

## **FINAL REPORT**

# **COST EVALUATION OF THE STATEWIDE MICHIGAN WIC EBT PROGRAM**



**JUNE 10, 2010**

**SUBMITTED BY:**

**BURGER, CARROLL & ASSOCIATES, INC.**

## I. PROJECT SUMMARY

This report documents the findings of an independent Cost Evaluation of the Michigan eWIC system.

The study was intended to answer a relatively simple question:

*Now that Michigan's eWIC System is deployed statewide, does it provide tangible cost savings for the WIC Program and evidence of savings for its retail grocer partners?*

The answer is naturally of interest to a wide range of stakeholders, both in Michigan and the broader national audience, as the success of the “early adopters” of eWIC has generated a growing sentiment for nationwide deployment. Notably, Congress is currently considering mandating nationwide eWIC as a part of the pending Child Nutrition and WIC Reauthorization Act. Evidence of tangible cost-benefit in a statewide implementation could boost the case for national eWIC.

Michigan's paper-based food delivery system (FDS) employed a voucher such as illustrated below.

STATE OF MICHIGAN DEPARTMENT OF COMMUNITY HEALTH <b>WIC</b> SPECIAL SUPPLEMENTAL FOOD COUPON FOR WOMEN, INFANTS AND CHILDREN		1531358361 MUST BE RECEIVED BY STATE WIC OFFICE WITHIN 60 DAYS OF STARTING DATE
COUPON NOT VALID IF ALTERED OR STAPLED. IMPROPER USE OF THIS COUPON BY ANYONE IS SUBJECT TO STATE AND FEDERAL PROSECUTION.		
PARTICIPANT I.D. 000345187-01	NAME OF AUTHORIZED PERSON DOE JANE	
GOOD FOR THESE FOOD ITEMS ONLY	1 GALLON MILK (GALLON SIZE ONLY) 1 JUICE: 46 OZ CONTAINER OR 11.5 - 12 OZ CONC 36 OUNCES OR LESS, WIC APPROVED CEREAL 18 OZ PEANUT BUTTER OR 16OZ DRY PEAS OR BEANS	VENDOR CLEARLY FILL IN AMOUNT BEHIND SIGNATURE OF AUTHORIZED PERSON OR PROXY. DO NOT WRITE INITIALS OR OTHER MARKS IN THE PRICE BOX.
		AUTO COUPON NUMBER 0153135836
		STARTING DATE MAY 11, 2006
		EXPIRATION DATE JUNE 10, 2006
		DATE SPENT/TRANSACTION BY AUTHORIZED PERSON OR PROXY MONTH DAY YEAR 2 0 0
SIGNATURE OF AUTHORIZED PERSON OR PROXY. AFTER PRICE IS ENTERED, MUST MATCH THE WIC ID/VOC OR PROXY CARD.		WIC USE ONLY 2150/730/0287
1531358361		

These vouchers were redeemed at the retail store for approved WIC foods. Retailers then batched the vouchers and sent them to the state for processing. Retailers were sent checks for approved voucher payments.

Michigan was the first state to implement an “affordable”<sup>1</sup> online, magnetic card eWIC platform.<sup>2</sup> The online solution is similar to the debit/credit/ATM systems common in the retail marketplace nationwide. It affords Michigan WIC the opportunity to share costs and efficiencies

<sup>1</sup> The affordability standard was established by USDA in WIC Electronic Benefit Transfer (EBT) System Development, Implementation, and Expansion – 5-year Plan, USDA/FNS, September 2002.

<sup>2</sup> Kentucky (currently piloting in 9 counties), and Nevada and its’ partner The Inter-Tribal Council of Nevada, now operate online systems. Texas, New Mexico, Wyoming, the Isleta Pueblo and the Cherokee Nation now operate off-line/smartcard systems.

with the Michigan SNAP (formerly Food Stamps) Bridge Card EBT system, under a common master contract.

The study estimates that that *eWIC* would have saved the Michigan WIC Program some twenty-seven percent (27%) of Nutrition Services and Administration (NSA) grant dollars over the likely paper costs.

