Connecting Communities with Open Civic Data

Roles for Libraries and Civic Data Partners

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Civic Switchboard

Thank you to SICSS for the invitation!

Acknowledgements

The Civic Switchboard Project has been made possible through funding from the Institute of Museum and Library Services.

The Civic Switchboard Team includes Aaron Brenner, Robert Gradeck, Chelsea Gunn, Liz Monk, and Marcia Rapchak. We have learned from library and data workers from around the country.

Civic Switchboard

Agenda

Introduction and background of Civic Switchboard Project

Concepts guiding work and activities

Building civic data literacy

Library roles and civic data

Current efforts

Discussion

Introduction

University of Pittsburgh | School of Computing and Information

University of Pittsburgh | Responsible Data Science

Civic Switchboard

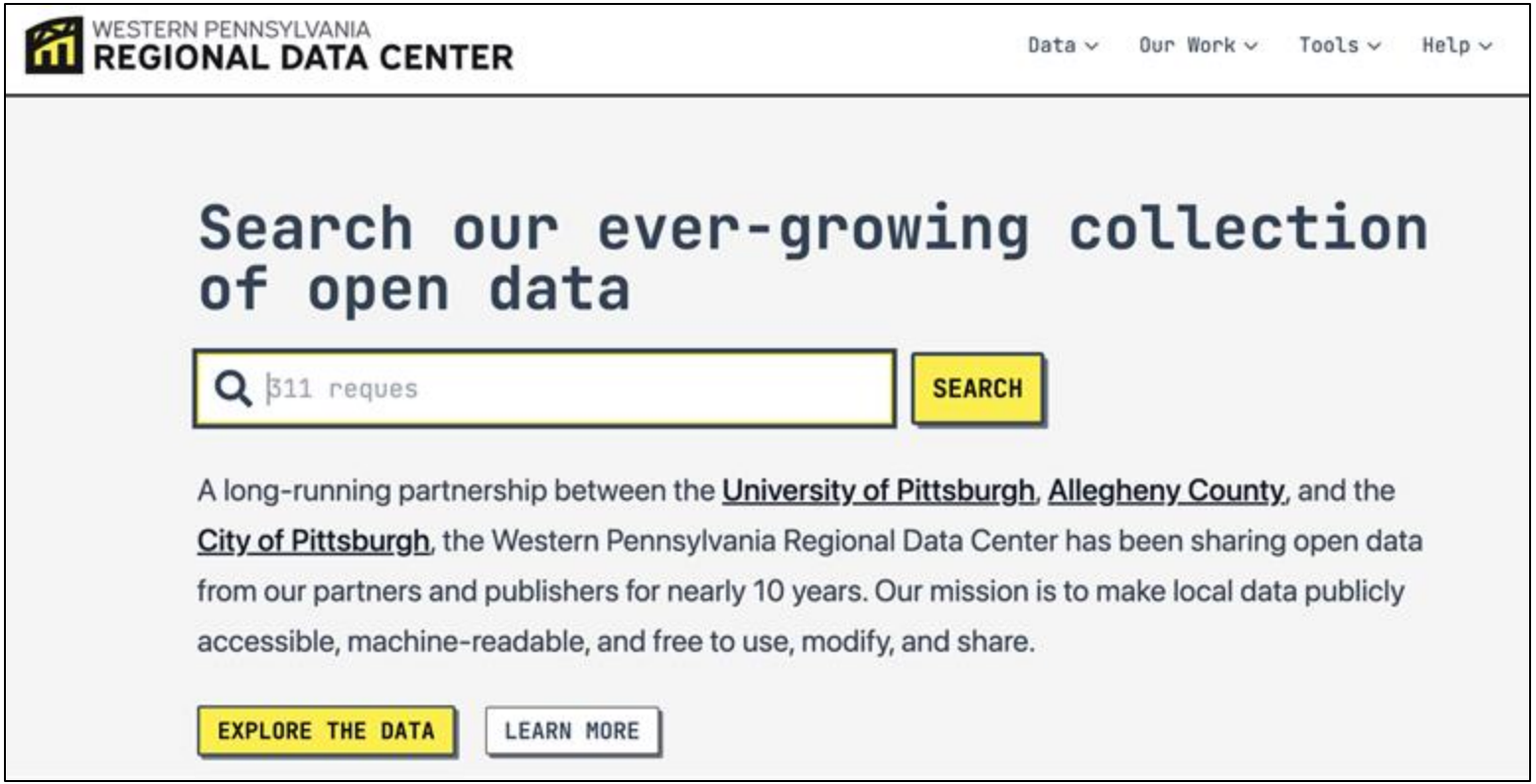
Background of Civic Switchboard Project

THE CITY OF PITTSBURGH

2014 Ordinance –

"WHEREAS, in commitment to the Spirit of Open Government, the City of Pittsburgh will consider public information to be open by default and will proactively publish data and data containing information"

Background of Civic Switchboard Project



WPRDC

Background of Civic Switchboard Project

Collaborated on:

- Selection of platform for data portal
- Design of metadata schema
- Strategies for privacy protection
- Preparation and publication of archival data as open data
- Design and implementation of data training and programming

Background of Civic Switchboard Project

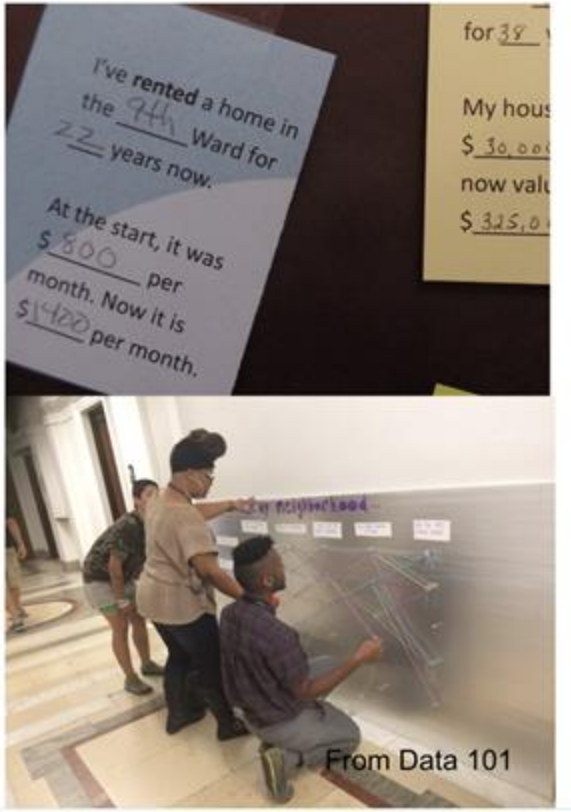
Our collaboration surfaced common values and goals that are shared by libraries and data organizations.

