



*Last Revised: March 31, 2011 5:32 PM*

- Dates:** Tuesday March 22 through Thursday March 24, 2011
- Place:** Bureau of Labor Statistics Conference Center, Postal Square Building,  
2 Massachusetts Ave., Washington, D.C. 20212
- Sponsors:** The Bureau of Labor Statistics and the U.S. Census Bureau

## **Background**

The Bureau of Labor Statistics and the Census Bureau will hold the 15<sup>th</sup> Annual Federal CASIC Workshops in 2011. This series of annual meetings was originally called the Federal CAPI Workshops but its focus was expanded in 1997 to include all forms of computer assisted survey information collection (CASIC).

Attendance is open to representatives of Federal agencies and Federal contractors who use computer assisted methods of survey data collection, capture, and processing. Agencies and agency contractors who plan to use CASIC methods or that provide software support to Federal CASIC surveys also are welcome to attend. There is no fee for attendance but advance registration is required for admission to the BLS Conference Center.

## **Fed CASIC 2011 Coordination and Registration**

These workshops are being planned and coordinated by Jean Fox (BLS) and Cheryl Landman (Census). The primary means of coordination will be through e-mail messages and a web site.

Registration is open until March 20, 2011.

# Conference Program

Opening Day - Tuesday, March 22, 2011

## Plenary Sessions (Tuesday 9:00 am to 12:00 noon)

The conference will begin with two 80-minute, consecutive, plenary sessions.

### 1. Opening Keynote Speaker

#### **Remaining Relevant Through Rethinking Survey Design**

**Dr. Robert M. Groves**

Director, U.S. Census Bureau

Survey designs perform well when they mirror the needs, interests, and abilities of the populations they study. Many developed countries are experiencing relatively rapid social shifts from growth of new subcultures due to generational change and immigration. Traditional survey designs that fix all relevant sample and data collection parameters prior to the initiation of the design are increasingly threatened by the uncertainties arising from these rapid changes.

New technologies may offer some partial solution to these uncertainties. However, intelligent application of the technologies must tailor their use to the diverse subcultures in the study population. This requires adaptive survey designs, which alter their key parameters as a function of intermediate information gathered during data collection.

The presentation uses the observations above to motivate a vision of the necessary organization infrastructure required to use effectively such designs.

### 2. Plenary Panel

#### **Using Technology to Improve Productivity, Increase Efficiency, and Lower Costs**

The FedCASIC community has a long history of introducing technology-driven innovations into the survey process. At times the discussion of these innovations has focused on their positive impact on data quality. This year's plenary panel, coming at a time of soaring federal deficits and agency belt-tightening, will turn attention to the productivity component of technology and innovation. The panelists, representing both government and contractor perspectives, will discuss how their organizations are using technology to take costs out of the survey process.

**Panelists:** Tim Gabel, RTI, Moderator  
Linda Bandeh, Mathematica  
Lew Berman, National Center for Health Statistics  
Brad Edwards, Westat  
Milana Karaganis, Statistics Canada  
Barbara LoPresti, US Census Bureau  
Jack Nealon, National Agricultural Statistics Service

## Concurrent Sessions (Tuesday 1:30-4:30 pm)

### 1. Recent Innovations: Cloud Computing

This session has replaced the original Round Robin Organizational Reports. We decided to focus on what specific technological innovation that organizations are interested in pursuing or have started to use.

#### Speaker

For the first part of the session (1:30-2:45), we have the pleasure of a distinguished presenter:

#### **Lewis Shepherd**

Chief Technology Officer

Microsoft Institute of Advanced Technology in Governments

This talk will examine the comparative roles of private industry and the federal government in driving scientific investment in cloud computing. The presentation will cover cloud computing's influence on engineering and business, and the radical new class of advanced technologies enabling large-data research and computing, on platforms of real-time and archival government and survey data.

Lewis Shepherd is Director and General Manager of Microsoft's Institute for Advanced Technology in Governments. He has degrees from Stanford University, the University of Virginia, and the Université Libre de Bruxelles (Belgium). He spent two decades working in Silicon Valley, but after the September 11 attacks he focused on technologies to support the Intelligence Community. In 2003 Lewis joined the government as Senior Technology Officer at the Defense Intelligence Agency, where he was Chief of Requirements and Research. After over four years at DIA, he joined Microsoft in 2007.

#### Panel

The second half of the afternoon session (3:15-4:30) will include panelists from government, not for profit and private survey organizations who are using or exploring the use of cloud computing.

