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## V. Alternatives

### A. PRICING MODELS

The method of pricing current EBT projects is through the cost per case month (CPCM) pricing model, in which a set price is paid each month for each active case on the vendor's EBT system. The main issue with this model is the inelasticity of certain expenses to shifts in the caseload levels. As described previously, expenses such as supplying EBT-only point of sale (POS) terminals to retailers, are not correlated to caseload changes, and consequently does not increase or decrease as caseloads increase or decrease. This requires the EBT vendor to assume a business risk that is difficult to control or protect against.

Another issue with the current pricing model is the risk of unanticipated processing volumes, such as recipient help desk call volumes or additional EBT transaction volumes. Two examples of this type of risk are:

- Initial card issuance by mail, as opposed to an over-the-counter issuance method in which case the EBT vendors have learned that the recipient help desk call volume will initially be greater when cards are issued through the mail.
- The determination of the monthly issuance cycle for recipients receiving ongoing Food Stamp benefits. The EBT processors prefer monthly benefits always be issued on the same day of the month for a client. The EBT processors have learned from experience that if the issuance day changes from month to month, the recipients become confused as to when their benefits are available. The result is an increase in the number of declined Food Stamp purchase transactions (declined because benefits are not yet available) and an increase in recipient calls to the help desk.

This type of risk is becoming inherently lower as the remaining EBT processors get more experience in the processing characteristics of EBT projects, and especially the impact of certain implementation decisions.

It should be noted that this experience provides the remaining EBT vendors an informational advantage against new entrants to the EBT market, as the existing EBT vendors can better assess the impacts that a specific requirement from a state will have on the processing volumes. States who are in the process of re-procuring their EBT services contracts can mitigate this advantage by providing the operational characteristics for their EBT project within the RFP. Specifically the re-procuring states, in addition to a detailed listing of their requirements, should provide the following information within their RFP:

1. The number of retailers utilizing government sponsored POS terminals and the number of terminals deployed. Also the state should provide the number of transactions occurring on these terminals on a monthly basis;

2. The turnover of retailers on a monthly basis (i.e., new retailers being added and existing retailers being dropped from the EBT program) using government sponsored POS terminals;
3. The current number of phone lines provided to retailers if these costs are to be included within the CPCM pricing;
4. The number of recipient calls to the help desk on a monthly basis for the previous year. Recipient calls should be broken out between the number of calls satisfied by the ARU (automated response unit) and those requiring assistance by a customer service representative (CSR);
5. The average number of replacement cards on a monthly basis; and
6. The turnover in cases on the EBT system (number of new cases added on a monthly basis and number of existing cases losing eligibility).

Unfortunately states that have not implemented EBT do not yet have this data. But there is not much that can be done until the operational characteristics of the EBT services are known by the state.

Because of the risks in the existing CPCM pricing model, both new and existing EBT vendors have been requesting changes in the pricing model. A combination of these various models may be appropriate in paying for EBT services. The changes being requested are three-fold.

1. Fee for service;
2. Tiered Pricing; and
3. Caseload floors.

Each of these requested changes is discussed individually in the following sections.

### **Fee for Service**

In a fee for service pricing model the contracting state pays directly for the services being provided. For example, the state would pay for each EBT-only terminal that is deployed to a Food and Nutrition Service (FNS) certified retailer, and/or the state would pay individually for each call to the recipient help desk.

There is an incentive to the EBT vendor to implement this type of pricing model. Specifically, it removes both transaction volume risk and caseload volume risk from the EBT vendor. For example, if the contracting state is paying a fixed price for each EBT-only terminal that is deployed, the EBT vendor is not as concerned regarding a potential increase in the number of retailers wanting EBT-only POS terminals, or conversely a decrease in the caseload level. This is because the EBT vendor is being reimbursed directly for the expense of the terminal, removing both transaction volume and caseload volume risks as a factor.

From the contracting state's perspective there are some positives to this pricing model. The first is that the state is only paying for services that are being provided. In the CPCM pricing model, the EBT vendors have an economic incentive to take a conservative view regarding the quantity of a particular unit (i.e., EBT-only POS terminals) that will be consumed. This is because if the quantity is more than originally estimated, the EBT vendor has expenses that are not being reimbursed. Consequently, it can rationally be assumed that the state is probably paying more for certain items, to compensate for the greater risk. It should be noted that the risk of an invalid estimate is not mitigated with a tiered CPCM pricing model. Although the EBT vendor will receive a more consistent revenue stream for the service unit under a tiered price, the risk of an incorrect estimated error is still present.

A second advantage is that by paying directly for services, the state receives the benefit when the actual processing volumes turn out to have a positive impact for the state. Take for example the scenario when the actual number of required EBT-only POS terminals is less than originally estimated, or caseload volumes increase substantially. Under a CPCM pricing model, a reduction in terminals deployed or an increase in the caseload volume will provide additional revenue to the EBT vendor, as a CPCM pricing component attributable to EBT-only POS terminals would be spread over a larger number of cases without an offsetting change in the number of EBT-only POS terminals being provided.

Although more esoteric, another advantage to the state is that by removing a specific quantifiable risk, additional service providers may have the incentive to enter the marketplace. Specifically, if a vendor can accurately project revenue to cover a given cost, the vendor is more likely to want to compete for the available business.

But there are negatives to a fee for service pricing model to the contracting state/agency. The first is that the pricing risk, and the financial impact of this risk, is not removed from the EBT processing environment. Instead, the contracting state directly assumes the pricing risk. If the state accepts a fee for service pricing model, then the state has a scenario where the monthly cost per case to deliver benefits cannot be accurately projected. In the example of EBT-only POS devices, if the assumptions regarding the number of EBT-only retailers are low, the contracting state/agency will need to deploy additional EBT-only POS devices, thus increasing the overall expense to the contracting state, and indirectly increasing the actual cost of EBT services per case. But conversely if the assumptions regarding the EBT-only retailers are too high, then the actual expense to the state will be lower than budgeted. However this risk is substantially less for states re-procuring EBT services, as opposed to states initially implementing EBT. This is because the operational characteristics of the states re-procuring EBT services have been established, and the number of a service unit such as EBT-only terminals can be determined through past history.

An issue that is troublesome for many states is that they must accurately estimate their expenses in determining the state budget for projects such as EBT. States may find it difficult to acquire additional funds to pay for more POS devices than the number originally estimated in their budget.

The second negative consequence is that by paying directly for specific EBT services, the EBT vendor does not have the same incentive to control the number of units of service being provided. Using the ongoing example of EBT-only POS terminals, the EBT vendor does not have the same incentive to control the number of EBT-only POS terminals if the state is paying directly for these terminals. This is because the EBT vendor is receiving additional revenue for each POS terminal being placed. Removing terminals would reduce revenue, and the resultant profits, to the EBT vendor. Consequently, under a fee for service pricing model, the contracting state/agency must assume a greater role in monitoring and controlling the service units being provided.

The third negative is that certain service units, such as recipient help desk calls, are adversely impacted by the performance deficiencies of the EBT vendor. By implementing fee for service for these types of service units, the state is indirectly indemnifying the EBT vendor from the impact of their actions. This is because if a state agrees to pay individually for recipients calls to the EBT help desk, the state will end up paying for extra calls that are generated when the EBT vendor has processing problems.

It should also be noted that certain service units, such as recipient help desk calls, are elastic when compared to the caseload level. That is, the rise and fall in the caseload levels has a direct correlation to the number of recipient help desk calls. Consequently, the CPCM pricing model does not carry any caseload variation risk for the EBT vendor for recipient help desk pricing. But a fee for service pricing model does protect the EBT vendor from invalid pricing assumptions or increased call volume because of its own poor performance.

There are two main incentives for a state to implement a fee for service pricing model. The first is that a better price should be received overall, because risk is reduced for the vendor providing the service. The second is theoretically the fee for service model should increase competition, as new vendors should have an increased incentive to enter the market because of the reduced risk. However at this time there is no empirical evidence to support the theory of increased competition.

### **Tiered Pricing**

The theory behind a tiered pricing model is that the CPCM price is adjusted for different caseload levels. Specifically, the CPCM price is adjusted either upward or downward from a given base price after the caseload has changed from a baseline caseload volume. For example, the CPCM price may be adjusted for every increment of 10,000 from the baseline caseload volume. The object behind a tiered price is to allow the EBT vendors a pricing model that mitigates the caseload volume risk for both the contracting state/agency and the EBT vendor. It also allows the contracting states in a consortium to take advantage of the apparent economies of scale provided to the winning EBT vendor.

Unfortunately there have been a number of reasons why tiered pricing has not been as effective as originally envisioned. The first reason is that the increments were not sufficiently small enough to allow the EBT vendor to effectively reduce their risk in a given marketplace. For example, the increments for changes in the tiered price for the Southern Alliance of States (SAS)

were 500,000 cases. This wide range in caseload levels before the next tier was reached reduced the effectiveness of the tiered pricing for the EBT vendors.

The second reason is where tiered pricing was introduced within consortiums, such as the SAS and the Northeastern Coalition of States (NCS), the different consortium member states have different economies of scale. A good example is the NCS, which has New York, Connecticut, Massachusetts, Rhode Island, Vermont, New Hampshire, and Maine within the coalition. New York is considered a large state in terms of caseloads volume, Connecticut and Massachusetts are medium sized states, while the remaining states are considered small. The effort involved and the respective cost, for all of the states differed in terms of the implementation costs. New York, because of its large recipient population, would have had the lowest implementation costs when considered in terms of a CPCM price. But all of the states' caseloads were blended in order to obtain a single CPCM price. In this case, the smaller states received a decided advantage due to being part of the NCS coalition. New York may have subsidized the implementation costs of the smaller states by allowing these states to receive a lower CPCM price than they would have obtained on their own.

The third reason is that the EBT vendors, specifically the Citicorp Services, Inc. (CSI) team in the SAS, NCS, and Western States EBT Alliance (WSEA), did not take full advantage of the opportunities afforded by tiered pricing. The differences between the pricing in the different tiers were not adequate to adjust for the lower caseload levels. This particular view has been expressed on numerous occasions by CSI to its client states. It should be noted that in the earlier Requests for Proposals (RFPs), the tiers were set to the advantage of the states and the anticipated collective large case volumes. The initial intent of the contracting states in tiered pricing was not to protect the vendor from risk, but to provide the contracting states a lower price because of the collective case volumes.

The EBT vendors have learned valuable lessons from these earlier contracts. A contract negotiated between CSI and the State of Alabama in June of 1999 included tiers that break at smaller caseload level (tier breaks are at every 3,000 cases). All pricing for EBT services, except for pay phone charges, was included in the CPCM prices contracted with CSI. The pay phone charges are being billed as a pass through expense directly to the state by CSI.<sup>1</sup> It should be noted that CSI had three years of experience providing EBT services for the state. This allowed CSI to be intimately familiar with the operational characteristics of the project when they were renegotiating the contract. But what is demonstrated from this recently negotiated contract is that a CPCM pricing model can work with effective pricing tiers.

### **Caseload Floors**

In a caseload floor, the contracting state/agency agrees to pay for a minimum number of cases on the EBT system, regardless of the actual numbers of cases on the system. This pricing model

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<sup>1</sup> Federally mandated surcharges on pay phones were a result of section 276 of the Telecommunications Act of 1996 and subsequent FCC Orders. The surcharges were established to fairly compensate pay phone owners of each call made from a pay phone. In many states, pay phone surcharges were an additional incremental cost which occurred after the signing of their original contract. Some states have disputed this additional cost while others have agreed to pay for the charges as a pass through expense.



effectively puts a floor on the minimum revenue that will be paid to the EBT vendor, regardless of how many (or in this case, how few) cases are being supported by the EBT vendor. Some states may not have the ability to pay for cases that do not exist, however, an option may be to call it a fixed price contract. Essentially once a state's caseload drops below the caseload floor the contract becomes fixed price.

A caseload floor has many advantages for the EBT vendor. It removes caseload risk completely from the pricing equation at the lower caseload levels. It also maximizes profits as caseloads drop, since variable expenses are being removed from the equation as the caseload volume drops, but revenue is not reduced accordingly.

For the contracting state/agency, there is only one scenario where a caseload floor appears to be justified. A caseload floor makes sense at the extreme ends of a tiered price or where there are very small caseload levels (i.e., under 10,000 cases). This is because at a certain caseload level, any additional incremental changes that lower the caseload level will have a correspondingly greater impact on the revenue stream to the EBT vendor. In simple terms, the revenue received from CPCM pricing at a low caseload level when caseloads continue to drop will not be enough to cover the fixed expenses for the EBT vendor. So as the alternative to having an unrealistic tier price (e.g., CPCM price for a tier range of zero to 10,000 cases), it probably makes more sense to have a fixed price at 10,000 cases.

Other than the above stated scenario, there does not appear to be any other advantages to the contracting state/agency to accept a caseload floor. The major disadvantage to the contracting state/agency is that there is not an associated drop in the expense for EBT services if caseloads fall. A caseload floor will maintain a constant fixed cost to the state/agency for EBT services, although the expenses of the EBT vendor are decreasing. Intuitively, the contracting state/agency should receive part of the cost savings that the EBT vendor realizes by not processing the additional cases.

### Combining Pricing Model Alternatives

The previous discussion has indicated that there are advantages and disadvantages for each of the pricing models to the contracting state/agency. An alternative to explore is combining different pricing models to optimize the advantages and minimize the disadvantages. The presumption is that this will result in the lowest overall cost for EBT services to the contracting state/agency.

An example is being provided to more completely demonstrate the potential impact of combining pricing models; in particular in an environment where caseloads and/or other separately priced service units have changed. In order to make the model understandable, the complexity will be limited. The example is predicated upon the baseline data in the following table.

TABLE 27: EXAMPLE DEFINITION	
Expected average number of monthly billable cases	100,000
Number of EBT-only terminals deployed	800
Number of EBT-only retailer phone lines provided	100



<b>TABLE 27: EXAMPLE DEFINITION</b>	
Cost per EBT-only terminal	\$30.00
Cost per EBT-only retailer phone line	\$25.00
EBT vendor fixed monthly operating costs (not including EBT-only terminals and phone lines)	\$120,000
Variable costs per case	\$0.80

Pricing for the example is being provided in tiers of 5,000 cases. The range for the tiers is from 75,000 cases to 130,000 cases. The baseline cost to the state for providing EBT services to the contracting state in this example, not including the EBT-only terminals and phone lines, is \$2.20 CPCM<sup>2</sup> at a base caseload of 100,000 cases, and includes a 10 percent profit margin for the EBT vendor. It assumes that the cost per EBT-only terminal and phone line includes the vendor's profit margin. The calculated tier prices for a case range between 75,000 and 130,000 for the two pricing methods are shown in the following table.

