TSNS 2020 NEIGHBOURHOOD EQUITY INDEX Methodological Documentation

Prepared for the Toronto Strong Neighbourhoods Strategy 2020

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By Social Policy Analysis and Research City of Toronto



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1. Purpose of this Document

This methodological report describes the development of a Neighbourhood Equity Index in support of identifying *Neighbourhood Improvement Areas* (NIA) for the Toronto Strong Neighbourhoods Strategy 2020 (TSNS 2020). The work described in this document was conducted by the Social Policy, Analysis & Research Section (SPAR) of the Social Development, Finance & Administration Division (SDFA) of the City of Toronto in consultation with residents of Toronto, community agencies, academic experts and City of Toronto divisions, corporations and agencies.

The final selection of NIAs as part of TSNS 2020 is described in a separate report. This report can be found at <u>http://www.toronto.ca/neighbourhoods</u>.

2. Background

In 2005, Toronto City Council identified 22 of its 140 social planning neighbourhoods as a part of its Priority Neighbourhoods for Investment. This designation was made as part of a strategic initiative to address historic under-investment in the social infrastructure of some Toronto neighbourhoods. The identification of these *Priority Neighbourhood Areas for Investment* (PNIs) was based on a methodology identifying neighbourhoods in Toronto where vulnerable populations had low access to services, combined with areas of the city experiencing safety issues as identified in the Community Safety Plan.

After almost seven years of work in the PNIs, Council directed the Executive Director, Social Development, Finance and Administration Division to report back on an update to the Strategy. Council's direction focused on the need to better strengthen all neighbourhoods and monitor their wellbeing across a broader range of issues beyond service access and crime. The proposed updates to the City's neighbourhood-based initiatives were approved by Council in March 2012 when it adopted the report titled *Toronto Strong Neighbourhoods Strategy 2020*.

Under TSNS 2020, a new set of neighbourhoods are to be identified, called *Neighbourhood Improvement Areas* (NIAs). NIAs are to be selected based on a determination of which neighbourhoods in Toronto are facing the most inequitable outcomes. By definition, an inequity is an unnecessary, unfair and unjust difference. Because these differences are unnecessary, action can be taken to remedy them. Correspondingly, the NIA selection criterion for TSNS 2020 is to reflect the strategy's goal of building an equitable set of social, economic and cultural opportunities for all residents, leading to equitable outcomes across all neighbourhoods.

To support the selection of new NIAs, the City of Toronto has developed a **Neighbourhood Equity Index** (NEI) based on data from the Urban HEART@Toronto research initiative. This index provides a broad quantitative assessment of neighbourhood wellbeing in Toronto, facilitating the recommendation of NIAs by the TSNS 2020 Steering Committee and final selection by Toronto City Council.

3. Methodology

3.1. Components of Neighbourhood Equity Index

The **Neighbourhood Equity Index** that is described in this document consists of two components:

(1) A **Neighbourhood Equity Score** for each of Toronto's 140 neighbourhoods:

This score is derived from 15 indicators of neighbourhood inequity across five thematic domains and describes how neighbourhoods in Toronto are faring relative to others. These indicators were provided to the City of Toronto by the Urban HEART@Toronto research initiative.

(2) A Neighbourhood Equity Benchmark:

This benchmark value is a composite score derived from a series of benchmark values selected by Urban HEART@Toronto. The benchmark delineates a score that signals that the overall burden of inequities faced by a neighbourhood requires immediate action..

3.3. Guiding Principles

There are several principles that guide the development of the NEI. First, **the index should measure broad inequity across neighbourhoods**. The objective of TSNS 2020 is to provide an equitable set of social, economic and cultural opportunities for all residents, with the goal of advancing equitable outcomes across all neighbourhoods. As a result, the index is designed to provide a composite measure of neighbourhood wellbeing across a broad range of different thematic domains. In turn, the indicators that make up the index are based on overall neighbourhood *outcomes* as opposed to such factors as service inputs or populations groups.

Second, **the index must adhere to the existing 140 neighbourhood planning area boundaries** developed by the City of Toronto. These boundaries were developed by SDFA based on standard Census geography (Census Tracts) in the mid-1990's as a geography for service planning purposes as opposed to being based on historic neighbourhood identity. They have since been adopted by the City of Toronto, multiple agencies and organizations for reporting on social wellbeing. It is the intent to keep these boundaries consistent over time and as of 2014, they have not changed since their inception. Designating NIAs using these boundaries improves the ability to consistently monitor the wellbeing of NIAs over time. (See the Neighbourhood Profiles at www.toronto.ca/demographics for more details.)

