Title: Workshop on Survey Nonresponse

Date/Time: Monday, April 3, 2017, 12:30 PM – 4:00 PM (ET)

Speakers: Andy Peytchev (University of Michigan), Philip Brenner (University of Massachusetts, Boston), Philip Kott (RTI)

Discussant: John Eltinge, Census Bureau

Chair: Renee Miller, U.S. Energy Information Administration (EIA)

Sponsor: WSS Methodology Section

Location: Bureau of Labor Statistics, Janet Norwood Conference Center, Rooms 9 and 10

BLS is located at 2 Massachusetts Avenue, NE. Use the Red Line to Union Station. Parking in the area of BLS is available at Union Station. For parking information see http://www.unionstationdc.com/parking. No validation is available from BLS for reduced parking rates.

Registration: You need to register (free) by noon at least two days in advance of the workshop to be placed on the attendance list at the Bureau of Labor Statistics. The registration link is https://www.eventbrite.com/e/wss-survey-nonresponse-workshop-tickets-32050700508

Please bring a photo ID to the workshop. Your name will be on the workshop list at the guard desk by the visitor's entrance, if you registered for in-person attendance. WebEx information will be sent to on-line attendees by the afternoon of March 31.

Questions: Contact Pam McGovern (pam.mcgovern@nass.usda.gov) or Wendy Martinez (martinez.wendy@bls.gov).

Agenda:

12:30 to 12:40	Welcome and Introductions
12:40 to 1:30	Andy Peytchev, Reduction of Survey Length through Split Questionnaire Design, and Implications for Nonresponse and Measurement Error
1:30 to 2:20	Philip Brenner, Does Nonresponse Contribute to Bias in Survey Estimates of Social Determinants of Health?
2:20 to 2:30	Break
2:30 to 3:20	Philip Kott, An Example of Using Calibration Weighting When Unit Nonresponse is a Function of Variables Collected on the Survey
3:20 to 4:00	Discussant – John Eltinge, Census Bureau, followed by floor discussion

Abstracts:

Reduction of Survey Length through Split Questionnaire Design, and Implications for Nonresponse and Measurement Error

Andy Peytchev, University of Michigan

There is evidence showing a positive correlation between survey length and survey nonresponse, threatening the representativeness of the survey estimates. There is also limited evidence that measurement error increases as respondents answer more questions in the survey. This study experimentally evaluates the impact of survey length on nonresponse and measurement error, and the ability to improve estimates through a split questionnaire design in which respondents are asked only a subset of the questions and missing data are multiply-imputed, yielding complete datasets. We are currently in data collection and this presentation will focus on the motivation and study design.

Does Nonresponse Contribute to Bias in Survey Estimates of Social Determinants of Health?

Philip Brenner, University of Massachusetts, Boston

An ABS sample was drawn from five purposively selected Boston neighborhoods and suburbs based on their diversity of demographic and household characteristics. Half of this sample was initially contacted by mail and asked to complete an IVR survey. The remaining sample was divided between two modes. Households on the frame able to be matched to a telephone number were contacted by mail and told to expect a telephone interviewer to call. Those without a telephone number match on the frame were contacted my mail and told to expect an interviewer visit. Samples of nonresponding households from the IVR and telephone modes were then recontacted by mail and told to expect an interviewer visit. Respondents completed a 20-minute interview including a series of questions taken from a number of federally-administered or funded studies. Estimates of numerous social determinants of health from first-round respondents are compared with those from follow-up interviews of nonrespondents, accounting for mode and other design elements.

An Example of Using Calibration Weighting When Unit Nonresponse is a Function of Variables Collected on the Survey

Phillip S. Kott, RTI International

When adjusting for unit nonresponse in a survey, it is common to assume that the response/nonresponse mechanism is a function of variables known either for the entire sample before unit response or at the aggregate level for the frame or population. Often, however, some of the variables governing the response/nonresponse mechanism can only be proxied by variables on the frame while they are measured (more) accurately on the survey itself. For example, an address-based sampling frame may contain area-level estimates for the median annual income and the fraction home ownership in a Census block group, while a household's annual income category and ownership status are reported on the survey itself for the housing units responding to the survey. A relatively new calibration-weighting technique (WTADJX in SUDAAN) allows a statistician to calibrate the sample using proxy variables while assuming the response/nonresponse mechanism is a function of the analogous survey variables. We will demonstrate how this can be done with data from the Residential Energy Consumption Survey National Pilot, a nationally representative web-and-mail survey of U.S. households sponsored by the U.S. Energy Information Administration.