Statistical Analysis of Fraud in the Florida Food Assistance Program

Prepared for

The Florida Strike Force on Medicaid & Public Assistance Fraud

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ERS Group was requested by The Florida Strike Force on Medicaid & Public Assistance Fraud (the Strike Force) to 1) review information on metrics and methodologies used to measure fraud, waste, and abuse in government food and nutrition or other public assistance programs, and 2) to design and implement a methodology to provide the Strike Force with an estimate of the amount of fraud, waste and abuse leading to overpayments in the Florida Food Assistance Program, also known as the Supplemental Nutrition Assistance Program (SNAP). In the interest of brevity, throughout this report we often refer to "fraud, waste and abuse" simply as "fraud." ERS Group staff worked closely with Strike Force staff, the Department of Children and Families (DCF), and the Department of Financial Services' Division of Public Assistance Fraud (DPAF). ERS Group would like to thank the Strike Force members for the opportunity to contribute to their efforts to reduce fraud in the State of Florida, and to thank the numerous individuals within these agencies for their cooperation and assistance, without whom this project could not have been completed.[1]

Executive Summary

- The estimate of fraud incidence in the Florida SNAP program is 7.5 percent. For the purpose of this estimate, fraud includes any potential overpayment of benefits due to a misrepresentation of information, regardless of size. Therefore, this estimate indicates

[1] ERS Group would like to thank Jeri Flora, Yameche Madry and Peter Bull of DCF's Economic Self Sufficiency Division; Amanda Huston, Director of the Office of Public Benefits Integrity; Randy Burkhalter, Director of Florida's Division of Public Assistance Fraud; and Chuck Faircloth, Executive Director of the Strike Force. Special thanks are due to Strike Force staff member Cynthia Godbey, Department of Children and Families ACCESS Integrity Chief Fred Young, and Florida Department of Financial Services' Financial Crimes Investigator Kim Harrison.

that 7.5 percent of the discrete payments were potentially larger than justified under the program rules.

- In addition to calculating a rate of fraud incidence, we employed two methodologies to estimate the overall overpayment rate in dollar terms. One method, based on the benefit payments received by those in our sample who committed fraud, yields an estimated dollar overpayment rate of approximately 2.75 percent.
- The second method, based on historical fraud overpayment calculations provided by DPAF, yields an estimated dollar overpayment rate of approximately 3.7 percent.
- These estimates do not include vendor trafficking (purchase of SNAP electronic benefit transfer (EBT) cards by vendors at a fraction of their value), which cannot be detected by the methodologies employed in this study. A recent U.S. Department of Agriculture (USDA) report estimates the dollar cost of SNAP vendor trafficking at one percent.
- Fraud was detected by four of the nine distinct fraud detection methodologies that were employed by investigators during the study. The most effective methods of detection were income verification, site visits, and desk reviews.
- Over 70 percent of the fraud that was detected in our sample was related to non-reporting or under-reporting of income. Florida's SNAP system would benefit from routine computer comparisons of recipient income (as reported on applications) vs. earned income as reported to the Department of Economic Opportunity, along with follow-up on identified discrepancies. Similarly, routine verification of household composition through available data may help to prevent fraud.
- Logistic regression analysis of the sample revealed one statistically significant difference in the characteristics of those who committed fraud and those who did not: As the

number of adults in the household increased, the likelihood of fraud increased, after controlling for other factors.

- Current policy requires SNAP recipients to report changes in income (and other living conditions) every six months (or every year in certain cases). The USDA's Food and Nutrition Service (FNS) allows states several choices with regards to how often recipients are required to report changes. We recommend DCF review the current six-month change reporting policy to determine if a shorter time threshold is in the best interest of the State of Florida.
- Per the SNAP State Activity Report for FY 2010, 87 percent of pre-certification fraud investigations in Florida result in a positive finding, while only 12 percent of post-certification investigations result in a positive finding. However, only 32 percent of investigations are done on a pre-certification basis. Florida would benefit from moving further away from a post-certification, "pay-and–chase" system and towards a more rigorous pre-payment fraud detection system.

I Background

The Supplemental Nutrition Assistance Program is implemented by the Food and Nutrition Service, a division of the United States Department of Agriculture. SNAP provided nearly $65 billion in benefits to American families in fiscal year 2010, and as of September, 2011 provided assistance to 46 million people per month.[2,3] While the program's funds are provided by the

[2] SNAP Quality Control Annual Report, September 2011, page i.

[3] State Fraud Detection Efforts for the Supplemental Nutrition Assistance Program, Audit Report 27703-0002-HY, January 2012, page 4.

federal government, the program is administered by each state. Within the State of Florida, the program is administered by DCF. In fiscal year 2010, Florida's share of SNAP funds totaled over $4.4 billion, the fourth highest amount in the nation.[4] It is worth noting that Florida's SNAP issuance increased from almost $1.8 billion in 2008 to $4.4 billion in 2010, a growth rate of almost 150 percent, the second highest in the nation (only Idaho had a higher growth rate).[5] With sums of this magnitude, even a relatively low rate of fraud can represent significant monetary loss.

In consultation with Strike Force staff, we first endeavored to define the phrase "fraud, waste and abuse". While similarities in definitions exist across federal and state entities, it does not appear that any two units of government use exactly the same definition. For example, the Texas health care claims studies described later in this report, which were pilot studies for the Federal Payment Error Rate Measurement Program (PERM) used for Medicare and Medicaid, define fraud as "…an intentional deception or misrepresentation made by a person with the knowledge that the deception could result in some unauthorized benefit…" The studies defined abuse as "…provider practices that are inconsistent with sound fiscal, business or medical practices and result in an unnecessary cost to the Medicaid program…"[6]

In contrast, the current definition of fraud on the Federal Government's FNS website is as follows:

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[4] SNAP Quality Control Annual Report, September 2011, page 11.

[5] Supplemental Nutrition Assistance Program (SNAP) State Activity Report: Federal Fiscal Year 2010. U.S. Department of Agriculture, Food and Nutrition Service, Program Accountability and Administration Division, December 2011, page 55.

[6] *Texas Health Care Claims Study*, January 2001, Section II, page 15. *Texas Health Care Claims Study*, March 2003, Section I, page 16. *Texas Health Care Claims Study*, March 2005, Section I, page 17.