**Moderator:** Karen Davis, VP, Research Computing Division, RTI

**Panelists:** Josh Seeger, VP Technology, NORC  
Greg Binzer, Vice President, Westat  
Brian McGrath, Chief Information Officer, Census Bureau  
Ron Bianchi, Director of ERS Information Services Division

Coordinator:

Cheryl Landman <[cheryl.r.landman@census.gov](mailto:cheryl.r.landman@census.gov)>

## **2. Software and Application Demonstrations**

This year we will continue to offer demonstrations of CASIC instruments and software in a mini exhibit hall setting, where attendees can move among exhibitors throughout the demonstration period.

Coordinator:

Louis Harrell <[Harrell.Louis@bls.gov](mailto:Harrell.Louis@bls.gov)>

### **Cloud Computing and Blaise**

Lon Hofman, Statistics Netherlands

Jim O'Reilly and Richard Frey, Westat

Cloud computing capabilities can be used to handle business rules and data storage. This demonstration of Blaise 5 CAI will show a CAI application hosted in the cloud using Microsoft Azure.

### **Statistics Canada – Electronic File Transfer Service**

Chris Leaman, Statistics Canada

The Electronic File Transfer Service enables external contacts and Statistics Canada divisions to exchange electronic files bi-directionally in a secure manner, using the Internet. The service includes a number of measures to meet the department's information management, security and communication needs and follows industry and government recognized standards. The service provides three common interfaces to exchange files in a simplified and easy to use manner requiring little, or no technical expertise.

### **The use of iPads in Scientific Research**

David Proestos and Judd Watts, DatStat

DatStat will demonstrate the utilization of Apple iPads in survey research and also its latest version of Illume Version 5.0 and will include advances in multi-control table building, complex looping, SMS communications as part of a workflow and panel/participant management.

### **iPad Survey Administration**

Pam Hird, NASS.

### **Demonstration of the CARI Interactive Data Access System**

Carl Fisher, RTI International

## Technical Workshop Session Topics

March 23 and 24, 2011

The remaining sessions on March 23 and 24 will focus on CASIC topic areas in a workshop format. These workshops will consist of moderated half-day discussions led by experts in those areas. They are designed to maximize discussion among the presenters and with the audience.

### Wednesday Morning, March 23, 2011

#### 1. Web-Based Surveys

Web-based surveys continue to increase in popularity and for certain respondent populations are now the preferred mode. Given their popularity, we are increasingly interested in many aspects of web surveys. In this session, we will explore technical developments in web surveys, scalability, usability, web survey design approaches including the use of visual analog and graphical ratings scales, considerations for choosing web survey software, and methods to increase web response rates. Audience experiences and input will be strongly encouraged.

Target audience: Survey managers and researchers

Coordinators:

Mark Brinkley <[MBrinkley@Mathematica-Mpr.com](mailto:MBrinkley@Mathematica-Mpr.com)>

Kirsten Barrett <[KBarrett@Mathematica-Mpr.com](mailto:KBarrett@Mathematica-Mpr.com)>

Timothy Gilbert <[timothy.r.gilbert@census.gov](mailto:timothy.r.gilbert@census.gov)>

#### Reusable Web Architecture

John White, Lockheed Martin

Scalability of Web Based Surveys provides a unique challenge. From the modeling of peak loads, to minimizing points of contention within the design, through the test approach - all pose a novel challenge. Lockheed Martin shares its approach to addressing these challenges at the extreme limits of the problem domain - when executing a national census.

#### Developing an Internet Response Mode for the American Community Survey (ACS)

Mary C. Davis, U.S. Census Bureau

In 2000, the Census Bureau tested an Internet response option for the ACS. Since 2000, technological advances have been instrumental in moving towards a paperless society. This talk will focus on the development of the Internet instrument, including the guiding principles behind the design as well as modifications resulting from expert review and usability testing.

