

# 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?

curation  
expertise

HISTORIC  
ROLE

*information  
experts*

*lots of  
library  
data*

*equity  
for all*

CORE  
VALUES

**transparency**

# What roles do libraries play in open data literacy?



**EDUCATOR**



**COLLABORATOR**



**PUBLISHER**

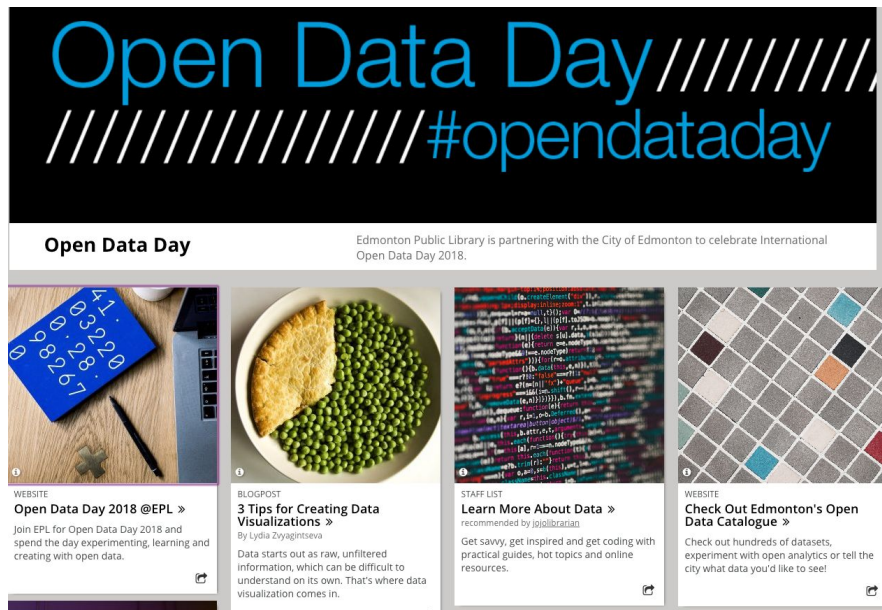
# How do libraries educate about open data?



# Open Data Day Hackathon at Edmonton Public Library

Edmonton Public Library ([epl.ca](http://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



The screenshot shows the Open Data Day website. At the top, there's a large banner with the text "Open Data Day" in blue and white, followed by a series of diagonal lines and the hashtag "#opendataday". Below the banner, a sub-header reads "Open Data Day" and "Edmonton Public Library is partnering with the City of Edmonton to celebrate International Open Data Day 2018." The main content area is divided into four columns, each with a different image and text:

- Column 1:** Image of a blue calculator and a laptop. Text: "Open Data Day 2018 @EPL »", "Join EPL for Open Data Day 2018 and spend the day experimenting, learning and creating with open data."
- Column 2:** Image of a pie and peas. Text: "3 Tips for Creating Data Visualizations »", "By Lydia Zyagintseva", "Data starts out as raw, unfiltered information, which can be difficult to understand on its own. That's where data visualization comes in."
- Column 3:** Image of a code editor. Text: "Learn More About Data »", "recommended by @j0j0l1crat1an", "Get savvy, get inspired and get coding with practical guides, hot topics and online resources."
- Column 4:** Image of a grid pattern. Text: "Check Out Edmonton's Open Data Catalogue »", "Check out hundreds of datasets, experiment with open analytics or tell the city what data you'd like to see!"

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



# 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.

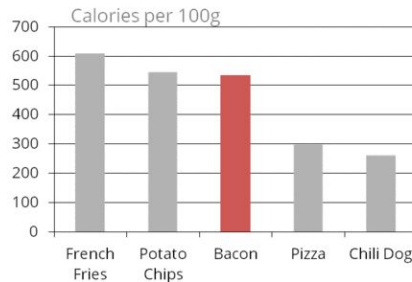


## 1. Less is More

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](#)