Third, **any indicators used to develop or verify the index must already be publicly accessible at the neighbourhood level.** Given limited resources and the need to maximize validity and transparency, priority was given to using existing indicators of neighbourhood wellbeing. While this approach may not necessarily incorporate perfect measurements of inequity, it does allow for an immediately achievable framework for measuring neighbourhood outcomes. Because the implementation of TSNS 2020 will be iterative, development of new and better indicators can occur over the course of the strategy's implementation.

3.4. Data Sources

3.4.1. Urban HEART@Toronto Indicators

The NEI consists of indicator data provided by the Urban HEART@Toronto research initiative. This initiative builds off of work developed by the World Health Organization. Urban HEART stands for "Urban Health Equity Assessment and Response Tool." In 2010, the World Health Organization launched Urban HEART to help city leaders and their communities identify and resolve health and social inequities.

Because the WHO version of Urban HEART was designed for cities in urbanizing contexts, a modified version of the tool was developed for Toronto and comparable urban environments. The Toronto version was jointly developed the Centre for Research on Inner City Health/St. Michael's Hospital, the City of Toronto, United Way Toronto, the Toronto Central Local Health Integration Network and WoodGreen Community Services.

Urban HEART@Toronto provides 15 indicators of neighbourhood inequity across five thematic domains based on a social determinants of health model. Possible indicators for inclusion were selected through an online Delphi process involving 80 expert researchers and data users from the Greater Toronto Area. The City of Toronto was one of the participants in the selection process and provided some technical advice on the selection of indicators.

Once the long-list of indicators was identified, a short-list was proposed by the Urban HEART@Toronto team based on the availability of data at a neighbourhood level, whether the indicator contained sufficient variance and whether the data was publicly available and comparable. Based on these criteria, a final set of 15 indicators was selected and approved by the Urban HEART@Toronto Steering Committee in September 2013. These indicators are detailed in Table 1. Neighbourhood scores for each of these indicators are summarized and mapped in Appendix I.

For more information about Urban HEART@Toronto, visit http://www.torontohealthprofiles.ca/urbanheartattoronto.php.

Domains	Indicator	Data Source
Economic Opportunities	Unemployment Number of unemployed persons age 15+.	2011 National Household Survey
	Low Income Percentage of persons living below the after-tax low income measure.	2010 T1 Family File, Statistics Canada
	Social Assistance Percentage of persons who are recipients of Ontario Works, persons on ODSP participating in OW employment programs and non-OW persons receiving assistance with medical items.	Toronto Employment & Social Services
Social Development	High School Graduation Composite measure of four indicators predicting the rate of youth graduation from high school (2006-2011).	TDSB, TCDSB, 2006 Census
	Marginalization A combined measure of 18 variables representing residential instability, ethnic concentration, dependency and material deprivation.	Ontario Marginalization Index, 2006 Census
	Post-Secondary Completion Percentage of persons age 25-65 with post secondary certificate, diploma or degree.	2011 National Household Survey
Participation in Decision-Making	Municipal Voting Rate Percent of eligible voters who voted in the last municipal election.	Toronto Election & Registry Services, Toronto Open Data
Physical Surroundings	Community Places for Meeting Average number of meeting places within a 10 min. walking distance measured from each residential block in the neighbourhoods (incl. libraries, recreation facilities, places of worship).	Toronto Open Data

Table 1. Urban HEART@Toronto Domains and Indicators

	Walkability A walkability score between 0 (not very walkable) and 100 (very walkable).	Walkscore.com
	Healthy Food Stores The average number of healthier food stores within a 10 minute walking distance from each residential block in a neighbourhoods.	Toronto Dinesafe 20134, Toronto Open Data
	Green Space Average amount of green space (incl. parks and public areas) per km ² in a 1 km circular buffer from each residential block in the neighbourhood.	DMTI, University of Toronto
Healthy Lives	Premature Mortality Age-adjusted number of deaths under age of 75 per 100,000 population age under 75.	Ontario Mortality Data 2005- 2009, Ontario Ministry of Health and Long-Term Care
	Mental Health Percentage of those age 20+ reporting very good or excellent mental health.	2005-2011 Canadian Community Health Survey
	Preventable Hospitalizations Age and sex adjusted number of ambulatory care sensitive condition hospitalizations per 100,000 population.	2009-2011 Discharge Abstracts Database, Canadian Institute for Health Information
	Diabetes Age and sex adjusted number of persons age 20+ with diabetes per 100 population.	Ontario Diabetes Database, Ontario Registered Persons Database, Ontario Ministry of Health and Long-Term Care

It is important to note that these indicators are not population group measures. Because the goal of TSNS 2020 is to measure inequity, population group measures are inappropriate. For example, being young or having recently arrived in Toronto does not, on its own, constitute an inequity. However, an inability to find employment because one is young is an inequity. Therefore, the final set of indicators does not include concentrations of such equity seeking-groups as youth or newcomers. For the same reason, indicators are also not normalized by these subgroups. Instead, the final indicator set includes the *outcomes* of these inequities, such as unemployment.

