# Why Libraries Should Maintain the Open Data of Their Communities

Mita Williams, Leddy Library, University of Windsor Wed, Jan 27 | 3:05 pm - 3:45 pm, MTCC 206D Ontario Library Superconference 2016

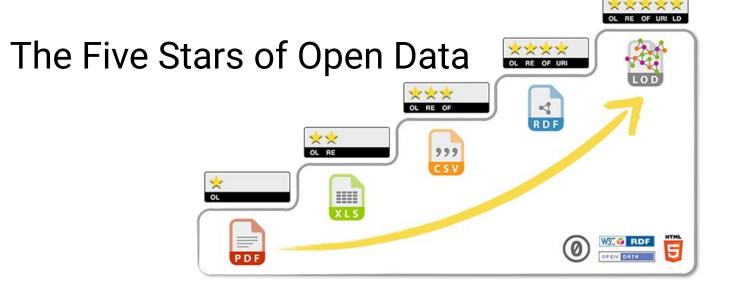
### Learning Outcomes

- Become familiar with some of the standards and technologies of Open Data
- Understand what Open Data is and its context in the Canadian landscape
- Learn how public libraries, academic libraries and nonprofit groups have encouraged the use and the collection of Open Data

# A trilogy of four parts

- What is Open Data?
- Where is the Open (Government) Data in Canada?
- Where do Libraries Fit In?

# What is Open Data?



★ make your stuff available on the Web (whatever format) **under an open license** 

- ★★ make it available as structured data (e.g., Excel instead of image scan of a table)
- $\star \star \star$  make it available in a non-proprietary open format (e.g., CSV as well as of Excel)
- $\star \star \star \star$  use URIs to denote things, so that people can point at your stuff
- $\star \star \star \star \star$  link your data to other data to provide context

## Open is a format ...

David Eaves' Three Laws of Open (Gov) Data

If it can't be spidered or indexed, it doesn't exist

If it isn't available in open and machine readable format, it can't engage

If a legal framework doesn't allow it to be repurposed, it doesn't empower

"In other words, Open Data allows us to ... LOOK, PLAY, and SHARE"

Does "open" mean openly licensed content or code? And, again, which license is really "open"? Does "open" mean "made public"? Does "open" mean shared? Does "open" mean "accessible"? Accessible how? To whom? Does "open" mean editable? Negotiable? Does "open" mean "free"? Does "open" mean "open-ended"? Does "open" mean transparent? Does "open" mean "open-minded"? "Open" to new ideas and to intellectual exchange? Open to interpretation? Does "open" mean open to participation - by everyone equally? Open doors? Open opportunity? Open to suggestion? Or does it mean "open for business"?

> From "Open" to Justice, #OpenCon2014 Audrey Watters, 16 Nov 2014 http://hackeducation.com/2014/11/16/from-open-to-justice/

## What does the Tri-Council mean by Open Data?

Capitalizing on Big Data: Toward a Policy Framework for Advancing Digital Scholarship in Canada

"Open data is data that meets the criteria of intelligent openness.

Consultation Document (16 October 2013)

Data must be accessible, useable, assessable and intelligible."

SSHRC≡CRSH

The Social Sciences and Humanities Research Council (SSHRC)

CIHR IRSC

The Canadian Institutes of Health Research (CIHR)



The Natural Sciences and Engineering Research Council (NSERC)

INNOVATION.CA

The Canada Foundation for Innovation (CFI)

# What do \*I\* mean by Open Data?

"Open data is data that can be freely used, reused and redistributed by anyone – subject only, at most, to the requirement to attribute and sharealike."

Open Knowledge Foundation okfn.org

# ... Open is a permission

Since everything is automatically given copyright, to release your given rights you need to assign an alternative licence to place it in the "Creative Commons"

CC-0 Public Domain

CC-BY Attribution

- CC-BY-ND Attribution, No Derivatives
- CC-BY-SA Attribution, Share Alike
- CC-BY-NC Attribution, Non-commercial

# Not all Creative Commons material is "Open"

"Open data is data that can be freely used, reused and redistributed by anyone – subject only, at most, to the requirement to attribute and sharealike."

Open Knowledge Foundation okfn.org

CC-BY-ND NOT OPEN!

CC-BY-NC NOT OPEN!