<b>TABLE 28: CALCULATED TIER PRICES</b>		
<b>Caseload</b>	<b>Inclusive CPCM</b>	<b>Combined Pricing Model (CPCM &amp; Fee-for-service)</b>
125,001-130,000	\$2.099	\$1.895
120,001-125,000	\$2.148	\$1.936
115,001-120,000	\$2.201	\$1.980
110,001-115,000	\$2.258	\$2.028
105,001-110,000	\$2.321	\$2.080
100,001-105,000	\$2.390	\$2.137
95,001-100,000	\$2.465	\$2.200
90,001-95,000	\$2.548	\$2.269
85,001-90,000	\$2.641	\$2.347
80,001-85,000	\$2.745	\$2.433
75,001-80,000	\$2.861	\$2.530
75,000 & below	\$2.993	\$2.640

Given a static environment as defined in the example definition, the cost to the state for EBT services under either a CPCM pricing model or a combination fee-for-service and CPCM pricing model is \$246,500 per month (see Appendix C for details of calculation). The costs of the EBT-only terminals and retailer phone lines are \$26,500 on a monthly basis, and is part of the overall costs contained within the inclusive CPCM. The revenue from the CPCM pricing component in the combined pricing model is \$220,000. The calculations in Appendix C also show that the total revenue generated at the upper end of each tier for the Inclusive CPCM pricing model is equal to the pricing model for the combined CPCM and fee-for-service when the fee-for-service cost (e.g., terminals and phone lines) is \$26,500.

The conclusion that can be drawn from the above example is that given static data regarding ancillary expenses (specifically the EBT-only terminal and phone line costs), there is no

<sup>2</sup> The CPCM price of \$2.20 stated in the example is a hypothetical price being used for illustrative purposes. Calculation of an actual price would need to take into account many more factors than is stated within the example.

difference between the pricing models. In a static environment where the number of EBT-only terminals and phone lines do not change, this is what the conclusion should be.

But in the real world assumptions are not always correct, and information thought to be static does change. In the next example, the actual number of EBT-only terminals and phone lines will be modified to be higher than the original projection, as illustrated in the following table:

<b>TABLE 29: MODIFICATION OF TERMINALS AND PHONE LINES</b>		
<b>Category</b>	<b>Projected</b>	<b>Actual</b>
EBT-only Terminals	800	1,000
Phone Lines	100	200

To illustrate the impact of caseloads on incorrect cost assumptions, three different caseload assumptions of 80,000, 100,000, and 120,000 are being used. The following tables demonstrate the impact to the EBT vendor at the various caseloads.

<b>TABLE 30: INCLUSIVE CPCM PRICING MODEL (EXAMPLE 1)</b>			
<b>Caseload</b>	<b>Revenue</b>	<b>Expenses</b>	<b>Vendor Profit</b>
80,000	\$228,900	\$219,000	\$9,900
100,000	\$246,500	\$235,000	\$11,500
120,000	\$264,100	\$251,000	\$13,100

<b>TABLE 31: COMBINED CPCM &amp; FEE-FOR-SERVICE PRICING MODEL (EXAMPLE 1)</b>			
<b>Caseload</b>	<b>Revenue</b>	<b>Expenses</b>	<b>Vendor Profit</b>
80,000	\$237,400	\$219,000	\$18,400
100,000	\$255,000	\$235,000	\$20,000
120,000	\$272,600	\$251,000	\$21,600

Table 30 illustrates the impact that erroneous assumption has under a pricing model consisting of only a CPCM pricing component. The impact is that the revenue accruing to the EBT vendor is not sufficient to cover the higher than expected expense because of increased service units for EBT-only terminals and phone lines, thus reducing the vendor's expected profit margin. Alternatively, costs for EBT services to the contracting state/agency (e.g., the revenue to the EBT vendor) are protected from service unit assumption errors made by the EBT vendor. As long as the errors in service unit assumptions are under estimates of actual service units required, then the contracting state/agency receives the benefit.

The scenario changes under a combined pricing model when the EBT vendor has protection from invalid service unit assumptions, as demonstrated by Table 31. In this pricing scenario, the EBT vendor's revenue and profit margin is protected from the faulty assumptions regarding service units. Instead, it is the contracting state/agency that has the higher than expected expenses for EBT services.

In a second example, the service units of EBT-only terminals and phone lines are being modified to be lower than the original projection, as illustrated in the following table:

<b>TABLE 32: MODIFICATION OF TERMINALS AND PHONE LINES</b>		
<b>Category</b>	<b>Projected</b>	<b>Actual</b>
EBT-only Terminals	800	500
Phone Lines	100	50

Again, three different caseload assumptions of 80,000, 100,000, and 120,000 are being used. The following tables demonstrate the impact to the EBT vendor at the various caseloads.

<b>TABLE 33: INCLUSIVE CPCM PRICING MODEL (EXAMPLE 2)</b>			
<b>Caseload</b>	<b>Revenue</b>	<b>Expenses</b>	<b>Vendor Profit</b>
80,000	\$228,900	\$200,250	\$28,650
100,000	\$246,500	\$216,250	\$30,250
120,000	\$264,100	\$232,250	\$31,850

<b>TABLE 34: COMBINED CPCM &amp; FEE-FOR-SERVICE PRICING MODEL (EXAMPLE 2)</b>			
<b>Caseload</b>	<b>Revenue</b>	<b>Expenses</b>	<b>Vendor Profit</b>
80,000	\$218,650	\$200,250	\$18,400
100,000	\$236,250	\$216,250	\$20,000
120,000	\$253,850	\$232,250	\$21,600

In Table 33, the EBT vendor is receiving higher than anticipated profits under the CPCM pricing model because the service units required are lower than originally estimated. Alternately the expense to the contracting state/agency (e.g., the revenue to the EBT vendor) continues to be constant compared to the figures detailed in Tables 30 and 31. Although the contracting state/agency does not get the benefit of the favorable decrease in service units, there is an advantage to the contracting state/agency that the cost of EBT services is consistent and directly correlated to the number of cases being serviced by the EBT vendor.

But under the combined pricing scenario in Table 34, the revenue accruing to the EBT vendor is more closely tied to actual expenses, so the vendor profit margins are more consistent. This is demonstrated by the fact that the vendor's profits are the same between Tables 31 and 34 for the combined pricing model. In this scenario, the advantages in the drop of the projected service units accrue to the contracting state/agency.

## ***B. EBT-ONLY TERMINAL DEPLOYMENT ANALYSIS***

Retailer management tasks have become one of the most expensive components of EBT systems. For example, the cost to the EBT vendor for providing EBT services in Texas was estimated at

\$2.35 CPCM.<sup>3</sup> The expense for EBT terminal support was estimated at \$.81 CPCM. The number of EBT-only terminals deployed in Texas is about 13,000 devices.<sup>4</sup> The cost of POS terminals deployed in Texas is estimated to be \$28.86 per device per month.<sup>5</sup>

Costs for POS devices deployed has not been as easy to ascertain in other EBT projects. In a number of other EBT projects, the EBT contractor does have a per unit per month charge for EBT-only devices, or has proposed a charge for terminals deployed. These unit costs are summarized in the following table.

<b>Project</b>	<b>Terminal Cost per Month</b>
State of Wisconsin	\$9.66
WSEA	\$22.62
NCS <sup>6</sup>	\$21.50

The EBT vendors have also proposed per unit charges for POS terminals in a number of recent contract negotiations. The unit charge for POS devices in some of these negotiations has exceeded \$30 per device.<sup>7</sup>

Because of the wide range of costs being quoted within the various projects, it is hard to gauge what an accurate cost is to deploy an EBT-only POS terminal. The physical device most commonly deployed in EBT projects is a VeriFone Tranz330. These devices have been deployed in all of the EBT projects except Ohio and Wyoming, which are smart card projects, and in New Mexico, which uses Hypercom equipment. The ongoing lease price and maintenance support on the Tranz330 device can be estimated at about \$9.60 per device.<sup>8</sup> It would appear that the variation in EBT terminal charges being quoted by the EBT vendors can be partially based upon how much of the setup and ongoing operational costs are included in the price being quoted to the project. Specifically, the price quoted to the State of Wisconsin appears to only include the cost of the equipment, and not the initial set-up and ongoing operational costs.

The discrepancy between the calculated cost per EBT-only terminal in Texas and the specific POS terminal charges in the WSEA and NCS is significant. The difference in costs is hard to understand between the projects. Some of the differences in cost can be inferred to varying

<sup>3</sup> Texas EBT Alternatives Analysis, January 1999, Phoenix Planning & Evaluation, a division of MAXIMUS

<sup>4</sup> Ibid.

<sup>5</sup> The standalone EBT Cost model presented in Appendix H of the Texas EBT Alternatives Analysis (TEAA) report detailed a monthly cost of \$585,157 for POS Deployment, Servicing, and Maintenance. Dividing the number of terminals supported (13,000) by the total cost gives a unit cost of \$45.02 per POS device. However, the total monthly cost includes 7,000 phone lines provided at an average cost of \$30.00 per line. Excluding this cost from the calculation provides a cost of \$28.86 per POS terminal deployed.

<sup>6</sup> The states in the NCS coalition do not pay a per unit fee for POS devices, but retailers have the option to lease additional devices from the EBT contractor at a cost of \$21.50 per device.

<sup>7</sup> Per unit charge for POS device support in the EBT vendor proposal to the State of West Virginia was \$30.31.

<sup>8</sup> See Appendix H for pricing of VeriFone Tranz 300 equipment. The monthly cost of equipment was estimated using a five-year lease and Expedited Replacement Service Warranty.

service level requirements between the different projects. But the following review of service standards in the NCS and WSEA, when compared to the State of Texas, does not reveal any major differences, as detailed below:

- A waiver to allow terminal deployment through the mail for stand-alone single lane POS equipment has been granted for both Texas and the NCS and WSEA states. Onsite support at the retailer location is provided only as necessary.<sup>9</sup>
- Texas, the NCS and WSEA states have received the waiver that retailers must have a minimum of \$100 per month in Food Stamp redemptions in order to qualify for a government provided POS terminal. It should be noted that this waiver does not really impact the cost of individual terminals, only the number of terminals that must be placed.
- Within the NCS and WSEA states, the practice by the EBT contractor has been to not provide retailers with phone lines unless Food Stamp sales exceed \$5,000 per month or the retailer requests a phone line. In Texas, every retailer who requested a phone line was provided a line. But in the per terminal charges being used, phone line costs have been removed from the Texas estimates, and the cost of POS equipment in the NCS does not include any phone line costs. So again, this is not a factor for the differences in POS terminals costs.
- Requirements stated in the Code of Federal Regulations (CFR) regarding lane coverage are being used as the minimum requirement for providing additional POS terminals in the NCS and WSEA. This was not the case in Texas, as some retailers who had commercial equipment also elected to have an EBT-only device for a back-up device. But again, this information is not relevant when looking at the cost for an EBT-only POS terminal.
- Fees are not paid to retailers for using their own equipment in the NCS and WSEA states. Texas does pay a per transaction fee to retailers using their own equipment. Again this information is not relevant when looking at the cost for an EBT-only POS terminal, although it should provide an incentive to retailers to utilize their own equipment for EBT services.

Because service level standards do not appear to be the reason for the difference in cost between Texas and the NCS and WSEA, then the logical explanation is processing efficiencies by CSI, the EBT processor for the NCS and WSEA. It is important to note that CSI, the prime contractor, does not perform the actual POS terminal deployment and terminal driving for these projects, but subcontracts out the effort to vendors who are in the business of POS terminal deployment and support.

It is difficult to compare costs between commercial terminal drivers such as Concord and Bypass and the prices quoted by the EBT-only vendors because of the differences in how the

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<sup>9</sup> However, a statement within the TEAA stated that the requirement for 24-hour repair or replacement made this “an expensive service.” The TEAA also states much of the repair service is hands on. This may be a source for some of the cost difference, as much of the repair service in the NCS and WSEA is by mail.

services are priced. Commercial terminal drivers typically do not support POS equipment sales and/or leasing, or installation, but instead leave this to Independent Sales Organizations (also called ISOs). Depending upon the contractual relationship, the terminal drivers will bill either the Independent Sales Organizations or the retailer directly on a per transaction charge of \$.06 to \$.10, based upon the transaction volume and services being provided.

Because the NCS price is the cost to the retailers for leasing additional equipment, the terminal price can be assumed to be reflective of all of the operational costs of the terminal, including the monthly lease and maintenance cost to the EBT contractor in the NCS. The analysis that follows uses the cost of \$21.50<sup>10</sup> as a basis for estimating EBT-only terminal deployment costs.

The EBT processors have a cost control mindset when it comes to providing POS terminals to retailers not wishing to use commercial POS terminals to acquire EBT transactions. To the EBT vendor, the issue comes down to economics, or specifically what is the most efficient method to acquire EBT transactions. If the contracting state agency is paying for POS terminals outside of the CPCM pricing structure on a per terminal basis (and the price per terminal is sufficient to cover the vendor's costs), then the EBT processor does not have a strong incentive to control the number of deployed POS terminals. But if payment for government sponsored POS terminals is included as part of the CPCM, there is a financial incentive to minimize the number of POS terminals deployed. Specifically vendors attempt to minimize POS deployment through their marketing efforts to retailers to obtain commercial POS equipment.

The EBT processors are looking at the costs to acquire an EBT transaction. If the cost to deploy a POS terminal is \$21.50, and the terminal only performs one transaction per month, then the cost of the transaction from that retailer as calculated by the EBT processor is \$21.50. The use of a manual voucher becomes a more economical method for completing the EBT transaction as opposed to providing a POS terminal to the retailer. In this environment, one must determine the break-even point, where the cost of performing a manual voucher transaction is comparable to the per transaction costs of providing a POS terminal to the retailer. FNS, in their waiver process, has defined the break point for a retailer receiving a POS terminal at \$100 per month in Food Stamp redemptions. This break point, which has become a defacto standard for states requesting the waiver, was based upon the amount within the first request for this waiver from the State of Texas.

Experience has shown that the average Food Stamp transaction amount is approximately \$22.00.<sup>11</sup> However this is a weighted average that takes into account all types of retailers, from the high volume supermarkets to the lower volume grocery/gas stations and convenience stores. The stores at the lower end of monthly Food Stamp redemptions typically belong to the "Grocery/Gas Station", "Convenience Store", and "Small-Medium Grocery Store" categories. These categories of stores have a much lower average transaction amount, in the range of \$4.47

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<sup>10</sup> It should be noted that the terminal cost of \$21.50 being used in the analysis does not include the variable costs attributed to transaction processing, such as transaction acquiring costs (telecommunications, CPU processing, etc.) and supply reimbursement.

<sup>11</sup> The \$22.00 figure was obtained from EBT Management Reports in projects where Deluxe Government Services is the processor. This average has been consistent among various EBT projects within a narrow range for transactions that are acquired from both EBT equipment and retailers using their own equipment.



to \$5.97, with a mean of \$5.30.<sup>12</sup> Consequently, using an average Food Stamp redemption amount of \$5.30 and an incremental cost per POS terminal to the state of \$21.50 per month, the cost per transaction can be calculated for retailers using monthly Food Stamp redemption totals. The following table provides this data in \$50 increments for Food Stamp redemptions.

