

# Identifying Methods to Preserve and Utilize Methodological Knowledge within Organizations

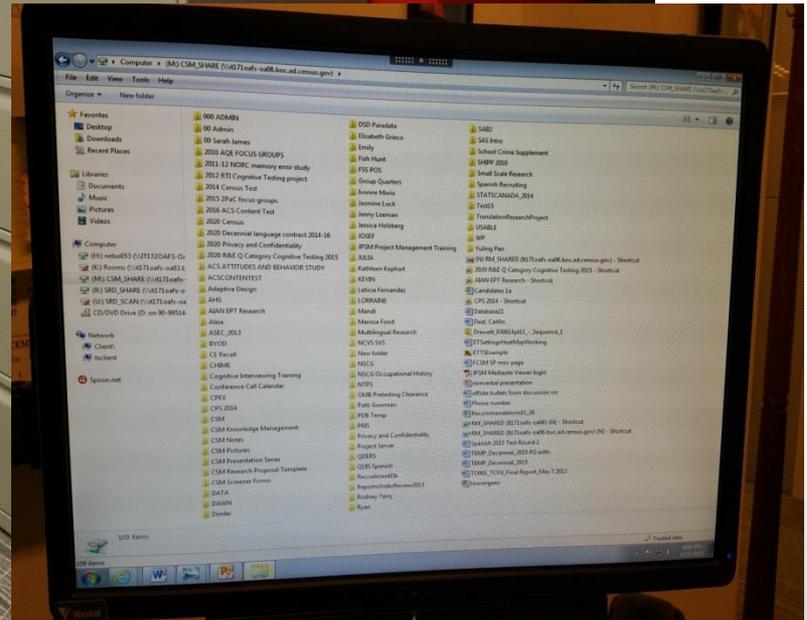
Dawn V. Nelson

Center for Survey Methods, US Census Bureau

Presented at the QUEST 2015 Workshop  
at Statistics Finland in Helsinki

April 28 to 30, 2015

# Current CSM Research Repository



# CSM Report Series

The screenshot shows the 'Research Reports and Studies Sorted by Series' page. The page title is 'Research Reports and Studies' and it is sorted by 'Series'. The content is divided into two main sections: 'Beginning August 1, 2001:' and 'Prior to August 1, 2001:'. Each section contains a list of report series and a detailed description of the 'Research Report Series'.

**Beginning August 1, 2001:**

- RRC Reports
- RRS Reports
- RSM Reports
- SSC Reports
- SSS Reports
- SSM Reports

**Prior to August 1, 2001:**

- RR Reports
- SM Reports
- EX Reports
- EV Reports
- Other Reports

**Research Reports and Studies Sorted by Series**

To communicate and document certain results from work done primarily by staff of the Center for Statistical Research and Methodology, Center for Survey Methodology, and Center for Disclosure Avoidance, we offer a number of research reports on topics in statistics, computing, and survey methodology.

Beginning August 1, 2001

- The **Research Report Series** primarily includes papers which report results from the conduct of systematic, critical, intensive investigation directed toward the development of new or more comprehensive scientific knowledge of the subject studied. The series is subdivided into categories, including **Computing (RRC)**, **Statistics (RRS)**, and **Survey Methodology (RSM)**.
- The **Study Series** primarily includes papers which report results from the conduct of systematic, critical, intensive investigation directed toward applying known scientific knowledge to a specific problem. The series is subdivided into categories, including **Computing (SSC)**, **Statistics (SSS)**, and **Survey Methodology (SSM)**.

Prior to August 1, 2001

- The **Statistical Research Report Series (IRR)** covers research in statistical methodology and estimation.
- **Working Papers in Survey Methodology (SM)** cover questionnaire design research and methodological studies to identify causes of nonsampling errors and evaluate alternative design solutions.
- The **Ethnographic Exploratory Research Report Series (EX)** discuss the ethnography of certain patterns of behavior in defined U.S. socio-cultural groups which may affect census coverage.
- The **Ethnographic Evaluation of the 1990 Decennial Census Reports (EV)** discuss behavioral causes and correlates of undercount in the decennial census among Blacks, Hispanics, American Indians, recent immigrants from Asia, and undocumented immigrants primarily from Latin America and Haiti.

There are a limited number of papers that don't fall into any of these series - These papers are collected [on a separate page](#).