#### Top Facts about Our Online Respondents and How We Plan to Use That Knowledge

Chris Gottschall, USDA-National Agricultural Statistics Service

The 2007 United States Census of Agriculture was the first to offer online reporting. We examined the traits of those who responded via the web. Based on this knowledge, several experiments were then designed to target likely web responders during pretesting of the 2012 Census of Agriculture

## **A Comparison of Visual Analog and Graphic Rating Scales in Web-based Surveys**

Randall K. Thomas, ICF International

Although many web-based studies have investigated scale types using radio buttons and numeric box entry, very few studies have compared them with the use of visual scales like a Visual Analog Scale (VAS) or Graphic Rating Scale (GRS). We examined the influence of topic, element differentiation, scale type, and item banking on respondent reactions (difficulty, interest, accuracy) along with measures of criteria

## **Common Usability Issues with Web Surveys: Results from Usability Testing of the American Community Survey and Census Quality Survey Online Instruments**

Kathleen T. Ashenfelter, U.S. Census Bureau

Iterative usability testing of the American Community Survey (ACS) and Census Quality Survey took place in 2010. Usability findings, such as problems with auto-tabling features, trouble logging in, and uncertainty as to which people in the household should be listed will be discussed.

## **Web Survey Software: Choosing the Appropriate Product**

Mark A. Brinkley and Kirsten Barrett, Mathematica Policy Research, Inc.

Mathematica currently supports three different web survey software products. This presentation will briefly examine the three products. The bulk of the presentation will focus on considerations (cost, features, etc.) for deciding which packages to use and the resulting impact of using a particular software package.

## **2. Using Paradata to Monitor Survey Quality**

CASIC systems make it possible to collect a great deal of paradata (data about survey processes), and agencies and organizations have been increasingly using such data to monitor survey quality and to implement responsive survey designs. In many organizations and agencies, this has led to development of enhancements to systems for collection of paradata and tools for analyzing them, including dashboards that management and project staff can review daily to highlight potential aspects of data collection (e.g., interviewer effort, productivity of sample, and key survey statistics) that may need to be addressed in quality assurance and quality control, and that may suggest survey design changes at key points in data collection. This session will have presentations from three organizations using paradata to monitor survey processes, and a short presentation on user-centered paradata dashboard design, followed by discussion with audience members.

Coordinators:

Sue Ellen Hansen <[SEHansen@isr.umich.edu](mailto:SEHansen@isr.umich.edu)>

Chris Stringer <[M.Christopher.Stringer@census.gov](mailto:M.Christopher.Stringer@census.gov)>

## **Responsive Design as Used to Manage Collection Operations**

Cynthia Campeau, Statistics Canada

With all of the challenges facing collection, we are always looking to improve efficiency. Responsive Collection Design (RCD) constantly assesses data collection processes using

paradata information and adapts data collection strategies to make the most efficient use of remaining resources. This presentation will outline the operational perspective of using RCD.

### **Developing Standardized Paradata and Dashboards for Use across Multiple Surveys**

Susan Mitchell, RTI

Andy Peytchev, Lisa Carley-Baxter, and Orin Day, RTI International.

This presentation describes the work RTI International is undertaking to develop a set of paradata that are systematically collected across surveys and presented in a standard “dashboard” format. We discuss the challenges in deciding which paradata to collect, the design of the dashboards, the selection of software, and the education of end users.

### **Simple Tools for Determining Best Contact Windows for Different Survey Populations and Implementing an Optimal Contact Window Responsive Design Plan during Data Collection**

Frost Hubbard, Jennifer Arrieta, Haley Gu, and Heidi Guyer, SRC-Michigan

Using paradata from the 2010 Health and Retirement Study, we developed three charts to determine optimal calls to first contact windows for respondents above the age of 45 and developed a system to help implement an optimal contact window responsive design plan that ensures interviewers are making effective contact attempts.

### **Comments on User-Centered Dashboard Design**

Sue Ellen Hansen and Benjamin Duffey, University of Michigan

## **3. Audio Recording within Survey Instruments**

Digital audio recording, sometimes known as CARI (computer audio recorded interviewing), can be implemented in survey questionnaires to provide a snapshot of the production interview environment, but other uses for these audio files are being explored. This session will focus on various uses of the recordings produced during an interview. Potential topics include systems for audio case management and review, experience with audio or CARI in production and other topics related to the use of digital audio files created during an interview.

Target Audience: Technical staff for survey development, survey designers and methodologists, field operations managers, call center managers, interview quality monitors

Coordinator:

Barbara Bibb <[bibb@rti.org](mailto:bibb@rti.org)>

### **Using CARI as a Coaching Tool across Survey Modes**

Carl Fisher, Erica Saleska, RTI and Sherry Thorpe, US Census Bureau

CARI methodology has recently been extended beyond field surveys to telephone and mixed mode surveys. In this presentation, we will discuss the value of CARI recordings for recognizing and improving interviewer performance. We will focus on our experience in coaching telephone and field staff and on planning for the future.