We asked, “What does this “open civic data” work look like in other libraries and communities?”

Concepts guiding our work: Civic Data

Data that provides insight into community life and the decision-making and policies that affect people and places.

Includes data shared by local, state, and federal governments and civic organizations (like libraries!)

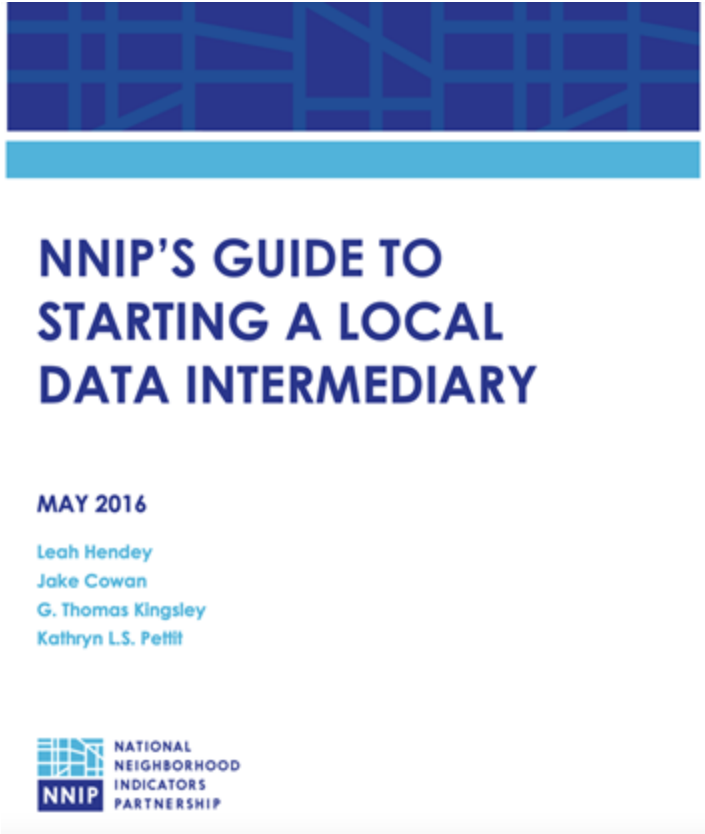


Concepts guiding our work: Open Data

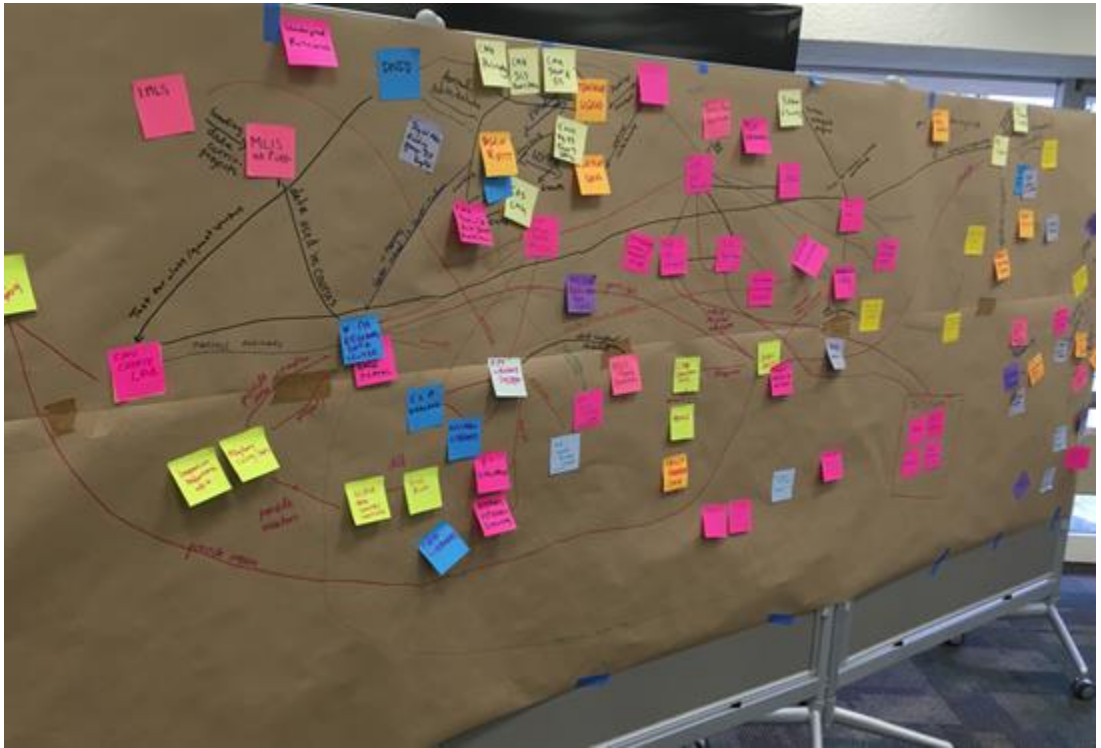
- Free to access and download
- Reusable by anybody for any purpose
- Available in machine readable, open file formats
- Absent of personally identifiable information
- Timely and as complete as possible
- Modification and resharing permitted

Concepts guiding our work: Data Intermediaries

Individuals and organizations that help people find, evaluate, and use information.



Concepts guiding our work: Data Ecosystems



The network of people and organizations connected with civic data work in a region and the infrastructure that supports data work.

Concepts guiding our work: Principles

We believe that no single model can be made to fit every city or region.

Modelling at the national level must be done by capturing a wide variety of successful local practices.

