

## **Attachment G – NASS Technical Comments**

**NASS Review of OMB Control Number 0584- NEW  
Review of Child Nutrition Data & Analysis for Program Management  
July 8, 2016**

The purpose and eight research objectives of this study are clearly explained in the “USDA\_Review of Child Nutrition Part A”.

The description in this paper and web interview scripts are very clear and follow Dillman’s principle. For Example:

1. Construction of respondent-friendly web questionnaires. These Web surveys include clear descriptions of computer actions at point of use, and also include the option to skip questions. By respondent-friendly, you may reduce the occurrence of sample survey errors through improvement of the motivational aspects of responding, as well as the technical user-interface between computer and respondent.
2. Use of lightly shaded color as background fields on which to write all questions provides an effective navigational guide to respondents. When shaded backgrounds fields are used, identification of all answer spaces in white helps to reduce non-response.
3. Placement of the instructions exactly where that information is needed and not at the beginning of the questionnaire; placement of special instructions inside of question numbers and not as freestanding entities, etc.

The survey methodology is correct:

1. A census will be used for State agencies and the District of Columbia because their MIS are unique and would not be properly represented through a sample.
2. A proportional stratified random sampling design will be used to select a nationally representative sample of SFAs. The sample will be representative in terms of the seven FNS regions and three size of SFA. Proportionate

stratification provides equal or better precision than a simple random sample of the same size, and gains in precision accrue to all survey measures.

3. The levels of precision is at a high standard (All public SFAs:  $\pm 5.0\%$  at the 95% level of confidence; and Sub-groups: between  $\pm 7.0\%$  and  $10.0\%$  at the 95% level of confidence).
4. The statistical analysis methods are appropriate.
  - a. Using descriptive statistics (such as mean, median, and standard deviation) for continuous variable (e.g., cost of developing an electric MIS);
  - b. Testing the difference between subgroups will employ Chi-square ( $\chi^2$ ) tests for categorical variables, and
  - c. Using one-way ANOVA tests for continuous variables.
5. The methods to adjust for non-respondent bias is correct. Propensity Modeling is an increasingly popular method for adjusting for nonresponse; that is, creating a logistic regression model that predicts the likelihood of response versus non-response. This model makes use of any and all available and relevant data. After finding out the final set of covariates for the non-response model (i.e., the variables that are strong predictors of non-response), the model is then applied to the responders, and a log probability of responding is generated for each case. The weighting adjustment factor is then calculated as the inverse of this probability. The adjusted sampling weight will be assigned to each responding SFA in data analyses to make the sample representative of all SFAs in the seven FNS regions.
6. The way to maximize response rates is thoughtful, such as effective recruitment, a detailed followed-up plan and an effective Web survey design.

## SUGGESTIONS

1. Consider adding the appropriate question numbers in Attachment B.12 – Web State Survey (Web Screenshots), so that they match the question numbers in Attachment B.10 – Paper State Survey.
2. Consider adding the question numbers in Attachment B.13 – Web School Food Authority Survey (Web Screenshots), so that they match the question numbers in Attachment B.11 – Paper School Food authority Survey.
3. Consider changing the format for choosing items and answers for question 7 in attachment B.11 (page 6 in paper version):
  - It may be better to use the format below, Figures 1 and 2, so respondents with multiple modules can select more than one choice.
4. The MIS could have two possible outcomes that is equal to 1 if the SFA uses an MIS for any of its functions and zero otherwise. It is correct to use logistic regression for data analysis when MIS is used as the dependent variable.
  - Please be aware of that the proportion odds assumption is a special case of the parallel lines assumption when LINK=LOGIT. If the score chi-square for testing the proportional odds assumption is highly significant, this indicates that the cumulative logit model might not adequately fit the data. If it is the case, then an alternative model to use may be the generalized logit model with the LINK=GLOGIT option.
  - When the data sets are too small or when the event occurs very infrequently or when some of the cells formed by the outcome and categorical predictor variable have no observations, the maximum likelihood method may not work or may not provide reliable estimates. Exact logistic regression provides a way to get out these difficulties. What it does is to enumerate the exact distributions of the parameters of interest, conditional on the remaining parameters.
  - In linear regression, the significance of a regression coefficient is assessed by computing a t test. In logistic regression, there are several different tests designed to assess the significance of an individual predictor, most notably the likelihood ratio test and the Wald statistic.

