



Office of Missouri State Auditor
Nicole Galloway, CPA

Supplemental Nutrition Assistance Program
(SNAP) Data Analytics Program



Nicole Galloway, CPA
Missouri State Auditor

CITIZENS SUMMARY

Findings in the audit of the Supplemental Nutrition Assistance Program (SNAP) Data Analytics Program

Program Data

The Department of Social Services (DSS) needs to strengthen efforts for managing Supplemental Nutrition Assistance Program (SNAP) related data. Without complete and accurate data, it is more difficult to use data analytics to detect trends or transaction patterns indicative of potential SNAP abuse or misuse.

Alerts and Reports

The DSS uses some data analytic techniques to identify potentially suspicious SNAP transactions. However, the current process does not always detect transactions or recipient benefit usage patterns that may be indicative of program abuse or misuse. We noted several concerns with system alerts and reports provided to the DSS by the department's contractor and with the department's utilization of the information.

For example, DSS investigators do not always review and investigate many of the suspicious activities identified by system alerts and reports. Of the 5,705 investigations opened by DSS investigators during the 2-year audit period, only 5 were identified as being opened because of an alert or a report. In addition, the criteria used to create alerts and reports may not be effective in generating targeted investigatory leads to identify fraud, waste, and abuse occurring in the program.

Federal regulations require that a household reside in the state in which it has applied for SNAP benefits. However, we found recipients spent more than \$16 million using their EBT cards exclusively outside the state for 90 days or longer. Consistent or exclusive purchase patterns outside the state may be indicative of program abuse or misuse. Frequent even-dollar transactions made by a recipient can be considered a warning sign for trafficking of SNAP benefits. We found the even-dollar alert was not working as designed. As a result, the DSS was alerted to only approximately one-fifth of the transactions that met the even-dollar alert criteria, and therefore, may have failed to identify a significant amount of inappropriate activity. The DSS needs to more effectively identify potentially high risk SNAP recipients that use their EBT cards multiple times in short periods of time.

Data Matches

The DSS needs to more effectively utilize data matches to identify potentially improper benefits issued to recipients. Due to weaknesses in data match procedures, households involving recipients who had died or were incarcerated continued to receive and spend SNAP benefits. Without effective controls to detect benefits issued to deceased or incarcerated recipients, the DSS is at increased risk of allowing ineligible persons to receive benefits resulting in abuse and misuse of the SNAP.

Vendor Contract

The DSS has not ensured services obtained from a key contract provide sufficient benefits to justify the amount paid for the services.

In the areas audited, the overall performance of this entity was **Fair**.*

*The rating(s) cover only audited areas and do not reflect an opinion on the overall operation of the entity. Within that context, the rating scale indicates the following:

- Excellent:** The audit results indicate this entity is very well managed. The report contains no findings. In addition, if applicable, prior recommendations have been implemented.
- Good:** The audit results indicate this entity is well managed. The report contains few findings, and the entity has indicated most or all recommendations have already been, or will be, implemented. In addition, if applicable, many of the prior recommendations have been implemented.
- Fair:** The audit results indicate this entity needs to improve operations in several areas. The report contains several findings, or one or more findings that require management's immediate attention, and/or the entity has indicated several recommendations will not be implemented. In addition, if applicable, several prior recommendations have not been implemented.
- Poor:** The audit results indicate this entity needs to significantly improve operations. The report contains numerous findings that require management's immediate attention, and/or the entity has indicated most recommendations will not be implemented. In addition, if applicable, most prior recommendations have not been implemented.

SNAP Data Analytics Program

Table of Contents

State Auditor's Report	2
------------------------	---

Introduction	
Background	3
Scope and Methodology	14

Management Advisory	
Report - State Auditor's	
Findings	
1. Program Data.....	16
2. Alerts and Reports	18
3. Data Matches.....	30
4. Vendor Contract	37



NICOLE GALLOWAY, CPA **Missouri State Auditor**

Honorable Michael L. Parson, Governor
and
Dr. Steve Corsi, Psy.D., Director
Department of Social Services
Jefferson City, Missouri

We have audited certain operations of the Department of Social Services, Supplemental Nutrition Assistance Program (SNAP). This audit was conducted in fulfillment of our duties under Chapter 29, RSMo. The objective of our audit was to evaluate the use and effectiveness of data analytic techniques for preventing and detecting potential program abuse or misuse.

We conducted our audit in accordance with the standards applicable to performance audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform our audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides such a basis.

For the area audited, we identified the need for improvement of data analytic techniques utilized by the department to prevent and detect potential program abuse or misuse within the SNAP program.

The accompanying Management Advisory Report presents our findings arising from our audit of the SNAP Data Analytics program.

A handwritten signature in black ink that reads "Nicole R. Galloway".

Nicole R. Galloway, CPA
State Auditor

The following auditors participated in the preparation of this report:

Director of Audits:	Jon Halwes, CPA, CGFM
Audit Manager:	Jeffrey Thelen, CPA, CISA
In-Charge Auditor:	Patrick M. Pullins, M.Acct., CISA
Data Support:	Jeffrey Roberts, CISA
Audit Staff:	Kent Aaron Dauderman, M.Acct.

SNAP Data Analytics Program

Introduction

Background

On August 31, 1964, the United States Congress passed the Food Stamp Act of 1964 "to safeguard the health and well-being of the Nation's population by raising levels of nutrition among low-income households."¹ The Food Stamp Program, later renamed the Supplemental Nutrition Assistance Program (SNAP), allows eligible households within each state to receive an allotment of funds each month to "purchase food from retail food stores which have been approved for participation in [SNAP]."²

In Missouri, the Department of Social Services (DSS) Family Support Division (FSD) administers the SNAP program. In calendar years 2015 and 2016, the state provided more than \$2.4 billion in benefits to Missouri residents through the SNAP program. The potential for abuse and fraud may be greater in such a large program unless appropriate agency controls are in place to help minimize these risks. The federal Office of Management and Budget has designated the U.S. Department of Agriculture (USDA) SNAP program as a high-error program due to the estimated dollar amount of improper payments for federal fiscal year 2016.³

Federal program officials have had long-standing concerns that some recipients provide false information to improperly receive benefits, or misuse benefits to obtain non-food goods, services, and cash, according to the U. S. Government Accountability Office (GAO). Advances in technology have provided new opportunities to commit as well as to combat such abuse and fraud. For example, social media websites have emerged as new venues for trafficking benefits while monitoring recipient transaction data may provide insight and clues for identifying potential SNAP abuse and fraud.

Both the state and federal government share responsibility for addressing SNAP recipient fraud. The DSS is responsible for detecting, investigating, and prosecuting recipient fraud, while the USDA's Food and Nutrition Service (FNS) has traditionally focused on pursuing retailer fraud. The FNS is also responsible for guiding and monitoring state activity.

According to the GAO, reducing improper payments, including those that are the result of fraud, is critical to safeguarding funds and helping to achieve potential cost savings. As a result, leading practices highlighted by the GAO⁴ have increasingly focused on the need for program officials to take a strategic approach to managing improper payments and risks that include abuse and

¹ 7 United State Code (USC) Section 2011

² 7 USC Section 2013(a)

³ This estimated amount of improper payments represents benefits distributed in error due to administrative as well as recipient errors, not all of which can be attributed to fraud.

⁴ Report GAO-17-339SP, *Data Analytics to Address Fraud and Improper Payments*, March 2017, is available at < <https://www.gao.gov/assets/690/683859.pdf> >.



SNAP Data Analytics Program Introduction

fraud. These leading practices can provide a guide for program managers to use when developing or enhancing efforts to combat fraud in a strategic, risk-based manner.

A critical strategic approach component involves implementing preventive and detective controls, including data analytics. Data analytics is a rapidly evolving field of information science that involves a variety of techniques to examine, analyze, and interpret large volumes of data, according to the GAO and other leading practitioners. Data analytics helps facilitate decision making by identifying patterns or trends, determining whether problems are widespread and systemic in nature, and evaluating program performance and outcomes.

Recent trends in data development and advanced analysis are creating innovation possibilities that carry the promise of far-reaching economic and societal benefits, according to the GAO. Areas such as health care and public benefit systems, may be improved or even transformed by innovations derived from new data analytics. Advanced analytics includes new tools for examining large amounts of data to uncover subtle or hidden patterns, correlations, and other insights, such as anomalies, trends, or potential abuse. The use of analytic results to improve actions or decisions is being transformed - improving decisions or actions and thereby extracting new economic and societal benefits, according to the GAO.

Eligibility

Initial eligibility and periodic recertifications are regulated by a number of complex factors that are beyond the scope of our audit. However, certain basic factors facilitate understanding the topics discussed in this report.

After a recipient (or household⁵) is approved for benefits, he/she is generally required to complete a 6- or 12-month review (recertification) to determine continued eligibility for benefits. In general, an interview, conducted in person or by phone, must be completed for an initial application or for a recertification. An initial or recertification applicant must meet certain criteria including, among others, having a household gross income under 130 percent of the federal poverty level and be a Missouri resident.

Changes may occur in household circumstances during the certification period. Under the state's simplified reporting rules, households are generally only required to report when the household's gross monthly income begins to exceed 130 percent of the federal poverty level. Other changes, such as a

⁵ 7 USC Section 2012(m) states a "household" consists of the number of people (related and unrelated) that generally prepare and share food together. The income of all eligible participants in the household is counted for income determination.



SNAP Data Analytics Program Introduction

change in the state of residence, are generally not required to be reported until the recertification process.