- "SNAP fraud is when SNAP benefits are exchanged for cash. This is called trafficking and it is against the law.
- SNAP fraud also happens when someone lies on their application to get benefits or to get more benefits than they are supposed to get.
- SNAP fraud also happens when a retailer has been disqualified from the program for past abuse and lies on the application to get in the program again."[7]

The above is roughly consistent with the FNS's December, 2011 statement on the USDA's efforts to reduce waste, fraud and abuse. That document suggests a definition that includes elements related to providing false information connected to eligibility and benefits, trafficking, and reducing improper payments and errors.[8]

Lastly, The Florida Department of Children and Families indicates that "fraud means to commit an intentional violation of law or a deliberate misrepresentation or concealment so as to secure unfair or unlawful financial or personal gain".[9]

We have chosen throughout this report to focus first and foremost on fraud. Within the SNAP universe and Florida DCF, this encompasses primarily at least one of two elements. The first is trafficking, or the exchange of benefits for cash. While direct investigation of vendor trafficking was outside the scope of this report, we did research this issue and have provided information related to estimates of vendor trafficking. The second element is an *intentional or unintentional material misrepresentation provided by a SNAP applicant (or re-applicant) that*

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[7] http://www.fns.usda.gov/snap/fraud/fraud_2.htm

[8] "USDA Efforts to Reduce, Waste, Fraud and Abuse in the Supplemental Nutrition Assistance Program (SNAP), December 2011, http://www.fns.usda.gov/cga/FactSheets/Integrity.pdf

[9] See for example, *Cf Operating Procedure No. 180-4, Florida Department of Children and Families* December 13, 2011.

could result in the receipt of unauthorized benefits. While other criteria, such as agency error or a misapplication of rules, could also result in a finding of fraud, waste or abuse, for the purposes of this report we have defined fraud in terms of such material misrepresentation. It is important to note that we did not attempt to differentiate between the distinct terms (fraud, waste, abuse) but rather treated them as a single phrase which encompasses the full range of activity associated with the receipt of improper benefit amounts due to material misrepresentation of information. Identifying fraud, waste and abuse as separate and distinct items would require a measurement of intent, which was beyond the scope of these investigations.

Fraud is an ongoing and pervasive problem within the SNAP program, both nationwide and within Florida. Of the nearly 800,000 fraud investigations conducted nationwide during (Federal) fiscal year 2010, the state of Florida conducted over 51,000, approximately 16,000 of which were pre-certification investigations and 35,000 of which were post-certification investigations. Of those 51,000 investigations, 18,000 resulted in a positive determination of fraud (a 35 percent rate compared to the national average of 27 percent). Of those, approximately 4,100 were post-certification instances involving approximately $5.7 million in disbursements.[10] The investigations resulted in 291 prosecutions which led to 283 convictions and eight acquittals.[11] These 283 convictions involved over $900,000 of fraudulent activity.[12] The State of Florida also conducted 2,856 administrative disqualification hearings resulting in 2,811 waivers or convictions and only 45 acquittals. These administrative disqualifications

[10] Supplemental Nutrition Assistance Program (SNAP) State Activity Report: Federal Fiscal Year 2010. U.S. Department of Agriculture, Food and Nutrition Service, Program Accountability and Administration Division, December 2011, page 25.

[11] Ibid., page 27.

[12] Ibid., page 27-28.

involved approximately $1.8 million of fraudulent activity[13]. In fiscal year 2010, Florida collected nearly $2.4 million in fraudulent SNAP claims, about 54 percent of which was collected through recoupment from ongoing recipients.[14]

II Review of Literature and Previous Government Fraud Measures

Academic Studies

We reviewed a variety of academic literature to obtain an understanding of how economists and statisticians (or experts in other fields) have previously conducted studies to measure fraud rates. There exists very limited academic literature addressing the actual rates of fraud in programs such as SNAP. There is however a considerable body of literature on the current methodologies used to detect such fraud. Not unexpectedly, most academic efforts in this arena are designed to determine the factors (demographic characteristics, education, income, etc.) that are correlated with fraud, rather than to directly measure incidence.

One such methodology is regression analysis. Regression is a mathematical technique used to estimate the statistical relationship between a dependent variable and a set of explanatory variables. This estimate can then be used to predict the dependant, or outcome variable, given the values of the explanatory variables. Regression models for fraud detection are most commonly discussed in the literature concerning automobile insurance fraud. In contrast, efforts to detect credit card fraud and fraud in health care have favored a variety of machine learning methods. Machine learning involves the use of computer algorithms that improve automatically through experience. Applications of machine learning range from data-mining programs that

[13] Ibid., pages 29-30.

[14] Ibid., pages 42-43.

discern general rules in large data sets, to information filtering systems that automatically learn users' interests.[15] Machine learning in the context of fraud takes primarily two forms. One methodology involves having the computer learn to identify potential fraud using a training data set where instances of fraud are first identified by human subject matter experts. The second involves the use of computers that learn to identify suspicious transactions based on a more general set of rules and/or identification of anomalous values in selected data fields. These methods are worthwhile and certainly aid in the detection of fraud; however, as noted, they do not actually measure the rate of fraud, but rather identify transactions that are more likely to be fraudulent.

Government Studies

In addition to researching the academic literature, we reviewed a number of government studies, both state and federal, that do measure fraud rates. In August 1998, the State of Illinois completed what was then believed to be "the first ever payment accuracy review of any state Medical Assistance Program."[16] For purposes of the review, state investigators selected a random sample of 599 records of payment for medical services, stratified by category (physician and pharmacy services, inpatient hospital and hospice services, and all other types of services). Investigators found 96 instances in which payments had been made in error. The study did not estimate a fraud rate, nor, according to the authors, was it intended to do so. The authors state however that 54.7 percent of the inaccurate payments were the result of "questionable" errors,

[15] Mitchell, Tom, *Machine Learning* McGraw Hill, 1997

[16] "Payment Accuracy Review of the Illinois Medical Assistance Program: A Blueprint for Continued Improvement". Illinois Department of Public Aid, August 1998, page 3.

meaning "the provider's intention to bill correctly is very doubtful, but no intent was proven."[17] Twenty-nine of the payments were judged to be so serious that they were referred for additional reviews.

In 2001, 2003 and 2005, the State of Texas conducted studies of potential overpayments in the state Medicaid program using random samples of patients and associated payments.[18] In each case where such a determination was made, a relatively small portion of the overpayment errors were found to represent fraud or "abuse". The 2001 *Texas Health Care Claims Study*, for example, presented results of an examination of a sample of 1,609 Medicaid Fee-for-Service (FFS) Claims. Investigators found 269 potential overpayment errors, including 14 that were classified as representing potential fraud or abuse.[19] The 2003 *Texas Health Care Claims Report* was expanded to encompass a separate study of potential overpayments in the Medicaid Vendor Drug Program (VDP). The amount of fraud in the Medicaid VDP is not addressed in the 2003 report; however, the authors of the report found 29 instances of potential overpayments due to fraud or abuse in the Medicaid FFS sample of 2,122 paid claims.[20]

The 2005 *Texas Health Care Claims Report* included a Medicaid FFS study based on a review of 2,202 medical services' payments.[21] The review indicated that 28 (about seven percent) of 387 potential overpayment errors represented potential "fraud or abuse".[22] For

[17] Ibid., page 4.

