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Promotion

Nutrition and Physical Activity
Section

WIC Program

Final Report: WIC EBT Feasibility Study and Cost-Benefit Analysis



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1 OVERVIEW

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) Program is administered by the United States Department of Agriculture (USDA) Food and Nutrition Service (FNS). WIC provides nutrition screening and education, referrals to preventive health care programs, and access to selected foods to supplement the diets of low income, pregnant, lactating and postpartum women, infants and children up to age five who are at nutritional risk.

To fund the WIC Program, FNS provides federal grants to states for supplemental foods, health care referrals, and nutrition education. At the state level, the WIC Program is administered by the state WIC Program, generally located within the Department of Health, and by local WIC clinics that provide nutrition screening and education and issue WIC benefits.

The Wisconsin WIC Program is located within the Department of Health Services (DHS), Division of Public Health (DPH). Wisconsin WIC serves approximately 130,000 participants per month through 70 local WIC projects serving all Wisconsin counties. The DHS/DPH enters into agreements with local health agencies and private non-profit agencies to provide eligibility determination and nutrition education counseling to WIC participants. In the WIC clinics, nutritionists, eligibility certification staff and benefit issuance personnel are supported by the Wisconsin WIC Management Information System (MIS) known by the acronym "ROSIE" (Real-time On-line Statewide Information Environment). Through ROSIE, WIC clinic staff issue negotiable food instruments (FIs) that are redeemable through authorized WIC vendors (i.e. retail grocers, pharmacies).

An alternative to the issuance and redemption of paper FIs is the use of electronic payment and card technologies to support the issuance of food benefits and the processing and settlement of WIC benefit transactions. These technologies, when applied to the delivery of government benefits, are referred to as Electronic Benefits Transfer (EBT). Federal and state governments have been issuing benefits through EBT since the early 1990's. The first WIC EBT initiatives were offline systems that used integrated circuit chip (ICC) smart card technologies as the complexity of the WIC Program precluded participating in EBT systems that utilized magnetic stripe cards with existing credit/debit networks. In offline systems, the authorization for the purchase occurs as a transaction between the data on the card and the software of the point of sale (POS) (card acceptance) terminals. A connection to the WIC EBT processing system is not required, hence the term "offline". At the store level, WIC EBT transactions are batched and sent in one file, usually on a daily basis, to the WIC EBT system for processing and settlement. Offline systems are operational in some states and are still being implemented by WIC EBT programs.

Recent advances in POS transaction processing technologies and the development of WIC technical and messaging standards have recently made online WIC EBT technically feasible. The concept of online WIC EBT is similar to that of EBT for SNAP (Supplemental Nutrition Assistance Program, formerly Food Stamps)¹, which is in use in every state and territory in the United States, including Wisconsin, to distribute SNAP benefits, and by many states to facilitate cash program payments. SNAP EBT uses International Standard Organization (ISO) debit card technologies. Participants are issued magnetic stripe cards that are used at POS terminals for the purchase of food at FNS

¹ In Wisconsin, the Supplemental Nutrition Assistance Program is known as the FoodShare Program.

authorized food retail locations. When EBT for SNAP was first introduced, many grocery stores did not yet accept credit or debit transactions. Today the use of credit and debit is ubiquitous.

Unlike SNAP, WIC benefits are not associated with a specific dollar amount but are provided in the form of a food package or food prescription². The participant may purchase only food items specified on the food instrument and the WIC Approved Food List. Approved food items, quantities and package size are specified in the food package. Because of the nature of WIC food benefits, a WIC EBT redemption transaction is more complex than SNAP EBT and is often considered the most complex transaction at the retail POS. Like SNAP and cash EBT³, online WIC EBT is being built on the retail POS and debit and credit infrastructure and will use national standards for the processing of financial transaction messages⁴. Unlike SNAP and cash EBT, which must be interoperable across state lines, states have the option of implementing offline, smart card systems for WIC EBT. Both technologies (magnetic stripe and smart cards) and systems (online and offline) have distinct advantages and are considered as WIC EBT alternatives within this Feasibility Study.

The Wisconsin WIC Program conducted a comprehensive Feasibility Study and Cost-Benefit Analysis (CBA) to determine the feasibility, costs and benefits of implementing WIC EBT in Wisconsin. The Feasibility Study and CBA considered the following:

- Impact of WIC EBT on the Wisconsin WIC Program's organization structure and technical infrastructure⁵;
- Impact of WIC EBT on authorized WIC vendors (retailers) in Wisconsin;
- Readiness of the Wisconsin WIC MIS (ROSIE) to support WIC EBT;
- Capability of WIC EBT to enhance WIC benefit delivery;
- Assessment of the cost to acquire WIC EBT services and implement and operate WIC EBT in Wisconsin;
- Assessment of the benefits of WIC EBT;
- Assessment of technology alternatives for the implementation of WIC EBT; and
- Assessment of the procurement alternatives for the implementation of WIC EBT including sharing the EBT infrastructure with other Wisconsin benefit programs.

The results of these analyses are summarized in this report. For an in depth review of these findings, please refer to the following reports:

² In addition to specified food items, the WIC benefit package also includes a Cash Value Voucher (CVV) for the purchase of fruits and vegetables.

³ Some states use their EBT processors to distribute cash benefits and payments (e.g., TANF, child support, child care) to clients and citizens.

⁴ American National Standard for Financial Services, ANS X9.93:3 2008 Financial transaction messages – Electronic benefits transfer (EBT) – Part 1 Messages and Part 2 Files.

⁵ Issuance processes at the local level in Wisconsin are extremely efficient, and, while printing food instruments, issuance personnel scheduled appointments and provided nutritional education. It was determined that tangible benefits from issuance may be difficult to achieve and therefore are not included in the cost assessment.

- Wisconsin WIC EBT Requirements Study of WIC EBT Readiness and Capability, November 24, 2009 (Deliverable 7.1.1)
- Wisconsin WIC EBT Business and Technical Capacity, March 8, 2010 (Deliverable 7.1.2a)
- Wisconsin WIC EBT Retailer Technical and Business Capacity, March 10, 2010 (Deliverable 7.1.2b)
- Wisconsin WIC EBT Organizational Capacity, April 5, 2010 (Deliverable 7.1.3)
- Wisconsin WIC EBT Cost Assessment, April 20, 2010 (Deliverable 7.1.4)
- Wisconsin WIC EBT Cost-Benefit Analysis, May 4, 2010 (Deliverable 7.1.5)
- Wisconsin WIC EBT Recommendations, May 5, 2010 (Deliverable 7.1.6)
- Wisconsin WIC EBT Shared Deliverable Assessment, December 15, 2009 (Deliverable 7.1.7)

2 WISCONSIN WIC PROGRAM

The Wisconsin WIC Program is located within the Department of Health Services (DHS), Division of Public Health (DPH), Bureau of Community Health Promotion. Within DHS, the Bureau of Information Technology Services (BITS) provides information technology (IT) services to the entire Department. The Wisconsin WIC and Nutrition Director serves as the Director for the Wisconsin WIC Program and the Wisconsin Public Health Nutrition Program.

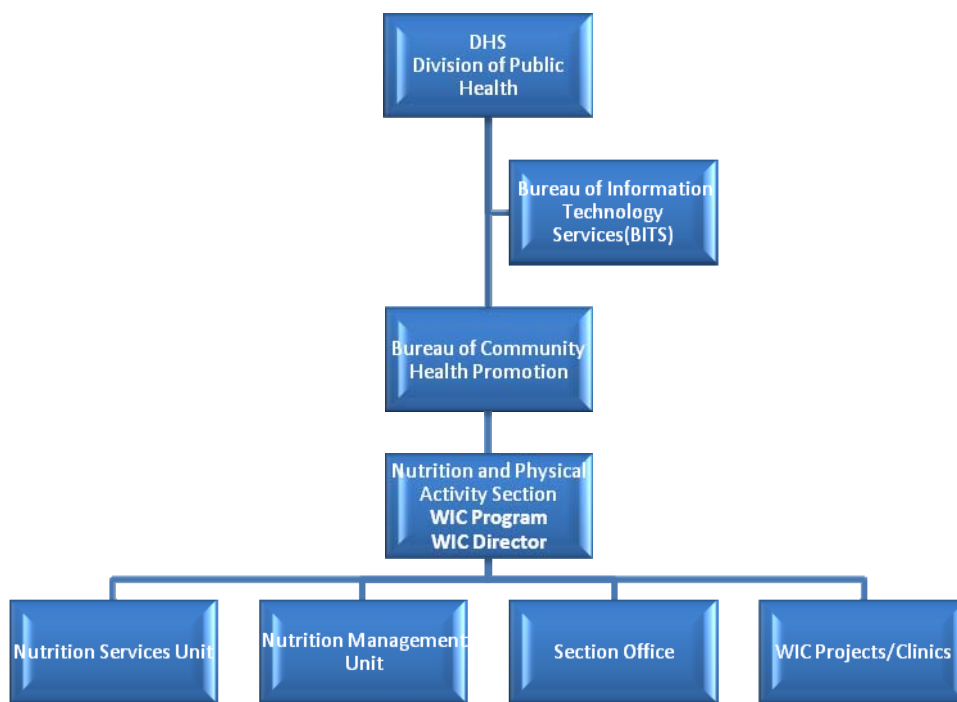


FIGURE 1: WISCONSIN WIC PROGRAM ORGANIZATION STRUCTURE

The WIC Director is responsible for program planning, development, implementation and evaluation for the Wisconsin WIC and the WIC Farmers' Market Nutrition Programs and for oversight of the local WIC projects. The Director also oversees several other programs including the Commodity Supplemental Food Program (CSFP), the Emergency Food Assistance Program (TEFAP), FoodShare Nutrition Education (SNAP Ed), the Senior Farmers' Market Nutrition Program, and the Overweight, Obesity and Physical Activity Program. The WIC Director is supported by the following units or offices:

- Nutrition Services Unit: responsible for program operations, training, education and coordination.
- Nutrition Management Unit: responsible for vendor management, vendor fraud and abuse, participant fraud and abuse, the ROSIE data system management, the WIC banking (food payment system), and EBT coordination. This unit interfaces with BITS for IT management.
- Section Office: responsible for fiscal management, web services, forms and publications, and oversight of all programs.

Wisconsin WIC serves approximately 130,000 participants per month through five regions and 70 local WIC projects serving all Wisconsin counties. The five regions are:

- Eau Claire/Western Region
- Rhinelander/Northern Region
- Green Bay/Northeastern Region
- Madison/Southern Region
- Milwaukee/Southeastern Region

Each region is composed of multiple projects and each project has one or more clinic sites. Throughout the state, about 200 WIC clinics interact directly with WIC participants to provide eligibility determination, nutrition screening and education, referrals to preventive health care and issuance of prescribed WIC food benefits. Clinic nutritionists determine the nutritional needs of WIC participants and prescribe specific food packages to meet their needs. Participants use the paper food instruments issued at WIC clinics to access their WIC food benefits at over 1,100 authorized WIC vendor (food retailer and pharmacy) locations in the state.

The Wisconsin WIC Program serves participants residing in metropolitan, urban and rural areas. The major population centers are the Milwaukee, Racine, Kenosha, Janesville, Beloit, and Fox Valley metropolitan areas and Madison, the state capital. WIC clinics include both permanent and satellite offices. Permanent WIC clinics have Internet connectivity. Many satellite clinics do not have Internet access but Wisconsin WIC plans to provide wireless access for satellite locations.

3 FEASIBILITY STUDY METHODOLOGY

The Wisconsin WIC EBT Feasibility Study incorporates several different analyses including impact and readiness assessments and cost-benefit analysis. While the methodology was tailored for each type of analysis, the general approach to conducting this study included the following methodologies.

3.1 DOCUMENT ASSUMPTIONS

The primary assumptions incorporated into the Wisconsin WIC EBT Feasibility Study include:

- Viable WIC EBT alternatives are those that are currently deployed or are being deployed by other state WIC Programs.
- The Wisconsin WIC Program is currently operating at capacity. Additional resources are required to support WIC EBT implementation and operations. To accommodate changes in business processes and increases in workload, current staff may be reassigned and additional staff or contractor support will be required.
- Some technical, organizational and cost impacts are directly attributed to the WIC EBT alternative selected by the Wisconsin WIC Program.

3.2 DOCUMENT THE CURRENT ENVIRONMENT (BASELINE)

The current system, business, organizational and technical environment of the Wisconsin WIC Program was assessed through the following tasks:

- Interview state-level WIC Program personnel
- Review program documents and data
- Conduct process reviews at local and satellite clinics
- Review ROSIE system documentation to assess the current functional capabilities
- Survey authorized Wisconsin WIC vendors to obtain technical (hardware/software) information on electronic cash register (ECR), technologies deployed in-lane, and the retailer costs of applicable WIC benefit redemption processes. (Refer to Appendix A.)

3.3 PREPARE GAP ANALYSES

Gap analyses were prepared by comparing the system, technical and organizational capacity of the WIC Program stakeholders against the requirements for each of the WIC EBT alternatives.

Stakeholder groups included:

- State-level WIC Program
- Local Projects and WIC Clinics
- Authorized WIC Vendors
- WIC Participants

In addition to stakeholders, a gap analysis was conducted to assess the current functional capabilities of ROSIE versus EBT functional requirements.

3.4 ASSESS WIC EBT ALTERNATIVES

As part of the analysis, we also assessed the technical and functional capabilities of the WIC EBT alternatives considered for Wisconsin WIC EBT using the following approach:

- Review WIC EBT functional, technical and program documentation issued by the United States Department of Agriculture, Food and Nutrition Service (USDA/FNS)
- Review best practices from other state programs and contact WIC EBT states for information, as necessary
- Contact WIC EBT system and WIC EBT service providers for system status and technical information

3.5 PREPARE COST ANALYSIS

A primary component of the EBT feasibility assessment is a comparison of the costs to issue and redeem WIC benefits under the paper (baseline) and EBT benefit delivery methods. The Wisconsin WIC EBT cost assessment was conducted using the USDA/FNS National Cost Benefit Analysis Model and approach. The results of the technical impacts on infrastructure requirements and organizational impacts on staffing and other resource requirements were incorporated into the cost model. The model also accommodates the Wisconsin WIC Program's forecasts for participant and FI volumes, the Wisconsin WIC Program's schedule for implementing WIC EBT, and other factors such as cost of living adjustments (COLA) and inflation.

In addition to the data collection methods identified above, additional data for the cost model was gathered through:

- Review of state and local benefit issuance activities;
- Estimated times for occasional benefit issuance activities (those activities that do not occur on a regular or daily basis, e.g., order paper stock)⁶;
- Observing repetitive issuance activities at the local level;
- Use of a retailer survey to obtain technical (hardware/software) information on ECR systems, technologies deployed in-lane, and the retailer costs of applicable WIC benefit redemption processes; and
- Review of available cost data and extant materials to support volume and cost information including:
 - *Final Evaluation Report* from the Michigan WIC Program EBT Evaluation Project, September 28, 2007

⁶ Time estimation was used in accordance with approved FNS methods and is discussed in the "WIC Electronic Benefits Transfer Cost Analysis Model", 2009.