The screenshot shows the 'Study Series - Methodology (SSM)' page. The page title is 'Research Reports and Studies' and it is sorted by 'Series'. The content is divided into two main sections: 'Years:' and 'Study Series - Methodology (SSM)'. The 'Years:' section contains a list of years from 2015 to 2003. The 'Study Series - Methodology (SSM)' section contains a detailed description of the series and a list of reports.

**Years:**

- 2015
- 2014
- 2013
- 2012
- 2011
- 2010
- 2009
- 2008
- 2007
- 2006
- 2005
- 2004
- 2003

**Study Series - Methodology (SSM)**

To communicate and document certain results from work done primarily by staff of the Center for Statistical Research and Methodology, Center for Survey Methodology, and Center for Disclosure Avoidance, we offer a number of research reports on topics in statistics, computing, and survey methodology.

The **Study Series** primarily includes papers which report results from the conduct of systematic, critical, intensive investigation directed toward applying known scientific knowledge to a specific problem. The series is subdivided into categories, including **Computing (SSC)**, **Statistics (SSS)**, and **Survey Methodology (SSM)**.

Note that the title of each paper serves as a link to the file. A link to the paper's abstract is also provided in most cases.

Please read our [disclaimer](#).

Papers from the Research Report series can also be viewed by [author](#) and by [year](#).

To request a hardcopy of any of the papers listed below, write to [Chad.Eric.Russell@census.gov](mailto:Chad.Eric.Russell@census.gov). Please include your name, address, and the title of the paper in your request.

**2015**

- **Final Report: National Teacher and Principal Survey (NTPS) Teacher Questionnaire Instruction Experiment** (about 1MB) by Jessica L. Holzberg (SSM2015/01) [Abstract](#)

[Back to the Index](#)

<http://www.census.gov/srd/www/byseries.html>

# Other Survey Program Report Series

U.S. Department of Commerce | Blogs | Index A-Z | Glossary | FAQs

U.S. Census Bureau

Topics: Population, Economy; Geography: Maps, Geographic Data; Library: Infographics, Publications; Data: Tools, Developers; About the Bureau: Research, Surveys

## American Community Survey

Methodology Main

Survey Methodology Main

The 2014 Design and Methodology Report contains descriptions of the basic design of the American Community Survey and details of the full set of methods and procedures. We have archived the previous version of the report.

Download Full Report (PDF 2.7MB)

Download by chapter:

- Acknowledgements (PDF 132KB)
- Foreword (PDF 227KB)
- Chapter 1. Introduction (PDF 232KB)
- Chapter 2. Program History (PDF 370KB)
- Chapter 3. Frame Development (PDF 476KB)
- Chapter 4. Sample Design and Selection (PDF 608KB)
- Chapter 5. Content Development Process (PDF 704KB)
- Chapter 6. Survey Rules, Concepts and Definitions (PDF 296KB)
- Chapter 7. Data Collection and Capture for Housing Units (PDF 524KB)
- Chapter 8. Data Collection and Capture for Group Quarters (PDF 265KB)
- Chapter 9. Language Assistance Program (PDF 308KB)

Current Data Profiles: Social, Economic, Housing and Demographic Characteristics

Website Feedback: Tell us how to make this website better.

Data by Topic: People (Age and Sex / Aging, Ancestry, Disability, Commuting to Work, Education, Employment, Family/Relationships, Health Insurance)

U.S. Department of Commerce | Blogs | Index A-Z | Glossary | FAQs

U.S. Census Bureau

## American Community Survey

Collections - By Series - 1998 ACS Symposium

Item Nonresponse: 1996 American Community Survey (PDF 294KB)

Anthony G. Testine, Jr. 1998

Income in the ACS: Comparisons to the 1990 Census (PDF 554KB)

Kirby G. Posey, Edward Weisak 1998

Evaluation of the Census Bureau's Master Address File Using National Health Interview Survey (PDF 374KB)

Kathy Ott, Randy Farmer, Barbara Reilly, Cliff Loudemilk, Yolanda McMillan, Tom Coughlin 1998

The 1996 American Community Survey Monthly Response Rates, by Mode (PDF 914KB)

Susan P. Love, Gregg J. Offental 1998

1996 American Community Survey vs. 1990 Decennial Census--Household Size and C characteristics by Response Mode (PDF 443KB)

Pamela W. Ferrari 1998

Weighting the 1996 and 1997 American Community Surveys (PDF 694KB)

