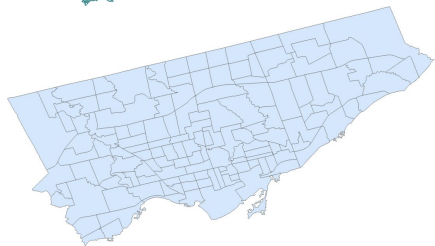


GIS Data

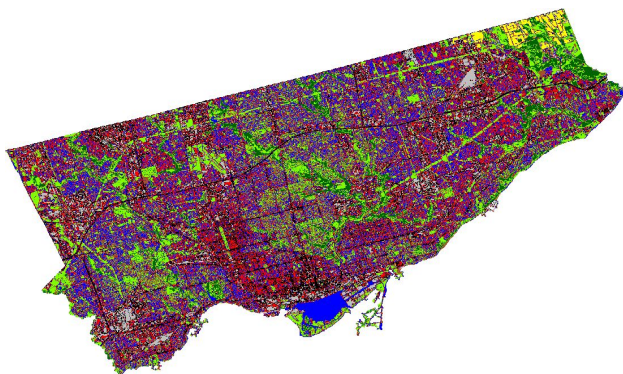
September 2021

Marcel Fortin
University of Toronto
Map and Data Library
mdl@library.utoronto.ca

Spatial Data types



Vector



Raster

ARCGIS Pro - analysis

Map: NHDREGSUBROADS_UTM

Field	Shape	AREA_CODE	AREA_NAME	ID	Characteristic	Neighborhood/Number	TINCRID3_Designate	area	_borders_English_vor_French	Population_2010	Population_2011	Population_Change_2010_2011	Residual
1	Polygon 007		York University/Hwy...	27	No Designation	27	NA	21.26695		3470	27393	27733	-0.090
2	Polygon 008		Lansing/Hwy...	28	No Designation	28	NA	5.24618		270	10354	10422	-0.039
3	Polygon 009		Yonge/Glen Park L...	29	Emerging Neighbour...	29	NA	6.82828		870	14884	14987	-0.080
4	Polygon 010		Stongate/Queens...	30	No Designation	30	NA	7.94620		155	29251	29351	-0.025
5	Polygon 011		Tam O'Shanter/Salis...	31	No Designation	31	NA	5.42235		2855	27446	27380	-0.062
6	Polygon 012		The Beaches RD	32	No Designation	32	NA	1.59529		45	21267	21130	-0.012
7	Polygon 013		Thorncliffe-Reaum...	33	No Designation	33	NA	1.13945		150	10360	10138	-0.022
8	Polygon 014		Thorncliffe Park (S)	34	No Designation	34	NA	1.13945		150	10360	10138	-0.022
9	Polygon 015		Thorncliffe Park (S)	35	No Designation	35	NA	1.13945		150	10360	10138	-0.022
10	Polygon 016		Thorncliffe Park (S)	36	No Designation	36	NA	1.13945		150	10360	10138	-0.022
11	Polygon 017		Thorncliffe Park (S)	37	No Designation	37	NA	1.13945		150	10360	10138	-0.022
12	Polygon 018		Thorncliffe Park (S)	38	No Designation	38	NA	1.13945		150	10360	10138	-0.022
13	Polygon 019		Thorncliffe Park (S)	39	No Designation	39	NA	1.13945		150	10360	10138	-0.022
14	Polygon 020		Thorncliffe Park (S)	40	No Designation	40	NA	1.13945		150	10360	10138	-0.022
15	Polygon 021		Thorncliffe Park (S)	41	No Designation	41	NA	1.13945		150	10360	10138	-0.022
16	Polygon 022		Thorncliffe Park (S)	42	No Designation	42	NA	1.13945		150	10360	10138	-0.022
17	Polygon 023		Thorncliffe Park (S)	43	No Designation	43	NA	1.13945		150	10360	10138	-0.022
18	Polygon 024		Thorncliffe Park (S)	44	No Designation	44	NA	1.13945		150	10360	10138	-0.022
19	Polygon 025		Thorncliffe Park (S)	45	No Designation	45	NA	1.13945		150	10360	10138	-0.022
20	Polygon 026		Thorncliffe Park (S)	46	No Designation	46	NA	1.13945		150	10360	10138	-0.022
21	Polygon 027		Thorncliffe Park (S)	47	No Designation	47	NA	1.13945		150	10360	10138	-0.022
22	Polygon 028		Thorncliffe Park (S)	48	No Designation	48	NA	1.13945		150	10360	10138	-0.022
23	Polygon 029		Thorncliffe Park (S)	49	No Designation	49	NA	1.13945		150	10360	10138	-0.022
24	Polygon 030		Thorncliffe Park (S)	50	No Designation	50	NA	1.13945		150	10360	10138	-0.022
25	Polygon 031		Thorncliffe Park (S)	51	No Designation	51	NA	1.13945		150	10360	10138	-0.022
26	Polygon 032		Thorncliffe Park (S)	52	No Designation	52	NA	1.13945		150	10360	10138	-0.022
27	Polygon 033		Thorncliffe Park (S)	53	No Designation	53	NA	1.13945		150	10360	10138	-0.022
28	Polygon 034		Thorncliffe Park (S)	54	No Designation	54	NA	1.13945		150	10360	10138	-0.022
29	Polygon 035		Thorncliffe Park (S)	55	No Designation	55	NA	1.13945		150	10360	10138	-0.022
30	Polygon 036		Thorncliffe Park (S)	56	No Designation	56	NA	1.13945		150	10360	10138	-0.022
31	Polygon 037		Thorncliffe Park (S)	57	No Designation	57	NA	1.13945		150	10360	10138	-0.022
32	Polygon 038		Thorncliffe Park (S)	58	No Designation	58	NA	1.13945		150	10360	10138	-0.022
33	Polygon 039		Thorncliffe Park (S)	59	No Designation	59	NA	1.13945		150	10360	10138	-0.022
34	Polygon 040		Thorncliffe Park (S)	60	No Designation	60	NA	1.13945		150	10360	10138	-0.022
35	Polygon 041		Thorncliffe Park (S)	61	No Designation	61	NA	1.13945		150	10360	10138	-0.022
36	Polygon 042		Thorncliffe Park (S)	62	No Designation	62	NA	1.13945		150	10360	10138	-0.022

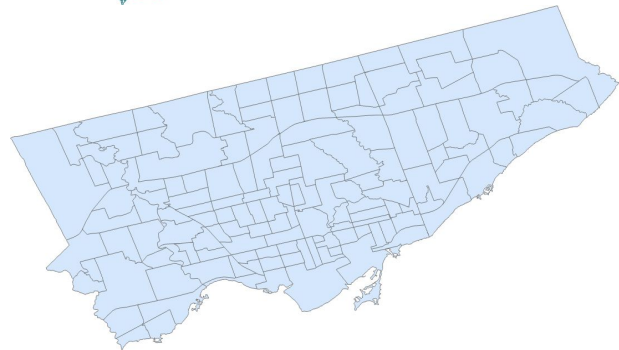
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Filter: 100%