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The study was the independent work of Burger, Carroll & Associates, Inc. (BCA), a woman-owned public sector consultancy specializing in similar work in WIC and other public programs since 1989. BCA previously conducted Baseline Period and EBT Pilot Period evaluations in Michigan with funding from USDA/FNS. The first evaluation examined the original JP Morgan *eWIC* pilot and a second the ACS *eWIC* pilot. This study was funded by ACS Government Solutions (ACS), Inc., the current Michigan EBT Services Provider, and was conducted with the cooperation of the State of Michigan WIC Program. Both the Michigan WIC Program and ACS approved the study design. Neither entity had authority over the findings and reports.

## **II. METHODOLOGY**

The *eWIC* Pilot was initiated in 2005. Studies during the pilot<sup>3</sup> estimated that EBT saved the Program approximately \$0.05 per participant-per month over paper (\$0.08 per case month or family). Those studies employed the National Evaluation Model (NEM)<sup>4</sup>

The NEM examined a wide range of costs, including those at the state, local and retail level. It has been difficult to apply the findings of the NEM methodology to real-world estimates of the “affordability” of *eWIC*. This is because its use of both tangible and intangible cost measures do not match well with the actual expenditures reported in the NSA budget. There is also a risk that the NEM’s use of functional time studies may have underestimated paper labor costs by failing to account for all related activities. The NSA data is generally reported as a portion of a full-time equivalent.

The objective of this study was to estimate actual budget impacts, so the cost analysis only considered NSA grant funds. While the study did not examine local WIC staffing costs, interviews with state WIC and Jackson County WIC staff confirmed that *eWIC* had caused no increase or decrease in staffing resources. Similarly, the study did not examine retailer costs, but interviews with store representatives suggested that *eWIC* was more efficient than paper in both the lanes and the back office.

This study used a “point-in-time” (FFY2007) estimation of the Nutrition and Services (NSA) Grant dollars that would be needed to operate the former paper voucher system, and to operate its current EBT system, to support delivery of the newly enhanced food package and cash value benefit. The study essentially simulates the paper and the EBT food delivery systems that would have been necessary to deliver the new benefits to estimate the NSA Grant impact of EBT.

The point-in-time method was necessitated by the overlapping implementations of the *eWIC* system, the MIWIC (e.g. MIS) system, and the new food package. Statewide rollout of *eWIC* was completed in November 2008, the MIWIC system in May 2009, and the new food package and cash value benefit in August 2009. Each clearly impacted cost, but the unique impact of each was impossible to distinguish with available data.

While the Jackson pilot *eWIC* system was underway during FFY2007, its 4,409 participants per month (PPM) represented just 2 percent of the statewide caseload. This study did not attempt to isolate the pilot costs. It was also considered that the impact of caseload growth and other program changes during the post-FFY2007 period further complicated the task of isolating the *eWIC* impact. The point-in-time scenario method avoids these containments by selecting the year just prior to statewide rollout. Actual FFY07 caseload numbers and NSA costs established the baseline.

Study *eWIC* costs were based on the current contract price of \$2.14 per case month, inclusive of the enhanced package (which increased the number of eligible items) and Cost Value Benefit

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<sup>3</sup> Final Evaluation Report(s), Michigan WIC Program EBT Evaluation Project, Burger, Carroll & Associates, Inc., Santa Fe, NM, November 2005 (JPM pilot) and September 2007 (ACS pilot)

<sup>4</sup> WIC EBT National Cost Evaluation Model, USDA/FNS/SFPD, Alexandria VA, April 2004

(CVB), a cash value benefit limited a range of fruits and vegetables). The likely *eWIC* statewide NSA costs in addition to the EBT Services contract were estimated on the basis of actual FFY2009 FDS costs.

Michigan WIC staff estimated that the enhanced food package would require two (2) additional FIs. This was based on the observation that the old FI had space to list a maximum of four (4) food items (category/subcategory/units) on a single voucher. The variety of items in the enhanced package and their logical issuance distribution patterns are such that an average of five (5) vouchers would have been needed per participant per month (PPPM) to accommodate the new package.

In addition, Michigan WIC staff estimated that the state's fresh-only policy for implementation of the CVB would logically require two (2) FIs.

Thus the combined effect of the new food package and the CVB was estimated to have required an average of seven (7) vouchers per participant per month (PPPM).