### **Monitoring CAPI Performance**

Vinay Kumar, Statistics Canada

Monitoring computer assisted personal interviewing (CAPI) performance has always been a challenge for surveys organizations. This presentation will discuss the technical challenges and lessons learned by Statistics Canada during the implementation of its CAPI monitoring project. It will also provide a brief update on the CAPI monitoring program itself.

### **CARI: The Places We Can Go. . .**

Wendy Hicks, Brad Edwards, Rick Dulaney, Westat, Inc

Most often, CARI is used as a tool for interview validation, and to provide direct, specific information about interviewer performance. This paper explores other uses of CARI: estimating the magnitude of measurement error in survey estimates; collecting data independent of CAPI software; and training data collectors.

### **Using CARI for Behavior Coding to Evaluate Questionnaires**

Joanne Pascale, US Census Bureau

In behavior coding, recordings of field interviews are used to analyze the interviewer-responder interaction to evaluate questionnaire design, interviewer training and other data collection features. CARI makes the mechanical process of recording much less burdensome and intrusive and offers a wealth of options regarding sampling among the recordings for analysis.

### **Evaluating Skype for Telephone Interviewing and Recording**

Charles Loftis, Hilary Zelko, RTI

In this presentation we will discuss the advantages and disadvantages of using Skype, a VOIP provider to more than 560 million users worldwide, as a low-cost and secure (AES encryption) alternative for telephone interviewing and recording

## **4. Testing CAI Systems**

Testing CAI systems is a very critical and complicated process in each CASIC organization. In these sessions, we will discuss the strategies, methodologies, technical challenges to design and build a process to test CAI systems. The presentations will cover not only CAI instruments' testing but also other CASIC system testing such as Web surveys testing, sample management system testing, etc.

Coordinator:

Gina Cheung <[QianYang@umich.edu](mailto:QianYang@umich.edu)>

### **Blaise NG Testing**

Mark M Pierzchala, MMP Survey Services, LLC

The Blaise data collection system is being rewritten to bring it into the .NET world. This presentation will discuss coordinating Blaise institutes and an already large installed base of instruments to test the emerging Blaise system. A large test suite of instruments provides the basis of this testing.



## **Testing Current Population Survey Instruments**

Pam Noble, U.S. Census Bureau

With a basic survey running every month and supplement surveys running almost every month, one of the vital responsibilities of the Current Population Surveys Branch at the Census Bureau is instrument testing. This presentation covers our testing strategies, stakeholders in the testing process, and unique challenges we face.

## **Computer Assisted Interview Testing Tool (CTT) - How the Tool has Improved the Testing Process**

Rebecca Gatward, Survey Research Center, University of Michigan

The CAI Testing Tool (CTT) is an application developed by the University of Michigan's Survey Research Center to manage and facilitate efficient testing of Blaise questionnaires. CTT was designed to improve the quality of CAI instruments through standardized testing procedures, reduce the cost of testing, and increase access to information about the CAI development process through preset and ad hoc reports.

## **Testing Strategies for CAI and CAI Related Applications**

Sandhya Bikmal, Anwar Mohammed and Sridevi Sattaluri, RTI

CAI is increasingly being integrated with other systems to enable packaging and processing of data collected and provide output in a user friendly format or input for further processing. We will use examples to discuss Integration, Usability and Section 508 compliance testing strategies for CAI and CAI related applications.

## **Collection Application Testing at Statistics Canada**

Janet Lefebvre, Statistics Canada

The Collection Systems and Infrastructure Division of Statistics Canada develop over 200 collection applications per year. A dedicated Quality Assurance section provides centralized testing services in support of its development activities, and numerous partners across the Agency conduct additional specialized testing. The presentation will give an overview of the testing processes for CAI and web-based collection applications and describe current challenges and future directions.

## **Stress Testing Prior to Production Deployment**

Bryan Davis, Westat

This presentation discusses experience and lessons learned in stress testing, the importance of stress testing your web survey application, basic approaches to performing stress testing and software tools that may be used to test your application to ensure that your performance objectives are met.