Funded 14 Partnered Field Projects across US

Alaska State Library, Juneau, AK

Charlotte Mecklenburg Public Library, Charlotte, NC

Fondren Library, Rice University, Houston, TX

St Paul Public Library, St Paul, MN

Western New York Library Resources Council, Western NY

Indianapolis Public Library, Indianapolis, IN

St. Joseph County Public Library, South Bend, IN

Spokane Public Library, Spokane, WA

Pioneer Library System, Ontario County, NY

Providence Public Library, Providence, RI

Queens Borough Public Library, Queens, NY

Robert L. Bogomolny Library at the University of Baltimore, Baltimore, MD

The School of Library and Information Sciences Library at North Carolina Central University (NCCU), Durham, NC

The University of Chicago Library's Center for Digital Scholarship, Chicago, IL

University of Pittsburgh

Civic Switchboard

Connecting libraries and community information networks

This project was made possible in part because of IMLS grant #LG-70-17-0146-17

Institute of Museum and Library Services

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Guide

Partner organization

UNC Charlotte Urban Institute

Library roles played

Connecting data producers (see page 36)

Showing the importance of civic data (see page 37)

CASE STUDY 2

Charlotte Mecklenburg (NC) Public Library

Organizing a local civic data council as groundwork for an open data portal

The Charlotte Mecklenburg Library initially partnered with UNC Charlotte Urban Institute with the hope of launching a Civic Data Council comprised of local data providers. Both partners experienced leadership changes mid-stream and the library ended up working mostly on its own. The project revealed a clear need around organizing local data providers, and early results supported the library was optimally positioned to fill this role. Moving forward, the library will need to 1) coordinate how to turn the council's ideas into reality, and 2) gather institutional support where those ideas require investments of time and resources.

Our project was designed to expand access to civic data and empower users to utilize the benefits of civic data within their everyday lives. We hoped to accomplish this by first forming our own Civic Data Council between the Library, the UNCC Urban Institute, and the multiple municipalities and data providers within Mecklenburg County. From this group we would begin laying the ground work and foundation for future collaborative initiatives that highlight the importance of data literacy and data access.

The data landscape within Mecklenburg County is complex. Charlotte as a city effectively has two major government systems (The City of Charlotte and Mecklenburg County) each generating their own siloed datasets within the areas of their purview. In addition, Mecklenburg County houses several townships that each have their own data reporting mechanisms—these municipalities include Matthews, Mint Hill, Pineville, Huntersville, Cornelius, and Davidson. The civic data ecosystem remains complex, which is a perfect use case for the Library to come in as a neutral party to convene and organize the collaborative activities of this group.

> "From our initial meeting nearly all of the stakeholders relayed to us that they were excited about the Library stepping up and gathering this group, and they thought that it aligned perfectly to the library's charge, even though it did represent a new direction for our institution."

Our first tactic was engaging the potential stakeholders and explaining our charge in building out a civic data council with the hope of creating better on-ramps for community members to access and leverage their civic data. We also took this conversation outside of our workplace choosing to strategically meet at a local breakfast joint called the Famous Toastery, creating an environment that was non-threatening, casual, and collaborative from the get-go (plus who can turn down a free breakfast?). From our initial meeting nearly all of the stakeholders relayed to us that they were excited about the Library stepping up and gathering this group, and they thought that it aligned perfectly to the library's charge, even though it did represent a new direction for our institution.

Unfortunately, our project went through some massive leadership changes during its first year causing delays in our progress. It became more important in terms of the Library's sustainability to work as a convener and organizer of these public datasets, instead of being the owner and operator of a community data portal. It will be interesting to see what conflict may arise when the Civic Data Council begins to "cost" something so that we remain collaborative with the group. As the project begins to build momentum, the Library's CIO will allocate resources from the Innovation Fund accordingly, as well as seek out additional funding from grants and other interested funders. Stakeholders may also contribute.

Civic Data Council at the Famous Toastery.
Photo by Seth Erwin, CC-BY.

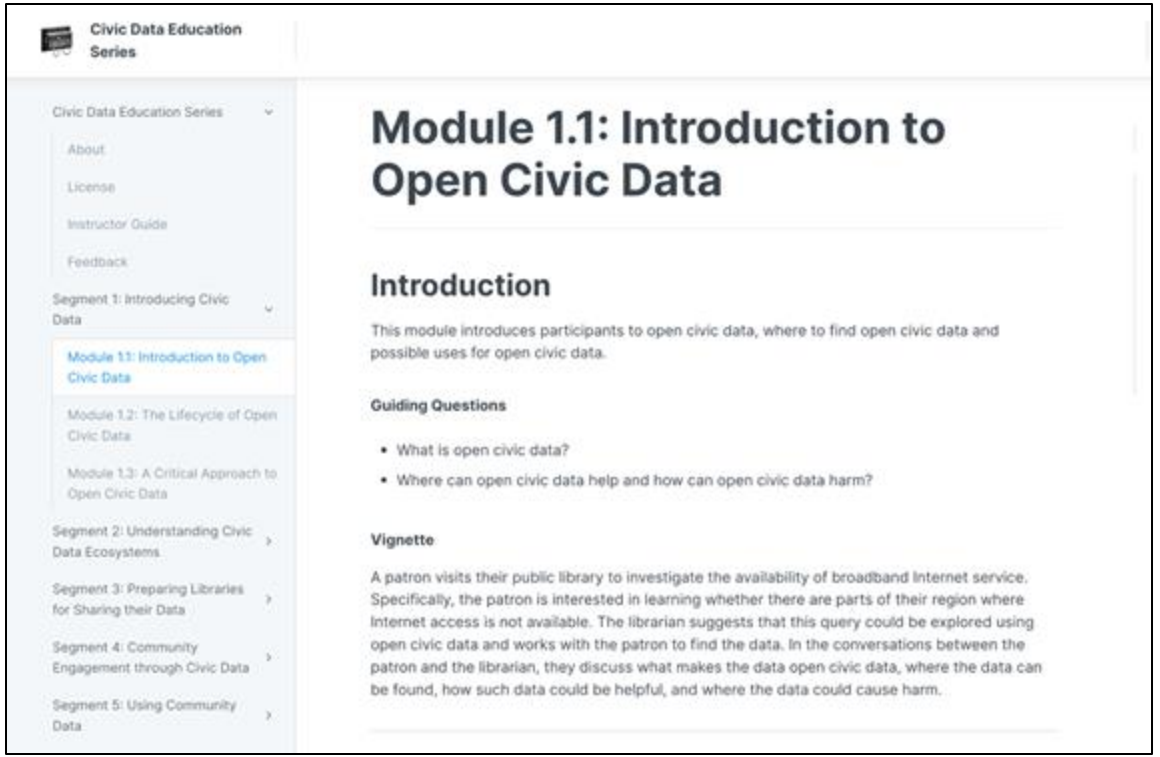
The major success was that the stakeholders that were gathered were excited and enthusiastic about the library convening the group. Several of the representatives identified areas where we could better collaborate including:

- Surveying and auditing the dataset landscape
- Establishing a metadata standard across all the stakeholder datasets

Guide

Civic Data Education Series to support civic data literacies in LIS programs

- Recordings
- Scripts and slides
- Exercises
- Additional resources



Civic Data Operators Discussion Group

The **Civic Data Operators** group allows those working to connect libraries with civic data in their local communities to exchange information and ideas and resources. While the Civic Switchboard project has been an promoter of this community, it is our hope for this group to have its own identity and sense of ownership beyond any particular project.