Attribute

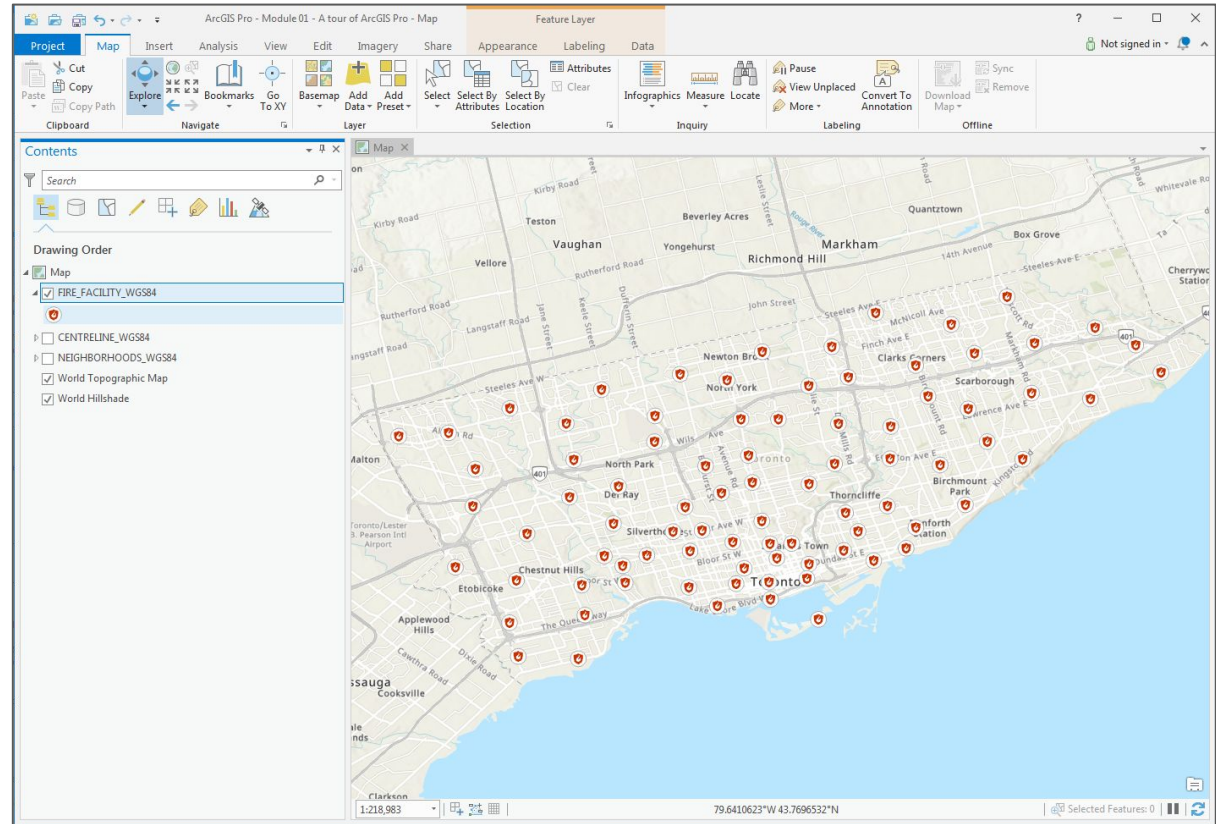
Vector Data

Points / Lines / Polygons (areas)