<b>TABLE 36: COST PER POS TRANSACTION AT GIVEN MONTHLY FOOD STAMP REDEMPTIONS</b>					
<b>Monthly Food Stamp Redemptions</b>	<b>\$50</b>	<b>\$100</b>	<b>\$150</b>	<b>\$200</b>	<b>\$250</b>
Average transaction amount	\$5.30	\$5.30	\$5.30	\$5.30	\$5.30
Average number of transactions monthly	9.43	18.87	28.30	37.74	47.17
Monthly expense for POS terminal	\$21.50	\$21.50	\$21.50	\$21.50	\$21.50
Cost per incremental transaction performed by POS	\$2.28	\$1.14	\$0.76	\$0.57	\$0.46

From a purely cost/benefit perspective, the issue becomes how efficiently can the EBT vendor process manual voucher transactions. The requirements for processing a manual voucher transaction originated by a retailer without a POS terminal is as follows:

1. Receive the voucher in the mail from the retailer (as the retailer does not have any automated means of clearing the voucher, the manual voucher must be mailed to the EBT vendor for processing).
2. Verify the form is filled out correctly and completely, and has a recipient signature (the form is verified only that it was signed by someone, the actual signature is not validated to see if it is actually from the owner of the EBT account).
3. Enter the transaction into the EBT system through an EBT administrative terminal transaction to initiate the settlement process. If the manual voucher is received late from the retailer, the hold on the Food Stamp balance is released and the transaction is denied.
4. If the transaction is approved, file the paper voucher so that it can be retrieved if there is a future client dispute regarding the transaction. If the transaction has been denied, mail the voucher back to the retailer along with a reason for the denial.

EBT vendors have often disputed the cost of processing a voucher transaction, specifically arguing that vouchers are not cost justified. This argument has been used when voucher processing has been suggested as an alternative in support of a contingency plan. What is not in dispute is the fact that the remaining EBT processors have gone to a great deal of effort to automate, to the extent possible, the process for handling voucher transactions. An ARU software application places a hold on the client's account when a retailer calls in for the voice authorization. The process for clearing the voucher has been streamlined to where it is a clerical data entry function. Assuming that a clerical staff person with a fully burdened labor rate of \$45 per hour is used, and the clerk can handle (i.e., review, process, and file) 30 vouchers an hour, the voucher processing cost is \$1.50 per voucher. After considering the expense to support the

<sup>12</sup> FNS did a review of redemption patters for four states using January 2000 ALERT data: Arizona, Florida, Massachusetts, and Maryland. While not a complete analysis, a consistent pattern of low average transaction volumes was demonstrated for Convenience Store, Grocery/Gas Station, and Medium Small Grocery Stores. Details are presented in Appendix I.



initial voice authorization, an estimate of \$2.00 per voucher transaction appears to be a conservative cost.

Based upon an estimated cost to process a voucher of \$2.00, the monthly redemption limit to optimize the cost benefit of providing a POS terminal to a retailer is between \$50 and \$100 per month. Consequently the use of \$100 of monthly Food Stamp redemptions as the cut-off limit by FNS for providing a government sponsored POS terminal to a retailer is justified.

The next item analyzed is the effectiveness of the waiver being granted by FNS to restrict the placement of government sponsored POS terminals to retailers whose monthly redemption is \$100 or greater. EBT Standard Report IV (EBT IV) data was analyzed for four states, Delaware, Montana, Nevada, and West Virginia. States not yet converted to EBT were used, as it was felt that this would provide a more accurate picture of the effect of the waiver. Certain assumptions were made in performing the analysis. These assumptions are:

1. \$100 is the correct cut-off point for providing government sponsored POS terminals to retailers.
2. All stores not in the category of “Supermarket” would request a government sponsored POS terminal.<sup>13</sup>
3. Terminals would be deployed to retailers using the formula defined within the FNS regulations in 7 CFR §274.

The following table illustrates the analysis of the EBT IV data.

<b>TABLE 37: EBT-ONLY TERMINAL DEPLOYMENT ANALYSIS</b>					
State	DE	MT	NV	WV	Total
EBT-Only Retailers	373	670	535	2061	3639
EBT-Only Terminals	396	682	570	2194	3842
Retailers with Redemption < \$100	48	168	90	234	540
Adjusted Number of POS Terminals	348	514	480	1960	3302
Adjusted Number of POS Retailers	325	502	445	1827	3099
Percent to Initial Number of EBT-Only Terminals	87.88%	75.37%	84.21%	89.33%	85.94%
Percent to Initial Number of EBT-Only Retailers	82.07%	73.61%	78.07%	83.27%	80.66%

Using the EBT IV data, the analysis first determined the number of government provided EBT-only terminals that would be required if terminals had to be provided to every retailer. Then the number of POS terminals that would be required was calculated at a minimal monthly Food Stamp redemption of \$100. As an example, the number of retailers in Delaware that had Food Stamp sales of less than \$100 per month was 48. If \$100 was the breakpoint for receiving a government provided POS terminal, then the number of POS terminals that would be required in Delaware would be 348, and the number of retailers receiving POS terminals would be 325 (some retailers qualify for more than one terminal). The percentage of POS terminals that would

<sup>13</sup> This assumption is not indicative of the actual environment within these states, where retailers being depicted as requiring government sponsored POS terminals may already have their own commercial POS equipment and decide to use it instead for EBT transactions.

need to be provided in relation to the original estimate is 87.88 percent. The number of retailers equipped compared to the initial estimate is 82.07 percent.

What can be construed from this analysis, and the data in the table, is that there is cost/benefit from obtaining and implementing the waiver for requiring retailers to have at least \$100 in monthly Food Stamp redemptions before being able to receive a government sponsored POS terminal. Specifically the number of government sponsored POS terminals that need to be deployed will be decreased. However, the actual cost/benefit is difficult to determine because there is a shift in cost from POS terminal deployment to voucher processing. Consequently the overall cost savings to the project will depend upon the number of voice authorizations performed by those retailers who do not qualify for a POS device.

There are some points to consider when reviewing the effectiveness of the waiver to restrict the placement of government sponsored POS terminals to retailers whose monthly redemption is \$100 or greater, or raising the minimum redemption limit to greater than \$100. These are:

- The use of paper vouchers is contradictory to the Food Stamp Program’s goal of having a nationwide electronic system for Food Stamp benefit redemption.
- There is a concern that Food Stamp redemptions will drop in stores required to use paper vouchers, in particular where the average transaction amount is low.
- Stores that do not receive government sponsored POS equipment may choose to withdraw from the FSP instead of utilizing paper vouchers. This could create access problems for recipients. These stores often cannot justify or afford the use of commercial POS equipment.

One factor explored was the number of transactions that occurred at EBT-only terminals in relation to the overall Food Stamp transaction volume. The intent of the analysis was to explore the impact that EBT-only terminals had in supporting EBT Food Stamp transactions from recipients, and to determine if any conclusions could be drawn based upon the transaction mix between EBT-only retailers and retailers using their own equipment.<sup>14</sup> EBT Food Stamp transaction data from August 1999 was collected from a number of states being processed by Deluxe. The data is summarized in the following table.<sup>15</sup>

State Name	Transactions from EBT-only	Transactions from Commercial	Total Transactions	% EBT-only to Total
Alabama	173,669	955,104	1,128,773	15.4%
Alaska	33,933	81,906	115,839	29.3%
Arkansas	145,666	566,769	712,435	20.4%

<sup>14</sup> Although analyzed, this scenario is not being suggested as a viable alternative for reducing EBT costs. Federal law and FNS regulations specifically require support of EBT-only retailers and POS terminals.

<sup>15</sup> Data is from Deluxe, and was initially gathered for use in the interoperability study conducted by Benton International for National Automated Clearing House Association (NACHA).

<b>TABLE 38: FOOD STAMP TRANSACTION DATA FROM DELUXE STATES</b>				
<b>State Name</b>	<b>Transactions from EBT-only</b>	<b>Transactions from Commercial</b>	<b>Total Transactions</b>	<b>% EBT-only to Total</b>
Arizona	163,467	672,591	836,058	19.6%
Massachusetts	232,193	391,849	624,042	37.2%
Minnesota	222,265	290,139	512,404	43.4%
Missouri	277,620	974,018	1,251,638	22.2%
New Hampshire	14,490	75,604	90,094	16.1%
New Jersey	791,695	422,051	1,213,746	65.2%
Rhode Island	56,700	61,689	118,389	47.9%
Tennessee	180,146	1,263,056	1,443,202	12.5%
Vermont	21,670	64,360	86,030	25.2%
Kentucky	375,220	836,343	1,211,563	31.0%

The conclusion that can be drawn from looking at the data is that the impact of transactions from EBT-only terminals in relation to overall transaction volume varies significantly from state to state. There does not appear to be any overriding differences that can be attributed to the policies or practices implemented within specific projects, such as the SAS, NCS, or WSEA. In fact the State of Minnesota, which reimburses their retailers for EBT transactions that occurs on retailer owned equipment, has one of the higher percentages of transaction volumes occurring on EBT-only equipment. It appears that differences in the percentage of transaction volumes on EBT-only equipment are more related to demographics and existence of the commercial infrastructure than to any overt policy decisions.

The last factor explored in EBT-only retailer deployment was to review the number of EBT-only retailers in various EBT projects to the total number of FNS certified retailers. The intent was to determine if policy decisions in projects had an impact on the percentage of retailers requiring EBT-only terminals. The policy decision examined was the requirement that EBT-only terminals in the SAS could only perform Food Stamp transactions. If a retailer wanted to also perform cash transactions for EBT recipients, the retailer would be required to use commercial (e.g., non-EBT-only) POS equipment. A sample of states was selected from each of the three major coalitions, NCS, SAS, and WSEA in order to provide the following Food Stamp Retailer Data.

<b>TABLE 39: FOOD STAMP RETAILER DATA FROM COALITION STATES</b>					
<b>State</b>	<b>Number of Retailers<sup>16</sup></b>	<b>Number of EBT-only Retailers</b>	<b>Number of Non-Traditionals</b>	<b>Retailers with Equipment<sup>17</sup></b>	<b>% to Total Retailers</b>
Alabama	3,003	2,104	301	1,803	60.0%
Arkansas	1,722	1,070	59	1,011	58.7%
Colorado	1,517	1,102	144	958	63.2%

<sup>16</sup> Number of FNS certified retailers provided by FNS. This number includes all retailers within the state authorized to redeem Food Stamp benefits for recipients, including shelters and treatment centers.

<sup>17</sup> Number of EBT-only retailers supplied by Deluxe Government Services.

State	Number of Retailers <sup>16</sup>	Number of EBT-only Retailers	Number of Non-Traditionals	Retailers with Equipment <sup>17</sup>	% to Total Retailers
Connecticut	1,324	1,209	214	995	75.2%
Florida	9,066	5,251	516	4,735	52.2%
Idaho	579	421	68	353	61.0%
Massachusetts	2,879	2,294	527	1,767	61.4%
Missouri	3,053	2,168	229	1,939	63.5%

On the surface, there does not appear to be any advantage when comparing the four SAS states in the sample – Alabama, Arkansas, Florida, and Missouri – to the other states in the sample. However, the sample does present two apparent anomalies. The first is the high number of stores with EBT-only equipment in Connecticut. A possible explanation for this anomaly is that in the NCS commercial retailers are able to lease EBT-only equipment directly from the EBT vendor. Unfortunately, the data received from Deluxe did not provide the information to distinguish which retailers also had commercial equipment and were only leasing EBT-only POS devices for back-up purposes, and which retailers were truly EBT-only retailers. The other anomaly is the lower percentage of EBT-only retailers in relationship to the total retailer database in Florida. The percentage of EBT-only retailers to the total retailers in Arkansas, Alabama, and Missouri did not show a significant difference from the other states in the sample. It appears that the deviation is more related to the demographics of the state as opposed to being influenced by policy.

### **C. PROCUREMENT**

As discussed in Section III, *Assessment of Current Environment and Potential Changes*, some states are trying new approaches to obtaining EBT services. Wyoming is acting as a prime contractor and has positive experiences contracting for some EBT services with local vendors. The State of Texas commissioned the TEAA in order to determine the best approach for the state to acquire its second round of EBT services. The document was published in January 1999. Part of the TEAA defined and separated EBT functions into categories that could be shopped separately – an approach that Texas is now pursuing. Delaware, after receiving no bids on its EBT RFP, was allowed by state law to pursue a form of catalog procurement, negotiating with vendors for the best combination of services and prices.

Coalition procurements, as well as those multiple-state procurements led by one state appear to have distinct advantages to their member states, including pricing and economies of scale, and ease of promoting and implementing interoperability requirements. The EBT vendor responding to a coalition RFP should be able to provide a lower monthly CPCM than if the EBT vendor was bidding on each of the states in the coalition separately. This is because the bidding EBT vendor is able to leverage their overall investment in EBT technology across a greater caseload base, along with the certainty that the winning EBT vendor will process the coalition caseload. The amount of cost savings to the EBT vendor is related to the overall caseload being provided

within the coalition. From an economic standpoint, this could be referred to as volume pricing, or buying power. A scenario was developed to illustrate this point. Full details of the scenario are provided in Appendix D, but the following table summarizes the net result of volume pricing provided by the caseload volume contained within a coalition.<sup>18</sup>

<b>TABLE 40: VOLUME PRICING WITHIN A COALITION</b>				
<b>Billable Cases on EBT System</b>	<b>Estimated Monthly Costs</b>	<b>Vendor Markup @ 20%</b>	<b>Total Estimated Price to Coalition</b>	<b>CPCM @ Caseload Level</b>
1 million	\$2,103,883	\$420,777	\$2,524,660	\$2.525
2 million	\$3,570,270	\$714,054	\$4,284,324	\$2.142
3 million	\$4,981,510	\$996,302	\$5,977,812	\$1.993

However there are two caveats to consider when looking at this analysis. The first is that actual economics is not the sole criteria in the pricing models used by the EBT vendors. The EBT vendors will also look at competition, risk, available manpower, and other factors when considering what price to bid on a given project. The second caveat is that the volume pricing, or buying power, presented by the analysis is directly related to economies of scale. The economies of scale are also present in an EBT vendor that has managed to capture a large market share. The analysis also illustrates how an EBT vendor with a large market share can economically provide a more attractive price than an EBT vendor with a smaller caseload.

Stand-alone procurements increase an individual state's flexibility, including the choice of technology, the ability to add programs at a later date, the choice of whether or not to be interoperable and with whom, and the timing of entry into the EBT market. As all states deploy EBT, the issue of choice of timing is diminished and, instead, timing becomes an issue of opportunity. When does a state's contract come up for renewal? What are a state's contract extension options? Does a state's renewal and/or contract extension overlap with any other state so that a joint procurement can be negotiated with a contractor?

Finding the "right fit" for a joint procurement does not solve all of the problems facing states in the EBT market today, specifically the lack of competition among EBT vendors and rising costs reflected in higher CPCM rates. And, the evolving nature of EBT compels state and federal governments to continue to explore alternative methods of procuring and operating EBT systems. This may include variations of the Texas and Wyoming model, breaking EBT services into functions that can be outsourced individually, which in turn may be expanded to include involvement in EBT systems by the federal government. Three procurement options that address some of the issues are presented below.