# Data Courses Offered or Developed by Libraries

- [Data 101 Toolkit](#)
  - Developed by Carnegie Library of Pittsburgh and Western Pennsylvania Regional Data Center
- [Data Equity for Main Street](#)
  - Developed by librarians as well as education and technology leaders
  - Pilot-tested in more than 20 libraries

# How do libraries collaborate with local government on open data?

- Local government collaborations
- Open data portal as a library service
- Data collection development
- Additional library and information science expertise





# Library as Collaborator

## Chapel Hill, North Carolina

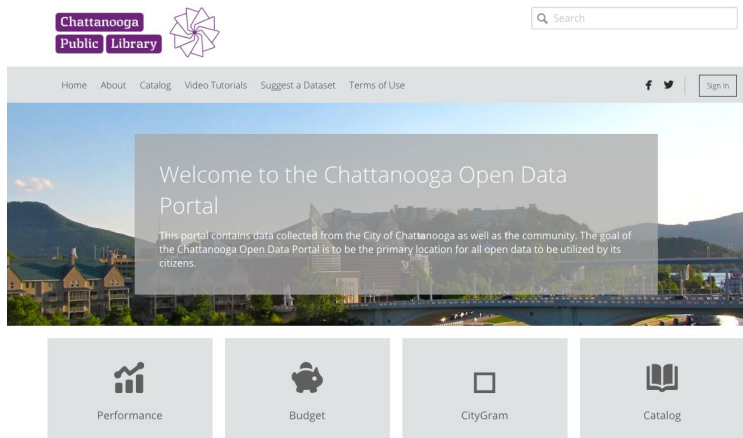


[www.chapelhillopendata.org](http://www.chapelhillopendata.org)

- 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 Collaborator

## Chattanooga, Tennessee



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

[data.chattlibrary.org](https://data.chattlibrary.org)



# Library as Collaborator

## Asotin County, Washington



- Leading collaborative efforts to open up county data to the public
- Opening up its own library data