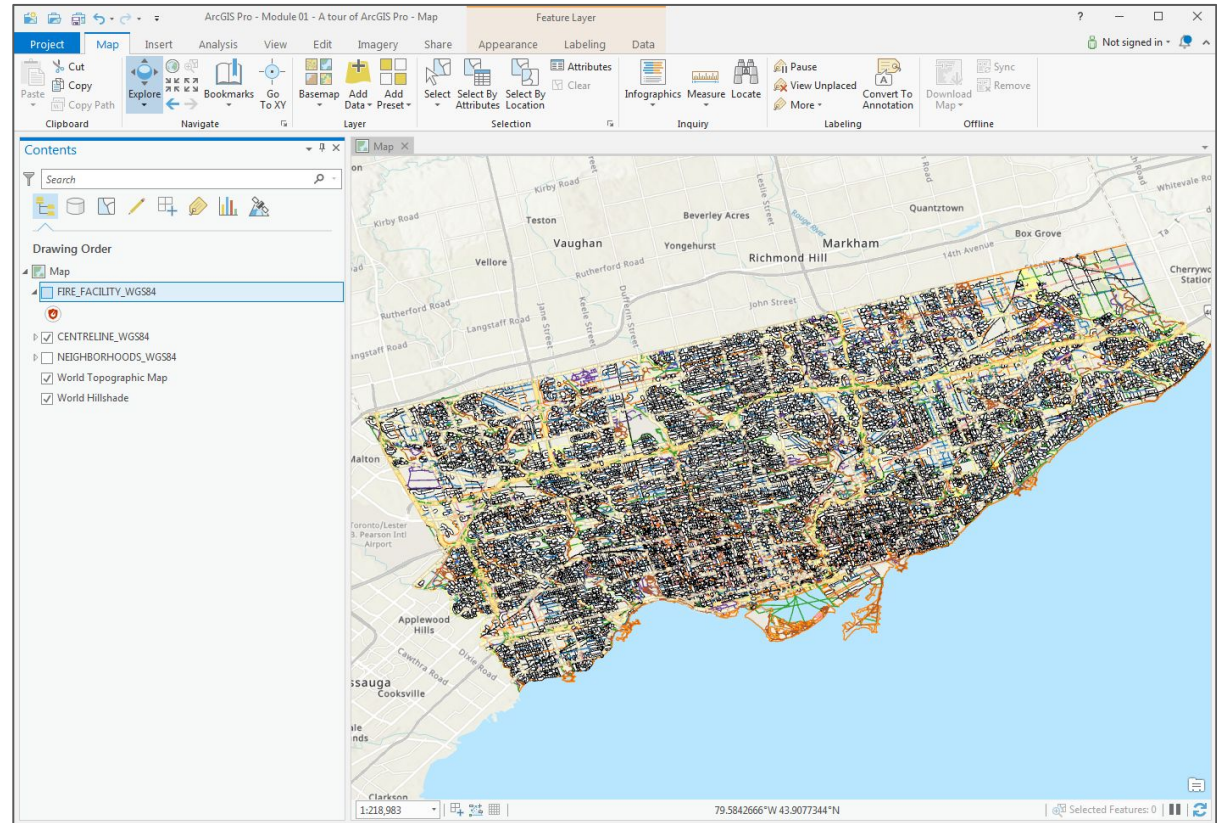
Vector Data

Points formatted



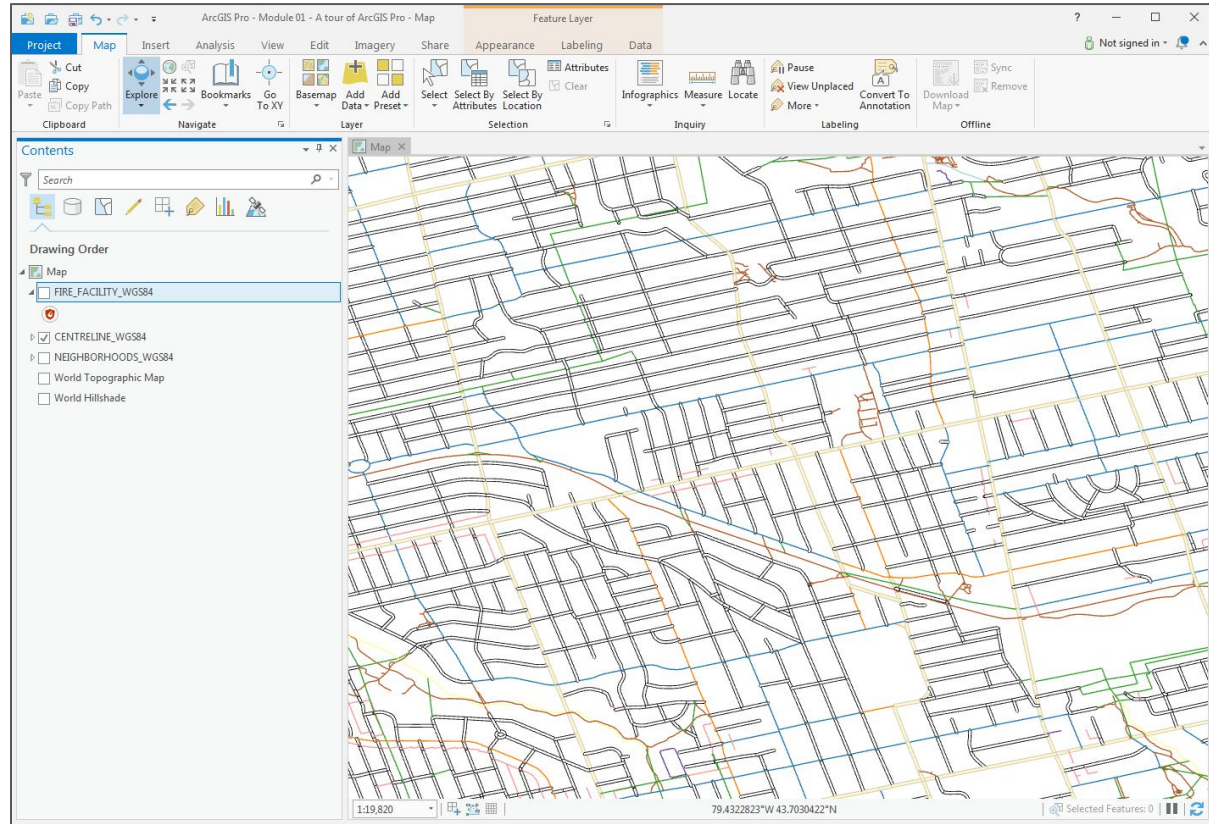
Vector Data

Lines formatted



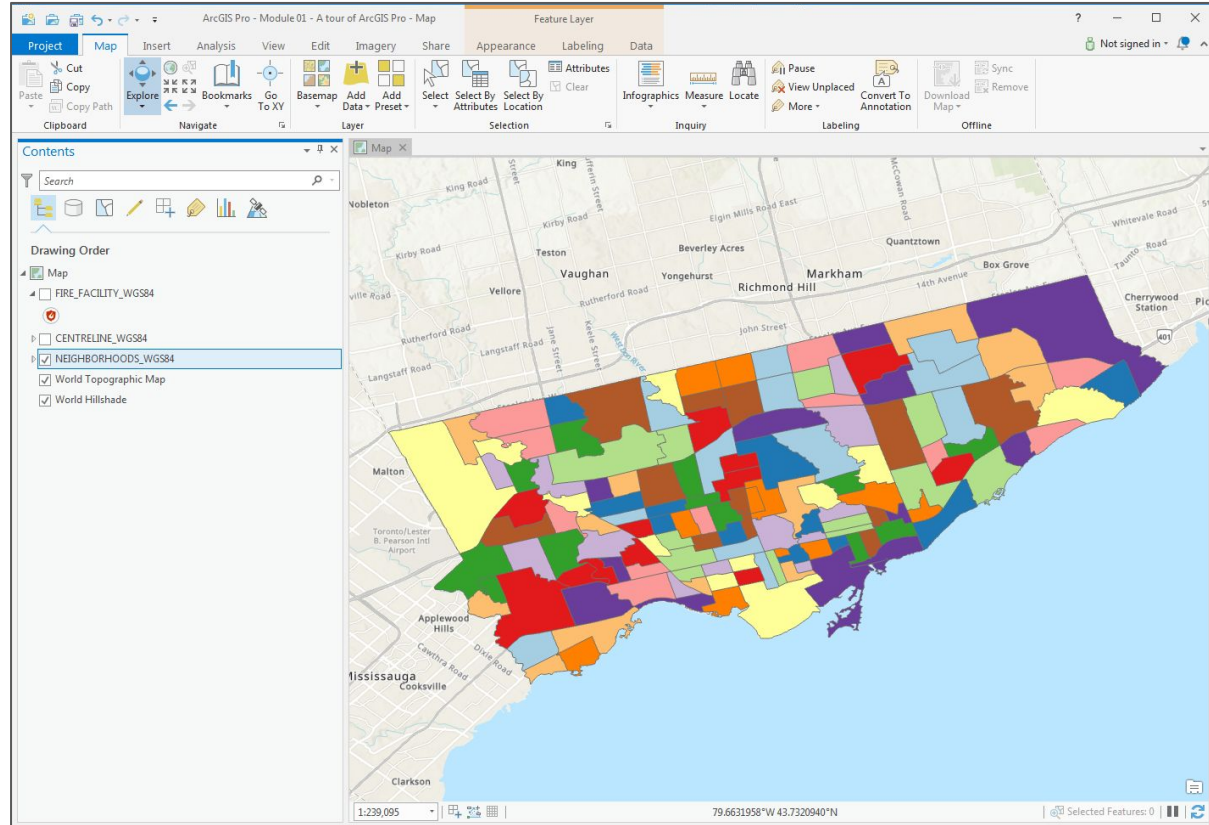
Vector Data

Lines formatted



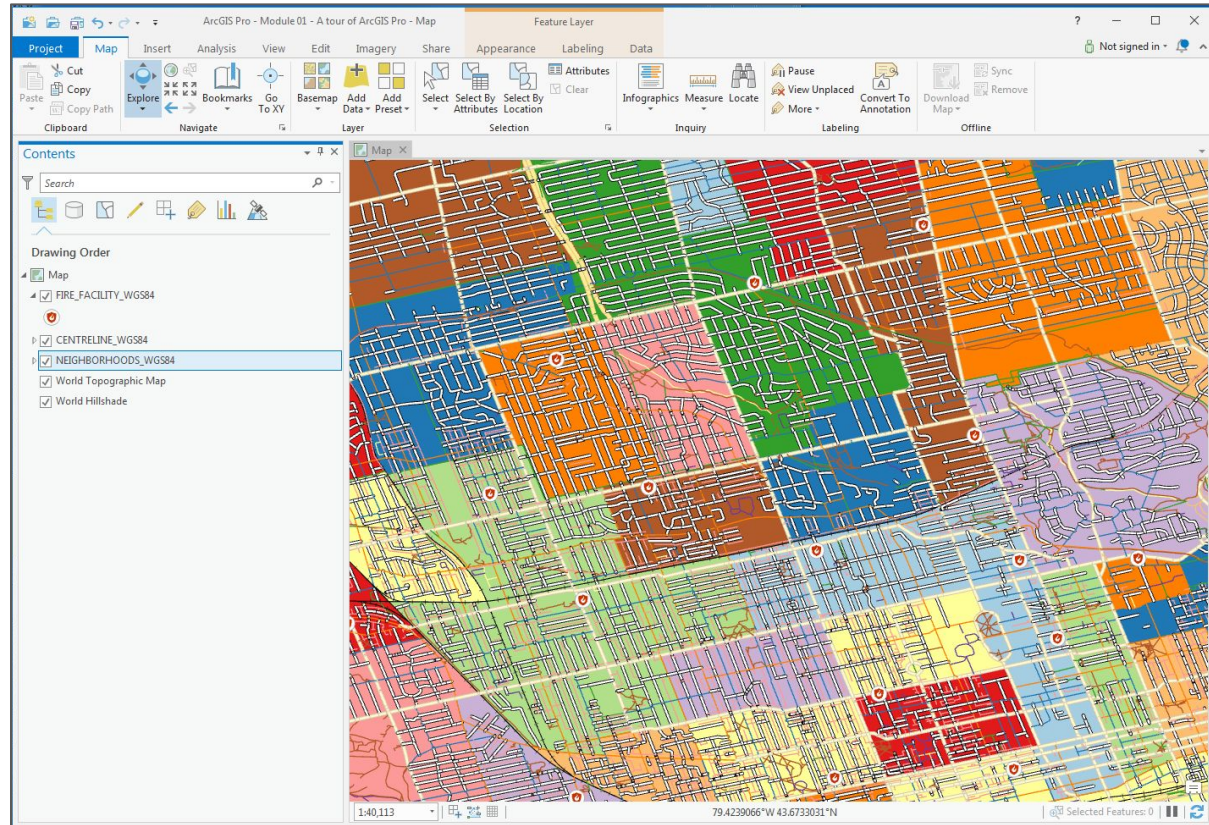
Vector Data

Polygons or Areas formatted

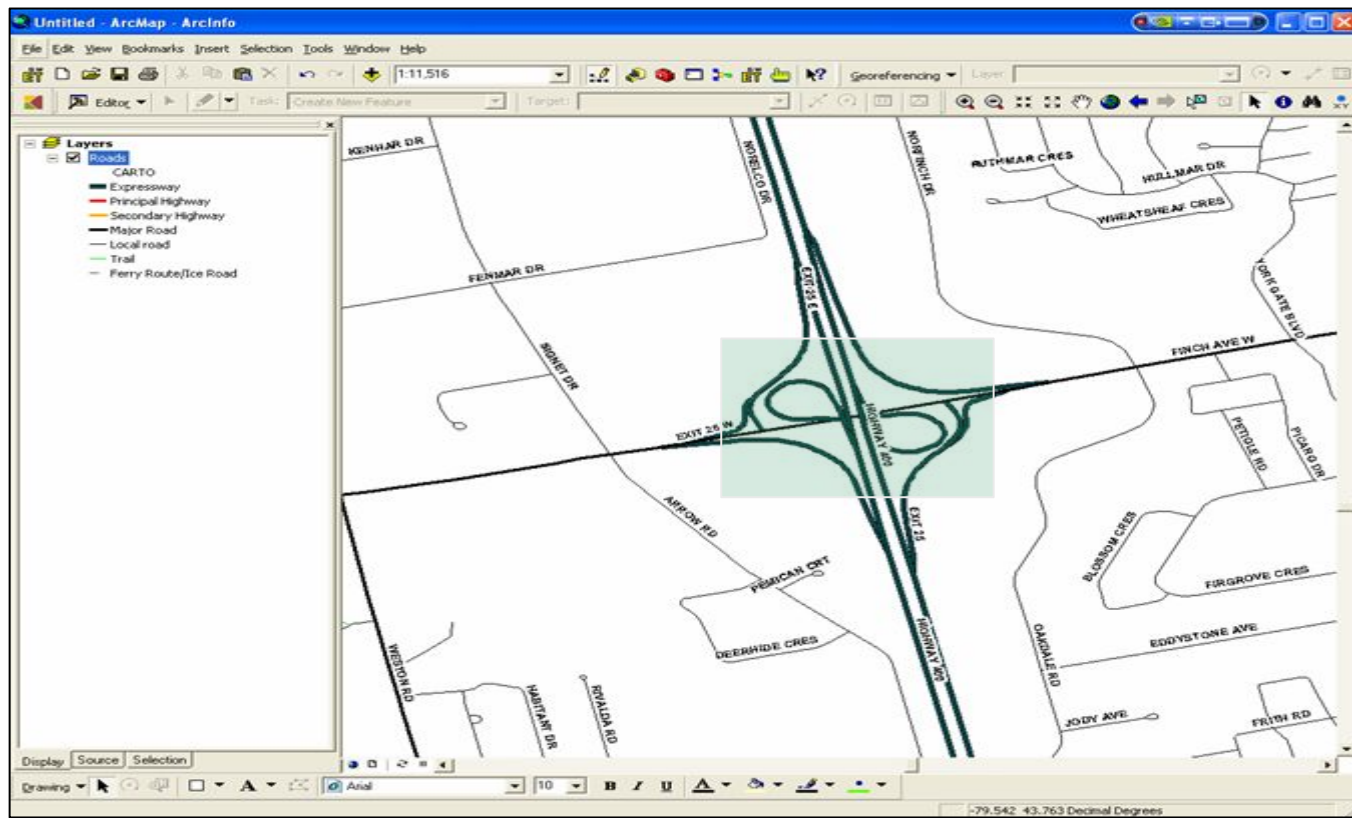


Vector Data

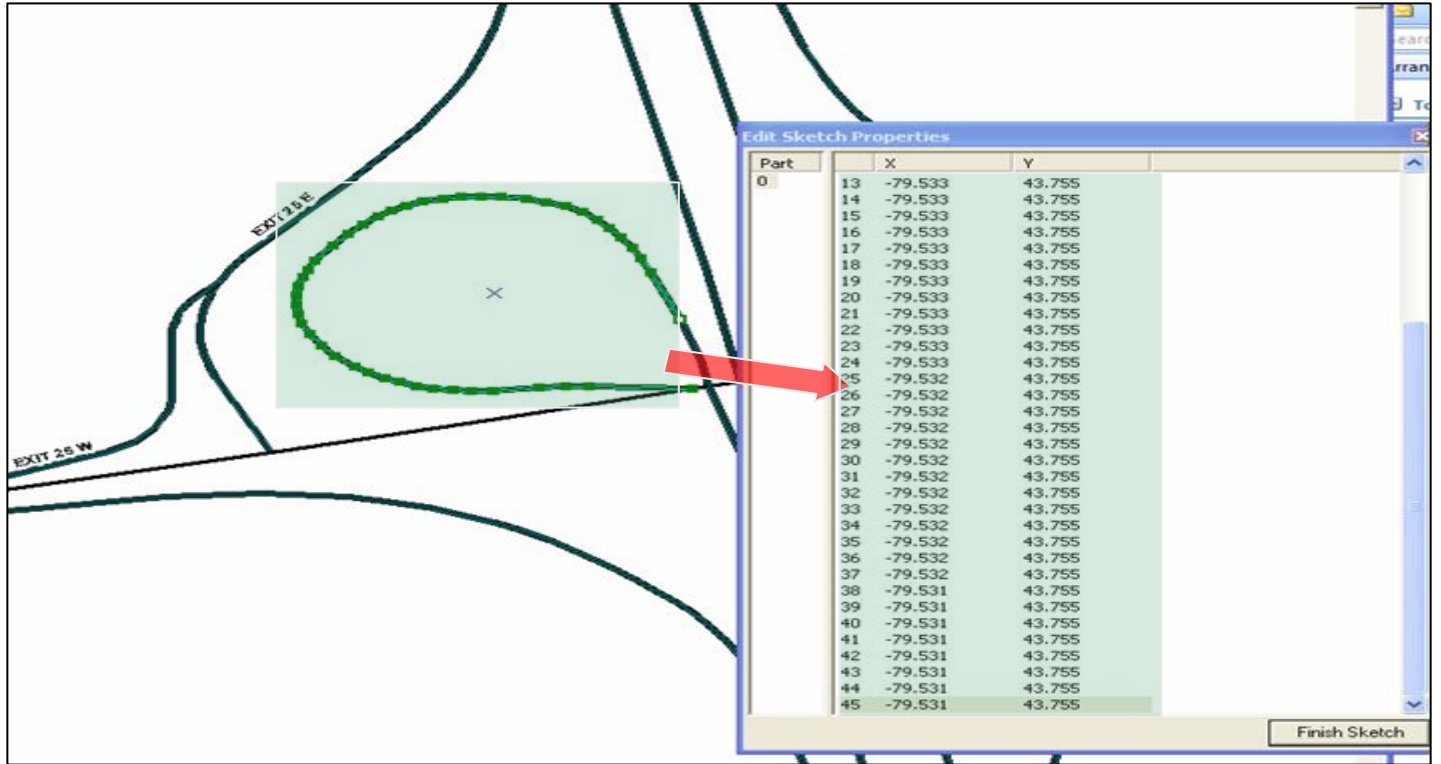
Polygons or Areas formatted



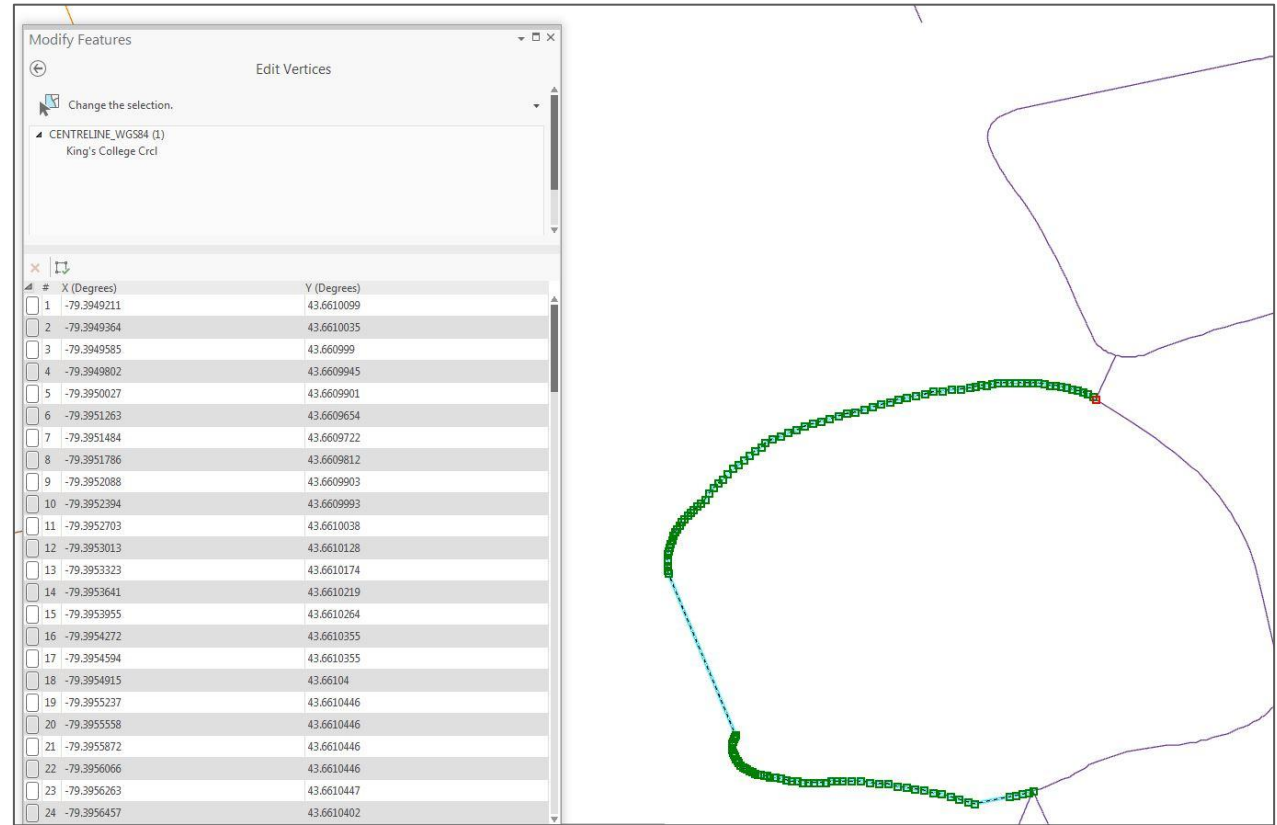
Vector Data



Vector Data



Vector Data



Attribute Data

Table variables/columns

ArcGIS Pro - analysis

NEIGHBOURHOODS_UTM6

Field: Add Delete Calculate Selection: Zoom To Switch Clear Delete Copy

FID	Shape	AREA_CODE	AREA_NAME	ID	Characteristic	Neighbourhood_Number	TSNS2020_Designatio	area	Neither_English_nor_French	Population_2016	Population_2011	Population_Change_2011_2016	Known
1	Polygon 027	York University Heig...	York University Heig...	27	York University Heig...	27	NIA	13.246656	1400	27593	27713	-0.004	
2	Polygon 038	Lansing-Westgate (38)	Lansing-Westgate	38	Lansing-Westgate	38	No Designation	5.346186	370	16164	14642	0.104	
3	Polygon 031	Yorkdale-Glen Park (...)	Yorkdale-Glen Park (...)	31	Yorkdale-Glen Park	31	Emerging Neighbour...	6.038326	850	14804	14687	0.008	
4	Polygon 016	Stonegate-Queensw...	Stonegate-Queensway	16	Stonegate-Queensway	16	No Designation	7.946202	535	25051	24691	0.015	
5	Polygon 118	Tam O'Shanter-Sulliv...	Tam O'Shanter-Sulliv...	118	Tam O'Shanter-Sulliv...	118	No Designation	5.422345	2655	27446	27398	0.002	
6	Polygon 063	The Beaches (63)	The Beaches	63	The Beaches	63	No Designation	3.595829	45	21567	21130	0.021	
7	Polygon 003	Thistletown-Beaumo...	Thistletown-Beaumo...	3	Thistletown-Beaumo...	3	NIA	3.339481	550	10360	10138	0.022	
8	Polygon 055	Thornciffe Park (55)	Thornciffe Park	55	Thornciffe Park	55	NIA	3.126554	1360	21108	19225	0.098	
9	Polygon 059	Danforth East York (59)	Danforth East York	59	Danforth East York	59	No Designation	2.188598	650	17180	16712	0.028	
10	Polygon 106	Humewood-Cedarva...	Humewood-Cedarvale	106	Humewood-Cedarvale	106	No Designation	1.871263	195	14365	14108	0.018	
11	Polygon 014	Islington-City Centre...	Islington-City Centre...	14	Islington-City Centre...	14	No Designation	16.239689	1350	43965	38084	0.154	
12	Polygon 066	Danforth (66)	Danforth	66	Danforth	66	No Designation	1.119665	440	9666	9444	0.024	