3.4.2. Consultation Findings

Feedback received through a multi-format public consultation process involving online surveys, paper surveys distributed at community events and a series of 9 "Community Conversation" roundtables was used to support the interpretation and analysis of the Urban HEART@Toronto data. These consultations ran between October and November 2013, resulting in 1,421 survey

responses and qualitative notes summarizing the input gathered from over 230 participants in City-led meetings and 150 residents in community-agency led meetings. While no cluster sampling methods were used to reflect geographic representation across the City, mapping the respondent postal codes showed a satisfactory level of response from across Toronto compared to similar City of Toronto consultations conducted in the past.

Results from these consultations can be found online at <u>http://www.toronto.ca/neighbourhoods</u>.

Upon receiving the indicator data from Urban HEART@Toronto, the City of Toronto's Social Development, Finance & Administration (SDFA) Division conducted further consultations with members of the Toronto Community Data Program, academic experts from the Wellbeing Toronto Advisory Panel, the City of Toronto Research Network, the Social Planning Network of Ontario, Toronto Community Housing Corporation, Toronto Public Health, City divisions, community groups and agencies and Toronto residents on the optimal methodological weighting method for the NEI.

Results from both consultation processes were used to guide the methodological choices described in this document and were used to verify whether the neighbourhood equity scores reflected resident concerns.

3.4.3. Wellbeing Toronto

Finally, neighbourhood wellbeing indicators from Wellbeing Toronto (www.toronto.ca/wellbeing) were used to verify the results of the NEI design. The Neighbourhood Equity Scores were checked against demographic data to ensure that important equity-seeking groups are represented in the results of this analysis and issues raised in the community consultations were captured. Wellbeing Toronto data was also used to identify where the NEI scores are consistent with the geographic priorities of agencies, divisions and corporations from with the City of Toronto, and where they differed. The indicators used in this analysis are drawn primarily from the 2011 Census and National Household Survey and are summarized at the neighbourhood level in Appendix III.

3.5. Developing the Neighbourhood Equity Index

There are four steps involved in developing a Neighbourhood Equity Score for the NEI:

- 1. Standardize indicator values
- 2. Determine indicator weighting
- 3. Calculate Neighbourhood Equity Score
- 4. Derive Neighbourhood Equity Benchmark

3.5.1. Indicator Standardization

The 15 Urban HEART@Toronto indicators are measured using different units. For some, such as unemployment, the indicator is presented as a percentage where higher percentages are more inequitable. For other indicators, such as Community Spaces for Meeting, the indicator is expressed as simply a count where lower counts are more inequitable. Because of these differences, indicator values must be standardized to a common range and consistent direction.

Fortunately, Urban HEART@Toronto provides standardized values for each of the 15 indicators. These standardized values range between 0 and 1, where 1 is assigned to the neighbourhood with the most inequitable outcome. The neighbourhood with the most equitable outcome is assigned a value of 0. The remaining neighbourhoods are assigned a score relative to those two polarities. The resulting standardized indicator values are summarized in Appendix II.

For indicators where high values signify increased inequity, such as unemployment, the standardized value is calculated as follows:

$$Standardized Value = \frac{Indicator Value - Min(Indicator Value)}{Max(Indicator Value) - Min(Indicator Value)}$$

For indicators where low values signify inequity, such as postsecondary completion, the standardized value is calculated using the following formula, which reverses the direction of the underlying indicator:

$$Standardized Value_{reverse} = \frac{Max(Indicator Value) - Indicator Value)}{Max(Indicator Value) - Min(Indicator Value)}$$

3.5.2. Determine Indicator Weighting

Two indicator weighting options were considered for the NEI composite score. The first option was an equal domain weighting method. Under this method, standardized indicator values are averaged within their respective domains to adjust for the varying number of indicators within each domain. The five resulting domain scores are then given equal weight. The advantage of this method is in its simplicity. It also conceptually matches resident feedback which emphasized that all of the domains are important. The key disadvantage of this method, however, is that the weightings are not statistically derived and therefore overemphasize domains that do not actually describe differences between neighbourhoods.

The second method assigns each indicator a weight in proportion to its actual contribution in describing the differences between neighbourhoods. Weights are derived using a principal components analysis technique similar to those used in other studies of neighbourhood wellbeing (Murdie, Logan and Maaranen 2013; Krishnan 2010). The advantage of this method is that the resulting weights emphasize indicators that can differentiate neighbourhoods for NIA selection. Heavier weights are given to indicators where there are consistently large gaps between neighbourhoods. Indicators where gaps are smaller or where issues are scattered across a wide range of different types of neighbourhoods are given lighter weight. The disadvantage of this method is that the weights do not obviously match resident preferences.