[18] They also examined the extent of overpayment in the state employees' workers' compensation program.

[19] *Texas Health Care Claims Study*, January 2001, Section II, pages 29-30.

[20] *Texas Health Care Claims Study*, March 2003, page 2, Section I, page 31.

[21] *Texas Health Care Claims Study*, March 2005, page, 2, Section I, page 25.

[22] Ibid.

purposes of the Medicaid VDP study a sample of 4,036 prescriptions were randomly selected for audit. After review, 916 were found to have potential overpayment errors.[23]

The Texas state studies discussed above were pilots for the federal Payment Error Rate Measurement Program (PERM). The pilot programs were overseen by the Centers for Medicare and Medicaid Services and covered the period from 2002-2005. The PERM program was designed to measure payment error rates in Medicaid and the Children's Health Insurance Program (CHIP) in response to the requirements of the (federal) Improper Payments Information Act of 2002 (IPIA).[24,25] The IPIA required federal agencies overseeing programs susceptible to "significant" erroneous payments (as defined by the Office of Management and Budget (OMB)) to estimate the amount of improper payments each year and to report on measures taken to reduce them.[26] An overpayment is defined as a payment for a service that is not in accordance with the policies of the Medicaid program, and may include fraud and abuse.[27] Under the plan, 17 states (including DC as a state) are reviewed each year, so that all are reviewed on a rotating basis every three years.[28] The first wave of states was reviewed in fiscal year 2006.

Each fiscal quarter the states provide to a statistical contractor the universe of claims data for Medicaid, CHIP FFS and managed care that were paid by the federal government.[29] The statistical contractor then draws random samples from the claims. After receiving supporting

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[23] Ibid., section II, page 79.

[24] The IPIA was subsequently amended by the Improper Payments Elimination and Recovery Act (IPERA) of 2010.

[25] Payment Error Rate Measurement Manual, Centers for Medicare and Medicaid Services, 2010.

[26] Ibid

[27] *Texas Health Care Claims Study*, March 2005, page I-17.

[28] Payment Error Rate Measurement Manual, Centers for Medicare and Medicaid Services, 2010, page 12

[29] Payment Error Rate Measurement Manual, Centers for Medicare and Medicaid Services, 2010, page 10-12.

data for the samples from the states, the statistical contractor forwards the data to a review contractor who sends records requests to medical service providers represented in the sample.[30] The review contractor employs medical personnel who review the medical records for accuracy and consistency with the claims submitted to the states. The statistical contractor then calculates state specific error rates and a national error rate for FFS transactions and managed care. These rates are calculated overall, as well as by program and by type of error.[31] The estimated overall Medicaid error rate for the nation for fiscal year 2008 was 8.71 percent. The estimated overall Medicaid error rate for Florida for fiscal year 2008 was 14.63 percent.[32]

III Supplemental Nutritional Assistance Program (SNAP)

Similarly to Medicaid, SNAP, formerly known as the food stamp program,[33] was also identified by the OMB as a "high error program".[34] The USDA first reported on improper payments in the SNAP program in the 2004 Performance and Accountability Report (PAR), which covered outlays for fiscal year 2003.[35] The most recent (2011) PAR covered improper payments in fiscal year 2010. The improper payment error rate for the U.S. was 3.8 percent in fiscal year 2010 (consisting of an overpayment error rate of 3.05 percent and an underpayment

[30] Ibid.

[31] Ibid.

[32] Fiscal year 2008 PERM Medicaid Corrective Action Plan Executive Summary, page 1.

[33] Analysis of Florida's Supplemental Nutrition Assistance Program (SNAP) Eligibility Data, Audit Report 27002-0002-13, November 2011, page 1.

[34] Improper Payments: Recent Efforts to Address Improper Payments and Remaining Challenges, GAO-11-575T, April 15, 2011. Footnote 14, page 8.

[35] 2011 Performance and Accountability Report, U. S. Department of Agriculture, page 27.

error rate of 0.75 percent).[36] For the State of Florida the reported SNAP improper payment rate was 0.72 percent for fiscal year 2010 (consisting of a 0.68 percent overpayment rate and a 0.04 percent underpayment rate).[37] The process of calculating the improper payment rate for SNAP is described below.

Each month, states select a statistically random sample of cases from a universe of all households receiving SNAP benefits that month and perform a quality control review to measure the accuracy of eligibility and benefit determinations for each sampled case against SNAP standards. State agencies are required to report to FNS the findings for each case selected for review. FNS then sub-samples the completed state quality control reviews and re-reviews selected individual case findings for accuracy. Based on this sub-sample, FNS determines each state agency's official error rate using a regression formula. The national payment error rate is computed by averaging the error rate of the active cases for each state weighted by the amount of issuance in the state.[38]

According to the FNS document which provides the guidelines for the quality control audit process, the quality control review should consist of "a face-to-face interview for active cases subject to review to determine the identity of the applicant and whether the household did exist and to explore household circumstances affecting the sample month's eligibility and allotment".[39] The FNS guidelines also require income verification.[40] These are just two of

[36] Supplemental Nutritional Assistance Program Quality Control Annual Report Fiscal Year 2010, page 4.

[37] Ibid., page 5.

[38] 2011Performance and Accountability Report, U. S. Department of Agriculture, pp. 218-219.

[39] SNAP Quality Control Review Handbook (FNS Handbook 310), U. S. Department of Agriculture, Food and Nutrition Services, October, 2011, section 420 – Household Interview.

[40] FNS Handbook 310, section 1021 – Wages and Salaries.

several ways in which the quality control audit process is similar to our methodology. However, there are several exceptions to the process which differentiate the quality control audit process from our methodology and may be the source of the contrast in our results, which are detailed later in this report.

First, there are several case types that are not to be included in the quality control sample per the FNS guidelines.[41] Examples include but are not limited to:

- Cases pending a hearing appealing an adverse action,
- Cases already referred for investigation,
- Cases under active investigation or pending an intentional program violation hearing,
- Cases where household members have moved out of state,
- Cases in which the household members could not be interviewed after all reasonable efforts to do so have been made and documented.

In several instances, these types of cases are ones in which there is a heightened likelihood of fraudulent activity. Since these cases are not subject to review and are removed from the FNS sampling process, it may serve to reduce the subsequent error estimate. Second, the quality control process is designed to determine allotment errors, not to detect fraud per se. Accordingly, although incorrect applications of policy, or deviations between the information that was used and what should have been used to determine eligibility/allotment, may exist, they do not result in a finding unless they result in an allotment error. Lastly, the allotment error must reach a specific monetary threshold before it is included as an error ($25 per the FNS handbook; $50 according to quality control personnel at DCF). There may be a significant number of

[41] FNS Handbook 310, sections 330 – 338, section 442.

instances where the threshold requirement could reduce the overall error rate reported through the quality control process.