Figure 1

	<b>Applications Scanner</b>	<b>Online Application</b>	<b>Eligibility Determination</b>
<b>Initial Development and Implementation Costs</b>	<input type="checkbox"/> No direct cost to state school nutrition agency (upgrades are made by state IT staff)	<input type="checkbox"/> No direct cost to state school nutrition agency (upgrades are made by state IT staff)	<input type="checkbox"/> No direct cost to state school nutrition agency (upgrades are made by state IT staff)
	<input type="checkbox"/> Less than \$50,000	<input type="checkbox"/> Less than \$50,000	<input type="checkbox"/> Less than \$50,000
	<input type="checkbox"/> \$50,000 - \$99,000	<input type="checkbox"/> \$50,000 - \$99,000	<input type="checkbox"/> \$50,000 - \$99,000
	<input type="checkbox"/> \$100,000 - \$299,999	<input type="checkbox"/> \$100,000 - \$299,999	<input type="checkbox"/> \$100,000 - \$299,999
	<input type="checkbox"/> \$300,000 - \$499,999	<input type="checkbox"/> \$300,000 - \$499,999	<input type="checkbox"/> \$300,000 - \$499,999
	<input type="checkbox"/> \$500,000 - \$699,999	<input type="checkbox"/> \$500,000 - \$699,999	<input type="checkbox"/> \$500,000 - \$699,999
	<input type="checkbox"/> \$700,000 - \$999,999	<input type="checkbox"/> \$700,000 - \$999,999	<input type="checkbox"/> \$700,000 - \$999,999
	<input type="checkbox"/> \$1,000,000 - \$4,999,999	<input type="checkbox"/> \$1,000,000 - \$4,999,999	<input type="checkbox"/> \$1,000,000 - \$4,999,999
<input type="checkbox"/> \$5,000,000 or more	<input type="checkbox"/> \$5,000,000 or more	<input type="checkbox"/> \$5,000,000 or more	
<b>Upgrade Costs (if non-routine upgrade[s] occurred after initial implementation)</b>	<input type="checkbox"/> No upgrades purchased	<input type="checkbox"/> No upgrades purchased	<input type="checkbox"/> No upgrades purchased
	<input type="checkbox"/> No direct cost to SFA (upgrades are made by SFA IT staff)	<input type="checkbox"/> No direct cost to SFA (upgrades are made by SFA IT staff)	<input type="checkbox"/> No direct cost to SFA (upgrades are made by SFA IT staff)
	<input type="checkbox"/> Less than \$50,000	<input type="checkbox"/> Less than \$50,000	<input type="checkbox"/> Less than \$50,000
	<input type="checkbox"/> \$50,000 - \$99,000	<input type="checkbox"/> \$50,000 - \$99,000	<input type="checkbox"/> \$50,000 - \$99,000
	<input type="checkbox"/> \$100,000 - \$299,999	<input type="checkbox"/> \$100,000 - \$299,999	<input type="checkbox"/> \$100,000 - \$299,999
	<input type="checkbox"/> \$300,000 - \$499,999	<input type="checkbox"/> \$300,000 - \$499,999	<input type="checkbox"/> \$300,000 - \$499,999
	<input type="checkbox"/> \$500,000 - \$699,999	<input type="checkbox"/> \$500,000 - \$699,999	<input type="checkbox"/> \$500,000 - \$699,999
	<input type="checkbox"/> \$700,000 - \$999,999	<input type="checkbox"/> \$700,000 - \$999,999	<input type="checkbox"/> \$700,000 - \$999,999
	<input type="checkbox"/> \$1,000,000 - \$4,999,999	<input type="checkbox"/> \$1,000,000 - \$4,999,999	<input type="checkbox"/> \$1,000,000 - \$4,999,999
	<input type="checkbox"/> \$5,000,000 or more	<input type="checkbox"/> \$5,000,000 or more	<input type="checkbox"/> \$5,000,000 or more
<input type="checkbox"/> Don't know	<input type="checkbox"/> Don't know	<input type="checkbox"/> Don't know	