13	Polygon 028	Rustic (28)	Rustic	28	Rustic	28	NIA	2.096349	520	9941	9951	-0.001	
14	Polygon 139	Scarborough Village...	Scarborough Village	139	Scarborough Village	139	NIA	3.151015	525	16724	16609	0.007	
15	Polygon 085	South Parkdale (85)	South Parkdale	85	South Parkdale	85	NIA	2.286974	805	21849	21251	0.028	
16	Polygon 070	South Riverdale (70)	South Riverdale	70	South Riverdale	70	No Designation	10.964574	2220	27876	25642	0.087	
17	Polygon 040	St.Andrew-Windfield...	St.Andrew-Windfields	40	St.Andrew-Windfields	40	No Designation	7.29958	660	17812	17958	-0.008	
18	Polygon 061	Taylor-Massey (61)	Taylor-Massey	61	Taylor-Massey	61	NIA	1.06297	545	15683	15594	0.006	
19	Polygon 021	Humber Summit (21)	Humber Summit	21	Humber Summit	21	NIA	7.966905	1000	12416	12525	-0.009	
20	Polygon 022	Humbermede (22)	Humbermede	22	Humbermede	22	NIA	4.421665	1075	15545	15853	-0.019	
21	Polygon 133	Centennial Scarboro...	Centennial Scarboro...	133	Centennial Scarboro...	133	No Designation	5.468486	170	13362	13093	0.021	
22	Polygon 075	Church-Yonge Corri...	Church-Yonge Corri...	75	Church-Yonge Corri...	75	No Designation	1.364547	405	31340	28349	0.106	
23	Polygon 120	Clairlea-Birchmount...	Clairlea-Birchmount	120	Clairlea-Birchmount	120	No Designation	7.3973	985	26984	24770	0.089	
24	Polygon 123	Cliffcrest (123)	Cliffcrest	123	Cliffcrest	123	No Designation	7.19138	325	15935	15703	0.015	
25	Polygon 044	Flemingdon Park (44)	Flemingdon Park	44	Flemingdon Park	44	NIA	2.473306	1595	21933	22168	-0.011	
26	Polygon 092	Corso Italia-Davenpo...	Corso Italia-Davenport	92	Corso Italia-Davenport	92	No Designation	1.884658	1170	14133	13743	0.028	

0 of 140 selected

Filters: 100 %

Attribute Data

Table variables/columns

ArcGIS Pro - analysis

NEIGHBOURHOODS_UTM6

Field: Add Delete Calculate Selection: Zoom To Switch Clear Delete Copy

FID	Shape	AREA_CODE	AREA_NAME	ID	Characteristic	Neighbourhood_Number	TSNS2020_Designatio	area	Neether_English_nor_French	Population_2016	Population_2011	Population_Change_2011_2016	Known
1	Polygon	027	York University Heig...	27	York University Heig...	27	N/A	13.246656	1400	27593	27713	-0.004	
2	Polygon	038	Lansing-Westgate (38)	38	Lansing-Westgate	38	No Designation	5.346186	370	16164	14642	0.104	
3	Polygon	031	Yorkdale-Glen Park (...)	31	Yorkdale-Glen Park	31	Emerging Neighbour...	6.038326	850	14804	14687	0.008	