- *WIC EBT Feasibility Study/Cost Benefit Analysis*, Washington State Department of Health WIC Program, September 26, 2007
- *Washington State Project Key Outcomes and Feedback Report*, USDA, FNS, Online WIC EBT Demonstration, March 16, 2006
- *New Mexico WIC Program EBT Cost Benefit Analysis*, USDA, FNS, May 19, 2006
- *Texas WIC EBT National Evaluation Model Cost Sheets*, USDA, FNS, 2006

Additional information was obtained concerning these and other deployments, such as the Kentucky on-line system being developed by CDP, Inc., through e-mails, interviews, presentations, and related documentation.

3.6 DEVELOP A COST-BENEFIT ANALYSIS

Subsequent to the Cost Assessment, a Cost-Benefit Analysis (CBA) was prepared. The CBA considers both tangible costs and intangible benefits related to each alternative assessed. Data for the CBA were obtained by:

- Preparation of detailed cost assessment of the paper-based system and the WIC EBT alternatives;
- Interviews and work sessions with state staff concerning the intangible benefits and risks of the WIC EBT alternatives;
- Review of processes at the state and local levels, detailed in Deliverable 7.1.3: Organizational Capacity;
- Review of materials pertaining to the deployment of EBT and WIC EBT in other states; and
- Application of extant knowledge of subject matter experts (SMEs) on the benefits of EBT and specific WIC EBT alternatives.

4 WIC EBT ALTERNATIVES

EBT is the electronic transfer of government benefits to individuals or households using debit or smart card technology and POS or Automated Teller Machines (ATM) technologies. EBT can be acquired by a state as a transfer system (e.g., the Wyoming or Kentucky transfer EBT system) or a service through an EBT service provider or processor (e.g., Michigan and Nevada). EBT can be implemented using online or offline technology. Online technology uses magnetic stripe cards and the national debit/credit card networks to process and authorize EBT transactions online in real time. Offline technology uses integrated circuit chip (smart) cards to process and authorize the transaction locally at the retail POS. Authorization occurs between the POS terminal and the card. Offline transactions are batched for later transmission to the EBT system.

To implement a transfer solution, government owned software for an existing WIC EBT system is transferred and modified to meet a state's WIC EBT requirements. The state purchases and owns the system hardware. The resulting WIC EBT system is retained by the state for as long as the state wishes to maintain it. The state may make its software available for transfer to other states. The system may be hosted within the state's IT environment or may be hosted by a third party

contractor. States usually contract with an IT development firm to make modifications to the transfer system application and pay contractors for ongoing system operations and maintenance.⁷ If an offline solution is selected, the state will likely require multiple contracts. In addition to application support contractors, the state will need card production and fulfillment services, retailer support services (particularly during the initial implementation) and possibly other services that are normally provided by a full service EBT processor.

To implement an outsourced solution, the state contracts with an EBT processor to provide WIC EBT processing services. The processor configures its system to meet the state's requirements. The software and hardware is owned by the processor. The state pays the EBT processor on a cost per case per month (CPCM) basis (i.e., the state pays a monthly fee for each active WIC household). The Wisconsin WIC Program would define its contract period within its request for proposals (RFP). The state's FoodShare EBT contract was established as a six year contract with two two-year renewals, for a total of ten years. If the WIC Program selects an online solution, it may elect to contract with an EBT processor for a similar period of time. If the WIC Program determines it will append its WIC EBT contract onto the existing FoodShare EBT contract, the contract option period would end in October 2017.

Traditionally, states and FNS have considered four potential WIC EBT alternative solutions. However, at this time, there is no state or EBT contractor that has an operational in-house online solution or an outsourced offline solution. Given this and upon further analysis of the alternatives, the Wisconsin WIC Program determined that the viable alternatives for the Planning and Feasibility Study are the offline in-house transfer solution and the online outsourced solution.

4.1 OFFLINE IN-HOUSE TRANSFER SYSTEM

Offline WIC EBT has been deployed statewide by Texas, New Mexico, and Wyoming. The Texas WIC EBT solution is intrinsically linked to the Texas data system, an older mainframe system, and is therefore not considered a candidate for transfer. An offline system was developed by Paul Jaeger Associates, Inc. (PJA) and deployed in New Mexico. The State of New Mexico eWIC system has been operational in 110 clinics and at 240 WIC authorized vendors statewide since December 2007. The New Mexico system⁸ was transferred to Wyoming and substantially modified by PJA and is known in Wyoming as WESS (WIC EBT Settlement Service). Both New Mexico and Wyoming host their EBT systems at state-operated and maintained facilities. WESS was developed to meet all FNS requirements and comply with ANSI standard X9.93. The WESS software is available for transfer to other states. All offline WIC EBT transfer systems are hosted in-house at a state operated facility, primarily for the following reasons:

- Except for some web interfaces where card and benefit issuance is recorded in the system, entry or deletion of authorized retailers, and entry or deletion of Universal Product Codes (UPCs), offline systems transfer data in batches, which is a transaction type states are familiar with.

⁷ The June 2010 contract for hosting and maintain ROSIE, and for providing help desk services was for five years with five optional one-year extensions.

⁸ The integrated NM MIS and WIC EBT systems were recently transferred to the Cherokee Nation and the Pueblo of Isleta.

- While states and WIC-authorized retailers prefer file transfers to occur as quickly as possible, the communications infrastructure for offline does not have to be quite as robust as with online EBT, as stores are sending files via batch over the internet and not real-time at the POS.
- Not all credit/debit payment industry security standards are applicable as issuance and purchasing are “one-off” transactions, with the card being the database of record. Therefore, states have a greater ability to host offline systems at existing facilities.
- A 24x7 operation is optimal but not mission critical and states may opt to provide on-call system support only during nights, weekends, and holidays.

4.2 ONLINE OUTSOURCED SYSTEM

Online outsourced WIC EBT solutions use magnetic stripe cards and the national debit/credit network infrastructure to process and authorize transactions online. These online outsourced solutions tend to be full service solutions with the processor providing card production and issuance services, WIC vendor (retailer) management and integration support, deployment and maintenance of stand beside POS solutions, and 24 X 7 customer services and help desk support.

An online outsourced full service WIC EBT solution is being provided by JPMorgan Chase (JPM) and Affiliated Computer Services (ACS). The JPM system is operational statewide in Nevada and JPM is implementing WIC EBT for the Chickasaw Nation. (JPM holds the contract for Wisconsin Child Support debit cards.) The ACS system is statewide in Michigan and is being implemented in Oklahoma. Fidelity National Information Services, Inc. (FIS), another major EBT provider, indicated that their online full service WIC EBT system is under development will be available in early 2011. FIS currently holds Wisconsin’s FoodShare⁹ EBT contract.

A hybrid of the outsourced online solution is the Kentucky WIC EBT system. With sponsorship from the Food and Nutrition Service (FNS), CDP, Inc. developed an online WIC EBT solution which is currently deployed in eight counties in Kentucky. The resulting software, known as WICDirect, is in the public domain. While the hardware is also government owned, Kentucky has opted to pay CDP to host and maintain the system. In addition to hosting services, CDP is providing Kentucky with 24 X 7 system monitoring, WIC retailer integration support, retailer stand beside deployment and management, and user help desk support. CDP is also providing card stock. The Kentucky WICDirect system is in the pilot phase and is scheduled to be operational statewide by the end of 2010. Rather than the tradition CPCM payment, the Kentucky system was developed and is being operated on a time and materials basis. The WICDirect software is expected to be available for transfer to other states in 2010 or 2011. The system was developed to comply with ANSI standard X9.93 to facilitate transferring to and integrating with a WIC Program’s EBT-ready WIC MIS.

⁹ FoodShare is the Wisconsin Program that distributes SNAP benefits to program participants.

5 OVERVIEW OF WIC EBT

This section of the report is intended to provide the reader with a broad overview of WIC EBT including the status of current projects, WIC system providers, and WIC EBT functionality. A brief discussion of the potential for shared services is also provided.

5.1 STATUS OF WIC EBT PROJECTS

A number of states, including Wisconsin, are planning for WIC EBT. A few states have implemented WIC EBT, including Michigan, Nevada, New Mexico, Texas, and Wyoming. Kentucky recently launched a WIC EBT pilot. The implementations in these states vary primarily by:

- EBT processing and card technologies (online processing supported by a card with a magnetic stripe versus offline processing supported by a “smart card” with an integrated circuit chip (ICC) embedded in the card); and
- Processing arrangement (processing transactions in-house by the state or outsourcing processing services to a service provider).

The following table provides the status of current WIC EBT projects.

TABLE 1: STATUS WIC EBT PROJECTS

WIC EBT Project	EBT Project Phase	EBT Card Technology	WIC MIS/Vendor	WIC EBT Service or Software Provider
Arkansas	Planning	TBD	Covansys – SPIRIT ¹⁰ SAM	TBD
Cherokee Nation	Operational	Offline	Transferred NM WIC EBT and MIS	Self Hosted
Crossroads (SAM): North Carolina, Alabama, Virginia and West Virginia	Planning	Virginia and West Virginia: Online	Covansys – new SAM	TBD
Florida	Planning	TBD	TBD	TBD
Kentucky	Testing (Pilot Test)	Online	CDP CMS Software	CDP WIC Direct Software; CDP Hosted
Michigan	Operational	Online	Three Sigma	ACS
Wyoming	EBT: Operational MPSC ¹¹ (SAM): Development	Offline	WYO WIC Legacy CIBER	WESS Software; State Hosted
Nevada	Operational	Online	Legacy System	JP Morgan – EBT Service Provider

¹⁰ Successful Partners In Reaching Innovative Technology (SPIRIT)

¹¹ Mountain Plains State Consortium (MPSC)

WIC EBT Project	EBT Project Phase	EBT Card Technology	WIC MIS/Vendor	WIC EBT Service or Software Provider
New Mexico	Operational	Offline	Self Process	WESS Software: State Hosted
Oklahoma	Planning	Online	PHOCIS ¹²	ACS – EBT Service Provider
Pennsylvania	Planning	Offline	CIBER	TBD
Pueblo of Isleta	Operational	Offline	Transferred NM WIC EBT and MIS	Self Hosted
SPIRIT (SAM) Chickasaw Nation	Planning	Online	Covansys – SPIRIT SAM	JP Morgan – EBT Service Provider
Texas	Operational	Offline	State Hosted	State Hosted
Wisconsin	Planning	TBD	CIBER – ROSIE ¹³	TBD

5.2 WIC EBT CONTRACTORS AND PROCESSORS

Currently, there are two types of EBT providers including outsourced full service providers and transfer system providers.

5.2.1 OUTSOURCED FULL SERVICE PROVIDERS

These providers provide online EBT processing services. The EBT system is configured to meet state requirements. The system and software is owned and operated by the provider. EBT services are provided to the state on a CPCM basis. In addition to transaction processing services, these providers typically provide card fulfillment, issuance and management, cardholder and retailer customer services, retailer management and settlement services, WIC retailer integration support, stand beside retailer equipment deployment and maintenance, training support and backup and recovery services.

Currently, there are three vendors providing full service EBT services. Each of these providers have substantial experience in providing EBT services and have the financial stability that comes with multi-billion dollar IT and financial services firms. The full service EBT providers include:

- ACS (Affiliated Computer Services):** ACS provides business process outsourcing and information technology services to industry and government. ACS initially entered EBT providing retailer management services. ACS provides online EBT services for SNAP, WIC and cash programs. ACS also has a time and attendance product for child care and a branded electronic payment card product. After developing their EPPIC™ platform to provide a full service EBT product, ACS began to aggressively pursue the EBT market share. ACS is providing online WIC EBT services in Michigan and is implementing WIC EBT services in Oklahoma. In February 2010, ACS was acquired by the Xerox Corporation, a \$22 billion global enterprise.

¹² Public Health Oklahoma Client Information System (PHOCIS)

¹³ The ROSIE (Real-time Online Statewide Information Environment) WIC MIS is a transfer of CIBER's Pennsylvania QuickWIC .NET system. The food delivery component of ROSIE is paper based but will be modified to incorporate EBT readiness functionality.

- **Fidelity National Information Services (FIS):** With annual revenues of \$3.8 billion (2009), the company is listed on the NYSE. FIS provides payment processing and other services to the banking and financial services industry. In 2007, FIS acquired eFunds® a provider of online EBT and other Electronic Funds Transfer (EFT) services. Based in Phoenix, Arizona, eFunds was one of the first companies to offer EBT services. FIS provides EBT services for SNAP and cash programs and provides EBT gateway¹⁴ processing services. The company also has a time and attendance product for child care and a branded electronic payment card product for government payments. FIS is currently developing a WIC EBT solution which is expected to be available in 2011. FIS currently provides online EBT services for Wisconsin FoodShare Program.
- **JPMorgan Chase:** With annual revenues of \$100 billion (2009), JPMorgan Chase is a global financial services firm listed on the NYSE. JPMorgan Chase provides EBT Services through JPMorgan EFS based in Chicago, IL and is the dominant provider of SNAP and cash EBT services to states. JPMorgan EFS has a branded electronic payment card, child care time and attendance and an on-line WIC product that was implemented in Michigan before the state transitioned to ACS. JPMorgan EFS currently provides online WIC EBT processing services in Nevada and is implementing WIC EBT for the Chickasaw Nation.

5.2.2 TRANSFER SYSTEM PROVIDERS

Transfer system providers modify government owned software to meet state specific requirements. The EBT hardware is purchased or leased by the state. The provider may or may not provide system maintenance and/or operational services. The state pays for development, maintenance and operational costs as applicable on a time and materials basis. Current transfer system providers include:

- **Custom Data Processing (CDP) Inc:** Located in LaGrange, IL, CDP provides enterprise health systems to state and local government health organizations. With sponsorship from the Food and Nutrition Service, CDP developed an online WIC EBT solution which is currently deployed in eight counties in Kentucky. CDP is providing Kentucky with hosting services, 24 X 7 system monitoring, WIC retailer integration support, retailer stand beside deployment and management, and user help desk support. CDP is a privately held company with 80 employees and an annual revenue of approximately \$10 million.
- **Quality WIC Information Corporation (QWIC):** Founded by Paul Jaeger, who developed the New Mexico and the Wyoming WESS solution, QWIC is being marketed as a full support offline WIC EBT provider. QWIC is a privately held company.

5.3 WIC EBT FUNCTIONALITY

Delivery of WIC benefits via EBT involves a complex set of functions and data exchanges across multiple system components, and usually, across multiple systems. In most EBT implementations, there are three primary systems:

¹⁴ The EBT gateway is a commercial network gateway that is used to route EBT transactions to the appropriate authorization end point.

- **Eligibility System (WIC MIS)** – This system may be operated in-house by the state or maintained and hosted by a contracted party. The WIC MIS determines client eligibility and authorizes benefits, although in some cases the system is hosted and maintained by a third party. . In an EBT environment, the MIS creates EBT account setup and benefit authorization messages which are transmitted from the WIC MIS to the EBT system. The WIC MIS is the system of record for benefit issuance.
- **EBT System** – This system is generally outsourced, although some states, including several WIC Programs, operate these systems in-house. The EBT system establishes and maintains an account for the individual or household, posts benefits to the household account, authorizes benefit transactions, reconciles redemptions, and initiates payment through Automated Clearinghouse (ACH) processes.
- **Retailer Electronic Cash Register (ECR) System** – Retailer ECR and associated POS equipment acquire benefit redemption transactions. Authorization occurs at the EBT host (online transaction) or between the POS terminal and the card (offline transaction).

The achievement of full EBT capability requires that the MIS, EBT, and ECR/POS systems are fully functional and have established interfaces for data exchange. If any of these systems or their interfaces are not fully functional, WIC EBT transactions cannot be processed.