Scott Dahl 1998

# Limited Search

- Report Series' Search Terms:
  - Report Title, Author(s), Year
  - Report Series identifier
  
- Public Website Search:
  - Report Title and Author(s)
  - Report Abstract information

# Are We Alone?

- “I am mostly in the ‘lost in filing cabinet’ camp.”
- “We do a lot of methodological work. However, we have no plan whatsoever to systematically retain and catalogue these, often important, pieces of background research. *We end up depending on the memories of longer term staff* (whose numbers are, no surprise, dwindling) and the fact that we’ve had the same contractor since 1988 (but even their original staff are retiring.) ”

# Are We Alone? (continued)

- “...But the short of it is, the best way we have to document anything is in our internal research reports. I think that if we manage to actually get those out for a project we do keep them pretty accessible for internal use. Most also go on our public website. However, *for most questionnaire evaluation projects these get written up much more informally* and we have all the problems you cite. We are just now trying to get a bit more organized with writing up and archiving the write-ups.”

# What Are Others Doing?

- Q-Bank
- Organization-Specific
  - Question Search - Pew Research Center
- Topic-specific Archives
  - Association of Religion Data Archives (ARDA)
  - U of Minnesota's Metropolitan Travel Survey Archive
- Data Archives
  - UK Data Archive
  - ICPSR
  - Roper

# Q-Bank

The screenshot shows a web browser window with the address bar displaying <http://www.cdc.gov/qbank/About.aspx>. The browser tabs include "Census Central", "Dawn V Nelson (CENSUS/CSM...", "Research Reports and Studies ...", "Gender | Pew Research Center", and "Q-Bank - About Q-Bank". The browser's menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The taskbar at the bottom shows icons for "UK Data Archive - CATAL...", "Sites Related to Survey Re...", "Timesheet - Project Web ...", "Work Email", and "Calendar".

The website content features a dark blue header with the "Q-Bank" logo in yellow and the tagline "Improving surveys through sharing knowledge." Below the header is a navigation menu with links for "Search", "Reports", "Question Evaluation", "About Q-Bank" (which is highlighted), "QUEST", and "Login".

## About Q-Bank

Q-Bank is a vital tool for survey research. All data and estimates produced by surveys derive from questions. Evaluating those questions ensures valid survey data.

Question evaluation studies are conducted to determine if a question

- Captures the intended concept
- Is interpreted consistently across respondent groups
- Poses problems for respondents when attempting to answer the question

Q-Bank provides researchers and survey practitioners access to question evaluation reports. Question evaluation studies provide information necessary to improve questionnaires during the design stages, as well as to better interpret and analyze the survey data after production.

Q-Bank allows users to easily search for questions based on the topic, survey name or keywords. The questions are then linked to the evaluation studies.

## Guidance of Q-Bank

The National Center for Health Statistics(NCHS) leads an interagency steering committee comprised of employees from the following federal statistical agencies:

# PewResearchCenter – Question Search

http://www.pewresearch.org/question-search/?keyword=demographics&x=10&y=12

Census Central Dawn V Nelson (CENSUS/CSM... Question Search | Pew Rese... x

File Edit View Favorites Tools Help

UK Data Archive - CATAL... Sites Related to Survey Re... Timesheet - Project Web ... Work Email Calendar

PewResearchCenter

U.S. POLITICS MEDIA & NEWS SOCIAL TRENDS RELIGION INTERNET & TECH HISPANICS GLOBAL

PUBLICATIONS TOPICS DATA METHODS INTERACTIVES FACT TANK EXPERTS

## Question Search

SITE SEARCH TOPICS POLL QUESTIONS

What do you have on...  
demographics

Use this tool to search our database of polling questions.  
To search all Pew Research Center content, choose the [Search tab](#).  
To filter our reports and data by subject, select the [Topics tab](#).

