



Don River Valley Historical Mapping Project

Marcel Fortin, GIS and Map Librarian
Data, Map and GIS Centre

Jennifer Bonnell, PhD Student (History) @ OISE

Jordan Hale, Geography Department Undergraduate Student

TRY Staff Conference, May 5, 2009



Agenda

- Project Description and Background
- Geographic Information Systems (GIS) and Geospatial Data
- Methodology and Sources
- Results of Project
- Challenges
- Future of Project

Geographic Information Systems (GIS)

Project to Map:

- Historical change of physical features :
 - Don River (1858 - 1918)
 - Lake Ontario shoreline (1858 - 1918)
 - Creeks/Lost rivers (1858 - 1918)
 - Ashbridges Bay (1858 - 1918)
- Industry (1825) (1858 – 1950)
- Land Ownership (1860 & 1878)

Geographic Area of Project : Watershed



Project Background

- PhD student → Don River Valley Environmental History @ OISE (Jennifer Bonnell)
- Overlay of Paper Map Information by Hand
- Beyond Scanned Maps → GIS
- Proposal to the Network in Canadian History & Environment (NiCHE)

NiCHE Funding Proposal

- Request: \$5,000
- Received: \$10,000
- Laptop Loan
- Server Access @ UWO

GIS & Geospatial Data?

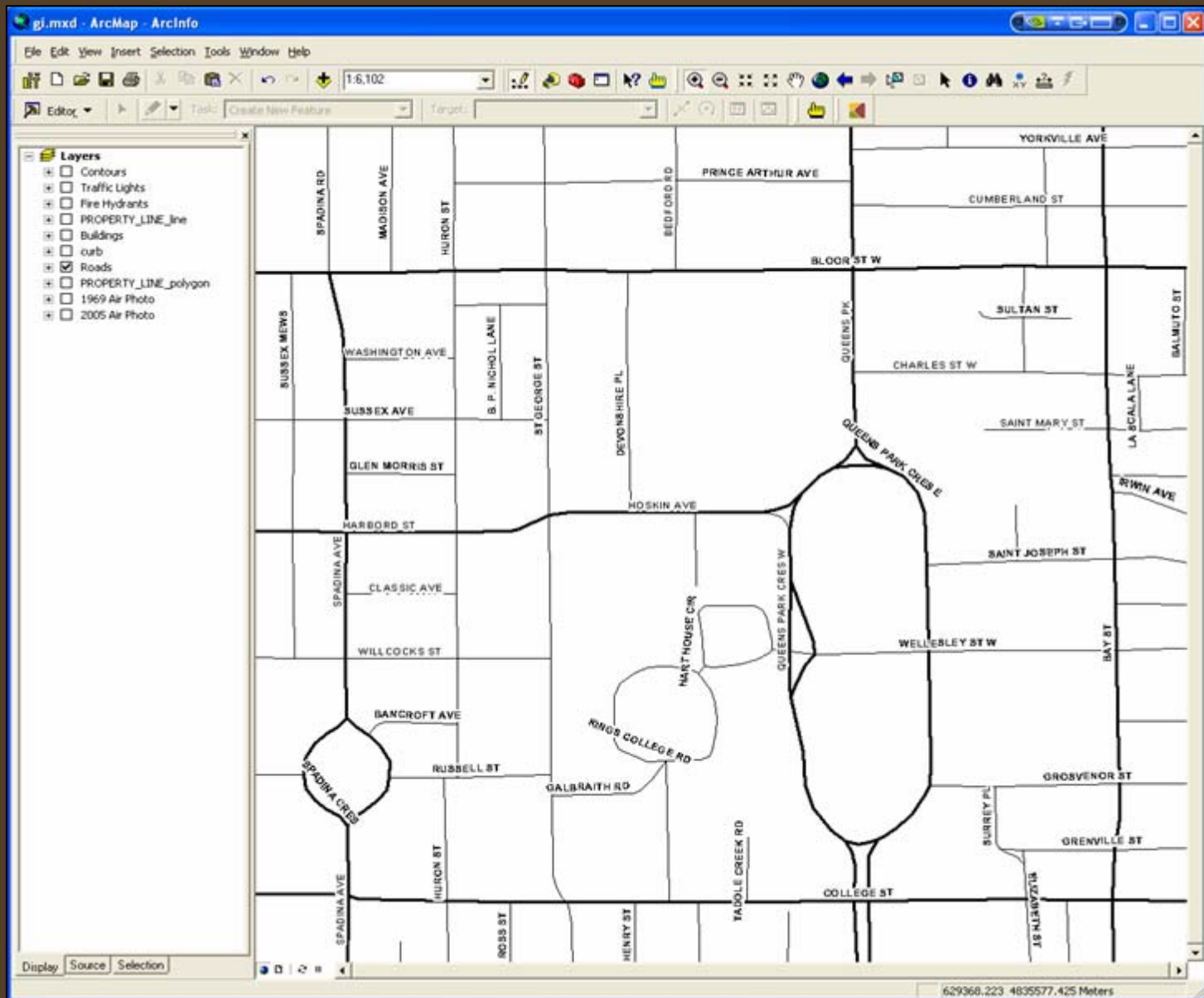
Technology to:

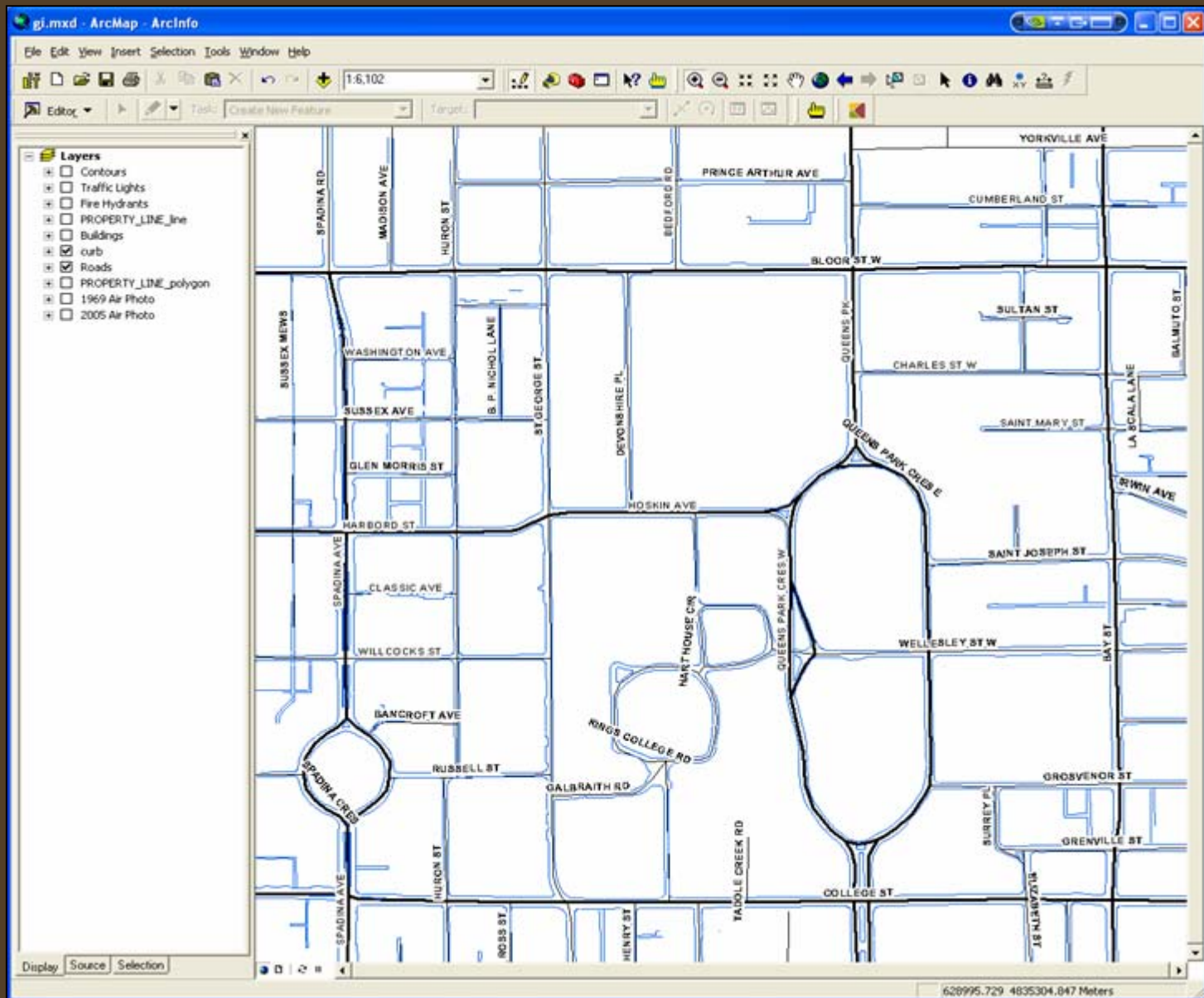
- Compile
 - Store
 - Manipulate
 - Display
 - Analyze
- 

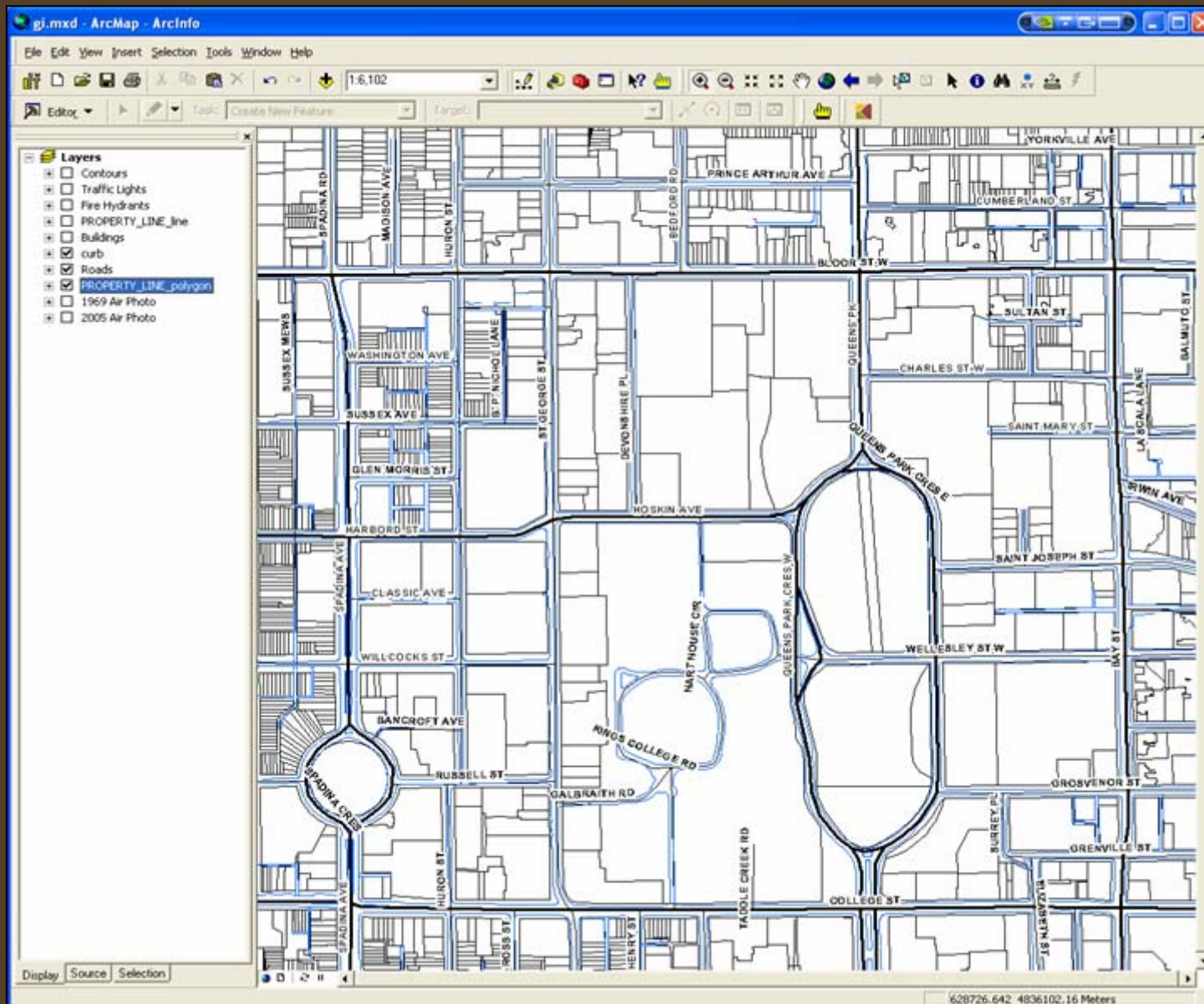
Geospatial Data

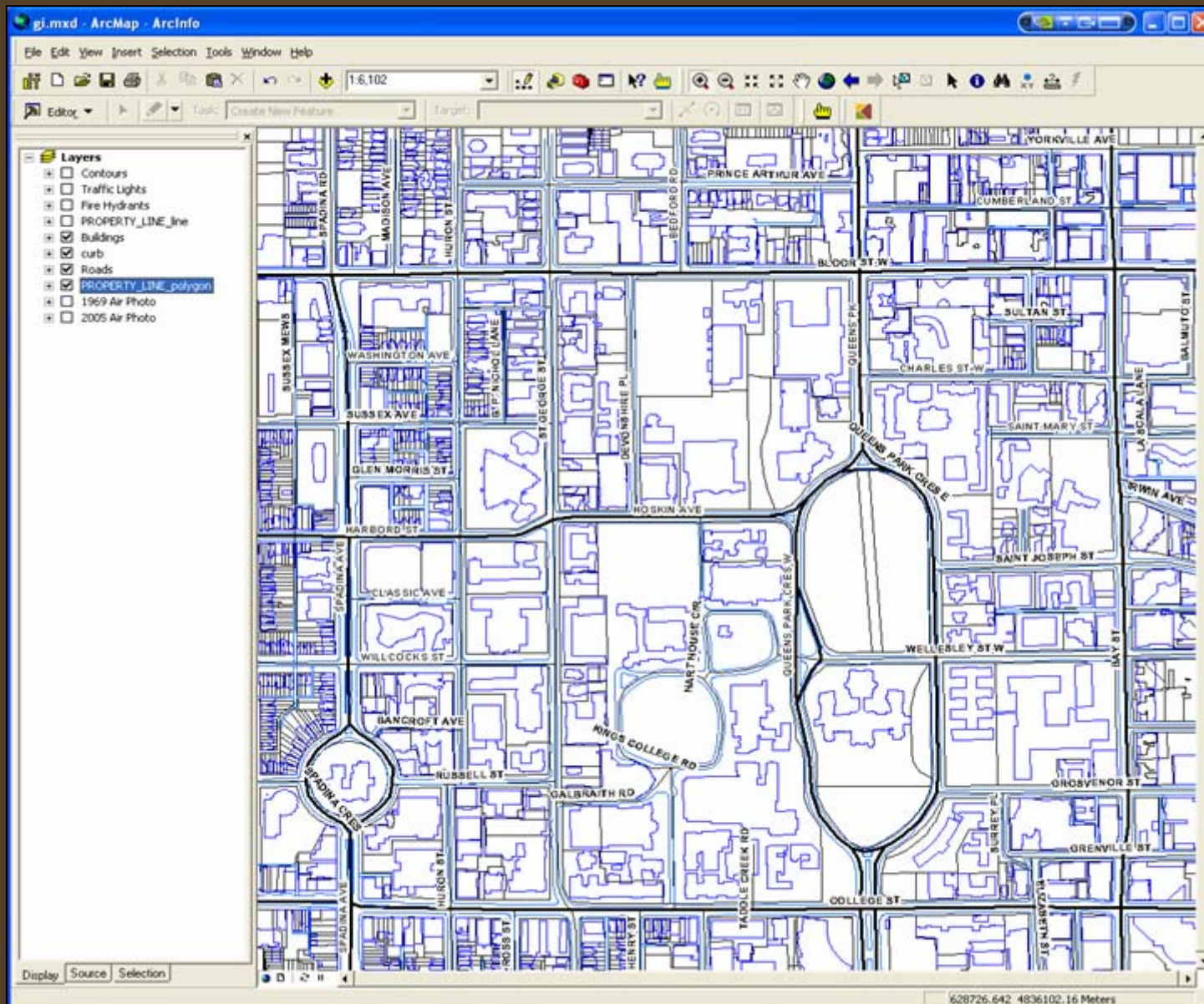
What does GIS data look like?