To achieve EBT readiness and full EBT capability, system interfaces between the WIC MIS and the EBT system must be developed. EBT account setup and benefit authorizations are originated by WIC clinic personnel using the WIC MIS. Account demographic data and benefit package data are transmitted from the WIC MIS to the EBT system. However, certain functions, such as card issuance and status change require that clinic users have direct access to the EBT system. Wisconsin WIC personnel will require an interface to the EBT system for reconciliation and fund accounting. Direct access to the EBT system will be secured through role based security protocols and user profiles.

The major functional components of a WIC EBT system are shown in the following chart.

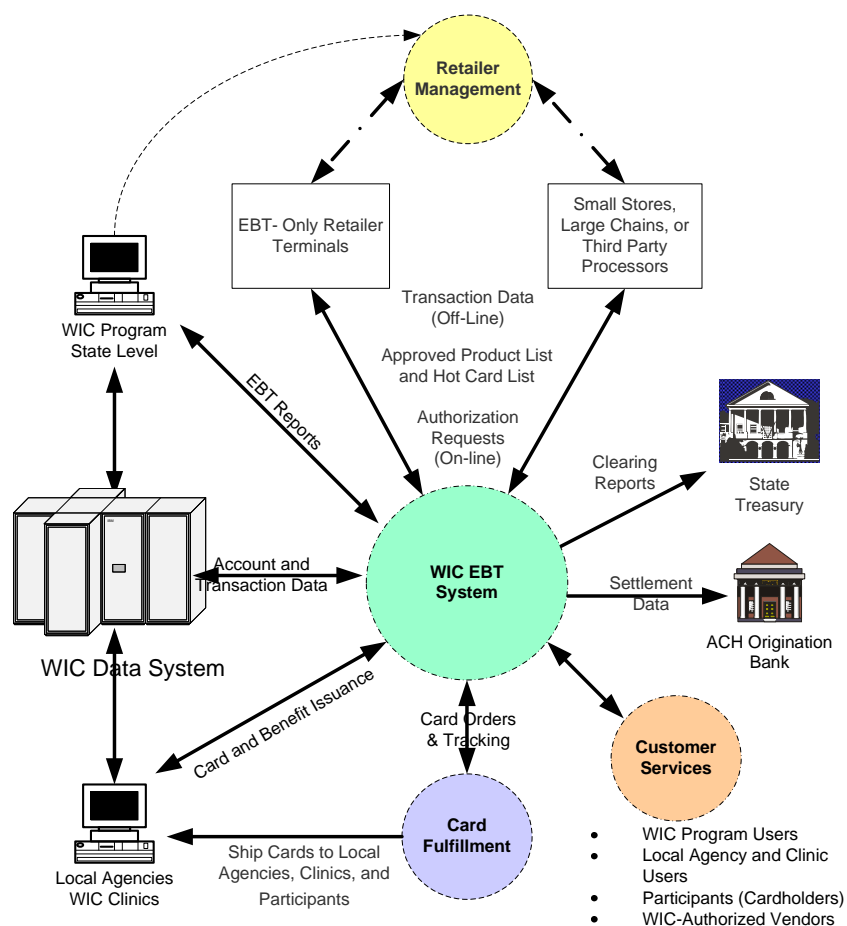


FIGURE 2: MAJOR FUNCTIONAL COMPONENTS OF AN EBT SYSTEM

Appendix B provides a detailed description of WIC EBT functional components.

5.4 POTENTIAL FOR SHARED SERVICES

Wisconsin WIC conducted an assessment of the potential for shared services with other Wisconsin benefit programs. EBT systems are capable of supporting multiple benefit programs through shared service agreements. Shared services can be defined as one card serving multiple programs or multiple cards serving multiple programs from a single card processing platform.

Currently, there are three types of card systems in planning or in use in Wisconsin including EBT, prepaid debit, and identification card systems. While Wisconsin may eventually realize certain economies from a shared card platform, at this time the technical and programmatic issues surrounding a one card solution have not been resolved by states or by the EBT processors and card issuers. Work is being done to create a one card solution, known as a co-branded debit card, in an effort to resolve the technical and programmatic issues. The co-branded card would incorporate

a commercial brand (MasterCard, VISA, Discover, etc.) and a government brand (QUEST for EBT) on a single card and would enable the federal and state government to issue a range of cash and directed (e.g., WIC or SNAP) benefits using a single card platform.

Until this type of card is available, Wisconsin may pursue a joint contract for those directed benefit programs requiring EBT, and a master services agreement for those cash programs requiring debit card services. Other programs issuing identification cards, including ForwardHealth and Child Care, should not be included in these contracts. At the time a one card solution is pursued, Wisconsin may want to investigate the issuance of ID cards (medical, time and attendance, etc.) from the one card contract but it is not certain whether this will result in any economic gains and may result in adding unnecessary complications to a contract for payment services.

When it becomes available, it is anticipated that a one card solution may have the following benefits:

- Support the business and program priorities of Wisconsin's agencies using the single card platform;
- Streamline and simplify card service procurement under a single statewide card service agreement (master service agreement);
- Reduce or eliminate the cost of benefit delivery for cash programs and may reduce the cost of benefit delivery for non-cash programs;
- Provide wider access to clients who may use the card wherever the brand is accepted;
- Deliver benefits in a streamlined, integrated and coordinated approach; and
- Simplify the support of operations, so that the state's technical infrastructure is managed efficiently and reliably.

6 ROSIE GAP ANALYSIS

In the WIC clinics, nutritionists, eligibility certification staff and benefit issuance personnel are supported by the Wisconsin WIC MIS known as ROSIE. ROSIE is a robust WIC MIS system that currently issues paper food instruments for the delivery of WIC food benefits. The system is a transfer of the Pennsylvania QuickWIC.NET system and has been modified to meet the specific requirements of the Wisconsin WIC Program. Developed by CIBER, Inc., ROSIE is hosted by CIBER at their Harrisburg, PA data center.

Modifications to ROSIE are required to support WIC EBT functional requirements.¹⁵ In order to support states in modifying their current WIC MIS or upgrading to a new WIC MIS, FNS developed the *Functional Requirements Document for a Model WIC Information System (FReD)*¹⁶. The FReD identifies EBT readiness functions for incorporation into the WIC MIS. In addition to the functional

¹⁵The Wisconsin WIC Program has recently signed a new contract for ROSIE maintenance and support. In anticipation of WIC EBT, the contract, which is fixed price, includes the requirement to make any modifications or upgrades to ROSIE necessary for WIC EBT operations. As there will be no additional costs to modifying ROSIE, these costs have not been included in the cost analysis.

¹⁶ United States Department of Agriculture, Food and Nutrition Service, "Functional Requirements Document for a Model WIC Information System," Version 2008 2.0, September 2008.

modifications, an interface between ROSIE and the selected EBT system will enable ROSIE to interface with the EBT system to authorize WIC benefits in an electronic environment. The specifics on the ROSIE Gap Analysis are provided in Appendix C.

7 COST ASSESSMENT

After analyzing the EBT alternatives, it was determined that the online outsourced and in-house offline alternatives were most feasible for Wisconsin. The Cost Assessment was developed to estimate costs for these two alternatives and for the baseline paper (food instrument) benefit issuance process.

WIC EBT costs include implementation and operational costs for the following elements, as applicable to the alternative:¹⁷

- State-level labor and contractor support
- Project-level labor
- Material goods
- WIC EBT services
- Banking contractor services
- State-borne costs for supporting WIC vendor transition to EBT
- Retailer-borne costs

As discussed, the Wisconsin WIC EBT cost assessment was conducted using the USDA/FNS National Cost Benefit Analysis Model and approach. The results of the technical impact assessment on infrastructure requirements and organizational impact assessment on staffing and other resource requirements were incorporated into the cost model. As required by the FNS cost model, the Wisconsin WIC cost assessment covers acquisition, development, implementation and operational phase. The timeframes for each of these phases are provided in the following table.

TABLE 2: WISCONSIN WIC EBT TIMEFRAMES

Wisconsin WIC EBT Cost Assessment Timeframes		
Phase	Primary Activities	Estimated Period of Performance
Acquisition	Acquire EBT consultant and EBT provider services	July 2010 through June 2011
Design, Develop and Test	Define requirements, modify or configure system; support WIC vendor integration and stand beside deployment	July 2011 through June 2012
Pilot and Implementation	Conduct and evaluate pilot; rollout EBT statewide	July 2012 through December 2013
Steady State Operations	Conduct ongoing EBT operations	January 2014 through June 2018

¹⁷ Refer to Appendix D for cost details.

A comparison of benefit issuance costs for the baseline processes compared to the costs to acquire, design, develop, implement and operate either the online outsourced or offline in-house WIC EBT benefit delivery system is summarized in the following table.

TABLE 3: SUMMARY OF WISCONSIN WIC BASELINE AND EBT BENEFIT ISSUANCE COSTS

Alternative	Acquisition, Design, Develop, Test & Implement			Operations: Implementation Period Plus Five Years			Summary Costs		
	Paper-Based System	Online Outs	Offline In-H	Paper-Based System	Online Outs	Offline In-H	Paper-Based System	Online Outs	Offline In-H
Labor Costs	0	665,627	665,627	467,516	463,836	962,257	467,516	1,129,463	1,627,884
State Level Labor	0	650,376	650,376	193,341	463,836	962,257	193,341	1,114,212	1,612,632
Project Level Labor	0	15,252	15,252	274,174	0	0	274,174	15,252	15,252
Material Costs	0	199,491	702,731	1,135,067	0	1,660,783	1,135,067	199,491	2,363,514
Banking Contractor Costs	0	0	0	1,903,680	0	0	1,903,680	0	0
Travel	0	6,229	17,990	0	0	0	0	6,229	17,990
Technical Support	0	1,303,727	5,013,129	0	260,000	3,767,123	0	1,563,727	8,780,252
Retailer Costs	0	1,867,659	4,342,312	0	0	0	0	1,867,659	4,342,312
WIC EBT Vendor Costs	0	0	0	0	11,050,824	0	0	11,050,824	0
TOTAL COST TO STATE	0	4,042,733	10,741,789	3,506,263	11,774,660	6,390,163	3,506,263	15,817,393	17,131,952
Retailer-Borne Costs	0	0	0	13,954,292	8,695,204	7,188,204	13,954,292	8,695,204	7,188,204
Labor	0	0	0	10,318,754	7,188,204	7,188,204	10,318,754	7,188,204	7,188,204
Fines/Loss/Fees	0	0	0	3,635,538	1,507,000	0	3,635,538	1,507,000	0
TOTAL SYSTEM COST Including Retailers	0	4,042,733	10,741,789	17,460,555	20,469,864	13,578,368	17,460,555	24,512,597	24,320,157

As shown in the summary table, the Wisconsin WIC EBT cost assessment indicates¹⁸:

- There is an estimated \$1.3 million difference in the total cost (implementation and operations); as shown in the Summary Costs column and listed in the “Total Cost to State” row, for the two alternatives through June 2018.
- Acquisition and implementation costs for the offline transfer solution are approximately 2.5 times as high as the outsourced solution (\$4.04 million for the online outsourced solution, \$10.74 million for the offline in-house solution).
- Operational costs for the offline, in-house solution are a little more than half of the costs of operating the online outsourced solution through June 2018. (\$11.8 million for the online outsourced solution, \$6.4 million for the offline in-house solution)
- As the Wisconsin WIC Program has an efficient and relatively modern WIC MIS in ROSIE and has promulgated efficient workflows in the paper-based environment, the cost of operating either WIC EBT alternative is higher than the cost of operating the paper based system.
- Retailer borne costs (the operational costs of WIC-authorized vendors) in the WIC EBT environment will be less than the paper-based environment. The labor, fines and losses due to improperly accepted or submitted food instruments will be alleviated, and savings in-lane in terms of the time to conduct a WIC transaction will be reduced. New costs

¹⁸ Refer to Appendix D for general cost assumptions.

associated with WIC EBT include the fees paid to third party processors (TPPs) to support online WIC EBT transactions for those retailers without direction connection to the WIC EBT host system. (EBT-only retailers provide with stand-beside terminals do not incur TPP fees. Other retailers may elect to communicate directly with the WIC EBT host through the internet. These retailers also do not incur TPP fees.)

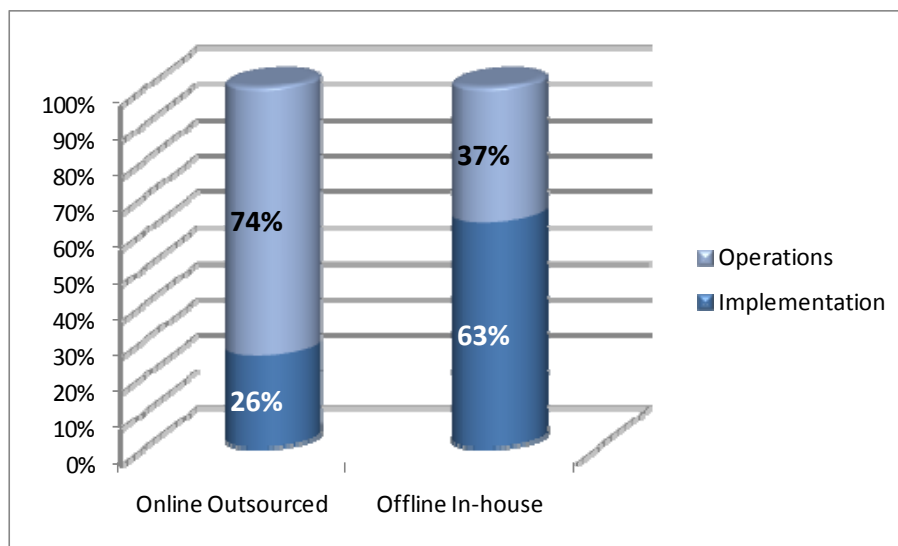


FIGURE 3: COMPARISON OF IMPLEMENTATION VS OPERATION COSTS FOR THE OUTSOURCED AND IN-HOUSE SOLUTIONS

The majority of costs for the in-house solution occur during implementation, while the opposite is true for the outsourced solution. Estimated costs for operating the offline, in-house solution, are fixed and cover only essential services that would be difficult to reduce or eliminate. The majority of the costs include staff to provide WIC vendor customer services, contractors to maintain the application and database, smart cards, and the fees charged for maintenance and hosting services.

The majority of the estimated costs for operating the online, outsourced solution are derived from the ongoing CPCM pricing, a fee assessed each month for each active case. The estimated CPCM drives operating costs to over three times that of the paper-based solution. However, the WIC Program may develop strategies to reduce the CPCM, including:

- Paying the implementation costs of the outsourced processor upfront. (In the past, EBT processors have built the cost of implementation into the CPCM.)
- Negotiating an overall reduction in cost, as any upfront payment will alleviate the processor from financing the project and will allow the processor to realize profits earlier in the operational timeline.
- Reducing or eliminating any extraneous services normally provided by a full-service processor, such as 24x7 live customer services, professional training materials, etc.
- Investigating the cost savings that may be achieved by using the FoodShare contract vehicle for WIC EBT. This may include economies of scale achieved by the additional caseloads and sharing the costs of stand-beside terminals.

An added benefit of paying implementation costs as they are incurred is that it encourages competition as firms using the online transfer system software will be more likely to bid on the procurement.