Visit the Google group to join the list here.

Connect with others –
Civic Data Operators Group

Group Guidelines

Subscribers can ask questions, carry on discussions, and post materials from other sources they think would be of interest to the group. The list is public and not moderated, but admins reserve the right to delete messages that are markedly off-subject or inappropriate (advertisements, solicitations, partisan political tracts, etc.) Subscribers are responsible for obtaining permission ahead of time before they post anything that is not clearly in the public domain.

Workshops for library + data partners

Building civic data literacy

Civic data literacy includes the skills and knowledge to find, evaluate, and use open civic data

Building civic data literacy: Three guiding approaches

Adult Learning Theory

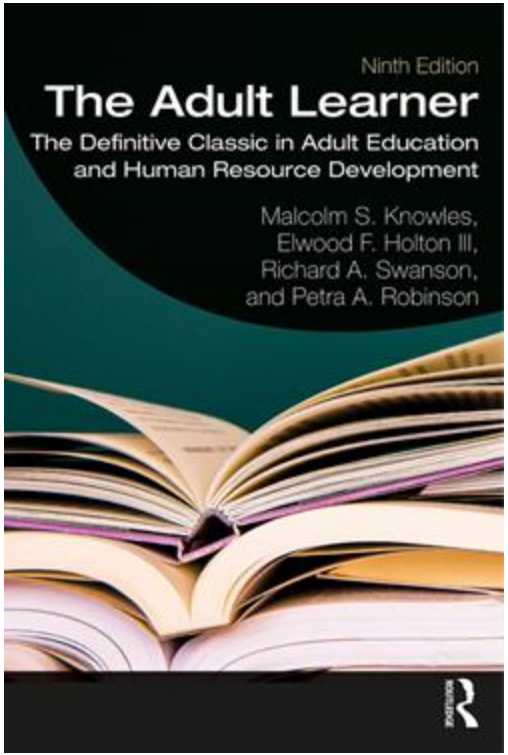
Low Tech Data Education

Data Justice Orientation

Building civic data literacy: Adult Learning Theory

Adult learning theory suggests that to design effective learning experiences, learning objectives should:

1. connect to real-life needs the learners experience
2. prioritize activity and direct experience
3. support independence and learner differences



Library Civic Data Planning Canvas Instructions

1. Target Audience

Who will attend your event, benefit from your service, participate in your activity, or use your tool or data?

2. Values

What values will guide your work?

3. Goals and Objectives

What are the broad goals of your event, activity, service, or tool?

4. Concept

What are you doing?
Describe the concept of your event, activity, service, or tool.

What roles will the core partners play?

5. Partners

Who else will you need to work with to implement your event, service, activity, or tool, and what role(s) will these additional partners play?

Will your partnerships or collaborations require any formal agreements?

6. Content

Where will the content of your event, activity, service, or tool come from?

Will you leverage an existing model, standard, or product, or will the content be developed from scratch?

7. Logistics

What locations, facility requirements, materials, equipment, and infrastructure will be needed to create and implement your event, service, activity, or tool?

8. Promotion and Publicity

How will you reach your target audience?

9. Resources

What will it cost in terms of time and financial support to implement your event, service, activity, or tool?

Who can provide cash or donated/in-kind resources, and what value proposition is important for each supporter?

10. Measuring Success

How will you measure success, and what types of indicators will you use?

11. Next Steps

What are the immediate/next steps you will take to implement your event, service, activity, or tool?

The Minefield

What types of obstacles will you need to overcome in order to make your activity a success? Some common obstacles may include:

- Organizational buy-in/no champion
- Financial support
- Capacity
- Time
- Understanding of your audience
- Lack of content
- Infrastructure
- Etc.

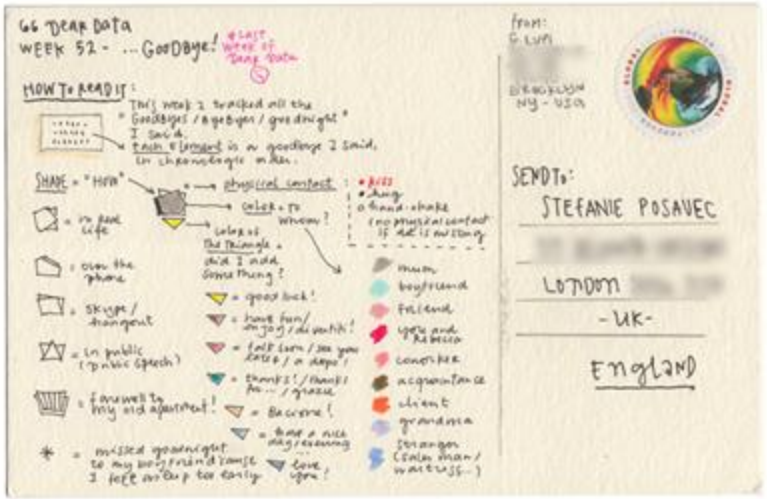
https://www.flickr.com/photos/savethewildup/441472210

The Library/Civic Data Intermediary Activity Planning Canvas was prepared by the Civic Switchboard project team, May, 2018 https://civic-

Building civic data literacy: Low Tech Data Education

By decentering technology, these approaches remove or minimize some technical barriers to entry, such as lack of access to, or familiarity with, specific tools or systems.

Instead, the emphasis is on thinking through and with the data and sparking discussions among participants, not on learning the mechanics of specific tools or technologies.



Dear Data Project, Image by Giorgia Lupi

Building civic data literacy: Data Justice

Data justice asks us to look critically at the ways that data has been used to perpetuate harms.

Data justice works to ameliorate such harms through data-inspired action and community participation throughout the data lifecycle.

From the Library of Missing Datasets to Action

Use this template to develop a strategy to act and change power dynamics through the use of missing data.