The USDA Office of Inspector General (OIG) also conducts audits of the SNAP eligibility data for selected states. The most recent OIG audit report of SNAP in Florida found that 2,689 of the 2.6 million average monthly recipients, or 0.1 percent, either (1) were deceased, (2) had invalid Social Security Numbers (SSNs), (3) were receiving duplicate benefits in Florida and in one or more nearby states, or (4) were listed in the Electronic Disqualified Recipient System (eDRS) and had therefore been disqualified from receiving benefits because of intentional program violations.[42] Similar audits of Alabama and Louisiana found that 0.2 percent and 0.3 percent respectively of the recipients were ineligible for benefits for one or more of the four reasons above.[43,44]

The OIG also reviewed state and FNS SNAP fraud control efforts in Colorado, New York, Florida and New Jersey.[45] A common recommendation is that states make better use of Electronic Benefits Transfer (EBT) Management Reports. Recipients of SNAP assistance receive debit cards that can be used to purchase food from approved vendors. The funds are transferred from an account monitored by a database manager to the vendors. Anomalous transactions could suggest fraud. Using the available EBT Management Reports, OIG identified 2,600 questionable transactions during a three-month period in New Jersey and Florida that had

[42] Analysis of Florida's Supplemental Nutrition Assistance Program (SNAP) Eligibility Data, Audit Report 27002-0002-13, November 2011, page 1.

[43] Analysis of Alabama's Supplemental Nutrition Assistance Program (SNAP) Eligibility Data, Audit Report 27002-0004-13, January 2012, page 1.

[44] Analysis of Louisiana's Supplemental Nutrition Assistance Program (SNAP) Eligibility Data, Audit Report 27002-0003-13, January 2012, page 1.

[45] State Fraud Detection Efforts for the Supplemental Nutrition Assistance Program, Audit Report 27703-0002-HY, January 2012, pp. 1-21.

not previously been found.[46] The transactions could represent up to $181,700 in fraudulent activity.[47] These included out of state transactions that could indicate recipients who are receiving benefits in more than one state. They also include cases with unusual numbers of whole-dollar transactions at a retail location and instances involving excessive refunds by retailers to SNAP recipients. The latter may indicate instances in which recipients are trading SNAP benefits for cash.

Instances in which retailers excessively manually enter the benefits card numbers may also represent fraud. Using one of the EBT Management Reports, the Manual Transaction Report, the OIG found 122 retailers in New Jersey who processed more than 400 manual transactions each during the review month. They note that these transactions totaled over $4.4 million and represented 49 percent of the retailers' total SNAP transactions during the month.[48] The OIG also found 15 retailers in Florida whose manual SNAP transactions totaled over $155,000 during the month of the review.[49] Nationwide, the USDA estimates retailer fraud in the SNAP program occurs in 8.2 percent of stores and diverts "about one cent of each SNAP dollar".[50]

We also reviewed the ACCESS Florida Food, Medical Assistance and Cash program policy manual. The manual, which is available online, contains 23 sections and 1,096 pages.

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[46] State Fraud Detection Efforts for the Supplemental Nutrition Assistance Program, Audit Report 27703-0002-HY, January 2012, page 7.

[47] Ibid.

[48] State Fraud Detection Efforts for the Supplemental Nutrition Assistance Program, Audit Report 27703-0002-HY, January 2012, page 8-9.

[49] Ibid.

[50] See the March, 2011 USDA FNS report entitled "The Extent of Trafficking in the Supplemental Nutrition Assistance Program (SNAP): 2006 – 2008". See http://www.fns.usda.gov/ora/menu/Published/SNAP/FILES/ProgramIntegrity/Trafficking2006Summary.pdf

The glossary alone is 27 pages. While a complete review of the entire manual was neither practical nor necessary, we did find one critical area of policy which may lead to waste and abuse within the SNAP program. The FNS guidelines provide states the freedom to choose SNAP recipient reporting requirements, that is, when recipients must report changes to their income, expenses or living conditions that determine their benefit levels. Choices include time requirements (which include monthly, quarterly or semi-annually) and threshold requirements, which require recipients to report changes above a certain amount as soon as they occur.[51] The DCF policy manual indicates that Florida SNAP recipients are required to report changes semi-annually, with certain categories of recipients subject to annual reporting.[52] So, for example, if a recipient were to receive an increase in income such that they were no longer even eligible for food stamp assistance, they would not be required to report that change for as much as six months. Under these rules, a recipient could continue to receive benefits for six months (or possibly a year) and not be in violation of reporting requirements. While there is technically no fraud, the potential for waste under these reporting requirements is significant. It is our recommendation that DCF and other stakeholders review this policy to determine if it is in the best interest of the State of Florida.

IV Our Methodology

While not all of the studies noted above included an analysis of random samples, use of sample data sets was a common methodology, particularly among the analyses conducted by government entities attempting to either investigate fraud or to measure payment error rates.

[51] FNS Handbook 310, section 223.1-223.6.

[52] Access Florida Food, Medical Assistance and Cash Program Policy Manual , l., Chapter 0800, section 0810-0200 to 0810-0400. http://www.dcf.state.fl.us/programs/access/esspolicymanual.shtml

Random sampling is a common technique used to measure incidence rates of various types in large data sets where examination of all observations is simply not economically practicable, as is the case here (Florida's SNAP program provided assistance to roughly 2.6 million recipients per month in fiscal year 2010).[53] At ERS Group's request, DCF selected a random sample of 545 payments from the universe of all payments made during the three month period from May, 2011 through July, 2011. The sample data provided information on the recipient, including but not limited to personally identifying information, residence, income, expenses and that month's benefit amount. We also received information on household composition, including but not limited to personally identifying information on all individuals listed as being in the household, their relationship to the recipient, their employment status as of the last eligibility review, and recorded income contributions.

This information was then provided to Florida's DPAF, where in conjunction with DCF, investigators conducted the following investigations to determine whether or not the sampled payments involved any fraud, waste or abuse.[54]

Household Composition/Site Visits

One of the primary factors in determining benefit eligibility and benefit levels is the composition of the household. According to DPAF investigators and DCF personnel, one of the common means by which fraud occurs is through over-reporting of individuals within the household (or conversely, by not reporting a household member who is earning income).

[53] Analysis of Florida's Supplemental Nutrition Assistance Program (SNAP) Eligibility Data, Audit Report 27002-0002-13, November 2011, page 1.

[54] The investigative work was overseen by Randy Burkhalter. Mr. Burkhalter is the Director of DPAF and has been investigating fraud for the State of Florida in some capacity for over 35 years.

