

A FEW DEFINITIONS

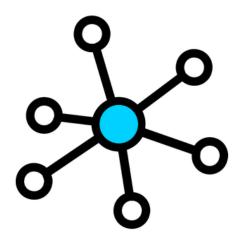


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What we do Who we are What is open? About Blog Q

What is open?

'Open knowledge' is any content, information or data that people are free to use, re-use and redistribute — without any legal, technological or social restriction.



Open Government is about making government more accessible to everyone. This means giving greater access to government data and information to the Canadian public and the business community. [Link]

About Open Government Government of Canada (2019, Sept.)



Open Data is a growing movement where organizations, especially government, release data to the public for use free of charge; allowing residents, students, educators, start-ups, and businesses to access and leverage the data for their needs. Location data represents a large portion of open data, approximately 60-80% of all open datasets. [Link]

Ryan Garnett

City of Toronto Manager Geospatial Data Integration & Access (2019, Aug.)



OPEN DATA – KEY POINTS

Open data is defined as structured data that is machine-readable, freely shared, used and built on without restrictions. The key points to remember about open data are:

- Availability and access
- Re-use and redistribution
- Universal participation
 - Open Data 101, Government of Canada (2020, November)
 - What is Open? Open Knowledge Foundation

Useful

Usable

Used



WHAT KINDS OF OPEN GOVERNMENT DATA ARE AVAILABLE?

EXAMPLES OF OPEN GOVERNMENT DATA

There are many kinds of open data that have potential uses and applications:

- **Culture:** Data about cultural works and artifacts
- **Science**: Data produced as part of scientific research
- Finance: Data such as government accounts and information on financial markets
- Statistics: Data produced by statistical offices
- Weather: The many types of information about weather and climate
- **Environment:** Information related to the natural environment

SOURCE: https://okfn.org/opendata/



HOW & WHERE DO YOU FIND OPEN GOVERNMENT DATA?

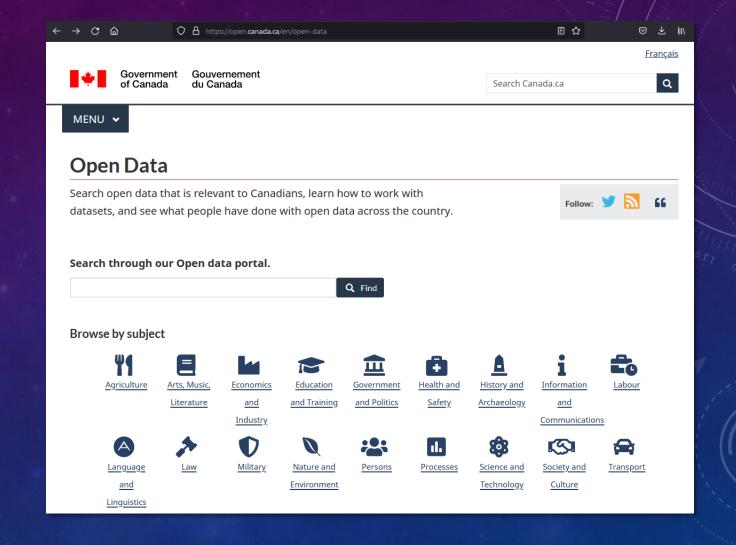
EXAMPLES OF CANADIAN GOVERNMENT PORTALS: FEDERAL, PROVINCIAL AND MUNICIPAL

CANADA'S OPEN GOVERNMENT PORTAL

- A one-stop location to access to the Government of Canada's searchable <u>open data and open</u> <u>information</u>, together with open dialogue
- Part of the federal government's commitment to enhance transparency and accountability.
- Apps Gallery
- Frequently Asked Questions
- Open Data User Stories how Open Data is being used.

GOVERNMENT OF CANADA OPEN DATA PORTAL

https://open.canada.ca/en/open-data



ALBERTA'S OPEN DATA CATALOGUE

- Open Government Portal is collection of <u>datasets and publications</u> by government departments and agencies. The public can use and access this data freely to learn more about how government works, carry out research or build web apps.
- The Open Government Program launched in November 2012; Open Data Portal V.
 1.0 in May, 2013. Include are 23,300+ open publications and 2,800+ open datasets.