4	Polygon	016	Stonegate-Queensw...	16	Stonegate-Queensway	16	No Designation	7.946202	535	25051	24691	0.015	
5	Polygon	118	Tam O'Shanter-Sulliv...	118	Tam O'Shanter-Sulliv...	118	No Designation	5.422345	2655	27446	27398	0.002	
6	Polygon	063	The Beaches (63)	63	The Beaches	63	No Designation	3.595829	45	21567	21130	0.021	
7	Polygon	003	Thistletown-Beaumo...	3	Thistletown-Beaumo...	3	N/A	3.339481	550	10360	10138	0.022	
8	Polygon	055	Thorncliffe Park (55)	55	Thorncliffe Park	55	N/A	3.126554	1360	21108	19225	0.098	
9	Polygon	059	Danforth East York (59)	59	Danforth East York	59	No Designation	2.188598	650	17180	16712	0.028	
10	Polygon	106	Humewood-Cedarva...	106	Humewood-Cedarvale	106	No Designation	1.871263	195	14365	14108	0.018	
11	Polygon	014	Islington-City Centre...	14	Islington-City Centre...	14	No Designation	16.239689	1350	43965	38084	0.154	
12	Polygon	066	Danforth (66)	66	Danforth	66	No Designation	1.119665	440	9666	9444	0.024	
13	Polygon	028	Rustic (28)	28	Rustic	28	N/A	2.096349	520	9941	9651	-0.001	
14	Polygon	139	Scarborough Village...	139	Scarborough Village	139	N/A	3.151015	525	16724	16609	0.007	
15	Polygon	085	South Parkdale (85)	85	South Parkdale	85	N/A	2.286974	805	21849	21251	0.028	
16	Polygon	070	South Riverdale (70)	70	South Riverdale	70	No Designation	10.964574	2220	27876	25642	0.087	
17	Polygon	040	St-Andrew-Windfield...	40	St-Andrew-Windfields	40	No Designation	7.29958	660	17812	17958	-0.008	
18	Polygon	061	Taylor-Massey (61)	61	Taylor-Massey	61	N/A	1.06297	545	15683	15594	0.006	
19	Polygon	021	Humber Summit (21)	21	Humber Summit	21	N/A	7.966905	1000	12416	12525	-0.009	
20	Polygon	022	Humbermede (22)	22	Humbermede	22	N/A	4.421665	1075	15545	15853	-0.019	
21	Polygon	133	Centennial Scarboro...	133	Centennial Scarboro...	133	No Designation	5.468486	170	13362	13093	0.021	
22	Polygon	075	Church-Yonge Corri...	75	Church-Yonge Corri...	75	No Designation	1.364547	405	31340	28349	0.106	
23	Polygon	120	Clairlea-Birchmount...	120	Clairlea-Birchmount	120	No Designation	7.3973	965	26984	24770	0.089	
24	Polygon	123	Cliffcrest (123)	123	Cliffcrest	123	No Designation	7.19138	325	15935	15703	0.015	
25	Polygon	044	Flemington Park (44)	44	Flemington Park	44	N/A	2.473306	1595	21933	22168	-0.011	
26	Polygon	092	Corso Italia-Davenpo...	92	Corso Italia-Davenpo...	92	No Designation	1.884658	1170	14133	13743	0.028	

