

The Roles of Libraries in Open Data Literacy

University of Washington
Information School
Open Data Literacy



Why should libraries get involved in the open data movement?

- Open data connects to core library values such as open access, information literacy, and civic engagement
- Libraries have a long history of helping the public navigate new information resources, and understand how to balance humans and technology
- The library's role as curator, and its expertise in discovering, selecting, and weeding information, can be naturally applied to open data
- Can provide the library itself with valuable open data that can be used for strategic planning

What roles do libraries play in open data literacy?



PUBLISHER



CONSULTANT



EDUCATOR

What do libraries publish as open data?

BRANCH INFORMATION & PATRON DATA

- Branch Services
- Library Visitors / Attendance
- Program Attendance
- Library Cardholders
- Library Expenditures

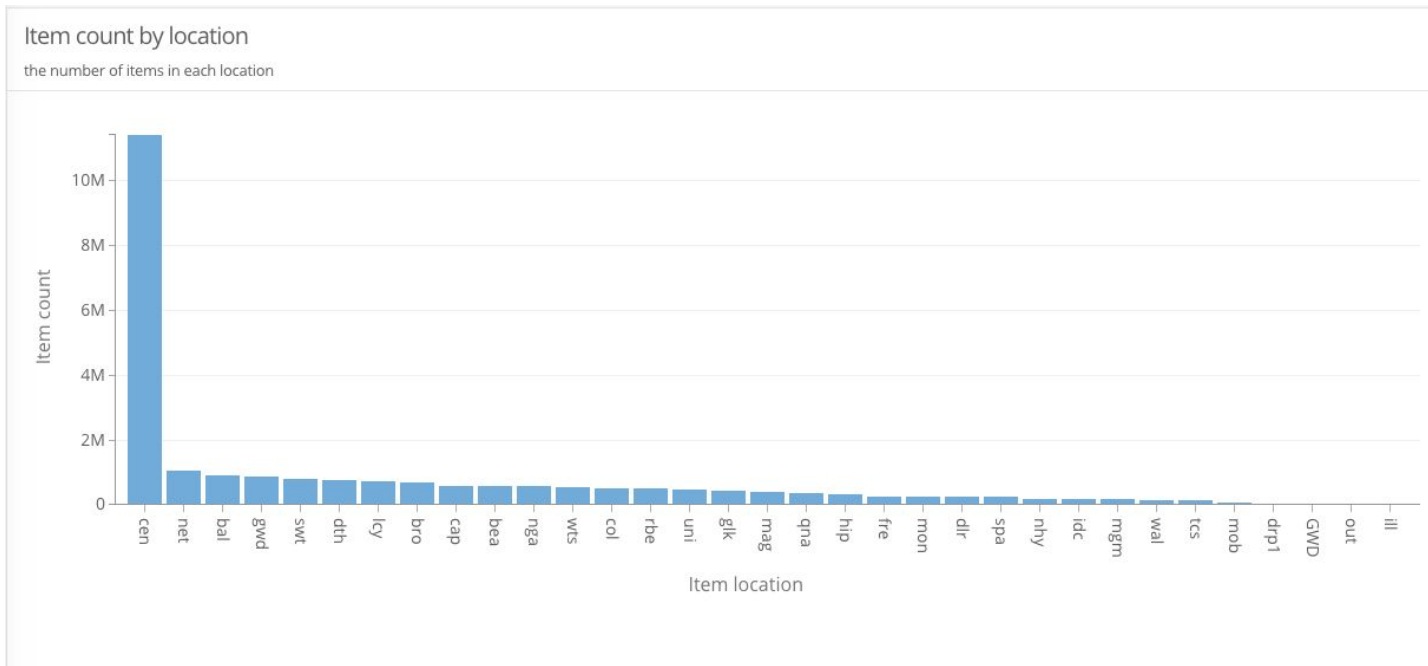
CIRCULATION DATA

- Most Popular Books by Branch
- Popular Fiction Titles
- Popular Nonfiction Titles
- Popular Teen Titles
- Library Holds
- Satisfaction with Library Materials

