

Open Data in Local Government

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Where is Haldimand?

- **Haldimand County is located where the waters of the Southern Grand River meet Lake Erie – offering visitors the experience of both “Grand River Country” and “Ontario’s South Coast.”**
- **We are a single tier local government with a population of 45,608**
- **Location -79.90, 42.95**
- **Haldimand County has been using Esri since 2006 and implemented an enterprise GIS in 2012.**

Opening our Data

- **Open data was a part of our 5 year technology plan in 2012**
- **Opened data as a result of need to reduce staff time spent on legal agreements and compiling data**
- **In 2013 we worked with Senior Management to craft a policy framework to begin to open data**
- **We mimicked the existing legal parameters established from the Province and Federal government**
- **Did not have any technical parameters in place only policy**

Opening our Data

- **Esri Open Data Platform released just in time!**
 - We made use of Esri newly released open data environment and implemented our first version free of charge
- **Process:**
 - Choose data – Completed through policy
 - Apply license – Completed through policy
 - Make the data available – Completed through Esri ArcGIS for Server
 - Make the data discoverable on the internet – Completed through Esri Open Data
 - Encourage use of the data – Completed through policy
 - Social media, hackathons, etc
- **The first implementation used only geographic data**

Policy Examples:

How do we open data?

- **Simple Approaches to Start:** Start by opening a few geographically based datasets – working towards rolling out other feasible data as the project evolves.
- **Engage Early and Often:** engaging with potential users who take and transform the data.
- **Open the Data:** Release the data and build appropriate infrastructure to support it.
 - **Choose data**
 - **Apply licence**
 - **Make the data available**
 - **Make the data discoverable on the internet**
 - **Encourage use of the data:**
 - **3rd party websites**
 - **Social media**
 - **Hackathons (software application competitions)**

Who has opened data?

70 countries worldwide, 9 provinces in Canada, and 37 municipal level governments in Canada have opened data to date. In Ontario, Burlington, London, Mississauga, Niagara Falls, Niagara Region, Ottawa, Peel, Waterloo, Toronto, and Windsor have some form of open data program in place. The programs vary widely in data content. The data we are proposing for Haldimand County does not go beyond what is already available by other municipalities in Ontario.

First Implementation Examples:



Haldimand County Open Data (Beta)

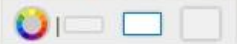
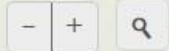


SEARCH WITHIN MAP

My Activity

road
roads

MATERIAL ▾



< Roads

Open In ArcGIS

Share

Download Dataset

Details

Table

Charts

DATASET ATTRIBUTES

ABOUT

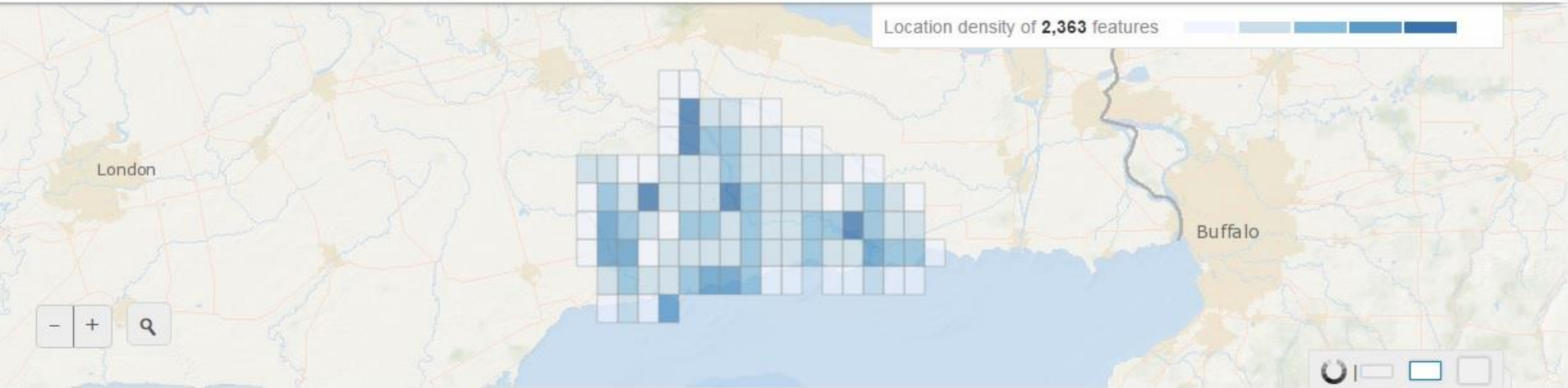
First Implementation Examples:

Collector



SEARCH WITHIN MAP

My Activity



< Roads

Open In ArcGIS

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[Download Dataset](#)

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DATASET ATTRIBUTES

ROAD NAME
Text

ABOUT



Haldimand County

By MDhald

Technical Environment

- **First Implementation (2012-2015)**
 - **Backend: Data hosted on ArcGIS Server from ArcSDE on SQL Express 2012**
 - **Frontend: Esri ArcGIS Open Data**

- **Second Implementation (2015-present)**
 - **Backend: Data hosted on ArcGIS Server, Internal Drives, Web Addresses (internal)**
 - **Frontend: Web address that points to ArcGIS hosted Open Data**
 - <http://maps.haldimandcounty.on.ca/extra/open>
 - <http://opendata.haldimandcounty.on.ca/>

Live Demo

Benefits

- We no longer use legal agreements to share data
- Easy integration into ArcGIS Pro
- Two companies (that we know of) that have profited off of the data
- Easy integration into much larger eco systems (Esri Community Maps) with no requirement for an agreement on our end
- Ease of use to access data for staff and citizens
- On demand access to analysis of all data
- Average annual increase of

Public Meeting Examples:

HOW OUR DATA IS SHARED



STAFF

Staff work with third party providers to enable uptake of our data through sharing data feeds to be utilized in their website or resource. Additionally, we import large amounts of data into third party webmaps like OpenStreetMap and ESRI Basemaps.



USERS

Users are capable of sharing data through using tools available on the Open Data Repository. Additionally, they can develop applications using our API and share using appropriate methods (Apple App Store, Google Play, etc)

Public Meeting Examples:

WHAT YOU CAN DO



Data Exploration

Users can navigate Details, Tables, and Charts as well as explore an interactive stylized map. Users are empowered to Filter results to display customized data searches. You can also create custom charts and embed the results to a webpage.



Data Download

Data can be downloaded into industry standard formats to enable users the ability to work within their skillset and manipulate the data as they see fit.



Expansion

Users can subscribe to our RSS feed which will keep them up to date on our most recent data additions or they can contact us and suggest datasets they would like to see added as we move forward.

Lesson Learned

- **Politics play a significant role in opening data**
- **There is no legislation requiring data to be open**
- **Limited technical exposure locally but high technical capacity globally**
- **Opening data does streamline GIS**
- **Esri platform is very effective in delivering data (little development required)**
- **Data is used more often in the summer months**
- **United States is biggest data consumer**
- **Parcels and roads are accessed the most**
- **An average of 150 unique hits per week**

Second Implementation Example:



[My Data](#)

[Sign In](#)

[Sign Up](#)

Haldimand County Open Data

Open Data, Open Possibilities.

This is Haldimand County's public platform for exploring and downloading open data, discovering and building apps, and engaging to solve important local issues. You can analyze and combine Open Datasets using maps, as well as develop new web and mobile applications. Let's make our great community even better, together!

Future Plans

- **Expansion of program to include more datasets at a corporate level.**
- **Steps related to developing more embedding our local data into larger systems**
- **Increase local public awareness of data**

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