

Assessing the Impact of On-line Application on Florida's Food Stamp Caseload

**Principal Investigator:**

Colleen Heflin

Harry S Truman School of Public Affairs, University of Missouri

Phone: 573-882-4398

Fax: 573-884-4872

120 Middlebush Hall

Columbia, MO 65211

Email: [heflincm@missouri.edu](mailto:heflincm@missouri.edu)

**Co-Investigator:**

Peter Mueser

Department of Economics, University of Missouri

Phone: 573-882-6427

Fax: 573-884-2697

331 Professional Building

Columbia, MO 65211

Email: [mueserp@missouri.edu](mailto:mueserp@missouri.edu)

## Abstract

In 2005, Florida implemented an Internet-based service delivery system for eligibility determination in public assistance programs, including the Food Stamp, Temporary Assistance for Needy Families (TANF), and the Medicaid programs. Given the growing importance of the Internet as a service delivery tool for governmental agencies, we conduct an evaluative case study of the effects of the introduction of Florida's on-line application tool on the Food Stamp caseload. In particular, we consider the impact on the flows onto and off of the program and, ultimately, on the size and composition of the caseload. To answer these questions, we will use administrative data from the Florida Department of Children and Families for the period from 2000 to 2008 to understand the broad trends in caseload characteristics and dynamics. While on-line application systems may increase access for some populations such as employed individuals, if they are accompanied by a decrease in services at state-run service centers, they may decrease access for other populations.

## Project Description

The Internet revolution of the last 10 years has brought rapid change in the way society is organized. Individuals now rely on the Internet as a source for information gathering, retail sales, and entertainment. One natural extension of web-based technology is to the governmental service sector where individuals could potentially receive information about and even apply for governmental services on-line. As other services such as banking increasingly move to on-line provision, it is hard to envision a future in which government services will continue to be administered through paper applications and face-to-face interviews.

Florida's Department of Children and Families has been a leader in the modernization of its service delivery system, eliminating the need for an applicant to visit a state office and fill out an application. In 2005, Florida implemented ACCESS (Automated Community Connection to Economic Self-Sufficiency), an Internet-based service delivery system for eligibility determination in public assistance programs including the Temporary Assistance for Needy Families (TANF) program, the Food Stamps program, and the Medicaid program. Eligibility for multiple programs is processed through a single on-line application. ACCESS was rolled out in Spring/Summer 2005. By September 2005, 66 percent of all applications were being received on-line. This number increased to 77 percent by February 2006 and 89 percent by March 2007 (Lange 2007; Winstead 2007).

One of the main objectives behind modernization efforts such as those implemented in Florida is to improve access of services to eligible populations. Non-participation in the Food Stamp program is a serious problem. Nationally, in FY 2004 about 60 percent of eligible individuals were estimated to participate; for those with earnings the participation rate was even lower at 51 percent. Additionally, Florida is one of a handful of states that are distinguished as having participation rates that are significantly below the national average. In 2004, 55 percent of the eligible population and

42 percent of the working poor population participated in Food Stamps, earning Florida a national ranking of 39 (Cunyngham et al. 2006).

In order to make Internet services widely available for low-income populations, the Department of Children and Families (DCF) Economic Self-Sufficiency Program (ESS) has entered into agreements with partner organizations to host on-line applications. Eligibility determination is still undertaken by a DCF merit employee who reviews the on-line data submitted by the applicant, while the community partner supplies the access point. As of June 2006, the agency had established agreements with over 2,400 community partners across the state. Community partners include hospitals, libraries, food banks, domestic violence centers, public health centers, aging resource centers and faith-based organizations (Florida Department of Children and Families 2007). A summary of the changes to the application procedure under ACCESS is summarized below in Table 1.

**Table 1. Summary of Application Procedure Changes**

<i>Application Activity</i>	<i>Before ACCESS Florida</i>	<i>ACCESS Florida</i>
First contact	Paper application	On-line application
Location	DCF Customer Service Center	Anywhere where there is a computer with Internet access
Eligibility Interviews	Full one-hour interview for all  Eligibility interview by phone uncommon	One 15 minute (or shorter) interview for most a second interview of up to 45 minutes for some  Eligibility interviews by phone are common
Documentation	Most expenses, assets, and income require documentation  Need to submit documentation in person to DCF worker	Most expenses, assets, and some income, do not require documentation  Self-service submission of documentation either in person or by fax

Source: Cody et al. (2008: p. XXI)

Even as the Internet and its uses continue to expand, there is persistent evidence of differences in the rates at which members of different groups use the Internet, with low-income or

low-educated individuals being less likely to use the Internet than high-income or highly educated individuals. This difference has been termed the “digital divide.” According to estimates from the 2003 Current Population Survey, while 59.5 percent of all American households had Internet access, among households with incomes below \$25,000 this rate fell by half to 30.7 percent. In contrast, among households with incomes greater than \$100,000, fully 92.2 percent had Internet access. Similarly, only 20.2 percent of those with less than a high school education and 43.1 percent of high school graduates reported Internet access. In terms of the age distribution, those over age 65 are the least likely to report Internet access (29.4 percent) compared to other age groups. Finally, in terms of race/Hispanic origin, both Hispanics (36 percent) and Blacks (36 percent) are less likely to report Internet access than are Non-Hispanic whites (59.9 percent) or Asians (66.7 percent). In Florida, just over 55 percent of the population reported having Internet access in 2003.