Verification of household composition and residency is best done through site visits. Unfortunately, this is a very time consuming element of fraud investigation, and it was prohibitively time consuming to perform site visits for all of the recipients in the full sample. Accordingly, ERS Group selected a random sub-sample of 100 recipients from our sample population of 545 SNAP recipients and DCF personnel conducted site visits on the sub-sample. In addition to determining which, if any, of the recipients in the sub-sample had a household composition that was different than what was reported at the time they received benefits, investigators also found program violations of other types during these visits. With regard to household composition, violations could have consisted of either 1) over-reporting of individuals in the household, 2) under-reporting of income earning members in the household or 3) residency issues. Any of these constitutes fraud, waste or abuse in that such misrepresentation could (and likely would) materially affect SNAP benefits.

Income Verification

The other primary factor in determining both benefit eligibility and benefit amount is household income. DPAF investigators have access to a variety of sources for income verification purposes, including the Florida Retirement System, Unemployment Compensation Benefits, Interstate Unemployment Compensation Benefits, Worker's Compensation Benefits, and earned wage information reported to the Department of Economic Opportunity (DEO), which receives quarterly information from Florida employers documenting income earned within the state (with the exception of self-employment income). Each household member's income (or absence of income) was compared to information from these various sources to determine if there was any un-reported or under-reported income. Any discrepancies were followed up and

verified independently. In the case of verified material differences, these generally resulted in a determination that fraud, waste or abuse had occurred.

Identity Verification

One of the ways in which fraud can occur within SNAP is if an individual's identity has been stolen. Investigators and computer programmers at ERS Group, DPAF and DCF compared each recipient's identity against a variety of databases to determine that both the recipient's identity appeared valid and they were eligible for SNAP benefits. The data sources for these comparisons included the U.S. Social Security Administration's Master Death File, the Florida Bureau of Vital Statistics database and the Stop Inmate Fraud database. Instances in which a recipient was identified as ineligible through these comparisons and subsequently verified were counted as fraudulent.

Electronic Disqualified Recipient System

We also requested that programmers at DCF compare the recipient sample against the Electronic Disqualified Recipient System. The eDRS is a national internet-based program that tracks and identifies SNAP recipients who are found guilty of violations in other states and therefore disqualified from receiving benefits. This is often the only way in which violators from other states can be identified.

PARIS Match

We also requested that DCF conduct a search using the Public Assistance Reporting Information System (PARIS) to determine if any of the recipients in our sample were receiving

SNAP benefits from any other states. The PARIS database is an information exchange system administered by the U.S. Administration for Children and Families and is designed to provide state public assistance agencies with appropriate data as a result of a Federal computer matching initiative.[55] This database enables agencies to determine if a recipient is receiving funds from multiple states under a variety of public assistance programs, including SNAP.

Address Matches

In addition to the computer matches to external databases, we also requested that DCF determine for each of the recipients in our sample, how many SNAP payments are going to the recipient's address. One way in which fraud or abuse can manifest itself is if many recipients receive SNAP funds at the same address. This may indicate that a recipient is using false information. While some multiple recipient locations are legitimate (churches, homeless shelters, etc.), many are not. For each recipient address, DCF determined the number of payments going to that address during the sample month. For those addresses that were receiving three or more SNAP payments, DCF personnel conducted follow-up investigations to determine if the multiple payments were the result of program violations.

Desk Reviews

Despite each of the above procedures, it is entirely possible to commit fraud or abuse of the SNAP system which is undetectable either by computer match or home visit. Accordingly, DPAF investigators also conducted what is referred to as a desk review. A desk review consists of an overall review of the benefit recipient's case file in an attempt to identify irregularities

[55] http://www.acf.hhs.gov/programs/paris/state

which are undetectable by any of the means noted above. For example, an investigator might conduct a comparison of expenses to income over time. An investigator might also conduct a review of Department of Motor Vehicle records and vehicle registration, driving history, insurance information or employment records to determine who is living at the address listed.[56] Investigators also review information from the Clerk of Courts, as well as birth records and property records. While there is no specific manual or checklist that is followed as part of a desk review, investigators report that it is an invaluable tool in the investigation of fraud, waste and abuse of public assistance programs. DPAF investigators conducted desk reviews on all 545 files in our sample and conducted follow-up investigations as necessary as part of the overall fraud investigation effort. The results of these reviews, as well as all of the aforementioned procedures are discussed in detail in the next section.

V Results

On the basis of the investigations discussed above, DPAF/DCF investigators determined the existence of fraud, waste or abuse in 28 cases from our random sample of 545. Table 1 below details the investigator's findings by fraud type. In several instances, multiple types of fraud were detected on a single case, and therefore the total incidence of fraud is not equal to the sum by type.

[56] Most of this information is available through DAVID, the Florida Driver And Vehicle Information Database.

Table 1

Fraud Type	Number of Cases
Household Composition	4
Residency	1
Non-Reporting of Income	21
Under-Reporting of Income	1
False Reporting of Expenses	2
Identity Theft	1

Several of the investigation methods described above resulted in some detection of fraud. However, the PARIS database match, the SSN Death Master File match and the match to the eDRS failed to detect any fraud within our sample of 545 records. This is not unexpected given the results reported in the November 2011 Audit Report of the Florida SNAP conducted by the OIG. That report notes finding 883 instances of multi-state beneficiaries through PARIS, 807 Death Master File matches and 160 previously ineligible recipients through the eDRS database.[57] These matches were conducted on over 2.6 million recipients and consequently represent a fraud detection rate of 0.07 percent for those three methods combined.[58] Given this low rate of detection, it is not surprising that those methods did not detect any fraud within our sample.

Table 2 summarizes detected cases of fraud, waste and abuse by detection method. As detailed in Table 2, the income matches detected a large number of cases of fraud (20). While most of these 20 cases were identified through comparisons to the earned wage information reported to the DEO, matches to the Florida Retirement System also detected fraud. Site visits to

[57] Analysis of Florida's Supplemental Nutrition Assistance Program (SNAP) Eligibility Data, Audit Report 27002-0002-13, November 2011, page 5-7.

[58] Ibid., page 1.

verify household composition and residency also detected six instances of fraud. Desk reviews led to detection of five instances of fraudulent activity, ranging from residency issues, to un-reported or under-reported income, to identity theft. It is also worth noting that in several cases, fraudulent activity was discovered through multiple detection methods, which were implemented concurrently.

Table 2

Detection Method	Number of Cases
Site Visit*	6
Desk Reviews	5
Income Verification – Wages	19
Income Verification – Unemployment	0
Income Verification – Florida Retirement	1
Address Matches	0
Death Master File Match	0
PARIS Match	0
eDRS Match	0

* Site visits conducted on sub-sample of 100 only.

