

*Traditional concepts of family and households, as well as traditional concepts of economic units, are rapidly evolving.*

- What methods can improve universe frame coverage of persons with intermittent ties with households, for entrepreneurial activities leading to new economic units in economic unit frames?
- What data auxiliary to households and covered persons might be used to estimate the propensity to be covered, as a targeting tool for alternative ways of assembling universe frames?
- Can theories be developed to guide research decisions for sampling unit definitions (derived from frames) and measurement units (e.g., enterprises vs. establishments, households vs. persons) to improve overall designs?
- How can estimates of immigration (both documented and undocumented) be improved?
- Is the concept of an "establishment" still relevant given changing business models and increasingly heterogeneous economic activity?

*Participation rates in sample surveys of households and economic units are declining.*

- What theories can inform the linkage between non response rates and non response errors?
- What data might be collected or linked to traditional survey data to improve the post survey adjustment for non response to reduce non response errors?
- What mechanisms underlie the finding that offering choices of alternative modes of data collection depress overall participation? What antidotes might be created to reduce that effect?
- How can administrative records on persons, households, and economic units be used in conjunction with traditional sample surveys to reduce the non response error of traditional surveys?

*The complexity of economic units is increasing, with multiple establishments, loose alliances, multiple lines of business, virtual spatial attributes, and highly dynamic structures.*

- How can administrative records be used to improve the tailoring of measurement techniques to diverse types of economic units?
- How can changes in key attributes of economic units be tracked over time to improve the collection of data from the units?
- In longitudinal measurement, how can deaths, mergers, and acquisitions of economic units be forecasted to permit real-time measurement of those phenomena?
- How can multiple modes of data collection facilitate measurement of complex economic units?
- How can we more accurately classify heterogeneous economic activity within business enterprises, individual locations, or aggregates of locations?

*Editing and imputation techniques commonly used in sample surveys currently have few evaluative frameworks that guide decisions on what approaches maximally reduce bias in final estimates.*

- What logical or statistical approaches might offer guidance to the trade off decision of how much editing is optimal for diverse purposes?
- What editing algorithms might be developed to reduce the post-estimation review processes common in statistical estimation?
- What computer-assistance in editing might be developed to reduce the use of subject matter expertise in the review of data from longitudinal and other surveys?
- How can empirical diagnostic tools for evaluating auto-coding algorithms and large scale imputation approaches be improved?

*Administrative records, when combined with survey data, may offer radically increased efficiencies in household and business surveys.*

- What mathematical and statistical frameworks might be used to improve inference from probabilistically linked data sets?
- How can the social science community effectively monitor public attitudes toward administrative record usage?
- What conceptual frameworks might be developed to measure the error properties of linked survey and administrative record data?
- What imputation techniques can be created to deal with item missing data in linked files with

- What imputation techniques can be created to deal with item missing data in linked files with variables common to multiple data sets?

*While public use data sets have greatly benefited quantitative research in the social sciences, the data are increasing threatened by risk of inadvertent reidentification of sample members.*

- What disclosure avoidance techniques can be developed to preserve pledges of confidentiality and maximize access to data?
- Can disclosure risk measurements be invented to guide practical decisions of data collectors regarding the release of data?
- How can synthetic data be produced that mimic the statistical properties of actual data but protect the identity of respondents?
- What effective analytic software approaches might be used to permit analysis of data without direct access to the data and protect pledges of confidentiality?

*Small domain estimation using survey data offers the promise of greatly expanded useful estimates from sample surveys.*

- How can model diagnostics be improved on small domain estimators?
- What small domain estimation approaches can exploit the longitudinal nature of surveys?
- What alternative approaches offer improved simultaneous estimation of small domains and higher level aggregates?
- What practical estimators of total error of small domain estimates might be developed for public dissemination?

*Cognitive and social psychological insights into respondent self-reports in social science research have reduced measurement errors.*

- What questionnaire development tools are superior for detecting different mechanisms of response error?
- What diagnostic tools in instrument development can be enhanced through computer assistance?
- How do we identify optimal measurement approaches for a single construct using individual modes of data collection?
- What diagnostics can be developed to isolate translation errors as a distinct component of measurement error in multi-language measurement?

*The use of statistical models for large-scale descriptive statistics has advanced in important ways.*

- How can diagnostic tools be advanced to measure potential model-specification errors within a total error framework for the estimates?
- What diagnostic tools might be developed using model-based approaches to identify errors in tabular data?
- What models might be useful to estimate sampling error covariances and auto covariances in longitudinal estimates?
- What statistical models might be useful to forecast final estimates based on preliminary measurements of a sample?

*New approaches to disseminating census data to users are emerging, and new requirements for confidentiality protection will be required.*

- What metadata approaches will be most useful in documenting census data, and how can existing metadata systems be improved?
- How can census data dissemination, including both tabular and micro data, be improved?
- What are the most significant risks in disseminating census data to user communities, and how can those risks be diminished?
- What approaches can be developed that will allow the user community to safely and securely access census and other administrative data that have been merged across multiple agencies or sources?