Thus, modernization efforts such as Florida’s raises concerns about access to the social service system, since the client base is low-income by definition and disproportionately low education and non-white, all groups with lower levels of internet access. This concern is amplified in Florida where modernization has been accompanied by a 43 percent reduction in staff and a 33 percent reduction in brick-and-mortar DCF offices throughout the states (Lange 2007). While a 2008 study by Cody and colleagues found that characteristics of the caseload in 2006 were almost identical to that in 2004, the descriptive analysis was performed within one year of implementation of ACCESS and did not attempt to model flows onto and off of the caseload.

## **Objectives**

Based on the growing importance of the Internet as a service delivery tool for governmental agencies, we propose an evaluative case study of the effects of the introduction of Florida’s on-line application tool, ACCESS, to answer the following questions:

- 1) What is the effect of moving to an on-line application system on the size of the Food Stamp caseload? How have flows onto and off of the program been influenced?
- 2) How has the availability of the on-line application system altered the characteristics of individuals who enter and leave the Food Stamp program? What are the expected long-term impacts on the composition of the caseload?

To answer these questions, we will use administrative data from the Florida Department of Children and Families for the period from 2000 to 2008 to understand the broad trends in caseload characteristics and dynamics and to examine the extent to which changes can be attributed to the implementation of ACCESS. This work builds on and extends the 2008 report by Mathematica Policy Research (Cody et al. 2008) along a number of dimensions. The quantitative analysis presented in the Cody et al. report is limited to simple descriptive statistics. We propose a much more thorough impact analysis of how ACCESS changed caseload dynamics and characteristics.

### **Research Methods**

Data on program participation and other program outcomes over the 2000-2008 time period will come from administrative case records maintained by the Florida Department of Children and Families in computer readable form. We have already received seed money from the University of Missouri to pursue this project and expect to have the data files well before the September 15th start date of this project.

The information in these records includes the date and method of application for benefits, disposition of application (denial/case opened), monthly benefit amounts, reported income amounts, as well as demographic and geographic characteristics of households. Data on employment and earnings will come from quarterly earnings records from the Florida Unemployment Insurance system. Based on other information in the administrative data, we will be able to control for

numerous individual and household characteristics, including the gender, race/ethnicity, age of the eligible household members, citizenship, and the reported work and income status.

## Data Analysis

Caseload Dynamics. The impact of ACCESS on the size of the caseload will operate through the flows onto and off of the program. If potential recipients find that applying for Food Stamps is facilitated by ACCESS, we will expect that the number of individuals entering the program will grow; if current recipients find that recertification is easier, we expect that fewer people will leave the program, holding all else equal.

The caseload in a give quarter  $t$  can be written as

$$CASELOAD_t = CASELOAD_{t-1} + INFLOWS_t - OUTFLOWS_t$$

We define  $INFLOWS_t$  as the number of individuals who were not receiving benefits in quarter  $t-1$  but are receiving benefits in  $t$ , and  $OUTFLOWS_t$  as the number of people receiving benefits in  $t-1$  who were not receiving benefits in  $t$ .  $OUTFLOWS_t$  can be further disaggregated as

$$OUTFLOWS_t = DR_{t-1} RECERT_{t-1} + DC_{t-1} CASENON_{t-1}$$

where  $RECERT_{t-1}$  is the number of recipients facing recertification in quarter  $t-1$ ,  $CASENON_{t-1}$  is the remainder of the  $t-1$  caseload, and  $DR_{t-1}$  and  $DC_{t-1}$  are the proportions of those groups not in the program in quarter  $t$ .

Each of the measures above can be calculated from our data. The measures most directly reflecting individual decisions are  $INFLOWS_t$ ,  $DR_{t-1}$  and  $DC_{t-1}$ . In conjunction with the existing caseload and recertification requirements, these three factors determine change in the size of the caseload. If ACCESS increases the ease of initial application, this is expected to cause an increase in

$INFLOWS_t$ . Similarly, if recertification is made easier, this is expected to reduce  $DR_{t-1}$ , as a smaller share of those facing recertification would fail to undertake the process.

We will use time series methods to examine the impact of the ACCESS program on these three measures. In addition to controlling for trends over time and changes in the economy (unemployment rate and employment growth), we will include treatment variables identifying ACCESS program implementation. Dummies will identify the quarters of ACCESS availability. In addition, we will undertake panel analyses examining these measures calculated separately for each of Florida's 67 counties. These differences allow estimates of program impact that differ across counties. We will consider whether such differences can be traced to population settlement (metropolitan vs. nonmetropolitan), economic factors (unemployment, average income), or demographic population characteristics (working poor, disabled, elderly, etc.).