Participation

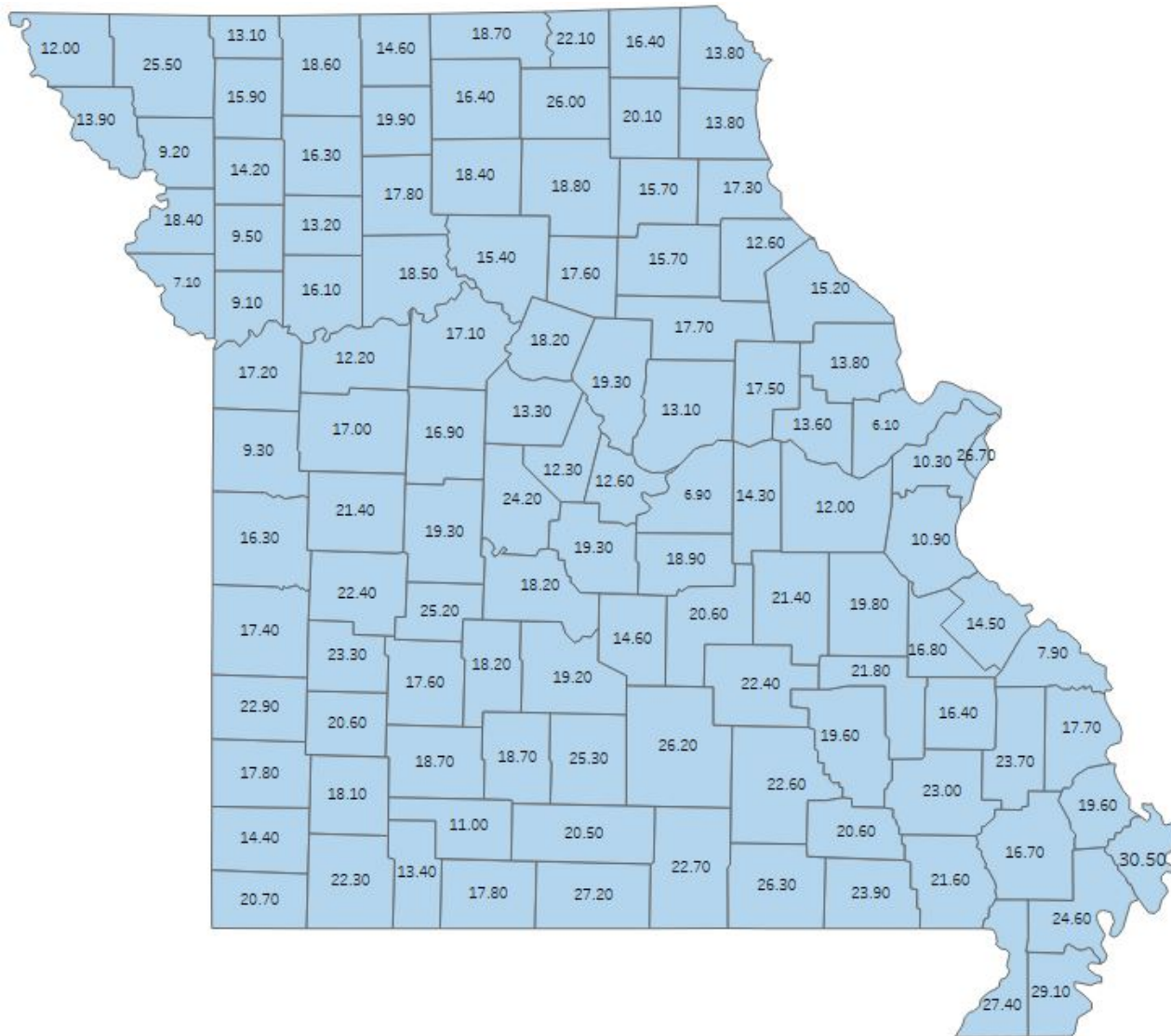
Under federal rules, to be eligible for SNAP benefits, a household's income and resources must meet certain tests. Most households must meet both the gross and net monthly income test. Gross monthly income is a household's total income before any of the program's deductions have been applied. Net income is gross income less allowable program deductions. In general, a household's gross monthly income must be at or below 130 percent of the poverty line and net income must be at or below the poverty line.



SNAP Data Analytics Program Introduction

In Missouri, 15.3 percent of individuals lived below the poverty line in 2016 according to the 2012-2016 American Community Survey 5-Year Estimates from the U.S. Census Bureau. The map below presents the percent of people, by county, living below the poverty level in 2016.⁶

Figure 1: Missouri Poverty Rates by County in 2016



Source: State Auditor's Office (SAO) Analysis of U. S. Census data

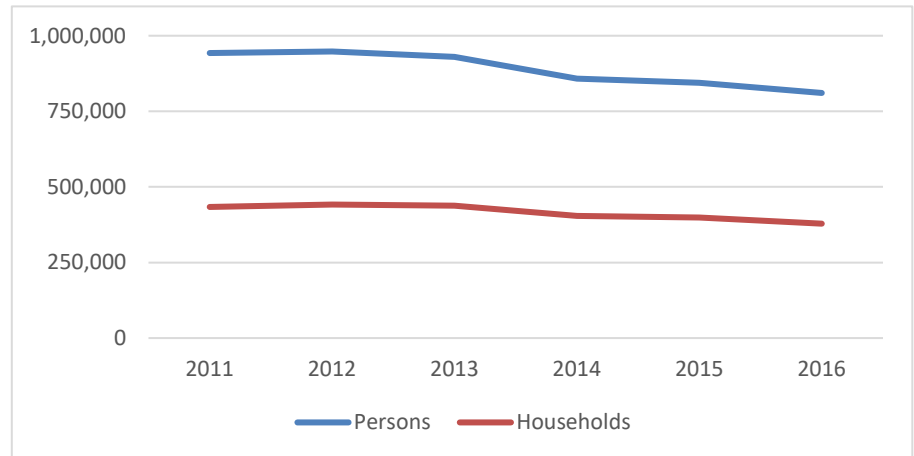
⁶ United State Census Bureau American FactFinder, 2012-2016 American Community Survey 5-Year Estimates, is available at https://factfinder.census.gov/bkmk/table/1.0/en/ACS/16_5YR/GCT1701.ST05/0400000US29, accessed January 10, 2018.



SNAP Data Analytics Program Introduction

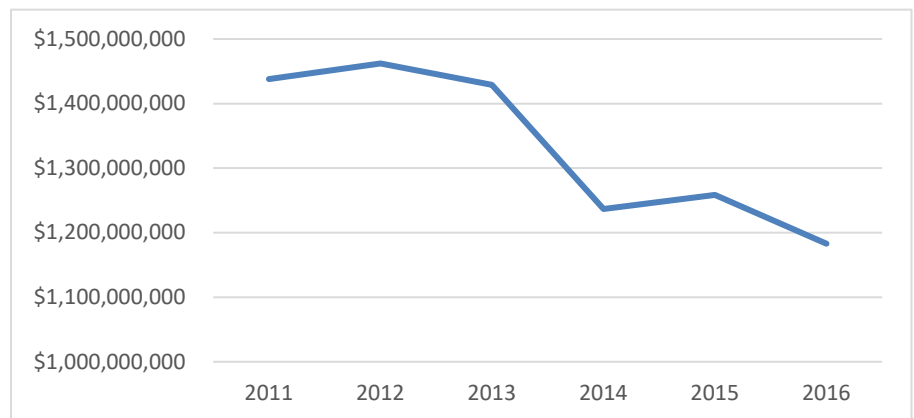
As shown in Figures 2 and 3, approximately 378,000 Missouri households, with 810,000 persons, participated in the SNAP program during federal fiscal year 2016, spending \$1.18 billion in benefits.

Figure 2: Missouri SNAP Recipients



Source: SAO Analysis of USDA State Activity Reports

Figure 3: Missouri SNAP Benefit Issuance



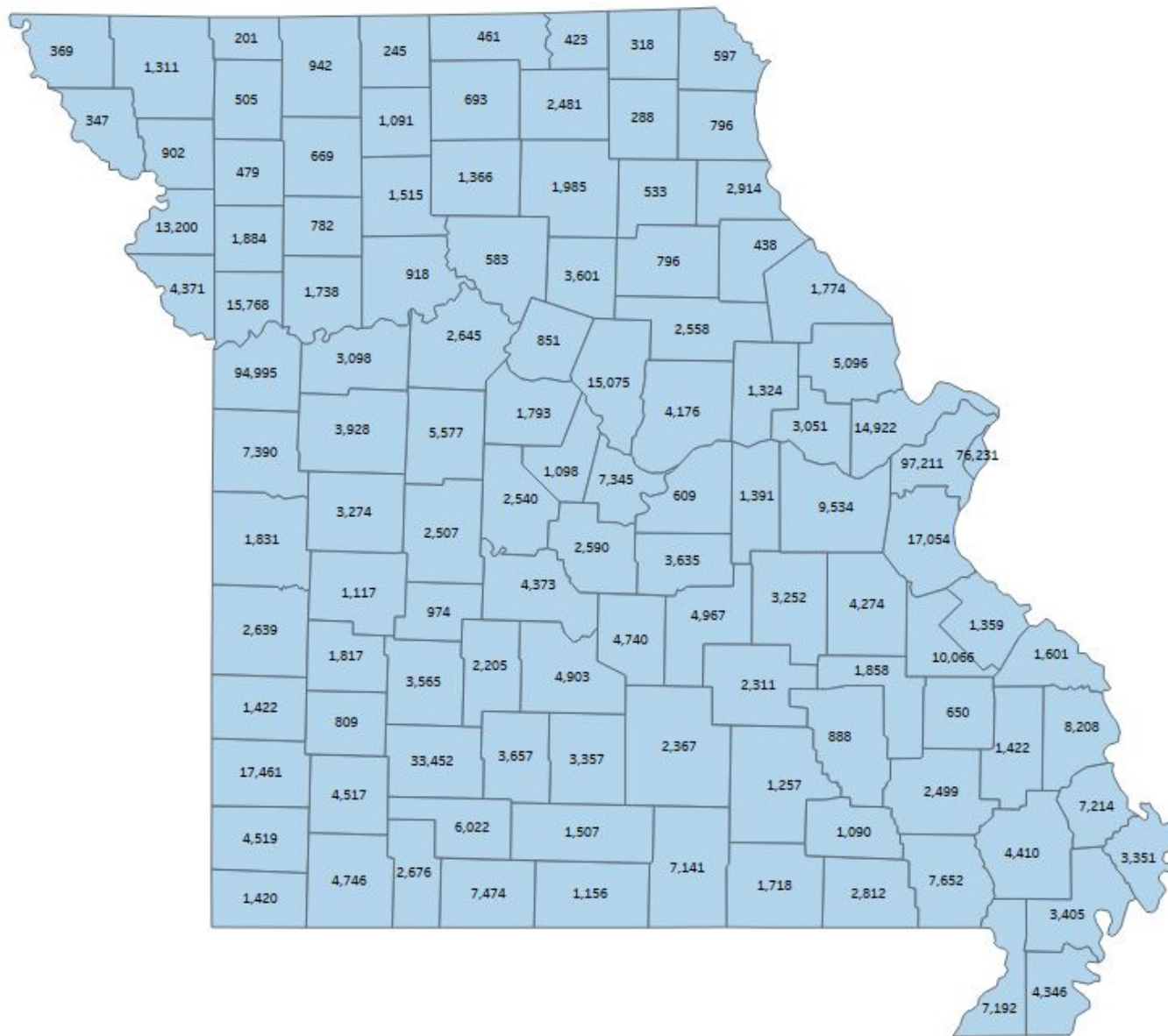
Source: SAO Analysis of USDA State Activity Reports



SNAP Data Analytics Program Introduction

The number of SNAP recipients per Missouri county in 2015/2016⁷ is shown in Figure 4.