EXAMPLES:

- Open Government Program Visualizations & Apps
- Frequency and Ranking of Baby Names by Year and Gender, 1980-2021 [Dataset]
- Web Usage Metrics of the Open Government Portal

Open government portal

The open government portal is a collection of datasets and publications by government departments and agencies. The public can use and access this data freely to learn more about how government works, carry out research or build web apps.

The portal functions as both a library for current publications and as an archive for old publications which have historic value.



Search for publications [2]

Search for Alberta government publications and laws.



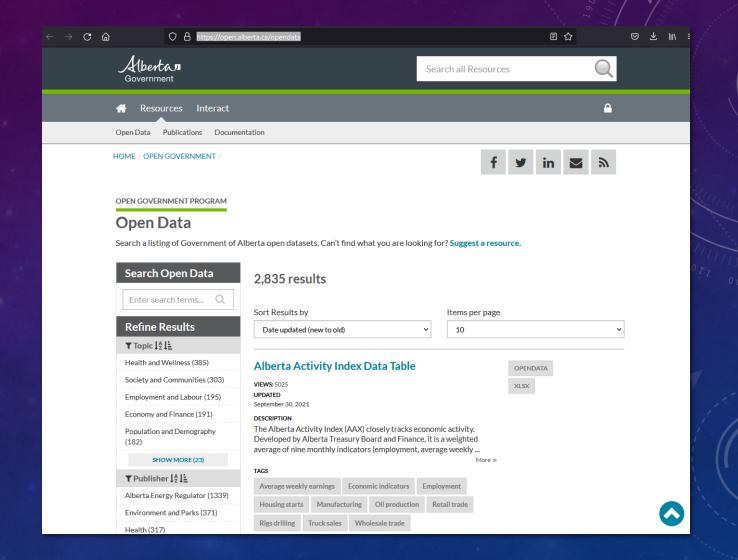
Browse the open data catalogue [2]

Search for government data in the open data catalogue to do research, build apps and gain insights.

158990	232	Martin	20	Boy	2020
158991	232	Miller	20	Boy	2020
158992	232	Not	20	Boy	2020
158993	232	Rhys	20	Boy	2020
158994	232	Tobias	20	Boy	2020
158995	232	Zain	20	Boy	2020
152006	าวา	7audon	20	Row	2020

GOVERNMENT OF ALBERTA OPEN DATA CATALOGUE

https://open.alberta.ca/opendata



LETHBRIDGE'S OPEN DATA CATALOGUE

- Download, visualize and analyze raw data and share your insights with our community or build new
 applications that serve specific users; includes 48 datasets, 42 documents & 9 apps & maps
- Provides several interactive web mapping applications for you to access and view some of the information available through the Open Data Catalogue.
- EXAMPLES of APPS:
 - Property Information / Lethbridge Explorer / Fire Incidents / Lethbridge Census



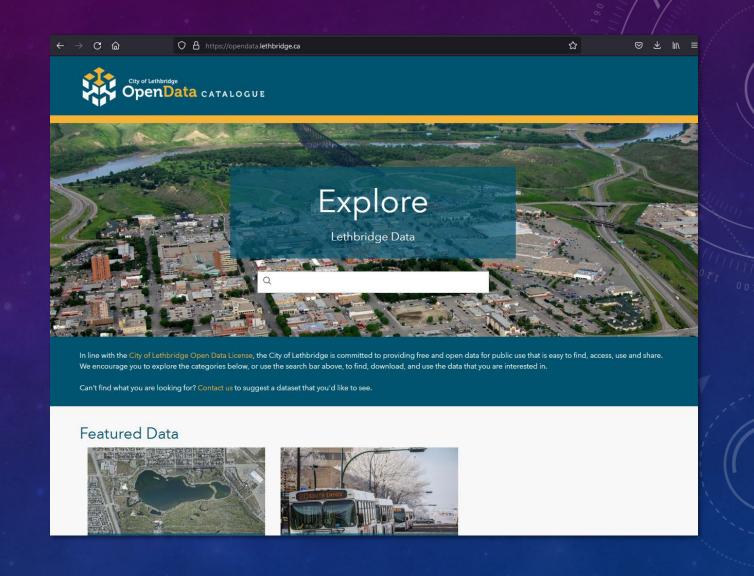
Property Information

Access property information including up-to-date assessment and taxation information.

