## **SUPPORTING STATEMENT FOR**

## WIC Nutrition Services and Administration Costs Study (WIC NSA)

### **PART B**

Tameka Owens
Office of Research and Analysis
Food and Nutrition Service
US Department of Agriculture
3101 Park Center Drive
Alexandria, VA 22302
Phone: 703-305-2321

Fax: 703-305-2576

E-mail: Tameka.Owens@fns.usda.gov

November 5, 2013

# Table of Contents

В.	Statistical Methods	1
	B1. Respondent Universe and Sampling Methods	1
	D1. Respondent Oniverse and Sampling Methods	1
	B2. Procedures for the Collection of Information	4
	B3. Methods to Maximize Response Rates	5
	B4. Tests of Procedures	6
	B5. Individuals Consulted on Statistical Aspects of the Design	7
Lis	st of Tables	
	Table B1-1. Respondent Populations	3
	Table B4-1. Instrument Pretesting	6
	Table B5-1. Statisticians and Researchers	7

## **List of Appendices**

#### **Appendix A: Screen Shots of Web Surveys**

- A1. WIC State Agency Web Survey
- A2. WIC Local Agency Web Survey
- A3. WIC Combination Web Survey
- A4. Spanish-language WIC Combination Web Survey

## **Appendix B: Case Study Interview Guides**

- B1. Case Study Interview Guide for WIC State Agency
- B2. Case Study Interview Guide for WIC Local Agency
- B3. Case Study Interview Guide for State SNAP/TANF Program
- B4. Case Study Interview Guide for County SNAP/TANF Program

#### **Appendix C: Recruitment Materials**

- C1. Communication Plan
- C2. WIC NSA Cost Study Brochure
- C3. Recruitment Letter to WIC State Agencies with Case Studies (includes extant data request)
- C4. Recruitment Letter to WIC State Agencies without Case Studies (includes extant data request)
- C5. Recruitment Letter to WIC Local Agencies with Case Studies
- C6. Spanish Recruitment Letter to WIC Local Agencies with Case Studies
- C7. Spanish-language Recruitment Letter to WIC State Agencies without Case Studies
- C8. Recruitment Letter to State SNAP/TANF Programs
- C9. Recruitment Letter to County SNAP/TANF Programs
- C10. Optional Email for WIC State Agencies to Encourage Local WIC Agency Participation

#### **Appendix D: Recruitment Materials**

D1. Memo on Pretest Results

## **Appendix E: Burden Estimate Assumptions**

E1. Assumptions Used to Estimate Burden

## **B. Statistical Methods**

This section of the Supporting Statement addresses the five points outlined in Part B of the OMB guidelines and focuses on statistical methods related to the collection of information for the study.

## **B1.** Respondent Universe and Sampling Methods

Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

As described in Part A, this study uses both quantitative and qualitative methods to collect data. Specifically, researchers will gather **quantitative** data from all State and local WIC agencies via Web survey and, additionally, from all WIC State Agencies via an extant data request. By conducting a census of the State and local WIC agencies, concerns about sampling and analytical significance are not relevant.

We expect to obtain a minimum 80% response rate.<sup>1</sup> A paper-based alternative to the Web-based survey that can be mailed back is offered in the recruitment letters to WIC local agencies to boost participation rates.

Recognizing that obtaining a response from all of the State and local Agencies may still not be possible, we plan to conduct a nonresponse bias analysis to examine potential bias in the analysis introduced through nonresponse. The first step in conducting the nonresponse bias analysis will be to determine local agency characteristics that are (1) known for all local agencies, and (2) important to the study analysis or will provide insight into potential bias. The

 $<sup>^1</sup>$  As noted in Part A, the Study expects to obtain responses from 91% of WIC State Agencies, 86% of WIC Local Agencies and 100% of SNAP and TANF agencies.

Participants Characteristics 2012 file will be used to determine the characteristics that are relevant to include in the nonresponse bias analysis. We will next examine the unweighted distributional differences for the identified local agency characteristics, between the respondents and the frame. This step of the analysis typically utilizes sampling weights, however, since a census was taken for this study, we do not have sampling weights. After completing the analysis weights (which will be adjusted for nonresponse) we will re-examine the distributional differences between respondents (using the analysis weights) and the frame. This latter analysis will indicate whether the analysis weights were successful in reducing bias due to nonresponse. The weighted respondent distributions, adjusted for nonresponse, should be close to the frame distributions.

**Qualitative** data will be collected during interviews with a subset of the State and local WIC agencies as well as from a number of State and county SNAP and TANF agencies. The purpose of the qualitative interviews is to help better understand the issues that contribute to the quantitative data reported. As such, a nonprobability sampling method will be used to select respondent agencies for this portion of the study.