Figure 4: Missouri SNAP recipients by county in 2015/2016



Source: SAO Analysis of SNAP Recipient Data

⁷ The recipient numbers and participation rates are a compilation of recipients who participated in SNAP at any time during all or part of 2015 and 2016.



SNAP Data Analytics Program
Introduction

The average benefit per Missouri recipient and household each year between 2011 and 2016 is shown in Table 1.

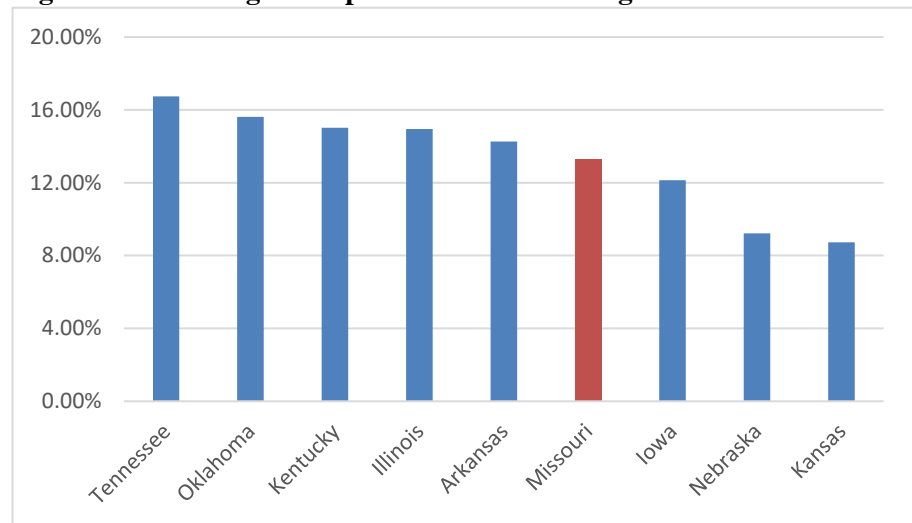
Table 1: Missouri SNAP Average Monthly Benefits

Year	Average Monthly Benefit per Recipient	Average Monthly Benefit per Household
2011	\$ 127.05	276.16
2012	128.54	275.89
2013	128.04	272.20
2014	120.03	255.10
2015	124.18	263.07
2016	121.60	260.54

Source: SAO Analysis of USDA State Activity Reports

As shown in Figure 6, Missouri had a smaller percentage of residents receiving SNAP benefits in 2016 than 5 of the 8 surrounding border states.

Figure 6: Percentage of Population in SNAP Program in 2016



Source: SAO Analysis of USDA State Activity Reports

Investigations

The DSS Division of Legal Services (DLS) Welfare Investigation Unit (WIU) investigates fraud and abuse committed by public assistance recipients. The WIU consists of approximately 18 investigators tasked with investigating alleged program violations for all welfare programs, including potential SNAP benefit fraud, waste, and abuse. After investigation, claims can be established against the recipients involved. Claims are categorized into one of three categories:



SNAP Data Analytics Program Introduction

- **Intentional Program Violation (IPV):** intentionally having "[m]ade a false or misleading statement, or misrepresented, concealed or withheld facts" or "committed any act that constitutes a violation of the Food Stamp Act, the Food Stamp Program Regulations, or any state statute for the purpose of using, presenting, transferring, acquiring, receiving, possessing or trafficking of coupons, authorization cards or reusable documents used as part of an automated benefit delivery system (access device)."⁸
- **Inadvertent Household Error (IHE):** "any claim for an overpayment resulting from a misunderstanding or unintended error on the part of the household."⁹
- **Agency Error (AE):** any claim for an overpayment caused by an action or failure to take action by the state agency.¹⁰

According to DSS Division of Legal Services investigators, it is common during the process of an investigation for claims to be reclassified to a different category. For example, Missouri opens many investigations as IHE claims, and then reclassifies the cases to IPV claims once an investigation establishes the suspected violation was intentional. The values for Missouri reported in Figures 7 and 8 and Tables 2 and 3 present claims as initially reported to the USDA as of a point in time, and not necessarily the final classification of the claim. The DSS reclassified some of the 2016 claims presented in Tables 2 and 3, and as of April 2018, the DSS considers 861 claims to be IPV, 381 claims to be IHE, and 379 claims to be AE.

⁸ 7 Code of Federal Regulations (CFR) Section 273.16(c)

⁹ 7 CFR Section 273.18(b)(2)

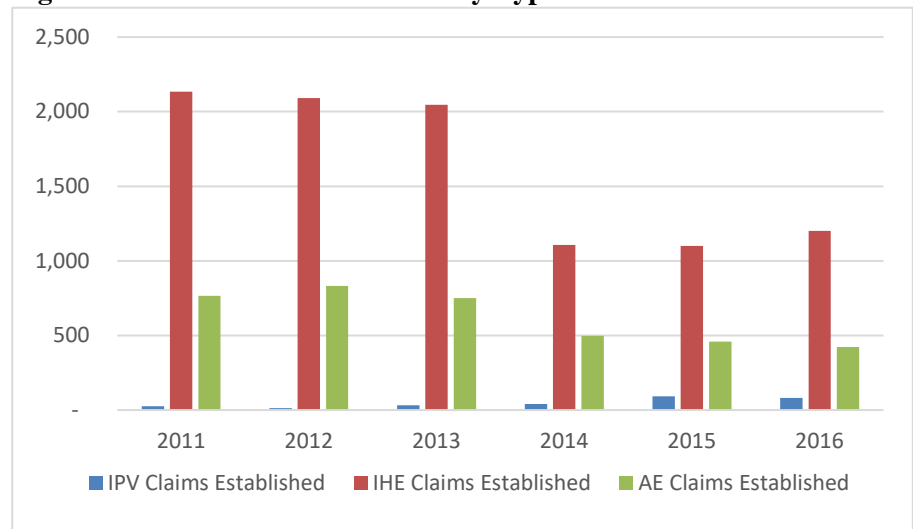
¹⁰ 7 CFR Section 273.18(b)(3)



SNAP Data Analytics Program Introduction

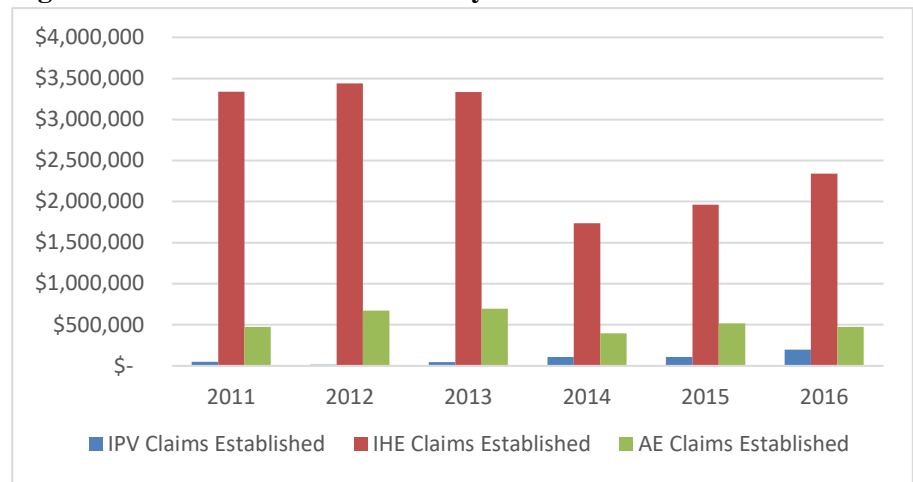
Federal regulation¹¹ allows the state to retain 35 percent of the amount collected on IPV claims and 20 percent of the amount collected on IHE claims. The DSS established almost \$20 million in claims, collected about \$18.3 million, and retained about \$4.2 million from 2011 through 2016. The number of claims established each year between 2011 and 2016, and the dollar values of those claims, is presented in Figures 7 and 8.

Figure 7: Total Claims Established by Type



Source: SAO Analysis of USDA State Activity Reports

Figure 8: Total Claims Established by Dollar Value



Source: SAO Analysis of USDA State Activity Reports

¹¹ 7 CFR Section 273.18(k)(1)



SNAP Data Analytics Program
Introduction

The number and dollar value of claims established by Missouri and the eight surrounding border states during 2016 is presented in Tables 2 and 3.

Table 2: Total Claims Established by Type

State	Intentional Program Violation Claims	Inadvertent Household Error Claims	Agency Error Claims	Total Claims Established
Arkansas	320	443	197	960
Illinois	182	35,987	3,525	39,694
Iowa	18	955	180	1,153
Kansas	60	1,391	1,239	2,690
Kentucky	860	9,433	8,414	18,707
Missouri	81	1,202	422	1,705
Nebraska	0	1,081	1,480	2,561
Oklahoma	371	662	442	1,475
Tennessee	224	4,955	646	5,825

Source: SAO Analysis of USDA State Activity Reports

Table 3: Total Claims Established by Dollar Value

State	Intentional Program Violation Claims	Inadvertent Household Error Claims	Agency Error Claims	Total Claims Established
Arkansas	\$ 733,329	1,067,262	117,737	\$ 1,918,328
Illinois	56,578	46,279,503	2,801,311	49,137,392
Iowa	108,198	2,397,534	69,432	2,575,164
Kansas	101,764	2,256,721	289,226	2,647,711
Kentucky	1,071,093	7,044,989	3,750,238	11,866,320
Missouri	199,208	2,339,619	476,199	3,015,026
Nebraska	0	1,343,866	681,256	2,025,122
Oklahoma	833,143	838,002	378,037	2,049,182
Tennessee	922,498	10,824,943	686,495	12,433,936

Source: SAO Analysis of USDA State Activity Reports

Since federal fiscal year 2011, the DSS has initially classified most of its established overpayments as either IHE or AE.



SNAP Data Analytics Program Introduction

Scope and Methodology

The scope of our audit included DSS management's approach to data analytics for preventing and detecting potential SNAP abuse, policies and procedures, and other management functions and compliance issues in place during the period January 2015 to December 2016.

Our methodology included reviewing written policies and procedures, and interviewing various DSS personnel. We obtained an understanding of the applicable controls that are significant within the context of the audit objective and assessed whether such controls have been properly designed and placed in operation. We tested certain of those controls to obtain evidence regarding the effectiveness of their design and operation. We also obtained an understanding of legal provisions that are significant within the context of the audit objectives, and we assessed the risk that illegal acts, including fraud, and violation of contract or other legal provisions could occur. Based on that risk assessment, we designed and performed procedures to provide reasonable assurance of detecting instances of noncompliance significant to those provisions.