### **State Owned Software, Outsourced Processing**

The current Texas model is a precursor of a state-owned software, outsourced processing model, in which the state purchases existing software, or pays for new software, and outsources the processing functions to a vendor. This model can be further expanded to include joint software procurement by coalitions in order to spread the cost of the software across multiple agencies.

<sup>18</sup> The State of Texas requirements as detailed in the TEAA were used to define the scope and assumptions in terms of EBT processing requirements.

The software could be required to be extensible, meaning that the software has the ability to add software modules that will accommodate additional programs being added by individual states. Owning the software directly provides states the added flexibility of outsourcing functional categories separately or as one EBT service.

Software can be purchased jointly within a coalition, or in a stand-alone procurement. Because the software in either procurement model will perform common functions, they will have similar properties. However, there are subtle differences between the two models that impact the advantages and disadvantages. A joint procurement of software and outsourcing would have the following advantages and disadvantages represented in the following table.

<b>TABLE 41: STATE OWNED SOFTWARE, OUTSOURCED PROCESSING (JOINT PROCUREMENT)</b>	
<b>Advantage</b>	<b>Disadvantage</b>
Joint procurements would be able to take advantage of economies of scale (see Appendix D for an illustration of the savings).	Joint software procurements may limit the amount of customizations available to a state.
States wanting to join coalitions at a later date could buy software from the coalition and receive the cost benefits of shared software, then negotiate separately for individual services	States joining the coalition at a later date will not have any say in the functionality of the software. These states will be need to take the software as it stands and make an additional investment if they wish to modify the functionality.
Joint procurements of software would facilitate common functionality and help promote interoperability.	States within a joint procurement must agree to adopt similar functionality within their EBT applications, thus losing some control over their destiny.
Common software will reduce the testing and support efforts of the second and subsequent states that utilize the software, as it should have already gone through a vigorous and complete acceptance test cycle.	Software is rarely static. Software must be enhanced and/or modified because of changing user and/or regulatory requirements. Development staff must also be available to fix software bugs and unanticipated problems.
The states can leverage experience and costs when utilizing common software, especially if a common vendor is providing the EBT services.	A higher level of sophistication must exist within the state in order to support this environment. Because the state owns the software, there is greater responsibility in regards to the direction on how the software is modified and maintained.

In a stand-alone procurement, there are differences in the advantages and disadvantages for software ownership. The differences between a joint and a stand-alone procurement are subtle, and are more related to the control of costs and ongoing maintenance of the software. The advantages and disadvantages in a stand-alone procurement are detailed within the following table.



<b>TABLE 42: STATE OWNED SOFTWARE, OUTSOURCED PROCESSING (STAND ALONE PROCUREMENT)</b>	
<b>Advantage</b>	<b>Disadvantage</b>
Overall cost of the software will be less in a stand-alone procurement. This is because the software can be specific to a single state and the state's unique requirements.	States procuring in a stand-alone environment may pay a higher CPCM price for their software, although the overall cost of the software will be less. This is because there will be less cases in a single state compared to a multiple state over which to spread the cost.
Less maintenance will be required on the software, specifically because the requirements for change within the software is being driving by only one state.	Regardless of the number of users, software is rarely static. Software must be enhanced and/or modified not only because of user requirements, but also due to regulatory requirements and/or software bugs and unanticipated problems.
Having the option of a stand-alone procurement increases a state's flexibility and customization options.	States that choose to operate the entire range of EBT services themselves may not accrue economies of scale.
States who own their own software have the maximum flexibility and control over the direction of the software.	A higher level of sophistication must exist within the state in order to support this environment. Because the state owns the software, there is greater responsibility in regards to the direction on how the software is modified and maintained.

The TEAA performed an analysis of this option, specifically for the environment currently existing for EBT within the State of Texas.<sup>19</sup> At the caseload existing in Texas when the analysis was performed, this solution was not as cost effective as the existing contract with Texas' current EBT vendor. However, the projected cost was less than the estimated market costs of acquiring EBT services through an EBT vendor.

It should be noted that the TEAA assumed a fully functional EBT system with all of the components being supported by state owned software. This included EBT POS terminal deployment and terminal driving, transaction acquiring, authorization database, help desk services, and settlement. Owning and supporting the software that provides all of this functionality is a large task whose scope is beyond the expertise and resources of most states.

### **Federal Developed Software, Outsourced Processing**

Another approach to be considered for future EBT procurements is a model where FNS contracts with a vendor for a one-time development of software to be used by each state when initially deploying EBT or at such a time when the state's current EBT contract ends. The use of this model would mean that all states would be given or sold the same initial EBT processing software that could then be customized for additional programs through the state's purchase or development of add-on modules. The assumption within this model is that a common software development group would exist (either through a maintenance contract to a software vendor or through a dedicated staff) that would provide ongoing maintenance and support of the software.

<sup>19</sup> Texas EBT Alternatives Analysis, January 1999, Phoenix Planning & Evaluation, a division of MAXIMUS.



This approach would seem to provide the best value to states in the long term. However, there may be initial integration costs that the state would not have to pay if it continued with its current software/processor. This model appears to be the most limiting to a state's flexibility to add programs at a later date; specifically the flexibility would be dependent upon the developed system's extensibility, and the ability of the state to update and/or modify the software provided by the federal government. If a state did modify the software to address a unique requirement or to add a Tier 2 program such as Special Supplemental Nutritional Program for Women, Infants, and Children (WIC), ongoing maintenance and support of the software would become a state responsibility.

The best scenario for this approach would be to limit the scope of the project to where only the software for the account authorization and processing component was funded and developed by the federal government. The rationale for this is that other vendors currently offer EBT-only terminal driving and transaction acquiring services, and can provide this functionality more efficiently with their existing software than would occur under this scenario. Further validation of this assumption is detailed within the EBT-only Terminal Deployment Analysis Section above, where the cost per EBT-only terminal deployed is higher in Texas, which uses custom software, than in other projects (NCS and WSEA) where the existing EBT prime contractor has outsourced the EBT-only terminal service to a subcontractor.

<b>TABLE 43: FEDERALLY DEVELOPED SOFTWARE, OUTSOURCED PROCESSING</b>	
<b>Advantages</b>	<b>Disadvantages</b>
One-time software development costs translates to a cost savings for all states, if deploying a new system.	States may spend funds to integrate/adopt to the new system beyond what it would cost for them to extend or renegotiate their current contracts. Specifically this would depend upon their current expense for EBT services, the caseload, and the type and number of programs on EBT.
The process of defining requirements and negotiating with a software developer would not have to be repeated by each state.	Flexibility in specifying requirements unique to a specific state would be restricted and/or lost.
The software would be developed under the requirements for a Food Stamp Program. Common functionality and standards would exist, including support for interoperability. Specifically this would occur by employing a standard technical interface as currently defined by the ANSI 9510 specifications.	States that wish to use EBT for other state programs such as WIC may not be able to extend the software to support the additional programs.
States would have the option of procuring services from one or multiple vendors, either singly or through joint procurements.	States choosing to procure services from vendors on their own may lose the economies of scale inherent within a joint procurement, depending on the type of service being contracted.

**TABLE 43: FEDERALLY DEVELOPED SOFTWARE, OUTSOURCED PROCESSING**

Advantages	Disadvantages
The software would be developed under a specific technology architecture, for example a magnetic stripe card, thus ensuring that interoperability will be supported.	States wishing to utilize new or non-standard technologies, such as chip cards, may not be able to use the software.

In order to estimate the development costs for this scenario, a number of assumptions need to be made. These assumptions are:

- The system would be developed specifically for handling Food Stamp transactions under EBT. Nothing in the design will restrict the addition of other programs, but the initial development effort does not include any functionality to include other programs;
- The development effort assumes a generic, commercially available development and operating environment such as that provided by a Sun Unix server or an IBM R6000 server;
- A commercially available relational database management system (RDMS), such as Oracle, would be used in the development and operations of the system.
- The system development team is familiar with EBT systems and the requirements for an EBT system processing Food Stamps;
- A standard EBT administrative terminal application is developed utilizing client/server technology and development utilities;
- A standard set of interfaces to a Food Stamp eligibility system will be developed that can be customized based upon the specific requirements of the implementing state;
- The system being developed will only include the authorization platform components, such as EBT account maintenance, transaction authorization and settlement, reporting, administrative terminal support, and client service support. The system will include the interfaces to support transaction authorization from an EBT transaction switch, a card production vendor, and FNS interfaces such as Anti-fraud Locator of EBT Retailer Transactions (ALERT), Retailer EBT Data Exchange (REDE), and State Tracking of Authorized Retailers System (STARS);
- It can be assumed that there will be some additional interface work for each state that decides to utilize the software. The amount of interface work will depend upon the complexity and type of interface, but for planning purposes an estimate of \$100,000 can be used; and
- FNS would fund and support ongoing maintenance of the base system. Once the system is modified/enhanced to handle other EBT program types by a state, the respective state would assume ongoing maintenance support for the software.

A high level estimate of the cost to develop an EBT authorization platform is \$1,860,000. The details of the estimate are included in Appendix E. It should be noted that this is a very rough estimate subject to refinements and updates as the system architecture and specific implementation requirements are developed. An estimate of the support costs is also included in the Appendix.

The second part of this equation is the operational cost of the system. Operational costs are greatly dependent upon the leverage a state agency can obtain by utilizing hardware and personnel to support multiple software applications and/or a large processing (i.e., caseload) volume. The variability that can exist on operational costs is demonstrated in Appendix D, under the Central Processing costs for various caseload volumes. However this estimate assumes a dedicated standalone environment for the system operations. If an existing data center and personnel can be leveraged by the implementing state to support the operations of the software, then cost would be significantly reduced.

### **Federal Catalog Procurement**

Another alternative that has been suggested is for the federal government is to obtain catalog pricing from vendors for EBT components. This method would be similar to the procurement system used by the General Services Administration (GSA). This procurement alternative could be a viable option for government deployed POS terminal driving and management, a more ubiquitous EBT service.

Under catalog procurement pricing, FNS would solicit vendors to be added to a master list of qualified EBT service providers. Vendors would submit proposals responding to the solicitation. The proposal would contain the price at which the service would be provided. FNS then would select vendors and pre-qualify the respective vendors based upon their technical and project capabilities. The end result is a pre-qualified vendor list with predetermined and negotiated prices.

The disadvantage of this model is that it can only be performed for a standardized offering such as equipment purchases, or for services at an hourly rate, such as contract labor at a fixed hourly rate. Within EBT, the standardized service to which a catalog procurement model could be applied are government sponsored POS terminal deployment and driving, as this service is standard and consistent between EBT projects. A state that is interested in contracting separately for the support of government sponsored POS terminal driving could use the catalog to select a vendor to perform the service.

However another spin to the catalog procurement has been suggested. Vendors would be asked to submit proposals responding to providing turnkey EBT services. The service would be offered at a standardized price (e.g., CPCM price) given certain operating assumptions. FNS would pre-qualify the vendor based upon technical and project capabilities. When a state is interested in procuring EBT services from the catalog, the state would provide a statement of work for the required services to FNS. Vendors on the master list would be able to respond the statement of work, and provide updates to the standardized price based upon differences in the work effort from the standard operating assumptions. A committee comprised of both FNS and

state representatives would evaluate and select a qualified vendor. Finally, a contract between the state and the vendor would be negotiated.

One of the reasons for considering the federal catalog is that it is felt that this method may make procurement of EBT services easier for the states. In the current environment states have found it increasing difficult to procure EBT services as evidenced by the lack of bidders for EBT services for the States of Delaware and Mississippi. The belief is that a federal catalog system for EBT would provide a better opportunity for states to have a successful procurement for EBT services.

The following table illustrates the advantages and disadvantages of procurement through a federal catalog.

<b>TABLE 44: FEDERAL CATALOG PROCUREMENT</b>	
<b>Advantages</b>	<b>Disadvantages</b>
Better opportunity for procurement for state agencies, especially if services were broken out into standardized services such as government sponsored POS terminal support.	If EBT is broken out into multiple services, States will have to manage multiple contracts. This may be difficult for a number of states to manage.
More competition between vendors.	Competition will occur only if EBT is broken out into multiple services, such as government sponsored POS terminal support. Multiple contracts may be difficult for states to manage.
Better opportunity for states to award contracts for EBT services.	There will be limited vendors on catalog that will offer full EBT services. The states may still not be able to contract because of disagreement over pricing or services to be provided.
Easier procurement method for states.	State procurement law may not allow a state to use federal catalog.
Direct FNS involvement in procurement.	Additional FNS resources required to oversee and manage process.

#### **D. FEDERAL INVOLVEMENT**

One of the recurring themes in discussions with EBT stakeholders is that the federal government, and specifically FNS, should be more involved with EBT. Some of the specific comments and suggestions are documented in Section IV, *Stakeholder Comments and Concerns*. The amount of suggested involvement has varied, from as little as providing more guidance to the states implementing EBT, to as great as having the federal government manage and run all aspects of EBT. While this section of the document analyzes the potential for the federal government to assume responsibility for the different components of EBT and technical areas where FNS could provide support; it does not address potential cost sharing alternatives.

Although on the surface increased involvement by the federal government would appear to offer many advantages, there are a number of disadvantages, as well as substantial issues to address. Certain issues are relevant, regardless of the specific component being discussed. Some of these particular issues include:

- FNS, or any other part of the federal government, does not have a legislative mandate or authority to assume direct responsibility for any component of EBT processing;
- Funding issues exist for assuming control of EBT functions. Current legislation for the Food Stamp Program administrative costs requires a 50 percent matching of administrative dollars from the states. Legislation and an appropriation from Congress may be required in order to fund direct participation by the federal government in EBT processing; and
- The handling of cash benefits within the specific components needs to be considered. Support of cash benefits is outside of the FNS mandate for EBT, however a number of states have implemented EBT programs that support the distribution of cash benefits. Consequently this needs to be considered within any option for federal support of an EBT component.

Certain assumptions have been made in performing the analysis. These are:

- To the extent possible, FNS would contract out responsibility for the various components, as opposed to building and maintaining the operational environment required to support the specific components; and
- The policies and regulations that exist in the current EBT environment are being used to define the requirements for the specific components.

Included in this analysis is a review of the potential cost impacts, staffing requirements, and the potential liabilities to the federal government. Also, where appropriate, the analysis includes the impact raised by adding cash benefits to the mix.