### Pew Research Poll Database

ROPER CENTER COLLABORATION  
New Search | Back

470 questions found for gender . (3.385 seconds)  
Results 1 - 10 of 470 < 1 2 3 >

QUESTION	
Do you personally hope the United States will elect a female president in your lifetime, or does that not matter to you? Nov 23, 2014, Pew Research Center for the People & the Press	<a href="#">View Question Results</a>
Do you think the United States will elect a female president in your lifetime, or not? Nov 23, 2014, Pew Research Center for the People & the Press	
Now thinking about different types of companies and organizations, all other things being equal, do you think a man or a woman would do a better job running... a computer software company? Nov 23, 2014, Pew Research Center for the People & the Press	
Now thinking about different types of companies and organizations, all other things being equal, do you think a man or a woman would do a better job	

http://www.ropercenter.uconn.edu/psearch/question\_view.cfm?qid=1858445&pid=50&ccid=50#top

75% 11:14 AM 4/26/2015

# Topic-Specific Archives

the ARDA  
Association of Religion Data Archives

QUALITY DATA ON RELIGION  
PROVIDING FREE ACCESS SINCE 1998

Search the ARDA  Go! Advanced Search

About The ARDA | Tools | FAQs | Contact Us

DATA ARCHIVE INTERNATIONAL US CONGREGATIONAL MEMBERSHIP RELIGIOUS GROUPS QUICKSTATS QUICKLISTS GIS MAPS

**Data Archive**

Data Archive > Files by Category

Search Data Archive:  Go!

Browse by Category Browse Alphabetically Browse Most Popular Browse Newest Additions

The ARDA Data Archive is a collection of surveys, polls, and other data submitted by researchers and file. Once you select a file you can preview the results, read about how the data were collected, review own file, and/or download the data file.

File Categories

- International Surveys and Data (89)
  - Cross-National Data (20)
  - Multiple Nation Surveys (26)
  - Single Nation Surveys (43)
- U.S. Church Membership Data (23)
  - County-Level Data (12)
  - State-Level Data (11)
- U.S. Surveys (745)
  - Surveys of the General Population
  - National Surveys (197)
  - Baylor Religion Surveys (3)

<http://www.thearda.com/archive/browse.asp>

Metropolitan Travel Survey Archive

About Archive Updates Sought Reports Zahavi Links Acknowledgements Contacts

Survey Archive

Place (City/State/Region)	Agency	Primary Source Data		Rectangularized Data	Metadata Documentation			Analysis Tools	ICPSR Link
		Raw Data	Documentation		XML Metadata	PDF Metadata	Processing Notes		
Anchorage	Municipality of Anchorage	2002	2002	2002	2002	2002	2002	2002	
Atlanta	Atlanta Regional Commission	1991		1991	1991			1991	
		2001	2001	2001	2001	2001	2001	2001	
		2011							
Baltimore	Baltimore Metropolitan Council	1977	1977	1977	1977	1977	1977	1977	
		1993		1993					
		2001	2001	2001	2001	2001	2001	2001	
Boston	Boston Metropolitan Planning Organization	1991		1991	1991			1991	
California	California Department of Transportation	1991							
		2001	2001	2001	2001	2001	2001	2001	

<http://www.surveyarchive.org/index.html>

# Data Archives

The image shows two overlapping browser windows. The top window is the UK Data Archive website, and the bottom window is the ICPSR website.

**UK Data Archive Website:**  
URL: <http://www.data-archive.ac.uk/create-manage/document/metadata>  
Navigation: HOME, ABOUT US, CREATE & MANAGE DATA, DEPOSIT DATA, HOW WE CURATE DATA, FIND DATA, NEWS & EVENTS  
Section: CREATE & MANAGE DATA DOCUMENTING YOUR DATA  
Text: **Catalogue metadata are a subset of core data documents, standardised structured information explaining the purpose, references, geographic location, creator, access conditions of data.**  
Text: Metadata for online data catalogues or discovery portals are often structured standards or schemes such as Dublin Core, ISO 19115 for geographic information, Documentation Initiative (DDI), Metadata Encoding and Transmission Standard (METS), and the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH).

**ICPSR Website:**  
URL: <http://www.icpsr.umich.edu/icpsrweb/ICPSR/>  
Navigation: Find & Analyze Data, Membership in ICPSR, Deposit Data, ICPSR Summer Program, Resources for Instructors, Data Management & Curation  
Section: Find Data  
Text: **Find Data**  
Text: **More Search Options**  
List:

- Browse by topic
- Browse by series
- Browse by geography
- Browse by investigator
- Browse international data
- View all studies
  - View all studies for which online analysis is available
  - View all replication datasets (more info)
  - View all studies that have learning guides
- Browse by thematic collection