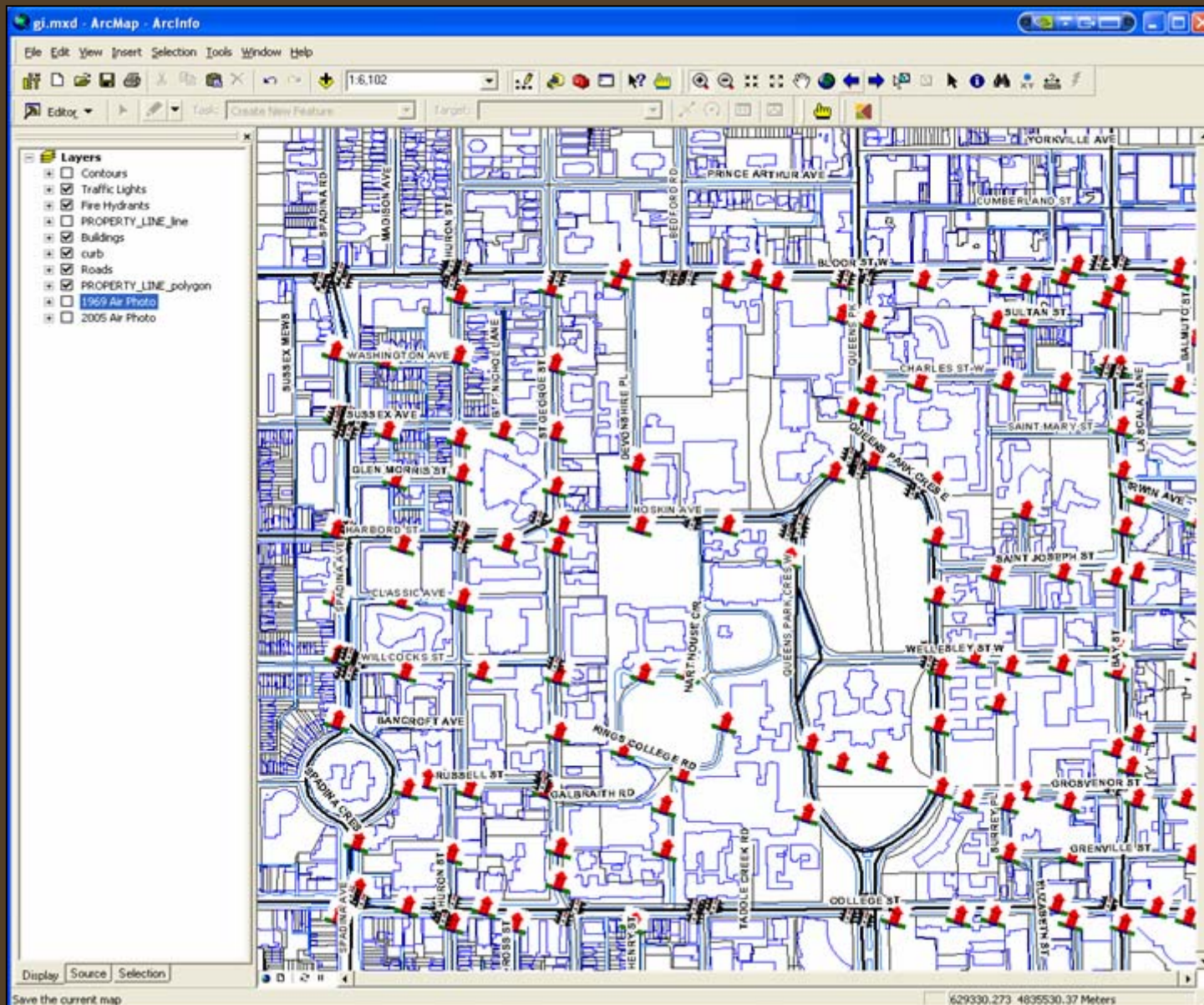
A Look at ArcMap 9.3

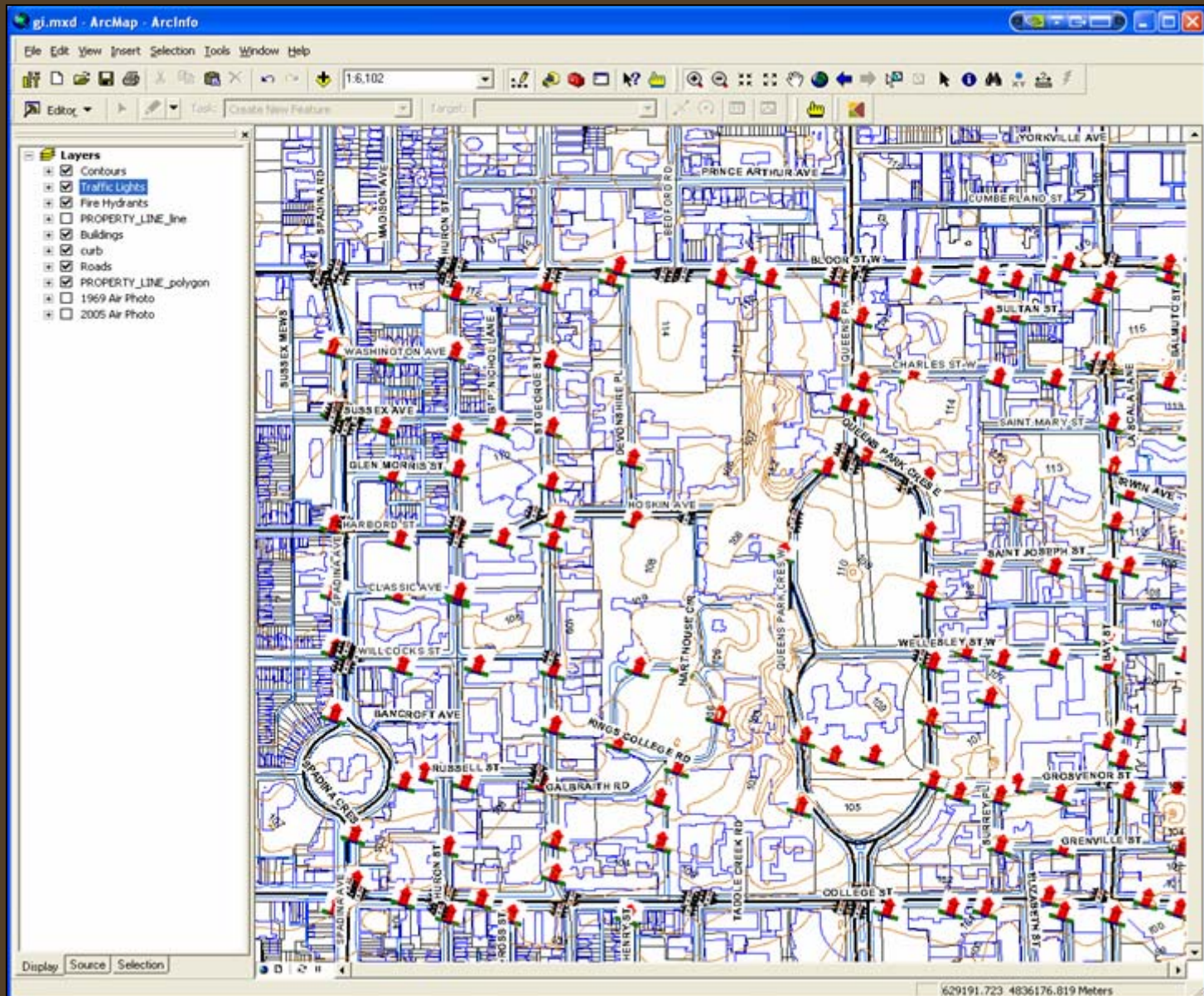




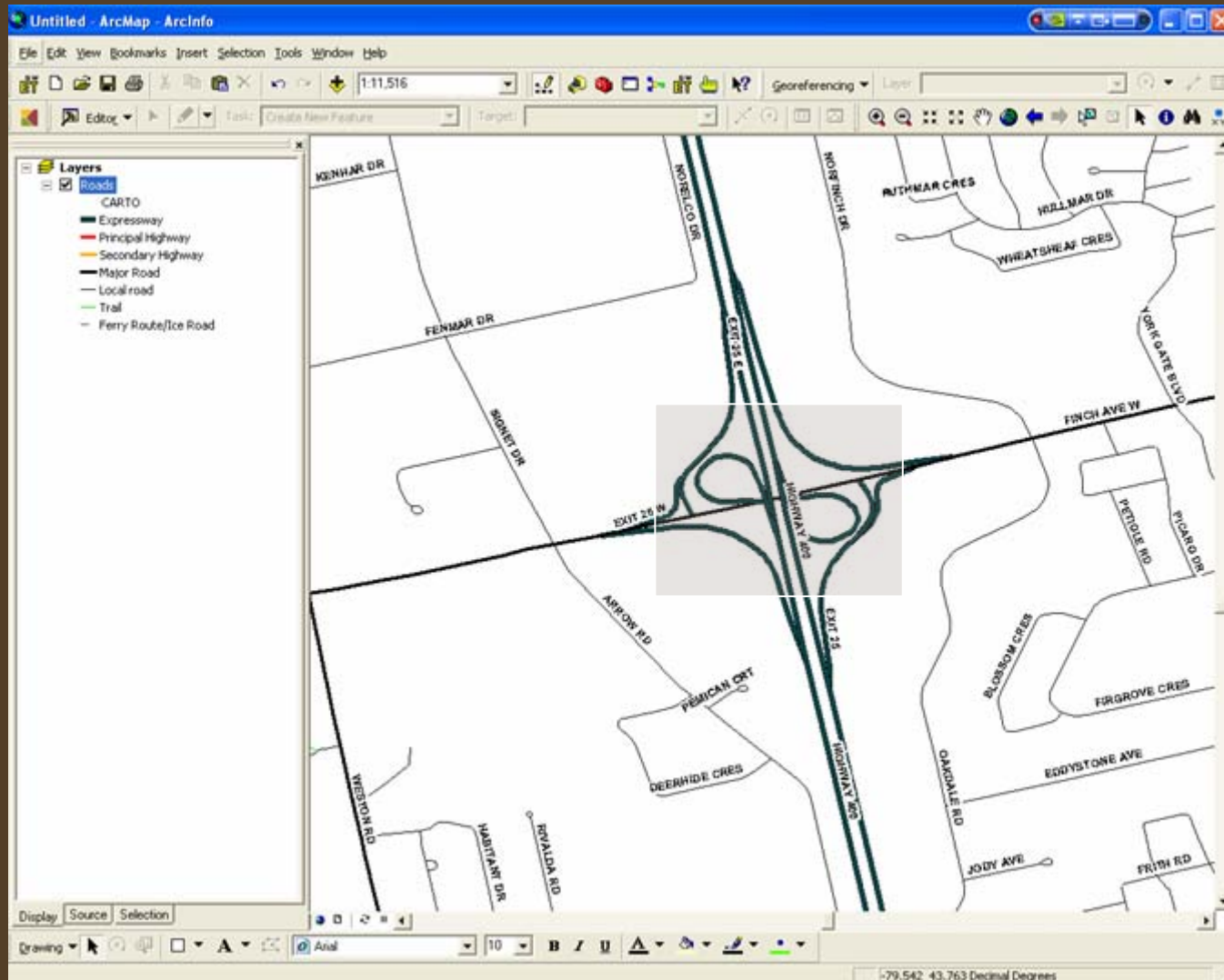




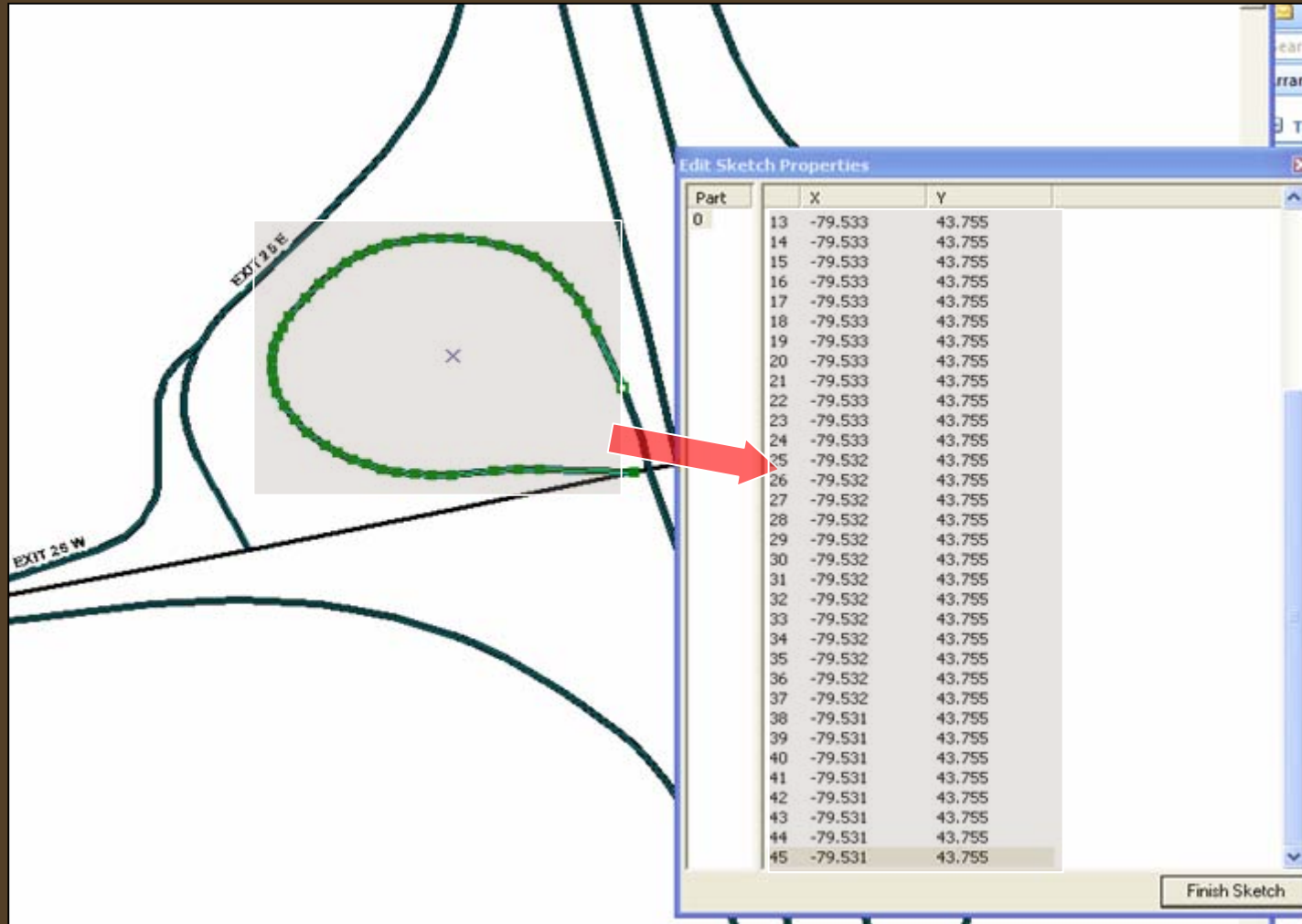




How are geospatial data built?

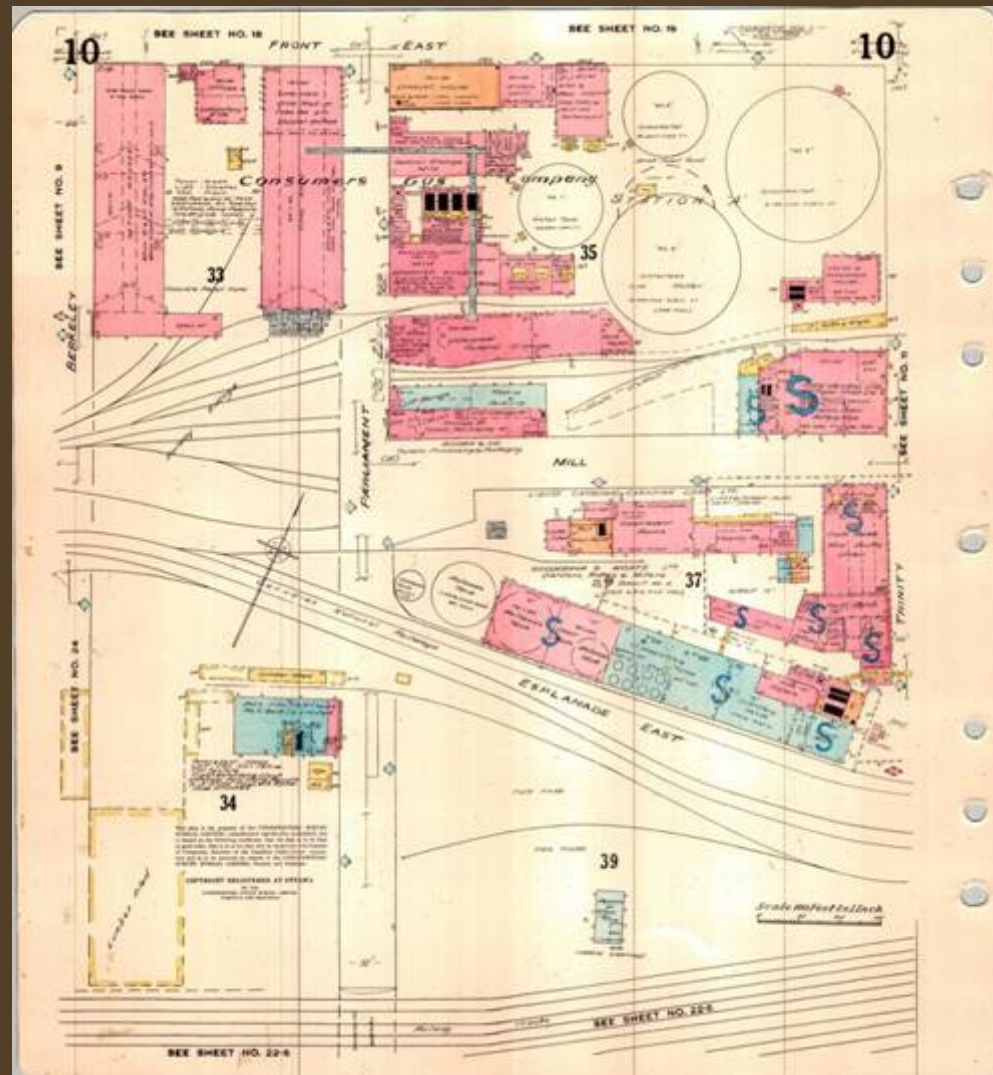


How are geospatial data built?

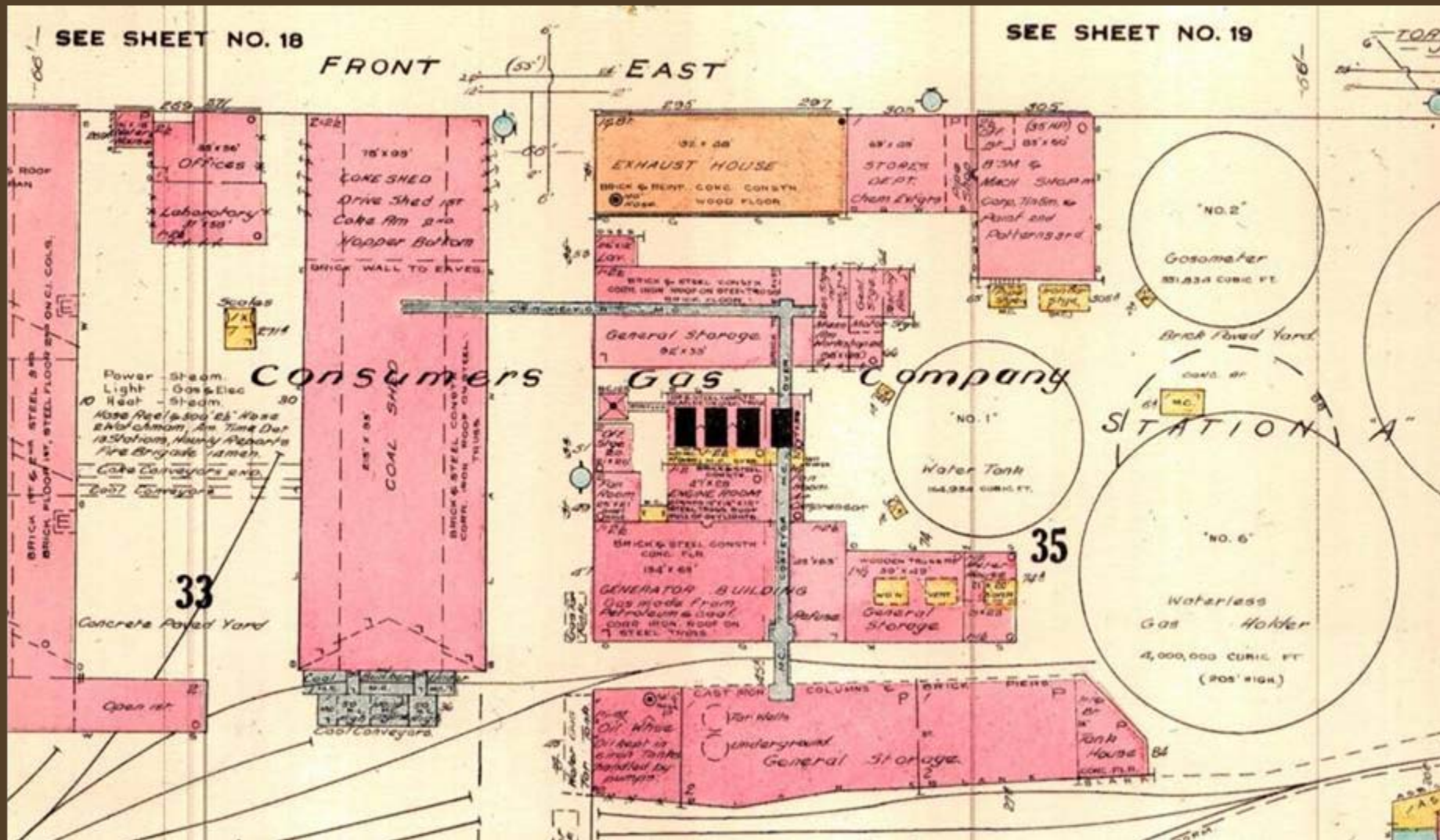


Methodology of Project - How GIS was used?

Industry : Fire Insurance Plans



Industry : Fire Insurance Plans



Industry : City Directories

68

TORONTO BUSINESS DIRECTORY.

Wilson, Thomas, 71 Nelson-street.
Woodall, George, 11 St. Lawrence Arcade.
Woolley, Miss, 293 Yonge-street.
Yeo, Samuel, 116 York-street.
SMITH, W. W., 80 Queen-street west.
Morrison, J., 234 Queen-street west.

Furnaces (Hot-air).

(See also Stove and Tin Dealers.)

Boxall, John, 50 Queen-street west.
Boxall & Brother, 50 Queen-street west.

Furniture Manufacturers and Dealers.

(See also Cabinet Makers and Upholsterers.)