We obtained data files containing SNAP transactions and recipient records¹² for the period January 2015 through December 2016 from the Office of Administration - Information Technology Services Division (ITSD) (the division that maintains archive copies of the data). While the DSS owns this data, it is collected and managed by the contractor who operates the SNAP program for the state and provides the archived copies to the ITSD. To determine the reliability of the SNAP data, we evaluated the significance of the data to our audit objective and assessed the data by various means, including (1) interviewing knowledgeable DSS officials, (2) reviewing existing information about the data and the system that produced them, (3) performing certain analytic techniques, and (4) reviewing internal controls. The results of our testing showed the archived version of the data does not contain all data fields included in the vendor's production system and some data fields contained missing or inaccurate data (see Management Advisory Report finding number 1.1). However, through a combination of methods and because we were able to use other data fields to accomplish audit objectives, we concluded the data were sufficiently reliable for the purposes of our audit work.

We obtained a listing of deaths recorded in the state for the period 2010 to 2016 from the Missouri Department of Health and Senior Services (DHSS). We matched these records to SNAP recipient records to determine if any deceased recipient cases continued to receive and spend program benefits

¹² The recipient records include records for Electronic Benefits Transfer (EBT) cardholders and does not include records for household members who do not have an EBT card.



SNAP Data Analytics Program Introduction

after the recipient's death.¹³ Although we used computer-processed data from the DHSS for our audit work, we did not rely on the results of any processes performed by the DHSS system in arriving at our conclusions. Our conclusions were based on our review of the issues specific to the audit objective.

We obtained a listing of individuals incarcerated by the state during the period January 2015 through December 2016 from the Missouri Department of Corrections (DOC). We matched these records to SNAP recipient records to determine if incarcerated recipient cases continued to receive and spend benefits during the recipient's incarceration. Although we used computer-processed data from the DOC for our audit work, we did not rely on the results of any processes performed by the DOC system in arriving at our conclusions. Our conclusions were based on our review of the issues specific to the audit objective.

We based our evaluation on accepted state, federal, and international standards and best practices related to information technology security controls from the following sources:

- National Institute of Standards and Technology (NIST)
- U. S. Government Accountability Office (GAO)
- ISACA (previously known as the Information Systems Audit and Control Association)

¹³ Acknowledgement: The data used in this document/presentation was acquired from the Missouri DHSS. The contents of this document including data analysis, interpretation or conclusions are solely the responsibility of the authors and do not represent the official views of DHSS.

SNAP Data Analytics Program Management Advisory Report State Auditor's Findings

1. Program Data

The Department of Social Services (DSS) needs to strengthen efforts for managing Supplemental Nutrition Assistance Program (SNAP) related data. We found the program data maintained on behalf of the DSS contained incomplete and invalid data that did not contain standardized values between fields. In addition, not all fields maintained in the vendor's system were included in the archived version of the data provided to the DSS. Without complete and accurate data, it is more difficult to use data analytics to detect trends or transaction patterns indicative of potential SNAP abuse or misuse.

The DSS contracts with an outside vendor to administer the Electronic Benefits Transfer (EBT) program. Recipients are provided EBT cards that, in conjunction with a security Personal Identification Number (PIN), allow access to benefits authorized for their cases. The EBT card can be used to access benefits including SNAP and Temporary Assistance for Needy Families (TANF). SNAP benefits can only be used at food retailers for food purchases, while TANF benefits can be used at a variety of retailers or withdrawn as cash at an ATM.

The DSS determines the amount of benefits to be authorized and loaded onto each recipient's EBT card. The contractor is responsible for making the benefits available, for processing transactions, and for tracking recipient balances, among other related duties.

Program data maintained by the contractor and program data provided to the state for archiving do not contain the same data fields and are not always complete or accurate. To improve the completeness and accuracy of archived SNAP data, DSS officials should develop and implement a process to regularly assess the consistency of information provided by the contractor.

As part of its transaction processing duties, the contractor maintains a website where recipients can login to review their transaction data. This data is also available to DSS program administrators and investigators for their research and investigation purposes through a related website. In addition, the contractor provides the state Office of Administration (OA) - Information Technology Services Division (ITSD) with a daily copy of transaction data. This record is combined into monthly files, which are retained by the ITSD.

We found not all fields in the contractor's system are included in the version provided to the ITSD for archiving and certain fields contained different values. For example, the field indicating if a transaction was completed with the EBT card present (swiped) or not (manual) is not included in the data provided to the ITSD. This field is often an indicator to alert for potential trafficking of EBT cards, and therefore important for any DSS analysis efforts.



SNAP Data Analytics Program Management Advisory Report - State Auditor's Findings

We also found data quality issues with the archived transaction data. Some of these issues may have been caused by differing versions of the data. However, we identified other data quality or completeness issues with the archived version including:

- The "Clerk ID" field, used by investigators to help determine if a store employee is participating in fraudulent transactions, was blank for 82.1 million of the 89.4 million transactions occurring over the 2 year audit period.
- The "Terminal ID" field, used similarly to the Clerk ID field, is assigned by a retailer and/or the Point of Sale System vendor and is encouraged (but not required) to be a unique identifier for each terminal. The Terminal ID field is also a key field for certain system reports. We found more than 108,000 transaction records where this field was blank or contained the values "00000000", "00000001", or "00000002."

Other fields that did not agree between the two data sets include timestamps and retailer information, including name and address. According to DSS officials, the contractor indicated the reason for the timestamp difference is due to two different timestamps being recorded in transactions; the date and time when a transaction processed is maintained in the archived data while the date and time a transaction occurred is maintained in the production data available to the DSS. The archived data did not contain a value for the "Store Name" field for 82.1 million of the 89.4 million transactions during the audit period, whereas the contractor's version was mostly complete. Transaction records pertaining to a single merchant location could contain several different values in the Store's Address field, for example "123 Main Street," "Acme Grocers," and "Acme Store #456." DSS officials could not identify why the retailer information was different. DSS officials said they were unaware of the issues between the production data and the archived data since the production environment provides the primary source for their data analysis efforts.

Managing data and obtaining useful information can be a challenge. As a result, it is important to work with standardized rules to ensure data is managed in a consistent, meaningful way. According to accepted standards, organizations should define and implement procedures to ensure the integrity and consistency of all information stored in electronic form such as databases, data warehouses, and data archives.

Maintaining and archiving complete, accurate, and valid data is essential for ensuring the results of any analytic technique provide useful information for making informed decisions and realizing the potential benefits of data analytics to detect fraud, waste, and abuse.



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

Recommendation

The DSS should strengthen efforts to improve data quality and accuracy within the SNAP system and related data archives to help improve fraud, waste, and abuse detection capabilities. Additionally, the DSS should ensure data provided by the contractor is accurate and reflective of what is recorded in the production system and includes all necessary data fields maintained by the contractor.

Auditee's Response

The DSS is in the process of developing a Request for Proposal (RFP) to be issued in 2020 that will include data improvements. In the interim, the DSS has recently developed in-house data analytic queries and processes designed to capture EBT transaction patterns indicative of retailer trafficking. The DSS continues to review processes and institute appropriate program improvements.

The "Clerk ID" and "Terminal ID" fields are retailer information which is controlled by FNS. Neither the DSS nor the contractor are able to alter this data.

2. Alerts and Reports

The DSS uses some data analytic techniques to identify potentially suspicious SNAP transactions. However, the current process does not always detect transactions or recipient benefit usage patterns that may be indicative of program abuse or misuse. While the DSS receives various alerts and reports from the contractor, these alerts and reports are not always configured correctly. In addition, the alerts are not always reviewed by staff and the DSS does not consistently investigate potentially high risk recipient behavior. As a result, high risk transactions indicative of recipients participating in inappropriate activity may not be detected timely, and the effectiveness of data analytics for preventing and detecting potential program abuse is diminished.

Using accurately configured and user-friendly data analytics and other advanced analysis techniques could allow the DSS to proactively identify potential SNAP abuse or misuse. Data analytics can provide high rates of return, allowing the DSS to use data for making informed decisions and for allocating scarce resources in a timely fashion.

We noted several concerns with system alerts and reports provided to the DSS by the contractor and with the department's utilization of the information.

2.1 Unreliable data

The *Multiple Withdrawals Same Day* report generated by the contractor's system is intended to "help [investigators] in fraud detection since it identifies households with an abnormally high number of withdrawals at a particular store on a given day," according to system documentation. However, the documentation also states for transactions to be identified on this report, they must have occurred at the same terminal (register) within the store. This contradictory flaw in the report's methodology results in two problems:



SNAP Data Analytics Program Management Advisory Report - State Auditor's Findings

- Transactions occurring at multiple terminals in a single store may not be detected by the reporting methodology. As a result, the report may not include all suspicious activity that should be reviewed for possible fraud, waste, or abuse.
- If the Terminal ID field is unreliable (which appears likely given that more than 59,000 transactions had a value of "00000001" and 33,000 transactions had a value of "00000000"), there is a risk that transactions within the same store but at different terminals (with duplicated Terminal IDs) are improperly being summarized based on the erroneous Terminal ID.

In the first instance, potentially improper transactions could escape detection by the methodology and thus, not be reviewed. In the second instance, transactions that occur across different terminals could improperly be flagged as occurring at a single terminal. In either case, activity on the report for the review of investigative staff would not be accurate and could lead to inefficient use of investigative resources.

Organizations should align information technology enabled services with needs and expectations, including identification of service levels and performance indicators, according to accepted standards. Such work includes ensuring the availability of reliable and useful information for decision making.

2.2 Usage of alerts and reports

DSS investigators do not always review and investigate many of the suspicious activities identified by system alerts and reports. During the 2-year audit period, DSS investigators opened 5,705 investigations. Of these, only 5 were identified as being opened because of an alert or a report. Most investigations were opened as the result of a hotline call or a referral from another source.

The alert system only maintains alert data for a rolling 2-year period. As such, we could only obtain alert data for approximately 18 months of the audit period, June 14, 2015, through December 31, 2016. During this period, the contractor's system recorded 51,238 alerts. DSS staff stated that some of these alerts are reviewed, but due to a shortage of resources most are not reviewed. Additionally, they told us the alerts are not in an easy-to-use format and require significant manual processing to review. DSS officials indicated an investigator reviews alerts when time is available, but no documentation is retained to indicate which alerts were reviewed, the outcome of the reviews, or other factors considered when reviewing the alerts. As such, the DSS has no assurance that alerts are being effectively reviewed to detect and eliminate fraud, waste, and abuse.



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

The out-of-state alert is designed to identify recipients who transact exclusively out-of-state for an extended period of time, which can be indicative of a recipient who has moved out-of-state and should no longer be receiving Missouri SNAP benefits. We judgmentally selected 15 (of about 51,000) out-of-state alerts generated by the system for testing. We reviewed transactions, the alerts generated, and the case notes in each recipient's file. For 14 of the 15 alerts tested, it is likely the recipient was not a Missouri resident and should not be receiving Missouri SNAP benefits. Questionable transactions related to these 14 cases totaled \$49,845 as of December 31, 2016.