# CSM – Capture and Organize

- Exploring Existing Templates
- Exploring Infrastructure

# CSM – Capture & Organize Exploration

## Q-Bank: Question Characteristics and Response Error

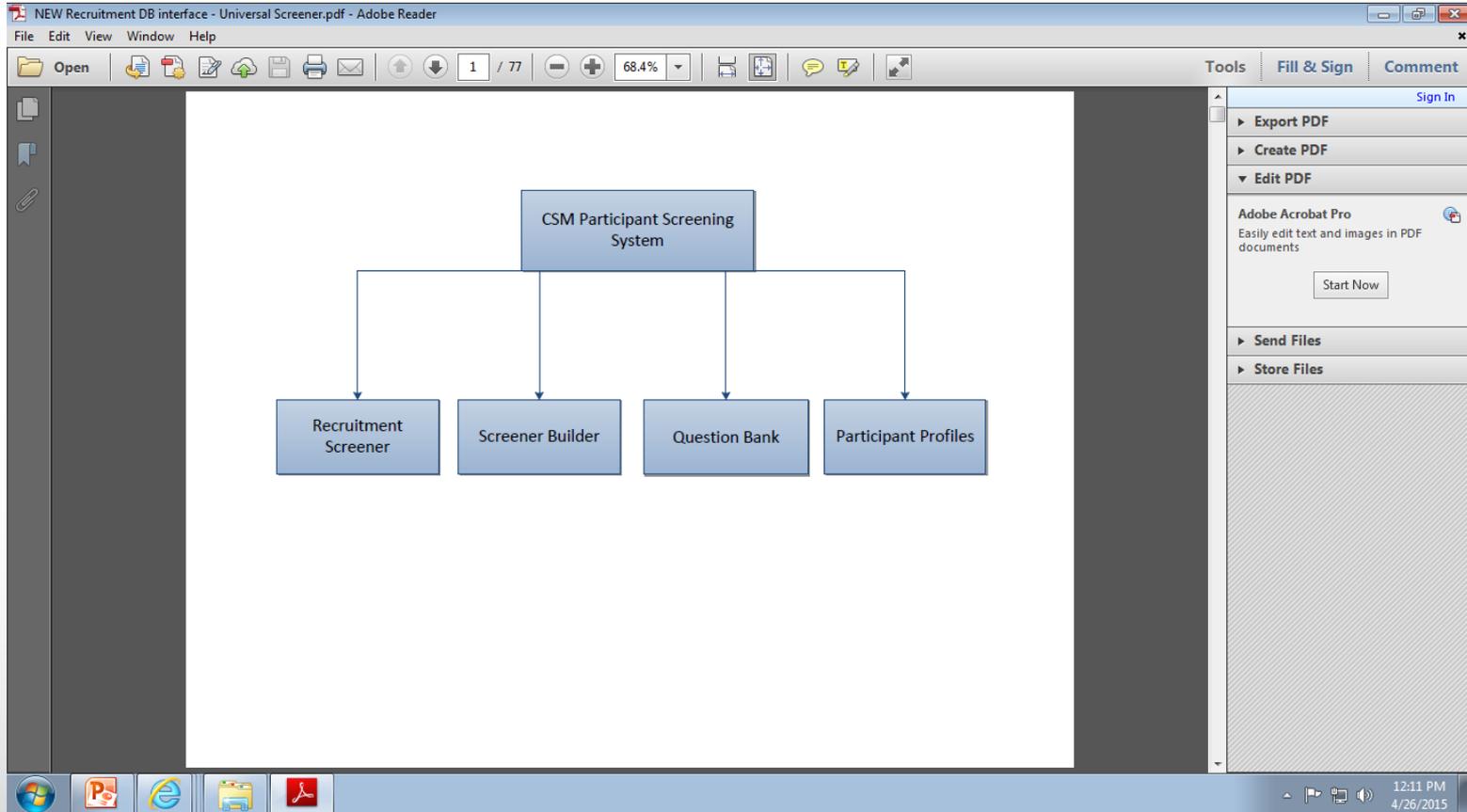
<p><b>Information Type:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Event, Action &amp; Behavior</li> <li><input type="checkbox"/> Objective Characteristics</li> <li><input type="checkbox"/> Subjective Characteristics</li> <li><input type="checkbox"/> Speculations</li> <li><input type="checkbox"/> Attitudes/Opinions</li> <li><input type="checkbox"/> Knowledge Test</li> <li><input type="checkbox"/> Other</li> </ul>	<p><b>Response Error:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Problematic Visual Cues</li> <li><input type="checkbox"/> Not seen/read</li> <li><input type="checkbox"/> Problematic Term</li> <li><input type="checkbox"/> Ambiguous Concept</li> <li><input type="checkbox"/> Overly Complex</li> <li><input type="checkbox"/> Assumption/Double Barrel</li> <li><input type="checkbox"/> Questionnaire Effect</li> <li><input type="checkbox"/> Recall/Estimation</li> <li><input type="checkbox"/> Biased/Sensitive</li> <li><input type="checkbox"/> Inadequate Response Options</li> <li><input type="checkbox"/> Problematic Answer Space</li> <li><input type="checkbox"/> None as tested</li> <li><input type="checkbox"/> Not Coded – Refer to Report</li> </ul>	<p><b>Where Error Occurs:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Heading/Label</li> <li><input type="checkbox"/> Question/Item</li> <li><input type="checkbox"/> Contextual Instruction</li> <li><input type="checkbox"/> Navigational Direction</li> <li><input type="checkbox"/> Response Options</li> <li><input type="checkbox"/> Non-Verbal Components</li> </ul>
<p><b>Response Category:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes/No</li> <li><input type="checkbox"/> Select one numeric</li> <li><input type="checkbox"/> Select one textual</li> <li><input type="checkbox"/> Mark all the apply</li> <li><input type="checkbox"/> Allocation</li> <li>Open-ended Textual <ul style="list-style-type: none"> <li><input type="checkbox"/> Delineated</li> <li><input type="checkbox"/> Non-delineated</li> </ul> </li> <li>Open-ended Numeric <ul style="list-style-type: none"> <li><input type="checkbox"/> Delineated</li> <li><input type="checkbox"/> Non-delineated</li> </ul> </li> <li><input type="checkbox"/> Other</li> </ul>		<p><b>Respondent Role:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Self</li> <li><input type="checkbox"/> Proxy</li> <li><input type="checkbox"/> Self and Proxy</li> </ul>
<p><b>Target Population:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Individual</li> <li><input type="checkbox"/> Household</li> </ul>		<p><b>Index Status:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Yes</li> <li><input type="checkbox"/> No</li> </ul>
<p><b>Sequence Number:</b> (optional)</p>		<p><b>Question Topic:</b></p>

