California Electronic Benefit Transfer Project

Supplemental Report to the Legislature

July 2011

California Health and Human Services Agency
California Department of Social Services &
Office of Systems Integration

1. Executive Summary

As requested by the Legislature via Supplemental Reporting Language associated with the 2010 Budget Act, this report by the California Department of Social Services (CDSS) and the Office of Systems Integration (OSI) provides a status update on the performance of the California EBT system. This report, which also will be shared with stakeholders, focuses on the following three areas of concern that were raised:

a. Efforts with the vendor to limit disruption in EBT access.
b. Communications with counties about any problems and resolutions as they arise.
c. How consumers are being informed of issues and recourse when disruptions do occur.

The state contracts with ACS State & Local Solutions, Inc. (ACS), a Xerox Company, for the California EBT system. The state does not own or operate its own EBT system. The California EBT system processes and reconciles food and cash assistance benefit transactions for over two million EBT cardholders per month.

The state transitioned to the ACS California EBT system on September 20, 2009. During the first year on the new system, some EBT cardholders experienced issues with their EBT transactions. Primarily, there were five separate occurrences where database slowdowns led to certain EBT cardholders' accounts being incorrectly debited for transactions that were denied at retailer or Automated Teller Machine (ATM) locations. Less than one half of one percent of EBT cardholders were affected and steps were immediately taken after each occurrence to correct the problem. Corrective actions have stabilized the California EBT system. In addition, the state and ACS have developed new system functionality to mitigate this problem. The state and the EBT vendor continue to closely monitor the system and are committed to its continuous improvement.

2. Background and Introduction

The EBT is the automated delivery, redemption, and reconciliation of the federal Supplemental Nutrition Assistance Program (SNAP) benefits, the California Food Assistance Program benefits, and cash assistance benefits (CalFresh). The EBT provides recipients receiving public assistance with electronic access to food and cash benefits through the use of magnetic-striped cards at point-of-sale (POS) devices and ATMs.

The CDSS is the project sponsor, responsible for program and policy issues, independent verification and validation, and independent project oversight. The OSI is responsible for project management, contract management, county implementation, and oversight of the California EBT system and associated contracted services.

The OSI conducted a successful procurement, which resulted in a significant cost reduction for ongoing operational costs under the new EBT contract with ACS. The ACS contract was executed on March 28, 2008. The implementation involved preparing all 58 counties, the then-four consortia eligibility systems, the Client Automated Response Unit, California retailers, and financial institutions for the transition to the ACS system from a different EBT services vendor. The transition occurred on schedule, on budget, and with minimal impact to clients, retailers, and financial institutions. All parties and key stakeholders acted professionally and collaboratively. Following an 18-month implementation, statewide cutover to the ACS system was successfully completed on September 20, 2009.

In most states, the issuance of welfare benefits is administered at the state level utilizing a single state system. California's welfare issuance environment has proved challenging for EBT service providers in that welfare benefits are administered by each of the 58 counties (including multiple local county offices within a county) through different county eligibility systems. In addition to these interfaces, the California EBT system must also interface with the state data center, two state departments, selected federal offices, the retail community, and financial institutions. The California EBT system includes billions of records, numerous interfaces, and operates across the commercial financial transaction processing and telecommunication network infrastructures in place across the nation. During the first year of operation, there were five occurrences where EBT cardholders were impacted by a slowdown of the database. In most instances, a cardholder could "re-swipe" his or her EBT card to successfully complete the transaction.

3. System Disruptions Due to Database Slowdown

The EBT vendor began processing California EBT transactions in September 2009. During the first two months operating the California EBT system, the vendor experienced three separate system disruptions caused by a database slowdown. The disruptions occurred on October 7, November 2, and November 16, 2009. During these database slowdowns, some EBT cardholders had their purchases denied at a retail location or ATM, yet their accounts were debited for the purchase in error. For each occurrence, approximately 1,000 transactions (out of over 650,000 daily EBT transactions) were affected. This represents less than one half of one percent of total daily transactions. Under state oversight, the vendor identified those EBT cardholder accounts affected by this system error and expedited credit adjustments to the affected client accounts.

The EBT vendor implemented two significant changes in November 2009 to prevent the recurrence of these database slowdowns. First, the vendor identified and removed conflicting software on the database server. Second, changes were made to database settings to optimize system performance based on recommendations from system experts. These two changes addressed the issues related to the October and November 2009 database slowdowns.