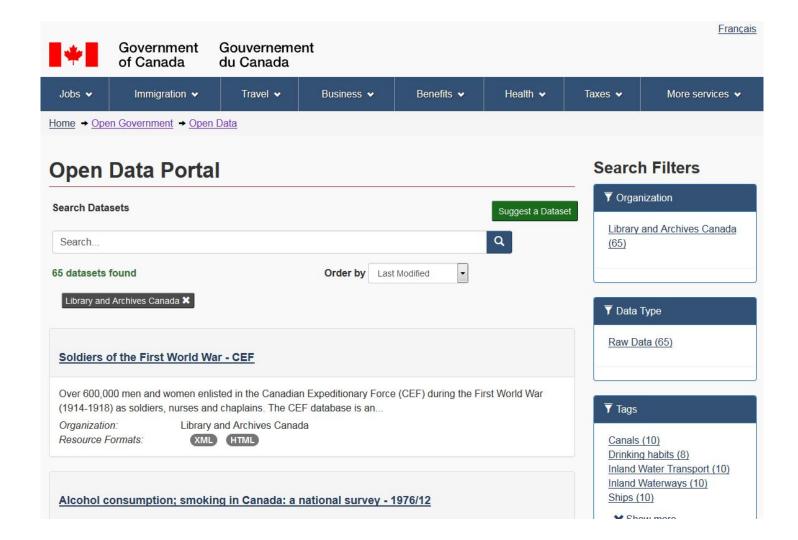
# "You don't like CC-NC? What kind of monster are you? Some sort of Census-hating neoliberal?"

- "Academic-use only" hurts our nonprofit communities
  - Where can anti-poverty groups get their data for evidence based decisions?
- The costs of cost recovery efforts are \*substantial\*
  - Data Liberation Initiative for universities
  - The Community Data Program
- It is speculated that cost recovery results are not significant
- Journalists, artists and writers rely on the ability to sell their work
- CC NC keeps content out of the Public Domain FOREVER
- CC-NC <u>complicates</u> how re-worked derivative material is handled

# Where is Open (Government) Data (in Canada)

## The data is in Open Data Catalogues (or portals)

M Toronto		67-Ontario	Search open o	lata	Se	earch				
Living In Toronto <del>-</del>	Doing Business	Total Data Sets: 409		Open data catalogue						
		All File Types 409		Ontario + open data - we like the sour generation of winning ideas, services ar	*	Government of Canada	Gouverneme du Canada	ent		
♠ City of Toronto / Accessing City Hall /	Open Data / Data catalogue	All Topics 405		generation of winning ideas, services ar	Jobs 🗸	Immigration 🗸	Travel 🗸	Business 🗸	Benefits 🗸	Health 🗸
Open Data	Open Data	<ul> <li>All Publishers 409</li> <li>Popular Data</li> </ul>	Drinking water quality and enforcer H Provides information on drinking water te		<u>Home</u> → <u>Ope</u>	en Government → Oper	n Data			
Data catalogue	Data catalog	Ontario Economic Accounts Traffic cameras Carpool lots Today's roadwork: closures		Date published: December 2015 Publis File types: ZIP Service delivery performance for th The Ontario Public Service Common Ser service delivery that help provide a qualit	Open Data Portal					
Business	By accessing the data catalogu				Search Data	isets				Suggest a Dataset
City government	Look for New and Upda				Search					Q
Community services Culture and tourism	<ul> <li>"View Data" link on sele</li> <li>Follow us <u>@Open_TO</u> (</li> </ul>				244,889 datasets found Order by Last Modified					
Development and infrastructure				College enrolments- 1996 to 2011						
Environment	Data Catalogue Total			Enrolment and statistical data for college province.	TERMIUM	1 Plus®				
Finance	Last update to Data Catalogue January 14, 2016.			Date published: November 2015 Publis File types: XLSX Tags:	The Operation of Consider terminal and the winting data have allow around to obtain the latest terminal and in					
Garbage and recycling	<ul> <li>Total data sets avail</li> </ul>			Population projections Annual population projections, from 2014	Resource Formats: CSV TXT HTML					
Health	<ul> <li>Total data files - counted as links to (</li> </ul>			Date published: January 2015 Publis File types: XLSX						
Locations and mapping	<ul> <li>See also: COT Data</li> <li>PLUS See our new Tools an</li> </ul>	d Help		Public Accounts: Volume 3 data (2	CAGDB -	NATGAM - Larsen	Creek			
Parks and recreation	Tee mood our new roots un	a rivily.			This airborn	ne or shipborne aeophy	vsical survev recorde	d the following param	eters: Total Field Mad	netic



### Wouldn't it be easier if it was all...

### Ontario

# Open by Default – A new way forward for Ontario

The Open Government Engagement Team consulted a diverse spectrum of Ontarians to get ideas about how Ontario can engage, collaborate and innovate.

The team has developed a report with recommendations based on their conversations with Ontarians. This includes ideas about how Ontario can move forward to:

- work with the public
- open up government information
- make data a public asset
- implement a sustainable plan
- The government is reviewing this advice and determining the best path forward. Stay tuned for more details.

What do you think about their recommendations?

Q

## Meanwhile, back at the Federal Level

Work produced by the Canadian Government is under Crown Copyright

Reproduction and other uses of Canadian government produced information, by default, requires permission and the generally involves the payment of licensing fees that have been set for the purposes of cost-recovery.