8 BENEFITS AND RISKS OF WIC EBT

This section provides a summary of the benefits and risks of the WIC EBT alternatives as they pertain to the primary stakeholders in WIC EBT.

8.1 STATE-LEVEL WIC EBT

Regardless which WIC EBT alternative is selected, at the state level WIC EBT provides substantial intangible benefits as reflected in the following table.

TABLE 4: STATE-LEVEL BENEFITS OF WIC EBT

Benefit	Description
Access to detailed and robust purchase data	Nutritionists will be able to identify specific food items and quantities being purchased by participants. The data analysis will support targeted marketing and information campaigns, either statewide or within specific regions of the state. Data may also support changes in food packages, food items, or food quantities.
Improved WIC vendor support	WIC vendor support will have near-real time access to purchase data specific to individual WIC vendors. This will support analysis and will also support the ability to address WIC vendor claims for payment.
Improved financial and budgetary analysis capabilities	Financial and budgetary analysts will have daily reports on total purchase amounts, supporting greater budgetary certainty and trend analysis.
Calculation of not to exceed amounts	This calculation can be performed by the WIC EBT system for individual categories – and subcategories – of food items, based on the actual cost of the item purchased within the individual peer groups. The calculation can be performed on a periodic basis (i.e., daily, weekly, monthly), according to the state’s pre-defined parameters. Once the system sets a new NTE amount, all purchases must be within the NTE parameters or will not be authorized in-lane.
Calculation of rebates	WIC EBT will automate the capture of purchase data for formula subject to rebates and calculate the amount of the rebate and will capture the partial redemptions. Not only will rebate accuracy increase, the ease of capturing rebate data will allow the state to pursue rebates for other food items.
Elimination of support for MICR printers and toner	WIC EBT eliminates the need for the state to support the purchase, repair, and replacement of MICR printers, answering calls concerning MICR printers, and supporting the purchase of toner.
Stock price surveys	Reduction in cost and labor to collect, enter and analyze prices from bi-annual Stock Price Surveys.
Compliance support	Compliance will have detailed WIC vendor and participant purchase data to support fraud detection and elimination.
Program integrity	The very specific data concerning each and every issuance, purchase and vendor settlement made under this program increases the ability to control fraud and abuse, and reduce or eliminate issuance, purchase and settlement errors.
Alignment with the long term strategies of the FNS for WIC EBT	Because of the success of EBT in general and the benefits of WIC EBT specifically, FNS is continuing to pursue the expansion of WIC EBT for states’ WIC Programs. In pursuing WIC EBT, the Wisconsin WIC Program is in alignment with the goals and strategies of the USDA/FNS WIC EBT initiative.

Differences between the alternatives, which may represent a benefit or a risk of one solution over another, include the following. Here, and in subsequent tables, both solutions may have some level of benefit for each line item.

TABLE 5: STATE-LEVEL BENEFITS OF WIC EBT ALTERNATIVES

DESCRIPTION		BENEFIT DISCUSSION
Online, Outsourced WIC EBT System	Offline, In-house WIC EBT Transfer System	
The state has access to real time transaction data	There is a delay in transaction data of 24 hours or more, depending on WIC vendor settlement requirements set in the state’s policies and procedures.	The same level of detail in transaction data is available with both solutions. However, online technology provides the benefits of providing access to real time transaction data.
The state has one prime contractor that manages all aspects of WIC EBT.	The state requires the services of one or more contractors and assume operational risk for in-house operations.	Both approaches have proven successful but outsourced provides the state reduced operational risk and liability which are borne by the prime contractor .
The state must re-procure services at the end of the initial contract cycle.	The state must re-procure software maintenance support services at the end of the contract cycle but it maintains the EBT system software rights.	Both approaches require re-procuring services at the end of their contract cycles. <ul style="list-style-type: none"> • With an outsourced solution, there is a benefit in having to re-procure the services of only one vendor. However, with an outsourced solution, if a new WIC EBT processor is selected, the state must undergo a new design, development and implementation cycle. • With a transfer system, there is a benefit in maintaining control of the software regardless of the change in contractors.
The WIC EBT processor is responsible for technology refresh and updates to its system to meet new federal and state regulations. Some contracts include a clause that requires updates to meet new federal requirements at no additional cost to the state.	The state is responsible for technology refresh and updates to its system to meet new federal and state regulations. If the state has a operations and maintenance contract, updates are likely to be paid for by the state on a time and materials basis	Both approaches have the ability to undergo technology refresh and updates to systems. While the state is ultimately responsible for the in-house transfer solution, the state’s contract with maintenance and support staff and, if applicable, its service agreement with its IT department should include technology refresh and system updates.

Both alternatives will provide benefits to the State’s WIC Program. The importance of each of the benefits must be weighed by the Wisconsin WIC Program when making its final determination on a WIC EBT solution.

8.2 PROJECT-LEVEL WIC EBT

The following benefits are likely to occur at the project/clinic level for either of the WIC EBT alternatives.

TABLE 6: PROJECT-LEVEL BENEFITS OF WIC EBT

Benefit	Description
Elimination of paper food instruments	This has a myriad of impacts including, but not limited to, stocking and storing FI stock, maintaining MICR printers, ordering and replacing MICR toner, voiding and re-issuing vouchers, and managing signed receipt vouchers, providing proof that the participant received his/her vouchers.
Support of individualized WIC nutrition analysis	Nutritionists at the project and clinic level will be able to access purchase data and target participants for specific nutrition education.
Elimination of claims of lost and stolen vouchers	Project staff will no longer need to research claims of lost or stolen vouchers, a process that is reported to be time consuming, particularly in the more urban areas of the state.
Simplify the support of satellite clinics	Many of the projects must transport MICR printers and FI stock to satellite clinics. Staff report it would be a relief to eliminate some of these processes, and in particular it would be a benefit to transport a PIN selection terminal and cards rather than a MICR printer and food instruments.
Streamlined operations, increasing time available for nutrition education	Site visits to projects and clinics indicated efficient operations within the paper-based environment, without definitive, tangible evidence of operational benefits when introducing WIC EBT processes. However, once WIC EBT is fully operational, a resulting comparative visit would likely indicate (based on other states' observations) that operations are streamlined by the introduction of WIC EBT. This may result in an increased capacity to handle growing caseloads with existing staff and/or the ability to spend more time on nutrition education for WIC participants.

The following benefits are identified for each of the WIC EBT alternatives at the Project Level in Wisconsin.

TABLE 7: PROJECT LEVEL BENEFITS OF WIC EBT ALTERNATIVES

DESCRIPTION		BENEFIT DISCUSSION
Online, Outsourced WIC EBT System	Offline, In-house WIC EBT Transfer System	
Projects may issue benefits regardless of whether a participant presents his/her card.	The card must be present for benefits to be issued.	Both approaches have proven successful for benefit issuance. There is a greater advantage to Wisconsin's clinics with online as it gives the ability to issue benefits regardless of whether the participant remembers the EBT card or in instances when participants are unable to get to a clinic.

DESCRIPTION		BENEFIT DISCUSSION
Online, Outsourced WIC EBT System	Offline, In-house WIC EBT Transfer System	
Projects may re-issue a card immediately if a participant reports it as lost, stolen or damaged.	Projects must wait 24-48 hours before reissuing a card.	Both approaches have proven successful for card issuance. There is a greater advantage to Wisconsin's clinics with online as it gives the ability to issue a replacement card in one visit or through the mail, without an imposed waiting period.
Participant purchase data is provided by the WIC EBT system in real-time.	Purchase data may be 24-48 hours out of synch with actual transactions.	Both approaches have proven successful and provide full transaction data. There is a greater advantage to Wisconsin's WIC clinics with online as it allows real-time access to participant's purchase data.
Local WIC-authorized vendor transaction data is provided by the WIC EBT system in real-time.	Purchase data may be 24-48 hours out of synch with actual transactions.	Both approaches have proven successful and provide full transaction data. There is a greater advantage to Wisconsin's WIC clinics in online as it allows real-time access to vendors' WIC transaction data.
PIN selection can be accomplished via PIN selection device at the clinic or by telephone (from any location) to the AVR.	PIN selection must be made at the WIC Project/Clinic.	Both approaches have proven successful for PIN selection. There is a greater advantage to Wisconsin's WIC clinics in online as it allows PIN selection via the AVR (automated voice response) customer service, and is therefore assumed to necessitate fewer participant interactions should a new PIN be required.

When evaluated against the WIC Program's current clinic processes and business needs, the online solution provides the greater level of benefits to projects and clinics.

8.3 WIC AUTHORIZED VENDORS

WIC-authorized vendors will likely receive the following benefits for either of the WIC EBT alternatives.

TABLE 8: BENEFITS OF WIC EBT FOR THE STATE'S WIC AUTHORIZED VENDORS

Benefit	Description
Reduction or elimination of errors in-lane	Each WIC EBT transaction will be checked and authorized electronically for parameters such as food item, food quantity, compliance with NTE amounts, account (card) acceptance and date of purchase.
Reduction of time in-lane	States with WIC EBT have reported that transaction times in-lane decrease when the transaction is conducted electronically.
Elimination of loss due to rejected food instruments	With WIC EBT, rejections occur in-lane, meaning that the participant cannot purchase an unauthorized item with WIC EBT. In the paper-based environment, a WIC participant may leave with the item and the bank may reject the food instrument for a variety of reasons, including missing signature, missing or unreadable vendor stamp, or out-of-date transaction.

Benefit	Description
Improved accounting capabilities	WIC EBT will provide WIC vendors with automated settlement and reporting capabilities.
Improved settlement	WIC EBT settlement occurs daily, on each banking day. WIC vendors often receive payment faster with WIC EBT than in the paper-based environment.
Improved ability to identify WIC authorized items in-lane	In past interviews with WIC vendors, vendors have expressed a need to identify WIC authorized items electronically so that disputes with clients over specific items can be settled by the ECR/POS, rather than between the participant and the clerk or manager.
Improved service for all customers	Faster and more accurate WIC transactions translates to an improved shopping experience for WIC participants as well as faster service for all client in the same lane as a WIC client.

The following benefits and risks are identified for each of the WIC EBT alternatives.

TABLE 9: BENEFITS OF WIC EBT ALTERNATIVES FOR THE STATE'S WIC AUTHORIZED VENDORS

DESCRIPTION		BENEFIT DISCUSSION
Online, Outsourced WIC EBT System	Offline, In-house WIC EBT Transfer System	
Authorizations are processed online, requiring the telecommunications system and WIC EBT system to be up	Authorizations are processed offline, requiring the card and card read terminal be operational	Both systems are proven to have the ability to process transactions. The offline system has a benefit in that the transaction can occur regardless of whether the telecommunications system or WIC EBT system is operational.
Purchases are approved and stored in the WIC EBT system in real-time.	Purchases are approved between the card and the WIC vendor's ECR/POS system in real-time and stored on the card and at the ECR. Data stored at the ECR is later uploaded to the WIC EBT system for settlement.	Both systems have the proven ability to accept and process transactions. Due to the slight time-delay nature of the offline system, there is a risk that the settlement amount may be reduced from the original purchase amount during reconciliation by the WIC EBT system.
Transactions may be processed through a third party processor (TPP). WIC vendors are responsible for TPP fees.	Transactions are batched and sent in a file via the internet. No TPP fees apply.	The offline system has a benefit in that there are no TPP transaction fees associated with the offline system. Recently, online processors have allowed retailers to conduct online WIC EBT transactions via the internet to mitigate the costs associated with TPPs.
Able to get authorization for a purchase transaction via customer service if electricity, host or communications systems are down.	Not able to get authorization for a purchase transaction via customer service if electricity is out.	Manual authorizations are allowed in the online environment and with the introduction of cellular technology, WIC vendors may conduct transactions if one or more networks are down.

DESCRIPTION		BENEFIT DISCUSSION
Online, Outsourced WIC EBT System	Offline, In-house WIC EBT Transfer System	
Stand-beside terminals have been certified and field tested. Stand-beside terminals have been deployed by JPMorgan Chase, ACS and CDP for the online systems at \$500 and \$600 each.	Stand-beside terminals are not currently available. Previous iterations of an offline stand-beside solution were priced at \$3000+. Texas has issued a Request for Offers (RFO) for a stand-beside solution but there is no pricing available and the solution has not been tested or certified.	Wisconsin's 211 pharmacy only stores will require a cost-effective solution in lieu of system integration and other retailers may request them. At this time, the online solution is more amenable to addressing the pharmacy stores technical (POS) needs.

WIC vendors receive a number of benefits regardless of the WIC EBT solution. Within the vendor community, the greater benefits of WIC EBT as a whole will be the determining factor for vendor success.

8.4 PARTICIPANTS

WIC participants will likely receive the following benefits for either of the WIC EBT alternatives.

TABLE 10: BENEFITS OF WIC EBT FOR THE STATE'S WIC PARTICIPANTS

Benefit	Description
Unrestricted number of shopping trips	Unlike the paper-based system, where participants have to purchase all items on the FI or forego the items not purchased, WIC benefits in an aggregated household account can be purchased at anytime within the authorization dates.
Increased security of benefits	Benefits are held in an account, accessible only with the presentation of the card and entry of the participant's private PIN. If a participant loses his/her card, it can be reported lost or stolen and in most cases the remaining benefits are restored to the participant.
Increased dignity when Shopping	With WIC EBT, participants present a card and PIN, making the transaction similar to any debit card transaction.
Improved shopping experience	WIC EBT transactions are faster and more accurate and reduce or eliminate exchanges on whether items are WIC eligible and WIC participant are more likely to have a shopping experience similar to other store clients presenting a card for payment.

The following benefits and risks are identified for each of the WIC EBT alternatives.

TABLE 11: BENEFITS OF WIC EBT ALTERNATIVES FOR THE STATE'S WIC PARTICIPANTS

DESCRIPTION		BENEFIT DISCUSSION
Online, Outsourced WIC EBT System	Offline, In-house WIC EBT Transfer System	
Ability to receive a replacement card in the mail	Must go to a WIC clinic to receive a replacement card. Must wait 24-48 hours for WIC vendor systems to settle to the processor before being issued a replacement card with benefits	The online system provides a greater level of convenience for clients with lost or stolen cards.
Ability to receive benefits in a WIC EBT account without going to a WIC clinic.	Must go to a WIC clinic to receive benefits	The online system provides a greater level of convenience for clients that are approved for benefits but unable to visit the clinic. (In the current environment, the WIC Program has had occasion to mail food instruments to clients in situations where they are unable to travel to the clinic.)
Ability to be provided with proxy cards. (More than one card for an account)	Can only be issued one card for each household account	The Wisconsin WIC Program supports participants who wish to authorize more than one family member to use WIC food instruments for a WIC purchase. The ability to assign proxies can be continued in the online environment but is not supported in the offline environment.
Ability to receive real-time balance inquiry support from customer service or a customer web site	Balances held at the host may be out of synch with actual account balance.	The online system supports real-time account balance and transaction histories.

As indicated, WIC participants will receive benefits of security, accuracy and convenience at the grocer's regardless of the WIC EBT solution. However, the online solution provides a slightly greater level of convenience for card replacement, benefit issuance, PIN selection and access to current account histories.

8.5 RISKS OF WIC EBT

As with any new system, there will be a number of risks to schedule, cost, quality and scope while implementing WIC EBT. The Wisconsin WIC Program will mitigate these risks through the use of professional project management techniques that include consistent and thorough monitoring of all implementation and operational activities.