# CSM – Capture & Organize Exploration

## Q-Bank: Question Formatting

<b>Layout of Qs and ROs:</b> Q Above ROs <input type="checkbox"/> One RO <input type="checkbox"/> Vertical ROs <input type="checkbox"/> Horizontal ROs <input type="checkbox"/> Vertical and horizontal ROs Q Left of ROs <input type="checkbox"/> One RO <input type="checkbox"/> Vertical ROs <input type="checkbox"/> Horizontal ROs <input type="checkbox"/> Vertical and horizontal ROs	<b>Location of Question:</b> <input type="checkbox"/> Top <input type="checkbox"/> Top Left <input type="checkbox"/> Top Right <input type="checkbox"/> Middle <input type="checkbox"/> Middle Left <input type="checkbox"/> Middle Right <input type="checkbox"/> Bottom <input type="checkbox"/> Bottom Left <input type="checkbox"/> Bottom Right	<b>RO Text Location:</b> (does not apply to matrix) <input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Above <input type="checkbox"/> Below	<b>Core Question Format:</b> <input type="checkbox"/> Headings/Label <input type="checkbox"/> Instruction/Statement <input type="checkbox"/> Question
		<b>Separate Instructions:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Introductory Text Format:</b> <input type="checkbox"/> Heading/Label <input type="checkbox"/> Instruction <input type="checkbox"/> Navigational Direction <input type="checkbox"/> Question

# CSM – Capture & Organize Exploration Infrastructure



# CSM – Future Use

- Incorporate Previous Research Results:
  - Expert review
  - Protocol development
  - Analysis and reporting

# How are you solving it?

## **Identifying Methods to Preserve and Utilize Methodological Knowledge within Organizations**

Dawn V. Nelson, U.S. Census Bureau

For more than thirty years, survey methodologists at the Census Bureau have evaluated questions from a myriad of federal surveys. Although many final reports are available on the Census website, many more have been lost in filing cabinets and on computer directories. Our 'knowledge management' system needs an overhaul. And we suspect we are not alone. In this presentation I will discuss our current efforts to capture and organize results from our earlier question evaluation projects. I will also provide an overview of our plans for utilizing this knowledge in future question evaluation projects. I will end with questions for the audience about their organization's knowledge management systems for preserving survey question pretesting findings.