Three-part series on the Measures that Matter initiative, a field-wide discussion of the current state of public library data.

Part Three: July 26
Today’s Presenters

**Linda Hofschire**
Director,
Library Research Service, Colorado State Library

**Rebecca Teasdale**
Senior Evaluation and Research Associate, Garibay Group

**John Bertot**
Associate Provost for Faculty Affairs and Professor, College of Information Studies at the University of Maryland
MEASURES THAT MATTER
DETAILING THE DATA-BASED STORY OF PUBLIC LIBRARIES
ANNOTATION TOOLS

Find the grey marker pen in top left corner of the presentation screen. Click to open the tool buttons in a column on the left side; the marker pen will turn blue.

Check mark
- Click on square shape, half-way down.
- Use the drop-down menu and choose the check mark.
- Click on slide to indicate choice.
Rate your knowledge about data (click on the arrow):

I’m just getting started learning about data

I’m a data geek!
MEASURES THAT MATTER

INSTITUTE of Museum and Library Services

Chief Officers of COSLA State Library Agencies
Webinar I
Measures that Matter – who, what, when, where, and why
MEASURES THAT MATTER – WEBINAR SERIES

Webinar 1
Measures that Matter – who, what, when, where, and why

Webinar 2
Sampling, data types, and data management: how do these concepts impact the public library data landscape?
MEASURES THAT MATTER — WEBINAR SERIES

**Webinar 1**
Measures that Matter – who, what, when, where, and why

**Webinar 2**
Sampling, data types, and data management: how do these concepts impact the public library data landscape?

**Webinar 3 – July 26**
A conversation about meaningful measures – from perspectives within and outside of the library field
# Public Library Data Landscape

## Current national efforts:

| Public Libraries Survey (PLS)  | Public Library Data Service (PLDS) |
| Institute of Museum and Library Services | Public Library Association |
| Edge  | Impact Survey |
| Urban Libraries Council | University of Washington |
| Project Outcome  |  |
| Public Library Association |  |

## Discontinued efforts:

| Public Library Funding & Technology Access Survey (PLFTAS)  | Digital Inclusion Survey |
| University of Maryland | University of Maryland |

| Library Topology Survey  |  |
| Pew |  |
COMMON TOPICS

• Organizational characteristics – expenditures, staff, hours, etc.
• Infrastructure – facilities, staffing, space, etc.
• Resources – size and use of collections
• Technology – availability and use
• Community – importance of public Internet to community
• Education – how library resources/technology assist in the education of library patrons
WHO ARE THE RESPONDENTS?

Library Staff

- Public Libraries Survey
- Public Library Data Service
- Edge
- PLFTAS
- Digital Inclusion Survey

Library Users

- Impact Survey
- Project Outcome

General Public

- Library Topology Survey
SAMPLING
Surveys
MEASURES THAT MATTER | SAMPLING

- Surveys
- Census
- Sample
MEASURES THAT MATTER | SAMPLING

- Surveys
- Census
- Sample
Census

• Aims for 100% of U.S. public libraries to respond

Public Libraries Survey (PLS)
MEASURES THAT MATTER | SAMPLING

Surveys

Census

Sample
MEASURES THAT MATTER | SAMPLING

Surveys

Census
Sample

Probability Sampling
Non-Probability Sampling
MEASURES THAT MATTER | SAMPLING

Examples

• Simple random sampling
• Systematic sampling
• Stratified sampling
• Cluster sampling
• Multistage sampling
Stratified sample

- Provides data that can be generalized and used to calculate national estimates

Digital Inclusion Survey (Report)
Multiple probability sampling methods

- Provides data that can be generalized and used to calculate national estimates
MEASURES THAT MATTER | SAMPLING

Non-Probability Sampling

Examples

- Purposive sampling
- Snowball sampling
- Convenience sampling
MEASURES THAT MATTER | SAMPLING

Respondents
MEASURES THAT MATTER | SAMPLING

Respondents
Website visitors
MEASURES THAT MATTER | SAMPLING

Community members

Respondents
Website visitors
Convenience sample

• Provides data about the libraries that respond

• Sheds light on specific libraries and can be used to conduct benchmarking

Public Library Data Service (PLDS)
National level:
Convenience sample

• Provides data from libraries that opt in
MEASURES THAT MATTER | SAMPLING

National level:
Convenience sample
  • Provides data from libraries that opt in

Local level:
Variety of samples

Project Outcome surveys
MEASURES THAT MATTER | SAMPLING

- Surveys
- Census
- Sample
- Probability Sampling
- Non-Probability Sampling
ANNOTATION TOOLS

Find the grey marker pen in top left corner of the presentation screen. Click to open the tool buttons in a column on the left side; the marker pen will turn blue.