On May 2, 2010, there was another system disruption that caused some EBT accounts to be debited in error. The EBT vendor identified impacted cardholder accounts and

expedited credit adjustments. The cause of this database slowdown was traced to a problem related to data storage equipment. At the state's request, the vendor delivered a Corrective Action Plan (see Section 4 below) which identified needed performance improvements and operational hardware and software. The vendor made a significant investment to address system issues with the purchase of two new data storage devices to be used exclusively for government customers, including California.

On February 10, 2011, a system degradation issue caused a database slowdown that resulted in some EBT accounts being debited in error. The impacted EBT cardholder accounts were promptly credited for the erroneously debited amounts. The EBT vendor quickly identified the problem and implemented additional measures to prevent this issue from occurring again. The problem was caused by a system logging tool that was inadvertently set to maximum logging by an ACS technician. The maximum logging option has since been disabled. In April 2011, the vendor installed new code in the California EBT system as a corrective action to address the root cause of the previously cited erroneous debits.

The state and the EBT vendor are committed to ensuring reliable transaction processing occurs every day of the year so that EBT cardholders can redeem benefits at their convenience at all authorized EBT locations. Various solutions have been implemented to date to minimize the impact of future system disruptions, as described in this section and in Section 4. Additionally, in October 2010 the vendor established a Change Stability Team comprised of senior-level staff who understand the complex California EBT environment. All steps and processes involved in the changes to the EBT production and test systems must be reviewed and approved by the Change Stability Team before system changes can be installed in California's EBT production environment. This team also monitors system changes to ensure all steps were followed and all systems are working properly. This process improvement provides an additional level of quality control for all future system changes.

4. Corrective Action Plan

Exercising prompt and appropriate state oversight, the state required the EBT vendor to submit a Corrective Action Plan reflecting steps that they are taking to ensure processes are in place to mitigate the occurrence of erroneous debits and ensure that system changes are thoroughly tested before updating the California EBT system. The Corrective Action Plan includes four phases that address the root cause for the May 2, 2010, incident and also proactively address other functional areas that will prevent future database slowdowns. The four components are:

1. **Performance improvements** – The vendor identified system and hardware issues that caused the database slowdown, which allowed the vendor to target specific performance improvements to prevent future database server issues.

2. **Change in transaction processing timing** – The vendor made a change in the number of seconds it takes for a retailer transaction to reach the California

EBT system, and the return message from the system back to the retailer, thus mitigating erroneous transactions from occurring.

3. **Other performance improvements** – The vendor has proactively developed several other performance improvements that have increased the efficiency of system functions such as providing friendlier and more informative transaction messages to interface partners and increased processing efficiencies to inquiries coming into the customer call center.

4. **Operational** – The vendor also revised operational processes for response time and communication with the state, the retailers, and EBT cardholders should a database slowdown occur again. In the event of any future occurrences, the vendor will provide as much information as is available during and after any system event to ensure the state can notify the counties and consortia with more information related to the impact to EBT cardholders. The vendor may not know the full extent of any system problem as it is occurring but is committed to sharing this information as soon as it becomes available.

The state monitors the California EBT system's performance on a daily basis. In June 2010 the state sent a financial transaction processing subject-matter expert to observe California EBT compliance within the vendor's data centers. The state shared its observations with the vendor, who then began implementing some requested changes. In addition to this trip, the vendor hired an independent contractor to review its data center infrastructure and make recommendations. The evaluation took two months to complete and the vendor has continued to implement the recommended improvements.

5. Communication Regarding Problems and Resolutions

The state and the EBT vendor have worked to improve communication processes used to notify stakeholders of system disruptions to ensure system-related problems and resolutions are communicated in a clear and timely manner. The EBT system alerts are the vehicle the state uses to communicate critical system information to affected stakeholders. All EBT systems alerts are now reviewed by CDSS before they are sent to the counties to ensure the impacts to clients and/or county operations are clearly communicated. These system alerts are sent shortly after the identification of an outage or disruption in service that affects EBT cardholders, retailers, and/or the counties/consortia. EBT alerts are distributed to a large audience, which includes CDSS executives, the counties and their respective consortium systems, the County Welfare Directors Association of California, and other key stakeholders. Updates are sent out, as appropriate, until the issue has been resolved. Conference calls are also scheduled with the counties and their respective consortium eligibility system to provide, as needed, recurring status updates related to system disruptions. Clients are notified by the county or the state, as appropriate, when their benefits have been affected by an EBT system disruption (e.g., information is posted on the EBT client website, clients are contacted by the counties).