The analysis is broken out by the components defined in Section III: *Assessment of Current Environment and Potential Changes: Part E. EBT Components*, These components are:

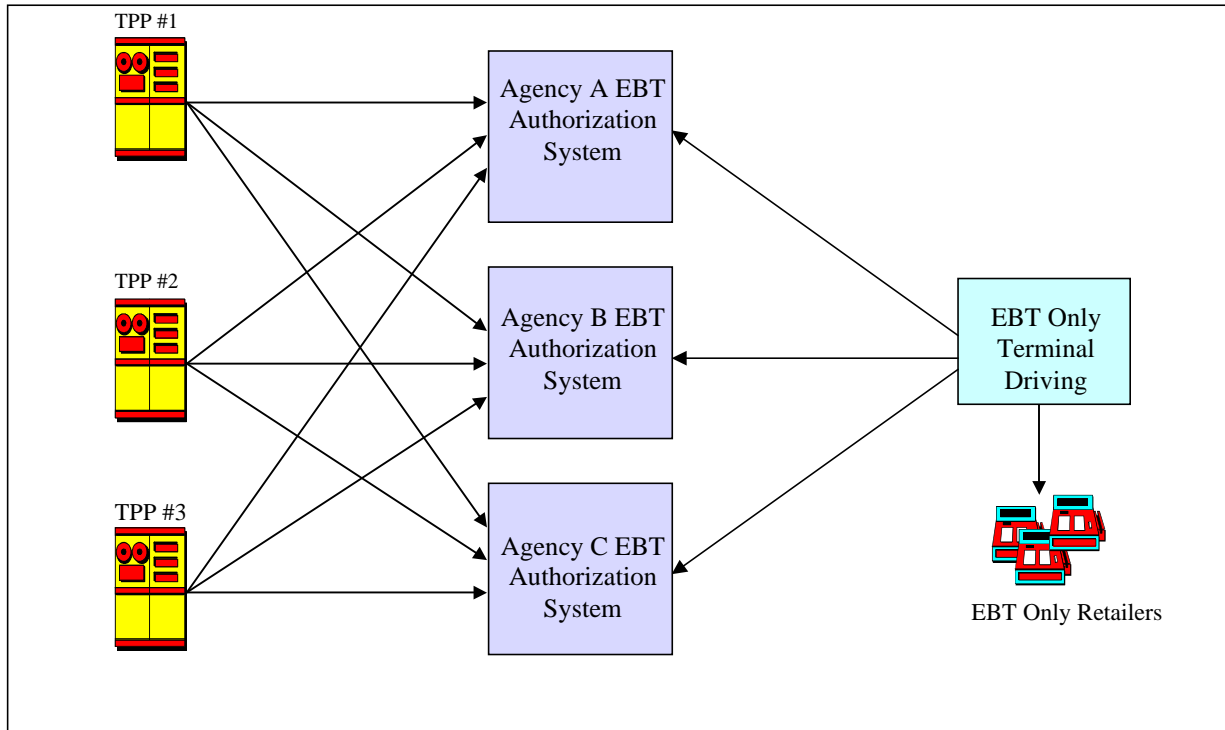
- EBT Gateway;
- Retailer Management;
- Authorization Engine; and
- Client Help Desk Services.

The analysis will also look at settlement to see what opportunities there are for federal involvement.

## EBT Gateway

The term, “EBT Gateway,” is a fancy name for a transaction switch that moves EBT POS and automated teller machines (ATM) transactions from the transaction acquirer (i.e., the retailer or ATM owner) to the transaction authorizer (i.e., the EBT processor). Consequently, a more generic name for this function is the EBT transaction switch. The reason an EBT transaction switch exists is for expediency for the EBT processors. The EBT transaction switch simplifies the processing environment for the EBT processors when more than one agency is being processed. Probably the best way to illustrate this point is visually. Figure 3 illustrates an environment where three projects are being supported without the benefit of an EBT transaction switch.

**FIGURE 3 EBT Environment Without a Transaction Switch**



The environment depicted by the diagram is busy and confusing. It should also be noted that the connectivity illustrated by the diagram is exponential, not linear. The current number of connections illustrated by the diagram is twelve. If another authorization system (i.e., another agency) is added, the number of connections increases to 16.

Interoperability can exist in this environment, but is controlled by the third party processors (TPPs) connected to the authorization platforms. Subsequently, if TPP #1 removes its connection to agency C’s authorization platform, then interoperability between the retailers behind TPP #1 and agency C disappears.

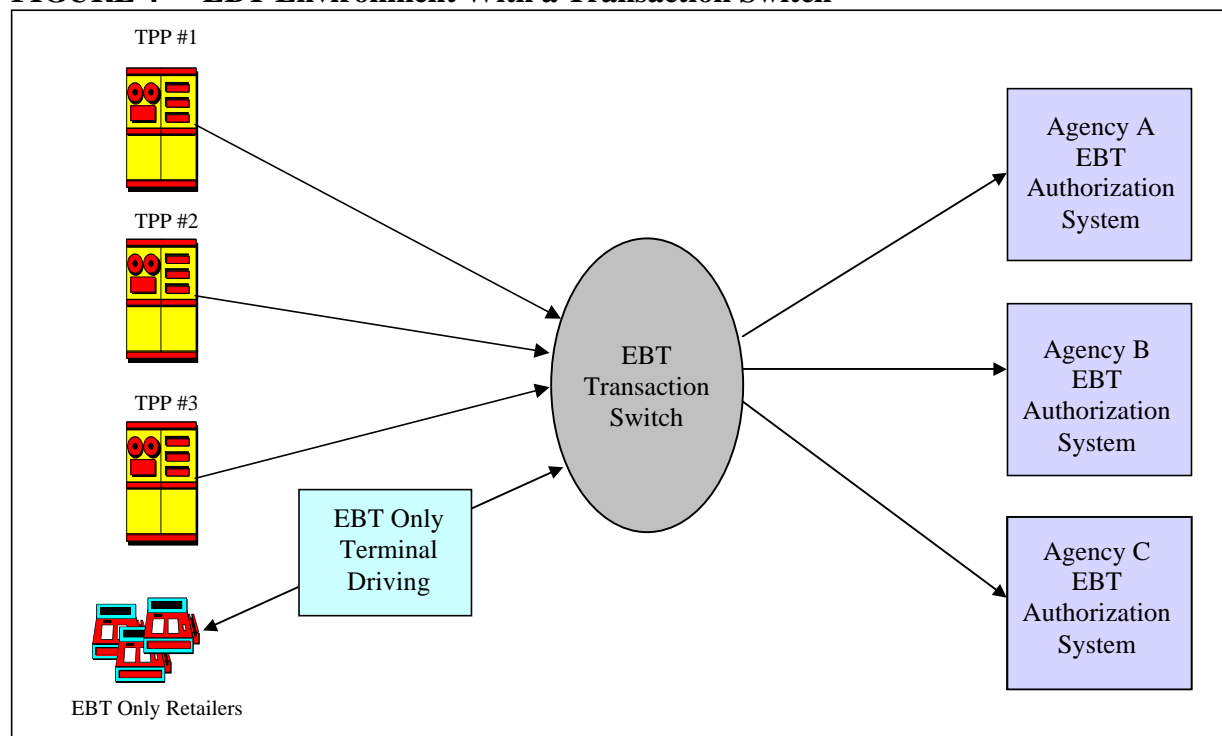
Settlement in this environment is also complicated. Each of the authorization systems must settle to every entity (TPP and EBT-only terminal) connected to it. Conversely, the TPPs must deal with settlements from every authorization platform to which it is connected. If the TPP is

connected to ten standalone authorization systems, than ten individual settlements must be performed on a daily basis.

Costs also increase, not just because of the increased workload from managing a greater number of connections, but also from the physical costs of the connections. Someone, either the TPP (and ultimately the retailer) or the authorization systems (and ultimately the contracting agency), is paying for each of the physical connections between the TPPs and authorization systems.

Figure 4 depicts an environment where an EBT transaction switch is controlling the connections to the various authorization systems.

**FIGURE 4 EBT Environment With a Transaction Switch**



The above diagram depicts a much simpler environment, along with all of the benefits from a simpler environment. The out of pocket costs are lower because of the reduced physical connections. For example, if each connection a TPP supports costs \$6,000 for line installation and telecommunications equipment (e.g., modems and DSU/CSU), and a monthly operational costs of \$1,400 for leasing the telecom line, than a reduction of three lines to one line would save the TPP \$12,000 in implementation expenses and \$2,800 a month in operational costs.

The number of connections in this environment is one for each entity connected to the EBT transaction switch, for a total of seven connections. But more importantly, increases are linear. The addition of an authorization system for a new agency only increases the number of connections by one.

Settlement is simplified. With all transactions passing through the EBT transaction switch, each entity connected to the EBT transaction switch only has to worry about settling with the EBT



transaction switch. The fact that all transactions pass through a common control point (i.e., the EBT transaction switch) allows for additional flexibility in terms of settlement. For example, the EBT transaction switch, based upon the transactions switched and authorized for the previous processing day, can perform the daily draw down of Food Stamp funds for settlement. In addition, the EBT transaction switch can create and provide the FNS retailer redemption file used to validate the ASAP draw down.

Finally, interoperability can be assured for each agency's authorization system attached to the EBT transaction switch. The only requirement is that the entities (TPPs and EBT-only terminal driving system) attached to the EBT transaction switch recognize the BIN of the foreign cards (cards belonging to out-of-state recipients), and pass them to the EBT transaction switch. It should be noted that with a single EBT transaction switch, there is no additional cost to support interoperability. The function of the EBT transaction switch is to route transactions to the correct authorization system, regardless of their origin. The fact that a transaction is out-of-state for a particular retailer is immaterial to the EBT transactions switch in terms of routing the transactions. Consequently, the restrictions on interoperability in the current production environment for the TPPs and Networks connected to the EBT transaction switch exist within the respective TPPs and Networks.

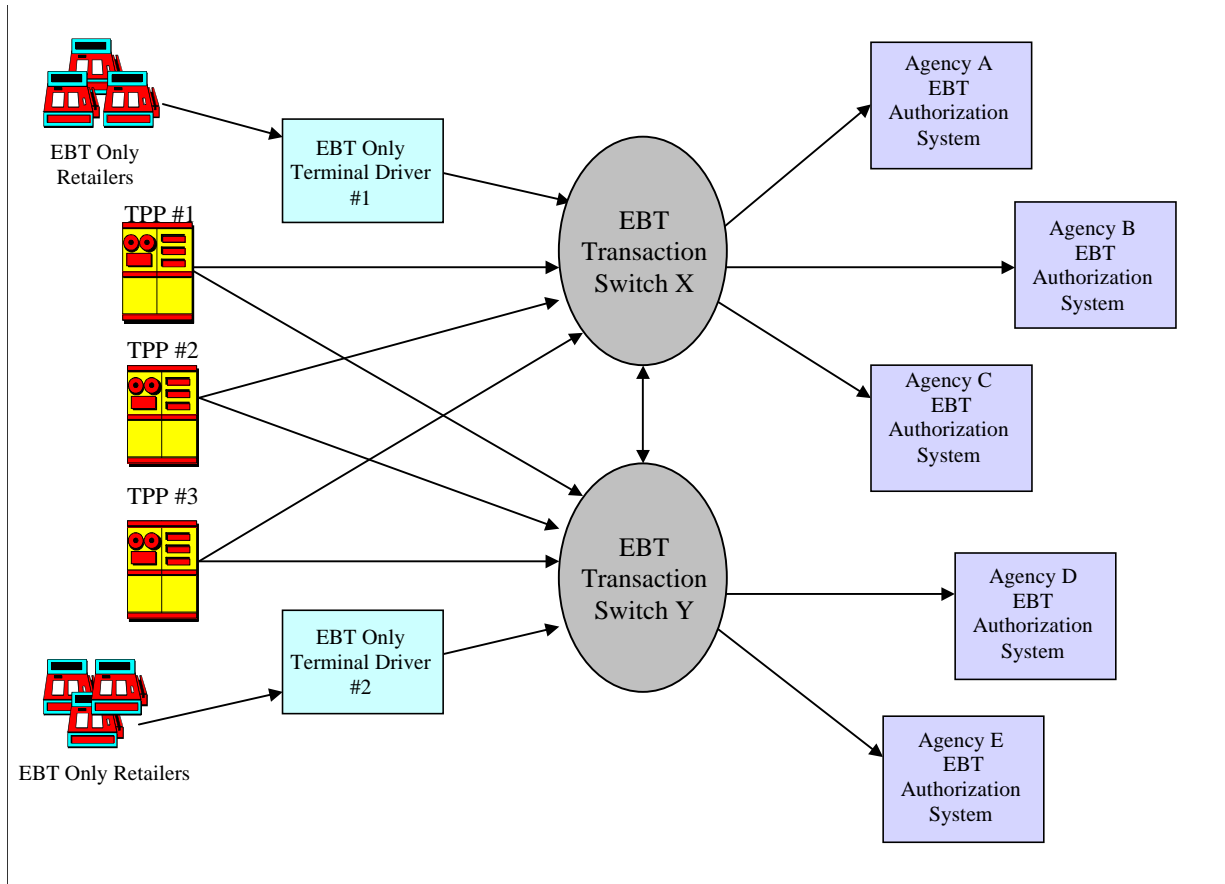
In the existing EBT environment, the two largest processors, CSI and Deluxe, are attached to the same EBT transaction switch for a majority of their EBT projects. The exceptions are North and South Dakota and South Carolina, which are all processed by CSI. All other projects supported by these two processors are connected to the Deluxe EBT transaction switch. Projects supported by the remaining processors using magnetic stripe technology, Transactive<sup>20</sup> and Shazam, currently are not interoperable, but this is a political decision, not a technology issue. The offline projects in existence, Wyoming and Ohio, have technical constraints that prohibit interoperability.

The issue, though, with a single EBT transaction switch is that it is a monopoly. If an EBT contract was awarded to another processor, and the contracting agency required interoperability, then a connection to the EBT Gateway is required. Deluxe, as the processor for the EBT Gateway, has had a monopolistic position that could be used to its advantage. But change in EBT, as it is with most business environments, is constant. CSI decided for business reasons, to move their EBT transaction switch business to Electronic Data Systems (EDS), announced in July 1999. The implementation of another EBT transaction switch complicates the EBT production environment. Theoretically a dual transaction switch should function as depicted in the Figure 5, but contractual relationships may take precedence over processing efficiencies and alter the way transaction are routed.

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<sup>20</sup> Transactive projects in New Mexico and Texas are interoperable with each other due to an agreement between the two states.

**FIGURE 5 EBT Environment With Dual Transaction Switches**



With the pending implementation of the EDS transaction switch, the production environment for EBT transaction switching does get more interesting. The existence of two EBT transaction switches will resolve the issue of a monopoly by Deluxe. A new vendor entering the EBT market has two external alternatives for obtaining services for EBT transaction switching, along with a third alternative of performing their own transaction switching.

The existence of dual transaction switches adds a complication for ensuring interoperability. The complication will exist with acquiring entities (TPPs, Networks, and EBT-only terminal drivers) that are not connected to both transaction switches. In the environment depicted in the above diagram, EBT-Only Terminal Driver #1 is not connected to EBT Transaction Switch Y; it is only connected to EBT Transaction Switch X. So if a transaction for a cardholder belonging to agency E is acquired by a retailer connected to EBT-Only Terminal Driver #1, the only way for the respective transaction to be approved is to have EBT Transaction Switch X route the transaction to EBT Transaction Switch Y, which in turn will route it to the agency E EBT Authorization System for approval (this description by itself is enough for some to recommend that FNS take over the EBT transaction switching). Consequently, there is now a real cost for interoperability, specifically the expense of being able to support and route transactions between the two EBT transaction switches.