In one case, a recipient spent \$13,026 using his/her EBT card exclusively outside the state during 2015 and 2016. An alert was generated for this recipient indicating excessive out-of-state usage in July 2016. Case notes indicate the recipient called DSS staff in March 2016 stating he/she was about to move out-of-state. However the case was not closed until July 2017, when an investigation found the recipient was not living in Missouri. Through December 31, 2016, the recipient spent \$4,409 out-of-state after informing the DSS about moving, of which \$3,784 occurred after the alert in July 2016.

In another case, the recipient submitted an out-of-state driver's license to the DSS in July 2015, according to documentation in the case file. However the recipient continued to use his/her EBT card and spent an additional \$4,883 outside the state, including \$2,133 after an alert was triggered. DSS staff reviewed the case in May 2017, the recipient failed to respond to inquiries, and the department closed the case in July 2017.

Not complying with
state law

We found the DSS is not complying with state laws¹⁴ requiring the department to temporarily suspend (pending a department investigation of the recipient's residency status) the account of any recipient who does not make a transaction in-state at least once every 90 days, and send a warning to any recipient who has gone 60 days without making an in-state transaction about possible suspension of benefits. DSS officials indicated this law conflicts with federal regulations, which do not allow for the suspension of benefits to a participant without first following a specified process, including providing the participant notification of the proposed adverse action and an opportunity to provide additional information to prevent or file an appeal to overturn the action. By requiring the temporary suspension of benefits after 90 days of out-of-state activity, versus only requiring an investigation or a redetermination of benefits (including eligibility), the state law conflicts with federal regulations.

¹⁴ Sections 208.024.3 and 208.024.4, RSMo, established during the 2014 legislative session.



SNAP Data Analytics Program Management Advisory Report - State Auditor's Findings

We contacted program officials with the USDA who confirmed the explanation provided by DSS officials. They also indicated another state had previously established a similar law, but stopped enforcing it when informed it violated federal regulations.

Conclusion

Without effectively reviewing alerts and reports,¹⁵ the DSS is at significant risk that improper transactions that have been detected could continue to occur for a significant period of time, constituting a waste or abuse of program funds.

2.3 Effective use of criteria

The criteria used to create alerts and reports may not be effective in generating targeted investigatory leads to identify fraud, waste, and abuse occurring in the program.

Alert information provided by the system contractor does not include any method to identify the recipient who triggered the alert. Instead, each alert must be manually researched by DSS staff to identify the recipient whose activity triggered the alert. The staff indicated that because of these limitations, which have been a problem since the system's implementation, they cannot determine how many recipients were detected by alerts without manually reviewing each alert, and cannot readily target those individuals who triggered alerts most often or by the largest amount. Further, they indicated if a recipient has been investigated and a valid reason for the suspicious activity determined, they cannot exclude that recipient from the applicable alert, increasing the risk that an additional, unnecessary investigation could be opened. As a result, the DSS is unable to efficiently use investigative resources to identify and pursue potential suspicious activity.

According to DSS management, enhancements to the alert and reporting process have been requested but are included with a long list of other outstanding requests to the contractor.

2.4 Out-of-State alerts

Federal regulations require that a household reside in the state in which it has applied for SNAP benefits.¹⁶ Out-of-state alerts are designed to identify recipients who transact excessively outside the state of Missouri, which could be an indicator the recipient is not a resident. We found recipients spent more than \$16 million using their EBT cards exclusively outside the state for 90 days or longer. Consistent or exclusive purchase patterns outside the state may be indicative of program abuse or misuse. Analytic efforts should focus on identifying SNAP recipients who incorrectly claim to be state residents to take advantage of SNAP benefits.

¹⁵ Alerts and reports are discussed in sections 2.3 through 2.6.

¹⁶ 7 CFR Section 273.3(a)



SNAP Data Analytics Program Management Advisory Report - State Auditor's Findings

DSS officials indicated there are various reasons why a recipient may be transacting out-of-state for an extended time period and still claim Missouri residency. For example, a recipient may be serving in the military or be caring for ill family members in another state. Additionally, they indicated under "simplified reporting" rules, recipients are not required to inform the state if they move out-of-state until their next scheduled case eligibility redetermination.

The out-of-state alert rules triggered 50,950 of the 51,238 alerts received from the contractor during the period June 14, 2015 through December 31, 2016. Two versions of this rule were in place during the audit period. The first version alerted when a recipient completed 20 or more transactions outside the state (excluding border states) in a single 5-day period. The alert also had a component when a recipient transacted exclusively outside the state for at least 90 consecutive days; however, it was overridden by the 5-day criteria. This alert triggered 2,934 times between June 2015 and August 2016. The second version alerted when a recipient transacted outside the state (including border states) for at least 90 consecutive days without any in-state activity and was triggered 48,016 times between August and December 2016.

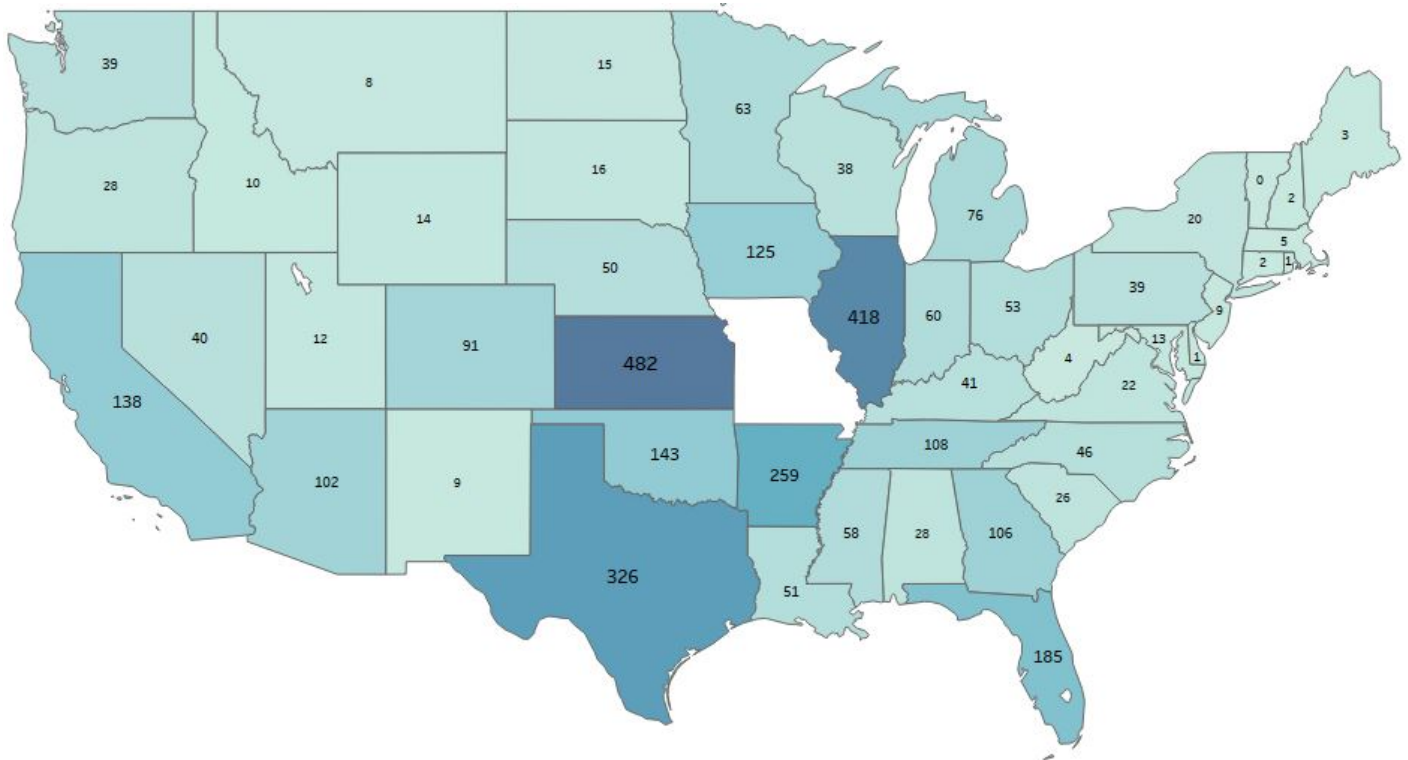
As previously noted, state law requires the DSS to temporarily suspend a recipient's participation in the SNAP program if the recipient spends SNAP benefits exclusively outside the state for a period of 90 consecutive days. We reviewed all recipient transaction records for the audit period and found 12,672 recipients who, at some point during the audit period, transacted exclusively outside the state for a period of more than 90 consecutive days.



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

SNAP recipients in 3,837 cases used their EBT cards exclusively outside the state during the entire 2-year audit period. Figure 9 shows the states where these SNAP recipients exclusively used their cards. (Not shown in Figure 9 are 5 recipients in Alaska, 2 in Hawaii, and 1 in the Virgin Islands.)

Figure 9: States Where SNAP Recipients Made Purchases Exclusively Outside of Missouri



Source: SAO Analysis of SNAP Transaction Data

Of these 3,837 recipient cases, 3,393 recipients used their EBT cards exclusively in one other state outside Missouri. Analysis of this information provides a strong indicator that recipients in these 3,393 cases likely reside in the state they exclusively had transactions in for at least the 2-year period. The other 444 recipients who used their cards exclusively outside of Missouri made purchases in more than one other state, with one recipient transacting in 13 different states over a 13 month period but never in Missouri. That case closed in January 2016.

While federal regulations allow SNAP recipients to use their EBT cards out-of-state, recipients must live within the state in which they apply for benefits. The DSS currently relies on reactive controls, such as returned mail, to identify recipients who have moved out-of-state because the alerts result in too many recipients to evaluate. Using data analytics to detect exclusive purchase patterns outside of Missouri will enable the DSS to proactively identify and investigate potential benefit abuse and misuse.



SNAP Data Analytics Program
 Management Advisory Report - State Auditor's Findings

We also identified 39 recipients who spent SNAP benefits exclusively outside the state for 700 or more consecutive days. The longest of these consecutive streaks was 729 days (out-of-state transactions totaling \$617 from January 1, 2015, to December 30, 2016, all in the state of Minnesota). Table 4 shows these 39 recipients, who claim Missouri residency, but used their EBT cards exclusively outside the state for 700 or more days.