Check mark
- Click on square shape, half-way down.
- Use the drop-down menu and choose the check mark.
- Click on slide to indicate choice.
Does your library conduct any surveys? If so, what sampling method(s) are used?

- Census
- Probability Sampling
- Non-Probability Sampling
- Not Sure
- Other – tell us about it in chat
What resources did we use?
What did we provide?

How many people did we serve?
What difference did it make?

Outcomes
MEASURES THAT MATTER | DATA TYPES

What change took place?

- Knowledge
- Attitude
- Skill
- Behavior
- Condition
**MEASURES THAT MATTER | DATA TYPES**

**Inputs**
Resources libraries use to deliver programs and services.

**Outputs**
Program and services libraries provide. Level of participation in those programs and services.

**Outcomes**
Effect of libraries’ programs and services. Change in individuals’ lives and in communities.
MEASURES THAT MATTER | DATA TYPES
Inputs

Tea bags
Water
Ice
Pitcher
Glasses
MEASURES THAT MATTER | DATA TYPES

Inputs
- Tea bags
- Water
- Ice
- Pitcher
- Glasses

Outputs
- 1 pitcher of iced tea prepared
- 5 friends drank iced tea
MEASURES THAT MATTER | DATA TYPES

Inputs
- Tea bags
- Water
- Ice
- Pitcher
- Glasses

Outputs
- 1 pitcher of iced tea prepared
- 5 friends drank iced tea

Outcome
- Thirst quenched
  (Condition)
MEASURES THAT MATTER | DATA TYPES

Public Libraries Survey
- Operating revenue
- Expenditures
- Open hours

EDGE
- Number of computers
- Internet speed
MEASURES THAT MATTER | DATA TYPES

Outputs

Public Library Data Service
• Visits
• Circulation
• Program attendance

Digital Inclusion Survey
• Digital content
• Digital literacy programs
Outcomes

Project Outcome
- Learned something new
- Increased confidence

Impact Survey
- Learned about specific topics
- Engaged in specific behaviors
MEASURES THAT MATTER | DATA TYPES

Inputs

What resources were used?

• Data from libraries
MEASURES THAT MATTER | DATA TYPES

**Inputs**
What resources were used?
- Data from libraries

**Outputs**
What was provided? How many people were served?
- Data from libraries and/or community members
**MEASURES THAT MATTER | DATA TYPES**

**Inputs**
What resources were used?
• Data from libraries

**Outputs**
What was provided? How many people were served?
• Data from libraries and/or community members

**Outcomes**
What difference did it make? What change took place?
• Data from community members
WHAT OUTCOME DATA DOES YOUR LIBRARY COLLECT?
DATA MANAGEMENT
SOME KEY QUESTIONS TO ASK

• For what purpose(s) do you intend to collect the data?
  – Organizational learning
  – Adding to knowledge

• Do you have any data compliance requirements?
  – Privacy, confidentiality, retention, open access, permission to collect (IRB)
    • City, County, State, Federal, University, Other

• Do you intend to share the data?
  – Organizationally
  – At large, open data
SOME KEY QUESTIONS TO ASK

• Do you want to maximize reuse of the data?
  – Internally
  – Externally

• Is the data you are collecting one-time or ongoing?

• Do you intend or are you required to ensure long-term preservation of the data?
CREATING DATA: SELECTED CONSIDERATIONS

- Research design
- Data management
  - Formats
  - Storage
  - Access mechanisms
  - Full data sets, APIs
- Sharing consent
- Capture data in way that facilitates reuse
PROCESSING DATA: SELECTED CONSIDERATIONS

• Data entry
  – Can affect the ability to reuse the dataset
• Check/scrub the data
  – Try to make the data as clean as possible
• If confidentiality is an issue, anonymize/aggregate data where necessary
• Make sure you describe the data
• Manage and store data
PRESERVING DATA: SELECTED CONSIDERATIONS

- Data format is critical
  - CSV (generic use)
    - In general, generic is best for long-term use/reuse
  - Proprietary (Excel, SPSS, SAS)
- Choose a suitable storage medium
  - Cloud, disk, other
- Make back-ups and ensure appropriate security protocols
- Data documentation
  - Codebooks, descriptions
- Archive data
  - Ensure long-term preservation
PROVIDING ACCESS TO DATA: SELECTED CONSIDERATIONS