**Caseload composition.** The most important effects of the ACCESS program are expected to be on the composition of individuals receiving benefits. The greatest concern is that those on the wrong side of the “digital divide” will face increased obstacles as procedures develop to cater to those with Internet access. The greatest potential benefit is that application costs for the working poor will be reduced.

Our primary focus will be on the characteristics of individuals leaving the caseload (*OUTFLOWS*) and individuals entering (*INFLOWS*) as a function of the availability of on-line access. We will focus attention on several factors of policy interest, including citizenship status, English language use, current and prior employment, and ABAWD<sup>1</sup> status, as well as standard demographic and geographical measures. Although we will examine changes in these characteristics, to

---

<sup>1</sup> Able bodied adults without children. Such individuals face special rules under the Food Stamp program.

understand the processes by which program changes occur, it is necessary to employ a multivariate model.

Our initial multivariate model will consider the decisions underlying outflows, applying the standard discrete choice logit model.<sup>2</sup> In particular, the probability of leaving the Food Stamp program for an individual  $i$  receiving Food Stamps in quarter  $t$  is given as:

$$\Pr(\text{depart}_{it}) = \exp(\mathcal{X}_{it}B + \mathcal{X}_{it}(B' - B) TH_t) / [1 + \exp(\mathcal{X}_{it}B + \mathcal{X}_{it}(B' - B) TH_t)]$$

where  $\mathcal{X}_{it}$  is a vector of personal characteristics, the local economy and other county-based measures (including a constant);  $TH_t$  is an indicator of whether the ACCESS program is in effect at time  $t$ ; and  $B$  and  $B'$  are estimated vectors indicating how the measured factors influence the departure decision prior to ACCESS implementation ( $TH=0$ ) and following full implementation ( $TH=1$ ). The vector  $\mathcal{X}_{it}$  will include demographic characteristics (age, race, marital status, citizenship status, language, employment), household characteristics (ages and numbers of children, income amounts and sources) and geographic characteristics (county economic characteristics, urban versus rural, community partners in area), as well as ABAWD status. In addition, we will include indicators of the length of time receiving Food Stamps, and a measure indicating whether on-line application was available when the individual applied for Food Stamps.

As above, our measure of Food Stamp participation is based on a discrete-time structure using quarters as the time unit. Individuals receiving Food Stamps in a given quarter and not in the following quarter are coded as contributing to outflows. We will distinguish those facing

---

<sup>2</sup> A discrete choice model is natural given that the decisions we observe occur in discrete time. A hazard model could, however, be applied, and it is easy to show that substantive results are essentially the same in the case we are considering. In either case, a utility maximizing interpretation is available.

recertification from other recipients, so our model will predict the individual analog of the population measures *DR* and *DC* described above.

The vector *B* identifies how the decision is made by individuals prior to ACCESS implementation, and the vector *B'* identifies the process after implementation. The impact of ACCESS is therefore captured by the difference,  $B' - B$ , which is the primary focus of our study. Each of the elements of this difference indicates the degree to which ACCESS alters selection of individuals into Food Stamps.

Examining how the program influences inflows is slightly less direct, since we do not have information on the population of eligible individuals and our sample is limited to those who choose to enter the Food Stamp program. We are, however, able to examine the way in which the composition of inflows changes due to ACCESS. For example, we can use time series methods to examine how the proportion employed among the inflow responds to ACCESS using time series methods analogous to those used to examine the size of the inflow. If the composition of the Florida population does not change significantly, changes occurring in the inflow composition can be used to identify the equivalent of the difference  $B' - B$ .

The caseload responds over time to changes in the inflows and outflows, and our estimates will allow us to determine explicitly how ACCESS is expected to influence the caseload over the long run. Our model of inflows and outflows allows the interaction of composition and selection to be captured in caseload simulations. For example, we will be able to consider whether those who apply for Food Stamps following implementation of on-line application differ in terms of their long-term program participation.

## Application of the Research Results

Currently, at least five other states in addition to Florida have implemented a multi-program on-line application system (Pennsylvania, Kansas, Washington, West Virginia, and Wisconsin). While several recent papers have considered these systems, outlining recommended “best practices” (Schott and Parrott 2005; Hoffman 2006; Cody et al. 2008), to our knowledge there are not any evaluative studies to guide states on the effects of on-line application systems on caseload dynamics or characteristics. Given the diffusion of Internet technology, as well as continued talk of a “digital divide,” other states need to understand the effects of these service delivery changes as they go forward designing their own modernization efforts. While on-line application systems may increase access for some populations such as employed individuals, if they are accompanied by a decrease in services at state-run service centers, they may decrease access for other populations

The results of this study are expected to be of widespread interest to both policymakers and researchers concerned about the design and effectiveness of the Food Stamp Program in the South and the nation as a whole. Additionally, results may inform changes to other food and nutrition programs including WIC and child nutrition programs. Evaluative studies are needed in this area to guide policy-makers as they move forward