Figure 2

	<b>Applications Scanner</b>	<b>Online Application</b>	<b>Eligibility Determination</b>
<b>Initial Development and Implementation Costs</b>	<input type="checkbox"/> No direct cost to state school nutrition agency (upgrades are made by state IT staff)	<input type="checkbox"/> No direct cost to state school nutrition agency (upgrades are made by state IT staff)	<input type="checkbox"/> No direct cost to state school nutrition agency (upgrades are made by state IT staff)
	<input type="checkbox"/> Less than \$50,000	<input type="checkbox"/> Less than \$50,000	<input type="checkbox"/> Less than \$50,000
	<input type="checkbox"/> \$50,000 - \$99,000	<input type="checkbox"/> \$50,000 - \$99,000	<input type="checkbox"/> \$50,000 - \$99,000
	<input type="checkbox"/> \$100,000 - \$299,999	<input type="checkbox"/> \$100,000 - \$299,999	<input type="checkbox"/> \$100,000 - \$299,999
	<input type="checkbox"/> \$300,000 - \$499,999	<input type="checkbox"/> \$300,000 - \$499,999	<input type="checkbox"/> \$300,000 - \$499,999
	<input type="checkbox"/> \$500,000 - \$699,999	<input type="checkbox"/> \$500,000 - \$699,999	<input type="checkbox"/> \$500,000 - \$699,999
	<input type="checkbox"/> \$700,000 - \$999,999	<input type="checkbox"/> \$700,000 - \$999,999	<input type="checkbox"/> \$700,000 - \$999,999
	<input type="checkbox"/> \$1,000,000 - \$4,999,999	<input type="checkbox"/> \$1,000,000 - \$4,999,999	<input type="checkbox"/> \$1,000,000 - \$4,999,999
	<input type="checkbox"/> \$5,000,000 or more	<input type="checkbox"/> \$5,000,000 or more	<input type="checkbox"/> \$5,000,000 or more
<b>Upgrade Costs (if non-routine upgrade[s] occurred after initial implementation)</b>	<input type="checkbox"/> No upgrades purchased	<input type="checkbox"/> No upgrades purchased	<input type="checkbox"/> No upgrades purchased
	<input type="checkbox"/> No direct cost to SFA (upgrades are made by SFA IT staff)	<input type="checkbox"/> No direct cost to SFA (upgrades are made by SFA IT staff)	<input type="checkbox"/> No direct cost to SFA (upgrades are made by SFA IT staff)
	<input type="checkbox"/> Less than \$50,000	<input type="checkbox"/> Less than \$50,000	<input type="checkbox"/> Less than \$50,000
	<input type="checkbox"/> \$50,000 - \$99,000	<input type="checkbox"/> \$50,000 - \$99,000	<input type="checkbox"/> \$50,000 - \$99,000
	<input type="checkbox"/> \$100,000 - \$299,999	<input type="checkbox"/> \$100,000 - \$299,999	<input type="checkbox"/> \$100,000 - \$299,999
	<input type="checkbox"/> \$300,000 - \$499,999	<input type="checkbox"/> \$300,000 - \$499,999	<input type="checkbox"/> \$300,000 - \$499,999
	<input type="checkbox"/> \$500,000 - \$699,999	<input type="checkbox"/> \$500,000 - \$699,999	<input type="checkbox"/> \$500,000 - \$699,999
	<input type="checkbox"/> \$700,000 - \$999,999	<input type="checkbox"/> \$700,000 - \$999,999	<input type="checkbox"/> \$700,000 - \$999,999
	<input type="checkbox"/> \$1,000,000 - \$4,999,999	<input type="checkbox"/> \$1,000,000 - \$4,999,999	<input type="checkbox"/> \$1,000,000 - \$4,999,999
	<input type="checkbox"/> \$5,000,000 or more	<input type="checkbox"/> \$5,000,000 or more	<input type="checkbox"/> \$5,000,000 or more
<input type="checkbox"/> Don't know	<input type="checkbox"/> Don't know	<input type="checkbox"/> Don't know	