# What do libraries publish as open data?



## BRANCH INFORMATION & PATRON DATA

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

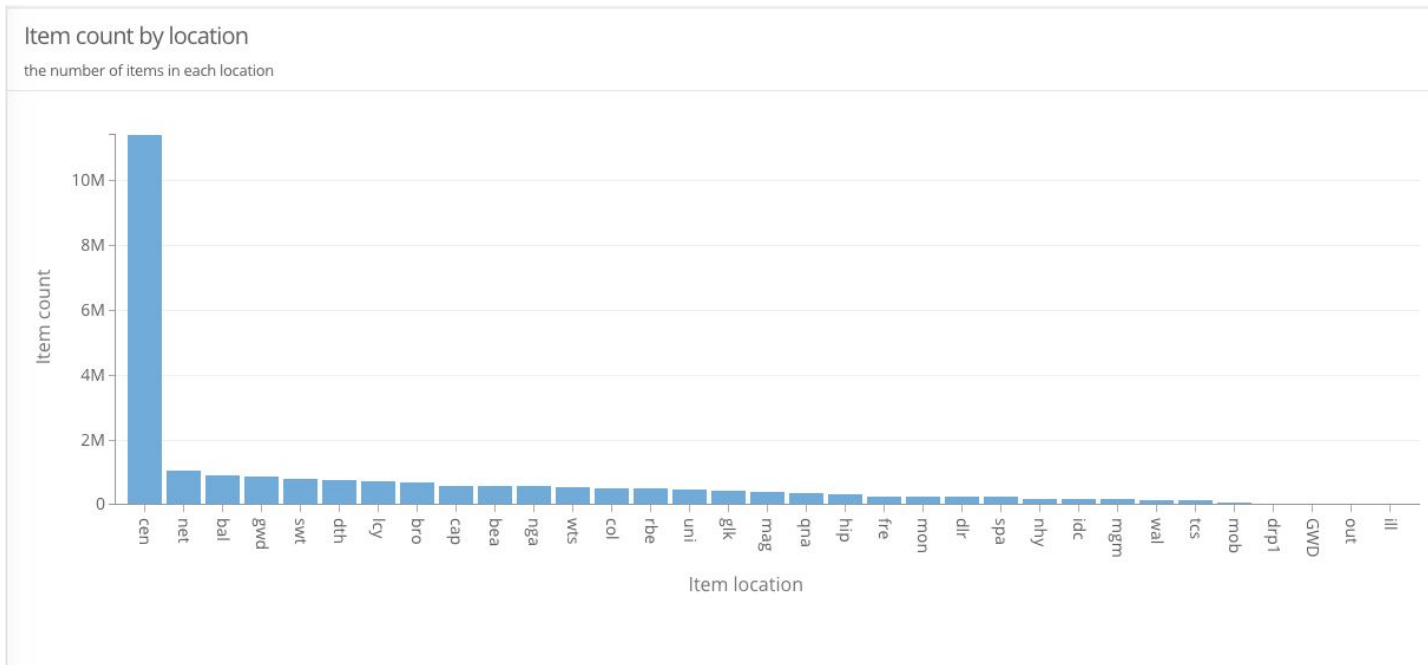
## CIRCULATION DATA

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

## TECHNOLOGY DATA

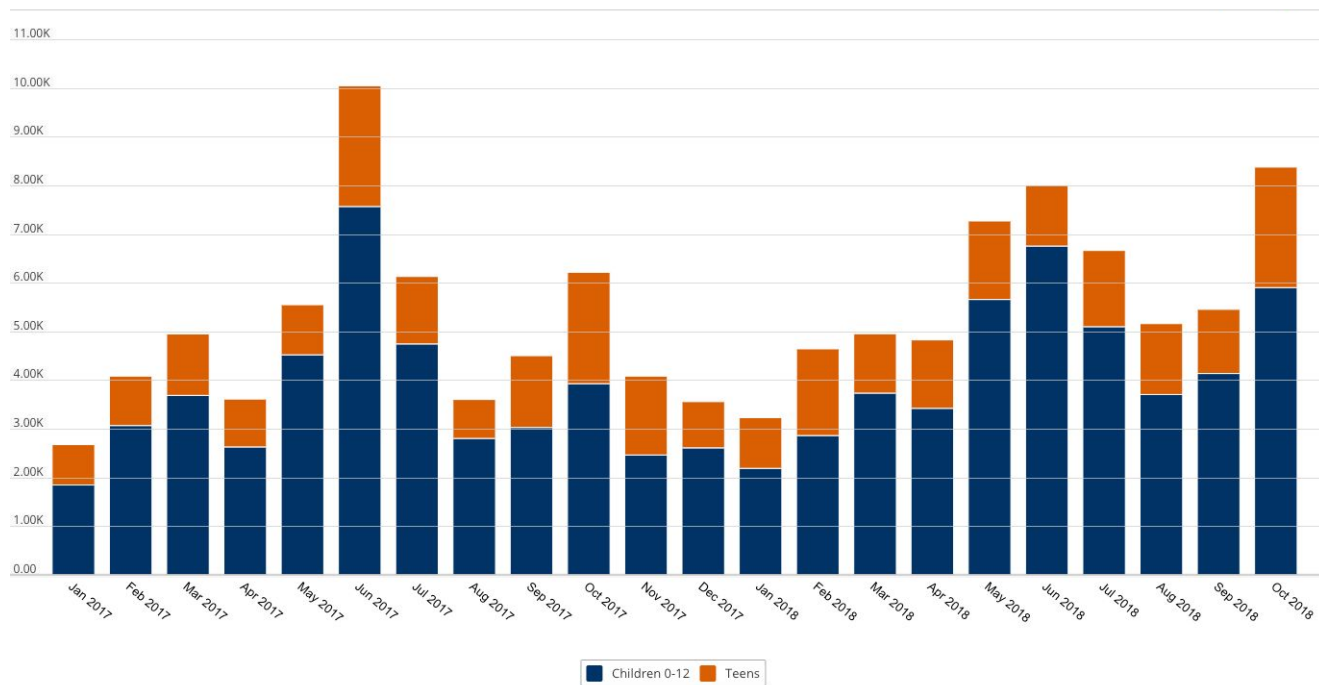
- Library WiFi Usage
- Library Computer Usage
- Electronic Resources

# data.seattle.gov: Collection Items by Location



(City of Seattle, 2018)

# data.memphistn.gov: Youth Library Program Attendance



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

(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)





# trl.org/open-data: Overdrive Digital Circulation



## Welcome to the Timberland Regional Library **Open Data Portal**

TRL recognizes the rights of citizens, organizations, and local government to public access to library records and information, as specified in the [Open Data Policy](#).