## Wednesday Afternoon, March 23, 2011

### 5. Multimode Data Collection

Multimode surveys have become a mainstream option in federal data collection. The FedCASIC session on Multimode Data Collection will continue to focus on real-world applications, experiences, lessons learned, and possibilities for the future. However, this session will concentrate on how the notion of multimode surveys has changed over the past several years. For example the relative proportion of modes used by survey respondent may shift over time as respondents use web modes more, as individuals have more than one email address where they can possibly be reached, as cell phones continue to proliferate, and as address-based sampling gains acceptance. The ways organizations try to reach and convince respondents to participate in this changing climate is also of interest

Coordinators:

Brad Edwards <[BradEdwards@westat.com](mailto:BradEdwards@westat.com)>

Mark Pierzchala <[MMP@MMPSurveyServices.com](mailto:MMP@MMPSurveyServices.com)>

#### **Using Blaise IS to Reduce Survey Costs on a Panel Study of New Businesses**

David DesRoches, Mathematica Policy Research, Inc.

Mathematica conducts the Kauffman Firm Survey, using Blaise to investigate how new businesses are funded. Through Blaise most data are collected through the web, reducing costs and respondent burden. This paper examines the KFS panel, benefits of converting to Blaise IS, and the cost benefits of increasing web data collection.

#### **Measuring the Sexual Identity of Survey Respondents in the CAPI and CATI Modes**

Tom Anderson, UK Office for National Statistics

The ONS Integrated Household Survey contains questions asked in CAPI and CATI modes. In 2009, ONS included a question measuring the sexual identity of respondents. The first estimates in 2010 generated significant media coverage. The presentation will outline findings from the question development process and analysis of the resulting data.

#### **Statistics Canada Experiences with Business Surveys in E-Questionnaire / Paper Collection**

Milana Karanganis, Statistics Canada

Statistics Canada has been offering e-questionnaire collection mode to surveys for several years. This presentation will review our experiences with business surveys that have been in multi-mode collection for several cycles. It will look into how multi-mode collection strategy and approach have evolved over the years and discuss future plans.

#### **Piggyback Surveys with Mixed Mode Designs**

Brad Edwards and Laura Branden, Westat

Some survey samples are derived from other surveys (e.g., parents of students are identified from a survey of schools). The two linked surveys often use different modes (e.g., CAPI for

one, CATI for the other). This paper discusses some unique design and operational challenges associated with these “piggyback” surveys.

### **Modal Unit-Response Rates and Strategy: A Study of Historical Response Rate Trends by Mode of Collection for Multiple Surveys**

Michael T. Zabelsky, U.S. Census Bureau

In survey processing, often times research and operations are viewed as two competing schools of thought. This study intends to bridge one aspect of the research and operations gap, using historical, modal, statistical data analysis and response rate data visualization to make recommendations that impact future operations decisions and objectives.

### **Response Behaviour in Mixed-Mode Surveys**

Fannie Cobben, Statistics Netherlands

Statistics Netherlands is re-designing its household surveys into mixed-mode surveys. I will present an analysis of the response behaviour in the re-designed Labour Force Survey and Health Survey. To see how the new design influences response behaviour, the composition of the response in the different modes is compared using R-indicators.

## **6. Survey Uses of Metadata**

Metadata are data that describe other data or processes. For users of data, the metadata are the record of how those data were produced and what the data mean. Metadata are analogous to the work you had to show when solving a math problem in high school. In order to understand the data a survey produces, you must understand the steps that were taken to conduct that survey.

Survey work provides many opportunities to use metadata fruitfully, throughout the survey life-cycle. For instance, data dissemination, data harmonization, and survey documentation all use or produce metadata. This session will explore these and related issues.

Target audience: Those who want a better understanding of the benefits of the uses of metadata in statistical survey production and data usage

Coordinator:

Dan Gillman <[Gillman.Daniel@bls.gov](mailto:Gillman.Daniel@bls.gov)>

### **A Wiki Platform for Metadata: Statipedia**

Peter Meyer, BLS

We will show Statipedia, a wiki platform for internal U.S. government statistical work. It has definitions and methodological information. It is an easy workspace for creating data definitions and sharing them across agencies. Wiki pages are categorized. Access by computer programs and semantic extensions are potentially possible.

## **Quality Metadata and the Survey Lifecycle Process**

Tim Mulcahy, NORC

There are myriad data access modalities for public- and restricted-use files; however, the analytic quality of these datasets depends greatly on the availability and quality of metadata. This discussion will focus on the vital role that well documented metadata play in the survey life cycle process.

## **Title, TBD**

Marilyn Seastrom, NCES

## **Edit Metadata Structures**

Mohammed Rahman, BLS

The nature of data production work is effectively applying edits on data. However, the applied editing methods are not apparent to users of the data. Embedding the metadata of operations and methods as part of data documentation preserves a replicable record of what was done. This talk describes a proposal to achieve this for the CE survey.