Bond, John, 209 King-street east.
Doyle, Matthew, 97 Yonge-street.
FRANCIS, T., 197 Yonge-street.
Jacques & Hay, Front, cor Bay-street, and King, cor Bay-street.
Hollins, R. T., 187 Yonge street.
HULME, C. L., 194 King-street east.
Krigler, Thos., 240 King-street east.
Miall & Co., 6 and 8 Front-street west.
Matthews, H., 241 Yonge-street.
Moore, D., 299 Yonge-street.
O'CONNOR, CHARLES, 226 Yonge-street.
PHIPPS, GEORGE, 84 King-street west.
Waterson, W., 315 Yonge-street.
West, W., 21 Adelaide-street east.

Furniture Mover.

Sparling, Christopher, 67 Victoria-street.

Figure Maker and Plaster Paris Worker.

CASCI, V., 3 Stanley-street.

Furriers.

(See Hatters and Furriers.)

Gas Company.

Consumers' Gas Company, 19 Toronto-street.

Gas Fitters.

(See Plumbers and Gas Fitters.)

Gilders.

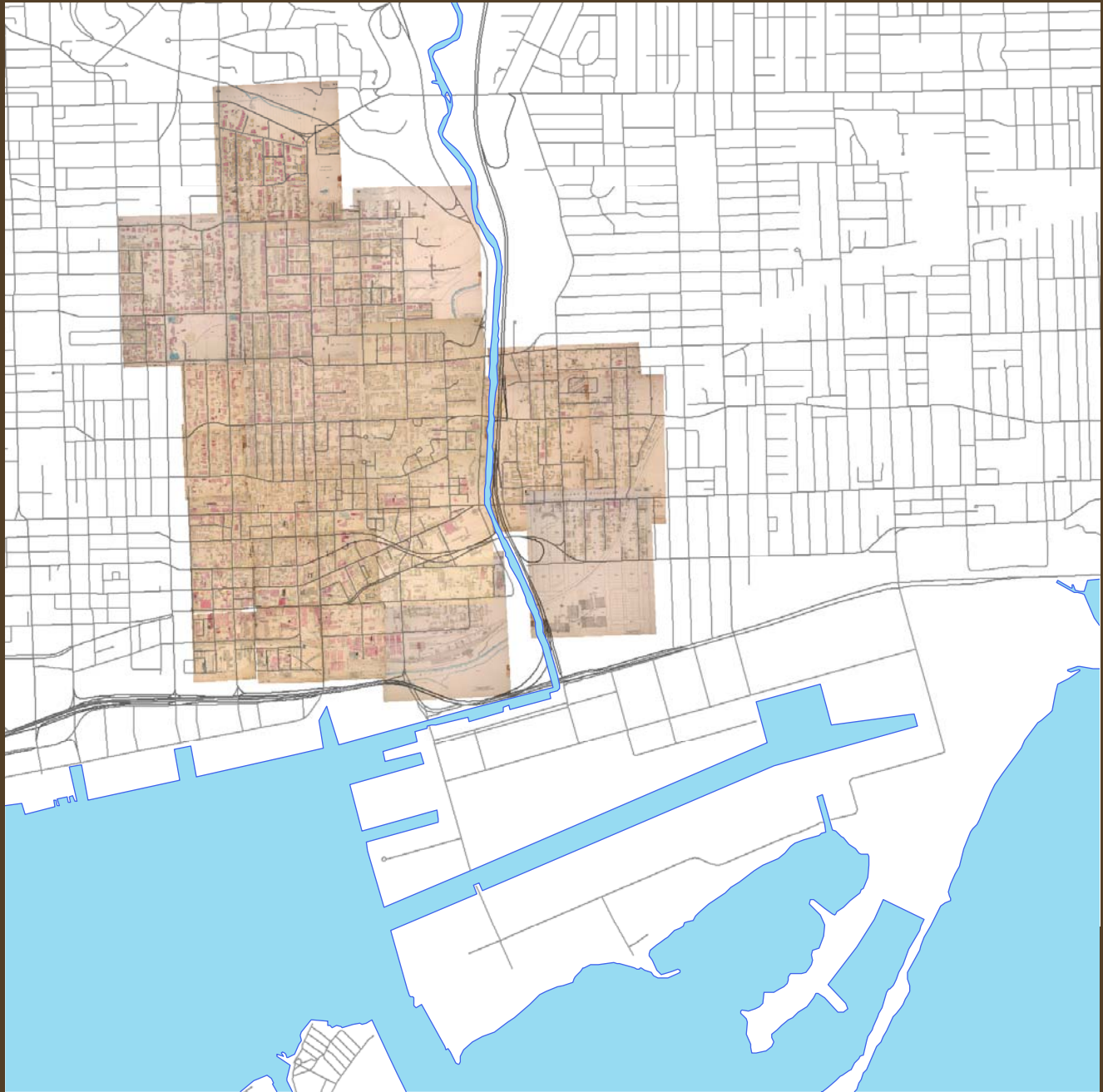
(See Carvers and Picture Frame Makers.)

Glass Stainers.

McCausland & Horwood, 119 Bay-street.

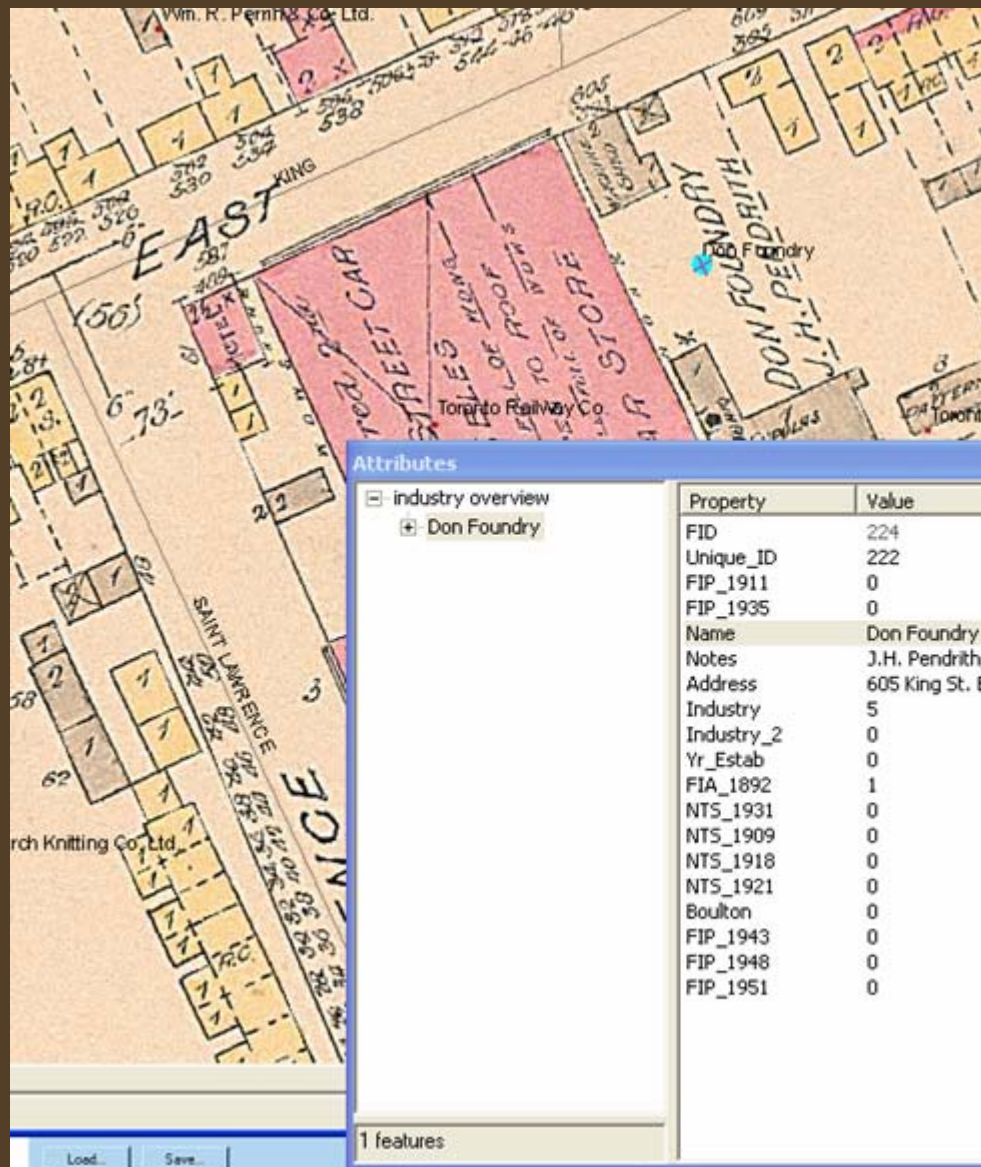
Glue Manufacturers.

Carr, Samuel, Davenport Road, Yorkville.
Lamb, Peter R., near Necropolis.

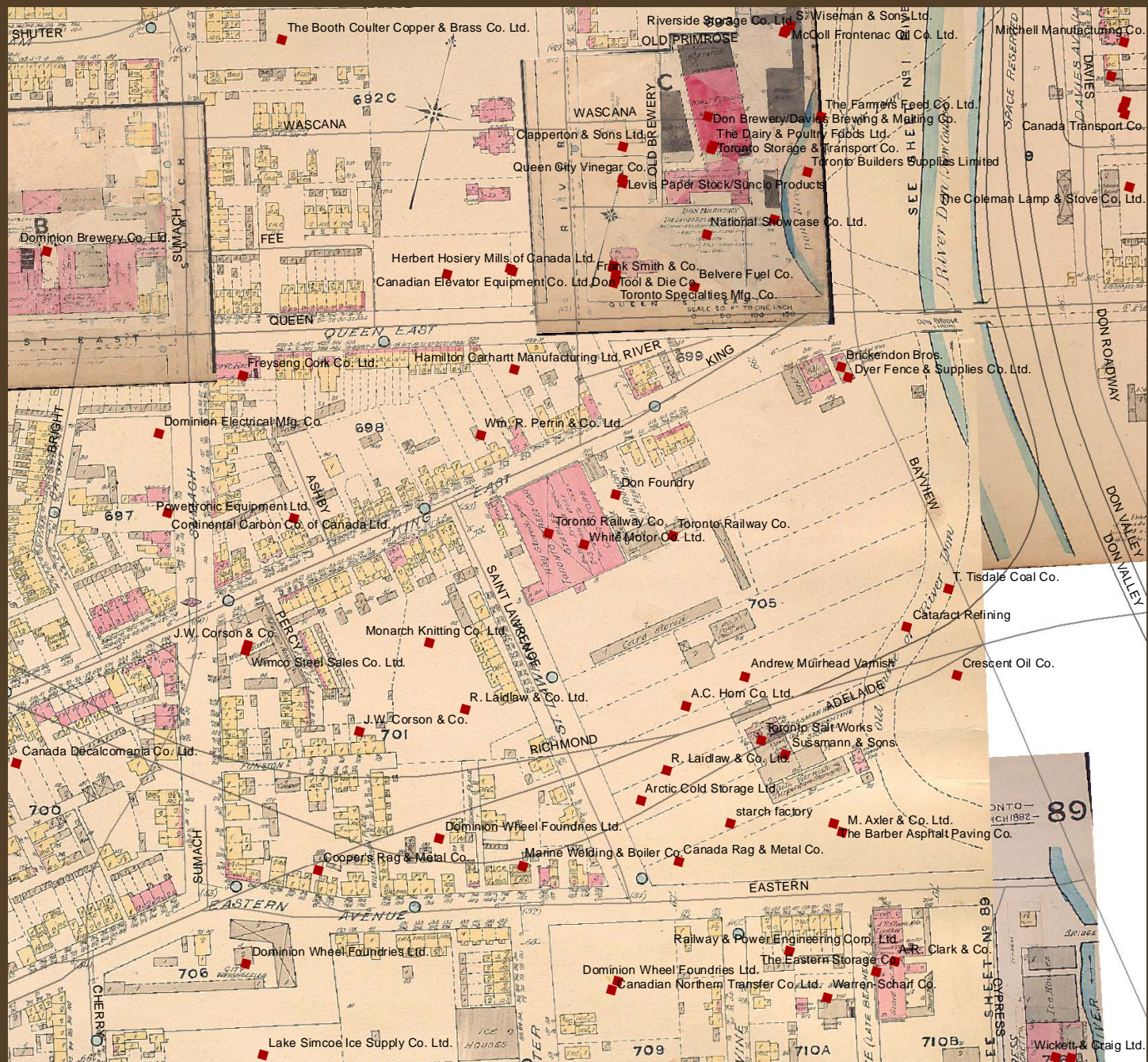


1892 / 2008





1. Saw mills [heavy manufacturing: raw material to product]
2. Paper mills [heavy manufacturing]
3. Grist mills [heavy manufacturing]
4. Breweries and Distilleries [heavy manufacturing]
5. Foundries and machinists (iron works, engine works, boiler makers, etc) [heavy manufacturing]
6. Animal Processing (abattoirs, rendering plants, tanneries); [heavy manufacturing]
7. Oil Refineries (including producers of oil-based paints and varnishes) [heavy manufacturing]
8. Soap works
9. Textile manufacturers
10. Other Food Production (bakeries, canned and bottled goods, etc)
11. Other Light Manufacturing (describes factories that create finished products from previously prepared materials—ie not from raw materials: household appliances, household goods, furniture, equipment (including carriages and ladders), clothing, etc.
12. Fuel Storage (coal and coal oil storage): storage and supply rather than production.
13. Building Materials Producers and Suppliers (lumber, cement, aggregates, glass, marble, granite, etc.). *planing mill would also go here.
14. Agricultural Suppliers (including animal feeds, fencing and wire): storage and supply rather than production.
15. General suppliers and warehousing: storage and supply rather than production.
16. Transportation (rail, shipping, etc)
17. Utilities (Consumer's Gas, etc)
18. Chemical Producers and Suppliers
19. Printing and lithographing

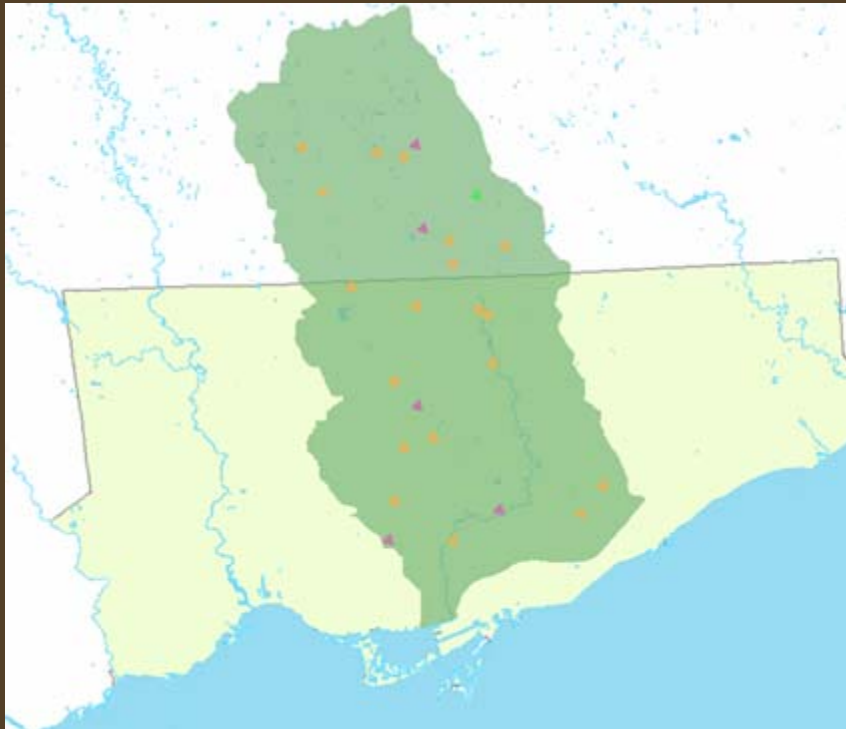


Attributes of industry overview

FI	Sh	Uniqu	Name	Address	Notes	Industr	Industry_2	Boulto	FIA_1892	NTS_1909	FIP_1911	NTS_1918	NTS_1921	NTS_1931
0	Poi	1	National Iron Works Ltd.	324 Cherry St.	later National Iron Corp	5	0	0	0	0	1	0	0	0
1	Poi	2	British American Oil Co. Ltd.	Cherry St. and Keatin		7	0	0	0	0	0	0	0	0
16	Poi	2	British American Oil Co. Ltd.	Keating Ave. (now L		7	12	0	0	0	0	0	0	0
2	Poi	3	Toronto Iron Co.	Cherry St.		5	0	0	0	0	1	0	0	0
3	Poi	4	Standard Fuel Co. Ltd.	Mill St.		12	0	0	0	0	1	0	0	0
4	Poi	5	The Wm. Davies Company Ltd.	521 Front St. E.		6	10	0	1	0	1	0	0	0
81	Poi	5	The Wm. Davies Company Ltd.	55-65 Parliament St.		6	10	0	0	0	1	0	0	0
5	Poi	6	John Taylor & Co. Ltd.	531 Front St. E.	soap and perfume man	8	0	0	0	0	1	0	0	0
7	Poi	7	Wickett & Craig Ltd.	1-37 Cypress St.	tannery, known as Bic	6	0	0	0	0	1	0	0	0
46	Poi	7	Bickell & Wickett Ltd.	1-37 Cypress St.	tannery	6	0	0	1	0	0	0	0	0
6	Poi	8	The Eastern Storage Co.	Eastern Ave. at Over		15	0	0	0	0	1	0	0	0
8	Poi	9	Laidlaw's Ltd.	Overend St. at Easter		13	0	0	0	0	1	0	0	0
9	Poi	10	Canadian Northern Transfer Co. Ltd.	Cherry St. at Front St		16	0	0	0	0	1	0	0	0
10	Poi	11	J.M. Purvis	2 Don Esplanade	cotton manufacturing	9	0	0	0	0	1	0	0	0
23	Poi	12	Toronto Railway Co.	92 King St. E.		16	0	0	0	0	1	0	0	0
22	Poi	12	Toronto Railway Co.	591 King St. E.	streetcar stables	16	0	0	1	0	0	0	0	0
11	Poi	13	Gooderham & Worts Ltd.		cattle operations	6	0	0	0	0	1	0	0	0
84	Poi	13	Gooderham & Worts Ltd.	2-16 Trinity St.	distillery	4	0	1	1	0	1	0	0	0
85	Poi	13	Gooderham & Worts Ltd.	63 Trinity St.	cooperage	11	0	0	1	0	1	0	0	0
93	Poi	13	Gooderham & Worts Ltd.	west side of Trinity S	distillery	4	0	1	1	0	1	0	0	0
24	Poi	13	Gooderham & Worts Ltd.	424 Front St. E.	cooperage	5	0	0	1	0	0	0	0	0
12	Poi	14	Sovereign Varnish & Oil Co.	357-359 Eastern Ave	later Samuel Jardine So	7	0	0	0	0	1	0	0	0
35	Poi	15	Martin Pump & Machine Co. Ltd.	47 Davies Ave.		5	0	0	0	0	1	0	0	0
13	Poi	16	Lever Bros. Ltd. Sunlight Soap Works	Eastern Ave. at Don		8	0	0	0	0	1	0	0	0
38	Poi	16	Lever Bros. Ltd.	Don Roadway S.	old Gooderham & Wort	8	0	0	0	0	0	0	0	0
68	Poi	17	Dominion Wheel Foundries Ltd.	Eastern Ave. at Sum		11	0	0	0	0	1	0	0	0
37	Poi	17	Dominion Wheel Foundries Ltd.	north side of Eastern		11	0	0	0	0	0	0	0	0
37	Poi	17	Dominion Wheel Foundries Ltd.	121-179 Eastern Ave	business expansion int	11	0	0	0	0	0	0	0	0
46	Poi	18	Taylor Butler	103 Ontario St.	planing mill	13	0	0	1	0	0	0	0	0
15	Poi	19	Cleansoline Refrigerating Co. Ltd.	Booth Ave.		18	0	0	0	0	1	0	0	0
16	Poi	20	One Minute Manufacturing Co.	Logan Ave.	manufacturing of dome	11	0	0	0	0	1	0	0	0
17	Poi	21	Freyseng Cork Co. Ltd.	61-71 Sumach St.		13	0	0	1	0	1	0	0	0
18	Poi	22	Hamilton Carhartt Manufacturing Ltd.	535 Queen St. E.		11	0	0	0	0	1	0	0	0
19	Poi	23	Wm. R. Perrin & Co. Ltd.	530 King St. E.	packing machinery & pr	5	0	0	0	0	1	0	0	0
20	Poi	24	J.W. Corson & Co.	Sumach St.	coal, wood, coke & car	13	0	0	0	0	1	0	0	0
21	Poi	24	J.W. Corson & Co.	Funston St. secondar	secondary location	13	0	0	0	0	1	0	0	0
46	Poi	25	Treloar, Blashford & Co.	6-8 Berkeley St.	founders & moulders	5	11	0	1	0	0	0	0	0
22	Poi	26	R. Laidlaw & Co. Ltd.	St. Lawrence St.	lumber	13	0	0	0	0	1	0	0	0
24	Poi	27	Dyer Fence & Supplies Co. Ltd.	Don Esplanade W. at		14	0	0	0	0	1	0	0	0
27	Poi	28	Andrew Muirhead Varnish	St. Lawrence St.	varnish factory	7	0	0	0	0	1	0	0	0