There are eight basic respondent populations to be surveyed. Divided into quantitative and qualitative data collection sections in the Table B1-1, the respondent populations are listed along with the universe of respondents, the number for planned in the study and the sampling method used.

Table B1-1. Responden	t Populations			
Respondent Population	Universe of Respondents	Number of Respondents in Study	Sampling Method	Appendix cross- reference
Quantitative Data				
State WIC Director     (extant data request,     submission of local     agency contacts and     email addresses, and     Web survey)	90	90	Census	A1, A3, C3 C4
2. Local WIC Agency Director (Web survey)	1,900	1,900	Census	A2
Qualitative Data				
3. State SNAP Official (qualitative interview)	53 <sup>2</sup>	9	Nonprobability. State SNAP officials will be chosen representing the diversity of agency structures and operations, and also based on willingness and agreement of officials to participate.	В3
4. State TANF Official (qualitative interview)	119³	9	Nonprobability. State TANF officials will be chosen representing the diversity of agency structures and operations, and also based on willingness and agreement of officials to participate.	В3
5. WIC State Director (qualitative interview)	90	14	Nonprobability. The criteria for selecting 14 State WIC directors are as follows: 3 from large-size WIC State agencies; 3 from medium-size; 3 from small-size; 2 from high cost/geographic-unique areas <sup>4</sup> ; and 3 from Indian Tribal Organizations (ITOs).	B1
6. WIC Local Agency Director (qualitative interview)	1,900	32	Nonprobability. Local WIC Directors will be selected from the 14 State WIC agencies listed above with the following distribution:  Three each from the large-size and medium-size agencies (total: 3 x 6=18);  Two each from the small-size and high cost/geographic-unique agencies (total: 2 x 5=10)  Two each from two of the ITO state agencies (total: 2 x 2 = 4)	В2
7. County SNAP Official (qualitative interview)	5,000	1	Nonprobability. A county SNAP agency official will be selected from one of the 9 state SNAP agencies visited based on the recommendations of a state SNAP official.	B4
8. County TANF Official (qualitative interview)	5,000	1	Nonprobability. A county TANF agency official will be selected from one of the 9 state TANF agencies visited based on the recommendations of a state TANF official.	В4

<sup>&</sup>lt;sup>2</sup>50 states, DC, VI and Guam (<a href="http://snap.nal.usda.gov/state-contacts">http://snap.nal.usda.gov/state-contacts</a>)

<sup>&</sup>lt;sup>3</sup>50 states, DC, 66 ITOs (http://www.acf.hhs.gov/sites/default/files/ofa/2011 caseload data.pdf ) and 3 territories (http://www.gpo.gov/fdsys/pkg/GPO-CPRT-108WPRT108-6/html/GPO-CPRT-108WPRT108-6-2-12.htm )

<sup>&</sup>lt;sup>4</sup>These include all of the Trust Territories, the District of Columbia, Alaska, and Hawaii, which have unique geographic or political governance features that make them different from other state agencies. There are eight state agencies in this group.

#### **B2.** Procedures for the Collection of Information

Describe the procedures for the collection of information including:

- Statistical methodology for stratification and sample selection,
- Estimation procedure,
- Degree of accuracy needed for the purpose described in the justification,
- Unusual problems requiring specialized sampling procedures, and
- Any use of periodic (less frequent than annual) data collection cycles to reduce burden.

**Statistical methodology for stratification and sample selection.** For the collection of quantitative data, all State and local WIC agencies are being surveyed; thus, stratification and sample selection are not applicable. Qualititative data will be collected from a nonprobability sample of convenience and will be used to help place the quantitative findings in context and to avoid erroneous generalizations about the larger population.

**Estimation procedure.** For the collection of quantitative data, all State and local WIC agencies are being surveyed; thus, estimation procedures will not be used. Qualititative data will be collected from a nonprobability sample of convenience and will not be used to make inference to the larger population; therefore, estimation procedures will not be employed.

Degree of accuracy needed for the purpose described in the justification. For the collection of quantitative data, all State and local WIC agencies are being surveyed; thus issues related to the degree of accuracy of the data are not applicable to this Study. Qualititative data will be collected from a nonprobability sample of convenience and will not be used to make inference to the larger population; therefore, degree of accuracy is of no concern.

**Unusual problems requiring specialized sampling procedures.** There are no unusual problems that require specialized sampling.