## **7. Management Challenges in CAI Survey Organizations**

This session will provide a venue for those grappling with management and administrative challenges in today's CAI environment to share their knowledge and learn from others. A panel of 4-5 management experts from government and industry will discuss the following:

- Challenges of a Teleworking Workforce
- Challenges of a Multi-Generational Workforce
- Challenges of a Stable Workforce

Audience participation in the form of questions and shared experiences will be encouraged. Session attendees will hear about the techniques used in different organizations to address key management issues, participate in a discussion of these issues, and have an opportunity to ask the panelists about effective approaches to common situations.

Target audience: Survey managers, but anyone might benefit

Coordinators:

Karen Davis <[kdavis@rti.org](mailto:kdavis@rti.org)>

Jane Shepherd <[JaneShepherd@westat.com](mailto:JaneShepherd@westat.com)>

Anne K. Stratton <[AStratton@cdc.gov](mailto:AStratton@cdc.gov)>

## **8. Walking the Tightrope: Balancing Security Requirements with Operational Efficiency Mandates**

As organizations seek to drive down the cost of information technology by leveraging so-called “shared services”, the traditional fortress models and methods of securing information are no longer adequate.

This session will involve presentations and open discussion on balancing security requirements (NIST 800-53; ISO 27001; Protecting sensitive personal information; Preventing

data leaks) with operational efficiency mandates (Cloud technologies; Infrastructure/Platform/Software-As-A-Service; Consolidation initiatives; Shared services).

Topics may include:

- Security issues or challenges with use of “cloud” services
- How to maintain security control of data outside of organizational boundaries, including across international boundaries
- The different protection approaches to Infrastructure-, Platform-, and Software-As-A-Service
- What security advantages can be achieved moving to a distributed data/service environment?

Target Audience: Anyone interested in knowing more about these technology trends and how they might be safely employed for information collection activities. While some material will be technical in nature, presentation as a whole will be relatable for any audience.

Coordinators:

Paul Blahusch <[Blahusch.Paul@bls.gov](mailto:Blahusch.Paul@bls.gov)>

Bill Connett <[BConnett@isr.umich.edu](mailto:BConnett@isr.umich.edu)>

### **Reducing Security Risks within RTI International Call Center Services (RTI-CCS)**

Jennifer Durbin & McKinlay Jeannis, RTI International

Presentation will illustrate the required and self imposed security measures RTI-CCS has implemented to its call center’s facility, protocols, and systems; and demonstrate the challenges that are faced with security enhancements.

### **How to Maintain Security Control of Data Outside of Organizational Boundaries**

Diana Salazar, NORC

### **Securing a Large Project with Private Cloud Computing**

Taylor Cooper, Westat

This presentation will describe a private cloud implementation in use on one of Westat’s large projects, will highlight benefits of the private cloud architecture over a traditional ‘fortress’ implementation, and how this private cloud architecture addresses security and audit challenges.

### **Walking the Tightrope: Balancing Security Requirements with Operational Efficiency Mandates**

Paul Blahusch, US Bureau of Labor Statistics

As organizations seek to drive down the cost of information technology by leveraging so-called “shared services”, the traditional fortress models and methods of securing information are no longer adequate.

## Thursday Morning, March 24, 2011

### 9. New Technologies for Surveys

This session will present new and innovative technologies, fully implemented or in the development phase, that have the potential to improve data collection, management, or quality. Topics may include cloud computing, mobile computing, text messaging, social networking, virtual computing, and innovative application design.

Target Audience: A variety of survey research professionals would benefit from this session, including programming staff, data collection managers, survey designers, survey methodologists and sampling statisticians.

Coordinators:

Lew Berman <[lfb4@cdc.gov](mailto:lfb4@cdc.gov)>

Patty LeBaron <[plebaron@rti.org](mailto:plebaron@rti.org)>

#### **Current Trends in Mobile Technology for Survey Research**

Donna Medeiros, Nathan Sikes, RTI

This presentation provides an overview of advancements in mobile technology over the past year including capabilities and application for survey use. Selection criteria and feasibility will be discussed. Managing development for Android, iOS WP7 and Windows 7 will be addressed along with the challenges of platform conversion and multiple platform development.

#### **A Mobile, GPS-enabled Listing Application**

Josh Seeger, NORC

We will describe and demonstrate a mobile application running on smart phones that automates and enhances the listing process with GPS capture and photographs. This app supports both traditional and “enhanced” listing and runs on a diverse set of mobile platforms including the RIM Blackberry, Apple’s iOS, and Google’s Android.