Risk	Online, Outsourced WIC EBT System	Offline, In-house WIC EBT Transfer System
Failure to meet system performance standards	Set performance standards and liabilities within the contract for EBT services. Monitor system performance.	Set performance standards and liabilities within the contract with maintenance/support staff and set performance standards within the service level agreement established with the IT department. Monitor system performance.
Failure to comply with federal or state regulations	Establish a requirement for the system to meet all federal and state regulations within the contract for EBT services.	Track all changes to federal and state regulations that may impact modifications. Budget sufficient funds to acquire additional development support should modifications to the system be required.
Disruption of services to WIC clients or retailers	Establish performance requirements appropriate to online technology. Allow manual transactions during system downtimes.	Offline allows clients and retailers to conduct transactions if the system is down, mitigating the risk to WIC clients. Retailers, however, should have access to the system 24x7 to conduct settlement and download hot card and UPC lists. Establish performance requirements appropriate to offline technology.
Integration (readiness) of WIC retailers for WIC EBT	Establish communication with the retailer community to ensure readiness. Promulgate the standardization of the interface between the retailers and the various WIC EBT processors.	Establish communication with the retailer community to ensure readiness.
Readiness of WIC clinic staff for WIC EBT	Establish training requirements in the contract for WIC EBT services.	Budget sufficient funds to provide training services and support associated travel.

9 ADVANTAGES AND DISADVANTAGES OF WIC EBT ALTERNATIVES

The following advantages and disadvantages are based on the evaluation of criteria, and previous deliverables discussing the technical aspects of the alternatives.

9.1 ADVANTAGES AND DISADVANTAGES OF ONLINE, OUTSOURCED WIC EBT

This alternative includes the traditional full-service providers as well as any firm that may want to provide full services using the online transfer system developed for Kentucky.

9.1.1 ADVANTAGES OF THE ONLINE, OUTSOURCED SOLUTION

This alternative would provide the WIC Program with the full range of WIC EBT services, including design, development, testing and implementation support, WIC vendor management and implementation, system operations and maintenance, client and WIC vendor customer services and system security appropriate to online transactions. A full-service outsourced solution fills the gap in the technical and resource capabilities of the state and provides advantages such as:

- The system cost over the system life cycle (ten-year period) is estimated to be less than the offline solution.
- An online solution is currently being used by the FoodShare program; implementing an online solution creates the possibility of partnering with Wisconsin FoodShare in contracting for WIC EBT services, creating the potential for sharing stand-beside terminals at WIC vendor locations and in leveraging economies of scale for WIC EBT pricing.
- Online technology enables the WIC Program to continue its policy of allowing alternates or proxies to pick up and/or purchase benefits. It also allows issuance of replacement cards and benefits in situations when a cardholder cannot travel to a project or clinic.
- A full-service, outsourced provider will provide WIC vendor support and training during rollout and ongoing technical and reconciliation support to WIC vendors, limiting the impacts on state resources.
- A full-service, outsourced provider is able to provide the full range of client customer service, including a client AVR which was deemed critical by the WIC Program. Elimination or a decrease in the level of live customer services for clients can be negotiated with outsourced processors, with a resulting discount to the CPCM.
- Full-service, outsourced providers have established facility and data system security that meet online standards for secure transactions.
- Full-service, outsourced providers have the capability to provide any required level of training and training materials to users, WIC vendors and clients. The level of service and appropriate cost can be negotiated with the outsourced provider.
- Full-service EBT providers must update their systems to meet changes in federal regulations and provide these updates free of charge to their clients, per their contracts with the states. In addition, if WIC EBT upgrades to a provider's system is paid for by any other state, it should be made available to the Wisconsin WIC Program free of charge.
- The ECR/POS systems used by many of the Wisconsin WIC vendors have been or are being integrated into the online environment.
- A stand-beside POS solution is available to those WIC vendors without integrated ECR systems and to WIC vendors that request stand-beside equipment as an alternative to using third party processors.

9.1.2 DISADVANTAGES OF THE ONLINE, OUTSOURCED SOLUTION

The greatest disadvantage of this alternative is that the ongoing cost of operations is estimated to greatly exceed the current cost of operating paper-based issuance, redemption and settlement of WIC benefits, in essence two and half times the total cost of paper benefit issuance. The selection of this solution is dependent on the Wisconsin WIC Program identifying strategies which may make the alternative operationally affordable. For WIC vendors an online solution may mean additional third party processor fees, although processors are now offering WIC vendors the option of direct internet connections for WIC transactions that would alleviate transactions fees.

9.2 ADVANTAGES AND DISADVANTAGES OF OFFLINE, IN-HOUSE WIC EBT

Offline, in-house systems have been successfully operating in Texas, New Mexico and Wyoming for a number of years and have recently been deployed by the Pueblo of Isleta and the Cherokee Nation. The offline systems have an advantage in these states as clinics and WIC vendors are often in geographically remote areas with limited access to communication systems. The offline transfer system that is available to the Wisconsin WIC Program is the WIC EBT Settlement Service (WESS), which is currently operational in Wyoming.

9.2.1 ADVANTAGES OF THE OFFLINE, IN-HOUSE SOLUTION

The greatest advantage of this solution is that the software is in the public domain. While the WIC Program may contract developers or database administrators to maintain the system, and these contracts may change over time, the WIC Program and WIC vendors will not have to be subject to a system conversion when new contracts are in place. Other advantages include:

- Clients may purchase authorized food items even when communications and/or the EBT host system is down.
- The WIC Program would have autonomy over the WIC EBT requirements, contract and contract schedule.
- With the current pricing model, operational costs are less than the costs of operating the online, outsourced solution.
- WIC vendors do not pay third party processor fees.

9.2.2 DISADVANTAGES OF THE OFFLINE, IN-HOUSE SOLUTION

As the solution will be maintained in-house, the Wisconsin WIC Program will likely need to provide a greater level of operations oversight and will have limited recourse in the form of liabilities and payment holdbacks should system problems occur. Other disadvantages of the offline, in-house solution to the Wisconsin WIC Program include:

- Inability to provide proxy cards or cards to alternative heads-of-household.
- Inability to issue a replacement card or benefits to a cardholder should the cardholder be unable to travel to a project or clinic.
- System upgrades to meet changes in federal regulations will need to be done under a separate contract or with a task order to database and application maintenance contractors.
- The WIC Program will have to manage multiple contracts, including WIC vendor management, database and application maintenance, client AVR, and card fulfillment. In addition, the WIC Program will have to establish a service level agreement with the Department's hosting center.
- A stand-beside system is not currently available for offline WIC EBT.¹⁹

The costs of operations for an in-house solution are fixed and there is little, if any, room for cutting costs. The cost of operating this solution is almost double the cost of paper-based issuance.

¹⁹ Texas has issued a Request for Offers (RFO) for an offline stand-beside solution. The costs for the solution are unknown at this time. The solution will require testing and certification.

9.3 EBT PROGRAM IMPACTS

While both alternatives will have an impact on WIC operations at the state and local levels, as described in the Organizational Assessment, the offline, in-house solution will have greater impacts due to the requirement to manage multiple contracts and a greater need to provide oversight of WIC EBT operations to mitigate operational and financial risk. This includes ensuring that the functions of the transfer system meet changes to federal regulations, contractors are maintaining the WIC EBT system to functional and security standards, the data center is providing the agreed upon levels of service, etc. The outsourced solution will also require oversight and will need to be monitored to assure the WIC Program that the processor is meeting established performance levels. The Wisconsin WIC Program is aware of these risks and has budgeted for support with maintaining the system to appropriate standards and allowing appropriate resources for oversight. However, in an outsourced solution, the primary operational responsibility falls on the EBT service provider and there is only one contractor to manage.

10 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis of the data and information gathered during this assessment, the online, outsourced WIC EBT solution best fits the needs of the WIC Program's stakeholders, particularly in the areas of vendor management and support, system oversight and client assistance in the form of AVRs and live customer service. The recommended solution relieves the state from having to manage multiple contracts during implementation and ongoing operations. The solution provides the WIC Program's clients with the ability to request proxy cards and alternative cardholders, to receive benefits if unable to travel to a WIC clinic, and to rapidly recoup benefits if their card is lost or stolen. Finally, the overall cost of the system (implementation plus five years of operations) is estimated to be less than the cost of the offline solution.

With the implementation of WIC EBT, Wisconsin's WIC vendors will require some level of support, regardless of the solution selected. The online solution appears to be the easier to implement in the Wisconsin WIC vendor community. Wisconsin has an advantage in that the majority of small vendors and some chains use one of two ECR/POS resellers, and most WIC vendors use Retailix, NCR or IBM systems. Two Retailix ECR systems commonly used in Wisconsin, StoreLine and ScanMaster, are under development for online integration and should be certified this year. Retailix reports that it does not have any plans to integrate these systems for offline WIC EBT. Wisconsin has one issue specific to the state, that of how to address pharmacy-only vendors. The primary provider in the pharmacy-only peer group has an older mainframe system and is reluctant to upgrade its system to incorporate WIC EBT functions, whether online or offline. In the online environment, this chain can be provided with stand-beside terminals for its stores, an option that is not currently available, although it may be available in the future. Wisconsin will work closely with its WIC vendor community to address concerns and support and ease the transition to WIC EBT.

10.1 BUDGET FOR THE ONLINE OUTSOURCE WIC EBT SOLUTION

The quarterly and annual budget for the selected online outsourced WIC EBT solution for the period from July 2010 through June 2018 is provided on the following page. This budget is based on the traditional CPCM pricing of the outsourced processors. Should the Wisconsin WIC Program take a different pricing approach, in particular, should some processor implementation costs be paid up front, the budget's implementation costs will rise in proportion to the reduction in operations costs.

Table 12: Annual and Quarterly Budget for the Selected Online Outsourced EBT Solution

	ACQUISITION PHASE				DESIGN, DEVELOP & TEST PHASE				OPERATIONS DURING IMPLEMENTATION IMPLEMENTATION PHASE				STEADY STATE OPERATIONS PHASE				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Implementation Year	2010				2011				2012				2013				
Operations Year	2010				2011				2012				2013				
Federal Fiscal Year	2010				2011				2012				2013				
FFY Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
State Fiscal Year	2011				2012				2013				2014				
SFY Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Cumulative Quarter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Beginning	1-Jul	1-Oct	1-Jan	1-Apr	1-Jul	1-Oct	1-Jan	1-Apr	1-Jul	1-Oct	1-Jan	1-Apr	1-Jul	1-Oct	1-Jan	1-Apr	
Ending	30-Sep	31-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar	30-Jun	
Staffing	32,091	32,091	46,999	37,893	53,142	53,142	56,208	65,485	51,294	52,535	56,258	56,258	47,128	42,958	24,233	24,233	24,475
Salaries for Implementation	30,189	30,189	44,214	35,647	49,993	49,993	52,877	61,604	48,480	48,480	48,480	48,480	41,190	37,268			
Overhead	1,902	1,902	2,785	2,246	3,150	3,150	3,331	3,881	2,814	2,814	2,814	2,814	2,595	2,348			
Salaries for Operations										1,167	4,670	4,670	3,144	3,144	22,797	22,797	23,025
Overhead										74	294	294	198	198	1,436	1,436	1,451
Material Costs	0	0	0	0	0	0	0	0	199,491	0	0	0	0	0	0	0	0
Project/Clinic Equipment									199,491								
Travel	0	0	0	0	0	0	1,535	1,535	1,580	1,580	0	0	0	0	0	0	0
Travel to Pilot Location									0	0							
UPC Database Collection							1,535	1,535	1,580	1,580							
Technical Support	34,751	34,751	53,971	0	57,145	57,145	121,249	139,565	136,253	164,521	192,790	107,985	114,802	114,802	13,000	13,000	13,000
Acquisition	34,751	34,751	53,971	0													
Quality Assurance					21,979	21,979	21,979	21,979	56,537	56,537	56,537	56,537	58,172	58,172			
Testing/System Support					35,166	35,166	44,324	62,639	9,046	9,046	9,046	9,046	13,000	13,000	13,000	13,000	13,000
Pilot Evaluation									0	28,268	84,805	0					
UPC Database					0	0	27,473	27,473	28,268	28,268	0	0					
Retailer Support					0	0	27,473	27,473	42,402	42,402	42,402	42,402	43,629	43,629			
Retailer Implementation Costs	0	0	0	0	0	0	0	0	208,514	275,542	409,599	409,599	328,963	160,442	75,000	0	0
ECR Software Integration Support									100,000	100,000	100,000	100,000	100,000				
POS Stand-Beside Terminals									9,789	29,366	68,521	68,521	68,521				
Initial Upgrades to POS Terminals									23,725	71,176	166,078	166,078	85,442	85,442			
Temp Lease of Stand-Beside Terms									75,000	75,000	75,000	75,000	75,000	75,000	75,000	0	
WIC EBT Vendor Costs (Operations)	0	0	0	0	0	0	0	0	0	10,329	51,647	154,940	307,040	455,266	529,379	529,379	542,613
CPCM										10,329	51,647	154,940	307,040	455,266	529,379	529,379	542,613
State and Project Hardware																	
POS Stand-Beside Terminals									0	0	0	0	0	0	0	0	0
Totals by Quarter	66,842	66,842	100,970	37,893	110,287	110,287	178,993	206,584	597,131	504,507	710,293	728,782	797,932	773,467	641,612	566,612	580,089
FFY Annual Total	66,842				315,992				1,092,995				2,741,514				2,561,779
SFY Annual Total				272,547				606,151				2,540,713				2,779,623	
Cumulative Total	66,842	133,684	234,654	272,547	382,834	493,121	672,113	878,698	1,475,828	1,980,336	2,690,629	3,419,410	4,217,342	4,990,809	5,632,421	6,199,033	6,779,122

Cumulative Quarter	18	19	20	21	22	23	24	25	29	30							
Beginning	1-Oct	1-Jan	1-Apr	1-Jul	1-Oct	1-Jan	1-Apr	1-Jul	1-Oct	1-Jan	1-Apr	1-Jul	1-Oct	1-Jan	1-Apr		
Ending	31-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar	30-Jun	SUM	
Staffing	24,475	24,475	24,475	24,720	24,720	24,720	24,720	24,967	24,967	24,967	24,967	25,217	25,217	25,217	25,217	1,129,463	
Salaries for Implementation																627,082	
Overhead																38,545	
Salaries for Operations	23,025	23,025	23,025	23,255	23,255	23,255	23,255	23,487	23,487	23,487	23,487	23,722	23,722	23,722	23,722	436,346	
Overhead	1,451	1,451	1,451	1,465	1,465	1,465	1,465	1,480	1,480	1,480	1,480	1,495	1,495	1,495	1,495	27,490	
Material Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	199,491	
Project/Clinic Equipment																199,491	
Travel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,229	
Travel to Pilot Location																0	
UPC Database Collection																6,229	
Technical Support	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	1,563,727	
Acquisition																123,472	
Quality Assurance																430,405	
Testing/System Support	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	473,478	
Pilot Evaluation																113,073	
UPC Database																111,483	
Retailer Support																311,815	
Retailer Implementation Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,867,659	
ECR Software Integration Support																500,000	
POS Stand-Beside Terminals																244,717	
Initial Upgrades to POS Terminals																597,942	
Temp Lease of Stand-Beside Terms																525,000	
WIC EBT Vendor Costs (Operations)	542,613	542,613	542,613	556,179	556,179	556,179	556,179	570,083	570,083	570,083	570,083	584,335	584,335	584,335	584,335	11,050,824	
CPCM	542,613	542,613	542,613	556,179	556,179	556,179	556,179	570,083	570,083	570,083	570,083	584,335	584,335	584,335	584,335	11,050,824	
State and Project Hardware																0	
POS Stand-Beside Terminals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals by Quarter	580,089	580,089	580,089	593,899	593,899	593,899	593,899	608,050	608,050	608,050	608,050	622,552	622,552	622,552	622,552	15,817,393	
FFY Annual Total				2,334,165				2,389,747				2,446,703					
SFY Annual Total			2,320,355				2,375,595				2,432,202				2,490,209		
Cumulative Total	7,359,210	7,939,299	8,519,388	9,113,286	9,707,185	10,301,084	10,894,983	11,503,033	12,111,083	12,719,134	13,327,184	13,949,736	14,572,289	15,194,841	15,817,393		

11 DATA SOURCES

This document was prepared by analyzing and aggregating the information provided in previous deliverables, and by conducting work sessions with appropriate WIC Program staff. No additional sources were used.