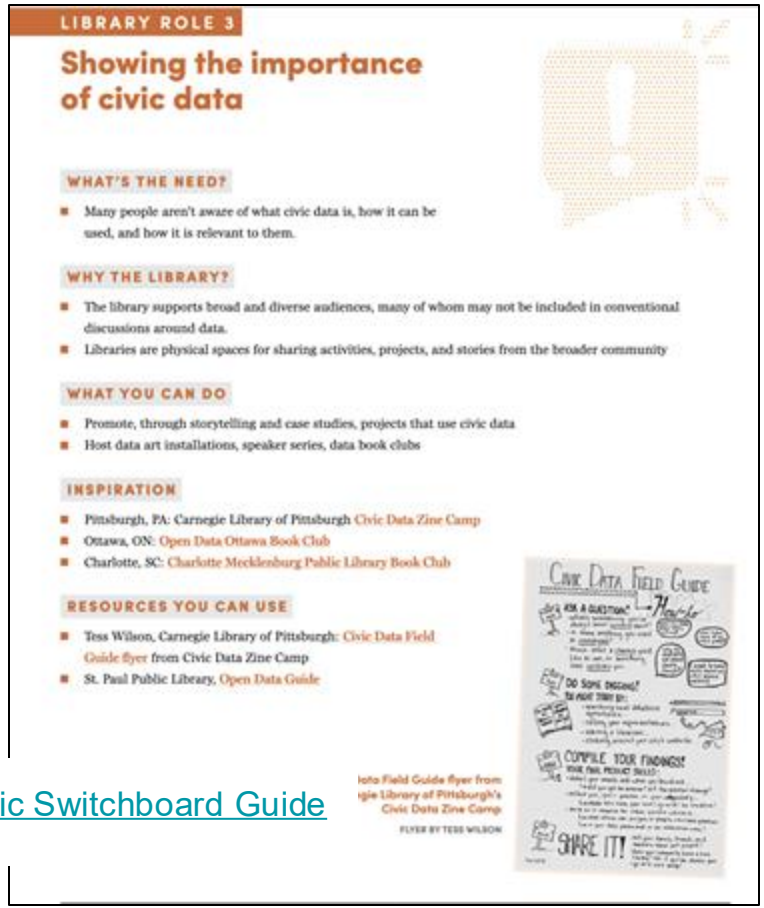
What data is missing?	How might this data be used? Please share some use cases	Why do you think this data is missing?
Are there risks that could come from exposing this data? How could these be addressed?	What strategy could you use to capture this data? This could involve counter-data collection, advocacy, uncovering hidden data, etc.	What are elements in an action strategy to build power using this data?

Civic Data Library Roles

By building internal capacity and data literacy, libraries can identify and take on local civic data roles.

Library (and other data organization roles) should account for local ecosystem and community interests and may be best done in partnership with others.

Civic Data Roles



LIBRARY ROLE 3

Showing the importance of civic data

WHAT'S THE NEED?

- Many people aren't aware of what civic data is, how it can be used, and how it is relevant to them.

WHY THE LIBRARY?

- The library supports broad and diverse audiences, many of whom may not be included in conventional discussions around data.
- Libraries are physical spaces for sharing activities, projects, and stories from the broader community

WHAT YOU CAN DO

- Promote, through storytelling and case studies, projects that use civic data
- Host data art installations, speaker series, data book clubs

INSPIRATION

- Pittsburgh, PA: Carnegie Library of Pittsburgh Civic Data Zine Camp
- Ottawa, ON: Open Data Ottawa Book Club
- Charlotte, SC: Charlotte Mecklenburg Public Library Book Club

RESOURCES YOU CAN USE

- Tess Wilson, Carnegie Library of Pittsburgh: Civic Data Field Guide flyer from Civic Data Zine Camp
- St. Paul Public Library, Open Data Guide

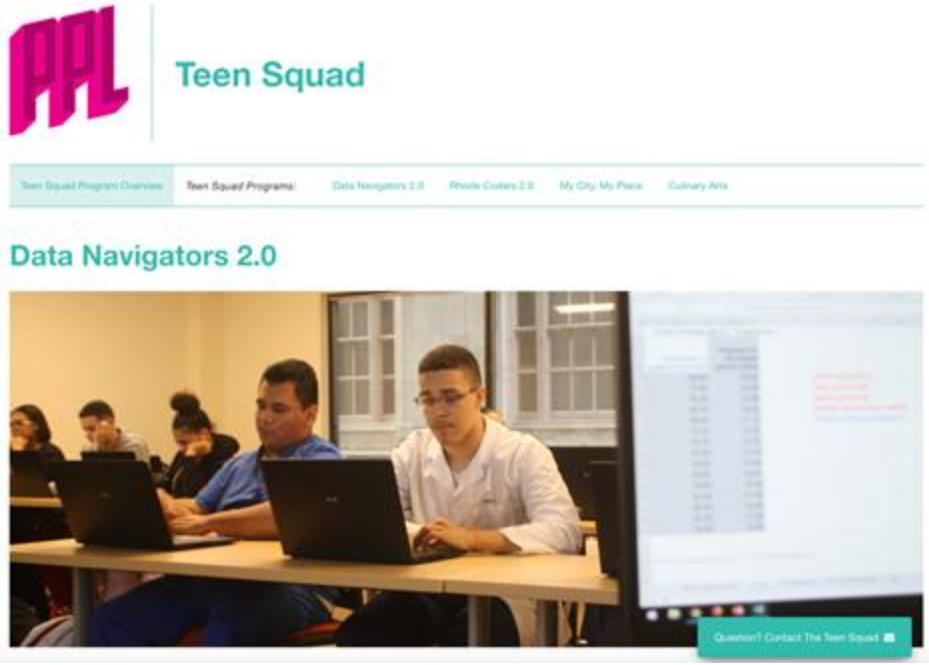
lata Field Guide flyer from
rgie Library of Pittsburgh's
Civic Data Zine Camp

FLYER BY TESS WILSON

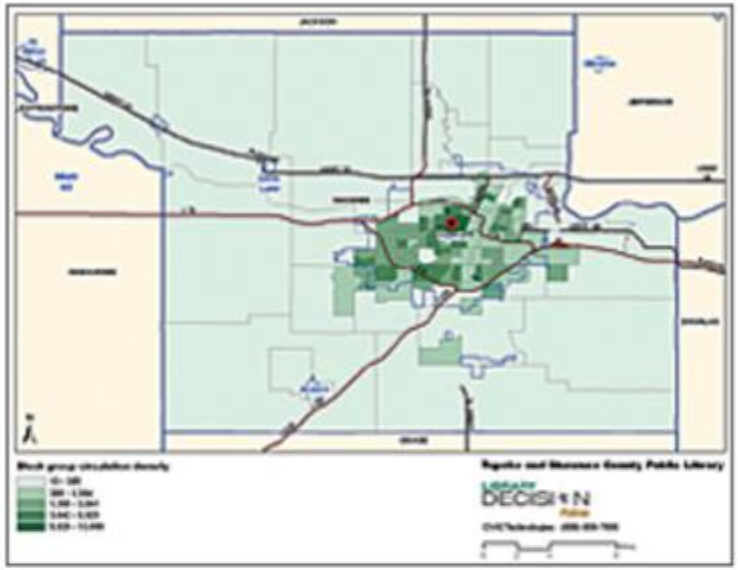
[Civic Switchboard Guide]