#### **The National Survey of Fishing, Hunting, and Wildlife-Associated Recreation Cell Phone and Debit Card Test**

Aniekan Okon, US Census Bureau

The purpose of the test is to research alternative designs that could increase CATI interviews and reduce CAPI interviews. This test contains three panels of households: Panel 1 receives a Cell Phone, Panel 2 receives a \$25.00 gift card, and Panel 3 receives an advance letter only. Results of the test will be compared to production results for viability.

#### **The Telephone Point of Purchase Survey Cell Phone Frame Test**

Aniekan Okon and James Arthur, US Census Bureau

The purpose of the cell phone frame test is to evaluate the number of cell phone numbers needed to produce productive interviews and to evaluate how many cell phone users move

from one geographical area to another, but keep the same telephone numbers. The results will be used to include a cell phone frame in future production surveys.

### **Leveraging Cloud-Based Solutions to Address High Demand, Large Scale Surveys**

Mark Adams, Booz Allen Hamilton

This presentation will describe how the tools and standards developed by the National Cancer Institute's Cancer Biomedical Informatics Grid project (caBIG) have been leveraged to support large-scale surveys. This leveraged a unique cloud-based buffer to prevent overload of the service under high demand, which will be described in detail.

## **10. Data Management: Data Dissemination and Visualization**

This session will focus on new ways of disseminating and visualizing survey data for timely use for internal survey management, data preparation, policy analysis, or public access. Of particular interest are datasets aggregated from different sites, survey modes, or from multiple surveys.

Topics could include: tapping into the data management system for real-time reporting of data, streamlining data processing to lower burden on editors and reporters, innovative methods for visual dissemination of study results, and the potential impacts of the data.gov initiative for survey practitioners.

Target audience: From managers to technical staff involved in data management.

Coordinators:

Jane Shepherd <[JaneShepherd@westat.com](mailto:JaneShepherd@westat.com)>

David Uglow <[duglow@rti.org](mailto:duglow@rti.org)>

### **Paradata and Data Management Initiatives at the Bureau of Census**

Christopher J. Laskey, US Census Bureau

Effective use of paradata to better inform and manage survey costs, progress, and data quality is a continuing effort. In 2009 an effort began on a pilot project to develop an enterprise level web-based BI application to integrate disparate sources of survey data. This presentation discusses this pilot project including lessons learned and next steps.

### **Dashboard Reporting for Performance Management**

Michael DeLatta et al., RTI International

By presenting information in an easy-to-read graphical format, and combining data from multiple reports, dashboards enable behavioral health service providers to quickly review their performance against their key service and outcome targets. Dashboard reports can be exported to multiple formats to inform stakeholders about program performance.

### **Dietary Data Surveys: Complex, Continuous, and Changing by**

Lois Steinfeldt, USDA, ARS

Presentation about data management aspects of dietary data surveys conducted by USDA, ARS.

## **Leveraging Data, Metadata and Paradata Management Tools**

Mary Laidlaw, Karen Brenner, and Jane Shepherd, Westat

As technologies become increasingly integrated in multi-mode data collection environments, more timely presentation of data is possible. This paper discusses approaches to streamline data management workflows, tools and operations and lessons learned.

## **Data Interoperability and Conformance**

Dan Gillman, BLS

Interoperability is a requirement for allowing data to work together, especially from the points of view of dissemination and visualization tools. It turns out, interoperability can be achieved by focusing on what makes standards work - conformance. Conformance also provides a scalable way to add new systems yet maintain interoperability. The presentation will discuss further details about these areas.

## **11. Multi-Instrument and Multi-Entity Studies**

The past decade has seen an increasing frequency of complex studies that field multiple data collection instruments on two or more related entities. For example in educational studies, it is not uncommon to collect data at the institutional level, at the class level, of the child, and of the child's parent. The instruments can cover paper, web, CATI, and CAPI modes in various combinations between and within each data collection instrument.

This session will focus on the challenges of conducting such studies including the efficient development of electronic instruments, sample management, coordinating data flow, finishing one wave of collection while preparing for a subsequent wave, reporting, statusing, and producing datasets. Each presenter will focus on 1 or 2 of these challenges and between them will cover most or all of these issues. The presentations will be descriptive but will also offer important lessons learned.