Any use of periodic (less frequent than annual) data collection cycles to reduce burden. There will be no periodic data collection cycles since this is a one-time examination of annual Federal Fiscal Year (FFY) 2013 data.

## **B3.** Methods to Maximize Response Rates

Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

The following methods will be employed to maximize the response rate for the study:

- Minimize the length of time required to complete the Web survey by collecting as much
  data as possible from other sources (e.g., State Agency size from FNS website,
  breastfeeding rates from FNS annual report, nutrition education methods/type of staff
  used from the WIC Nutrition Education Study);
- Design an instrument that minimizes respondent burden by being short in length, asking for data the way respondents collect them, and using terms familiar to respondents (Appendices A1, A2, A3, and A4);
- Test the draft instrument using cognitive interviews to ensure respondents can properly understand the questions and response options are robust (See Memo on Pretest Results in Appendix D1);
- Be flexible by allowing respondents to complete the survey by other (non-Internet)
   means, if desired, and to submit extant Form 798-A data in the format they currently use;
- Have a Help Desk during business hours to answer respondent inquiries (Phone number provided in recruitment letters found in Appendices C3, C4, C5, and C6);
- Develop a study brochure to explain the overall survey effort to affected agencies
   (Appendix C2); and
- Contact nonrespondents by email, FedEx letter, and phone calls to encourage participation.

Our expectation is that the planned methods of data collection will result in accurate and reliable

data necessary for the planned analyses at acceptable response rates.

#### **B4.** Tests of Procedures

Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of test may be submitted for approval separately or in combination with the main collection of information.

Pretests of the six data collection instruments were conducted May 7-31, 2013 as shown in the Table B4-1 below:

Table B4-1. Instrument Pretesting			
Survey Instrument	State(s) where Pretests Conducted	Respondent(s)	Number of Pretests Conducted
WIC State Agency Web Survey     (Appendix A1)	Kansas and Minnesota	State WIC directors	2
<ul><li>2. WIC Local Agency Web Survey</li><li>3. (Appendix A2)</li></ul>	Arizona, Kansas, and California	Local WIC directors	3
4. WIC Combined Web Survey for states with combined State/ Local WIC agencies (Appendix A3)	South Dakota	State WIC director	1
5. WIC State Agency Case Study Guide (Appendix B1)	Maryland and Tennessee	State WIC directors	2
6. WIC Local Agency Study Guide (Appendix B2)	Maryland and Tennessee	Local WIC directors	2
7. SNAP TANF Case Study Guide (Appendices B3, B4)	Maine	State officials	1

As part of the assessment, pretest respondents were provided with either a copy of the instrument or a live Web link by which they could access the Web-based survey. Respondents were then asked to review the questions for ease of comprehension and their ability to answer the questions using FFY 2012 agency data. In addition, they were encouraged to discuss the level of difficulty or ease of obtaining the information needed for answering the questions and to estimate the amount of time required to collect the information. Respondents provided feedback via written comments and in a follow-on debriefing session with Altarum and RTI on May 20, 2013.

Information from the pretest was combined with input previously obtained from the Study's Peer Advisory Panel (PAP) and revisions to the instruments were made accordingly.

FNS was provided with a pretest memorandum summarizing the feedback received and changes made to the instruments based on the pretests and PAP input. The memorandum of pretest results is included as Appendix D.

### **B5.** Individuals Consulted on Statistical Aspects of the Design

Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Altarum and RTI will collect the information and analyze the data on behalf of FNS.

Altarum is leading the case study data collection effort (qualitative) and SNAP/TANF comparisons; RTI is leading the Web survey implementation and analysis. Table B5-1 below outlines the project team members associated with these efforts. RTI's Benjamin Yarnoff, PhD, is the senior economist for the study.

Table B5-1. Statisticians and Researchers								
Name	Position	Telephone Number	Email					
Altarum Institute								
Loren Bell	Senior Fellow	207-358-2793	loren.bell@altarum.org					
Stacy Gleason, MPH	Senior Policy Associate and Data Analyst	207-358-2783	stacy.gleason@altarum.org					
Diane Phillips, MBA, RD	Senior Policy Associate	202-603-7142	diane.phillips@altarum.org					
RTI International								
Benjamin Yarnoff, PhD	Health Economist	919-541-6640	byarnoff@rti.org					
Celia Eicheldinger, MA	Statistician	919-541-6222	celia@rti.org					
David Bellard	Health Economist	919-541-6598	dbellard@rti.org					
USDA								
Andrew Dau	NASS	202-720-6482	Andrew.Dau@nass.usda.gov					
Tameka Owens, PhD	FNS	703-305-2321	tameka.owens@fns.usda.gov					