TECHNOLOGY DATA

- Library WiFi Usage
- Library Computer Usage
- Electronic Resources

data.seattle.gov: Collection Items by Location



(City of Seattle, 2018)

data.memphistn.gov: Youth Library Attendance

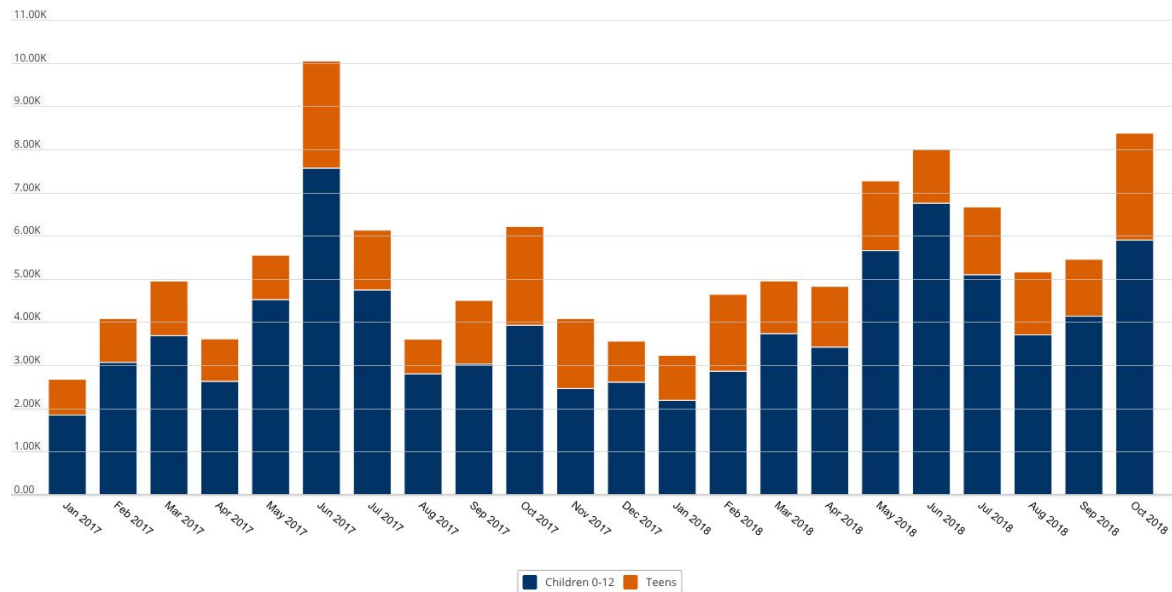
MEMFacts Youth Library Attendance

Based on [Library Program Total Attendance and Count](#)

This dataset shows the number of library programs by type and attendance at those programs by age group.



Manage More



(City of Memphis, 2018)

data.cityofchicago.org:

Popular Fiction Titles at the Chicago Public Library

RANK	TITLE	AUTHOR	PUB YEAR	CATALOG RECORD
1	The goldfinch	Tartt, Donna.	2013	http://chipublib.bibliocommon...
2	Gone girl: a novel	Flynn, Gillian, 1971-	2012	http://chipublib.bibliocommon...
3	Sycamore row	Grisham, John.	2013	http://chipublib.bibliocommon...
4	The gods of guilt: a novel	Connelly, Michael, 1956-	2013	http://chipublib.bibliocommon...
5	The invention of wings	Kidd, Sue Monk.	2014	http://chipublib.bibliocommon...
6	Takedown twenty	Evanovich, Janet.	2013	http://chipublib.bibliocommon...
7	Cross my heart	Patterson, James, 1947-	2013	http://chipublib.bibliocommon...
8	And the mountains echoed	Hosseini, Khaled.	2013	http://chipublib.bibliocommon...
9	The Interestings	Wolitzer, Meg.	2013	http://chipublib.bibliocommon...
10	Inferno: a novel	Brown, Dan, 1964-	2013	http://chipublib.bibliocommon...
11	The cuckoo's calling	Galbraith, Robert.	2013	http://chipublib.bibliocommon...
12	King and Maxwell	Baldacci, David.	2013	http://chipublib.bibliocommon...
13	The lowland: a novel	Lahiri, Jhumpa.	2013	http://chipublib.bibliocommon...
14	Fifty shades of Grey	James, E. L.	2012	http://chipublib.bibliocommon...