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3. Certification and Enrollment, Chapter 2, ROSIE User Guide, September 21, 2009.
4. Wisconsin WIC Management Information System, Detailed Functional Design Document, Version 1.0, CIBER, December 14, 2004.
5. WIC Universal Interface, EBT – MIS, Version 1.3, October 15, 2009.
6. WIC IT Diagrams, New Mexico WIC Technical Reference Manual, March 17, 2009
7. WIC Program: Total Participation, (Data as of November 02, 2009), USDA/FNS.
8. http://www.dshs.state.tx.us/wichd/ebt/ebt_ECR_systems.shtm
9. <http://www.wicdirectsystem.com/ForRetailers/SolutionIntegrationandCertificationStatus.aspx>
10. http://inflationdata.com/inflation/Consumer_Price_Index/CurrentCPI.asp
11. WIC EBT Feasibility Study and Cost-Benefit Analysis v 1.3, Virginia Department of Health, August 25, 2008.
12. WIC EBT Cost Analysis Model Instructions, Imadgen, provided by USDA/FNS, 2009
13. NM WIC EBT Report 19 May 2006.doc
14. Appendix A – National Model Spreadsheets.xls (New Mexico pricing)
15. kWICpos FNS Model 8_16 no credits.xls (Texas pricing)
16. MI Attachment A Completed National Model Spreadsheets.xls
17. Final Del 3_MI WIC EBT Eval Report
18. Kentucky WIC Cost Analysis, Draft Version 1.0, October 1, 2009
19. Kentucky WIC EBT Cost Analysis, Appendix – Detail Cost Analysis

20. WIC EBT System Development, Implementation, and Expansion – 5-year Plan (2003-2008), Program Analysis and Monitoring Branch, Supplementation Food Programs Division, Food and Nutrition Service, United States Department of Agriculture, Status Update March 2006.

12 APPENDIX A: WIC VENDOR SURVEY

Prior to conducting the survey, the Wisconsin WIC Program discussed the WIC EBT initiative, the survey and survey participants with the Wisconsin Grocers Association. At the time the survey was conducted, there were 1,153 WIC-authorized vendors with 9,148 store lanes. The survey captured responses from 503 WIC vendors (43.6%) representing 6,385 store lanes (69.8%).

The following retailers participated in the Wisconsin WIC Vendor Survey:

Andy's IGA (Richter Foods)
BKT Enterprises, Inc.
Blue Ribbon – Glidden (Blue Ribbon Meats & Grocery)
Buffalo City Food Mart
Consumers of Eau Claire Mega Foods
Country Market, Medford Coop
CVS Pharmacies
Defense Commissary
Dick's Family Foods
Econo Foods (T&C Markets)
Erickson's Diversified
Festival Foods
Frank's Food Mart
Hansen's IGA
Larry's Markets
M&R Petroleum
Miner's Incorporated
Ormson's Super Value
Paul & Fran's Grocery
Pelkin's Piggly Wiggly
Piggly Wiggly Midwest
Ponfil's Grocery
Roundy's (Includes Mega Marts, Shop Rite and Ultra Mart)
Savers Milwaukee
Sentry Foods (WC Foods, Inc.)
TA Solberg
Walgreens
Walmart
Wayne's Star of the North

In addition the following firms were interviewed in regards to retailer software systems:

- IBM
- NCR
- North Country Business Products
- Retail Data Systems
- Retailix

Wisconsin WIC EBT Feasibility Study Vendor Telephone Survey

Name: _____

WIC Vendor Stamp Number: _____

Chain or Independent: _____

If chain, number of WIC-authorized stores in Wisconsin: _____

If chain, do you have stores in other states? (yes/no _____)

If yes, in which other states do you have stores? _____

General Information

1. How many registers are available to customers? _____
2. At how many registers are WIC foods sold? _____
3. Describe the store employees involved with WIC food sales, in-lane or otherwise:

Employee Type	Average \$/Hr	Average Length of Employment	
		Years	Months
Store Level Personnel			
Management			
Cashiers			
Backroom/Accounting			
Corporate/Central Office Personnel (if applicable)			
Accounts/Receivable			
Bookkeeping			
Accountant			

4. What are the store(s) days of operation (circle all that apply)? S M T W T F S

5. Who trains store cashiers?

6. How long does it take to train a cashier on conducting a WIC transaction?

7. Upon hire, how are store level personnel trained (check all that apply)?

- Classroom
- "Hands on" training ..
- Other (Explain)..... _____

8. Ongoing, how are store level personnel trained (check all that apply)?

- Classroom refresher ...
- "Hands on" as needed ..
- Other (Explain)..... _____

8. Ongoing, how often are store level personnel trained (check all that apply)?

- Regular refresher training _____
- As needed _____

Telephone Service Provider/Services

1. Is there a dedicated store(s) (business) telephone line (yes or no)?

If "yes"...

a. Who is the telephone service provider? _____

b. What is the type of telephone service (check one)?

- Regular/Landline
- Wireless (cell, satellite) ..
- Cable (VOIP)
- Other
- Describe "Other": _____

Internet Service Provider (ISP)/Services

1. Does your store(s) have internet service (yes or no)?

If "yes"...

a. Who is the Internet service provider (ISP)? _____

b. What is the type of Internet service (check one)?

- Dialup
- High Speed Cable/DSL ..
- Other
- Describe "Other": _____

Financial Institution/Bank Services Provider/Services and Fees

1. Does your bank charge a fee for electronic (ACH) credits/deposits (yes or no)? ___

If "yes", what are the terms and fees? _____

2. How frequently does the store receive an electronic deposit from the WIC financial institution? (check the one that applies)

7 days per week ___

6 days per week ___

5 days per week ___

4 days per week ___

3 days per week ___

2 days per week ___

1 day per week ___

If less than once per week, how many times per month? ____

2. Does your bank charge a fee for items returned (yes or no)? ___

If "yes", what are the terms and fees (\$/return, \$/return above ##, etc.)? _____

Third Party Acquirer/Processor

1. Does your store(s) utilize a 3rd party processor to "drive" terminals used for online debit and credit transactions in-lane (yes or no)? ___

If "yes", which of the following services are included in your agreement (check all that apply)?

Terminal maintenance .. ___

Terminal repair ___

Help Desk ___

None of the above ___

2. Is the store(s) charged on a "per transaction" basis (yes or no)? ___

If "no", describe the charge basis: _____

If "yes", is the fee "volume-based/discounted" (yes or no)? ___

WIC Sales, Appeals and Reconciliation

1. Where are WIC food sales records maintained (check all that apply)?

- Corporate office
 - Region office
 - Store backroom/manager's office ..
 - Other
- Describe "Other": _____

2. If other than "store backroom/manager's office", how is WIC food sales data transmitted to the corporate or regional office? (check all that apply)

- Electronically/automatically by electronic cash register system/point-of-sale terminals (ECR/POS) ..
 - Manually (paper):
 - Store report
 - Bank statements/report
 - Other
- Describe "Other": _____

3. Reports of WIC food sales are prepared (Check all that apply):

- Daily
 - Weekly
 - Monthly
 - Quarterly ..
 - Annually ...
 - Other
- Describe "Other": _____

4. What are the most common reasons for returned checks and what is the frequency of occurrence for all WIC sales transactions?

- a. _____ @ _____% of all WIC sales transactions
- b. _____ @ _____% of all WIC sales transactions
- c. _____ @ _____% of all WIC sales transactions
- d. _____ @ _____% of all WIC sales transactions

5. On average, how much time per week is spent on getting reimbursement for returned WIC checks by the following personnel?

- Corporate office
 - Region office
 - Store office
 - Store manager/assistant manager ..
- Store does not apply resubmit returned checks _____

6. Please estimate other costs related to check resubmission.

Average postage/delivery costs per appeal: _____ (dollars)

Miles to/from delivery drop-off, if applicable: _____ (miles)

Other, describe: _____

Other, describe: _____

FoodShare

1. Is your store(s) certified for Wisconsin FoodShare (Quest Card) (yes or no)? ____

If "yes", in how many lanes are FoodShare items sold? _____

2. In the FoodShare-enabled lanes, are the pin-pad devices (terminals) provided by the State? (yes or no)? ____

Technical Infrastructure

1. Does your store(s) have an ECR/POS system (yes or no)? ____.

If "yes"...

a. Who are the system component manufacturers?

Store Controller _____

ECR _____

POS: _____

In-lane Pin-Pad/CAD .. _____

b. Who is the software manufacturer and current version for each of the system components?

Store Controller _____ Version: _____

ECR _____ Version: _____

POS _____ Version: _____

In-lane Pin-Pad/CAD .. _____ Version: _____

MTX (yes or no)?: ____ If "yes", what is the SCAT version?: _____

c. In what year was your ECR/POS system purchased and installed? ____ (Initial install year)

d. Has your ECR/POS system been upgraded or components replaced (check all that apply)?

- Store Controller
- ECR
- POS
- In-lane Pin-Pad/CAD ..

e. Are there plans to replace parts or the entire ECR/POS system (yes or no)?

If "yes", in what year? _____

f. Who maintains your ECR/POS system (Check all that apply)?

- Corporate/Store IT Department ..
- Contractor/3rd Party
- Store Owner
- Family Member
- Other

Describe "Other": _____

2. If your ECR system is upgraded internally on a regular schedule, how much advance notice would you need to put WIC EBT integration on your schedule? _____

3. Does your system utilize a scanner to identify a food item in-lane by universal product codes (UPC) (yes or no)?

4. Are electronic scales and printers used by customers to weigh fresh fruits and vegetables and print barcode identifier, price and description (yes or no)?

5. At the POS, do cashiers key-enter price look-up (PLU) codes for fresh fruits and vegetable purchases (yes or no)?

6. Does the store(s) purchase locally grown fruits and vegetables from private suppliers (yes or no)?

If "yes"...

a. Are store(s) PLUs those assigned by the International Fresh Produce Standard (IFPS) (yes or no)? (give two examples: bananas XXX and tomatoes XXX)

b. Does the store(s) utilize 'retailer assigned' and generic (i.e., other fruits, other vegetables) PLUs (yes or no)?

13 APPENDIX B: WIC EBT FUNTIONAL COMPONENTS

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
WIC EBT Cards	<ul style="list-style-type: none"> Smart card Food package and cash allowance stored on card PIN stored on card Limited to one card (cardholder) per household Participant must be present at the clinic to receive a card and PIN May also include a magnetic stripe to support other programs Due to the ICC, the cost is higher per card than a magnetic stripe card 	<ul style="list-style-type: none"> Magnetic stripe card Food package and cash allowance stored at the WIC EBT system PIN stored at the WIC EBT system Able to have multiple cards (cardholders) per household Participant may be issued a card at the clinic or may be mailed a card Participant may select a PIN at the clinic or may select a PIN via an AVR Minimal cost per card 	<ul style="list-style-type: none"> State contracts directly with card manufacturer Card costs may include cards, card sleeves, card design, ICC file design, key ceremony (secure transfer of the encryption keys needed to access the ICC) and fulfillment Clinic staff responsible for issuing cards (online and offline) As an option, state staff may mail replacement cards to clients (online) 	<ul style="list-style-type: none"> Cards provided as core part of EBT contract Cost of card fulfillment is included in the CPCM pricing Other card costs, such as card design and card sleeve may be included in the CPCM or may be priced separately Clinic staff responsible for issuing cards (online and offline) As an option, the processor may mail cards to clients (online)
Benefit Issuance	<ul style="list-style-type: none"> Benefits loaded onto card's ICC and a record is maintained by the WIC EBT system Card and cardholder must be present for issuance Aggregated benefits for the household (household participant food packages, CVBs and 	<ul style="list-style-type: none"> Benefits are posted (uploaded) to the WIC EBT system Cardholder does not need to be present for issuance unless required by WIC policy WIC MIS may post benefits to individual accounts in real-time WIC MIS may send daily 	<ul style="list-style-type: none"> State purchases and maintains or leases smart card read/write and PIN selection devices and magnetic stripe PIN selection devices for clinics State's host system must be available to accept issuance transactions and daily batch files 	<ul style="list-style-type: none"> Smart card and magnetic stripe card devices provided as part of OP contract. May be part of CPCM or may be priced separately Processor's host system must be available to accept issuance transactions and daily batch files

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
	<p>related and benefit periods) may be loaded at one time</p> <ul style="list-style-type: none"> Benefit issuance location must have a card read/write device (which will also be the PIN selection device) 	<p>batch files to host system for automated posting of monthly benefits (system must be available 24x7)</p>	<ul style="list-style-type: none"> State's host system must retain a record of the issuance transaction Clinic staff responsible for loading benefits onto ICC (offline) 	<ul style="list-style-type: none"> Processor's host system must retain a record of the issuance transaction Performance standards are included in processor's contract Costs are part of CPCM Clinic staff responsible for loading benefits onto ICC (offline)
Benefit Change	<ul style="list-style-type: none"> Card and cardholder must be present for a benefit change Benefits are deleted from and/or loaded onto card's ICC See Benefit Issuance for all other requirements 	<ul style="list-style-type: none"> Card and cardholder do not need to be in WIC clinic for a benefit change Benefit changes are posted (uploaded) to the host system See Benefit Issuance for all other requirements 	<ul style="list-style-type: none"> See Benefit Issuance 	<ul style="list-style-type: none"> See Benefit Issuance
Benefit Redemption	<ul style="list-style-type: none"> Card and cardholder must be present for redemption WIC authorized vendor must have a WIC-EBT ready smart card read/write device Transaction occurs between the card and the card reader; communications with the host is not required for the transaction to occur Only authorized WIC items will be approved 	<ul style="list-style-type: none"> Card and cardholder must be present for redemption WIC authorized vendor must have a WIC-EBT ready POS device Client must swipe card prior to purchase to access benefits; communications with the host is required for the transaction to occur Client must swipe card at end of purchase to approve the transaction Only authorized WIC 	<ul style="list-style-type: none"> State's host system must be available 24x7 to accept and authorize transactions (online) WIC authorized vendor agreements, WIC authorized vendor certifications and terminal deployment responsibility of state but may be contracted out separately State may purchase ECR/POS terminal configurations or provide WIC authorized 	<ul style="list-style-type: none"> Processors host system must be available 24x7 to accept and authorize transactions (online) Performance standards are included in processor contract (online) WIC authorized vendor agreements, WIC authorized vendor certifications and terminal deployment responsibility of processor Cost of WIC EBT