- Connecting data users
- Connecting data producers
- Showing the importance of civic data
- Developing civic data literacy
- Advocating for ethical, responsible, and accessible civic data
- Making civic data more usable
- Providing expertise on data management
- Creating civic data
- Using civic data
- Publishing civic data
- Archiving civic data
- Increasing the library's capacity to do all of the above

Civic Data Roles: Developing Civic Data Literacy



Civic Data Roles: Using Civic Data



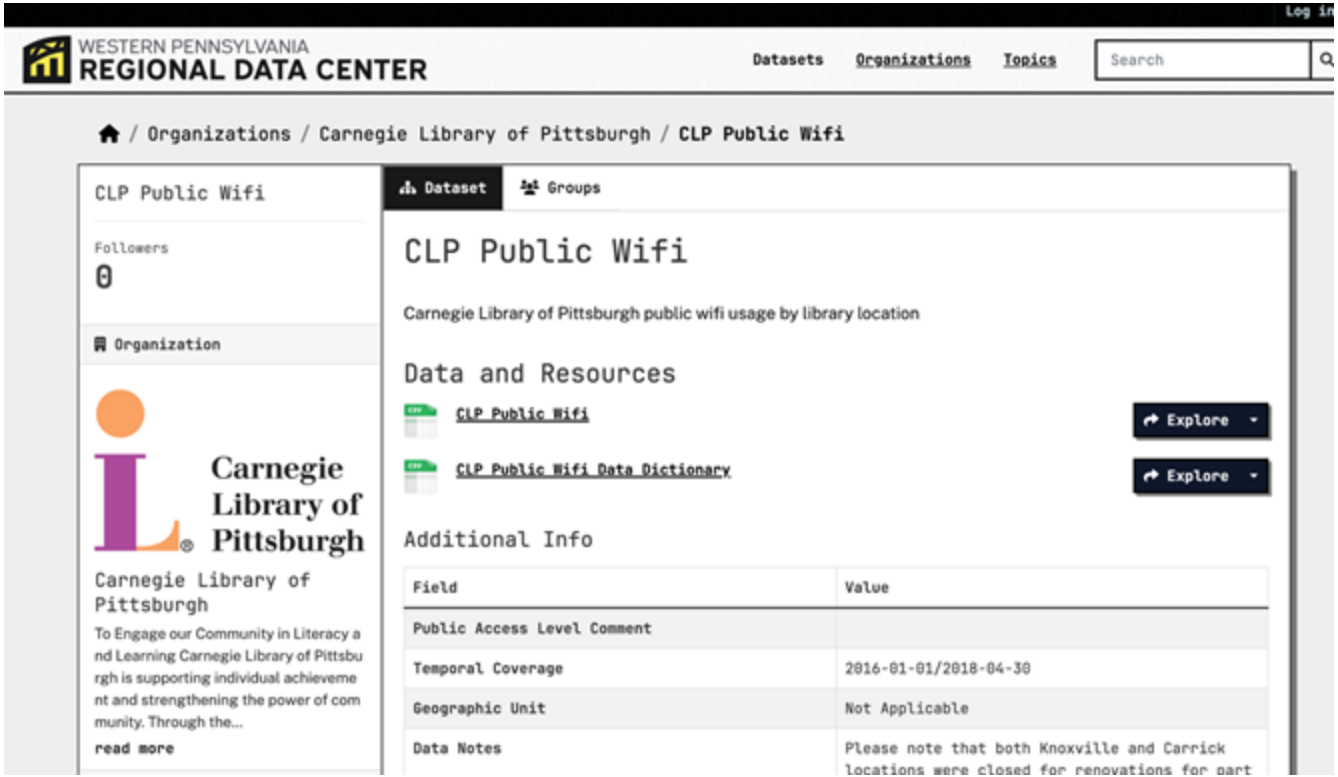
GIS analysis told the library more about its patrons than traditional survey methods.

Perception: People who live in eastern Topeka are generally underserved and are not big library users.

Reality: Seventy-seven percent of inner city tenants are library customers and are the fifth highest segment in terms of items checked out.

Baumann & Writer. (2012) Targeting Local Library Patrons: Tapestry Weaves Common Characteristics into Community Profiles."

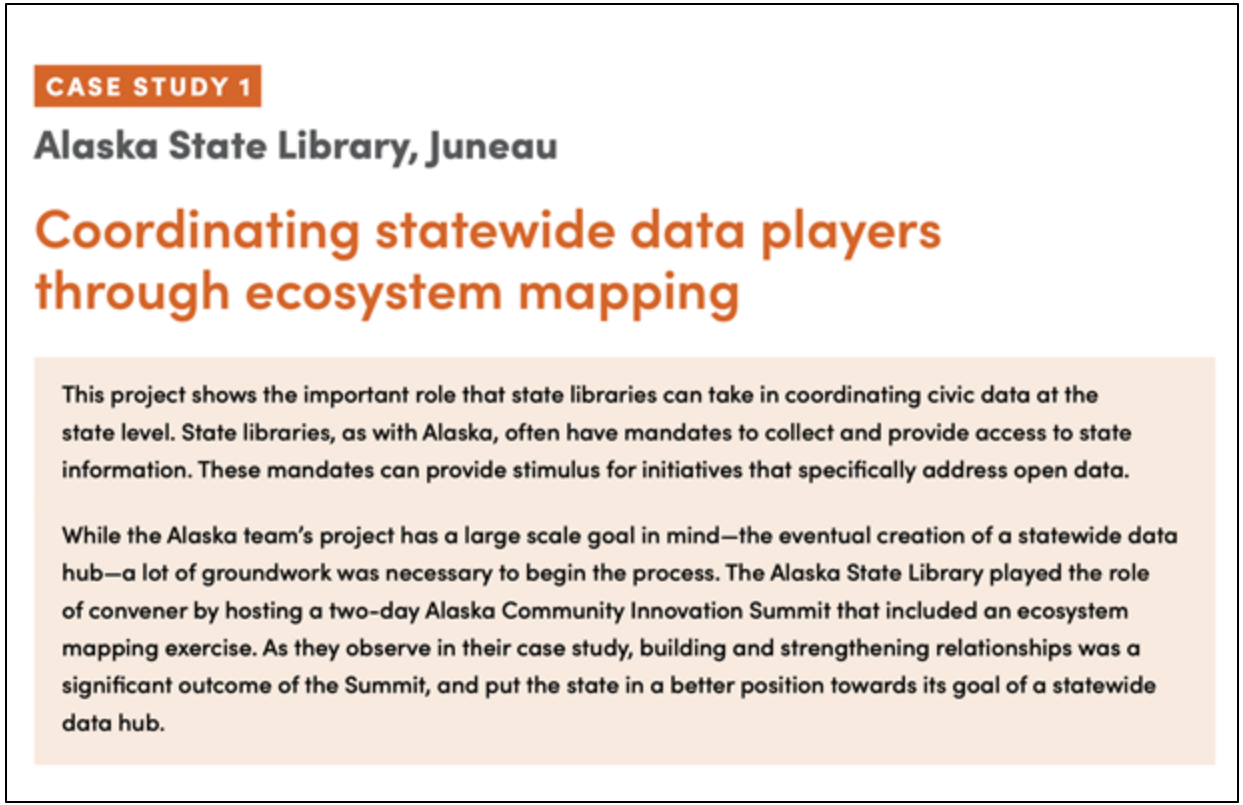
Civic Data Library Roles: Creating Civic Data