Within the current operational environment there is a high degree of uniformity and standardization. Technical standards exist that support interoperability. Operating rules in the form of Quest® support the business environment for interoperability. States that want to provide interoperability for their Food Stamp recipients not only have the technical and business infrastructure defined; the states also have the production environment implemented with the Deluxe EBT Gateway and the soon to be implemented EDS transaction switch. However, there are benefits to be considered in a federal entity, specifically FNS, assuming responsibility for the EBT Gateway. Some of the advantages and disadvantages to consider are expressed in the following table.

<b>TABLE 45: FEDERALLY SPONSORED EBT GATEWAY</b>	
<b>Advantages</b>	<b>Disadvantages</b>
There is a reduced cost to TPPs and Retailers connected to the EBT Gateway, as they only have to maintain a single connection for all Food Stamp EBT transactions. This is true even if Citibank or Deluxe required EBT transaction to process through the transaction switch, because the federally sponsored gateway would connect to the Citibank and/or Deluxe Gateway and would route the TPP and retailer transactions to the respective Citibank/Deluxe transaction switch instead of directly to the authorizing platform.	The cost savings that would occur due to federal ownership of the EBT Gateway may be hard to quantify or demonstrate. This is because transaction switch service is not a major or easily identified component of the CPCM service fees to the states acquiring EBT services. EBT vendors may not pass on savings generated from using an FNS-sponsored switch to their contracting states.
An additional control in validating the daily draw down for Food Stamp settlement could be implemented using the settlement data from the transaction switch. In addition, there will be easier availability of the transaction data currently being provided by the EBT vendors, specifically the ALERT data.	There may be increased pressure for FNS to assume the settlement function for Food Stamps from the states, as all of the data and control required to support settlement is available through the federally sponsored gateway.
A federally sponsored gateway that switches all Food Stamp EBT transactions will be able to handle all interstate Food Stamp transactions.	There are liability issues if the gateway fails, including political liabilities. Monetary liabilities can be passed to the vendor providing the switching services, not so with political liabilities.
With a federally sponsored gateway, FNS will have a vehicle to control the implementation and support of certain operational rules, such as adjustment processing.	With the additional control also comes the additional management responsibility and work effort to manage not only the vendor providing the switching services, but also the operational and support issues that come with providing switch services.

An unanswered question is whether a federally sponsored gateway would positively or negatively impact competition within the marketplace, or even impact competition at all. Although conjecture, there would not appear to be any competitive impact within the EBT marketplace through the implementation of a federally sponsored gateway, other than possibly

the vendor that is awarded the contract for supporting the gateway.<sup>21</sup> The reason for this is that EBT vendors will still be required to support retailers that want government sponsored POS devices for acquiring EBT Food Stamp transactions, as well as the authorization processing platforms.

However, if states contracting for EBT services separated the services between EBT-only POS terminal driving and the authorization-processing platform, competition would be positively impacted. This is because service providers with expertise and the infrastructure to support a specific aspect of the business such as POS terminal driving will be more motivated to provide this function. Removing the requirement of supporting other transaction acquirers such as TPPs and Direct Connect Retailers may provide the incentive to split out these services.

There are a number of issues that need to be addressed and resolved before the FNS considers accepting responsibility for EBT transaction switching. These are:

- FNS needs to require 100 percent utilization of the switch by all entities acquiring and authorizing EBT transactions in order to obtain all of the advantages from sponsoring the switch. This will have some operational impacts in existing Deluxe processed contracts, because transactions from EBT-only terminals currently bypass the Deluxe EBT Gateway and go directly into the authorization platform. Routing these transactions through the transaction switch will create a scenario where Deluxe is holding Food Stamp funds until settlement is passed to the EBT-only retailers (this is the main reason Deluxe EBT-only retailers bypass the Deluxe EBT Gateway);
- FNS would need to determine if there is a reason why costs to support the EBT transaction switch need to be allocated back to the states utilizing the services of the switch. If cost allocation is required, a method for the allocation will need to be developed;
- FNS will need to hire, contract for, or develop the expertise to support the oversight management of implementing and operating an EBT transaction switch. A minimum of three support persons will be needed during the initial conversion to the EBT transaction switch, and one person on an ongoing basis.<sup>22</sup> This estimate assumes that an existing set of operating rules, such as the Quest® Rules, are utilized;
- Obtaining the contracts with the entities connected to the EBT transaction switch is the responsibility of the transaction switch and ultimately FNS. FNS will need to develop standard contracts for both transaction acquirers and EBT processors connected to the transaction switch. The current policy with both the Deluxe and EDS transaction switches is that the connecting entities pay all out-of-pocket fees for

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<sup>21</sup> The potential of a competitive advantage and monopoly for the vendor providing the EBT Gateway function will be blunted due to the fact that the vendor is under contract to FNS, and will be subject to the terms and conditions of the contract with FNS. Consequently under this scenario it will be important for FNS to have a contract that limits the ability to restrict competition.

<sup>22</sup> This estimate is based upon the experience at Deluxe Government Services when the Deluxe EBT Gateway was initially implemented.

- connecting to the transaction switch.<sup>23</sup> FNS would need to consider if it should keep this policy in order to control its costs;
- The economics of a transaction switch for the connecting entities is predicated on the switch handling both Food Stamp and cash transactions. FNS would need to develop policies, operational procedures, and a cost allocation methodology for handling cash transactions. The alternative of choosing to not process cash transactions will cause issues for both EBT processors and transaction acquirers, in particular for less sophisticated transaction acquirers<sup>24</sup> who may not be able to route cards to different switches based upon the transaction type. In a standard switch environment, all transactions coming from a specific card are routed through a common path. The BIN, which is the first six digits of the PAN, or card number, identifies the route for the transaction. However certain transactions can be routed differently based upon the transaction type. In this case both the BIN of the card as well as the transaction type being performed determine the routing of the transaction. Under a scenario where the same EBT card is being used for both cash and Food Stamp transactions, it is conceivable that the Food Stamp transactions will be routed to the federally sponsored gateway, while the cash transactions are routed to a different switch;
  - Fees currently paid to retailers are the result of either EBT vendor negotiations (North and South Dakota, Illinois, Texas, and Kansas), or are the result of state mandates (Minnesota and Wisconsin). FNS does not have any regulations requiring payments made to vendors using their own equipment, but also does not prohibit the payments. Because of processing requirements, payments records to retailers are currently generated using the switch transaction logs. The EBT transaction switch operated for FNS would have to continue supporting this functionality, as the data does not exist on the authorization platforms to make these payments;
  - STARS data to validate settlement could be collected from the transaction switch data. However this data may not include transaction adjustments performed by the EBT processors on behalf of retailers and/or recipients for processing errors. In the existing environment with the Deluxe EBT Gateway, transaction adjustments are performed outside of the normal transaction routing and settlement flow. A method will need to be developed to ensure that transaction adjustments can be accommodated within the normal transaction flow being provided by the federally sponsored gateway, or a mechanism would have to be created to account for these adjustments; and

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<sup>23</sup> As an example, the monthly charges for an acquirer (e.g., TPP) to connect to the EDS switch consist of a connection fee of \$350, \$150 fee for software in order to process automated adjustments between acquirers and EBT processor, \$300 fee for reconciliation file support, and cost plus 10 percent for telecommunication expenses (telecom hardware and monthly line charges). Each adjustment processed through EDS has an additional fee of \$5 for automated adjustments, and \$20 for a manual adjustment. The bottom line is that an acquirer has an operational expense of \$800 per month, plus telecom charges, which can be between \$900 and \$3,000 monthly, depending on the bandwidth and redundancy built into the telecom line.

<sup>24</sup> A subset of the smaller TPPs and direct connect retailers do not have the same sophistication and expertise as the larger TPPs, in particular when it comes to controlling the routing of transactions.

- REDE files would still be required by the EBT processors in order to validate the FNS number for voucher transactions. FNS would not be able to stop the creation of the REDE files for the EBT processors unless an alternative to the current method of performing voucher transactions is developed.

The issues described above are not insurmountable and the economics of transaction switching lends credence to a scenario for a federally sponsored transaction switch. The electronic funds transfer (EFT) transaction switching business in the private sector is a standardized service that normally operates as a defacto monopoly in a given geographical area. Specific examples of this are the regional ATM networks such as STAR, PULSE, and Honor. Costs are volume sensitive in that as volume increases the per transaction costs decrease.

Transaction switching costs for ATM networks are typically estimated as being between \$.015 and \$.04 per transactions. Given the high transaction volumes generated by EBT, along with the limited service requirements (when compared to an ATM network) the transaction expense should be between \$.01 and \$.02 per transaction, with a best estimate of \$.014 per transaction switched.

### **Retailer Management**

Retailer management under EBT is unique, especially when compared to the “commercial” environment. The uniqueness comes about because of the split responsibility for managing the retailer relationship. FNS is responsible for the front-end relationship, while the EBT vendor, acting as an agent of the state, is responsible for the back-end relationship. The front-end responsibility consists of providing the authorization to retailers to accept, or redeem, Food Stamp benefits from recipients as payment for food purchases. The back-end relationship supported by the state consists of providing the means to electronically redeem Food Stamp benefits and ensure the retailer is paid for those redemptions.

There have been suggestions by stakeholders from both the retailer and state community that FNS should consider assuming overall responsibility for retailer management. A number of the state stakeholders feel that under EBT, FNS has imposed responsibility for retailer management to the states that was previously handled by FNS. Comments have been made that this is a responsibility that did not exist under the Food Stamp coupon world, but was given to the states without additional funding under EBT.

The aspects of retailer management **not** currently supported by FNS include:

- Surveying FNS certified retailers to determine how they would like to participate, if at all, in the respective EBT program;
- Providing and supporting EBT-only POS equipment to retailers requesting government supplied equipment;
- Supporting retailers whose Food Stamp sales are not large enough to qualify for free equipment or are non-traditional retailers. These retailers perform EBT Food Stamp transactions through voice authorization. The retailer management aspect required to



support these retailers is receiving the paper vouchers and converting the vouchers to an electronic transaction so that the recipient's EBT account can be debited and the retailer paid for the transaction;

- Reimbursing retailers for supplies used to support Food Stamp sales from the EBT-only terminals;
- Providing and paying for phone lines for retailers whose Food Stamp sales qualify them for a free phone line; and
- Providing a retailer help desk for retailers using government POS equipment or are Food Stamp voucher retailers.

If FNS chooses to support Retailer Management and EBT-only terminal deployment and driving, the start of the retailer support systems exist within the STARS and REDE system. It is the REDE system that provides information in an automated fashion to the EBT processor regarding which retailers are authorized (or de-authorized) for taking Food Stamps.

One of the issues in making this determination is the costs, and the cost/benefit, for the government to provide this service. The overall cost for retailer management depends upon the service level requirements. An example of this is providing phone lines for use with state government sponsored EBT-only equipment. In Texas, phone lines were provided to every retailer that requested a line, while within the SAS project the practice was to provide phone lines only to retailers with \$5,000 or more in monthly Food Stamp redemptions.<sup>25</sup>

If the federal government should decide to enter the EBT processing arena for retailer management, the assumption is that service level requirements would parallel standards currently followed in the SAS, NCS, and WSEA projects. The requirements for retailer support within EBT are defined in 7 CFR §274.12(g)(4). However, a number of waivers have been granted that have had the effect of reducing costs for retailer support, although generally service levels have not been diminished.<sup>26</sup> It is assumed that the federal government would also want to deploy the same practices requested within these waivers. Specifically these waivers are:

- Provide POS equipment only to authorized retailers who have Food Stamp sales equal to or greater than \$100 per month. Retailers with less than \$100 in monthly redemptions would participate via manual vouchers;
- Charge a reasonable fee to de-install EBT-only POS devices that were installed at government expense if the retailer breaches the retailer agreement, was disqualified or involuntarily withdraws from the Food Stamp Program and allow a charge to retailers to reinstall POS devices if devices were installed at government expense and the POS device was removed because of retailer breach of contract, or the retailer was reinstated after program disqualification or involuntary withdrawal; and

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<sup>25</sup> The TEAA estimated a monthly savings of \$178,000 if Texas adopted the same practice as the SAS project in providing phone lines.

<sup>26</sup> An argument can be made that there is an impact to those retailers whose monthly Food Stamp redemptions are below \$100, and therefore do not qualify for a government sponsored POS terminal.

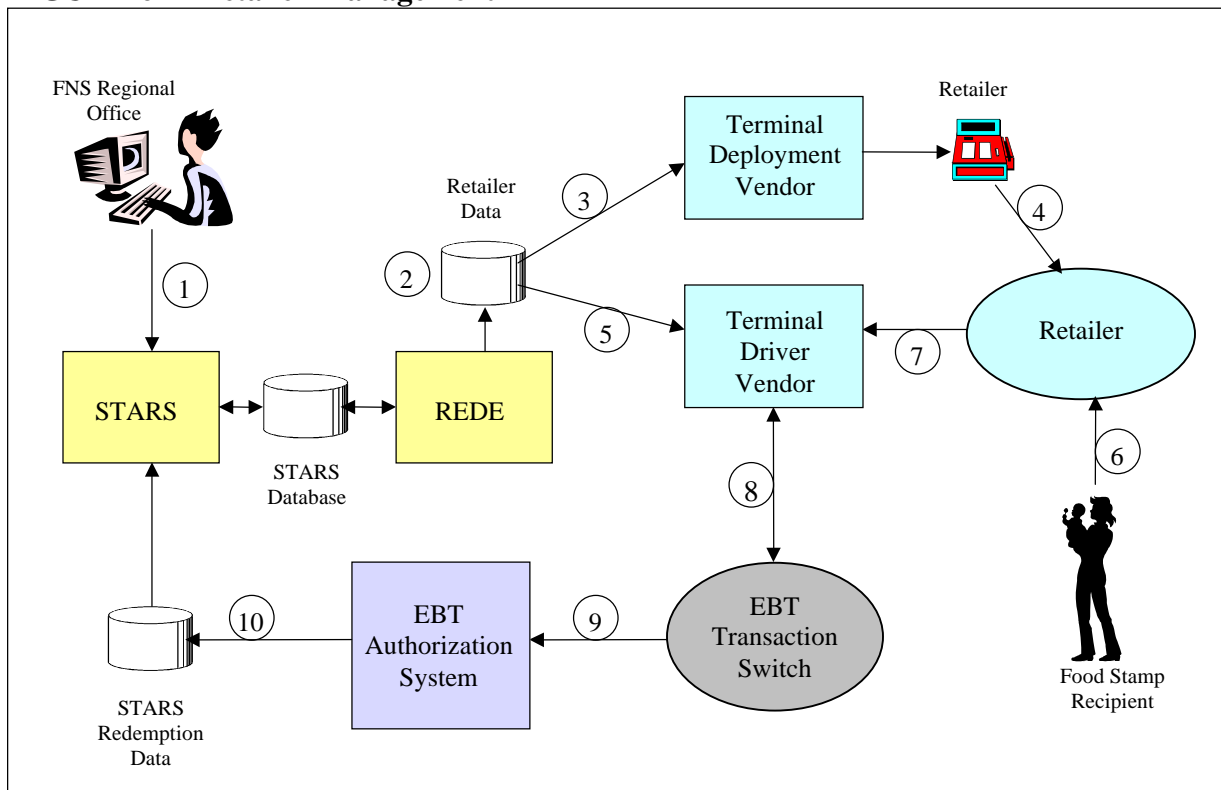


- Mail POS devices to retailers with installation instructions and a toll-free number for assistance.