Project Results

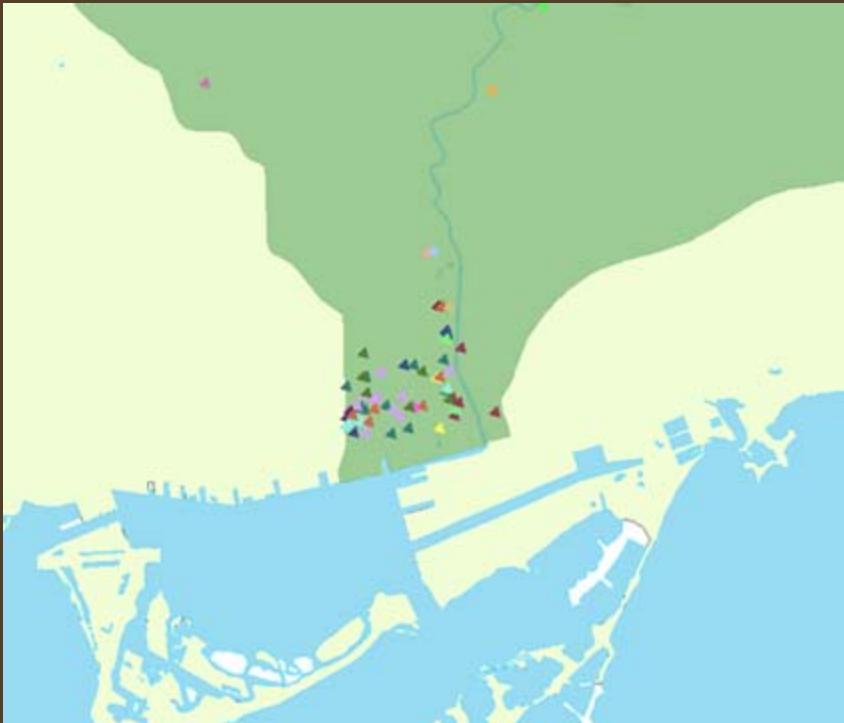
Industry 1825 & 1852



Industry 1858 & 1892



Industry 1909-1930's



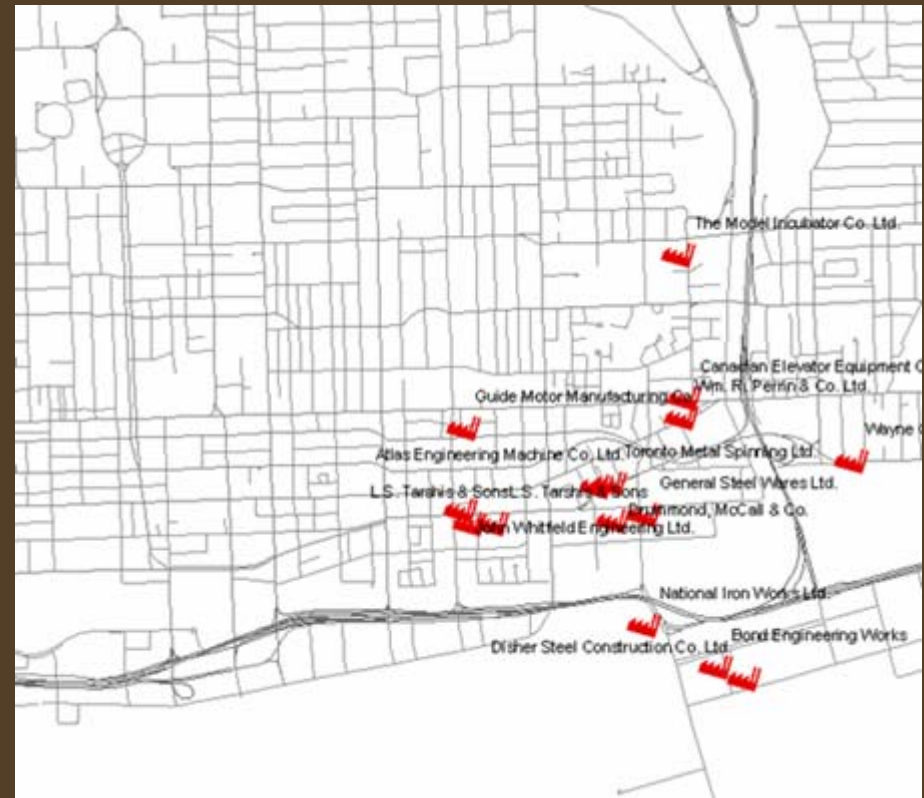
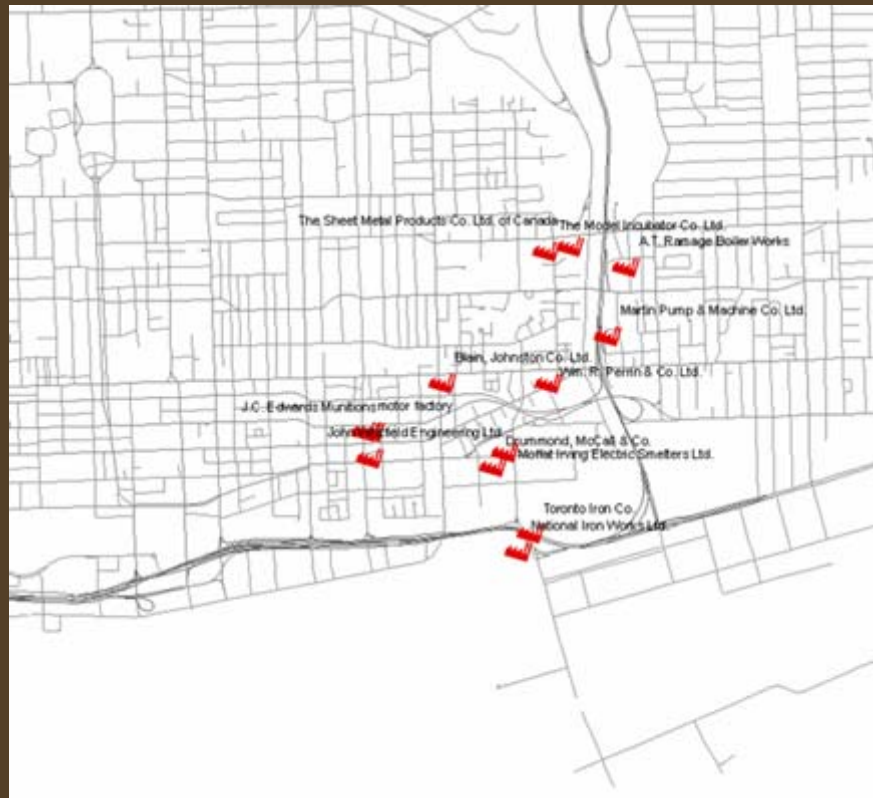
Industry 1935-37



Industry 1940's-1950's



Querying the Data: Foundries in 1911 & 1935



Oil and Gas footprints 1911-51

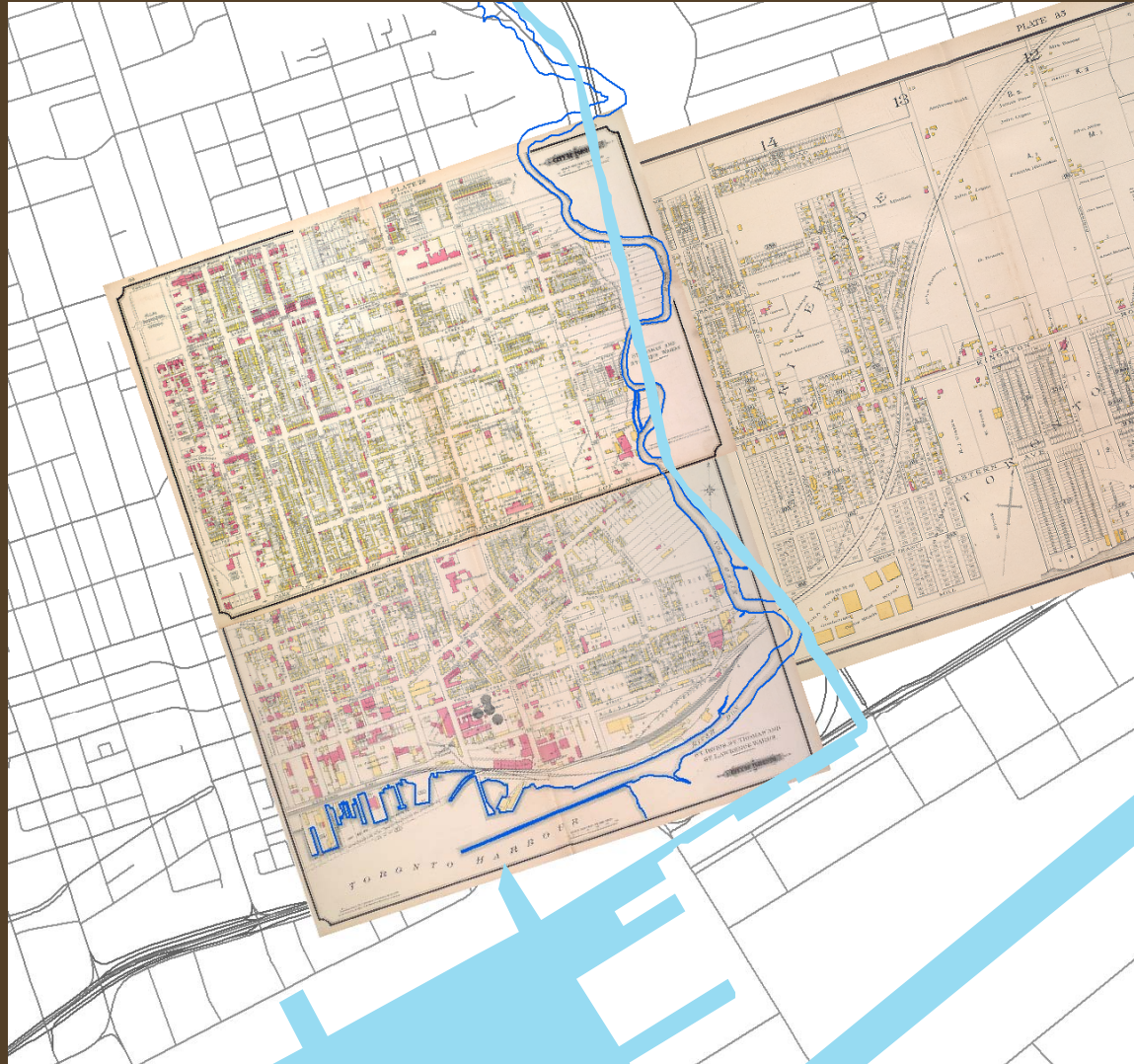


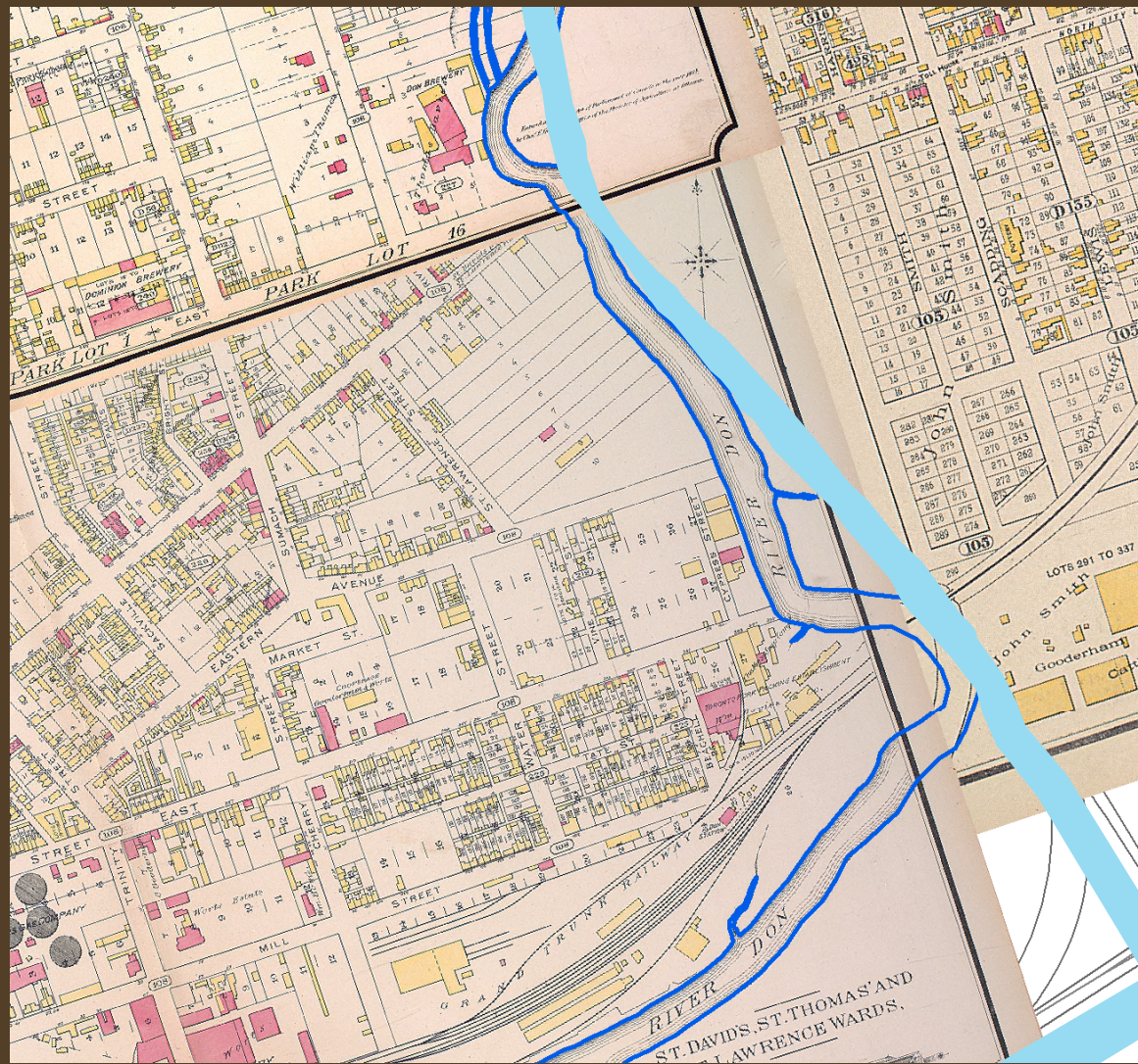
(breweries and animal processing footprints also available)