Table 4: Activity of recipients out-of-state for 700+ days

Recipient	Days Out-of-State	\$ of Out-of-State Transactions	Count of Out-of-State Transactions
01	729	\$ 617	62
02	728	2,453	87
03	728	4,451	112
04	726	619	154
05	725	4,720	98
06	724	7,630	183
07	724	4,672	114
08	720	13,026	305
09	720	2,406	107
10	719	4,402	97
11	719	4,372	65
12	714	5,118	54
13	714	8,243	185
14	713	1,934	60
15	713	1,880	18
16	712	3,450	100
17	712	1,982	125
18	712	8,077	101
19	712	4,062	94
20	712	10,205	210
21	711	2,008	48
22	711	4,026	79
23	710	2,879	100
24	708	3,991	73
25	707	938	22
26	707	3,021	115
27	706	2,429	168
28	706	1,199	19
29	706	2,148	61
30	705	2,664	30
31	705	4,660	107
32	705	4,571	156
33	704	815	23
34	702	4,332	64



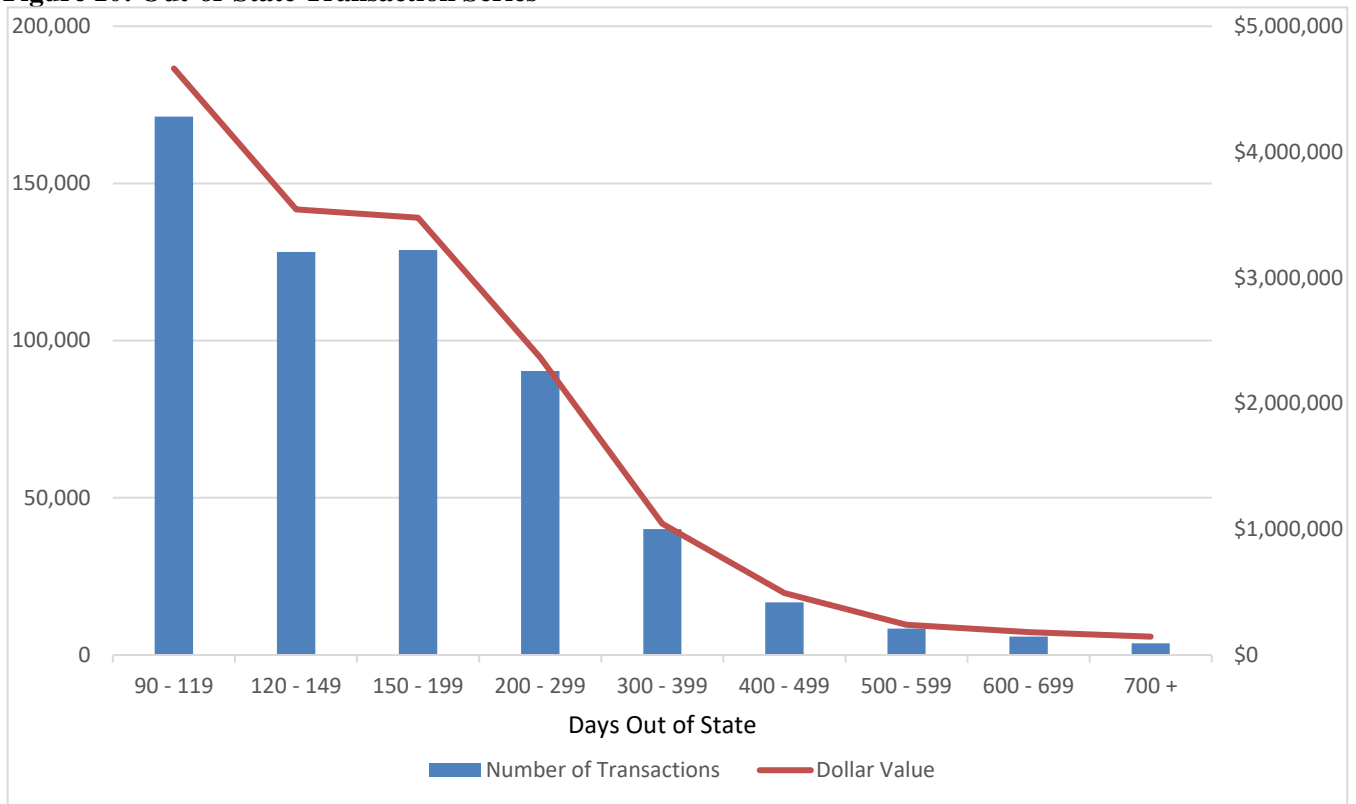
SNAP Data Analytics Program
 Management Advisory Report - State Auditor's Findings

Recipient	Days Out-of-State	\$ of Out-of-State Transactions	Count of Out-of-State Transactions
35	701	1,852	65
36	700	2,001	50
37	700	413	35
38	700	3,841	149
39	700	<u>4,179</u>	<u>41</u>
Totals		\$ <u>146,286</u>	<u>3,736</u>

Source: SAO Analysis of SNAP Transaction Data

Figure 10 shows the number and dollar value of transactions for groupings of out-of-state transactions. We identified more than 170,000 transactions where a single recipient transacted solely out-of-state for a period of 90 to 119 days, spending a total of \$4.6 million in benefits, while the 39 recipients who transacted out-of-state for 700 or more days expended approximately \$146,000 in benefits.

Figure 10: Out-of-State Transaction Series



Source: SAO Analysis of SNAP Transaction Data



SNAP Data Analytics Program
 Management Advisory Report - State Auditor's Findings

Federal regulations allow SNAP recipients to use their EBT cards out of state; however, program recipients must live in the state in which they apply for benefits. Intentionally making "a false or misleading statement" or intentionally misrepresenting, concealing, or withholding facts constitutes an Intentional Program Violation (IPV)¹⁷ punishable by increasingly severe suspensions from the SNAP program.¹⁸

To help prevent SNAP abuse and misuse and to target cases to review, the DSS should ensure the effective use of data analytics for identifying cases where SNAP recipients make the majority of their purchases outside the state to ensure recipients are not falsifying their state of residency.

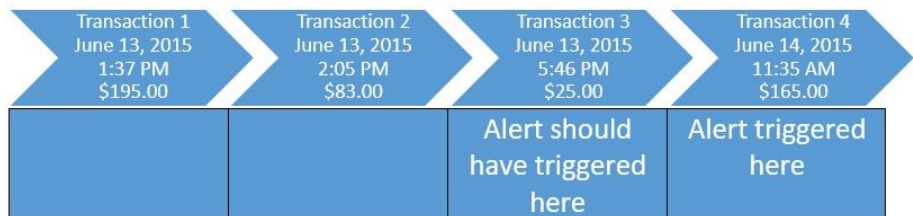
2.5 Even-Dollar alerts

The even-dollar rule triggered 246 of the 51,238 alerts received from the contractor during the period June 14, 2015, through December 31, 2016.

Frequent even-dollar transactions made by a recipient can be considered a warning sign for trafficking of SNAP benefits. An example would be a recipient allowing a merchant to charge his/her SNAP account for \$100 of groceries, but instead of receiving groceries, accepting \$50 cash, with the merchant keeping the remaining \$50. Such activity is considered to be trafficking ("The buying, selling, stealing, or otherwise effecting an exchange of SNAP benefits [...] for cash or consideration other than eligible food") under SNAP regulations.¹⁹

The Missouri alert is designed to trigger when a recipient completes three or more transactions, each for an even-dollar amount, totaling \$200 or more within a 24-hour period. However, audit testing found this alert was not actually being triggered until the 4th transaction occurred. DSS management was not aware this alert was not functioning properly until we discussed this issue with them. Figure 11 provides an example showing the alert did not trigger as designed.

Figure 11: Even-dollar alert triggering late



Source: SAO analysis of SNAP Transaction Data

¹⁷ 7 CFR Section 273.16(c)

¹⁸ 7 CFR Section 273.16(b)(1)

¹⁹ 7 CFR Section 271.2



SNAP Data Analytics Program Management Advisory Report - State Auditor's Findings

We reviewed SNAP transaction records for the 2-year audit period and determined this alert should have triggered at least 1,267 times. The majority of these appear to be instances where the series of transactions in the 24-hour period ended at three, but failed to be detected because the alert erroneously did not start flagging transactions until the count equaled or exceeded 4 in a 24-hour period.

Because the alert was not working as designed, the DSS was alerted to only approximately one-fifth of the transactions that met the criteria, and therefore, may have failed to identify a significant amount of inappropriate activity. The DSS could potentially improve the detection of SNAP abuse or misuse by ensuring the alert criteria for even-dollar transactions operates correctly and by prioritizing suspicious transactions to investigate.

2.6 Successive transactions

The DSS needs to more effectively identify potentially high risk SNAP recipients that use their EBT cards multiple times in short periods of time. A real-time alert to detect successive transactions has not been established. While the DSS receives a report showing suspicious successive activities, the DSS could not provide any documentation to show the report is actually reviewed and acted upon. Additionally, this report is the same report referenced in section 2.1,²⁰ which is not always accurate due to design flaws.

For our data analytic purposes, we defined successive transactions as multiple transactions within a 5-minute period. Our research indicates this type of transaction activity could be indicative of recipients trying to manipulate spending patterns and could be used in an attempt to conceal inappropriate transactions. For example, a recipient makes a legitimate purchase and then completes a second transaction for the purpose of illegitimately obtaining cash. Successive transactions could also indicate a recipient purchasing merchandise on behalf of a second party. This type of activity is also against program regulations, which state "Program benefits may be used only by the household, or other persons the household selects, to purchase eligible food for the household."²¹

²⁰ The Multiple Withdrawals Same Day report is intended to identify households with an abnormally high number of withdrawals at a particular store on a given day.

²¹ 7 CFR Section 274.7(a)



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

We analyzed SNAP transaction data from 2015 and 2016 and found approximately 2.1 million successive transactions completed by approximately 466,000 recipients occurring within 5 minutes, as defined by the sequence rules indicated in Table 5.

Table 5: Successive Transactions

Transactions in Sequence	Number of Cases	Number of Recipients
2	2,047,086	404,154
3	75,113	54,246
4	6,815	5,889
5	1,523	1,345
6 - 10	945	868
11 - 20	75	70
21 +	8	8
Total	<u>2,131,565</u>	<u>466,580</u>

Source: SAO Analysis of SNAP Transaction Data

Without sufficiently identifying high risk SNAP recipients that use their EBT cards multiple times in short time periods, the DSS does not have the information needed to detect trends that may be an indication of potential benefits abuse. To help prevent SNAP abuse and misuse, the DSS should use data analytics to detect successive transactions that may be indicative of abuse and use this analysis, in conjunction with other risks, when prioritizing cases to investigate.

Conclusion

We identified certain areas where the DSS needs to strengthen efforts in the processes for proactively identifying, reviewing, and prioritizing potential SNAP abuse and misuse. The current processes do not always detect SNAP transactions or recipient benefit usage patterns that may be indicative of program abuse or misuse. As a result, potentially ineligible recipients continue receiving benefits.