Open App

CITY OF LETHBRIDGE OPEN DATA CATALOGUE

https://opendata.lethbridge.ca/



OTHER OPEN GOVERNMENT DATA SOURCES [EXAMPLES]

- <u>City of Vancouver Open Data Portal</u> <u>Map builder</u> & Chart builder
- <u>City of Toronto Open Data Portal</u>
- Open Calgary

Other Sources Containing Links to Open Data

- GIS & Spatial Data Library Guide [U. of Lethbridge]
- Numeric Data & Statistics Library Guide [U. of Lethbridge]

Searching for Data (Including from Open Data Portals)

Google Dataset Search











HOW DO YOU MAKE USE OF OPEN DATA?

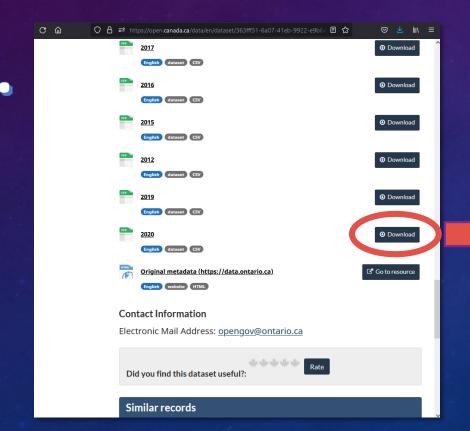
EXAMPLES USING DOWNLOADED DATA



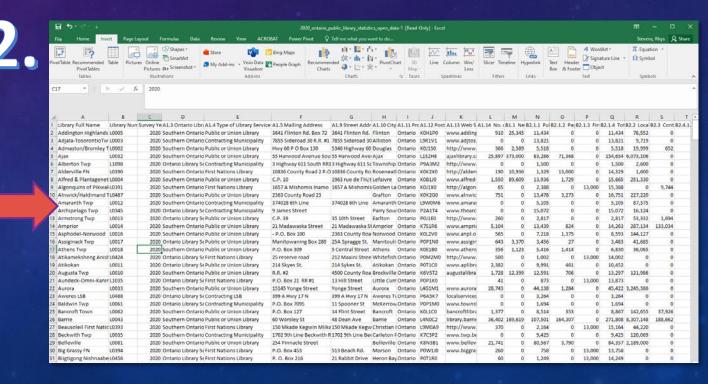


ONTARIO PUBLIC LIBRARY STATISTICS [CSV DATASET]

Download CSV Dataset



Select CSV Table Columns

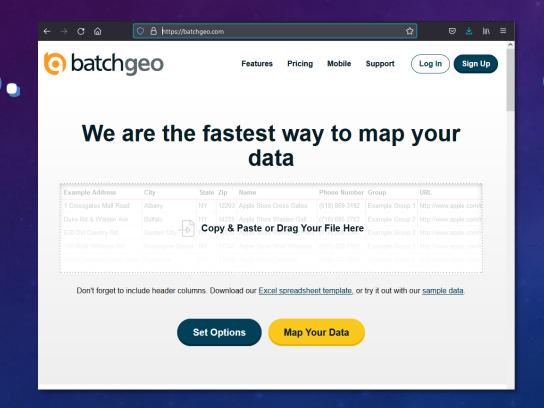




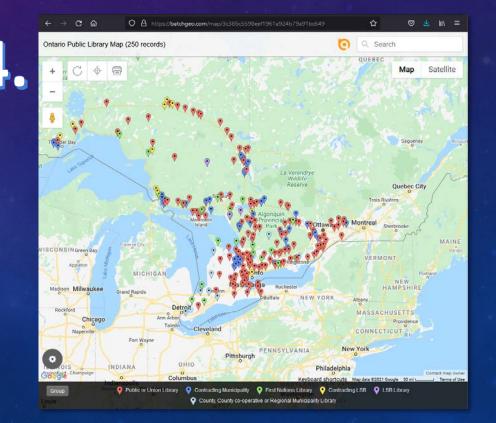


ONTARIO PUBLIC LIBRARY STATISTICS [BATCHGEO]