• Data distribution
• Data sharing
• Data access control
• Copyright? Open?
• Promote data availability
RE-USING DATA: SELECTED CONSIDERATIONS

• Follow-up research
  – Longitudinal (ongoing)?
    • Change over time – how make data series available to facilitate analysis/reuse
  – Periodic updates
• Combining datasets
• Program evaluation
• Build a culture of assessment
http://digitalinclusion.umd.edu/content/interactive-map
NATIONAL DATA: AVAILABILITY

Open Data
• Public Libraries Survey
  ~2 years after collection
• Digital Inclusion Survey
  Discontinued
• Pew
  Discontinued

Closed Data
• PLDS
  Subscription required to access data
• Project Outcome
  Under consideration
• EDGE
  Subscription required to participate
• Impact
  Subscription required to participate
# National Data: Level of Data

<table>
<thead>
<tr>
<th>Survey/Data Source</th>
<th>Branch</th>
<th>System</th>
<th>Users</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Libraries Survey</strong></td>
<td>X</td>
<td>X</td>
<td></td>
<td>Census</td>
</tr>
<tr>
<td></td>
<td>(mostly library demographics – e.g., geocodes, metropolitan status, square footage)</td>
<td>(budget, FTEs, services, resources, use)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Digital Inclusion Survey</strong></td>
<td>X</td>
<td></td>
<td></td>
<td>Sample</td>
</tr>
<tr>
<td></td>
<td>(broadband, PACs, resources, services)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PLDS</strong></td>
<td></td>
<td>X</td>
<td></td>
<td>Voluntary</td>
</tr>
<tr>
<td><strong>EDGE</strong></td>
<td>(X)</td>
<td>X</td>
<td></td>
<td>Voluntary</td>
</tr>
<tr>
<td><strong>Impact</strong></td>
<td>(X)</td>
<td>(X)</td>
<td>X</td>
<td>Voluntary</td>
</tr>
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<td><strong>Pew</strong></td>
<td></td>
<td></td>
<td>X</td>
<td>Sample</td>
</tr>
</tbody>
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QUESTIONS?
WHAT’S COMING UP?
WHAT’S COMING UP?

➢ ALA Annual Presentation: **Measures that Matter: Building Bridges Between Data Collection Activities in Public Libraries**, June 24, 10:30-11:30
WHAT’S COMING UP?

➢ ALA Annual Presentation: Measures that Matter: Building Bridges Between Data Collection Activities in Public Libraries, June 24, 10:30-11:30

➢ Webinar: Measures that Matter Part 3: Moving Toward More Meaningful Measures, July 26, 3:00-4:00 Eastern/12:00-1:00 Pacific
THANK YOU!

➢ Questions? Feedback? Please contact info@cosla.org or Tim Cherubini, COSLA Executive Director, at tcherubini@cosla.org

➢ Follow Measures that Matter on Twitter: @libmeasuresmtr

➢ Sign up for the email distribution list at https://www.surveymonkey.com/r/MtMEmailList
Learner Guide

Measures that Matter Part Two: Detailing the Data-based Story of Public Libraries

http://www.webjunction.org/events/webjunction/measures-that-matter-2.html

Event Description: In the United States, there are a number of national surveys of public libraries and their patrons. While of these efforts help us tell a data-based story of public libraries, they differ in terms of their samples, what types of data they collect, and how their data are collected, stored, and accessed. During the first webinar in this three-part series, we scanned the landscape of major public library surveys and considered how library data could be used more productively in the future. In this second webinar, we will drill deeper into the concepts of sampling, data types, and data management, and how they impact what we know about public libraries and their patrons. At the end of this webinar, participants will have a greater understanding of various sampling methods, recognize the differences between inputs, outputs, and outcomes, and be aware of the data management practices for various national public library surveys.

Presented by: Rebecca Teasdale, John Bertoc, and Linda Hofschild

What are your goals for viewing this webinar?

- Personal Goals
- Team Goals

Sampling Methods

Identify the methods for any surveys your library conducts or participates in (Indicate which survey per method):

- [ ] Census
- [ ] Probability Sampling (e.g. simple random, systematic, stratified, cluster, or multistage)
- [ ] Non-Probability Sampling (e.g. purposive, snowball, or convenience)
- [ ] Other

Explore these additional resources on sampling methods:

- Understanding random sampling, a video from Pew Research Center
- Understanding Sampling, a toolkit from the Pall Institute
- SampSize, Design and Analysis, a book by Sharon Lohr

This webinar is brought to you by the Evaluation Impact Team. Comments or questions about Measures that Matter to info@costa.org.