Civic Switchboard case studies

Case Study Example: Library roles played

- Connecting data producers
- Connecting data users



CASE STUDY 1

Alaska State Library, Juneau

Coordinating statewide data players through ecosystem mapping

This project shows the important role that state libraries can take in coordinating civic data at the state level. State libraries, as with Alaska, often have mandates to collect and provide access to state information. These mandates can provide stimulus for initiatives that specifically address open data.

While the Alaska team's project has a large scale goal in mind—the eventual creation of a statewide data hub—a lot of groundwork was necessary to begin the process. The Alaska State Library played the role of convener by hosting a two-day Alaska Community Innovation Summit that included an ecosystem mapping exercise. As they observe in their case study, building and strengthening relationships was a significant outcome of the Summit, and put the state in a better position towards its goal of a statewide data hub.

Current Efforts: Data Storytelling

The New York Times

TheUpshot

Thousands of U.S. Government Web Pages Have Been Taken Down Since Friday

Federal agencies moved to satisfy Trump's orders to remove topics like diversity initiatives and "gender ideology."

Listen to this article · 8:06 min Learn more

Share full article 448

By Ethan Singer

Published Feb. 2, 2025 Updated Feb. 3, 2025

Farmers Sued Over Deleted Climate Data. So the Government Will Put It Back.

The Agriculture Department pledged to restore online climate information that farmers said helped them do business, but which officials had deleted.

Listen to this article · 2:23 min Learn more

Share full article

NYT, May 12, 2025

Current Efforts: Data Storytelling

The Data Rescue Tracker

	ID	Dataset	Website	Status	Maintainer
1	f9927cab-...	Billion-Dollar Weather and Climate Disasters	ncei.noaa.gov	In Progress	GTDC
2	c7787744-...	BLS Downloads	download.bls.gov	Finished	DRP
4	f1e011bf-d...	CDC FTP	ftp.cdc.gov	Finished	DRP
5	26ba71f4-f...	US Census Bureau FTP	census.gov	Finished	DRP
6	7cb43fc4-...	National Hurricane Center	nhc.noaa.gov	Finished	DRP
7	2c78d527-...	United States Geological Survey	usgs.gov	Finished	DRP
8	98666e77-...	Office of General Counsel Documents	noaa.gov	Finished	DRP
9	a575ee2e-...	National Hurricane Center FTP	ftp.nhc.noaa.gov	Finished	DRP
10	50606b34...	Enforcement and Compliance History Online	echo.epa.gov	Finished	DRP
11	0c0e50d0-...	System for Award Management	sam.gov	In Progress	GTDC
12	ca207fa3-...	American Communities Survey	census.gov	In Progress	GTDC
13	e1f1b49b-...	Consumer Expenditure Survey	bls.gov	In Progress	GTDC
14	16cd1ff5-f...	USA Spending	www.usaspending.gov	In Progress	GTDC
15	36977438-...	Consumer Finance Bureau Website	consumerfinance.gov	Finished	DRP
16	7adcdfa4-...	College Scorecard	collegescorecard.ed.gov	Finished	DRP DL
17	913ae562-...	Campus Safety and Security	ope.ed.gov	Finished	DRP DL
18	02fda5bc-...	Equity in Athletics Data Analysis Cutting Tool	ope.ed.gov	Finished	DRP DL