Copy & Paste CSV Column Values



Create a Geolocated "Pin Map"





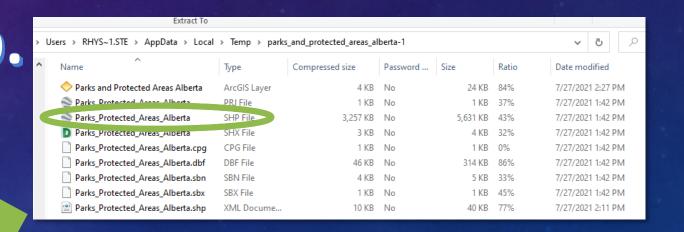


ALBERTA PARKS & PROTECTED AREAS [SHP FILE]

Download Zipped SHP File



Extract Zipped SHP File





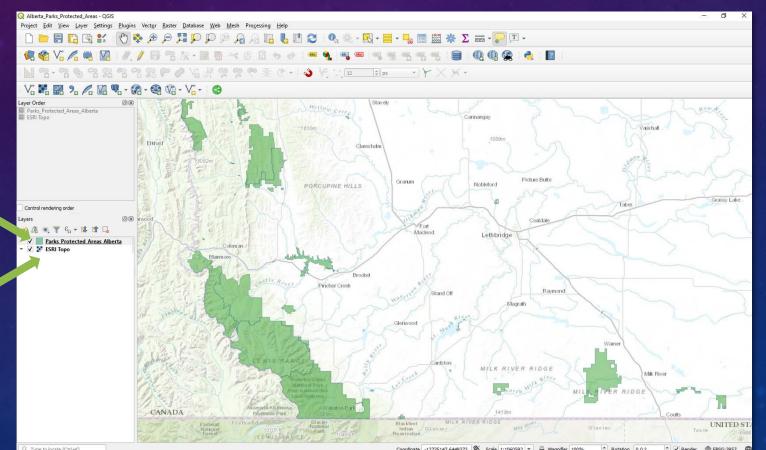
Shapefile Layer

Basemap



ALBERTA PARKS & PROTECTED AREAS [QGIS]

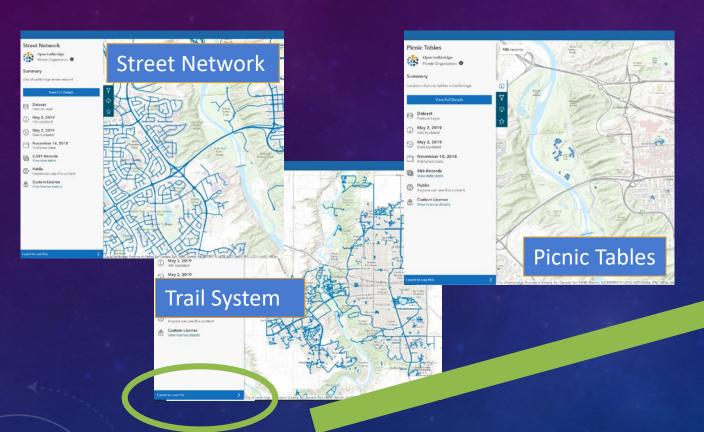
Using QGIS, Add Shapefile Layer & Basemap to Create Custom Map

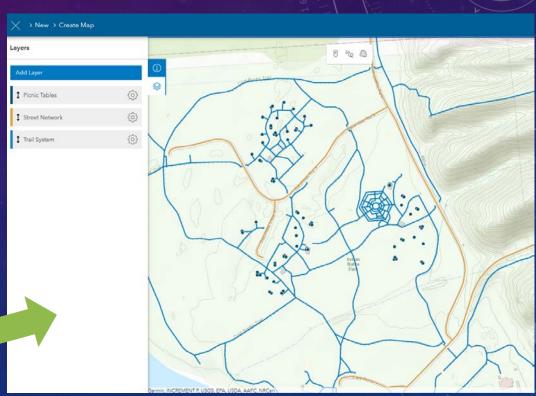






LETHBRIDGE STREETS, TRAILS & PICNIC TABLES [ONLINE VIEWER]