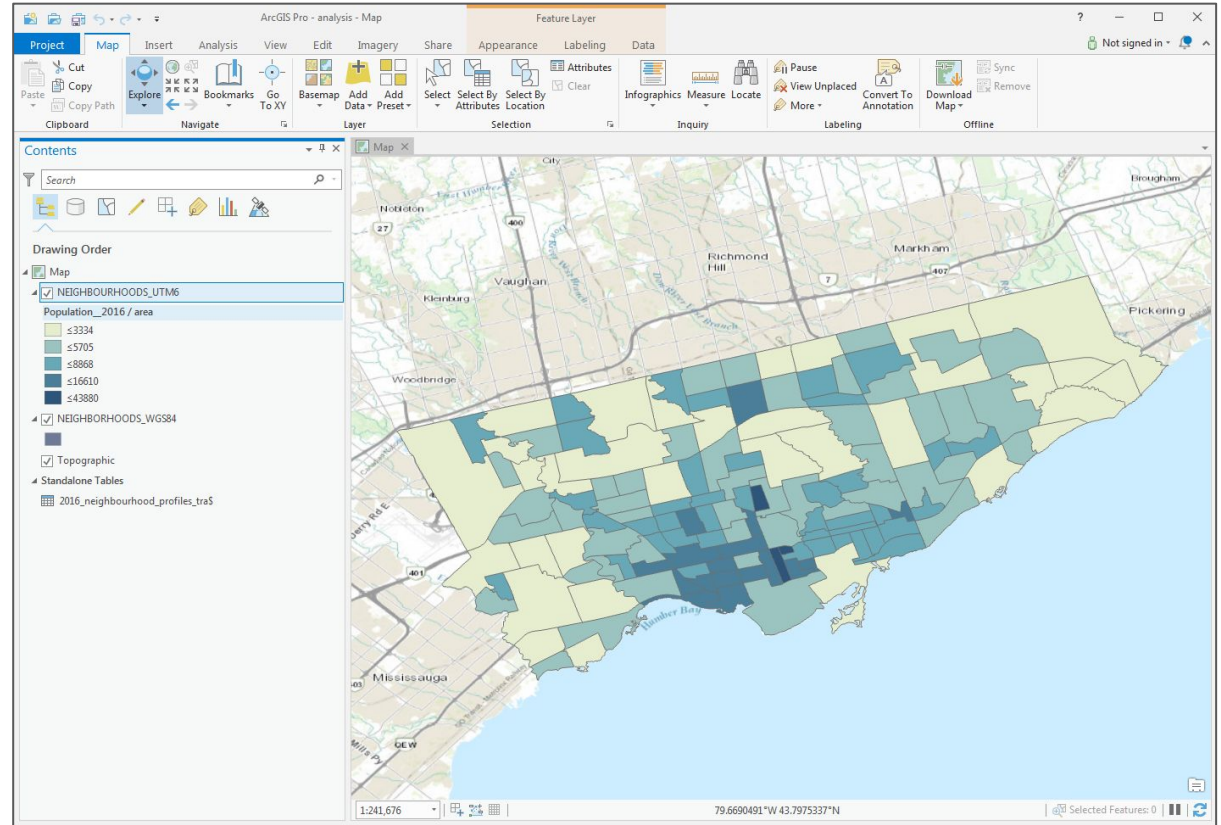
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Filters: 100 %

Attribute Data

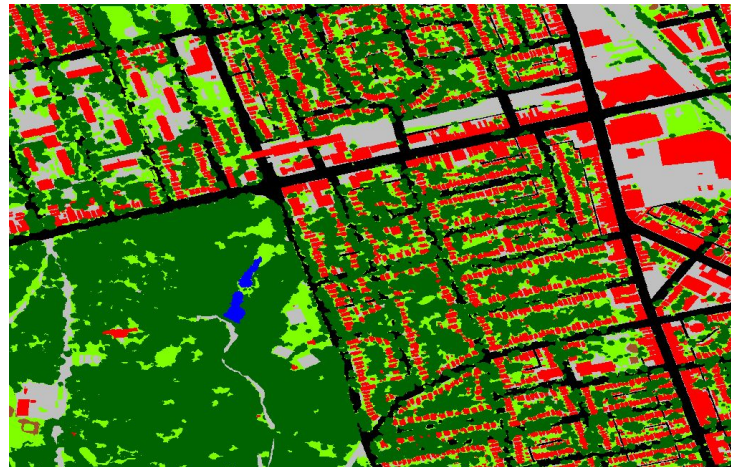
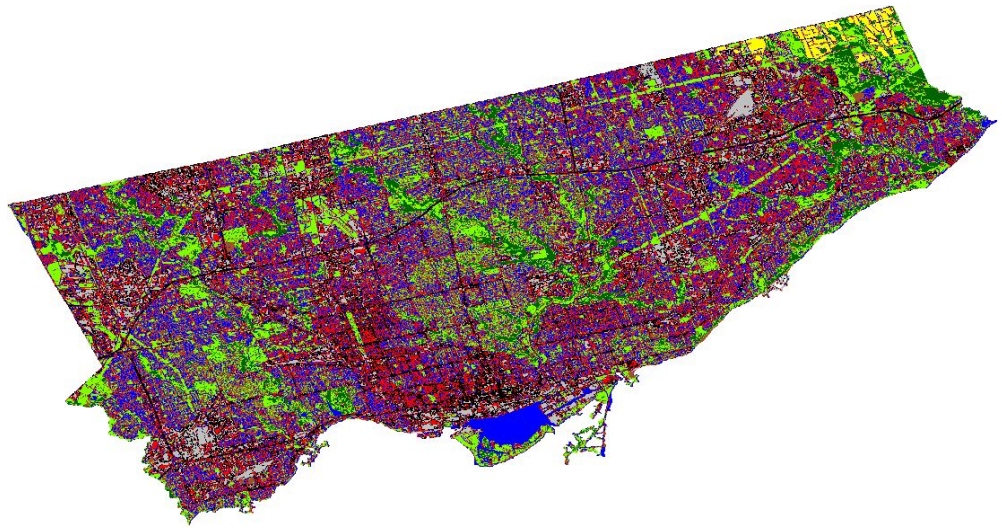
Symbology based on
variables/columns