As noted, investigators detected 28 instances of fraud in our sample of 545 households.[59] Three of those cases were found solely through the site visits conducted on the sub-sample. The remaining 25 cases were found in the course of investigations conducted on the entire sample of 545.[60] The overall fraud rate is based on a combination of the results from both the original

[59] Information detailing the sample by county can be found in the Appendix.

[60] Several of the instances of fraud were detected by both the site visits and other methodologies.

sample and the sub-sample. We estimate the overall rate of fraud incidence in the Florida SNAP system to be 7.5 percent.[61]

In addition to the 28 cases of fraud noted above, we have been asked to note that there were an additional six recipients identified through the desk review process which DPAF investigators believe have a high likelihood of having fraudulently received excess SNAP funds. DPAF has opened additional investigations into those cases and the results are pending. However, as of the date of this report, investigators have not yet categorized those cases as fraudulent. If some or all of those cases are eventually revealed to have been fraudulent, we would supplement this report at the Strike Force's request to update the calculations. If all six cases are found to have involved fraudulent activity, the fraud rate estimate would rise from 7.5 percent to 8.6 percent.

Sampling Error

Because our estimate is based on a sample, we cannot expect it to be perfectly accurate. The situation is akin to flipping a coin some number of times (the sample size) to determine if it is a fair coin. Different samples give different estimates, and few of the samples are likely to result in exactly 50 percent heads, so each estimate comes with a likely error due to sampling. The sampling error is determined primarily by the size of the sample. Thus, if we flipped a coin 10 times and the results were 60% heads, we would not be concerned about its fairness because the sample is so small. However, if we flipped a coin 1,000 times and the results were 60% heads, we would conclude that the coin is not fair because 60% is "too far away" from 50% for a

[61] This is calculated using the 25 cases detected in the overall sample and the 3 cases identified in the sub-sample (out of 97 remaining from the sub-sample that had no fraud detection prior to the site visits). The resulting fraud rate calculation is [((3/97)*(545-25)) + 25]/545.

sample of that size. More precise estimates (that is, ones with smaller sampling error and narrower confidence intervals) require larger samples. However, they also typically incur greater time and expense in performing the estimation.

When we allow for the likely error from sampling, we estimate that the fraud rate for the population of all payments is between 4.2 percent and 11.7 percent with 95% confidence. The "95% confidence" means that, applying our methods to many different samples of this size, the fraud rate would lie within the calculated interval 95% of the time.[62]

Descriptive Statistics

We have detailed below a comparison of the characteristics of those within the sample who were found to have committed fraud to those who did not. Such a comparison may reveal differences between the two groups. However, we caution the reader regarding any attempt to use applicant characteristics to profile individuals regarding their likelihood to commit fraud. The use of averages to draw conclusions about specific individuals or groups has any number of unforeseen complications. Table 3 below highlights a variety of descriptive statistics for the households in our study sample. In each case, we show the average or proportion for the households, grouped by those whom investigators concluded committed fraud and those they concluded did not. We performed commonly used statistical tests (t-tests or Chi-square tests) to determine if the averages between the two groups were statistically significantly different. Statistically significantly differences are those that are large enough that one is not able to attribute them to random chance. For most characteristics, the groups were not different. Those

[62] Note that the estimated range of the 95 percent confidence level is not precisely centered around our estimate of 7.5 percent. This is a standard statistical effect that occurs the further away one gets from an estimate of 50 percent.

characteristics that were statistically significantly different relate to the size of the household, including both the number of children and the number of adults in the household.

Table 3
Study Sample Statistics

Characteristics of SNAP Recipients by Fraud Status

Characteristic	Study Sample (n=545) Fraud (n=28)	No Fraud (n=517)
Household Composition	Means	
Number in Household (Reported) *	2.79	1.87
Number in Household (Computed) *	2.93	2.02
Number of Adults *	1.71	1.28
Number of Children (17 and under) *	1.21	0.74
Number of Adult Males	0.82	0.55
Percent of Households with at least 2 Adults *	0.50	0.25
Age of Head of Household (HHH)	40.21	44.21
Age of Adults	37.70	43.63
Age of Children*	9.73	7.11
Percent of Households where HHH is Female	0.75	0.63
Percent of Households where HHH is US Citizen	0.82	0.87
Monthly Income & Expenses		
Gross Income	$725.75	$638.82
Shelter	$406.68	$339.29
Disposable Income [1]	$319.07	$299.53
Utilities	$219.82	$200.69
SNAP related		
Percent of Households with Expedited Application	0.14	0.15
Percent of Households with Simplified Eligibility	0.75	0.66

*Statistically significantly different at 5% probability.

[1]Defined as (Gross Income - Shelter Expense)

In order to further determine whether or not these variables appear to be statistically significantly related to fraud, we conducted additional statistical analyses. Logistic regression analysis is a commonly used technique in which one can control for a variety of factors to determine whether or not they are correlated with a categorical dependent variable, in this case committing fraud or not. We ran regressions controlling for characteristics of the head of household (age, gender, etc.), the number of minors, number of adults, income and expense variables, as well as eligibility characteristics (simplified or expedited). In each of our models, the sole variable that was statistically significantly correlated with fraud was the number of adults present in the household. More precisely, the greater the number of adults, the more likely that household was to have committed fraud.

Estimated Overpayment Rate

It is important to note that the 7.5 percent figure is a rate of fraud incidence and not a measure of the proportion of total dollars overpaid to fraudulent recipients. In the vast majority of instances, the elimination of fraudulent activity would likely result in a lower payment for recipients, but not complete ineligibility and elimination of all benefits. Only if 100 percent of the dollars associated with these incidents are fraudulent, or alternatively, if these incidents are for disproportionately larger dollar figures than the average SNAP payment, could the overpayment rate in dollar terms be 7.5 percent (or more). While we were not able to directly calculate the reduction in payments that would occur in the absence of the fraud that was detected in our sample, we provide here an estimated overpayment rate in dollars using two separate calculation methods.

The first methodology involves comparing the average monthly payment amount received by recipients who were identified as having misrepresented information to the average monthly payment amount in the entire SNAP universe. It is important to recognize that these 28 cases represent a very small sample of recipients and thus the corresponding estimate has a potentially large sampling error. It is also important to note that we did not compare the characteristics of those who committed fraud to the characteristics of all individuals within the SNAP universe. Ideally, one would want to determine if these individuals would have been entitled to greater benefits, even in the absence of fraud, because they possessed more of the characteristics that correlate with higher benefits than those in the SNAP universe on the whole. If it is the case that the individuals committing fraud are different than the average SNAP recipient (aside from the fact they have misrepresented information), then the estimate may suffer from sample bias. Sample bias can occur when an estimate is based on a sample that is not representative. While our sample of recipients used to determine the fraud incidence rate was randomly drawn and very likely to be representative, it may not be the case that those who committed fraud are representative of the average recipient. Unfortunately, that determination was beyond the scope of this study.