(Chicago Data Portal, 2014)

data.austintexas.gov:

Wireless Usage at Austin Public Library

Wireless Usage at Austin Public Library

Recreation and Culture

[View Data](#)[Visualize](#) ▾[Export](#)[API](#)[...](#)

The Library offers WiFi access at all locations. As of 10/2016 we are pulling the usage from Meraki, and it is the number of distinct clients using our WiFi. Prior to 10/2016, we pulled number of sessions/connections for each location from Google Analytics monthly.

About this Dataset

Updated

September 24, 2018

Data Last Updated
September 24, 2018

Metadata Last Updated
September 24, 2018

Date Created
July 8, 2015

Views
462

Downloads
1,378

Data Provided by
Austin Public Library

Dataset Owner
Sarah

[Contact Dataset Owner](#)

Imagine Austin (30 - Year horizon) Primary Priority

Primary Priority

Workforce Development

Imagine Austin (30 - Year horizon) Secondary Priority

Secondary Priority

Healthy Austin

Strategic Plan Outcome (3-5 year horizon) Primary

Primary Strategic Outcome

Cultural and Learning Opportunities

Strategic Plan Outcome (3-5 year horizon) Secondary

Secondary Strategic Outcome

Health

Additional Information

Department

Library

Frequency

Monthly

[Show More](#)

(City of Austin, 2018)



How do libraries consult on open data?

- May work in partnership with local government to establish and/or manage portal
- May promote open data portal as library service
- May host the portal on library domain, or work as the portal project manager
- May advise on collection development and data curation best practices
- May contribute library expertise in areas such as community analysis and digital literacy to the process of data curation

Library as Consultant

Chapel Hill, North Carolina

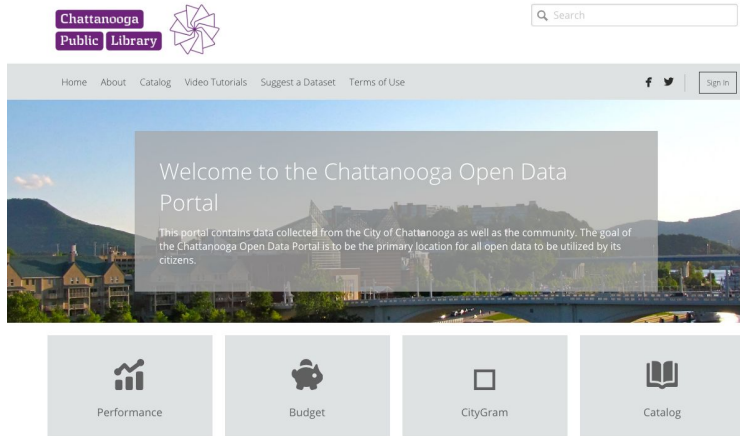


www.chapelhillopendata.org

- Launched portal as library service in partnership with Town of Chapel Hill
- Contributes staff member to portal who serves jointly as library systems manager and open data project manager
- Publishes library data to portal