In developing the cost model for determining the prices that the government would expect to pay for terminal deployment services, the assumption was that the cost of services would parallel cost in the commercial market. Consequently, these are the costs used within the analysis.

The development of cost data is dependent upon an implementation strategy. The strategy analyzed within this study is to use the existing infrastructure to the greatest extent possible. Specifically this means that the STARS and REDE systems should be modified to support a retailer management infrastructure where contracted private sector vendors provide POS terminal deployment and terminal driving. The regional FNS offices, in their role of qualifying retailers for accepting Food Stamps, would also determine if the retailers want to use EBT-only equipment and the number of devices for which the retailer qualifies. This data would be entered into STARS. The REDE system would provide the automated means for exchanging data between FNS and the vendors supporting the retail management functions. The specific flow for the retailer management as provided by FNS is depicted in the following flow chart, and is followed by a description of the various steps occurring within the retailer management process.

**FIGURE 6 Retailer Management**



1. The FNS Regional Offices, in their role of certifying retailers, also gather the information required for retailer management, such as settlement information and requests for government provided POS terminals.

2. REDE extracts the data from the STARS database and formats it into a standard format for the contracted vendors supporting retailer management for FNS.
3. The retailer management data is provided to the Terminal Deployment Vendor. The Terminal Deployment Vendor is responsible for loading and shipping the POS terminal to the retailer, and supporting the retailer during equipment installation and initial testing.
4. The POS equipment is shipped to the FNS certified retailer and installed.
5. REDE also provides the retailer management data to the Terminal Driver Vendor. This data is used to identify the retailer and the retailer's banking information that will be used to acquire and settle the EBT transactions.
6. Recipients redeem their Food Stamp benefits at retailers using government provided POS terminals.
7. The POS device passes the transaction to the terminal driving system of the vendor supporting the government deployed POS terminals.
8. The Terminal Driving System passes the transaction to the EBT transaction switch supporting the respective EBT Authorization System.
9. The EBT transaction switch passes the transaction to the respective EBT Authorization System for processing and transaction approval.
10. Settlement and reporting of the completed Food Stamp transactions occurs. Settled transactions are passed back to STARS through the Minneapolis Data Center. The STARS system would be programmed to monitor retailers with government deployed POS equipment, so that if the Food Stamp redemptions for these retailers fall below the minimum to obtain a POS terminal, action can be taken.

This basic process is being used today within a number of EBT projects, including the SAS, NCS, and WSEA EBT projects. The major difference in the scenario defined above is that FNS is assuming direct responsibility for the retailer management functions and contracting directly with the commercial vendors to support POS terminal deployment and terminal driving.

The costs on a per terminal basis for the government to support the deployment of EBT-only POS equipment are dependent upon the respective state where services are being provided. Cost can be broken out into two different components, initial implementation and ongoing operational costs. An estimate of the costs was performed for three different states, Kentucky, Montana, and North Carolina. The estimate is contained within the following table.

<b>TABLE 46: COST ESTIMATE FOR EBT-ONLY POS EQUIPMENT</b>		
<b>State</b>	<b>Implementation Cost</b>	<b>Monthly Operation Cost</b>
Kentucky	\$160,142	\$73,921
Montana	\$33,248	\$14,954
North Carolina	\$158,241	\$72,991

The details for how the costs were calculated are contained in Appendix F. Within the estimate, a conservative approach was used in determining the level of service being provided and the cost

of the acquired service. However, it should be noted that certain investment and operational costs have not been included in the analysis. These are:

- Investment costs to the government to modify their existing systems to support the retail management functions;
- Central FNS staff time to implement, coordinate, and manage the overall process required for retailer management, assuming that the management function would occur centrally from FNS headquarters. Included within this would be soliciting (through an RFP process), contracting, and managing the vendors that would provide the actual POS terminal deployment and driving. An estimate for this is five to eight persons for the initial implementation, and three to five persons for the ongoing support; and
- The FNS field offices would have an additional workload in supporting retailer management. This workload would consist of obtaining additional information during the approval process for a retailer to be able to redeem Food Stamp benefits, including whether the retailer wants a government deployed POS terminal. Additional operational support would probably be required to answer questions and resolve complaints.

As with the EBT Gateway processing, there are advantages and disadvantages for FNS to consider in assuming complete responsibility for retailer management as represented in the following table.

<b>TABLE 47: FNS RESPONSIBLE FOR RETAILER MANAGEMENT</b>	
<b>Advantages</b>	<b>Disadvantages</b>
FNS assuming retailer management functions appears to be the best fit for direct federal involvement in EBT. This is because FNS already has a direct role in retailer management.	FNS assuming retailer management functions is a major responsibility that would require additional staff resources and management oversight.
EBT services acquired through state contracts would only require authorization-processing services. This would greatly reduce costs of EBT services to the state, and simplify the processing environment where more vendors may be interested in providing EBT services.	There are liability issues to consider if the contracted terminal driver has a problem with its system, including political liabilities. Monetary liabilities can be passed to the vendor providing the switching services, not so with political liabilities.
There is a potential overall cost saving to the government, assuming that the government can purchase acquiring services at a better price than the EBT vendors, especially if a recently quoted price of over \$30 per terminal per month from an EBT vendor is valid.	An unknown variability in the cost of retail management for FNS is the number of transaction that would be acquired by retailers using government sponsored POS devices. The analysis in this study assumed an average of 70 transactions per device per month. The actual number of transactions acquired from EBT-only devices is currently an unknown. If the number is substantially higher than the average of 70 per device, than cost per terminal will be higher.

<b>TABLE 47: FNS RESPONSIBLE FOR RETAILER MANAGEMENT</b>	
<b>Advantages</b>	<b>Disadvantages</b>
Because of the increased role in retailer management, FNS would have additional options and opportunities to implement management and program reporting and controls on retailer management. This can lead to lower costs and better management of the Food Stamp Program.	FNS does not currently have the management expertise to support terminal deployment and transaction acquiring services. Options are to contract for expertise or develop expertise in house.

There are also a number of issues that needs to be considered and resolved if FNS were to consider accepting responsibility for retailer management. These are:

- FNS will need to hire, contract for, or develop the expertise to support the retail management function. The number of staff required to support a retail management function would be dependent on whether functions are centralized or decentralized within the FNS regions. An initial estimate of the staff required in a decentralized environment is two to three staff personnel per region, depending on the number of retailers within the region. A centralized operation may have a small savings in staff, but would increase the communications required as well as the potential for problems;
- Obtaining contracts with retailers requesting government deployed terminals would become the responsibility of the local FNS offices under the proposed scenario. FNS will need to develop standard contracts for these retailers, as well as the procedure for processing the contracts;
- In many projects, government deployed terminals support both cash and Food Stamp transactions. FNS would need to decide whether the EBT-only POS terminals they deploy would process cash transactions. If cash transactions were supported, then a cost allocation method for the cash transaction would need to be developed;
- FNS would need to determine if there is a reason why the costs to support retailer management need to be allocated back to the states utilizing the services. If cost allocation is required, a method for the allocation will need to be developed;
- Certain states have legislation and/or mandates that require fees to be paid to retailers using their own POS equipment for acquiring EBT transactions. The assumption is that FNS control of retailer management would not alter these payments, but this is an additional factor to be considered and managed; and
- There is an assumption that the terminal driver would also handle the processing of vouchers coming in from non-traditional retailers. This assumption would need to be validated. If the assumption were not true, it would impact the advantages of this option.

## Authorization Engine

As defined in Section III: *Assessment of Current Environment and Potential Changes, E. EBT Components*, the authorization engine is the component that is the heart of the EBT system, especially when considered from the contracting state/agency's perspective. The reason is that the authorization engine is the component to which the contracting agencies/states interface. From a contracting state/agency perspective the transaction switching and retailer management component are ancillary components necessary to support recipients' EBT transactions, but overall does not have a direct system impact when implementing the EBT project.<sup>27</sup>

If the federal government decided to assume responsibility for the EBT authorization platform, then by default the federal government would be assuming responsibility for all components of the EBT system. From a state perspective, it would not make sense to maintain responsibility for retailer management or EBT transaction switching when it does not have responsibility for the authorization platform. As stated above, these other components are ancillary to the states' objective of providing an efficient payment mechanism for its clients, and control of these functions does not provide any real advantage.

The states that implement EBT on an authorization platform sponsored by the federal government could have responsibility for the client help desk services. This could provide some flexibility to the state to support their recipients in the manner they desire, but it would require a unique client help desk interface by the state agency to provide this flexibility.

The authorization engine is the component where there is the largest variability between EBT vendors, and also between the various states. The reason is obvious. The authorization engine is the component that contains the interfaces to the various states under contract to the EBT vendor. The eligibility systems within each state are unique, as is the state's implementation of the policies and regulations for administering the Food Stamp Program. In a literal sense, the practices implemented within the EBT system (such as EBT card issuance and emergency benefit issuance) is an extension of the state's policies in paying out Food Stamp benefits to recipients.

The EBT vendors have implemented a strategy where the core functionalities (for example, how a Food Stamp purchase transaction is processed or settlement occurs) within the authorization platform are standardized, but the interfaces to each state are customized and unique to the respective state. After the first couple of projects were implemented, the requirement for unique interfaces became obvious.<sup>28</sup> The benefits of unique interfaces from the EBT vendor's standpoint are:

1. An interface to the state agency can be developed and implemented once, bringing closure to the development process. Any additional request for changes to the interface becomes a change order by the state, and is billable.

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<sup>27</sup> However, the importance of these functions have become evident aware to the states when system problems occur with these components and recipients are not able to complete transactions.

<sup>28</sup> Deluxe attempted to implement an interface on their second EBT contract, New Jersey, modeled after their first contract with the State of Maryland. However because of the differences between the eligibility systems, Deluxe realized that the interfaces would have to be unique.

2. Because interfaces are developed, tested, and implemented separately, a processing problem (i.e., program bug) in one interface should not cause problems to every agency/state being processed by the respective EBT vendor.
3. A requested change to the interface for one state will not impact any other state being processed by the same EBT vendor.

Consequently, it should be expected that even if the federal government provides one common EBT system on a nationwide basis, there would still be unique interfaces for each state using the system.

The estimate of the costs for developing an authorization engine has already been discussed above within the Federal Developed Software, Outsourced Processing Section. Under this scenario of government sponsored EBT systems, the estimate is also valid. The details of the estimate are contained with Appendix E. Operational costs are harder to estimate because of reasons also previously discussed within the Federal Developed Software, Outsourced Processing Section. But a high level estimate that illustrates the impact of economies of scale is provided within Appendix D.

The advantages and disadvantages for FNS to consider in providing authorization processing are addressed in the following table.

<b>TABLE 48: FNS SUPPORTED AUTHORIZATION PROCESSING SERVICES</b>	
<b>Advantages</b>	<b>Disadvantages</b>
Heavy federal involvement would be required in defining state processing and interface requirements. This involvement could help ensure a consistent implementation of EBT policies and regulations.	Assumption of this function is a large responsibility that would require additional staff resources and management oversight.
Federal involvement could help ensure standardization and a consistent implementation between all of the states.	Federal involvement would bring few economies of scale to the development and operations of the contract from a state perspective. This is because states would continue to require the same level of involvement to ensure their requirements and project goals are being met.
FNS can foster new vendors within EBT by offering significant caseload volumes and paying upfront development costs.	FNS does not currently have the management expertise to support EBT systems development and operations. Options are to contract for expertise or develop expertise in house.
Operational problems that have or are occurring in existing EBT projects, in particular settlement and reconciliation issues, can potentially be resolved through the control opportunities offered by direct federal participation.	State may not welcome the direct federal involvement in the implementation of their EBT systems, and may not be as positive regarding additional controls brought about because of direct federal participation.



<b>TABLE 48: FNS SUPPORTED AUTHORIZATION PROCESSING SERVICES</b>	
<b>Advantages</b>	<b>Disadvantages</b>
There will be a better understanding and possibly controls of the costs in providing EBT services.	There may not be any cost savings that develop because of direct federal involvement, specifically because of the cost shifting to the federal government, as well as the assumption of many of the processing risks previously covered by the federal government.
Increased competition should occur, with additional vendors entering the market because of reduced risk.	Competitive environment would substantially change from full service providers such as CSI and Deluxe to facilities management vendors such as CSI and EDS that are providing services on a cost plus basis. The federal government may incur greater cost because of the shift in risk from the vendor to the government, which reduces the vendor's incentive to control costs.

However, there are a number of issues that need to be considered by the federal government if it decides to provide EBT processing. These issues are:

- FNS would need to hire, contract for, or develop the expertise to support the management of an EBT authorization processing function;
- FNS would need to develop and implement a method for the allocation of costs to the states;
- Many existing EBT projects also support delivery of cash benefits within their EBT systems. Some states are in the process of looking at delivery of Tier 2 services, such as Child Care, through their EBT systems. FNS would need to develop and implement a policy on supporting cash programs from a federally managed EBT system;
- Certain states have legislation and/or mandates that require fees to be paid to retailers using their own POS equipment for acquiring EBT transactions. The assumption is that FNS control of retailer management would not alter these payments, but there is an additional factor to be considered and managed;
- FNS would need to consider its position and the potential impacts on an EBT project when required to act as mediator between the EBT vendor and the numerous state stakeholders during the implementing and ongoing operations of a common EBT system; and
- States currently have the responsibility for implementing and operating their own recipient eligibility systems for Food Stamps, as well as other benefits. As many states consider an EBT system an extension of the eligibility system, there may be resistance from some of the state stakeholders about utilizing a common federally sponsored EBT system.

## Client Help Desk Services

The client help desk services, as explained in Section III: *Assessment and Potential Changes of Current Environment, EBT Components*, consist of two discrete components. These components are the ARU and the Customer Service Center (CSC) where personnel referred to as customer service representatives (CSRs) answer client calls. Although it is possible for the client help desk services to be assumed by the FNS, there are no real advantages to the various EBT stakeholders in having FNS assume responsibility for this unless FNS is also assuming responsibility for the authorization processing component.

The advantage for the federal government assuming responsibility for customer service is economies of scale. But the economies of scale are limited when considering client help desk functionality. The expenses for a recipient help desk include the fixed infrastructure costs and the variable per call expenses. Fixed infrastructure costs can be leveraged over a large client population (i.e., a million cases), but it should be noted that both CSI and Deluxe have surpassed this threshold. Variable costs per case also reach a point where additional volume does not influence per unit costs. This was demonstrated in the TEAA analysis. Both CSI and Deluxe have the case volume where economies of scale should have also been achieved on the variable costs.

A factor to note is that utilization of the help desk services by recipients is not uniform across state EBT projects. This is demonstrated in the following table showing recipient calls per case to the help desk across the SAS projects for the month of June 1999 to November 1999. Call statistics and case volume were collected from the monthly Customer Service Performance Reports provided to the SAS states from their EBT contractor, CSI.