River, Shoreline, and Ashbridges Bay

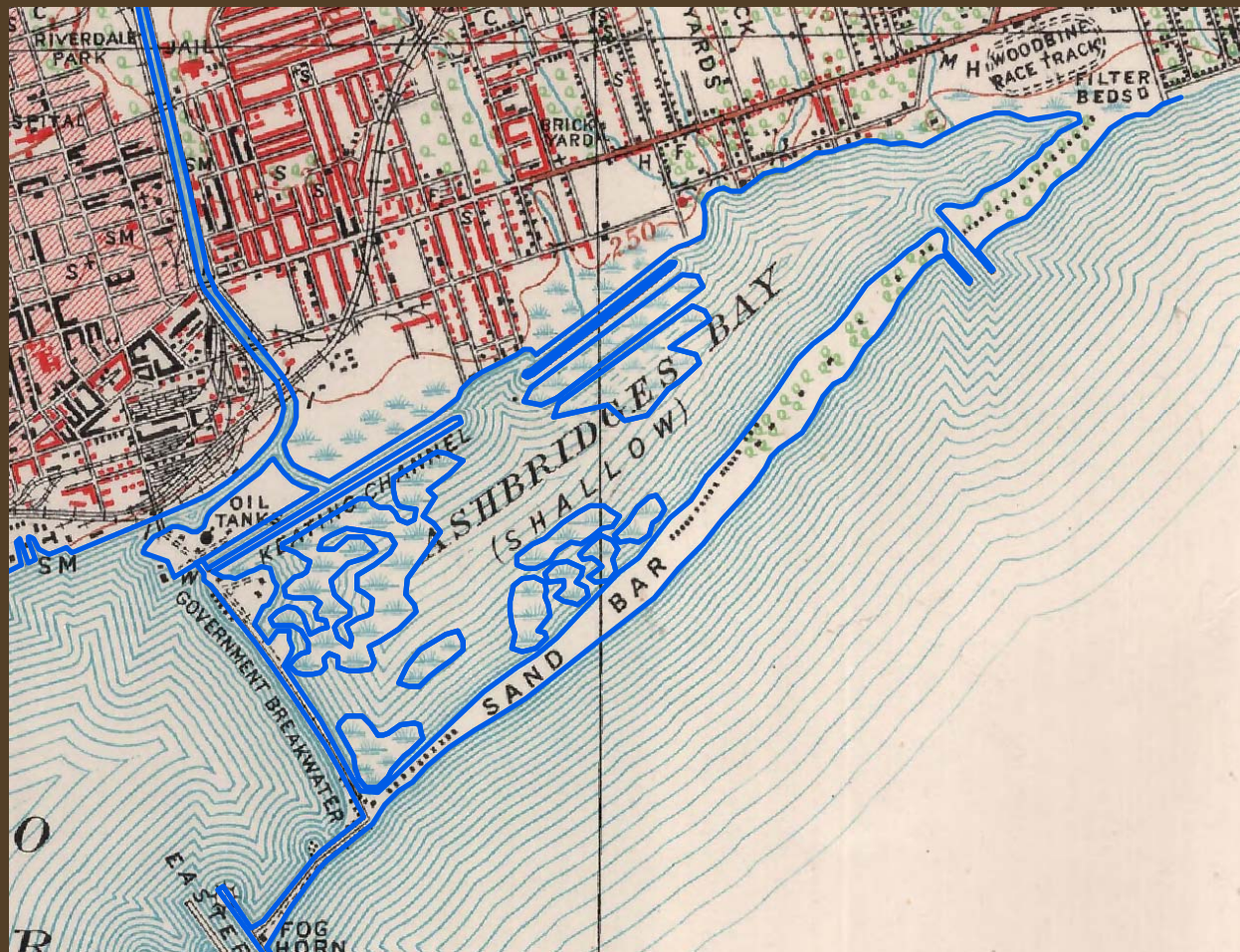


River, Shoreline, and Ashbridges Bay





Ashbridges Bay



Don/Shoreline/Ashbridges Bay

1857



Don/Shoreline/Ashbridges Bay

1882



Don/Shoreline/Ashbridges Bay 1891



Don/Shoreline/Ashbridges Bay 1894



Don/Shoreline/Ashbridges Bay 1909

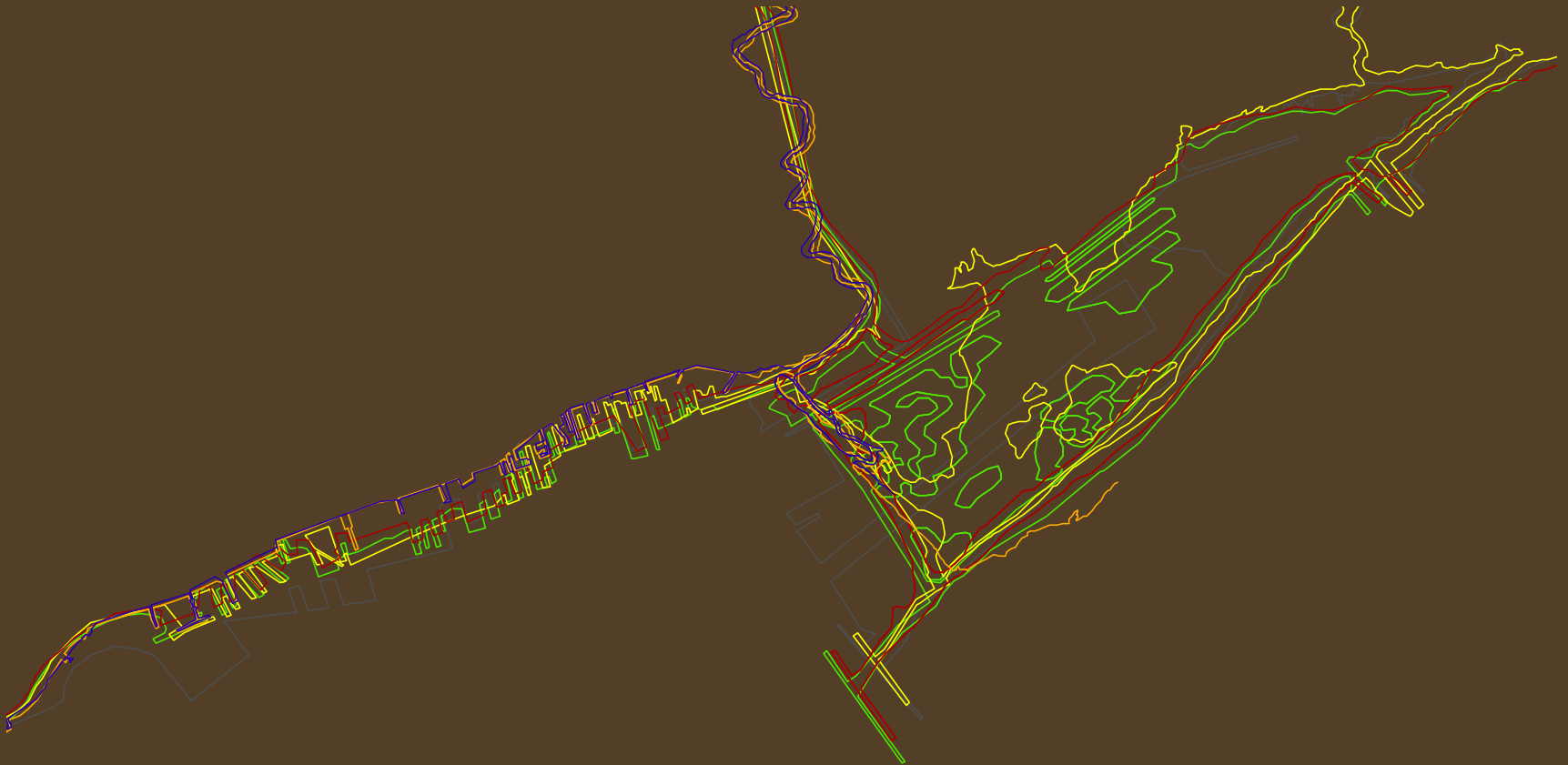


Don/Shoreline/Ashbridges Bay 1918

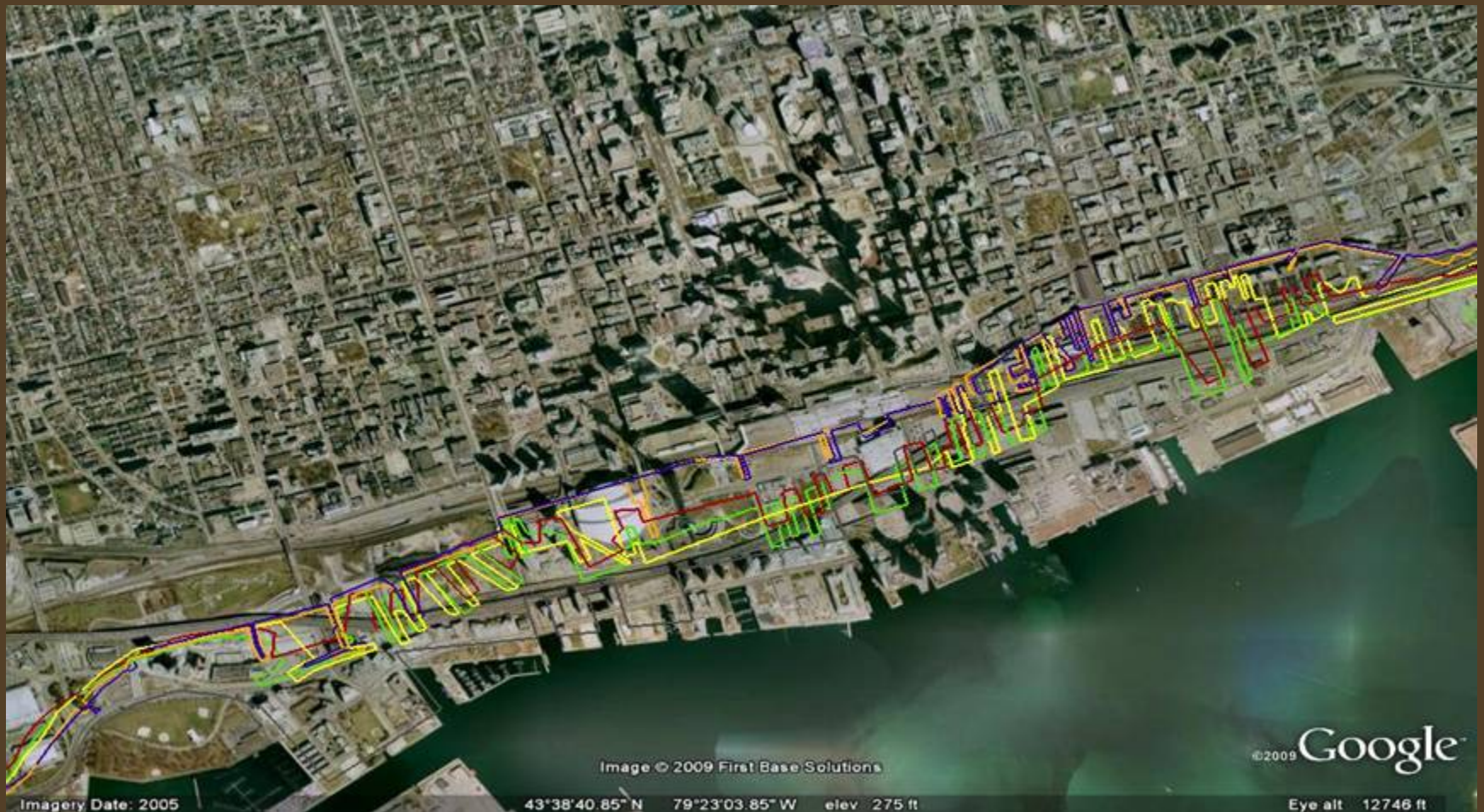


Don/Shoreline/Ashbridges Bay

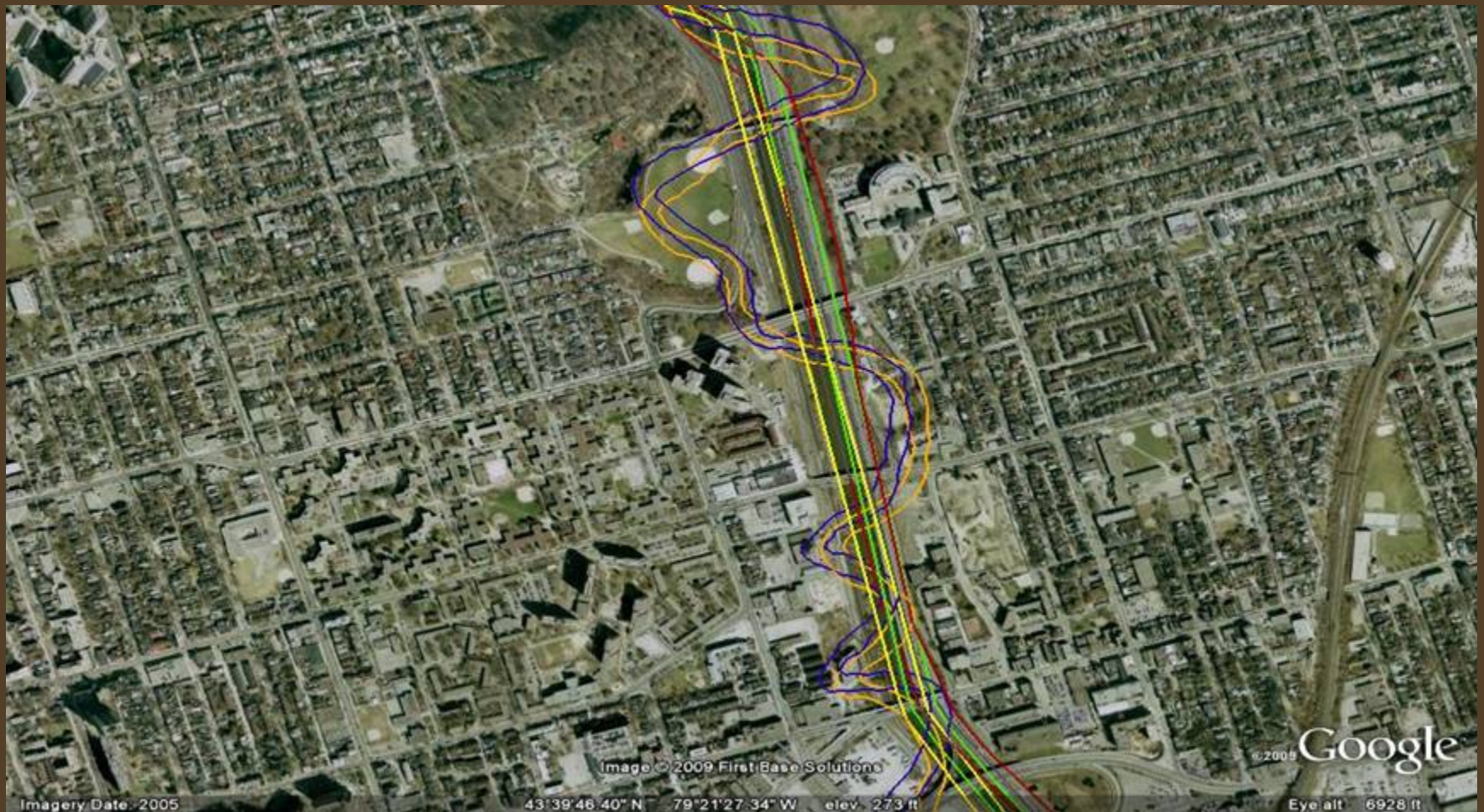
1857-1918



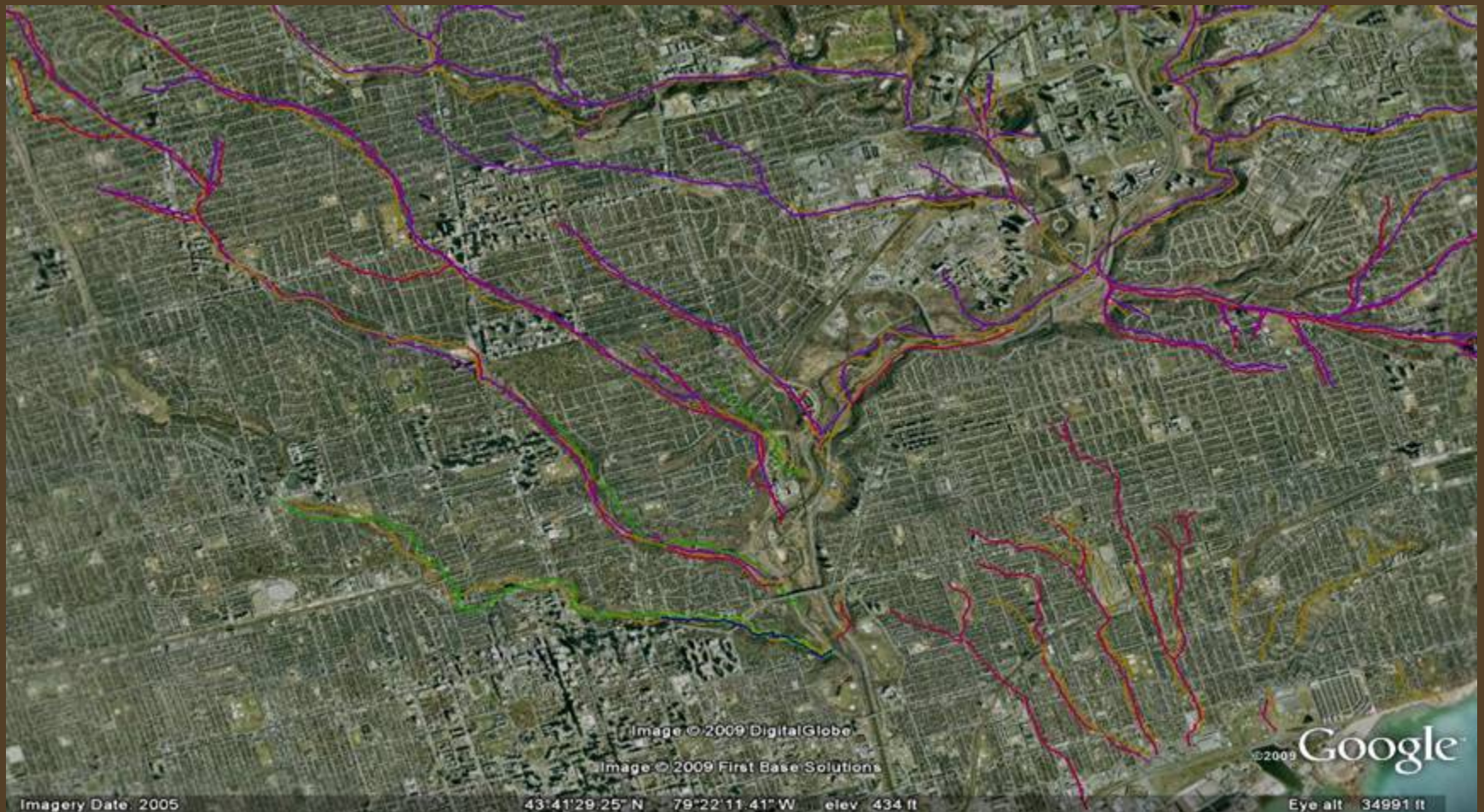
Shoreline on Google Earth



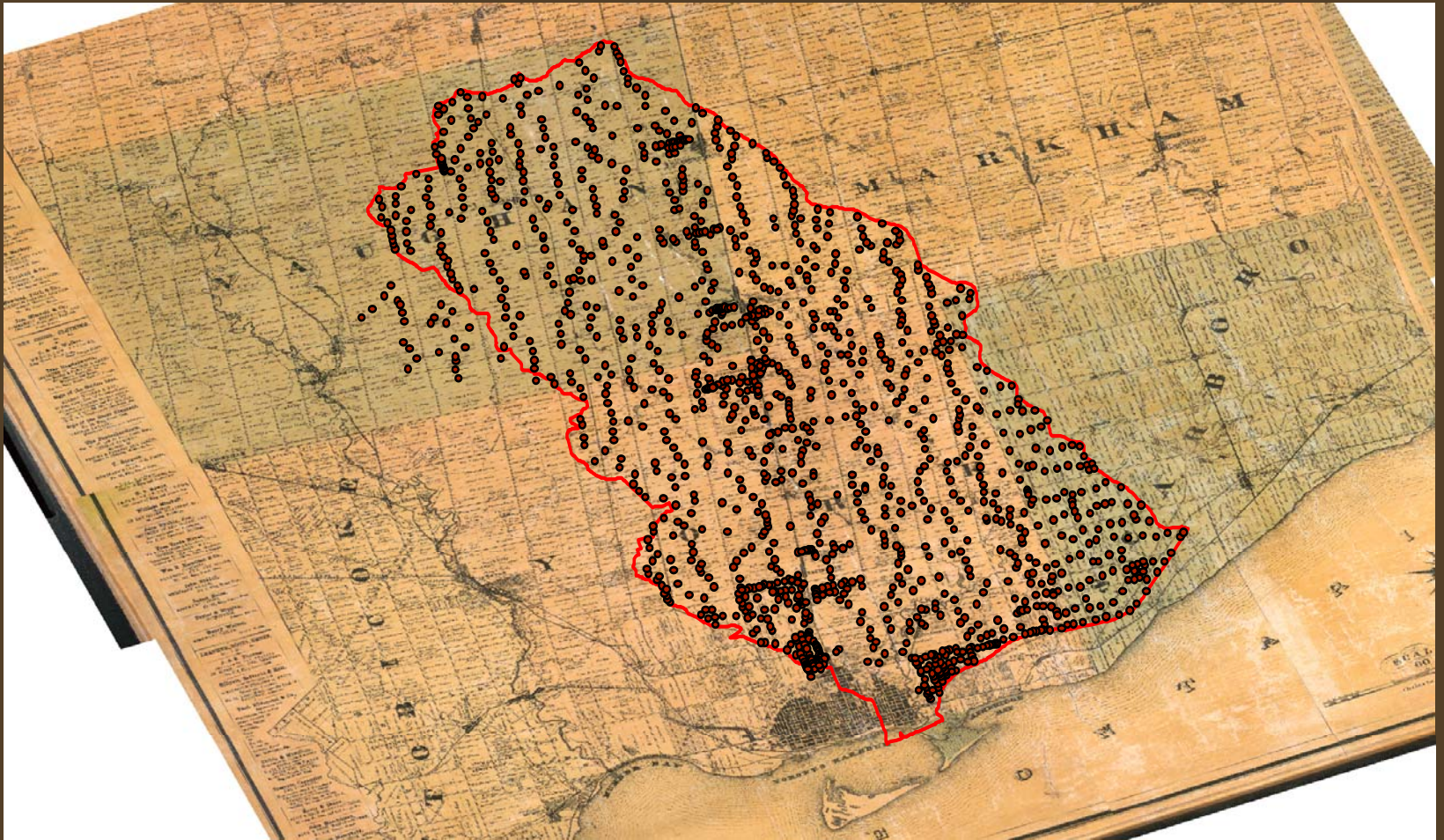
Don River on GE



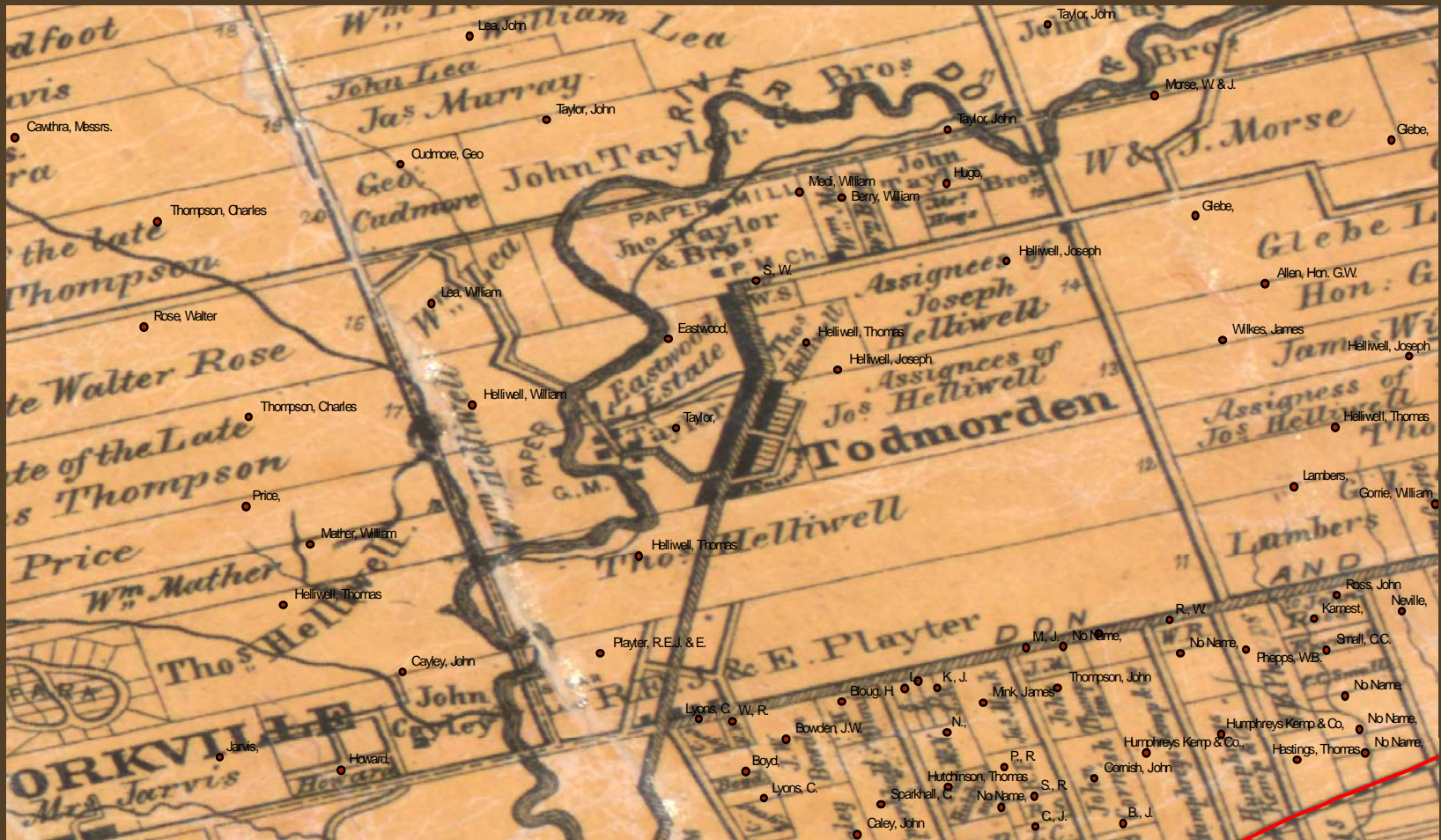
Creeks/Lost Rivers on GE



Land Ownership 1860



Land Ownership 1860



Land Ownership 1878



Data Dissemination: Data Download



Don Valley Historical Mapping Project

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The Don River Historical Mapping Project

Toronto's Don River Valley is arguably the city's most distinctive physical feature. As a provider of water, power, sustenance, building materials, and transportation, it has played an important role in the city's settlement and development. The river valley has changed dramatically in the years since European settlement, particularly during the late nineteenth and early twentieth century, when the Lower Don River was straightened and channelized and the huge marsh at its mouth drained and filled. Today, the Lower Valley forms the foundation for one of the most densely populated areas in Canada, outlining as it does the eastern portion of Toronto's downtown core and radiating residential areas.

This project documents historical changes in the landscape of the Don River Valley. Drawing from the wide range of geographical information available for the Don River watershed (and the Lower Don in particular), including historical maps, geological maps, fire insurance plans, planning documents, and [other?], the project uses GIS software to synthesize and interpret this information and make it more accessible as geospatial data.

The project is a work in progress. To date, we have digitized over 8 historical maps of Toronto and the Don River watershed, and compiled the following GIS layers: 1) changes to the river channel and shoreline of Toronto harbour, 1882-1918; 2) industrial development in the Lower Don River Watershed, 1858-1951; 3) historical mill sites in the Don River Watershed, [years?]; 4) land ownership in the watershed, 1878-?; and 4) points of interest in the watershed. [should we highlight the polygon layers of oil & gas, animal processing, and breweries as separate layers here? Am I missing anything else?] In future, we hope to expand the project to include data from other Toronto area watersheds/other parts of the city.