Library as Consultant

Chattanooga, Tennessee



- Launched open data portal on library domain
- Publishes library data to portal

data.chattlibrary.org



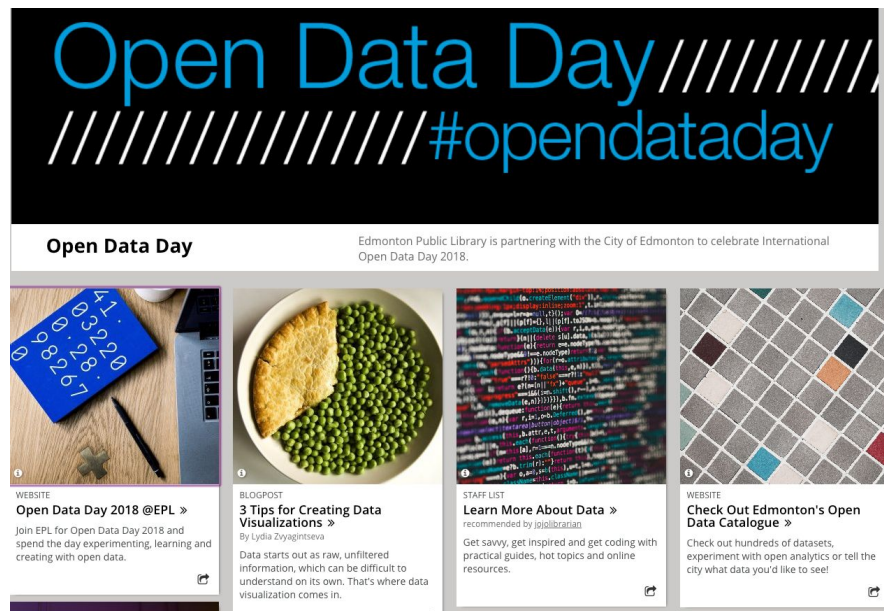
How do libraries educate about open data?

- May present open data to patrons at reference services
- May offer programming around open data such as hackathons, data science classes, and informational sessions
- May curate content around open data such as Data 101 guides, blogs, and resource lists
- May engage with the community to promote open data
- May utilize library venues (especially makerspaces or technology labs) for open data events

Open Data Day Hackathon at Edmonton Public Library

Edmonton Public Library (epl.ca) in Edmonton, Alberta, Canada offers a variety of open data resources to its patrons, including its annual Open Data Day Hackathon. EPL's Hackathon involves:

- City, library, and business representatives
- Open to any citizens interested in experimenting with open data
- Encourages new projects and business ideas that utilize open data

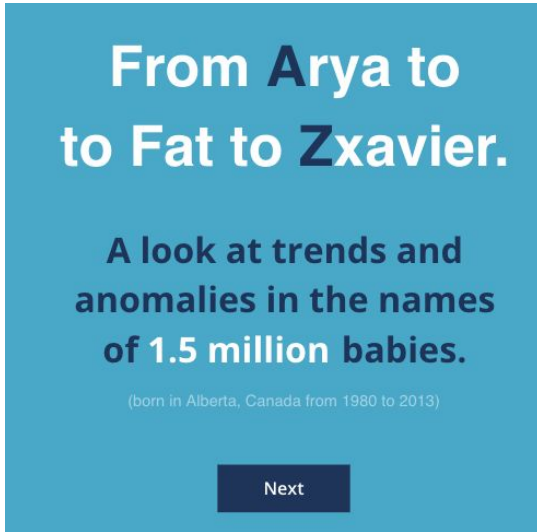


([Open Data Day - epl.ca](http://OpenDataDay-epl.ca))



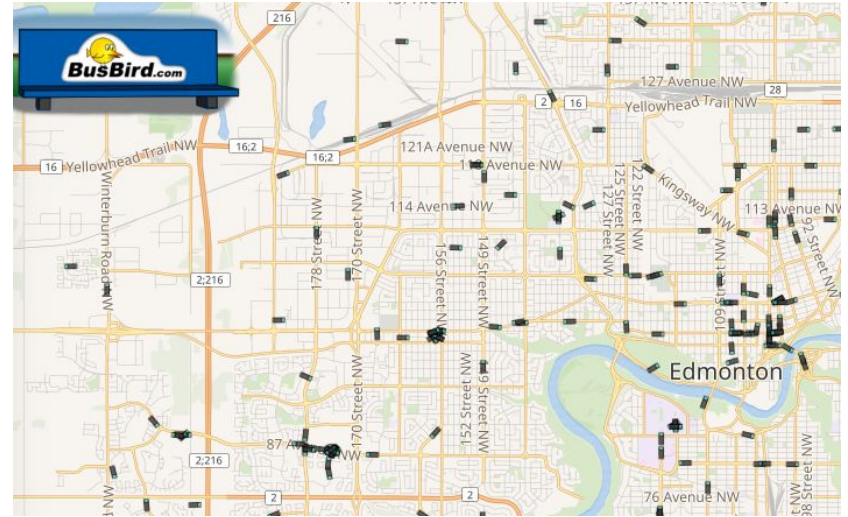
Projects to Come Out of Edmonton Open Data