Data Rescue Project

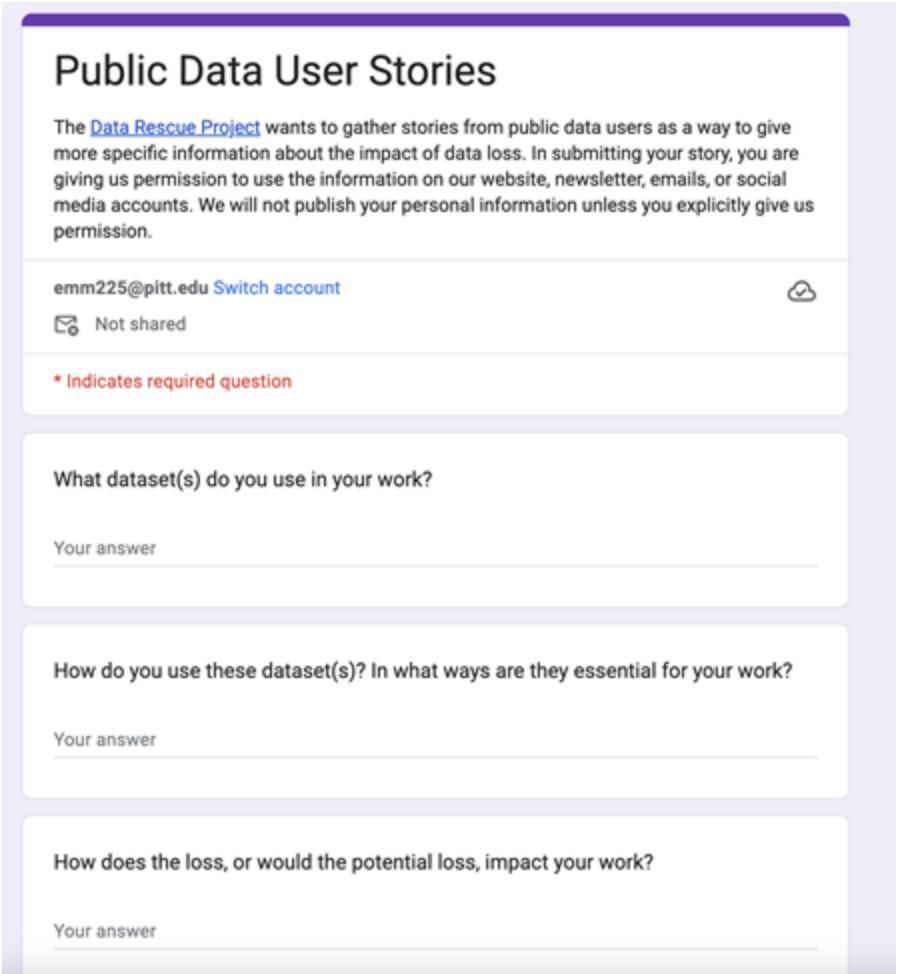
Current Efforts: Data Storytelling

Civic Switchboard Community Call

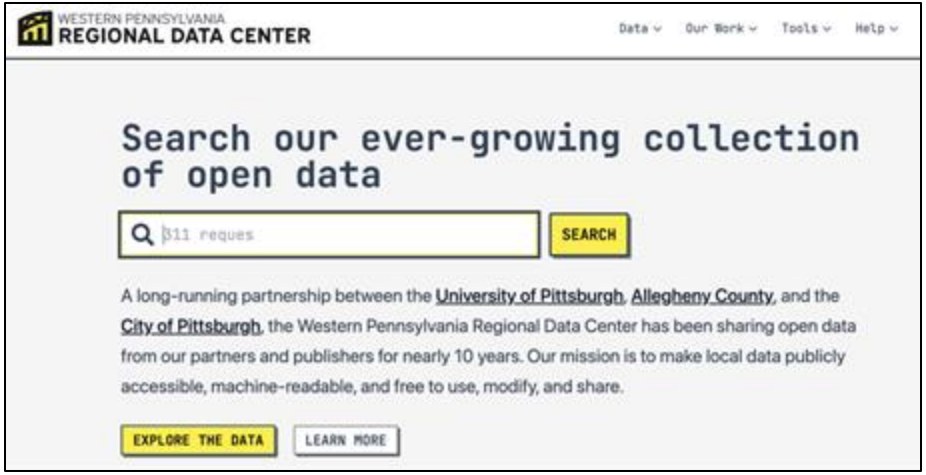
May 22, 12-1pm Eastern on Zoom

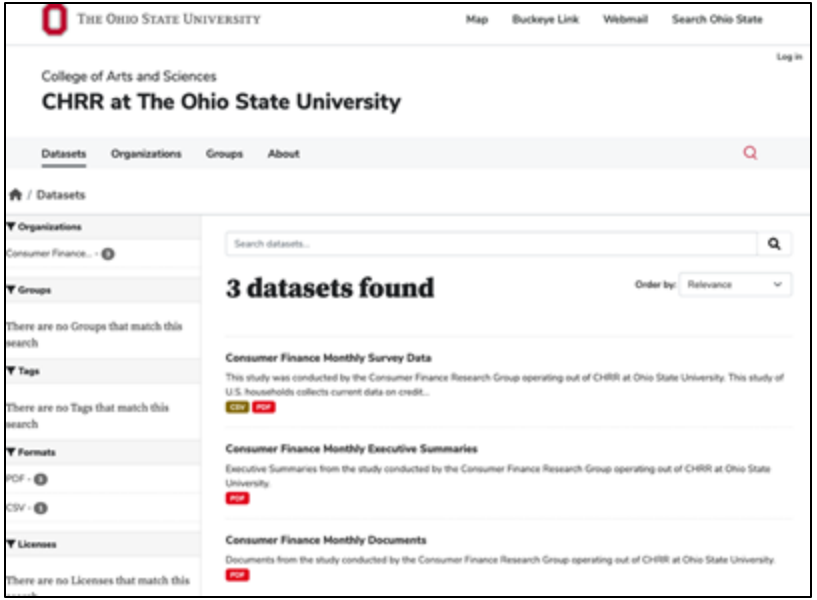
Together, we will build strategies for collecting data stories:

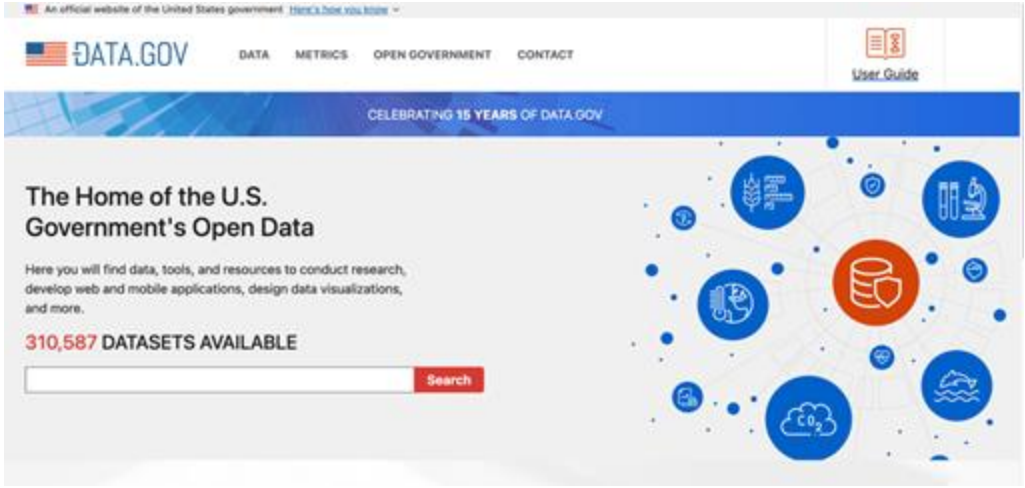
- What are the elements of a data story that demonstrates the human impact of data?
- How can we locate data stories through our work in libraries and data organizations? How do we find people with a story to tell?
- What information should we collect to help us tell the story?



Current Efforts: Sustaining and Growing Community Around CKAN







Current Efforts: Sustaining and Growing Community Around CKAN

https://civicdataecosystem.org/

Questions and Discussion

- Your strategies for building data literacy?
- Ways that you connect community members to data about communities?

Thank you!

Nora Mattern, University of Pittsburgh
emm225@pitt.edu

Resources

Civic Switchboard Project Website + Blog

Civic Switchboard Guide

Civic Data Education Series

Community Calls

POSE-Civic Data Ecosystem Project Website