The project was completed with financial support from the Network in Canadian History and Environment (NiCHE) and in-kind support from the University of Toronto Map Library. Three main partners collaborated in the project design and implementation: Jennifer Bonnell, a doctoral student in the History of Education program at the University of Toronto's Ontario Institute for Studies in Education (OISE/UT); Marcel Fortin, the GIS and Map Librarian at the University of Toronto's Robarts Library; and representatives from Lost Rivers, a community-based urban ecology organization focused on building public awareness of the City's river systems. Jordan Hale, a University of Toronto Geography student, conducted much of the digitization and GIS database work. This project could not have been completed without her skilled assistance and dedication.

Map & GIS Collections and Services - Data, Map and GIS Centre, University of Toronto Libraries - Mozilla Firefox

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About the GIS and Map Collections and Services in the Data, Map, and GIS Centre

The University of Toronto GIS and Map Collections and Services are part of the Data, Map and GIS Centre of the University of Toronto library system. The Data, Map and GIS Centre is located on the 5th floor of the Robarts Library.

The Map and GIS holdings range widely in scope and focus and include in excess of 230,000 paper maps, 4,000 paper air photos, 14,000 paper atlases and books, 22,000 microforms, and thousands of digital mapping files for use in GIS software.

For hours of operation, please see the following link.



Plan of Toronto Harbour with the proposed town and part of the settlement, 1798, Gauthier Maps. Click the image to enter the Digital Map Project

(Plugins Required)
Refresh screen to display a different image

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Done Open Notebook Zotero

Data Discovery - Geonetwork

GeoNetwork on NiCHE - The portal to historical spatial data and maps - Mozilla Firefox

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http://niche.uwo.ca:8080/geonetwork/srv/en/main.home

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**DON RIVER VALLEY HISTORICAL GIS PROJECT - INDUSTRY**

Abstract The Don River Valley Historical GIS Project is...

Keywords industry, river, watershed, portlands, Toronto, Ontario, Canada



1

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Data Discovery - Geonetwork

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- Don River Valley Historical GIS Project - Industry
- Don River Valley Historical GIS Project - Creeks and Tributaries, 1857
- Don River Valley Historical GIS Project - River Course and Shoreline, 1918
- Don River Valley Historical GIS Project - Industry


1:24,458

LAYERS

- industry_Type
- Opaque    
- G_3524_T61_1862a_EAST is a A raster file accompanied by a spatial data file
- Blue Marble world image

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GEONETWORK OPENSOURCE EMBEDDED WEB MAP SERVER

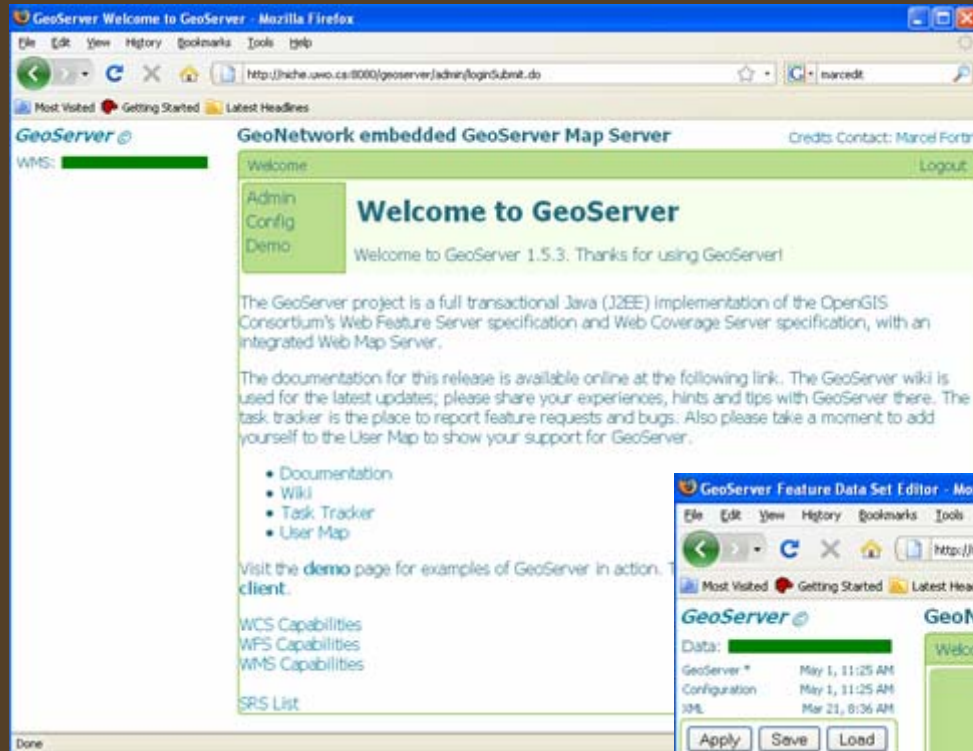
Abstract Web Map Services provided by GeoServer for GeoNetwork opensource.

Keywords: WFS, WMS, GEOSERVER, GEONETWORK, OSGeo

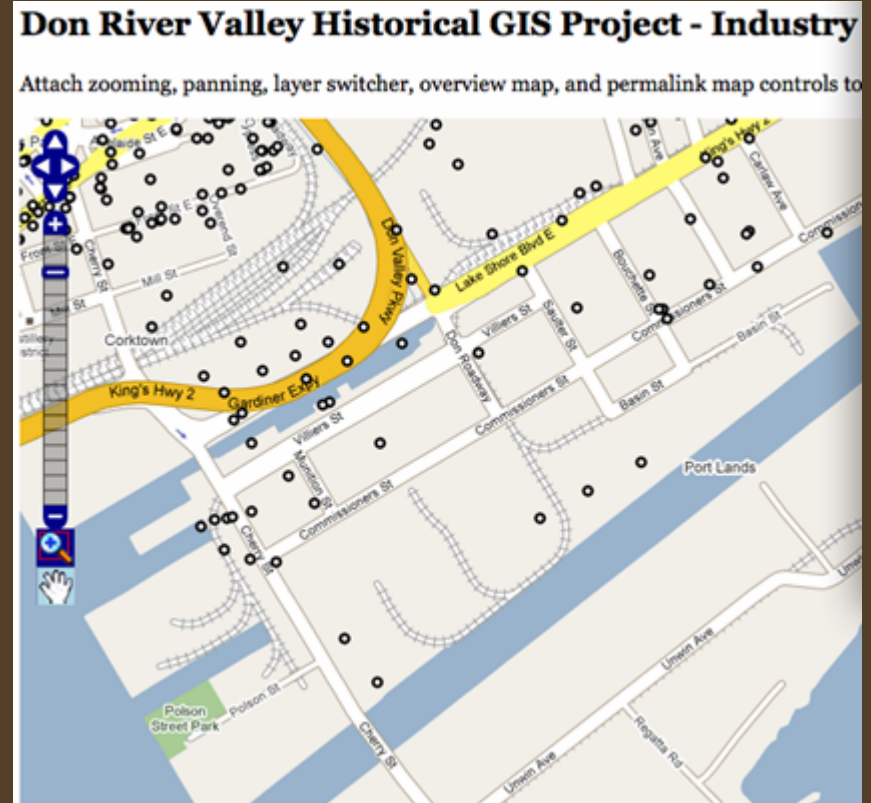
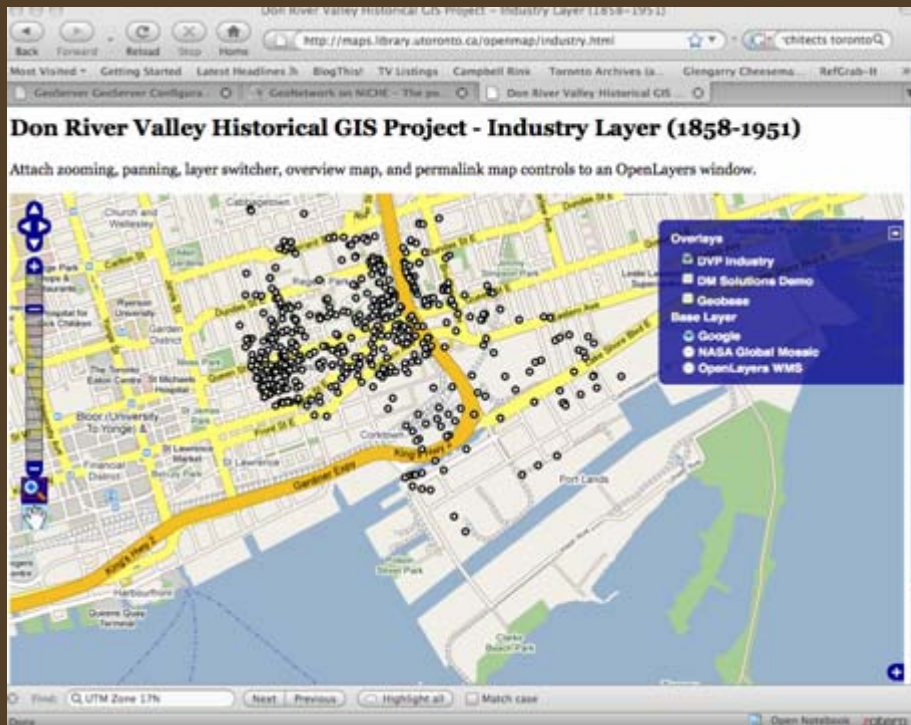
Home page: <http://niche.uwo.ca:8080/geoserver/wms>

Contact information:
Primary contact person: Marcel Fortin (University of Toronto Libraries)
Position: GIS and Map Librarian

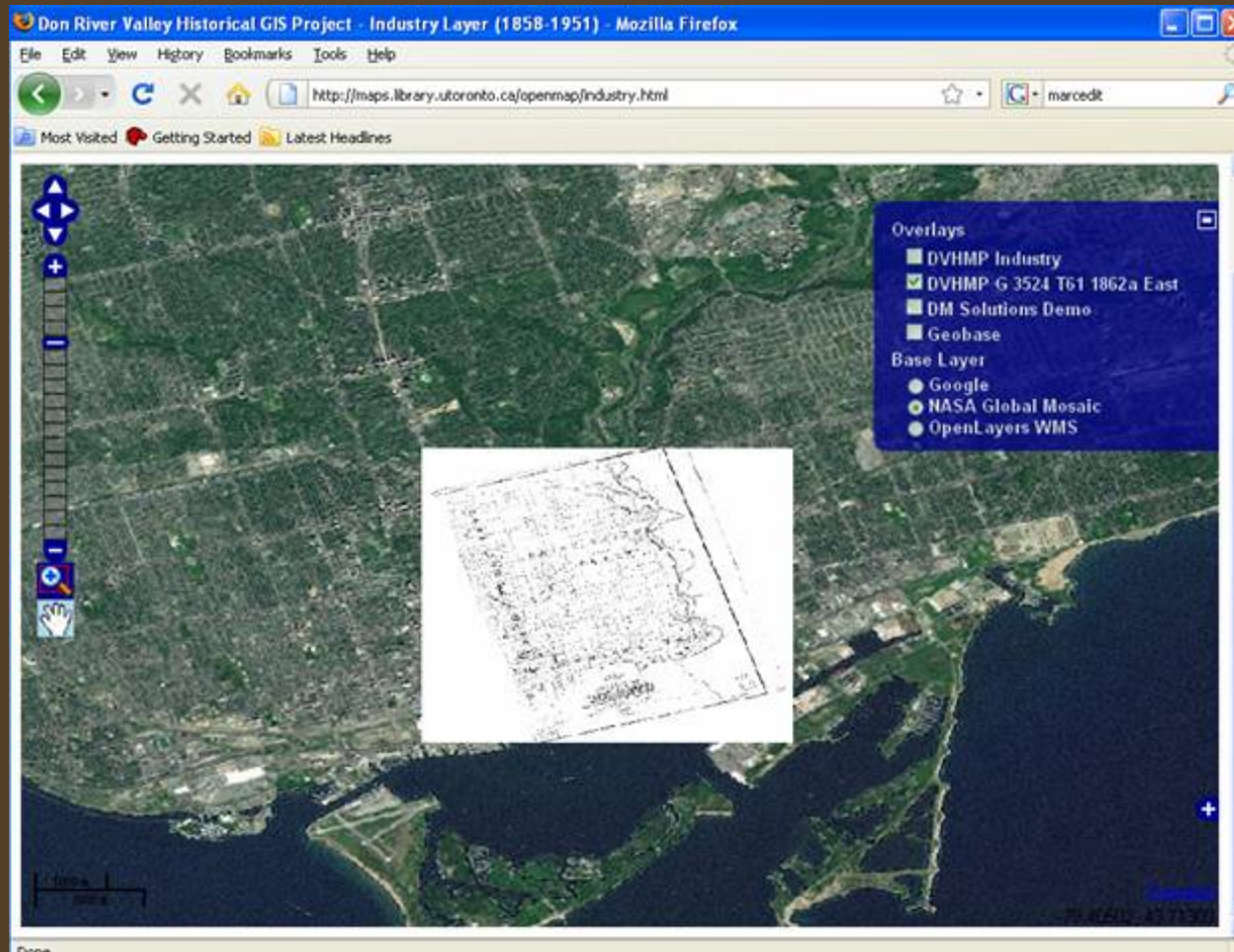
Data Interoperability - Web Mapping Services (WMS)- Geoserver