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
	<p>for purchase</p> <ul style="list-style-type: none"> • Only items authorized in a food package of a member of the cardholder’s group will be approved • Only items approved for the current benefit period will be approved • Items purchased are deducted from the amounts stored on the card; fruit and vegetable purchase amounts are deducted from the CVB allowance amounts stored on the card • NTE amounts can be calculated and adjusted in real time by the WIC authorized vendor ECR system with the state’s APL (for example, Wal-Mart performs a pre-edit), or the WIC authorized vendor can allow the state to adjust the daily WIC authorized vendor reimbursement amounts (called post-editing). The state WIC program provides to the WIC authorized vendor a detailed accounting of NTE adjustments. 	<p>items will be approved for purchase</p> <ul style="list-style-type: none"> • Only items authorized for a member of the group’s food package will be approved • Only items approved for the current benefit period will be approved • Authorized WIC items are deducted from the benefits; fruit and vegetable purchase amounts are deducted from the CVB allowance amounts stored in the account • Not to exceed (NTE) exceptions are calculated real time and provided to the WIC authorized vendor as part of the approval message 	<p>vendors with funds to purchase/modify own terminals</p>	<p>terminal configurations included in CPCM or may be priced separately</p>

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
Transaction Routing	<ul style="list-style-type: none"> Daily claim files are batched and sent directly to the FTP communication processor WIC authorized vendors with more than one store may choose to combine claim files. Daily approved product list (APL)/UPC updates and hot card list (HCL) and daily claim confirmation and summary and detailed transaction file reports (NTE adjustments) are retrieved by the WIC authorized vendor 	<ul style="list-style-type: none"> Transaction routing is performed real-time If WIC authorized vendor uses WIC EBT-only device, routing is direct; does not use an intermediary processor WIC authorized vendor may act as its own processor or may use an intermediary (TPP and Gateway) TPPs may charge WIC authorized vendors transaction fees 	<ul style="list-style-type: none"> State responsible for accepting claim files (offline) State responsible for accepting real-time transactions from EBT-only terminals, WIC authorized vendors who act as their own processors and TPPs (online) WIC authorized vendors responsible for retrieving daily updates to the APL/UPC from the state (offline and in some online configurations) WIC authorized vendors responsible for retrieving HCLs from the state (offline) 	<ul style="list-style-type: none"> Processor responsible for accepting claim files (offline) Processor responsible for accepting real-time transactions from EBT-only terminals, WIC authorized vendors who act as their own processors and TPPs (online) State responsible for maintaining the APL/UPC for upload to processor Processor responsible for sending daily APL/UPC updates (offline and in some online configurations) Processor responsible for sending HCLs (offline)
System Availability	<ul style="list-style-type: none"> System must be available to issue cards System must be available to issue or change benefits System does not need to be available to redeem benefits System must be available to accept claim files from the WIC 	<ul style="list-style-type: none"> System must be available 24x7 for card and benefit issuance and redemption and to accept file transfers If POS device is non-functional a manual entry is possible; if system is down, a voice authorization is possible. 	<ul style="list-style-type: none"> If an online system, state must maintain 24x7 availability. For offline systems, state must maintain close-to 24x7 availability as system is required for issuance and settlement transactions. 	<ul style="list-style-type: none"> If an online system, processor must maintain 24x7 availability. For offline systems, processor must maintain close-to 24x7 availability as system is required for issuance and settlement transactions.

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
	<p>authorized vendor and to send APL updates and the HCL to the WIC authorized vendor</p> <ul style="list-style-type: none"> Real-time account balance is held on the card; time lapse required to synch the host system. If a WIC authorized vendor's card read/write devices are non-functional, then WIC transactions cannot be processed. There is no paper back-up 	<ul style="list-style-type: none"> If the system is down, a WIC authorized vendor may store the transaction and forward it a later time. This transaction is at the WIC authorized vendor's risk 		<ul style="list-style-type: none"> Processor is given performance standards concerning system availability
Host Processing	<ul style="list-style-type: none"> Host receives claim files from WIC authorized vendors in a batch mode; processing occurs when file is received Host receives benefit files in real time as only what is loaded on the card is sent to the host; processing occurs when files are received 	<ul style="list-style-type: none"> Host receives transaction from WIC authorized vendors or TPPs in real time and processes upon receipt. Requires 24x7 availability and rapid response Host receives benefit files in real time and may receive files in batch mode; processing occurs when files are received 	<ul style="list-style-type: none"> State must be capable of receiving claim files or real-time transactions State is responsible for processing State is responsible for ensuring host system is up If an online system, state is responsible for 24x7 availability and rapid response 	<ul style="list-style-type: none"> Processor receives claim files or real-time transactions Processor processes the transactions Processor ensures host system is up If an online system, processor maintains 24x7 availability and rapid response Processor is subject to specific performance measures under its contract
<p>Card/Benefit Replacement</p> <p>Note: WIC benefits issued on checks</p>	<ul style="list-style-type: none"> Participant must be present at the clinic to receive a replacement card and PIN Participant must be 	<ul style="list-style-type: none"> Participant may receive a replacement card and PIN at the clinic or may be mailed a replacement card and PIN 	<ul style="list-style-type: none"> State responsible for providing replacement cards (card stock) Clinic staff responsible for issuing replacement 	<ul style="list-style-type: none"> Processor responsible for providing replacement cards (card stock) Clinic staff responsible

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
are not generally “replaced”. This discussion concerns access to remaining benefits after a card, which contains the household’s WIC benefits, is reported lost, stolen or damaged.	<ul style="list-style-type: none"> present at the clinic to restore unused benefits Unused benefits may not be loaded onto the ICC until 48 hours or more following the report of a lost, stolen or damaged card to allow the host system to synch with any outstanding redemption transactions 	<ul style="list-style-type: none"> As the host system is real-time benefits stored at the host remaining benefits may be accessed immediately with the new card 	<ul style="list-style-type: none"> cards (online and offline) Clinic staff responsible for loading benefits onto card (offline) 	<ul style="list-style-type: none"> for issuing replacement cards at the clinic (online and offline) Processor responsible for mailing replacement cards (online) Clinic staff responsible for loading benefits onto card (offline) Costs included in CPCM
Hot Cards and Card Inactivation	<ul style="list-style-type: none"> Lost stolen or damaged cards may be reported to the WIC clinic, help desk, or to a web-based customer site The list (HCL) of lost, stolen or damaged cards is maintained by the host system The HCL is sent to WIC authorized vendors each day The smart card is compared against the HCL prior to a transaction The smart card terminal provides a message to the WIC authorized vendor concerning the card’s status The HCL is not real-time. Cards may be reported 	<ul style="list-style-type: none"> Lost stolen or damaged cards may be reported to the WIC clinic, the help desk, or to a web-based customer site The list (HCL) of lost, stolen or damaged cards is maintained by the host system The card is compared against the HCL prior to a transaction The POS terminal provides a message to the WIC authorized vendor concerning the card’s status The HCL is real-time. Once a card is reported as lost/stolen, transactions using the card will no longer be authorized. 	<ul style="list-style-type: none"> The state or clinic accepts reports of lost, stolen or damaged cards The EBT system maintains the HCL The state ensures the HCL is sent to WIC authorized vendors on a daily basis (offline) The EBT system denies transactions using the lost/stolen card (online) 	<ul style="list-style-type: none"> The processor and the state (WIC clinics) accept reports of lost, stolen or damaged cards The processor maintains the HCL The processor ensures the HCL is sent to WIC authorized vendors on a daily basis (offline) The processor’s system denies transactions using the lost/stolen card (online) The processor is liable for authorization errors (online) The processor is subject to performance standards

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
	<p>as lost/stolen up to 24 hours before the HCL is provided to WIC authorized vendors. WIC authorized vendors are not liable for authorized transactions due to this time lag. Participants may not recover benefits lost due to this time lag</p>			
Security	<ul style="list-style-type: none"> • ICCs are created with unique access keys. PINs are stored on the ICC using proprietary algorithms and cannot be read directly from the ICC. • Encrypted keys are stored on the card, on the read/write devices at the clinic and at the smart card devices at the WIC authorized vendor. These keys authorize access and specific types of transactions. • Transaction files must be date and time stamped • Claim files must include 	<ul style="list-style-type: none"> • PIN and transaction data are encrypted prior to being sent to and from the host • PIN selection terminal at the clinic is validated by the host • POS terminal is validated by the host (EBT-only) or by the TPP • Transactions must be date and time stamped 	<ul style="list-style-type: none"> • Key exchange ceremonies are required²⁰ • State must secure and manage keys • State responsible for validating keys, files and transactions • State responsible for only receiving and transmitting files that have been encrypted • State may be invoiced for the key ceremony 	<ul style="list-style-type: none"> • Processor must secure and manage keys • Processor responsible for only receiving and transmitting files that have been encrypted • Processor responsible for validating keys, files and transactions • Costs included in CPCM

²⁰ Transferring the algorithm that serves as the digital key to read the encrypted data exchanged between two applications, which may reside at the host system, at the point-of-sale terminal, or on the smart card.

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
	<ul style="list-style-type: none"> a transaction signature to ensure validity Claim files must be date and time stamped 			
Settlement	<ul style="list-style-type: none"> Claim files are validated NTE exceptions may be applied Approved claim files trigger the generation of WIC authorized vendor reimbursement files WIC authorized vendor reimbursements are settled to the WIC authorized vendor's financial institution within one to two business days 	<ul style="list-style-type: none"> Transactions are approved at the POS Reimbursements are settled to the WIC authorized vendor's financial institution for transactions that occur prior to the processor's daily cut-off time 	<ul style="list-style-type: none"> State is responsible for validating files and transactions State is responsible for authorizing its financial institution to reimburse WIC authorized vendors State is liable for processing and settlement errors 	<ul style="list-style-type: none"> Processor is responsible for validating files and transactions Processor is responsible for settling to WIC authorized vendors (processor may be a financial institution or may subcontract settlement to a financial institution) Processor is liable for processing and settlement errors
Reconciliation	<ul style="list-style-type: none"> Claim files are reconciled with the settlement amount and returned to the WIC authorized vendor 	<ul style="list-style-type: none"> Reconciliation is performed between parties accepting and receiving a transaction Transactions are reconciled with the settlement amount and returned to the WIC authorized vendor or TPP 	<ul style="list-style-type: none"> State is responsible for reconciling claim files and transactions against settlement amounts and sending reconciliation files to the appropriate party 	<ul style="list-style-type: none"> Processor is responsible for reconciling claim files and transactions against settlement amounts and sending reconciliation files to the appropriate party
Balance Inquiry	<ul style="list-style-type: none"> Card, PIN and smart card reader/printer are required for an accurate (real time) balance The help desk may provide an estimated balance; the host system 	<ul style="list-style-type: none"> Card, PIN and POS terminal/printer can provide an accurate balance Customer service can provide an accurate balance with 	<ul style="list-style-type: none"> State responsible for providing customers with access to account balances; methodologies to be determined by the state 	<ul style="list-style-type: none"> Processor responsible for providing customers with access to account balances; methodologies to be determined by the state Cost included in CPCM

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
	<p>will not be accurate unless all WIC authorized vendors have settled and all transactions are uploaded to the host</p> <ul style="list-style-type: none"> If web-based access is provided it will provide an estimated balance and only those transactions that have been uploaded to the host 	<p>appropriate identity verification</p> <ul style="list-style-type: none"> If web-based access is provided, it will provide an accurate balance and a record of all transactions that have been conducted with the host 		
Audit Trail	<ul style="list-style-type: none"> Audit trails are required for all transactions Audit trails for benefit redemption transactions are stored on WIC authorized vendor ECR systems until uploaded to the host system 	<ul style="list-style-type: none"> Audit trails are required for all transactions 	<ul style="list-style-type: none"> State responsible for maintaining complete audit trail for a pre-determined period 	<ul style="list-style-type: none"> Processor responsible for maintaining complete audit trail for a pre-determined period Cost is included in the CPCM
Call Center Customer Service	<ul style="list-style-type: none"> Separate numbers are usually provided for participants, WIC authorized vendors and staff 	<ul style="list-style-type: none"> Separate numbers are usually provided for participants, WIC authorized vendors and staff 	<ul style="list-style-type: none"> State provides call center customer service capability staffed by state staff or contracts for call center customer service Customer service includes calls from participants, WIC authorized vendors and staff 	<ul style="list-style-type: none"> Processor provides call center customer service Customer service includes calls from participants, WIC authorized vendors and staff Customer service call center included in CPCM Costs may be contained if limits are placed on the number of participant calls per month or the hours of

WIC EBT Functional Components				
System Component	Offline	Online	Transfer System (TS)	Outsourced Processing (OP)
				operation; limits should not be placed on the hours for WIC authorized vendor calls or the hours for reporting lost and stolen cards

14 APPENDIX C: ROSIE GAP ANALYSIS

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
3.3	Food Management				
3.3.1	Maintain Food Categories/Subcategories				
3.3.1.1	Maintain Food Category/Subcategory Table	Maintains approved WIC food data in the Product Data Tab but does not utilize the standard category/ subcategory codes per the National UPC database.	Yes	Maintain the Approved Product List (APL) using national standard food category/ subcategory codes; create an electronic file and provide APL data to the EBT system through a batch interface	Acquire APL data from ROSIE
3.3.4	Maintain UPC Database and Food Item Maximum Amounts				
	Interface to the National UPC Database	ROSIE does not have an interface to the National UPC database	Yes	Option: Maintain interface in ROSIE	WUI Recommendation ²¹ : Maintain Interface to National UPC database in EBT system.
3.3.4.1	Maintain UPC Database for WIC Authorized Foods	ROSIE does not maintain the UPC database	Yes	Option: Maintain UPC data in ROSIE; transmit to EBT system	WUI Recommendation: Maintain UPC data for all APL foods in EBT system; data used to verify and

²¹ Recommended placement of EBT readiness functionality in ROSIE or the EBT system, reflect FNS guidance per the WIC EBT- MIS Universal Interface (WUI) document.

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
				through batch interface	approve WIC EBT transactions
3.3.4.2	Establish Food Item Maximum Allowed (Not-to-Exceed – NTE) Amounts. NTEs are established for each peer group.	Although the Product Data Tab does have a data field for Maximum Price, calculation of maximum prices is not in use	Yes	Option: Calculate NTE in ROSIE; transmit to EBT system through batch interface	WUI Recommendation: Calculate NTE by peer group in EBT system. Data used to verify and approve WIC EBT transactions.
3.4	Food Benefit Issuance				
3.4.2	Issue Benefits via EBT				
3.4.2.1	Establish Household EBT Account	New families are established in ROSIE via the Information Tab. Demographic data is captured and Family (Household) ID is assigned. Guardian or Head of Household (HOH) assigned. ROSIE does not currently create a household benefit account. The required interface the EBT system is currently not available in ROSIE.	Yes	Create electronic household account and invoke real time interface to EBT system to authorize the household EBT account and transmit Family ID and HOH (and proxy if applicable) demographic data. Minimum data set includes: <ul style="list-style-type: none"> • Household ID • HOH name • HOH address • HOH data of birth • Clinic/Project ID (optional) SOR: ROSIE is the system of record (SOR) for household ID and HOH (and Proxy) demographic data.	Accept HOH demographic data; establish/maintain-household EBT account; the account is linked to the family through the unique household ID generated by ROSIE

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
3.4.2.2	Add Participant to an EBT Account	N/A Assumption: Participant level data is not maintained in the EBT system	No	N/A	N/A
	Aggregate Food Benefits by Household or Family	Benefit aggregation functionality currently not available in ROSIE	Yes	Aggregate the benefits of all participants in the household to create a household benefit account	N/A
3.4.2.3	Issue Electronic Benefits	Electronic household benefit record and interface to the EBT system currently not available in ROSIE	Yes	Create electronic benefit record and invoke real time interface to authorize and transmit aggregated household benefits to EBT system. Minimum data set includes: <ul style="list-style-type: none"> • Household ID • Credit/Debit indicator (to add or delete benefits) • Benefit ID • Benefit start date • Benefit end date • Category • Subcategory • Benefit quantity • CVV benefit dollar amount²² SOR: Benefit authorization	Accept benefit package and post current month and future months' (if transmitted) to the household EBT account

²² In an EBT environment, the CVV is known as a Cash Value Benefit (CVB).

