# APPENDIX C RECOMMENDATIONS OF THE TECHNICAL WORK GROUP FOR ADJUSTMENTS TO FIELD TEST PROCEDURES



# MATHEMATICA Policy Research, Inc.

# **MEMORANDUM**

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**TO:** Mark Denbaly, USDA Economic Research Service

FROM: Nancy Cole DATE: 7/19/2011

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**SUBJECT**: Recommended Modifications for FoodAPS Based on the

TWG Meeting

The FoodAPS Technical Work Group (TWG) meeting was held on July 15 to present findings from the field test and receive recommendations from academic and government experts. Below is a list of FoodAPS design changes recommended by the TWG.

- **1.** Adopt the high incentive level The field test included a low and high base incentive for the main respondent (\$50 and \$100). The high incentive yielded significantly greater response rates and is recommended for the full-scale survey.
- 2. **Include the "Pre-Test with interviewers" -** The field test included a "pre-test with interviewers" which is not budgeted for the full-scale survey. This pre-test was suggested by OMB to gather additional information about survey protocols in advance of the field test. Interviewers used the food reporting data collection instruments for one week prior to their training for the field test. For the field test, Mathematica provided "respondent training" to interviewers in a series of two-hour group training sessions. For the full-scale survey, we will produce a training video for distribution via multiple mediums. The hands-on experience that interviewers gained through the "pre-test" provided them with in-depth understanding of the protocols and it resulted in more efficient and effective training for the field test.
- 3. **Acquire Additional SNAP Data -** One of the findings from the pre-test is that the SNAP caseload is fluid, thus reducing the efficiency of the SNAP sampling frame. About half of SNAP households were obtained from the ABS frame, while non-SNAP cases were obtained from the SNAP frame. TWG members were not concerned with this frame "contamination" in terms of the impact on sampling weights. However they were concerned with the reduced efficiency of the sample over time. The SNAP frame (based on State caseload data) will age even more over the 6-month full-scale survey, compared with the field test. The TWG suggested that additional SNAP administrative data processed for sampling for the second half of the field period may improve the efficiency of field operations.
- **4. Research and acquire additional UPC data** The TWG was concerned with the low match rate of scanned UPCs with Gladson data because item descriptions from receipts are often impossible to link to food items. ERS indicated that they have research to share on this issue, and suggested that aggregation of UPCs may be appropriate for research purposes. However, non-matching UPCs pose added costs when entering price data from receipts. Alternative

- sources of UPC data, for example, from large retailers or private label manufacturers can improve data entry operations and data quality.
- **5. Replicate weights -** The TWG recommended the construction of replicate weights for inclusion in public access data files. Replicate weights can be used to account for the complex sampling design without revealing the identity of PSUs.
- **6.** Increase the number of Secondary Sampling Units (SSUs) from 4 to 8 The full-scale survey was designed to include 4 SSUs per PSU. At the first TWG meeting (January 2009), TWG members suggested an increase to 8 SSUs per PSU for the field test and this change was made in the first contract modification. Eight SSUs resulted in acceptable ICCs that were driven primarily by weighting and not by clustering. TWG members recommended adoption of 8 SSUs per PSU for the full-scale survey.
- **7. Measures to improve response rates** The field test achieved lower response rates than expected. Several TWG members were comfortable attributing the rates to the difficult survey areas and winter field conditions. However, OMB expressed concerns with the screener response rates and stated that we must implement a solution for the low screener response rate. The following measures are designed to improve response rates:
  - **a.** Add one additional day to the field interviewer training schedule One additional day will be used to provide in-depth training on screening, including locating, planning routes, filling time slots, logging attempts, and refusal conversion.
  - **b. Procedural changes to increase response rates** TWG members suggested that sources of nonresponse should be reduced through: (a) an incentive to gatekeepers of locked buildings and gated communities; (b) a redesigned advance mailing and subsequent mailings to convert refusals. The advance mailing redesign is warranted because the incentive should have had a greater impact at screening, and the lack of impact indicates ineffective communication of the incentive prior to screening.
  - c. Implement a web-based sample management system Mathematica recommended implementation of a web-based sample management system to better track the multiple attempts needed to make contact with the address-based sample, and to better track the multiple contacts with households throughout the data collection week. It is critical that we receive detailed and timely sampling reports to manage sample release and provide feedback to field staff on their productivity. TWG members generally concurred that better tracking of the screening effort is essential to achieving improved response rates.
- **8. Extend the field period** TWG members noted that the current field period, March 5 through September 3, will prove difficult because many households will be on vacation in August when we are trying to wrap up operations. The TWG suggested that we extend the field period by at least one month, and possibly into October or November because those months provide a more responsive environment. We would also thereby include a longer period when children are in school.
- **9. Revise household interviews to reduce burden** Item nonresponse on Household Interview #2 was a problem (employment, income, and on-food expenditures). TWG

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members suggested that ERS examine their research plans for these data and identify survey questions that may be eliminated. Three suggetsions for reducing burden and improving response are: (a) eliminate questions about utility expenditures and supplement the survey with averages by geographic area; and (b) design and produce an advance brochure to inform survey respondents of the content covered in HH2; (c) combine HH2 and HH3 so that the difficult income questions are part of an in-person survey.

- 10. Increase sample release to account for lower rates Mathematica presented findings from the field test that showed higher than expected eligibility rates from the ABS frame, but lower than expected screener completion rates from the SNAP frame. The higher eligibility rate is due largely to the fact that field test PSUs were selected to provide us with very low income areas, and are thus not representative of the average PSU for the full-scale survey. The lower than expected SNAP completion rate indicates that SNAP households are not as responsive as expected, perhaps due to the expansion and increased diversity of SNAP caseloads. Lower SNAP household cooperation must be taken into account in the full-scale survey with a larger release of sample from the SNAP frame.
- 11. **Provide additional analysis of field test data** –TWG members suggested that the field test data should be analyzed to provide answers

#### Incentives:

- Include incentive levels in non-response analysis
- Use regression analysis to obtain estimates of the marginal impact of the high incentive
- Examine the impact of incentives as measured by the total incentive paid to household

## Sampling

- Examine whether the accuracy of the SNAP frame changed over time.
- Determine whether the counties were similar in terms of the inaccuracy of the frame.
- Determine whether the SNAP frame yielded a disproportionate percent of very lowincome households.
- Examine the incremental cost of using the SNAP vs. ABS frame for an additional SNAP households; and the relative cost of obtaining very low income households from the SNAP vs. ABS frame
- Conduct analysis of the efficiency/cost tradeoff of oversampling households adjacent to SNAP households

## Quality of food acquisition data

- Examine the percent of acquisitions by day of data collection week to see if there is survey fatigue throughout the week
- Examine food acquisitions separately for single person and multi-person households
- Examine SNAP participants' food acquisitions relative to their benefits distribution
- Examine acquisitions in relation to frequency of pay checks
- Examine characteristics associated with response through different reporting channels (e.g., Daily List, red/blue page, scanner, receipts)
- Assess whether misclassification of income at screener has an impact on inferences with regard to food acquisition behavior
- Compare reported food acquisitions with HH1 response to questions about "How often do you eat dinner out"
- Examine the disparity between booklets and FRS by timing of phone calls throughout the week to determine if survey fatigue played a role in reporting accuracy