#### **Open Data @ The City of Vancouver**



URISA BC May 20, 2010

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- GIS Data Dissemination (in the old days)
- The Open3 Council Motion
- Open Data-initial steps
- Open Data demo
- Summary & Next Steps



#### "Open" Data-previous era (back to at least 1995)

- Sell/license the data
- Considered outsourcing the licensing & dissemination
- Made it available at no cost if appropriate
- There was no money in it
- It was an administrative pain
- It was a hassle fulfilling requests



#### "Open" Data-previous era

- Generally 75 to 125 requests per year
- Many fulfilled for free
- GIS Team pushed for doing it at no cost
   this approach was never fully approved
- GIS Team did a lot of thinking about how to do it for free



#### And then along came the Motion



#### Council Motion - May 21 2009 (highlights)

- THEREFORE BE IT RESOLVED THAT the City of Vancouver endorses the principles of:
  - **Open and Accessible Data** the City of Vancouver will freely share with citizens, businesses and other jurisdictions the greatest amount of data possible while respecting privacy and security concerns;
  - **Open Standards** the City of Vancouver will move as quickly as possible to adopt prevailing open standards for data, documents, maps, and other formats of media;
  - **Open Source Software** the City of Vancouver, when replacing existing software or considering new applications, will place open source software on an equal footing with commercial systems during procurement cycles.





# **Open Data**



#### Council Motion - What It Says and Doesn't Say

- The City should freely share data to all subject to
  - Privacy
  - Security
  - "As much as possible"

- No funding initially
- No specific direction to departments to "fork it over"
- No explicit authority for IT to just do it
- No discussion about data quality



#### Open Data-initial steps for v1

- Get something "out there"
- Establish a relationship with the local Open Data developers community
- Think about constituencies
  - Citizens
  - Programmers & Application Developers
  - Commercial Users
  - Academics & Researchers
  - Other government entities



### Open Data—initial steps for v1

- Created design for the website
- Created narrative content for the website
- Determined what data could be easily released
  - Generally (98%) public VanMap data because
    - We understood it
    - It had already passed the security & privacy tests
- Engaged FME consultant to help with ETL scripts
- Thought about the infrastructure required



#### **Open Data—Terms of Use**

- Lengthy discussions with Law
- Comments received from open data community which resulted in plainer English
- Terms of Use allow all uses as long as they are legal
- Terms of Use do not convey ownership in the data
- Credit to the City not required but it is encouraged



### **Open Data—Terms of Use**

- Liability is with the user, not the City (some have trouble with this)
- City reserves the right to stop publishing data
- Users can not sue the City over the data
- Some would like same license everywhere
   COV TOU have been copied by other Open Data sites
- Some like the Creative Commons license



# Open Data - Launch of v1 beta

- Launched Open Data Beta v1 website on September 15 2009
- About 50 datasets, limited formats, limited updating
- Provided feedback mechanisms on the site to help prioritize new data requirements
- Provided links to non-City wiki and blogs
- Participated in hackathons



# **Open Data** - v1 Reactions

- Launch very well received by bloggers, developers, GIS librarians, politicians, etc.
- Over 130 survey responses before survey closed
- Good input regarding additional data to include (e.g. bikeways identified by 50% of respondents)
- Awareness raised within the City and outside
- Picked up by media despite no press release

# Open Data - v1 Usage

- In first month of being live
  - Over 15,000 visits (average of 500+ per day)
  - Over 11,000 visitors
  - Over 45,000 page views
- The most popular downloaded files
  - Contours
  - Land base
  - Water
  - Sewer
  - Street lighting
  - Garbage zones
  - Orthophotos



### **Open Data Beta Site** Initial Survey Feedback on Additional Data

High

Public "Value"

<ul> <li>Orthophotos 2008</li> <li>Parks</li> <li>Libraries</li> <li>Community Centres</li> <li>Infrastructure data</li> <li>Zoning Districts</li> </ul>	Road Clos Crime Dat Permit Da Property 7 311 Data	ta	Hot Spots Traffic Counts nts	Legend: Deliver ASAP
Bikeways Canada Line Traffic Cameras Greenways Cultural/public facilities				Increased level of difficulty and cost to extract and publish; work will prioritized based on business case
	Satellite Im	nagery		
City-owned properties Hospitals				

Low

**Cost/complexity** 

High



### Open Data - v2 launched January 20 2010

- More data
  - went from 50 to 100 datasets (plus packages)
  - Still almost all from VanMap
- More formats
  - most data in DWG, SHP, KML
  - some in XLS and CSV
- More currency
  - FME scripts update the data weekly



# Open Data - v2 launched January 20 2010

- Easier to find datasets
  - Every dataset explicitly listed
  - Many cross-referenced with alternate name
- Easier to get directly to data

   Can click to the data directly from catalogue
- Mapping in Google Maps and Bing Map
  - Most datasets are available via one click
  - Those mapping services have limitations
- Improved updates
  - Web feed
  - Email
  - Sorry, no formal Twitter or Facebook yet



### Open Data - v2 launched January 20 2010

- Direct ICIS support
  - ICIS mentioned explicitly in Open3 motion
  - GIS file to feed ICIS's GIS file store
  - Address file to directly support Address BC's needs

• New survey



# **Open Data** - v2 Usage

- From launch to mid-May
  - Over 46,000 visits (average of 400 per day)
  - Over 16,000 visitors (2,900 more than once)
  - Over 64,000 page views
- The most popular downloaded files
  - Water
  - Property Information
  - Streets
  - Contours
  - Olympic venues
  - Sewer
  - Orthophotos



# **Open Data** - Demo

- Open Data website v2 (January 2010)
- http://data.vancouver.ca/



# **Open Data** - Applications

- <u>vantrash</u> (Luke to talk later)
  - http://vantrash.ca/
- Flooding study
  - http://www.straight.com/article-298192/vancouver/get-readyrising-sea
- Water fountain finders
  - http://maps.google.com/maps/ms?ie=UTF&msa=0&msid=11553880353777 8874314.00047006f987f69c2cc39
- Vanguide
  - http://vanguide.cloudapp.net/
- Vancouver reference map
  - http://maker.geocommons.com/maps/8146



# **Open Data** - Next Steps

- Expand the data available
- Expand the use of FME Server
- Encourage development of new applications

• Listen to Darrin after lunch



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