Publishing and Depository Services *used to* administer Crown Copyright and Licensing on behalf of Government of Canada departments and agencies...

# The Federal Level: Everything is confusing

In 2010, the federal government gave notice that it was establishing a licence that gave permission for non-commercial uses without the need for permission

But in 2013, this notice was removed from the Public Works and Government Services site and the announcement was made that, **"as of November 18, 2013 Publishing and Depository Services no longer administers Crown Copyright** and Licensing on behalf of Government of Canada departments and agencies. Should you be seeking copyright clearance for Government of Canada information, **please contact the department or agency that created the information**."

# The Data Liberation Initiative is open? Not open?

Statistics Statist Canada Canada	ique la		Search Website	<u>França</u>		
Information for 🗸	Browse by subject	Browse by key resource	Help 🗸	Canada.ca		
$pme \rightarrow DLI \rightarrow DLI$ reports, reference	and training materials					
Data Liberation Initiative (DLI)	<b>DLI licensing</b>					
Tentative release dates of DLI products	<u></u>					
Restricted access Data Liberation Initiative Web Site	Assessing requests for DLI data The DLI Licence is the formal agreement between Statistics Canada (Data Liberation Initiative program) and the educational institution. The licence identifies the roles and responsibilities of both parties. When an educational institution joins the DLI, both parties sign this licence.					
The DLI Community						
DLI reports, reference and	, reference and The highlights of the licence agreement follow:					
training materials Other Microdata Access Brograme	Under the new Licence agreement, all standard data products in the <u>DLI</u> collection are subject to <u>Statistics Canada's Open</u> <u>Data Licence</u> . The <u>DLI</u> members are now allowed to use the standard data products for non-profit, academic research and instruction.					
Programs The Research Data Centres (RDC) Program		, institutional members of the DLI have acces ice. They can use the PUMFs for statistical ar				

### **Statistics Canada Open Licence Agreement**

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- · sublicence any or all such rights, under terms consistent with this agreement.

# Where Do Libraries Fit In?

## Public libraries are making their data open...

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by year.

**Resource Formats:** 

JSON

Browse 🗸 🗎 🗰 What's On 🗸 Library Resources Digital Content V

### **Open Data**

### Edmonton Public Library's Statement on Open Data

Edmonton Public Library's mission is "we share." In our Shared Values document, we assert our public role as a champion of ideas, community activators, knowledge seekers, and open to all. True to our mission and values, EPL declares our support for the open data movement and recognizes the principles of the G8 Charter on Open Data.

By recognizing the Charter, EPL accepts our responsibility as a public institution to work towards sharing all of our data by default, while recognising that there are legitimate reasons why some data cannot be released. Following the charter, the data we release will be:

- high-quality, timely, comprehensive and accurate;
- · provided in plain clear language with thorough metadata, and
- available in formats readable by both machines and people.

Additionally, we accept responsibility for sharing our technical expertise and experience with other organizations, documenting our open data standards and publishing practices online in the interest of transparency, working to increase open data literacy and encouraging citizens to unlock the value of open data.

EPL shares data through Edmonton's Open Data Catalogue and under the City's Open Government License.

### Access EPL's Open Data

· EPL Open Data in the City Open Data Catalogue

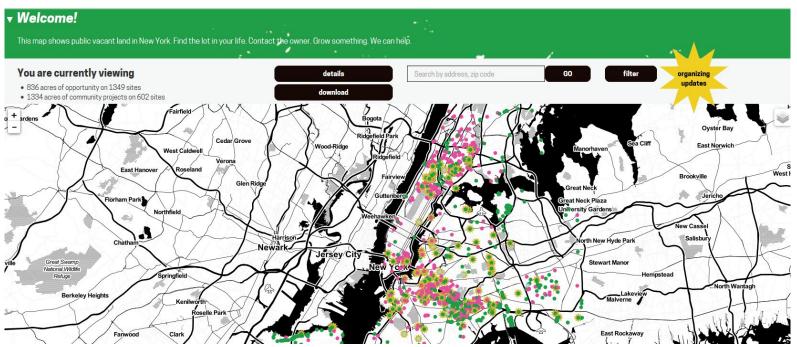
## Meanwhile, south of the border



# How to turn the (data) tables

### LIVING LOTS NYC BY ACRES

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### Who will host the data of nonprofits?







### Pathway to Potential



O Pathway to Potential (P2P) is composed of a diverse group of stakeholders who collectively work to reduce...

### 

### Ford City Neighbourhood Renewal

Ford City Neighbourhood Renewal (FCNR) is a neighbourhood improvement strategy started by the Ford City...