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
				<p>originates in ROSIE</p> <p>Note: A real time interface allows the client to leave the clinic and go shopping. In an online EBT environment, Wisconsin WIC may transmit future months' benefits along with current month's benefits. Alternatively, ROSIE may hold future months' benefits and transmit a bulk data file via the batch interface just prior to the benefit availability month. In an offline EBT environment, current and future months' benefit are posted to the EBT card and are transmitted daily to the EBT host via the batch interface.</p>	
3.4.2.4	Issue EBT Card	Card issuance functionality currently not available in ROSIE.	Yes	<p>Option: Issue the EBT card in ROSIE</p> <p>Option: If card is issued by EBT system, the card number (PAN) may be transmitted through a real time or batch interface to ROSIE for posting to the household account</p>	<p>WUI Recommendation: The clinic user accesses EBT system card issuance screen. In an online EBT environment, the card number (PAN)²³ can be key-entered or entered automatically by swiping the card through a card reader device. Online accommodates HOH and proxy cardholders. In an offline environment, a card read/write device is required to</p>

²³ A payment card (Debit, Credit or EBT) number is known as the Primary Account Number or PAN.

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
					<p>link the card to the EBT account. Offline EBT precludes proxy cards. Minimum data set includes:</p> <ul style="list-style-type: none"> • Household ID • Card Number (PAN) • Cardholder Name • Cardholder Date of Birth • Cardholder Type (HOH or proxy) <p>SOR: The EBT system is the SOR for card status and card management data. EBT systems also provide card inventory management functionality.</p>
	Select/Change PIN	Not an MIS function	Yes	N/A	<p>Clients select or change PINs using a PIN device in the clinic. In an online environment, the encrypted PIN is stored on the EBT host. The EBT Processor may provide an option for remote PIN change capability using AVR technology.</p> <p>In an offline environment, the encrypted PIN is stored on the card and remote PIN change capability is not available. Minimum data set includes:</p> <ul style="list-style-type: none"> • Card number (PAN) • Encrypted PIN <p>SOR: Online EBT – EBT host; Offline EBT – EBT Card</p>

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
	Maintain EBT Account Balance	Not an MIS function	Yes	N/A	<p>EBT account balance is maintained on the EBT system. SOR: The EBT system is the SOR for the EBT account balance</p> <p>Note: In an online EBT environment, a real time account balance is maintained by the EBT system.</p> <p>In an offline environment, the real time account balance is carried on the card. The account balance on the EBT system is updated when WIC vendors send bulk redemption data to the EBT host. Vendors generally transmit WIC redemption data daily but must send data within State specified parameters (e.g., at least every 48 hours). In an offline EBT environment, the real time account balance on the card and the balance posted to the EBT account is often out of synch</p>
3.4.2.5	Retrieve Account Balance	Not an MIS function	Yes	N/A	<p>In an online EBT environment, the clinic user accesses the EBT system to obtain a real time account balance. In an offline EBT environment, the clinic user may access the account balance post to the EBT account but must have access to the EBT card to retrieve a real time account balance.</p>

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
					<p>SOR: In an online EBT environment, the EBT system is the SOR for the EBT account balance. In an offline EBT environment, the card is the SOR for the account balance</p>
3.4.2.6	Update EBT Account Information	Capability to update account information is available in ROSIE but, there is no electronic household account and no interface to the EBT system	Yes	<p>Create electronic household record; invoke real time interface to transmit account update information to the EBT system.</p> <p>SOR: ROSIE is the SOR for household ID and demographic data</p>	Accept updated demographic data and update EBT account information
3.4.2.7	Remove Participant from an EBT Account	<p>N/A</p> <p>Assumption: Participant level data is not carried in the EBT system</p>	No	N/A	N/A
3.4.2.8	Process Change to Household Electronic Benefits (Adjustment, Void, Reissuance)	ROSIE has the capability to process changes to the participant benefit package but does not aggregate to create an electronic household account	Yes	<p>Modify current or future household benefits; create electronic benefit record; invoke real time interface to transmit change to the EBT system.</p> <p>Minimum data set:</p> <ul style="list-style-type: none"> • Household ID • Credit/Debit indicator (to add or delete benefits) 	<p>Acquire benefit change data and update EBT account balance.</p> <p>Note: In an offline EBT environment, the clinic user must have access to the EBT card to process a change to WIC benefits which are carried on the card</p>

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
				<ul style="list-style-type: none"> • Benefit ID • Benefit start date • Benefit end date • Category • Subcategory • Benefit quantity <p>SOR: Change to a household benefit package originates in ROSIE</p>	
3.4.2.9	Process Change to EBT Card Status (lost, stolen, suspended, replaced, deactivated)	Card status change functionality not currently available in ROSIE	Yes	<p>Option: Process change in card status in ROSIE and transmit to EBT system</p> <p>Option: If change in card status occurs in EBT system, the change in status may be transmitted through a real time or batch interface to ROSIE for posting to the household account</p>	<p>WUI Recommendation: Clinic user or client access EBT system to change card status. Client access is provided by EBT processor through the AVR/ customer service function. Card may be reissued in the clinic or mailed by the EBT processor. Minimum data set:</p> <ul style="list-style-type: none"> • Card Number (PAN) • Card Status Code <p>SOR: EBT system is the SOR for card status; changes in card status may be transmitted to ROSIE</p> <p>Note: In an offline EBT environment, a card hot list is downloaded to WIC vendors each time the WIC vendor uploads redemption data to the EBT host. The vendor is liable for purchases that occur outside state specified timeframes for receipt of</p>

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
					redemption data.
	Card Replacement	Functionality currently not available in ROSIE.	Yes	<p>Option: Replace the EBT card in ROSIE and transmit new PAN to the EBT System.</p> <p>Option: If the replacement originates in the EBT system and the new card number is transmitted to ROSIE, ROSIE will post the new card number to the household account.</p>	<p>WUI Recommendation: The clinic user accesses the EBT system card issuance screen to replace EBT card.</p> <p>Option: The new card number (PAN) may be transmitted to ROSIE</p> <p>Note: In an offline EBT environment, there is a waiting period to replace a card to ensure that all vendors have uploaded redemption data against that card to the EBT host. After the State specified timeframe for transmission of redemption data has expired, the account balance carried on the EBT host may be posted to the new card.</p>
3.5.	Food Benefit Redemptions, Settlement and Reconciliation				
	Validate Benefit Redemption Transaction	Not an MIS function	Yes	N/A	<p>EBT system performs a series of checks to validate the transaction:</p> <ol style="list-style-type: none"> 1.) Food retailer is an authorized WIC vendor 2.) PAN is valid and the card is active 3.) Benefit availability period is valid 4.) Number of consecutive failed PIN tries has not been exceeded

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
					5.) Entered PIN is valid. 6.) WIC account is active
	Process Benefit Redemption	Not an MIS function	Yes	N/A	After validation, the benefit redemption transaction is approved if the following conditions are met: 1.) Food package includes the category/ subcategory for the food item's UPC and the UPC/category/ sub- category has an available balance 2.) The food item is within the remaining quantity of units of measure for the category/ subcategory 3.) The food item purchase amount is within the NTE price; if not, the item is authorized at the NTE 4.) The WIC cardholder validates the total purchase amount 5.) The new benefit balance is posted to the EBT account.
	Reconcile Daily Redemptions	Not an MIS function	Yes	N/A	Operates on a 24 hour processing cycle. At the designated cut off time; closes the day, and reconciles each account and the system
3.5.3	Pay Vendor for Benefits Redeemed via EBT				

RTM Function Number	EBT Readiness Function	As Is ROSIE Functionality	GAP (Y/N)	To Be ROSIE Functionality	To Be EBT System Functionality
3.5.3.1	Process Vendor Payment	Not an MIS function	Yes	N/A	The EBT system consolidates WIC transactions; initiates settlement through ACH ²⁴ processes
3.5.4	Reconcile EBT				
3.5.4.1	Retrieve Benefit Issuance File	Not currently available in ROSIE	Yes	Invoke the batch interface to the EBT system to retrieve daily benefit issuance file; ensure benefits issued by ROSIE match benefits posted by the EBT system	Transmit daily file of all benefit issuances posted during the 24 processing cycle to ROSIE Note: The EBT system can push this file to ROSIE or ROSIE can pull the file from the EBT system
3.5.4.2	Retrieve Transaction History File/Reconcile	Not currently available in ROSIE	Yes	Invoke the batch interface to the EBT system to retrieve a monthly transaction history file to support 798 reporting	Transmit a monthly transaction history to ROSIE
3.9	Vendor Management				
3.9.3	Maintain Vendor Authorizations				
	Create Vendor Batch File	Electronic vendor batch file not currently available in ROSIE	Yes	Maintain a vendor master file and transmit to the EBT system through the batch interface; ROSIE is the SOR for all vendor data	Accept vendor master file and maintain a current list of authorized vendors to validate WIC EBT transactions. The WIC MIS is the SOR for authorized WIIC vendor data.

²⁴ Automated Clearing House (ACH) is an electronic network for [financial transactions](#) in the [United States](#). ACH processes large volumes of both credit and debit transactions, which are originated in batches.

15 APPENDIX D: COST ASSUMPTIONS

Following is a list of cost assumptions used to develop the cost analysis:

GENERAL ASSUMPTIONS

- The baseline year is State Fiscal Year 2010.
- Annual inflation rate is 2.9%, calculated using the average inflation rate from 2000 through 2009
- Cost of living adjustment (COLA) is variable due to the recent economic downturns. For 2011 it is assumed to be a 2% decrease. For subsequent years it is assumed to be a 1% increase per year.
- A blended rate of \$17.94 per hour, including benefits, is applied to local staff
- A blended rate of \$37.43, including benefits, is applied to state staff
- A 6.3% overhead rate is applied to local and state staff
- 200 local clinics
- 127,891 participants per month and 79,932 households per month for the baseline year (1.6 participants per household)
- Participation is assumed to increase at a rate of 2.5% per year
- 1,153 WIC authorized vendors

ASSUMPTIONS RELATED TO THE PAPER-BASED SYSTEM

- 5,039,678 Food instruments issued per year
- 4,015,647 Food instruments redeemed per year
- 1,024,031 Food instruments unredeemed per year
- 84,969 Food instruments rejected per year
- Observed local clinic issuance processes were extremely efficient. It is not anticipated that card and benefit issuance via EBT will either increase or decrease issuance times.
- Wisconsin does allow replacement of lost or stolen food instruments following an investigation (due process). Claims are predominant in urban areas. This process will be eliminated with WIC EBT. Estimated costs are included in the baseline analysis.
- The banking contract ends in SFY 2013. Assumed 5% increase in banking costs beginning SFY 2014.
- Assumed distribution of food instrument rejects between chains and small retailers is based on percentage of WIC sales (76.7% of WIC sales are chains, 23.3% of WIC sales are small stores)
- Estimate for in-lane transactions is based on the average transaction times from the Texas, New Mexico, Michigan and Virginia cost analyses.
- Retailer borne costs include transactions in lane and cost of food instrument rejects and payment adjustments.

ASSUMPTIONS RELATED TO WIC EBT IMPLEMENTATION

- Costs are calculated based on the assumed WIC EBT schedule (refer to Section 7, Table 2)
- Applications and databases for the in-house solution will be implemented on existing state hardware (cost is assessed as a monthly fee to the WIC Program). The WIC Program will purchase the licenses for all necessary software
- Staff agency travel costs are estimated to be less for the outsourced solution as the WIC EBT processor will assume responsibilities for regional train-the-trainer, any necessary WIC clinic installations, and retailer visits. Travel costs for the EBT processor are included in the CPCM.
- Additional online EBT-only (stand-beside) terminals will be required during the rollout to support retailers that have not completed ECR integration. These terminals are assumed to be leased for the rollout.
- Based on the latest available information related to systems that are certified, or are in development and plan to be certified for online and/or offline WIC EBT, two ECR systems will require integration support for the online solution; four ECR systems will require integration support for the offline solution. It is understood that this may change as software upgrades and integration work continues among retailers and software providers.

ASSUMPTIONS RELATED TO WIC EBT OPERATIONS

- WIC EBT operation levels during SFY 2013 (first year of implementation) are estimated at 10.5% based on rollout schedule
- WIC EBT operation levels during SFY 2014 (second year of implementation) are estimated at 86% based on rollout schedule
- Contractor staffing for system in-house (pilot) operations during SFY 2013 are allocated to implementation costs
- Contractor staffing for the in-house solution will be business hours with on-call support
- 2.34 WIC EBT transactions per household per month, based on data from Texas and Michigan
- Smart card replacement rate of lost and stolen cards is 18.3% per year based on data from Texas, New Mexico and Wyoming
- 44.8% Household turnover per year
- Estimate for in-lane transactions is based on the average transaction times from the Texas, New Mexico, Michigan and Virginia cost analyses.
- Retailer borne costs include transactions in lane, synch-up of UPC database and third party processor fees.

16 APPENDIX E: ACRONYMS

Acronyms	
ACS	Affiliated Computer Systems
ATM	Automated Teller Machine
AVR	Automated Voice Response
CBA	Cost Benefit Analysis
CDP	Custom Data Processing
COLA	Cost of Living Adjustment
CPCM	Cost per Case per Month
DHS	Department of Health Services
DPH	Division of Public Health
EBT	Electronic Benefits Transfer
ECR	Electronic Cash Register
EFT	Electronic Funds Transfer
FI	Food Instrument
FIS	Fidelity National Information Services, Inc.
FNS	Food and Nutrition Service
HCL	Hot Card List
ISO	International Standard Organization
IT	Information Technology
JPM	JPMorgan Chase
MICR	Magnetic Ink Character Recognition
MIS	Management Information System

Acronyms	
PAN	Primary Account Number
PC	Personal Computer
PIN	Personal Identification Number
PJA	Paul Jaeger Associates
POS	Point of Sale
RFO	Request for Offers
RFP	Request for Proposals
ROSIE	Real-time On-line Statewide Information Environment
SFY	State Fiscal Year
SME	Subject Matter Expert
SNAP	Special Nutrition Assistance Program
SOR	System of Record
SOW	Statement of Work
TPP	Third Party Processors
USDA	United States Department of Agriculture
WESS	WIC EBT Settlement Service
WIC	Special Supplemental Nutrition Program for Women, Infants and Children