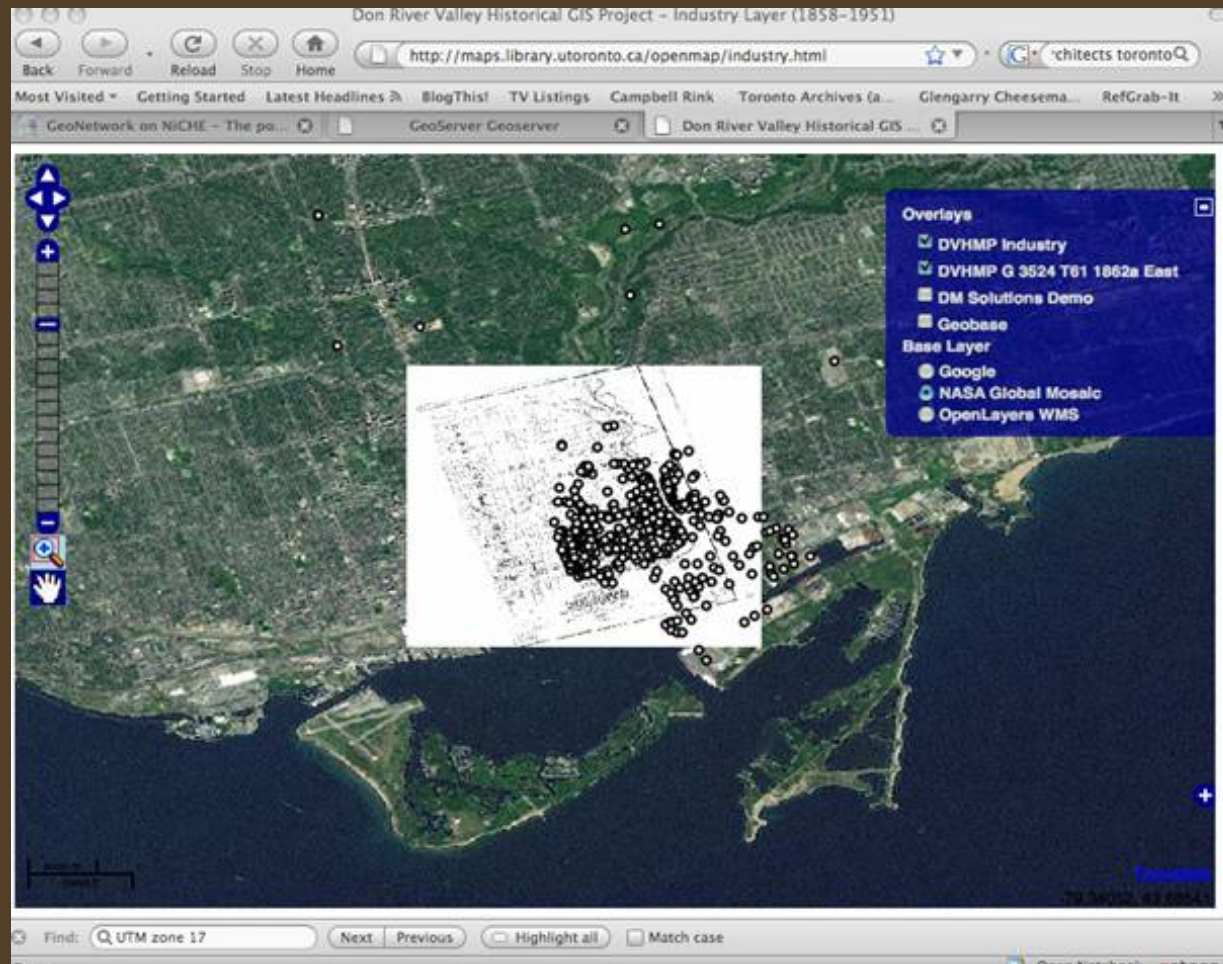
Data Interoperability - WMS - Mashup



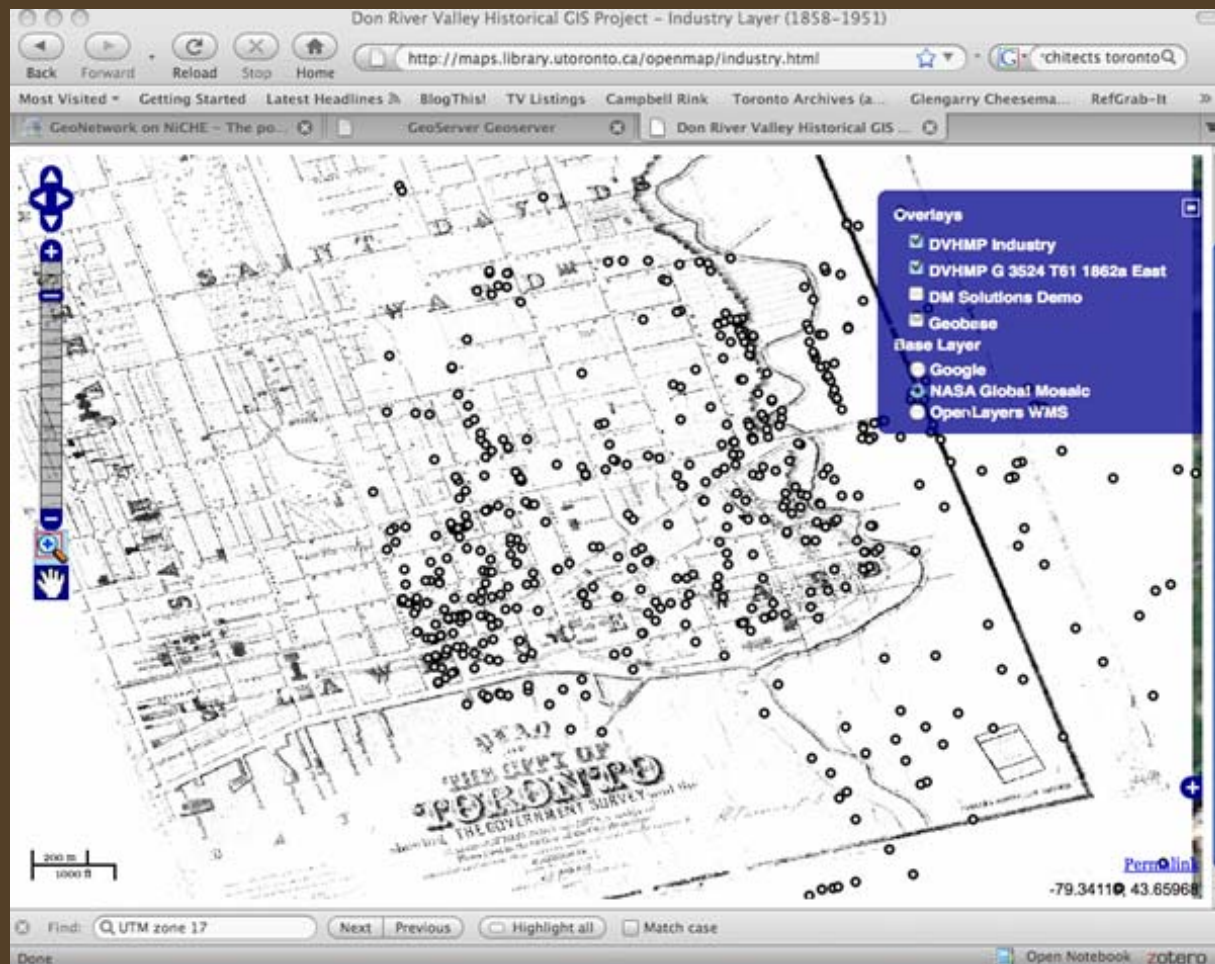
Data Interoperability – Web Coverage Services (WCS)



WCS & WMS - Mashup



Mashup Closeup



Google Earth

GeoNetwork on NiCHE - The portal to historical spatial data and maps - Mozilla Firefox

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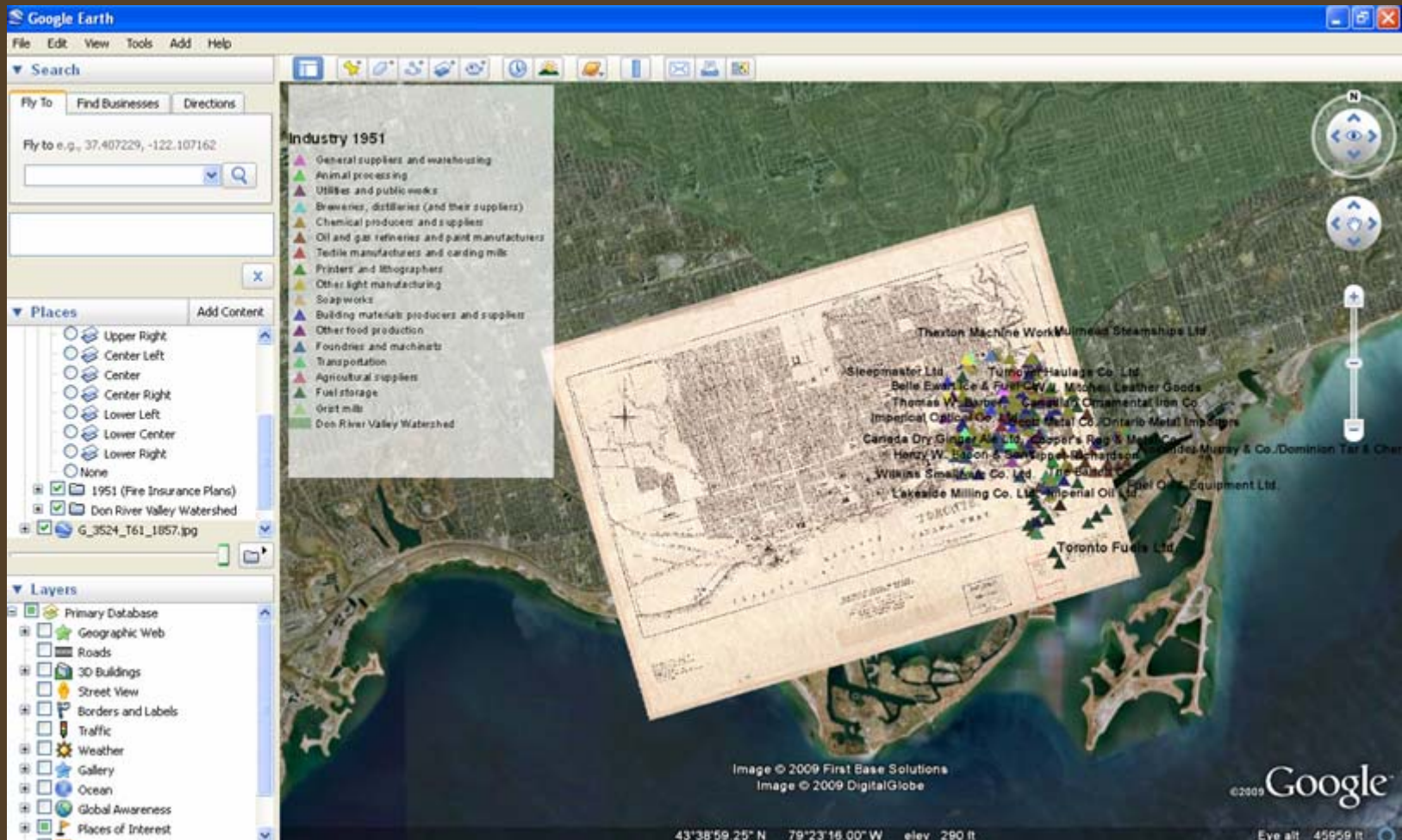


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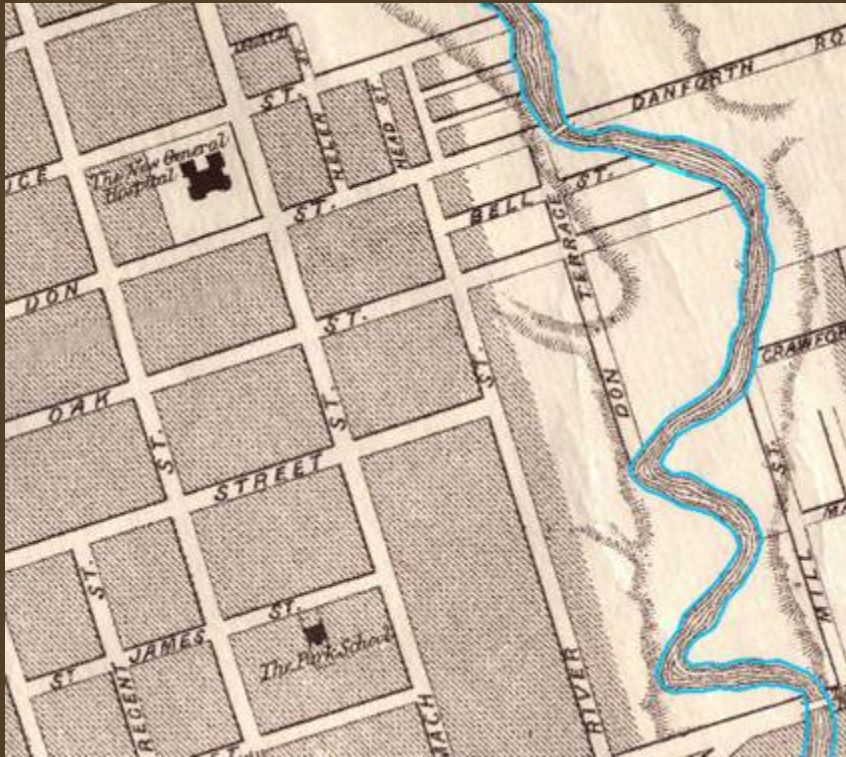
Google Earth (Data and Images)



Why Libraries ?

- Showcase our collections
- Repurpose and give new life to collections
- Hone technical skills, talents, expertise...
- Assert technical and academic leadership
- Collaboration with our communities
- Data Sharing and Archiving Responsibility
 - Benefits to wider community than if not involved (shoreline data, etc.)

Challenges – Accuracy



Toronto, Canada West
G 3524 T61 1857



Boulton Atlas
1858

Documentation / Compilation

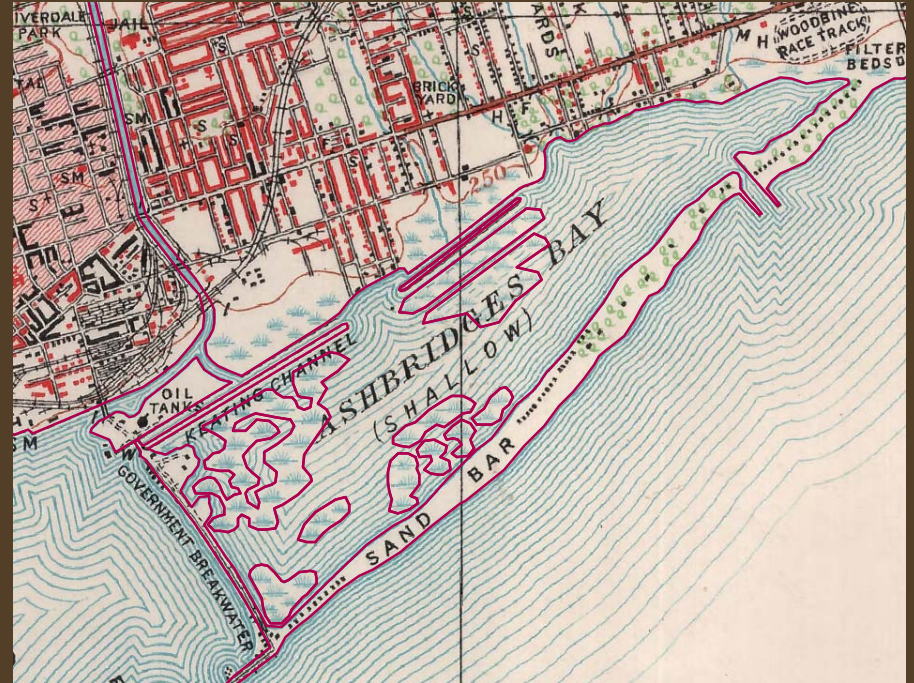
Attributes of industry overview

Fi	Sh	Uniqu	Name	Address	Notes	Industr	Industry_2	Boult	FIA_1892	NTS_1909	FIP_1911	NTS_1918	NTS_1921	NTS_1931
0	Poi	1	National Iron Works Ltd.	324 Cherry St.	later National Iron Corp	5	0	0	0	0	1	0	0	0
1	Poi	2	British American Oil Co. Ltd.	Cherry St. and Keath		7	0	0	0	0	0	0	0	0
16	Poi	2	British American Oil Co. Ltd.	Keating Ave. (now L		7	12	0	0	0	0	0	0	0
2	Poi	3	Toronto Iron Co.	Cherry St.		5	0	0	0	0	1	0	0	0
3	Poi	4	Standard Fuel Co. Ltd.	Mill St.		12	0	0	0	0	1	0	0	0
4	Poi	5	The Wm. Davies Company Ltd.	521 Front St. E.		6	10	0	1	0	1	0	0	0
81	Poi	5	The Wm. Davies Company Ltd.	55-65 Parliament St.		6	10	0	0	0	1	0	0	0
5	Poi	6	John Taylor & Co. Ltd.	531 Front St. E.	soap and perfume man	8	0	0	0	0	1	0	0	0
7	Poi	7	Wickett & Craig Ltd.	1-37 Cypress St.	tannery, known as Bic	6	0	0	0	0	1	0	0	0
46	Poi	7	Bickell & Wickett Ltd.	1-37 Cypress St.	tannery	6	0	0	1	0	0	0	0	0
6	Poi	8	The Eastern Storage Co.	Eastern Ave. at Over		15	0	0	0	0	1	0	0	0
8	Poi	9	Laidlaws Ltd.	Overend St. at Easter		13	0	0	0	0	1	0	0	0
9	Poi	10	Canadian Northern Transfer Co. Ltd.	Cherry St. at Front St		16	0	0	0	0	1	0	0	0
10	Poi	11	J.M. Purvis	2 Don Esplanade	cotton manufacturing	9	0	0	0	0	1	0	0	0
23	Poi	12	Toronto Railway Co.	92 King St. E.		16	0	0	0	0	1	0	0	0
22	Poi	12	Toronto Railway Co.	591 King St. E.	streetcar stables	16	0	0	1	0	0	0	0	0
11	Poi	13	Gooderham & Worts Ltd.		cattle operations	6	0	0	0	0	1	0	0	0
84	Poi	13	Gooderham & Worts Ltd.	2-16 Trinity St.	distillery	4	0	1	1	0	1	0	0	0
85	Poi	13	Gooderham & Worts Ltd.	63 Trinity St.	cooperage	11	0	0	1	0	1	0	0	0
93	Poi	13	Gooderham & Worts Ltd.	west side of Trinity S	distillery	4	0	1	1	0	1	0	0	0
24	Poi	13	Gooderham & Worts Ltd.	424 Front St. E.	cooperage	5	0	0	1	0	0	0	0	0
12	Poi	14	Sovereign Varnish & Oil Co.	357-359 Eastern Ave	later Samuel Jardine So	7	0	0	0	0	1	0	0	0
35	Poi	15	Martin Pump & Machine Co. Ltd.	47 Davies Ave.		5	0	0	0	0	1	0	0	0
13	Poi	16	Lever Bros. Ltd. Sunlight Soap Works	Eastern Ave. at Don		8	0	0	0	0	1	0	0	0
38	Poi	16	Lever Bros. Ltd.	Don Roadway S.	old Gooderham & Wort	8	0	0	0	0	0	0	0	0
68	Poi	17	Dominion Wheel Foundries Ltd.	Eastern Ave. at Sum		11	0	0	0	0	1	0	0	0
37	Poi	17	Dominion Wheel Foundries Ltd.	north side of Eastern		11	0	0	0	0	0	0	0	0
37	Poi	17	Dominion Wheel Foundries Ltd.	121-179 Eastern Ave	business expansion int	11	0	0	0	0	0	0	0	0
46	Poi	18	Taylor Butler	103 Ontario St.	planing mill	13	0	0	1	0	0	0	0	0
15	Poi	19	Cleansoline Refrigerating Co. Ltd.	Booth Ave.		18	0	0	0	0	1	0	0	0
16	Poi	20	One Minute Manufacturing Co.	Logan Ave.	manufacturing of dome	11	0	0	0	0	1	0	0	0
17	Poi	21	Freyseng Cork Co. Ltd.	61-71 Sumach St.		13	0	0	1	0	1	0	0	0
18	Poi	22	Hamilton Carhartt Manufacturing Ltd.	535 Queen St. E.		11	0	0	0	0	1	0	0	0
19	Poi	23	Wm. R. Perrin & Co. Ltd.	530 King St. E.	packing machinery & pr	5	0	0	0	0	1	0	0	0
20	Poi	24	J.W. Corson & Co.	Sumach St.	coal, wood, coke & car	13	0	0	0	0	1	0	0	0
21	Poi	24	J.W. Corson & Co.	Funston St. secondar	secondary location	13	0	0	0	0	1	0	0	0
46	Poi	25	Treloar, Blashford & Co.	6-8 Berkeley St.	founders & moulders	5	11	0	1	0	0	0	0	0
22	Poi	26	R. Laidlaw & Co. Ltd.	St. Lawrence St.	lumber	13	0	0	0	0	1	0	0	0
24	Poi	27	Dyer Fence & Supplies Co. Ltd.	Don Esplanade W. at		14	0	0	0	0	1	0	0	0
27	Poi	28	Andrew Muirhead Varnish	St. Lawrence St.	varnish factory	7	0	0	0	0	1	0	0	0

Record: 14 0 Show: All Selected Records (0 out of 471 Selected)

Options

Challenges – What's what?