Population / Land Area



Raster Data

Or matrix / grid data

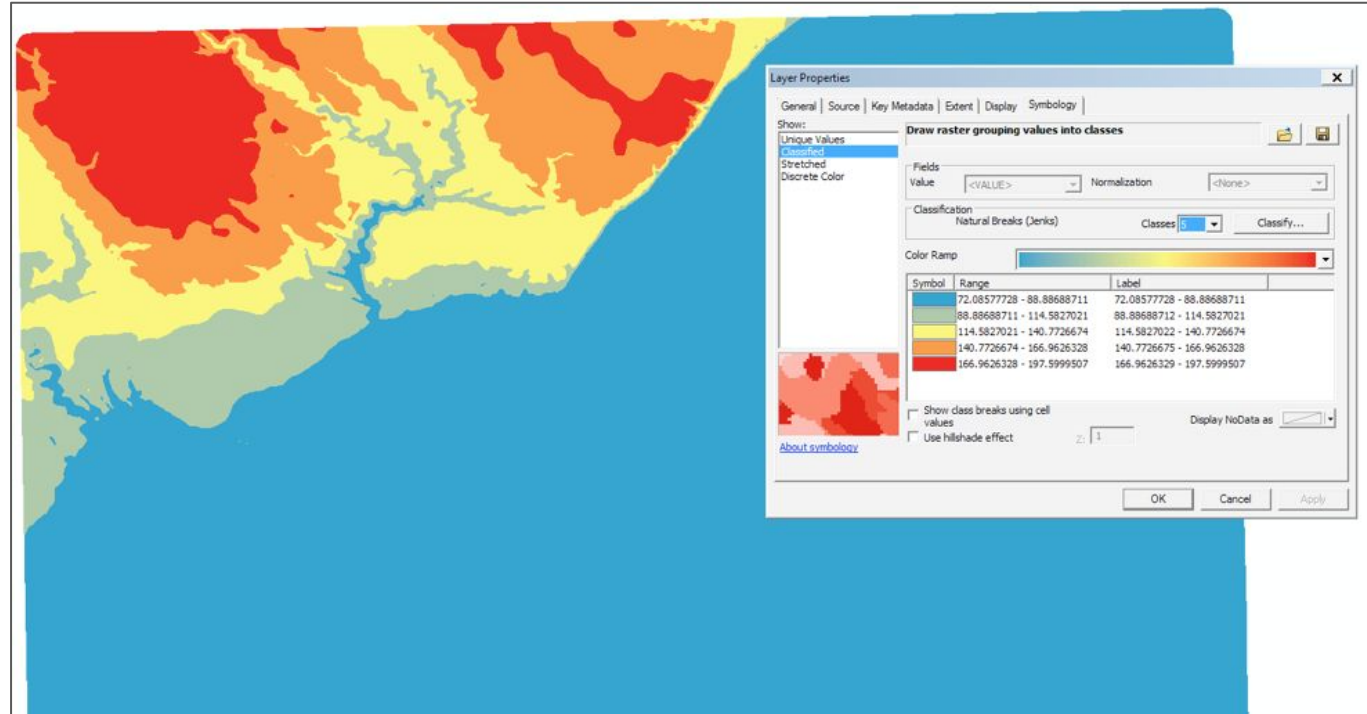


Raster Data

Or matrix / grid data

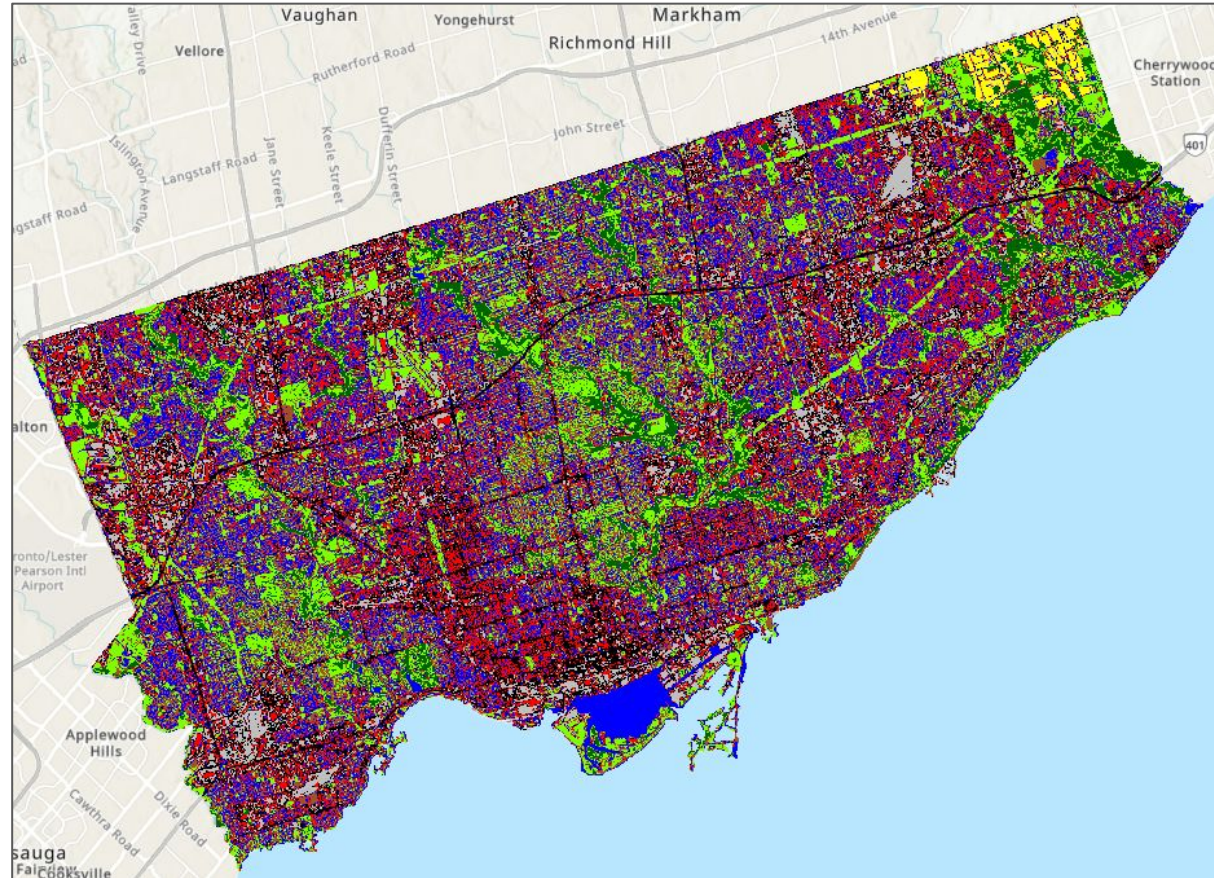


Why Raster?



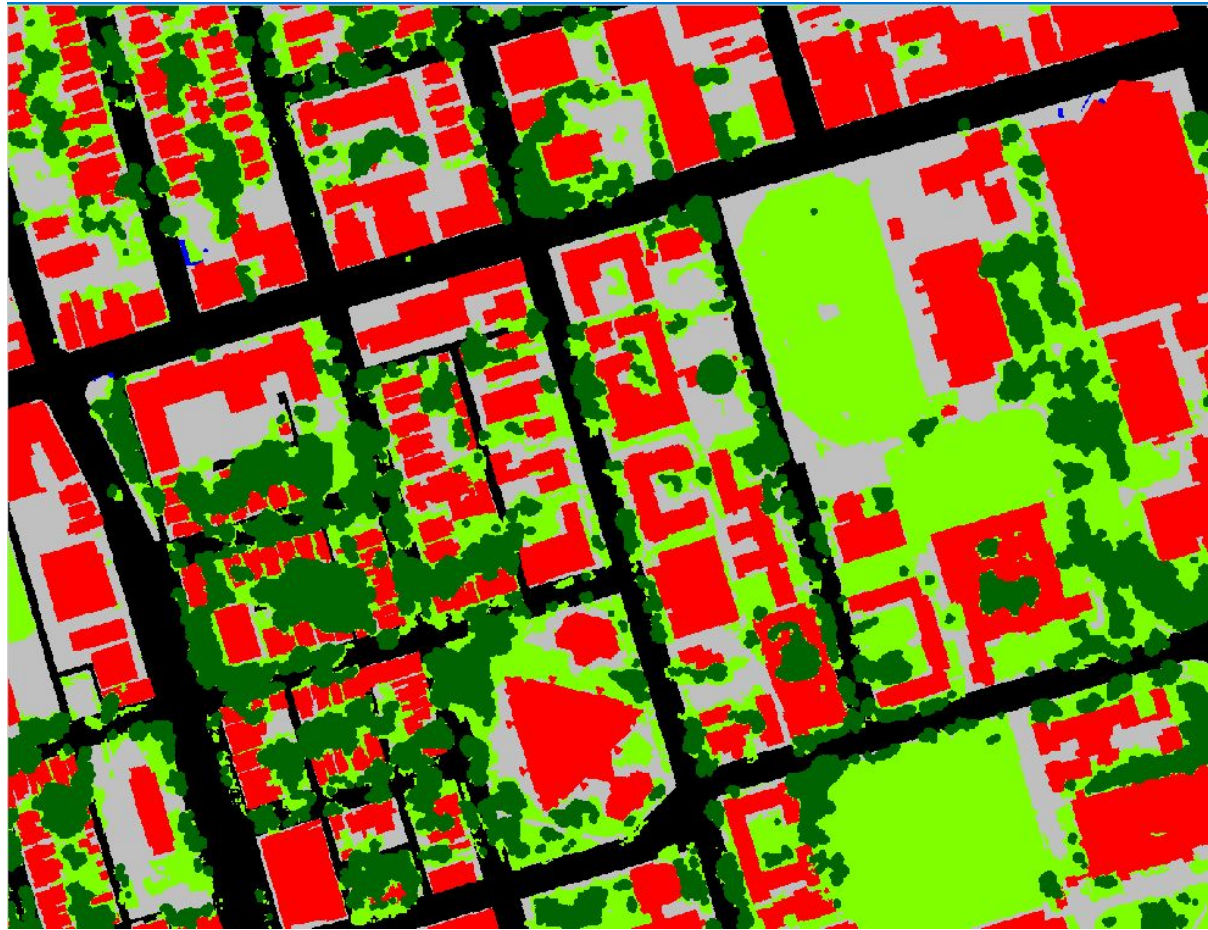
Raster Data

Or matrix / grid data



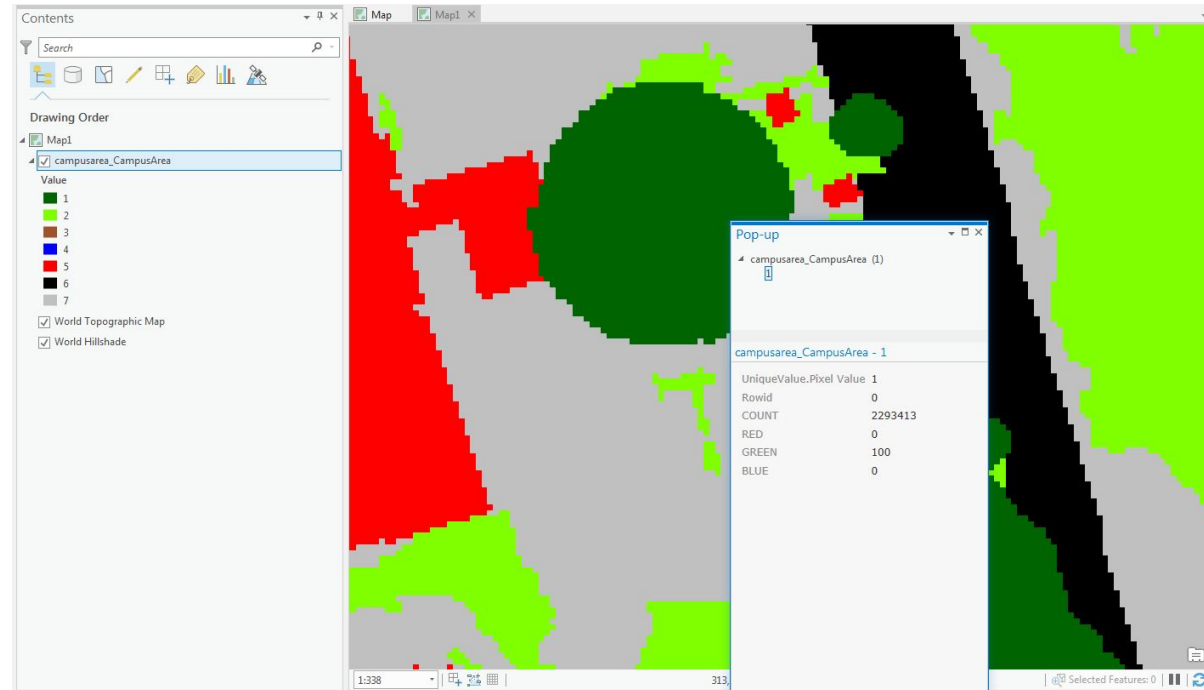
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Or matrix / grid data