Coordinator:

Bill Connett <[bconnett@umich.edu](mailto:bconnett@umich.edu)>

Mark Pierzchala <[MMP@MMPSurveyServices.com](mailto:MMP@MMPSurveyServices.com)>

Jerry West <[jwest@mathematica-mpr.com](mailto:jwest@mathematica-mpr.com)>

## **Nirvana: Attaining Case Management Bliss**

Joe Nofziger, RTI International

RTI is developing an integrated control and case management system to allow projects to manage cases at each step in data collection, including managing cases in a variety of data collection modes. The heart of this system is a common database structure with common stages and statuses, as well as a core set of utilities.

## **Facing the Multimode Challenge Head On: Best Practices for Tracking and Linking Dynamically Changing Relationships**

Annalee Kelly and Jennifer McNulty, Mathematica Policy Research

The Family and Child Experiences Survey (FACES) uses a complex set of web, CAI and paper survey instruments coordinated through a sample management system. We will discuss



the challenges associated with collecting data in an environment of dynamically changing relationships between children, parents, teachers and staff.

### **Challenges of Ensuring Compliance with Electronic Measurement of Behavior**

Michael Link, The Nielsen Company

Electronic data capture as a replacement for or adjunct to traditional surveys is becoming commonplace. Maintaining individual compliance within a multi-respondent environment is a critical challenge. Discussion will describe how television (entity) tuning and individual (entity) viewing behavior are captured; compliance verification systems; and, efforts to improve this system using passive facial-recognition monitoring.

### **The Challenges of Developing Multiple Instruments for Differing but Related Respondents**

Steven Ingels and Dan Pratt, RTI International

This presentation will discuss the challenges of developing multiple instruments with different respondents tapping a broad set of student home, classroom, and school experiences, and creating composite variables from multiple sources. It will also discuss integrating and harmonizing different data collection and data management technologies using the NCES secondary longitudinal studies for illustration.

## **12. Usability and Accessibility in CASIC Surveys**

This session will cover the usability and accessibility of CATI and CAPI instruments along with web surveys. Presentations will cover topics such as how to incorporate usability and accessibility into the development process and methods for conducting evaluations. Presenters will also discuss lessons learned from their usability or accessibility experience.

Target audience: From survey managers to survey developers, including usability and accessibility professionals; not too technical.

Coordinator:

Jean Fox <[Fox.Jean@bls.gov](mailto:Fox.Jean@bls.gov)>

### **Accessibility Overview: JAWS Screenreader**

Jennifer Horan, DOL

A JAWS screenreader demo and overview, presented by DOL's section 508 Coordinator. What is the end user experience for someone using a screenreader? What are the different settings and speeds a JAWS user may use? Follow along as we review common websites, media players, a scanned PDF and a form with JAWS to demonstrate good design vs. bad design and how it affects an end-user with a screenreader.

### **Web-Based Survey Design Considerations in Developing 508-Compliant Instruments**

Tim Flanigan, RTI

This discussion will focus on the issues and challenges faced in developing 508-complaint survey instruments. These design considerations need to be discussed when a survey is first

proposed to ensure that designers are developing an instrument that truly meets the technological constraints of working within a 508-compliant environment.

### **Benefits of Usability Testing with JAWS users**

Larry Malakhoff, US Census Bureau

The Census Regions Web Site offered U. S. citizens services related to the 2010 Census, including job listings and forming partnerships. Two software packages were used to analyze usage: Tobii eye-tracking was used to determine where people were looking, and JAWS vocalized text for persons with a vision deficit. Optimum placement of information will be discussed.

### **Universal Design in NAEP Computer-Based Assessments: Promoting Inclusiveness for “The Nation’s Report Card”**

Scott Ferguson, Fulcrum IT

Lisa Rodriguez, Westat

The National Assessment of Educational Progress (NAEP) is the largest continuing and nationally representative measure of student achievement. New computer-based assessments (CBA) for NAEP enhance and simplify usability and accessibility for special needs students through a range of “universal design” features. This presentation explains how NAEP accommodations are being streamlined through the CBA/universal design methodology.

### **Potential Role for Technology in the Consumer Expenditure Survey**

Sid J. Schneider and Abie Reifer, Westat

Nhien To and Jeanette Davis, Bureau of Labor Statistics

Respondents in the Consumer Expenditure Survey currently record their daily expenses with paper-and-pencil diaries. This presentation considers how technologies such as receipt scanners, barcode readers, cameras, smart phones, financial software, and computer assisted self-interviews might enhance data quality while reducing burden for some respondents.