

# Methodology

## *An FDLP Forecast Study Presentation*

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# Survey Instruments Timeline

- Creation of Survey Instruments: October 2011 – January 2012
- Release of Library Questionnaire Survey Instrument: January 31, 2012
- Release of State Questionnaire Survey Instrument: February 12, 2012
- Deadline for all Survey Submissions: November 30, 2012
- Analysis of Survey Responses: December 2012 – September 2013

## Retrieving & Data Preparation

- Data retrieval and cleanup performed by GPO's Program, Strategy, and Technology (PST), Business Intelligence and Analysis Group
- Definition of an Eligible Questionnaire
  - Submitted by the November 30, 2012 deadline
  - Completed in its entirety
  - Certified, as requested in forecast questions 35 (Library) and 21 (State)
  - One eligible questionnaire accepted from each Library or State

## Retrieving & Data Preparation

- Downloaded survey data from Survey Monkey into Excel spreadsheets
- Identified eligible questionnaires
- Imported the initial Excel spreadsheets into SAS
- Performed further "data cleanup" by examining consistency and out-of-range responses (for example, identifying FDLP number typos)
- Added demographic grouping variables from the FDLP Directory to each eligible Library Questionnaire
- Used SAS to extract the responses for each Library/State open-ended question for Subject Matter Expert (SME) Teams to analyze

## Quantitative Analysis

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- “Quantitative” questions are those with specific responses (e.g., yes/no; extremely, moderately or not beneficial, etc.)
- High-level summaries of all “quantitative” questions
- Demographic cross-tabulations generated by SAS
- Graphical Outputs: US Maps, Pie and Bar Charts generated by SAS
- Excel Workbooks and Word RTF files generated by SAS

## Qualitative Analysis

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- “Qualitative” questions contain a “text” box for the responder to enter their “open-ended” responses
- Multiple SME Teams
- Created codes for themes
- Coded each response with one or more codes, as appropriate
- Reviewed theme tabulation and identified overarching categories for theme compression
- Quality Control of coding
- Quantitative data analysis techniques applied to qualitative coded themes for both compressed and un-compressed (root themes) data

## Qualitative Analysis: Definitions

- **Responder** – the “library” or “state” that filled out the survey questionnaire
- **Response** – the information selected (quantitative question) or provided (qualitative question that contains a text box)
- **Open-ended response** – responder provides answer to a qualitative question, in their own words, in the text box provided
- **Theme(s)/Root Theme** (un-compressed) – recurring topic(s) or pattern(s) discerned from the open-ended responses that are associated to a specific qualitative question
- **Coding** – the applying of themes to the open-ended responses
- **Compressed Theme** – collapsing of root theme codes into categories to better assist in identifying overarching themes.
- **Observation** – each response made by the responder for a quantitative question or each root theme coded from a responder’s open-ended response for a qualitative question

## Reporting Results

- Library and State Data Reports
- Working Papers
- *Expanding the Forecast Framework: Engage & Discuss, Focused Discussions:*
  - Determining the Future of Microfiche Distribution (12/04/2013)
  - Depository Library collaboration: Structure for the Digital Age (12/05/2013)
    - ▶ Part 1: Regional and Selective Depository Libraries
    - ▶ Part 2: New Opportunities for Depository Libraries
  - Building an Authoritative National Bibliography of U.S. Government Publications (12/10/2013)
  - In the Public Eye: Increasing Federal Depository Library (12/10/2013)
  - Resolving Anticipated Barriers to Digital Access (12/11/2013)
  - Marketing (12/11/2013)
- *FDLP Forecast Study Report: Summary and Recommendations*

## Overall Survey Confidence

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- Error reduction actions
- High response rate (67% for the Library Forecast and 84% for the State Forecast)
- Representation from all states and territories
- Margin of Error (MOE) – statistic expressing the amount of random sampling error in a survey’s results – reported at the 95% Confidence level
  - Library Forecast Questionnaire Survey: within  $\pm 2\%$
  - State Forecast Questionnaire Survey: within  $\pm 5.5\%$
- Solid foundation for any inferences made from responses