Additionally, there are other communication tools that are regularly used by the state to update the counties and consortia on routine EBT system changes and maintenance (e.g., routine system notifications sent via e-mail, a state/county/consortia technical workgroup that meets regularly to discuss system changes and impacts, and posting system updates and documents to a website accessible 24/7 by county/consortia staff). Daily deficiency reports are available to the counties and the consortia. These reports provide a status on trouble tickets that are opened by the counties/consortia and allows the counties/consortia to track daily progress until an issue is resolved.

6. Informing Consumers of Issues and Recourse

During normal operation of any round-the-clock financial transaction processing system, there may be an occurrence where a client's account is erroneously debited. An account may be debited in error due to a malfunctioning ATM that does not correctly dispense funds, or a client may not receive goods, but a retailer has erroneously debited the account. As such, industry standards were developed to address the claims process which is an integral part of EBT systems across the nation. When processing a claim, the vendor either credits or debits a cardholder account depending on the circumstances of the submitted claim.

The EBT vendor is contractually required to process claim adjustments according to the national Quest® Operating Rules. These rules are very specific related to the processing of SNAP and cash claim adjustments. These federal regulations and state requirements allow the vendor up to 25 days to process a credit adjustment. During the system disruptions mentioned previously, the vendor took emergency measures to complete credit adjustments to affected cardholder accounts within four calendar days. Clients are currently only notified by mail if a debit adjustment is pending on their account; they are not notified when funds have been deposited into their account. To improve communications to the clients, customer service representatives now are provided with information on system issues that impact a client's ability to access benefits. Additionally, the state and the EBT vendor are developing requirements for new functionality that will send an outbound credit adjustment telephone notification to EBT clients when a credit adjustment larger than ten dollars is made to their accounts. The California EBT system will be the first ACS EBT system in the nation to implement this new functionality, which is scheduled to be implemented in 2011.

7. California EBT System Breach

In January 2011 the state became aware of fraudulent activity occurring against certain California EBT cardholder accounts. The EBT cardholders from various counties contacted the ACS Customer Service Call Center or their local county office stating cash benefits were missing or fraudulently withdrawn from their EBT cash accounts. As of January 26, 2011, approximately 430 EBT accounts (out of 1.6 million active EBT cardholders statewide) were identified as affected by the fraudulent activity.
The state immediately directed the counties to replace the stolen benefits for the impacted EBT cardholders, in addition to replacing their EBT cards for added security. An additional 1,400 EBT cards were also identified for replacement as a precautionary measure.

The fraudulent activity was determined to be related to the account registration screen on the California EBT Client Website. The state immediately directed ACS to disable the account registration functionality on this website. The state then directed the vendor to systematically reset personal identification numbers (PINs) for those EBT card numbers identified as possible targets of the fraudulent activity. The resetting of the PINs stopped the fraudulent activity, as all claims against the fraudulent cash withdrawals occurred prior to the PIN reset. The state and the vendor worked collaboratively with the counties in identifying affected EBT cardholders, validating claims, and expediting benefit replacements to the fraud victims.

As of February 1, 2011, the state and EBT vendor have implemented numerous precautions to identify unusual system and/or client website activity to prevent breaches to the EBT system. Due to the ongoing investigation by multiple law enforcement agencies (at the federal, state, and county level), details on the investigation are not available for distribution.

Changes were implemented to the EBT Client Website's account registration screen in May 2011 that provide an increased level of system security. The primary change adds user identification (ID) that is used in place of the card number to log into the Client Website. The user ID and password is selected during account registration using the card number, date of birth (month/year), and a State Unique Identifier (SUID) to authenticate the cardholder. The use of a PIN has been eliminated for authentication.

8. Conclusion

The state continues to work with ACS to improve the California EBT system and remains diligent in the oversight of EBT system performance. This vigilance ensures EBT benefits are available to clients 24 hours a day, 7 days a week, and 365 days a year.