In estimating the additional cost requirements of the enhanced food package and CVB, two multipliers were employed:

- Vouchers and printing supplies costs were multiplied by the increased number of FIs (2.33 baseline)
- State labor, data processing and telecommunications costs were multiplied by a factor of 1.7, based on state staff estimates.

It was assumed that there would be no additional costs in the financial services staffing provided by the Division of Finance.

Table 1 presents the resulting study metrics.

### **III. COST ANALYSIS FINDINGS**

The study estimates that the Michigan Discover *e*WIC system would likely have saved the Michigan WIC Program some twenty-seven percent (27%) of its NSA grant dollars over the likely paper costs.

Table 1 presents the paper baseline metrics. Table 2 presents the cost comparisons.

As shown in Table 2, the largest single savings is from the elimination of the state WIC agency and contracted (e.g. DIT and Manpower) labor required for processing the paper vouchers. There is also a significant savings related to telecommunications costs.

Some of these costs were absorbed in the EBT Services contract. Other functions were eliminated by the *e*WIC system. The primary source of the economies is that there are no cost increases in EBT related to introduction of the enhanced food package and CVB.

<b>Table 1</b>				
<b>FFY 2007 BASELINE METRICS - PAPER SYSTEM</b>				
<b>CASELOAD</b>		<b>SUMMARIES</b>	<b>OPERATIONS &amp; MATERIAL COSTS</b> (Source: NEM Sheet #4)	
<b>Month</b>	<b>Participation</b>		<b>Item</b>	<b>Cost</b>
October	234,639	Average Participants Per Household = 1.6 <sup>5</sup>	Vouchers, Printing Supplies, Additional ACH & Banking Fees	\$24,736.02
November	231,921			
December	227,292			
January	228,125	Average Participants Per Month = 232,206	Shipping, Storage, Archival & Equipment Security	\$82,472.18
February	225,214			
March	228,216			
April	229,165	Total Annual Case Months = 1,639,104	Additional Telecommunications	\$4,989.36
May	232,379			
June	234,464			
July	236,764	Average Number of Vouchers (FIs) Per Participant = 3	Equipment Maintenance	\$5,848.18
August	239,198			
September	239,100			
<b>TOTAL PARTICIPANT MONTHS</b>	<b>2,786,477</b>	<b>TOTAL FFY FIs = 8,359,431</b>	<b>TOTAL OPERATIONS AND MATERIAL COSTS</b>	<b>\$113,421.24</b>

<sup>5</sup> In 2005 and 2007 the Jackson County agency had 1.8 participants per household (PPHH). Following statewide implementation and a period of significant caseload growth, the statewide PPHH in 2010 is 1.6. Because the actual 2007 statewide PPHH is unknown, the study applied the current rate.

**Table 2**  
**COST COMPARISONS**

<b>COST ELEMENT</b>	<b>FFY07 BASELINE</b>	<b>EST. ADD'I REQS. OF NEW FOOD PACKAGE</b>	<b>EST. FFY07 PAPER W/ NEW FOOD PACKAGE</b>	<b>EST. FFY07 EBT W/NEW FOOD PACKAGE</b>	<b>EST. DOLLAR SAVINGS OVER PAPER</b>	<b>EST. PERCENT SAVINGS OVER PAPER</b>
Annual Vouchers/Printing Supplies (NEM#4)	\$113,421	\$150,850	\$264,271	\$0	\$264,271	100%
Annual FDS-Related Labor (incl. Benefits/Fringe) - NSA	\$590,230	\$413,161	\$1,003,391	\$85,501	\$917,890	91%
Annual FDS-Related Data Processing (Includes DIT & Manpower labor) .75 NSA	\$1,357,318	\$950,123	\$2,307,441	\$0	\$2,307,441	100%
Annual FDS-Related Telecommunications - NSA	\$655,443	\$458,810	\$1,114,253	\$0	\$1,114,253	100%
Annual Financial Services Contracted (Div. Of Finance) NEM #4	\$221,353	\$0	\$221,353	\$0	\$221,353	100%
Annual EBT Services (1,639,104 @ \$2.14 CPCM)	\$0	\$0	\$0	\$3,507,683	-\$3,507,683	(100%)
<b>TOTAL ANNUAL EXPENDITURE</b>	<b>\$2,937,765</b>	<b>\$1,972,944</b>	<b>\$4,910,709</b>	<b>\$3,593,184</b>	<b>\$1,317,525</b>	<b>27%</b>