Information on baby names in Alberta



(babynames.dha.io)

Bird's eye view of city buses



(Busbird)

Open Data Content at Edmonton Public Library

Edmonton Public Library also offers some open data content on their website, including topic guides (on topics such as Python and R) and blog posts.

One blog post, “3 Tips for Creating Data Visualizations That People Understand,” has been very popular, offering tips and tricks for creating open data visualizations.

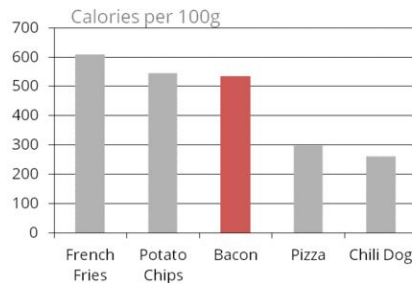


1. Less is More

Visualization is communication—communication that can take something complicated like data and make it meaningful. When you visualize data, it has the power to tell stories.

The key is: your visualization should only include that information which is needed to help the viewer understand the data. Often, this means less is more. Skip distracting fonts and use bold and italic sparingly. Let the data speak by communicating vital information to the viewer.

Lighten labels



[“3 Tips for Creating Data Visualizations That People Understand” - epl.ca](https://epl.ca/blog/3-tips-for-creating-data-visualizations-that-people-understand)

Data Courses Offered or Developed by Libraries

- [Data 101: Finding Stories in Data at Carnegie Library of Pittsburgh](#) - Pittsburgh, Pennsylvania
 - Introduction to the types of stories found in data
 - Part of a Data 101 series offered through the library and the Western Pennsylvania Regional Data Center
- [Data Equity for Main Street](#)
 - Developed by librarians and education and technology leaders
 - Pilot-tested in more than 20 libraries

Tips for Libraries Getting Started with Open Data

- **Start small.** Offer a class on open data, perhaps taught by an expert in your community.
- **Offer open data as a resource at reference.** If reference librarians aren't already mentioning open data as a potential resource to patrons, brief them on its value.
- **Talk with other government organizations about open data.** If your community doesn't yet have an open data portal, connect with other public institutions to see how they're making information more transparent.
- **Launch a dataset.** If your community already has an open data portal, review library data to determine what could easily be made available to the public.

How will your library engage with open data?

Whether as a **publisher, consultant, or educator**, libraries can play **a vital role in promoting open data literacy** in their communities.

Because they are open to all and have a long history of curation expertise, **libraries are perfectly positioned to connect patrons to the next information frontier: data.**



References

- Chicago Data Portal. (2014). *Libraries - Popular Fiction Titles at the Chicago Public Library* [Data file]. Retrieved from <https://data.cityofchicago.org/Education/Libraries-Popular-Fiction-Titles-at-the-Chicago-Pu/nv46-bxa3>.
- City of Austin. (2018). *Wireless Usage at Austin Public Library* [Data file]. Retrieved from <https://data.austintexas.gov/Recreation-and-Culture/Wireless-Usage-at-Austin-Public-Library/cr83-wy4q>.
- City of Memphis. (2018). *MEMFacts Youth Library Attendance* [Data file]. Retrieved from <https://data.memphistn.gov/Neighborhoods/MEMFacts-Youth-Library-Attendance/2qhu-zch9>.

References

City of Seattle. (2018). *Items by Location*. Based on Library Collection Items [data file]. Retrieved from <https://data.seattle.gov/Community/Items-by-Location/i9et-ud68>.