The recipients in this study who were identified as having committed fraud received an average benefit in the month they were sampled of $389.14. The average Florida SNAP recipient received a monthly benefit of $247.30 during the months from which our sample was drawn. If we assume the difference of $141.84 is due to fraud, we would estimate the overpayment rate among those who commit fraud to be 36.4 percent. In order to estimate the overpayment rate for the SNAP program, we multiply the estimated rate of fraud incidence (7.5 percent) times the estimated rate of overpayment among those who commit fraud (36.4 percent).

This yields an estimated dollar overpayment rate for the SNAP program of approximately 2.75 percent.

The second methodology involves the use of historical information regarding fraud loss that was provided to ERS Group by the Division of Public Assistance Fraud. At ERS Group's request, DPAF was able to provide average overpayment amounts based on fraud cases within the SNAP program during the three year period from March, 2009 to March, 2012. During that time, DPAF was involved in the investigation of over 6,000 cases in which fraudulent activity was found. According to DPAF, those cases resulted in an average monthly overpayment of $241.88. In contrast, as noted above, the average monthly SNAP payment during our sample period was $247.30. Under the assumption that those who commit fraud are similar to other SNAP recipients in terms of the characteristics that define eligibility and benefits (such as income, expenses, household composition, etc.), this represents an overpayment rate on fraudulent cases of 49.4 percent.[63] As above, the estimated overpayment rate for the SNAP program would be the estimated rate of fraud incidence (7.5 percent) multiplied by the historical fraud case overpayment rate (49.4 percent). That resulting dollar overpayment estimate is 3.7 percent. However, as above, there are concerns regarding this second overpayment rate estimation as well. First, as noted above, this estimate is dependent upon the assumption that those who commit fraud have similar characteristics to those who do not. In addition, this estimate is also dependent upon the assumption that the fraud cases that have been investigated by DPAF are similar to fraud cases on average with regard to the resulting overpayment. In most instances, the cases that are discovered, referred to and investigated by DPAF and subsequently result in a finding of fraud are likely to be biased toward larger overpayment amounts. This is

[63] $241.88/($241.88 + $247.30) = 49.4 percent.

because DCF and DPAF are more likely to discover, refer and investigate cases where the potential loss due to fraud is higher than the average loss due to fraud (discovered and not discovered). Thus, there is some likelihood that one or both of these assumptions are violated, either of which would lead to bias. Accordingly, it is more likely that the 3.7 percent estimate represents an upper bound on the dollar overpayment rate.

It is also important to note that one type of fraudulent activity, trafficking, was not examined by our study. Trafficking of SNAP benefits occurs when a vendor (grocery store, mini mart, etc.) purchases the monthly SNAP benefit from a recipient for a fraction of its worth. The recipient receives cash, which can be spent as he or she wishes, while the vendor is reimbursed for the entire amount of monthly benefit. This form of fraud is not detectable by any methodology we could readily employ. In addition, it is not entirely clear that the SNAP benefits paid to these recipients would change based on this type of fraud, and so it may not directly impact the overall overpayment rate to recipients. However, it is clearly a type of fraud and it is therefore noteworthy as part of this effort. A recent study by the USDA indicated that approximately 8.2 percent of stores trafficked in this manner and estimates SNAP trafficking (in dollar terms) at approximately one percent.[64]

VI Concluding Remarks

The Florida Medicaid & Public Assistance Fraud Strike Force contracted ERS Group to review information on metrics and methodologies used to measure waste, fraud, and abuse in public assistance programs. The Strike Force also requested we estimate the amount of fraud,

[64] See the March, 2011 USDA FNS report entitled "The Extent of Trafficking in the Supplemental Nutrition Assistance Program (SNAP): 2006 – 2008". See http://www.fns.usda.gov/ora/menu/Published/SNAP/FILES/ProgramIntegrity/Trafficking2006Summary.pdf

waste or abuse leading to overpayments in the Florida Food Assistance Program. There are a number of ways in which fraud is examined in academic studies and government programs. However, the most useful methodology for estimating fraud within Florida's SNAP was to draw a random sample of payments and have Florida's professional fraud investigators examine those cases for any misrepresentation of information, (i.e., fraud). The investigators for DPAF and DCF discovered 28 instances of fraud within the randomly drawn sample of 545 cases. Based on the various investigative methodologies employed on the entire sample, as well as the site visits employed on a sub-sample of 100 cases, we estimate fraud incidence within SNAP to be 7.5 percent. There were an additional six cases with pending investigations, which could raise that estimate to as much as 8.6 percent.

Further, we employed two methodologies to estimate the dollar overpayment rate within SNAP, both based in part on the fraud incidence rate estimate. First, we compared the average monthly payment amount received by recipients who were identified as having committed fraud to the average monthly payment amount in the entire SNAP universe. Multiplying this average overpayment rate of 36.4 percent by the fraud incidence rate of 7.5 percent yields an estimated dollar overpayment rate of approximately 2.75 percent.

The second method utilized historical information, provided by DPAF, regarding average monthly overpayment amounts on cases involving fraud. Multiplying the average overpayment rate indicated by the DPAF data, 49.4 percent, by the fraud incidence rate of 7.5 percent yields an estimated dollar overpayment rate of approximately 3.7 percent. Additionally, a recent USDA report estimates national vendor trafficking in dollar terms at approximately one percent.

It is critical to recognize that with both of these methodologies, the dollar overpayment estimates have the potential to be unreliable due to the relatively small number of fraud cases

identified in the sample (28), or biased by the nature of the information on fraud overpayment provided by DPAF. Further study of the 28 identified cases and recalculation of their monthly benefit based on additional information would provide a more accurate estimate of the dollar overpayment rate in Florida's Food Assistance Program.

The two most common mechanisms by which fraud was perpetrated in the sample were through false reporting of income and/or household composition. While investigators employed nine different methods of fraud detection, the vast majority of the fraud uncovered in the sample was related to one of these two reasons. Accordingly, we recommend that DCF, the agency tasked with administering the SNAP program, institute computer comparison of applicant's (or re-applicant's) reported income to that found in other state databases, including Florida wage income reported to the Department of Economic Opportunity. We also recommend implementation of a system in which household composition and residency are more routinely checked. This may include partnering with a vendor who can perform these types of checks using publicly available or privately held databases.

We also ran regression analyses to determine if there were any characteristics correlated with a higher likelihood of committing fraud. While an increased number of adults in the recipient household was correlated with an increased likelihood of fraud, we caution stakeholders against using this information proactively.