## **IV. CASE STUDY FINDINGS - LOCAL AGENCY AND RETAIL**

### **IV.1. LOCAL AGENCY**

BCA visited the Jackson County WIC Program, the site of the WIC Bridge pilot and interviewed Stephanie Horning, Jackson County WIC Director. It was affirmed that there had been no staff increase or decrease specific to the implementation of EBT, despite some 15% growth in caseload. Ms. Horning attributed the agency's capacity to service the higher caseload to the elimination of time-consuming paper issuance.

### **IV.2. STORE VISITS**

BCA conducted site visits to three (3) authorized WIC stores.

#### **IV.2.1. Meijers #210**

The Meijers #210 is a super-store and offers a fully-integrated eWIC system. Meijers is unique nationwide for its current offering of self-service "U-Scan" lanes for WIC customers. During the visit BCA interviewed Dawn See, Store Manager, and observed a simulated WIC purchase in a U-Scan lane. Meijer does not accommodate mixed basket purchases in WIC EBT.

Ms. See indicated that eWIC is "much quicker" than manual WIC transactions. She indicated that the most common problems involved eligibility of fresh fruits and vegetables. She indicated that the store staff was very happy with the system and reported no common problems.

#### **IV.2.2. Kroger #888**

The Kroger #888 store is a large, mainstream supermarket that currently operates the eWIC stand-beside solution. BCA interviewed Ed Rushlow, Store Manager but did not observe a simulated purchase. Mr. Rushlow reported that because it was only available in 2 lanes, eWIC was limited to the two (2) busiest lanes in the store (e.g. always open). While necessary, he noted that the high use of these lanes meant that there was more prone to equipment break-downs.

Mr. Rushlow estimated that the eWIC checkout transaction is "a little slower, but more accurate" than the old paper system. In eWIC the store no longer has to review on any WIC payment rejects or price adjustments. He indicated that the store staff was very happy with the system except that it is not available in every lane. (Note: Kroger will begin implementing its integrated solution June, 2010.)

#### **IV.2.3. Felpausch #1901**

The Felpausch #1901 (owned by Spartan) store is a medium-sized supermarket offering a fully-integrated eWIC and allows mixed-basket transactions. BCA interviewed Katie Drews, Store Customer Service Manager, and observed a simulated WIC mixed-basket purchase. Ms. Drews estimated that some 10% of WIC transactions are balance inquiries. She also indicated that very few WIC clients attempt a mixed-basket. When mixed baskets are conducted, she indicated that

it was not unusual for the checkout clerks to pre-sort and subtotal the WIC items if the customer has multiple WIC and other items, just to be sure that the customer selected eligible WIC items.

In the observed mixed basket transaction, the checkout clerk moved so quickly that the buyers were left confused by the cash balance, despite having purposely selected the items. When they questioned the clerk and asked for a receipt to show which items were WIC-approved, she indicated that they would need to complete the transaction in order for the system to print a receipt (the Michigan WIC representative later told us that this was incorrect and that the system is programmed to produce an “interim” receipt). Instead the clerk began trying to match each item purchased to the multi-page hard copy list of approved WIC foods.

The Customer Service Manager indicated that it is common for WIC clients conducting mixed basket purchases to be confused about which items are WIC eligible. In the observed transaction, both the potatoes (which were red) and the peanut butter (blend) were ineligible items easily confused with eligible products. The manager indicated that ineligible fruits and vegetables were the most common mistakes. She reported that as many as 80% of WIC clients pre-sort their WIC items, whether they are conducting an mixed basket transaction or not. She said her clerks often scan the WIC items first to ensure they are eligible.

While the Manager indicated that the *e*WIC system was far better than the paper system for her clerks (because they did not need to remember what’s eligible) the system does result in a higher frequency of the need for supervisor overrides when the client selected items not ineligible for purchase with WIC benefits.

She indicated that the store staff was very happy with the system and reported no common problems other than those addressed above.