### Data Sets

Data sets may include:

- Library information such as geolocations, profiles, hours, and other features.
- Cardholder statistics and measures such as aggregated demographic data, number of cardholders, number of cardholders active in the past 12 months, number of cardholders using various services or borrowing materials, or similar data that does not include personally identifiable information.
- Data regarding programs offered at the Library including information about overall attendance and other measures.
- Technology information such as the number of computers available, internet and WiFi sessions used, and similar data.
- Collections data on titles and items held by the Library and their use.
- Financial information including budgets, income, and expenditures.

## Overdrive - Digital Circulation

Includes circulation of digital materials (eBooks and eAudiobooks by library).

Last Updated: [July 2019](#), .xlsx format, updates monthly

1	Branch	Checkouts
2	Nisqually Timberland Library	1
3	Shoalwater Timberland Library	24
4	Rochester Timberland Library	43
5	Hawks Prairie Timberland Library	49
6	Timberland Regional Library	54
7	Morton Timberland Kiosk	58
8	Toledo Kiosk Library	125
9	Amanda Park Timberland Library	134
10	North River Timberland Library	152
11	Oakville Timberland Library	154
12	Packwood Timberland Library	232
13	Administrative Service Center	304
14	Naselle Timberland Library	313
15	South Bend Timberland Library	363
16	Mountain View Timberland Library	467
17	McCleary Timberland Library	495
18	Hoodport Timberland Library	543
19	Westport Timberland Library	617
20	Raymond Timberland Library	832



(Timberland Regional Library, 2019)

# How about your library?

**What kind of open data would your library want to share with the public?**

**What do you think your community want to know about your library that you could tell them with open data?**

# Tips for Libraries Getting Started with Open Data

- Start small.
- Offer open data as a resource at reference.
- Talk with other government organizations about open data.
- Launch a dataset.

# How will your library engage with open data?

Whether as a **publisher, collaborator**, 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.**



# Contact Us

To learn more about the Open Data Literacy (ODL) project, contact us at:

- **Web:** <http://odl.ischool.uw.edu>
- **Email:** [odluw@uw.edu](mailto:odluw@uw.edu)
- **Twitter:** [@ODLiteracy](https://twitter.com/ODLiteracy)



# References

Chapel Hill Open Data. (n.d.). Retrieved from <https://www.chapelhillopendata.org/page/home1/>.

Chattanooga Open Data Portal. (n.d.). Retrieved from <https://data.chattlibrary.org>.

Data Equity for Main Street. (n.d.). Retrieved from <https://data-equity.org>.

Gradeck, B. (October 2, 2018). *Data 101 Toolkit*. Retrieved from <http://www.wprdc.org/news/data-101-toolkit/>.

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>.

# References

- 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>.
- 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>.
- Open Data. (n.d.). Retrieved from <https://www.epl.ca/open-data/>.
- Timberland Regional Library Open Data Portal. (n.d.) Retrieved from <https://www.trl.org/open-data>.
- Zvyagintseva, L. (February 22, 2018). *3 Tips for Creating Data Visualizations That People Understand*. Retrieved from <https://www.epl.ca/blogs/post/data-visualization-tips/>.

# Additional Resources

- ODL Resource Hub | <http://odl.ischool.uw.edu/resources/>
- Data.gov | <https://www.data.gov>
- Washington's Open Data Portal, Data.WA.gov | <https://data.wa.gov>
- Washington State Library's Open Data Information Page | <https://www.sos.wa.gov/library/libraries/projects/opendata/>
- Applications Created with Open Data | <https://www.data.gov/applications>



# Thanks to...

***Laura Bush 21st Century Librarian Grant funding from:***