Powered by DKAN, a project of NuCivic

ODWE is funded by the Ontario Trillium Foundation



### The literacy challenge of Open Data

### eaves.ca

if writing is a muscle, this is my gym

home • about david • public speaking • publications • in the media • get in touch

### June 10, 2010

### Learning from Libraries: The Literacy Challenge of Open Data

### 42 Replies

We didn't build libraries for a literate citizenry. We built libraries to help citizens become literate. Today we build open data portals not because we have public policy literate citizens, we build them so that citizens may become literate in public policy.

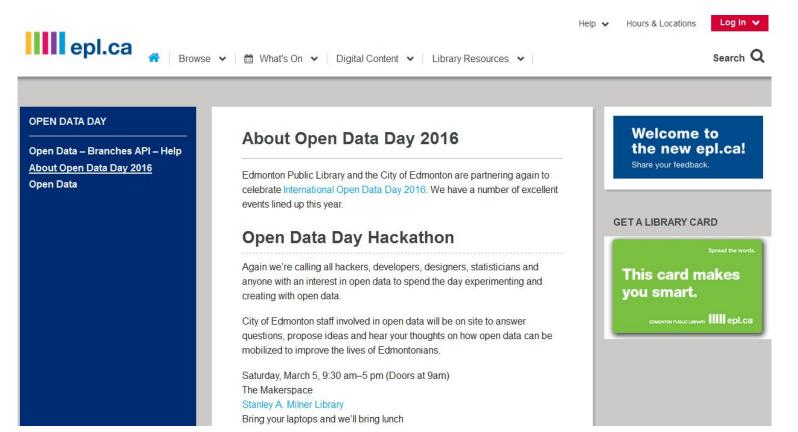
Yesterday, in a brilliant article on The Guardian website, Charles Arthur argued that a global flood of government data is being opened up to the public (sadly, not in Canada) and that we are going to need an army of people to make it understandable.

I agree. We need a data-literate citizenry, not just a small elite of hackers and policy wonks. And the best way to cultivate that broad-based literacy is not to release in small or measured quantities, but to flood us with data. To provide thousands of niches that will interest people in learning, playing and working with open data. But more than this we also need to think about cultivating communities where citizens can exchange ideas as well as involve educators to help provide support and increase people's ability to move up the learning curve.

Interestingly, this is not new territory. We have a model for how to make this happen - one from which we can draw lessons or foresee problems. What model? Consider a process similar in scale and scope that happened just over a century ago: the library revolution.

In the late 19th and early 20th century, governments and philanthropists across the western world suddenly became obsessed with building libraries - lots of them. Everything from large

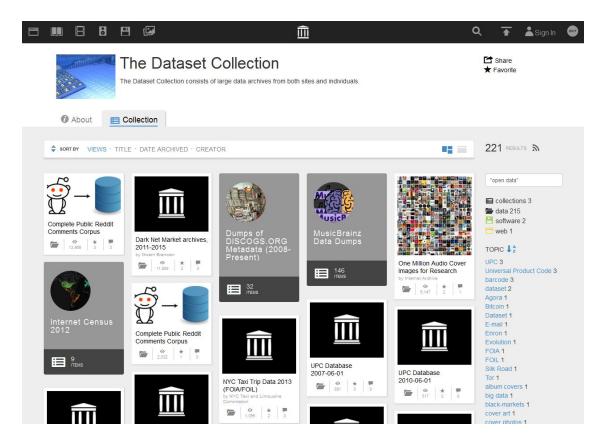
### Libraries can Support Data and Policy Literacy



### Host open data enthusiasts at your library

Maptime MSP					
Home Membe	ers Spor	nsors Photos Discussions More	Join us!		
		February Maptime: Cartography Tricks	Want to go? Join and RSVP		
		F Tell a friend Share	23 going		
Minneapolis	<b>)    </b>	Thursday, February 18, 2016 5:30 PM to 7:30 PM	Kitty Hurley CO-ORGANIZER EVENT HOST GIS Developer		
Founded Oct 14, 20	14	Saint Anthony Park Library 2245 Como Ave, Saint Paul, MN (map)	Geogeek · Car- tography · UI/UX		
Map Lovers	241	We'll be meeting at the <b>Saint Anthony Park Library</b> in <b>St. Paul</b> focused on <b>Cartography Tricks</b> using some awesome tools!	Rachel Koch		
Group reviews	5				
Upcoming Meetups	1	Liz Puhl (@LizPuhl) will show us Illustrator/Inkscape tips and tricks, and David Montgomery (@dhmontgomery) will showcase Photoshop/GIMP tips and tricks.	Paul Paddock		
Past Meetups	15	After the presentations, we'll have a group work session with a	Andrew K		
Our calendar	Ē	few samples for you to try. During the work session, we'll also have time for discussions, sharing of projects, and anything else	Andewic		

### Archive Open Data in the Internet Archive?



Thank you!

Slides are available at: <u>https://goo.gl/Bo6yDl</u>