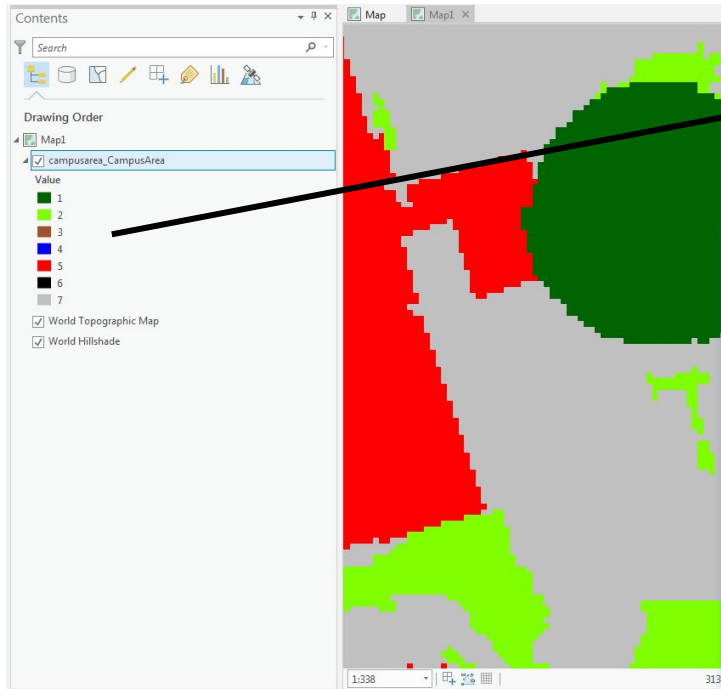
Raster Data

Or matrix / grid data



Raster Data

Or matrix / grid data



Catalog

Project > Folders > data > Forest_Land_Cover(raster) > landcover

Name

- campusarea
- toronto_2007_landcover.img

Land cover for the City of Toronto, ONT

Type Raster Dataset

Tags Land cover, Urban, tree canopy, UTC, Toronto, Ontario, 2007

Summary

This dataset was developed as part of the Urban Tree Canopy (UTC) Assessment for Toronto. As such, it represents a "top down" mapping perspective in which tree canopy over hanging other features is assigned to the tree canopy class. At the time of its creation this dataset represents the most detailed and accurate land cover dataset for the area.

Description

High resolution land cover dataset for Toronto. Seven land cover classes were mapped: (1) tree canopy, (2) grass/shrub, (3) bare earth, (4) water, (5) buildings, (6) roads, (7) other paved surfaces and (8). The primary sources used to derive this land cover layer were QuickBird satellite imagery (0.6m) acquired in 2007. Ancillary data sources included GIS data (building footprints and rights-of-way polygons) provided by the City of Toronto. This land cover dataset is considered current as of 20090829. Object-based image analysis techniques (OBIA) were employed to extract land cover information using the best available remotely sensed and vector GIS datasets. OBIA systems work by grouping pixels into meaningful objects based on their spectral and spatial properties, while taking into account boundaries imposed by existing vector datasets. Within the OBIA environment a rule-based expert system was designed to effectively mimic the process of manual image analysis by incorporating the elements of image interpretation (color/tone, texture, pattern, location, size, and shape) into the classification process. A series of morphological procedures were employed to insure that the end product is both accurate and cartographically pleasing. No accuracy assessment was conducted, but the dataset was subject to a thorough manual quality control. 50,000+ corrections were made to the classification.

Credits

University of Vermont Spatial Analysis Laboratory

Use limitations

There are no access and use limitations for this item.

Extent

West	-79.643724	East	-79.113286
North	43.862067	South	43.574826

Pop-up

campusarea_CampusArea (1)

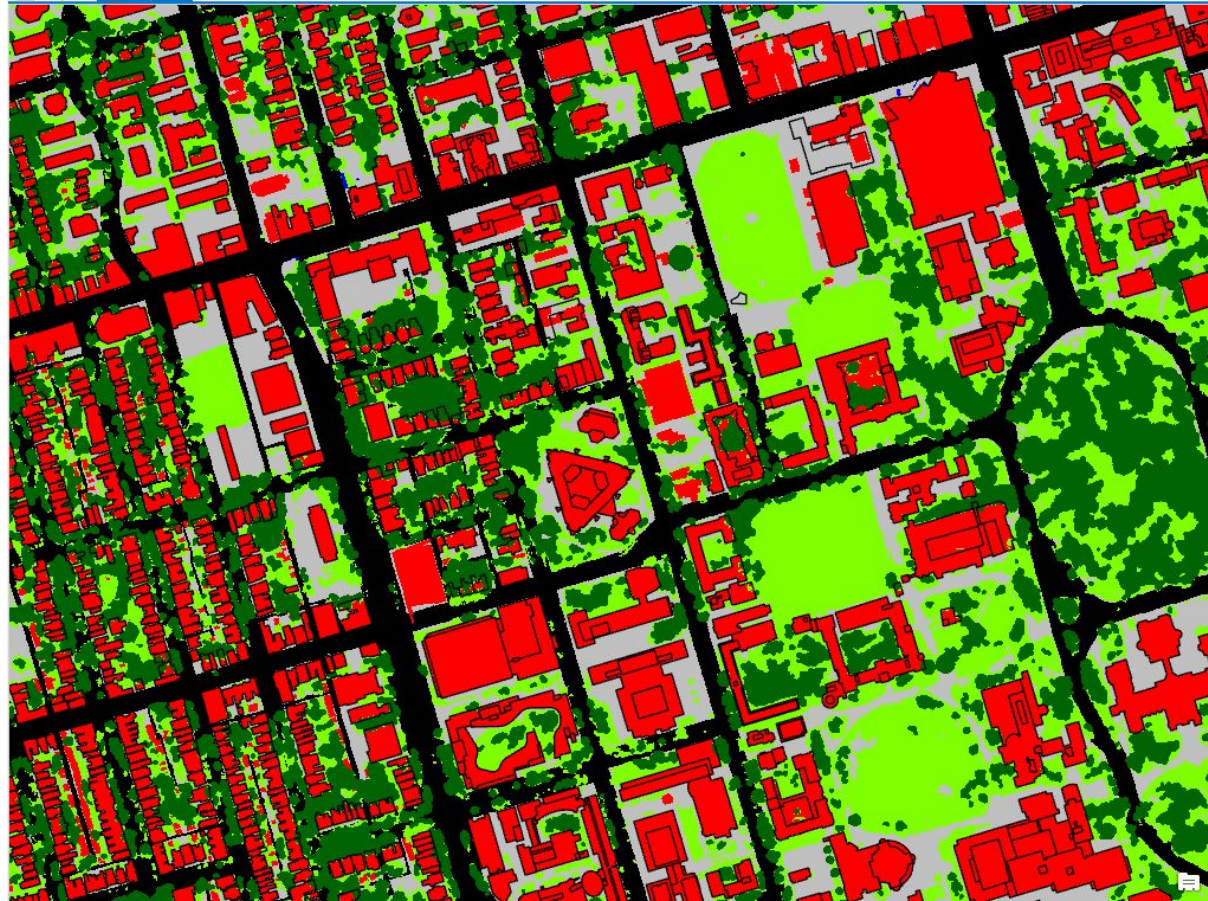
campusarea_CampusArea - 1

UniqueValue,Pixel Value	1
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COUNT	2293413
RED	0
GREEN	100
BLUE	0

Raster and Vector



Raster and Vector



Raster vs. Vector