Further, it is our understanding that households are not required to report changes in income (or other characteristics) that have occurred within six months of application (or re-application). While we did not identify any fraud based on that criteria since that is the rule under which the system operates, the potential for waste due to that rule may be significant. Households with meaningful changes in financial or other circumstances can receive what could

be termed excess benefits for as much as six months. Accordingly, we recommend a review of this policy to determine if it is in the best interest of the State of Florida.

Lastly, Florida, like many states, operates primarily in the fraud arena under what is commonly referred to a "pay-and-chase" system. Many investigations, though not all, are conducted post-eligibility and after benefits have already been received. Recovering these benefits after they have already been paid is difficult and typically results in a small proportion being recouped. We recommend Florida consider a more rigorous pre-certification system, perhaps partnering with vendors who can provide machine learning software designed specifically to detect this type of fraudulent activity.

APPENDIX

Results by County

	Households (2010 Census)		SNAP Households (October, 2011)		Study Sample (Total)		Study Sample (Fraud)	
County	Number	Percent Share	Number	Percent Share	Number	Percent Share	Number	Percent Share
Alachua	100,516	1.35%	20,413	1.14%	13	2.39%	-	-
Baker	8,772	0.12%	2,384	0.13%	-	-	-	-
Bay	68,438	0.92%	16,964	0.95%	4	0.73%	1	3.57%
Bradford	9,479	0.13%	2,807	0.16%	1	0.18%	-	-
Brevard	229,692	3.10%	41,171	2.31%	7	1.28%	-	-
Broward	686,047	9.24%	142,139	7.97%	55	10.09%	4	14.29%
Calhoun	5,061	0.07%	1,373	0.08%	-	-	-	-
Charlotte	73,370	0.99%	11,248	0.63%	3	0.55%	-	-
Citrus	63,304	0.85%	12,729	0.71%	4	0.73%	-	-
Clay	68,792	0.93%	10,895	0.61%	5	0.92%	-	-
Collier	133,179	1.79%	19,911	1.12%	8	1.47%	-	-
Columbia	24,941	0.34%	7,543	0.42%	1	0.18%	-	-
DeSoto	11,445	0.15%	3,665	0.21%	2	0.37%	-	-
Dixie	6,316	0.09%	2,146	0.12%	1	0.18%	-	-
Duval	342,450	4.61%	91,938	5.16%	40	7.34%	-	-
Escambia	116,238	1.57%	30,803	1.73%	8	1.47%	2	7.14%
Flagler	39,186	0.53%	6,589	0.37%	1	0.18%	-	-
Franklin	4,254	0.06%	960	0.05%	-	-	-	-
Gadsden	16,952	0.23%	7,134	0.40%	5	0.92%	1	3.57%
Gilchrist	6,121	0.08%	1,590	0.09%	-	-	-	-
Glades	4,533	0.06%	655	0.04%	-	-	-	-
Gulf	5,335	0.07%	1,309	0.07%	-	-	-	-
Hamilton	4,617	0.06%	1,875	0.11%	1	0.18%	-	-
Hardee	8,245	0.11%	2,971	0.17%	1	0.18%	-	-
Hendry	12,025	0.16%	5,125	0.29%	2	0.37%	1	3.57%
Hernando	71,745	0.97%	15,913	0.89%	4	0.73%	-	-
Highlands	42,604	0.57%	9,112	0.51%	2	0.37%	-	-
Hillsborough	474,030	6.39%	134,121	7.52%	48	8.81%	4	14.29%
Holmes	7,354	0.10%	2,412	0.14%	1	0.18%	-	-
Indian River	60,176	0.81%	10,747	0.60%	2	0.37%	-	-
Jackson	17,417	0.23%	4,578	0.26%	-	-	-	-
Jefferson	5,646	0.08%	1,453	0.08%	-	-	-	-
Lafayette	2,580	0.03%	481	0.03%	-	-	-	-
Lake	121,289	1.63%	23,721	1.33%	7	1.28%	-	-
Lee	259,818	3.50%	51,963	2.91%	17	3.12%	1	3.57%
Leon	110,945	1.50%	20,447	1.15%	7	1.28%	-	-
Levy	16,404	0.22%	4,359	0.24%	1	0.18%	-	-
Liberty	2,525	0.03%	687	0.04%	-	-	-	-
Madison	6,985	0.09%	2,308	0.13%	1	0.18%	-	-
Manatee	135,729	1.83%	26,774	1.50%	8	1.47%	-	-
Marion	137,726	1.86%	34,389	1.93%	13	2.39%	-	-
Martin	63,899	0.86%	8,338	0.47%	2	0.37%	1	3.57%
Miami-Dade	867,352	11.69%	362,450	20.33%	94	17.25%	8	28.57%
Monroe	32,629	0.44%	5,435	0.30%	-	-	-	-
Nassau	28,794	0.39%	4,866	0.27%	1	0.18%	-	-
Okaloosa	72,379	0.98%	10,351	0.58%	5	0.92%	-	-
Okeechobee	14,013	0.19%	4,663	0.26%	1	0.18%	-	-
Orange	421,847	5.68%	108,594	6.09%	25	4.59%	-	-
Osceola	90,603	1.22%	33,380	1.87%	14	2.57%	-	-
Palm Beach	544,227	7.33%	93,010	5.22%	22	4.04%	1	3.57%
Pasco	189,612	2.56%	40,368	2.26%	13	2.39%	-	-
Pinellas	415,876	5.60%	85,889	4.82%	20	3.67%	1	3.57%
Polk	227,485	3.07%	62,197	3.49%	18	3.30%	2	7.14%
Putnam	29,409	0.40%	11,135	0.62%	7	1.28%	-	-
St. Johns	75,338	1.02%	8,224	0.46%	2	0.37%	1	3.57%
St. Lucie	108,523	1.46%	26,189	1.47%	11	2.02%	-	-
Santa Rosa	56,910	0.77%	8,081	0.45%	1	0.18%	-	-
Sarasota	175,746	2.37%	26,678	1.50%	9	1.65%	-	-
Seminole	164,706	2.22%	23,976	1.34%	6	1.10%	-	-
Sumter	41,361	0.56%	5,017	0.28%	-	-	-	-
Suwannee	15,953	0.21%	4,589	0.26%	-	-	-	-
Taylor	7,920	0.11%	2,277	0.13%	1	0.18%	-	-
Union	4,048	0.05%	1,351	0.08%	-	-	-	-
Volusia	208,236	2.81%	48,887	2.74%	15	2.75%	-	-
Wakulla	10,490	0.14%	2,003	0.11%	1	0.18%	-	-
Walton	22,301	0.30%	2,980	0.17%	4	0.73%	-	-
Washington	8,864	0.12%	2,307	0.13%	-	-	-	-
Total	7,420,802		1,783,037		545		28	