Using accurately configured and more user-friendly data analytics and other advanced analysis techniques should help the DSS to more effectively identify potential SNAP abuse or misuse. Focusing data analytic efforts on specific purchase patterns and behavior trends indicative of a higher likelihood of program abuse or misuse, allows decision-makers to more effectively allocate scarce investigative resources in a timely fashion.

Data analytics can provide high rates of return, offering potential for significant return on investment of resources needed to establish and maintain such a program. To facilitate improvements, DSS officials should inventory their current resources, including analytic technology, techniques, data, and



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

staff, and look for opportunities to leverage existing capabilities and to develop new methodologies.

The SNAP program cannot effectively achieve its goal of assisting eligible recipients without maintaining strong program integrity. An increased emphasis on the data analytics program will help demonstrate management's commitment to program integrity and will also help ensure that SNAP benefits are used by eligible individuals for intended purposes.

Recommendations

The DSS:

- 2.1 Ensure transaction data is captured and accurately reflected in the alert reports.
- 2.2 Strengthen data analytic processes to help ensure high-risk transactions and recipient behavior are identified and reviewed. Additionally, work with the General Assembly to revise Section 208.024, RSMo, to accomplish the intent of the law while complying with federal regulations.
- 2.3 Strengthen data analytic processes by providing a more user friendly structure for reviewing and prioritizing cases for investigation and establish a process to ensure that alerts are being effectively reviewed to detect SNAP abuse and misuse.
- 2.4 Investigate cases identified as making purchases exclusively outside the state to determine if the recipients remain eligible for benefits. The DSS should also strengthen data analytic processes to more effectively identify and review recipients who spend the majority of their SNAP benefits exclusively outside the state to ensure appropriate use of SNAP benefits.
- 2.5 Strengthen data analytic processes to ensure even-dollar alert criteria functions as intended.
- 2.6 Strengthen data analytic processes to more effectively identify and review recipients who use their EBT cards multiple times in short periods of time.

Auditee's Response

2.1, 2.3,
2.5, &

2.6 *The DSS continues to review processes and institute appropriate program improvements. The DSS has recently developed in-house data analytic queries and processes designed to capture EBT transaction patterns indicative of retailer trafficking.*



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

2.2 *The DSS continues to review processes and institute appropriate program improvements. The DSS has recently developed in-house data analytic queries and processes designed to capture EBT transaction patterns indicative of retailer trafficking.*

In addition, DSS will work to propose a statutory revision that will comply with federal regulations.

2.4 *The DSS continues to review processes and institute appropriate program improvements. The DSS will implement a process for identifying and taking action on cases with exclusive usage out of state by sending the recipient a request for contact and will take action to either close or verify the recipient is still residing within the state of Missouri. FNS guidance states frequent use of benefits out of state would be a reason to request additional information about the household's residency via a Request for Contact (RFC). If the household does not respond to the RFC or responds but refuses to provide sufficient information to clarify its circumstances the State agency must issue a notice of adverse action as described in 273.12(c)(3)(i)(B). If the household responds to the RFC with sufficient information the State agency must act on the changes in accordance with 273.12(c)(1) and 273.12(c)(2). The state may not suspend or terminate benefits due to out of state transactions without following this procedure.*

3. Data Matches

The DSS needs to more effectively utilize data matches to identify potentially improper benefits issued to recipients. Due to weaknesses in data match procedures, households involving recipients who had died or were incarcerated continued to receive and spend SNAP benefits. Using data matches and subsequent analysis, we identified at least \$29,987 in SNAP benefits used by potentially unauthorized individuals. Additionally, the DSS is not in full compliance with federal regulations requiring data matches.

Data matching is the process of matching information about applicants and recipients against various data sources. Data matching can be used to determine initial and continued eligibility for SNAP benefits.

As discussed in the report's background section, recipients are authorized to receive SNAP benefits based on income and resource guidelines. After eligibility is established, recipients are certified to receive SNAP for periods ranging from 1 to 24 months depending on household circumstances and other policy options. At initial eligibility determination and generally monthly thereafter, the system loads authorized benefits to recipients' EBT cards. However, there is generally a delay ranging from several days up to a month between when the benefits are authorized to the time the benefits are actually available for use.



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

Death matches

DSS officials need to increase efforts to suspend benefits issued to recipients who have died.

We compared records of recipients receiving SNAP benefits to records of death certificates filed with the Missouri Department of Health and Senior Services (DHSS). We found 3,668 cases where a recipient's SNAP benefits were used 30 or more days after the recipient's date of death recorded on the DHSS records.²² We judgmentally selected 30 of these cases for a detailed review and identified \$7,403 of potentially improper transactions related to 9 cases as shown in Table 6 below.

Table 6: Transactions after date of death

Recipient	Date of Death	Date of Last Transaction During Audit Period ¹	Amount of Transactions After Death
01	April 13, 2015	October 20, 2016	\$ 262
02	July 31, 2014	January 22, 2016	366
03	October 1, 2016	December 21, 2016	193
04	June 10, 2016	December 30, 2016	2,448
05	February 7, 2016	May 7, 2016	1,310
06	August 18, 2016	October 6, 2016	745
07	November 1, 2014	May 7, 2016	388
08	December 10, 2011	August 25, 2015	203
09	February 15, 2016	August 31, 2016	<u>1,488</u>
	Total		\$ <u>7,403</u>

Source: SAO Analysis of SNAP Transaction Data

¹ According to the vendor's system, transactions for some of these clients continued into 2017.

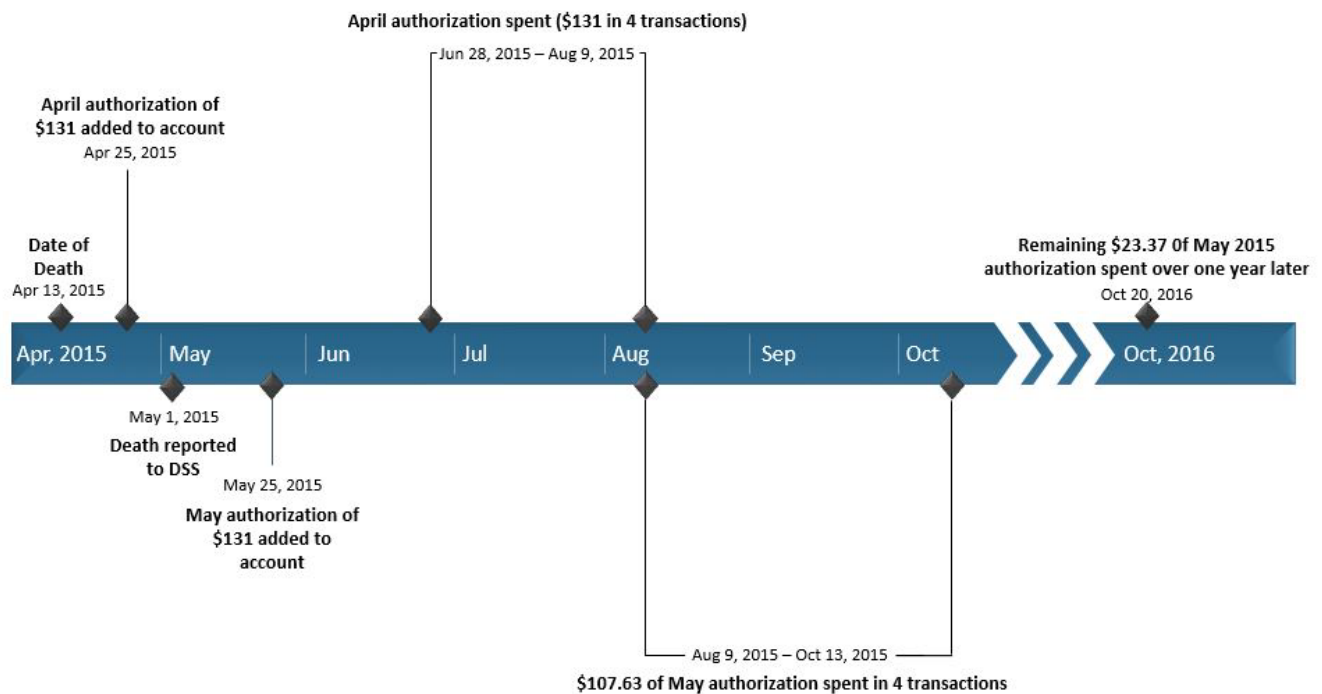
²² Acknowledgement: The data used in this document/presentation was acquired from the Missouri DHSS. The contents of this document including data analysis, interpretation or conclusions are solely the responsibility of the authors and do not represent the official views of DHSS.



SNAP Data Analytics Program Management Advisory Report - State Auditor's Findings

Figure 12 shows an example case where recipient benefits were used after the date of death. The recipient died on April 13, 2015, and the death was reported to the DSS on May 1, 2015. The case received two additional benefit authorizations for \$131 each, effective on April 25 and May 25. The April authorization was spent between June 28, 2015, and August 9, 2015, and the May authorization was spent between August 9, 2015, and October 13, 2015, except for the final \$23.37 which was not spent until October 20, 2016. If the DSS had canceled the authorizations effective on April 25 and May 25 after being notified of the death on May 1 and prior to the authorizations first being used on June 28, the DSS could have prevented the expenditure of \$262 in benefits.

Figure 12: Example of SNAP case with benefit authorization and usage (purchases) after date of death



Source: SAO Analysis of SNAP transaction data



SNAP Data Analytics Program
 Management Advisory Report - State Auditor's Findings

Table 7 shows a second example of a recipient whose case continued to receive SNAP authorizations and use benefits after the date of death. In this case, although the recipient died June 10, 2016, the DSS did not learn of the death until November 1. During that period, monthly benefits in the amount of \$511 were made available to the recipient's case on the 22nd day of June, July, August, September, October, and November. The first transaction against any of these 6 authorizations did not occur until October 29, two days before the DSS became aware of the death. Table 7 shows the transaction dates and number of transactions for each month's authorization. As of December 31, 2016, the recipient's EBT card still held \$107 of the October authorization and the entire \$511 November authorization. Activity on this card continued through February 2017, when benefits of less than \$1 remained available. As of January 2018, the card still remained active.

Table 7: Example of SNAP case with transactions after death

Date	Event	Transaction Dates	Number of Transactions	Dollar Value of Transactions
June 10, 2016	Recipient's Death			
June 22, 2016	June Authorization	October 29 - November 15	21	\$ 511
July 22, 2016	July Authorization	November 15 - November 30	17	511
August 22, 2016	August Authorization	November 30 - December 7	5	511
September 22, 2016	September Authorization	December 7 - December 19	13	511
October 22, 2016	October Authorization	December 19 - December 30	13	404 ¹
November 1, 2016	DSS Learns of Death			
November 22, 2016	November Authorization		0	\$ 0 ²

Source: SAO Analysis of SNAP transaction data

¹ \$107 of the authorization remained available on the EBT card as of December 31, 2016.