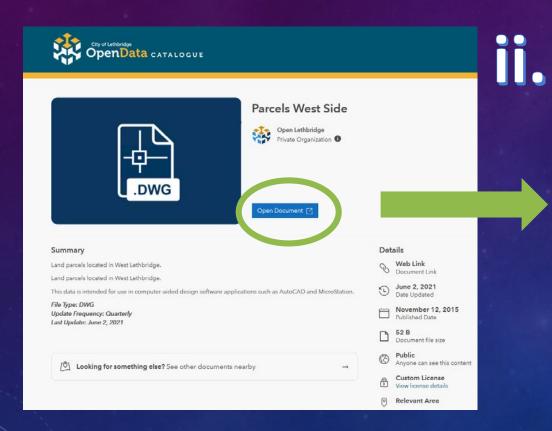


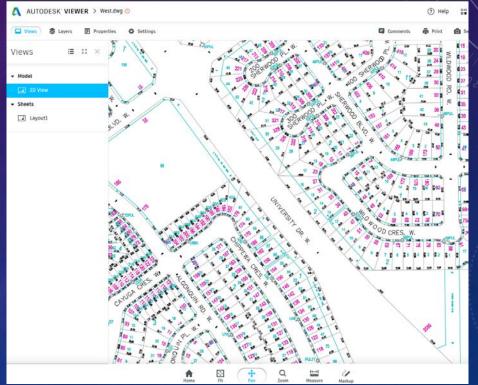
Link to Web Map

Download Data or Use the Built-in Online Viewer Tools to Combine Data Layers



LETHBRIDGE LAND PARCELS [AUTODESK VIEWER]





Download Zipped .DWG File & Extract

View in CAD Software or Free Viewer

TOOLS FOR MAKING USE OF USING OPEN DATA [EXAMPLES]













Datawrapper





Datawrapper Example 1
Datawrapper Example 2



- Formats for Standard Datasets
 - CSV, JSON, Excel
- Formats for Geospatial Datasets
 - GeoJSON, Shapefile, KML
- Other Formats
 - DWG, TIFF / GeoTIFF, ECW, MrSID





FOR ADDITIONAL INFORMATION

LEARN MORE ABOUT OPEN GOVERNMENT DATA RESOURCES & HOW TO MAKE USE OF THEM

OPEN DATA & OPEN GOVERNMENT RESOURCES

- <u>Datalibre.ca</u> Discussion of issues around access to government data in Canada.
- Canadian Open Data Society
 - Past Webinars (Recordings): "A Year of COVID-19 Open Data", "Introduction to the Beauties of Data Visualization."
- Open Knowledge Foundation [UK] Not-for-profit organization advocating for non-personal information is open, free.
- Open Data Handbook Guides, case studies and resources for government & civil society on the "what, why & how" of open data.

TOOLS & TRAINING FOR MAKING USE OF OPEN DATA

- Open Data Tools [Open Knowledge Foundation] Visualization, Data, Source Code, etc.
- <u>School of Data Courses</u> [Open Knowledge Foundation] Series of independent learning modules (Fundamentals, Cleaning, Exploring, Extracting, etc.)
- <u>Data.Europa Academy</u> [Publications Office of European Union]
- QGIS Training Tutorials: Using Spatial Data in Geographic Information Systems [Statistics Canada]
- Creating Maps in QGIS: A Quick Guide [U. of Waterloo]
- Resources.data.gov [U.S. Gov't] Repository of policies, tools, case studies. Aimed at those providing open data.
- Open Government Learning Hub [Gov't of Canada]

CONCLUDING THOUGHTS

- I've only shown a handful of Open Government Data portals as examples -- there are many more!
- Discovery tools used for hosting and finding data sets are similar but different.
- Some portals allow users to peer into datafiles using tools built into the interface.
- Using downloaded data requires some knowledge of software tools for viewing and analyzing content.
- Access to Open Government Data is ever-improving and available datasets are growing in number.
- Try digging into Open Data yourself!

DIGGING INTO DATA





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