State	June	July	Aug.	Sept.	Oct	Nov.
Alabama	2.66	2.39	2.64	2.61	2.71	2.45
Arkansas	2.34	2.05	2.42	2.38	2.30	2.16
Florida	3.39	3.68	3.63	3.69	4.38	3.79
Georgia	3.38	3.64	3.88	3.58	4.06	3.49
Kentucky <sup>29</sup>	2.14	6.78	4.19	2.38	2.10	1.92
Missouri	2.90	2.53	2.58	3.30	3.53	3.18
North Carolina <sup>30</sup>	1.40	1.62	1.50	2.57	2.23	2.49
Tennessee	2.16	2.43	2.41	2.34	2.46	2.27

The complete data gathered from the Customer Service Performance Reports is contained in Appendix G. Although there is still not a complete understanding of the factors impacting the number of calls made to the recipient help desk, two potential factors should be explored. The first is the impact that cash benefits have on the number of calls to the recipient help desk. Although inconclusive, it appears that states only supporting Food Stamp benefits with EBT (Kentucky and North Carolina) have a lower recipient call rate than states that support both cash

<sup>29</sup> Variation in recipient calls per case in Kentucky was due to project rollout phase, which completed in October.

<sup>30</sup> Increase in calls per case in North Carolina from September to October attributed to impact of natural disaster.

and Food Stamp benefits. Unfortunately, the call volumes were skewed in Kentucky and North Carolina by project rollout and a natural disaster, respectively.

The second item that needs to be explored is the influences on client behavior specifically caused by state policy and action. For example, North Carolina provided personalized client training and customer selection of personal identification numbers (PINs) in the local state offices. The other states within the SAS performed training through the mail, along with system generated PINs that were communicated to the recipients in PIN mailers. The impact of this policy may help explain the lower calls per case prior to the disruption caused by Hurricane Floyd.

The advantages and disadvantages for FNS to consider in providing recipient help desk services are represented in the following table.

<b>TABLE 50: FNS SUPPORTED RECIPIENT HELP DESK SERVICES</b>	
<b>Advantages</b>	<b>Disadvantages</b>
Federal involvement could help ensure a consistent implementation of EBT policies and regulations, as well as a consistent standard of service to recipients.	Unless FNS also assumes support for the authorization platform services, separate help desk interfaces would be required to every vendor supporting EBT authorization processing.
Federal involvement could help ensure standardization and a consistent implementation between all of the states.	There is considerable complexity required to support help desk services. FNS does not currently have this management expertise. Options are to contract for expertise or develop expertise in house.
FNS can foster new vendors within EBT by offering significant caseload volumes and economies of scale.	There may not be any cost savings that develop because of direct federal involvement.

The issues that need to be considered by the federal government when analyzing the benefits of providing help desk services are:

- FNS would need to hire, contract for, or develop the expertise to support the management of a recipient help desk operation;
- FNS would need to develop and implement a method for the allocation of costs to the states;
- Many existing EBT projects also support delivery of cash benefits within their EBT systems. If the EBT project for the respective states being supported includes cash benefits, FNS would need to develop and implement a policy on how customer service calls would be supported for recipients with either combined (e.g., both Food Stamp and cash benefits) or only cash benefits; and
- The number of client help desk calls increase greatly when processing problems occur on the EBT system. When this occurs, the client help desk is faced with rising expenses and operational problems due to the large number of unanticipated calls that it has no control over. It should be noted that this problem is common to every provider of help desk services within EBT.

The advantage for the federal government assuming responsibility for customer service is again economies of scale. But the economies of scale are limited when considering client help desk functionality. The expenses for a recipient help desk include the fixed infrastructure costs and the variable per call expenses. Fixed infrastructure costs can be leveraged over a large client population (i.e., a million cases), but it should be noted that both CSI and Deluxe have surpassed this threshold. Variable costs per case also reach a point where additional volume does not influence per unit costs. This was demonstrated in the TEAA analysis. Both CSI and Deluxe have the case volume where economies of scale should have also been achieved on the variable costs.

## Settlement

A number of the stakeholders felt that there are advantages to the federal government taking over responsibility for EBT settlement. Hand in hand with settlement is system reconciliation. Consequently it was assumed that the stakeholders making this comment were referring to both system settlement and reconciliation. In determining the validity of this request, it is necessary to understand the requirements relating to Food Stamp as defined in 7 CFR §274.12.

The settlement requirements are defined in 7 CFR §274.12(g)(5), and states:

*The State agency shall ensure that the EBT system provided credits to the financial institution holding the accounts for retailers or third party processors within two business days of the daily cut-over period for retailer settlement. The cut-over period is the time of day established by the system in which a transaction day is established for settlement and reconciliation.*

Further clarifications regarding the concentrator bank responsibilities is defined in 7 CFR §274.12(i), and reads as follows:

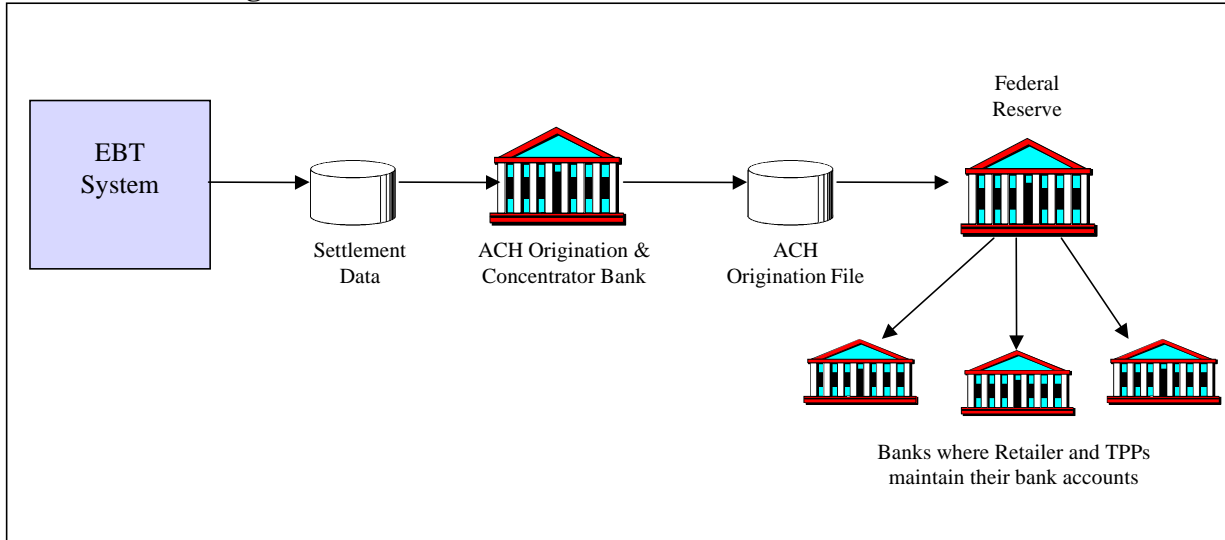
*Concentrator Bank Responsibilities. The concentrator bank shall be a federally insured financial institution or other entity acceptable to the Federal Reserve which has the capability to take retailer credits and/or debits, obtained from the EBT system operator, and transmit them to the ACH network operated by the Federal Reserve or through another process for crediting retailers approved by FCS<sup>31</sup>. Transmittal shall be by tape or on-line in a format suitable for the Automated Clearing-house (ACH) or as approved by FCS.*

In today's EBT environment the flow of funds is different than in the initial EBT projects. Originally the EBT processor provided an ACH origination tape to the bank that maintained the EBT Project Settlement Account (i.e., the concentrator bank). Consequently the concentrator bank also served as the ACH origination bank. The ACH origination tape contained all of the credits to the respective bank accounts for the retailers and TPPs that performed EBT transaction for the business day that needed to be settled. The flow is depicted in the following diagram:

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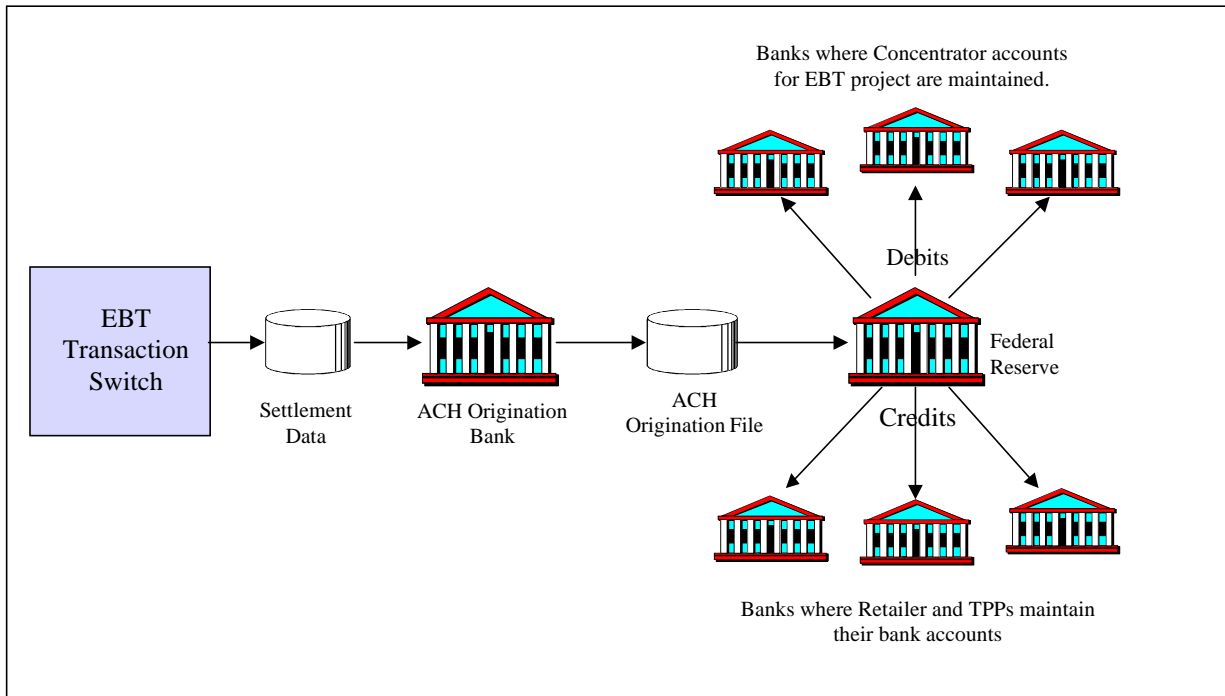
<sup>31</sup> FCS (the Food and Consumer Service) is the former name of FNS.

**FIGURE 7 Original Flow of Funds**



With the addition of the EBT transaction switch as well as interstate (i.e., interoperable) transactions, the settlement flow has changed. The main difference with settlement in the current environment is that the EBT transaction switch is the master (i.e., the initiator) of settlement. The concentrator bank (bank holding the settlement account for the respective state EBT project) is no longer the ACH origination bank. This is because an EBT transaction switch would be settling Food Stamp transactions for multiple state EBT projects, each of which may have a different bank maintaining the respective EBT project's concentrator account. The current flow is depicted in the following diagram.

**FIGURE 8 Current Flow of Funds**



If taken in a literal sense, FNS would be required to own the individual concentrator accounts used as the clearing (i.e., settlement) bank account for the settlement of Food Stamp transactions. The difference to the EBT vendors is that instead of acting as an agent of the state when drawing down funds from the Food Stamp letter of credit in order to fund the concentrator bank account, the EBT vendor would be acting as an agent of the federal government. Reconciliation of the draw-down would still happen after the fact by FNS using the STARS data provided on a periodic basis (i.e., daily or weekly) by the EBT vendor.

Besides the argument that there is very little advantage to FNS in taking over the settlement function, there are two other stumbling blocks. The first is the settlement of other benefit types such as general assistance cash benefits. Current EBT settlement practices include using a common concentrator bank account for both cash and Food Stamp benefits. If FNS takes over the settlement of Food Stamp benefits, then a separate concentrator account would be required for cash benefits. In addition, a retailer who redeems both cash and Food Stamp transactions within a state would receive two ACH deposits for the transactions, one for the cash benefits redeemed, and another ACH deposit for the Food Stamp benefits redeemed.

The other issue has to do with reconciliation of the EBT system. The reconciliation requirements mandated by FNS are specified in the federal Food Stamp regulation 7 CFR §274.12(j)(1), and read as follows:

*Reconciliation - Reconciliation shall be conducted and records kept as follows:*

*Reconciliation of benefits posted to household accounts on the central computer against benefits on the Issuance Authorization File;*

*Reconciliation of individual household account balances against account activities on a daily basis;*

*Reconciliation of each individual retail store's Food Stamp transactions per POS terminal and in total to deposits on a daily basis;*

*Verification of retailer's credits against deposit information entered into the ACH network;*

*Reconciliation of total funds entered into, exiting from, and remaining in the system each day;*

*Maintenance of audit trails that document the full cycle of issuance from benefit allotment posting to the State issuance authorization file through posting to point-of-sale transactions at retailers through settlement of retailer credits.*

From a practical standpoint, EBT system reconciliation requires three steps be performed on an ongoing basis to comply with the federal regulations.<sup>32</sup> These steps are:

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<sup>32</sup> For a more complete description of the EBT reconciliation requirements for state agencies, refer to the *EBT Reconciliation - Guidance for State Agencies Document*, published by FNS in August 1999.



- Validate that new benefits authorized by the issuance system are added correctly and completely to the recipient's account on the EBT system;
- Validate that daily settlement amount requested by the EBT vendor is equal to the total of the credits on the ACH origination file (i.e., the credits to the bank accounts for the retailers and TPPs), and is equal to the total of the Food Stamp purchase transactions deducted from the clients' EBT accounts; and
- Validate the outstanding liability (Food Stamps benefits that have not been paid out) remaining on the EBT system at the end of the settlement day is equal to the beginning balance plus new benefits added (benefit issuance), less Food Stamp benefits redeemed by the clients (transaction settlement), plus or minus transaction adjustments such as expungements or coupon conversion. This is also the balance maintained within the Account Management Agent (AMA) system by the Federal Reserve Bank of Richmond.

In order to perform reconciliation, FNS would need to maintain or have access to information that covers the full benefit issuance cycle. Within the current environment, the only information that can be reconciled by the federal government (i.e., FNS) is the settlement data. This reconciliation is a post-audit function that is performed by comparing the Automated Standard Application for Payment (ASAP) system draw-down against the settlement data provided on the STARS file.

The accuracy and validity of new benefits being added to the EBT system can only be validated against the states' Food Stamp eligibility systems. As long as state agencies maintain responsibility for issuance of benefits to recipients, the federal government does not have all of the information required to validate benefits entering into the EBT system. Not being able to validate funds entering into the system precludes the federal government from validating the outstanding liability remaining on the EBT system.

The end result is that the federal government cannot assume responsibility for settlement processing because it lacks access to all of the information required to perform the function. The federal government can perform part of the reconciliation process (which it currently does by validating the ASAP draw-down). But changing the settlement and reconciliation process so that the federal government can perform the complete settlement process does not appear to be a viable alternative that should be considered.