Other Challenges - Sources

- H-GIS, is new, it has no guidelines, no rules, not very many examples
- Access to sources
 - Copyright (Fire Insurance Plans mess in Canada)
 - Licensing / Restrictions on use
 - Costs
- Original sources vs. Reproduction sources
- Preservation (data and images)
- Metadata
 - long and tedious to compile
 - Standards issues (software restrictions, government issues)

Challenges Metadata (Click on Image)

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Nouvelle initiative canadienne en histoire de l'environnement
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What? industry

Where?




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- Any -

Search

Aggregate Results matching search criteria : 1-1/1 (page 1/1),

**DON RIVER VALLEY HISTORICAL GIS PROJECT - INDUSTRY**

Abstract The Don River Valley Historical GIS Project is...

Keywords industry, river, watershed, portlands, Toronto, Ontario, Canada

Metadata Download Interactive Map

1

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Identification info

Title	Don River Valley Historical GIS Project - Industry
Date	2008-11-27T13:13:00
Date Type	revision
Edition	
Individual Name	GIS and Map Librarian
Organisation Name	University of Toronto Libraries; Data, Map and GIS Centre
Position Name	GIS and Map Librarian
Delivery Point	130 St. George St., 5th Floor
City	Toronto
Administrative Area	Ontario
Postal Code	M5S2A5
Country	Canada
Electronic Mail Address	gis.maps@utoronto.ca
Role	author
Presentation Form	mapDigital
Name	Don River Valley Historical GIS Project
Collective Title	Don River Valley Historical GIS Project
Abstract	The Don River Valley Historical GIS Project is...
Purpose	Document the change in the industrial footprint in the Don River Valley.
Credit	Marcel Fortin
Credit	Jennifer Bonnell
Credit	Jordan Hale
Credit	Laurel Christie
Status	historicalArchive

Point of contact

Individual Name	GIS and Map Librarian
Organisation Name	University of Toronto Libraries; Data, Map and GIS Centre
Position Name	GIS and Map Librarian
Delivery Point	130 St. George St., 5th Floor
City	Toronto
Administrative Area	Ontario
Postal Code	M5S 1A5
Country	Canada
Electronic Mail	gis.maps@utoronto.ca

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Address Role	author	
Maintenance And Update Frequency	asNeeded	
Descriptive Keywords	industry , river , watershed , portlands (theme).	
Descriptive Keywords	Toronto , Ontario , Canada (place).	
Use Limitation		
Access Constraints		
Use Constraints		
Other Constraints	All members of the public are allowed to use these data for their own academic or private use.	
Spatial Representation Type	vector	
Equivalent scale		
Denominator	500	
Language	English	
Character Set	utf8	
Topic Category Code	structure	
Extent		
Description	Lower Don River Valley Watershed	
Temporal Extent		
Begin Date	1858-01-01T00:00:00	
End Date	1951-01-01T18:00:00	
Extent		
Geographic bounding box		
West bound longitude	North bound latitude	East bound longitude
-79.404634	43.750653	-79.329453
	South bound latitude	
	43.636781	
Supplemental Information		

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Distribution info

Data For Download	Table to be joined to shapefiles with industry code field
Data For Download	Industry Shapefile Layer (zipped)
Interactive Map	Don River Valley Historical GIS Project WMS (OGC-WMS Server: http://niche.uwo.ca:8080/geoserver/wms/dvhmp)
View In Google Earth	Don River Valley Historical GIS Project WMS 

Spatial representation info

Topology Level	geometryOnly
Geometric Object Type	point
Geometric Object Count	

Reference system info

Code	NAD 1983 UTM Zone 17N
------	-----------------------

Title
Date Type
Schema Language
Constraint Language
Title
Date Type

Data quality info

Hierarchy Level	dataset
Extent	
Description	Lower Don River Watershed, Toronto, Ontario, Canada
Attributes	Internal feature number
[Uuidref]	FID
Attributes	Feature geometry
[Uuidref]	Shape
Attributes	Unique identifier for project purposes
[Uuidref]	UniqueID
Attributes	Appearance in Goad Fire Insurance Plans of Toronto, Volume III, 1911 revised 1914
[Uuidref]	FIP_1911
Attributes	Appearance in Goad Fire Insurance Plans of Toronto, Volume III, 1935 revised 1939
[Uuidref]	FIP_1935

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[Uuidref]	Notes
Attributes	Notes regarding firm at this location
[Uuidref]	Address
Attributes	Description of firm's primary industrial classification
[Uuidref]	Industry
Attributes	Description of firm's secondary industrial classification
[Uuidref]	Industry_2
Attributes	Year of business establishment, when available
[Uuidref]	Yr_Estab
Attributes	Appearance in Goad Fire Insurance Atlas of Toronto, 1892; or Goad Fire Insurance Atlas of Riverside, 1889
[Uuidref]	FIA_1892
Attributes	Appearance of firm in Topographic Map of Ontario (Toronto Sheet), 1909
[Uuidref]	NTS_1931
Attributes	Appearance of firm in Topographic Map of Ontario (Toronto Sheet), 1931
[Uuidref]	NTS_1909
Attributes	Appearance of firm in Topographic Map of Ontario (Toronto Sheet), 1918
[Uuidref]	NTS_1918
Attributes	Appearance of firm in Topographic Map of Ontario (Toronto Sheet), 1921
[Uuidref]	NTS_1921
Attributes	Appearance of firm in Boulton Atlas of Toronto, 1858
[Uuidref]	Boulton
Attributes	Appearance in Goad Fire Insurance Plans of Toronto, Volume I, 1921 revised 1943
[Uuidref]	FIP_1943
Attributes	Appearance in Goad Fire Insurance Plans of Toronto, Volume I, 1943 revised 1948
[Uuidref]	FIP_1948
Attributes	Appearance in Goad Fire Insurance Plans of Toronto, Volume III, 1931 revised 1951
[Uuidref]	FIP_1951
Attributes	Appearance in the Toronto Harbour Commissioners' map of Waterfront Development, 1937
[Uuidref]	THC_1937
Attributes	Appearance in Goad Fire Insurance Plans of Toronto, Volume I, 1909
[Uuidref]	FIP_1909
Attributes	Appearance in "Roads, Mills, Churches etc. about 1825" map in 1950 Don Valley Conservation Report
[Uuidref]	1825
Attributes	Appearance in "Roads and Mills about 1852" map in 1950 Don Valley Conservation Report
[Uuidref]	1852

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1852	Appearance in Toronto Harbour Commissioners' Toronto Harbour 40' Plans, Sheet 45
[Uuidref]	THC_193_
Statement	Industrial locations referenced on maps and/or Toronto city directories are indicated as being present or not present in the maps and/or directories pertaining to that year, with the code 1 representing the presence of that firm and the code 0 representing the absence of that firm in a given year's sources. The noted absence of a firm in a given year's sources should not be interpreted as the firm not being in business during that time period, as these signifiers only represent the firm's notation on a map or inclusion in a city directory appropriate to that year. Industrial codes used: 1. saw mills 2. paper mills 3. grist mills 4. breweries, distilleries and their suppliers 5. foundries and machinists 6. animal processing 7. oil refineries 8. soap works 9. textile manufacturers 10. other food production 11. other light manufacturing 12. fuel storage and supply 13. building materials producers and suppliers 14. agricultural suppliers 15. general suppliers and warehousing 16. transportation 17. utilities and public works 18. chemical producers and suppliers 19. printers and lithographers
Description	Georeferencing of cartographic sources to road network
Rationale	Alignment of scanned paper maps to approximate coordinates for information digitization.
Individual Name	Marcel Fortin; Jordan Hale
Organisation Name	University of Toronto Libraries; Data, Map and GIS Centre
Position Name	GIS & Map Librarian; Research Assistant
Delivery Point	130 St. George St., 5th Floor
City	Toronto
Administrative Area	Ontario
Postal Code	M5S2A5
Country	Canada
Electronic Mail Address	gis.maps@utoronto.ca
OnLine Resource	http://www.library.utoronto.ca/maplib
Role	processor
Description	CanMap Route Logistics Toronto, city subset v2007.3
Title	CanMap Route Logistics Ontario
Date	2007-01-01
Date Type	Publication
Edition	2007.3
Edition Date	2007-01-01
Individual Name	
Organisation Name	DMTI Spatial, Inc.
Position Name	
Role	publisher
Presentation Form	mapDigital
Name	CanMap Route Logistics

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Description	Digitization of industrial locations as point entities, detailing relevant information regarding firm name, address, industrial category, notes and year established, when available
Rationale	To gain an understanding into the nature of industrial firms located in the Don River Valley watershed.
Individual Name	Jordan Hale
Organisation Name	University of Toronto Libraries; Data, Map and GIS Centre
Position Name	Research Assistant
Delivery Point	130 St. George St., 5th Floor
City	Toronto
Administrative Area	Ontario
Postal Code	M5S2A5
Country	Canada
Electronic Mail Address	gis.maps@utoronto.ca
Role	processor
Description	Might's Greater Toronto City Directory
Title	Might's Greater Toronto City Directory
Alternate Title	Might's Directory
Date	1893-01-01
Date Type	Publication
Date	1910-01-01
Date Type	Publication
Date	1912-01-01
Date Type	Publication
Date	1936-01-01
Date Type	Publication
Date	1938-01-01
Date Type	Publication
Date	1944-01-01
Date Type	Publication
Date	1949-01-01
Date Type	Publication
Date	1952-01-01
Date Type	Publication
Code	F 5547 T6A15
CodeSpace	Library of Congress Classification
Presentation Form	documentHardcopy
Name	Might's Greater Toronto City Directory

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Collective Title	Might's Greater Toronto City Directory
Description	Goad 1914 Fire Insurance Plans of Toronto, Volume III
Denominator	600-1000
Code	G 3524 T61G475 (6)-1 1904-52
CodeSpace	Library of Congress Classification
Title	Goad 1914 Fire Insurance Plans of Toronto, Volume III
Date	1911-01-01
Date Type	Publication
Date	1914-01-01
Date Type	revision
Presentation Form	mapHardcopy
Name	Goad Fire Insurance Plans of Toronto
Collective Title	Goad Fire Insurance Plans of Toronto
Description	The extent of area covered by maps used for information digitization in Goad 1914 Fire Insurance Plans of Toronto, Volume III.

Geographic bounding box

	North bound latitude 43.677347	
West bound longitude -79.371784		East bound longitude -79.337070
	South bound latitude 43.645725	

Description	Goad 1935 Fire Insurance Plans of Toronto, Volume III
Denominator	600-1000
Code	G 3524 T61G475 (6)-1 1904-52
CodeSpace	Library of Congress Classification
Title	Goad 1935 Fire Insurance Plans of Toronto, Volume III
Date	1931-01-01
Date Type	Publication
Date	1935-01-01
Date Type	revision
Presentation Form	mapHardcopy
Name	Goad Fire Insurance Plans of Toronto
Collective Title	Goad Fire Insurance Plans of Toronto
Description	The extent of area covered by maps used for information digitization in Goad 1935 Fire Insurance Plans of Toronto, Volume III.

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Collective Title	Goad Fire Insurance Plans of Toronto
Description	The extent of area covered by maps used for information digitization in Goad 1935 Fire Insurance Plans of Toronto, Volume III.
Geographic bounding box	
North bound latitude	43.679247
West bound longitude	-79.367114
East bound longitude	-79.336259
South bound latitude	43.641415
Description	Goad 1892 Fire Insurance Atlas of Toronto
Denominator	600
Title	Goad 1892 Fire Insurance Atlas of Toronto
Date	1880-01-01
Date Type	Publication
Date	1892-01-01
Date Type	revision
Presentation Form	mapHardcopy
Other Citation Details	multiple sheets only list 1880 publishing, not subsequent revisions
Collective Title	Goad Fire Insurance Atlas of Toronto
Description	The extent of area covered by maps used for information digitization in Goad 1892 Fire Insurance Atlas of Toronto.
Geographic bounding box	
North bound latitude	43.674728
West bound longitude	-79.381221
East bound longitude	-79.349426
South bound latitude	43.646663
Description	Topographic Map of Ontario - Toronto Sheet
Denominator	63360
Code	G 3400s 63-126 1904- R Sheet 34 1931
CodeSpace	Library of Congress Classification
Title	Topographic Map of Ontario - Toronto Sheet
Alternate Title	National Topographic System
Date	1931-01-01

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Position Name	author
Role	
Presentation Form	mapHardcopy
Collective Title	National Topographic System
Description	The extent of area covered by maps used for information digitization from Topographic Map of Ontario - Toronto Sheet (1931).

Geographic bounding box

West bound longitude	North bound latitude	East bound longitude
-79.5750	43.4187	-78.9238
	South bound latitude	
	43.7953	

Description	Topographic Map of Ontario - Toronto Sheet
Denominator	63360
Code	G 3400s 63-126 1904- R Sheet 34 1909
CodeSpace	Library of Congress Classification
Title	Topographic Map of Ontario - Toronto Sheet
Alternate Title	National Topographic System
Date	1909-01-01
Date Type	Publication
Edition Date	1909-01-01
Individual Name	
Organisation Name	Geographical Section, Department of Militia and Defense
Position Name	
Role	author
Presentation Form	mapHardcopy
Collective Title	National Topographic System
Description	The extent of area covered by maps used for information digitization from Topographic Map of Ontario - Toronto Sheet (1909).

Geographic bounding box

West bound longitude	North bound latitude	East bound longitude
-79.5625	43.4344	-78.9323
	South bound latitude	
	43.7897	

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		-79.5625	South bound latitude 43.7897	-78.9325
--	--	----------	--	----------

Description	Topographic Map of Ontario - Toronto Sheet
Denominator	63360
Code	G 3400s 63-126 1904- R Sheet 34 1918
CodeSpace	Library of Congress Classification
Title	Topographic Map of Ontario - Toronto Sheet
Alternate Title	National Topographic System
Date	1909-01-01
Date Type	creation
Date	1918-01-01
Date Type	revision
Edition	Reprinting of 1909 map with corrections
Edition Date	1918-01-01
Individual Name	
Organisation Name	Department of Militia and Defense
Position Name	
Role	author
Presentation Form	mapHardcopy
Collective Title	National Topographic System
Description	The extent of area covered by maps used for information digitization from Topographic Map of Ontario - Toronto Sheet (1918).

Geographic bounding box

	North bound latitude 43.4293	
West bound longitude -79.5733		East bound longitude -78.9310
	South bound latitude 43.7952	

Description	Topographic Map of Ontario - Toronto Sheet
Denominator	63360
Code	G 3400s 63-126 1904- R Sheet 34 1921
CodeSpace	Library of Congress Classification
Title	Topographic Map of Ontario - Toronto Sheet
Alternate Title	National Topographic System

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CodeSpace	Library of Congress Classification
Title	Topographic Map of Ontario - Toronto Sheet
Alternate Title	National Topographic System
Date	1909-01-01
Date Type	creation
Date	1921-01-01
Date Type	revision
Edition	Reprinting of 1909 map with corrections
Edition Date	1921-01-01
Individual Name	
Organisation Name	Department of Militia and Defense
Position Name	
Role	author
Presentation Form	mapHardcopy
Collective Title	National Topographic System
Description	The extent of area covered by maps used for information digitization from Topographic Map of Ontario - Toronto Sheet (1921).

Geographic bounding box

West bound longitude	North bound latitude	East bound longitude
-79.5672	43.4252	-78.9308
	South bound latitude	
	43.7930	

Description	Atlas of Toronto, surveyed and compiled by W.S. & H.C. Boulton
Code	G 3524 T62 [1858] mfe
CodeSpace	Library of Congress Classification
Title	Atlas of Toronto, surveyed and compiled by W.S. & H.C. Boulton
Alternate Title	Boulton Atlas of Toronto
Date	1858-01-01
Date Type	Publication
Presentation Form	mapHardcopy
Other Citation Details	Library & Archives Canada National Map Collection #28047
Description	The extent of area covered by maps used for information digitization from the Boulton Atlas of Toronto.

Geographic bounding box

North bound latitude

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	West bound longitude -79.373377	East bound longitude -79.342446
	South bound latitude 43.647157	
Description	Goad 1943 Fire Insurance Plans of Toronto, Volume IA	
Denominator	600-1000	
Code	G 3524 T61G475 (6)-1 1904-52	
CodeSpace	Library of Congress Classification	
Title	Goad 1943 Fire Insurance Plans of Toronto, Volume IA	
Date	1921-01-01	
Date Type	Publication	
Date	1943-01-01	
Date Type	revision	
Presentation Form	mapHardcopy	
Name	Goad Fire Insurance Plans of Toronto	
Collective Title	Goad Fire Insurance Plans of Toronto	
Description	Goad 1948 Fire Insurance Plans of Toronto, Volume IA	
Denominator	600-1000	
Code	G 3524 T61G475 (6)-1 1904-52	
CodeSpace	Library of Congress Classification	
Title	Goad 1948 Fire Insurance Plans of Toronto, Volume IA	
Date	1921-01-01	
Date Type	Publication	
Date	1943-01-01	
Date Type	revision	
Date	1948-01-01	
Date Type	revision	
Presentation Form	mapHardcopy	
Name	Goad Fire Insurance Plans of Toronto	
Collective Title	Goad Fire Insurance Plans of Toronto	
Description	Goad 1951 Fire Insurance Plans of Toronto, Volume III	
Denominator	600-1000	
Code	G 3524 T61G475 (6)-1 1904-52	
CodeSpace	Library of Congress Classification	
Title	Goad 1951 Fire Insurance Plans of Toronto, Volume III	
Date	1931-01-01	

Done

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Date Type	Publication
Date	1951-05-01
Date Type	revision
Presentation Form	mapHardcopy
Name	Goad Fire Insurance Plans of Toronto
Collective Title	Goad Fire Insurance Plans of Toronto
Description	The Toronto Harbour Commissioners' Waterfront Development Plan
Denominator	14000
Code	G 3524 T621G43 14 1937
CodeSpace	Library of Congress Classification
Title	The Toronto Harbour Commissioners' Waterfront Development Plan
Date	1933-02-22
Date Type	Publication
Date	1934-01-15
Date Type	revision
Date	1937-01-19
Date Type	revision
Presentation Form	mapHardcopy
Description	Goad 1909 Fire Insurance Plans of Toronto, Volume I
Denominator	600-1000
Code	G 3524 T61G475 (6)-1 1904-52
CodeSpace	Library of Congress Classification
Title	Goad 1909 Fire Insurance Plans of Toronto, Volume I
Date	1909-01-01
Date Type	Publication
Presentation Form	mapHardcopy
Name	Goad Fire Insurance Plans of Toronto
Other Citation Details	sheets only list 1909 publishing, not subsequent revisions
Collective Title	Goad Fire Insurance Plans of Toronto
Description	Don Valley Conservation Report
Title	Don Valley Conservation Report
Date	1950-11-15
Date Type	Publication
Individual Name	A.H. Richardson
Organisation Name	Conservation Branch, Department of Planning and Development, Province of Ontario
Position Name	Chief Conservation Engineer
Role	author

Done

Metadata

GeoNetwork on NiCHE - The portal to historical spatial data and maps - Mozilla Firefox

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http://niche.uwo.ca:8080/geonetwork/srv/en/main.home

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Organisation Name	Conservation Branch, Department of Planning and Development, Province of Ontario
Position Name	Chief Conservation Engineer
Role	author
Presentation Form	documentHardcopy
Other Citation Details	Maps referenced: "Roads, Mills, Churches etc. about 1825" (page 67) and "Roads and Mills about 1852" (page 125)

Metadata

File Identifier	5b36e9e9-66fb-42bd-890a-88fd2ca53270
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Use Constraints	
Maintenance And Update Frequency	

Metadata author

Individual Name	Jordan Hale
Organisation Name	University of Toronto Libraries; Data, Map and GIS Centre
Position Name	Research Assistant
Role	processor

Included With Dataset

Title

Date Type

1

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Done

Future

- Expand Geographically to all of Toronto
- Roads
- Sewers
- Lost Rivers West
- Industry beyond the watershed
- Rail Lines
- Contours
- Extend Shoreline to the Bluffs and beyond
- Forest Cover
- \$\$\$\$

FIN