² \$511 of the authorization remained available on the EBT card as of December 31, 2016.

For the other 21 cases tested, information in the system generally supported that household members likely used the benefits after the recipient's death until the death was recorded in state systems or until a recertification was necessary. Upon closing a case due to a recipient's death, new cases were generally opened for the remaining household members. As a result, current processes functioned properly in many cases. The authorization of benefits after the date of death cannot be readily prevented until a death certificate is filed, which can be some time after death. However, improper use of benefits can be reduced by immediately expunging benefits added to an EBT card or by performing a case redetermination when notification is received of a recipient's death.



SNAP Data Analytics Program Management Advisory Report - State Auditor's Findings

The DSS received a waiver in November 2016, from the USDA allowing the department to expunge benefits belonging to a deceased, single member household when the death is verified. Current program regulations do not require benefits to be expunged until after 365 days of inactivity.²³ As of April 2018, the functionality to expunge benefits has not been implemented in the system by the contractor because the contract amendment is still being drafted.

Incarceration matches

The DSS is not performing effective incarceration matches, or the results are not being used effectively, to identify persons ineligible to receive SNAP benefits. DSS officials could not provide us documentation to support the procedures for incarceration matches, including the data source or how often such matches are performed.

We compared records of recipients receiving SNAP benefits to records of individuals in custody of the Missouri Department of Corrections (DOC). We found 62 individuals who received SNAP benefits but were incarcerated during the entire January 2015 to December 2016 period. An additional 2,358 SNAP recipients, who were incarcerated during some portion of the audit period, were also identified.

EBT cards issued to the 62 individuals incarcerated during the entire audit period were used to make over \$50,000 in purchases from January 2015 to December 2016. We judgmentally selected 9 of these cases for a detailed review. As shown in Table 8, we identified \$22,584 of potentially improper transactions related to 8 cases. According to DSS officials, investigations had not been opened for any of these 8 cases.

Table 8: Benefits used while incarcerated

Case	Date of Incarceration	Amount of Transactions During 2015-2016
1	April 20, 2011	\$ 1,744
2	November 4, 2014	3,855
3	December 23, 2014	970
4	November 18, 2014	7,334
5	June 4, 2014	2,713
6	September 3, 2014	2,825
7	December 23, 2014	307
8	October 7, 2014	<u>2,836</u>
	Total	\$ <u>22,584</u>

Source: SAO Analysis of SNAP Transaction Data

²³ 7 CFR Section 274.2(h)



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

Case 4 in Table 8 pertains to a recipient incarcerated beginning in November 2014. SNAP records indicate this recipient's case continued to receive benefits of \$357 each month from February 2015 through October 2016, at which time the monthly benefit was reduced to \$194 before being canceled entirely prior to the November 2016 authorization. Notes in the case file explain the reduction in benefits was due to a child in the household reaching 18 years of age and thus becoming ineligible for benefits. Benefits of \$7,334 were used by the recipient's case during the period February 2015 through October 2016. At the time of our review in November 2017, the EBT card was still active and also showed available benefits from another assistance program, which had not been used in more than one year. The DSS official assisting us in evaluating these cases immediately disabled the card due to inactivity, preventing those benefits from being used.

Our review of DSS case notes provided sufficient information that when combined with the incarceration match data, warrants questioning whether a recipient was eligible for benefits or whether benefits should have been stopped or reduced. For example, we found a case where the recipient was incarcerated at the time he/she applied for benefits and a case where the recipient completed a recertification interview by phone with a DSS caseworker while incarcerated. Also noted was an instance where a complainant notified the DSS in August 2014 that the card of an incarcerated recipient had been reported stolen by an acquaintance of the recipient (presumably to obtain a replacement card), yet the DSS continued to issue benefits for the period November 2014 (issued retroactively in January 2015) through March 2016. In this instance, \$2,836 of potentially improper transactions occurred while the recipient was incarcerated.

Federal match requirements

While the DSS is performing data matches, the department is not in compliance with federal regulations requiring agencies to match records with the Death Master File maintained by the SSA.²⁴ For death matches, DSS officials indicated department staff match benefit recipients to a database maintained by the Missouri DHSS, Bureau of Vital Statistics. DSS officials said they thought the DHSS and SSA databases contained the same records. However, the DHSS database only contains records of Missouri death certificates, so death records for any recipient who dies outside the state would not be included.

DSS officials indicated the department is in compliance with federal regulations requiring agencies to match records with the SSA Prisoner Verification System.²⁵ This regulation requires the DSS to establish a system to prevent persons incarcerated for longer than 30 days from receiving

²⁴ 7 CFR Section 272.14(b)

²⁵ 7 CFR Section 272.13



SNAP Data Analytics Program Management Advisory Report - State Auditor's Findings

benefits. This match is supposed to occur at the initial application for benefits and again at each recertification, typically every 6 months. DSS officials indicated they perform these matches, but noted the match information is not always accurate so they may need to contact the DOC to verify if the individual is still incarcerated. However, as noted above, recipients applied for and received benefits and completed recertification interviews while incarcerated without detection.

Additional state law

During the 2016 legislative session, the General Assembly established Section 208.065, RSMo, which requires the DSS to establish a contract with a vendor to provide verification of initial and ongoing eligibility data for SNAP benefits and other assistance programs under the DSS. This statute, which requires a contract be in place no later than January 1, 2017, states the vendor shall perform data matches to verify eligibility data. Income, resources, and assets of each applicant and recipient shall be evaluated at least quarterly. On a monthly basis, any SNAP participants who have died, moved out-of-state, or have been incarcerated longer than 90 days shall be identified. Upon completing the data matches and verifications, the contractor is to notify the DSS. DSS personnel are then required to make an eligibility determination within 20 business days.

As of January 2018, a contract for these data matches has not been established. The state's Office of Administration, on behalf of the DSS, issued a request for proposal in January 2016, but determined the only vendor price proposal was too high and should be rebid. A contract was initially awarded in December 2016, but was canceled after a losing bidder challenged the bidding process. According to a DSS official, a request for proposal was issued in December 2017 with vendor responses due in May 2018.

Conclusion

Audit results indicate data matches performed by the DSS could be more effective at detecting deceased or incarcerated recipients timely. Establishing processes for more timely data matches would help the DSS stop benefit authorizations to recipients who are no longer eligible. Without effective controls to detect benefits issued to deceased or incarcerated recipients, the DSS is at increased risk of allowing ineligible persons to receive benefits resulting in abuse and misuse of the SNAP.

Recommendation

The DSS should strengthen efforts for effectively utilizing data matches to prevent fraud, waste, and abuse of SNAP benefits. In addition, the DSS should establish procedures to comply with federal regulations requiring the use of the SSA Death Master File to identify deceased individuals.

Auditee's Response

The DSS will develop and implement a process to receive the SSA Death Master File and use it to identify deceased individuals. When a match with an active SNAP participant is determined, the DSS will send the recipient a request for contact to give the opportunity to respond to the match prior to



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

an adverse action to deny, reduce or terminate benefits as required in 7 CFR 272.14(b). The DSS will have to ensure that the SSA computer matching agreement allows for this and if it does not, the agreement will have to be amended, as required by 42 U.S.C 405(r)(3).

The DSS completes an incarceration report quarterly. When a match occurs, a letter is sent to DOC for confirmation, and then returned to the county office where the information is processed. On a daily basis for new applicants or re-certifications, a request is submitted on IIVE (SSA) with a real time interface that alerts the DSS if the individual is showing as incarcerated. Because the information on active recipients is only quarterly the DSS is unable to close/remove a person retroactively. When someone is identified in this process a claim is filed. The DSS policies and processes are in compliance with FNS rules and regulations. The DSS continues to review processes and institute appropriate program improvements.

4. Vendor Contract

The DSS has not ensured services obtained from a key contract provide sufficient benefits to justify the amount paid for the services.

The DSS entered into a contract with a third-party provider in June 2011 to administer the SNAP program for the state. The vendor's responsibilities include producing and distributing EBT cards, processing (adding) benefit authorizations to the cards, reimbursing retailers for benefits redeemed upon completion of transactions, and providing related support.

During the 2013 legislative session, the General Assembly passed Senate Bill 251 establishing Section 208.024, RSMo. This section specifies that SNAP benefits cannot be used in certain prohibited stores (including, for example, liquor stores, casinos, or gaming establishments) or in any place for the purchase of alcoholic beverages, lottery tickets, or tobacco products or for any item the DSS determines is not in the best interests of the household. To implement the statute requirements, the DSS amended its contract with the vendor to add an additional system that allows prohibited purchases to be blocked.

In addition to blocking purchases at certain locations, the system allowed the DSS to add functionality capable of notifying DSS investigators of potentially suspicious benefit usage activity. Each time a specific activity pattern is detected, the system generates an "alert" that is sent to DSS investigators for determination if the activity might indicate SNAP abuse or fraud, requiring additional investigation.

According to the January 2014 contract amendment adding this additional functionality, the DSS pays the contractor \$0.001 (one-tenth of one cent) per transaction processed in the system, plus an additional charge ranging from \$1.00 to \$5.00 per "alert" generated (varies based on the criteria the alert



SNAP Data Analytics Program
Management Advisory Report - State Auditor's Findings

triggered on). The DSS also agreed to a minimum charge, regardless of actual activity, of \$10,000 each month for these services. The state averages approximately 4.5 million SNAP transactions, or \$4,500, per month in per-transaction fees against this \$10,000 minimum payment. The remaining \$5,500 is available to pay the per-alert charges or other associated costs of the contract amendment.

DSS officials could not quantify or provide support indicating what benefits the DSS receives for the contracted services. They did not provide documentation reflecting the actual amount of services received, including the number of monthly transactions assessed the per-transaction charge or the number and dollar value of the per-alert charges. According to a DSS official, the contractor invoices the DSS \$10,000 a month for the contracted services but the official could not provide any documentation to support benefits or services received. DSS staff indicated the contractor has never billed the DSS an amount greater than \$10,000. As a result, the DSS has not used the full allotment of services for which it is paying. The contract, as amended, was renewed in its entirety without changes to this service in May 2016 and June 2017.

Without actively monitoring the contract terms to verify usage and benefits received, the DSS is at risk of contracting for more services than needed and not using taxpayer dollars in an effective manner.

Recommendation

The DSS should formally evaluate the contract terms for system services to ensure the costs are appropriate for the benefits received.

Auditee's Response

The DSS is in the process of developing an RFP to be issued in 2020 that will include data improvements. The DSS continues to review processes and institute appropriate program improvements.