This second method of weighting, however, actually produces NEI scores that are more reflective of how residents perceive the actual state of neighbourhoods in Toronto. Counterintuitively, an equal weighting scheme makes it harder to differentiate neighbourhoods and creates a disproportionately high standard for neighbourhoods to be selected as an NIA. For example, most neighbourhoods fare poorly in the Physical Surroundings indicator set. If this domain was weighted equally as compared to the other domains, only neighbourhoods that fare *extremely* poorly on Physical Surroundings would rise to the top in the final NEI ranking. Neighbourhoods with serious issues in the other four domains, yet have average albeit still poor outcomes in Physical Surroundings, would see their ranking in the NEI fall. The result of an equal weighting scenario, therefore, actually results in *underemphasizing* many issues in Toronto that are more geographically concentrated. Based on these considerations and following consultations with community agencies, community leaders, City divisions and other implementation partners, the TSNS 2020 Steering Committee selected the this second weighting method as the preferred weighting scheme. The method for determining the exact weights for each of the indicators is explained below.

The weight for each standardized indicator is calculated using principle components analysis (PCA) with varimax rotation. PCA is a statistical data reduction technique that takes a larger set of indicators and derives a smaller set of "factors" that explain the maximum amount of variance in a sample. In doing so, PCA reveals the underlying structure of how the data is distributed. It also describes the strength of the relationship between each individual indicator and the underlying factors. For the purposes of this analysis, only factors that explained the bulk of the differences in the underlying data are used.

Indicator	Factor 1	Factor 2	Factor 3
Unemployment Rate	0.798	0.244	0.154
Low-Income	0.808	-0.196	0.220
Social Assistance	0.769	0.110	0.509
High School Graduation*	0.546	-0.174	0.543
Marginalization	0.843	0.027	0.111
Post-Secondary*	0.812	0.216	0.239
Voting*	0.730	-0.083	-0.454
Community Meeting Spaces*	-0.064	0.805	-0.384
Walkability*	0.264	0.872	-0.204
Access to Healthy Food*	-0.035	0.863	-0.228
Access to Green Space*	-0.065	-0.755	-0.213
Premature Mortality	0.189	-0.324	0.825
Mental Health	0.560	-0.081	0.202
Unnecessary Hospitalization	0.430	-0.120	0.776
Diabetes	0.826	0.323	0.218
Variance Explained (Eigenvalue)	5.378	3.147	2.559

Table 2. Standardized Indicator PCA Results (Rotated Factors)

PCA with varimax rotation

* Indicator was reversed when standardized so that high values reflect inequity.

The results of the PCA analysis are summarized in Table 2. Three factors, accounting for 73.8% of the total variance in the dataset were retained.

Factor 1 describes neighbourhoods with higher concentrations of residents facing broad socioeconomic challenges. These challenges include high unemployment, lower incomes, higher use of social assistance, greater marginalization, lower post secondary attainment, lower voting rates and higher incidents of mental health issues and diabetes.

Factor 2 describes neighbourhoods experiencing physical infrastructure challenges. This includes low access to meeting spaces, limited walkability and low access to healthy food stores. Notably, access to green space is negatively related to this factor. This is not entirely unexpected, as this opposing direction describes a tension in urban planning regarding in the appropriate amount of density in a neighbourhood.

Factor 3 describes neighbourhoods with residents facing acute vulnerabilities. These neighbourhoods have higher concentrations of residents receiving social assistance, have more residents with less than a high school education, have higher rates of premature mortality and higher rates of unnecessary hospitalizations.

The three factors correspond to commonly understood challenges facing neighbourhoods in Toronto and appear to provide a broad, valid description of neighbourhood inequity in Toronto. Using these factor results, weights for each of the 15 indicators are derived using the factor loadings for each indicator and the variance explained by each of the 3 retained factors. Two considerations influence how these pieces of information will be combined in the final weighting formula.

First, the Neighbourhood Equity Index is intended to identify differences between neighbourhoods. Methodologically, this is interpreted to mean that factors explaining the most variance should be weighted more heavily. This can be observed quantitatively from the eigenvalues of the three retained factors. The eigenvalue is a score summarizing the proportion of the total variance, or neighbourhood differences, that is present in the Urban HEART@Toronto data. Factors with higher eigenvalues will be weighted more heavily. Within each factor, the factor loading describes which indicators are more strongly related to each factor. The factor loadings will be used to determine how strongly each indicator is weighted within each factor.

Second, it was clear from the community consultations that all of the social and health issues depicted in the Urban HEART@Toronto model are conceptually important and interrelated.

Participants in our consultations emphasized that issues making an impact in one domain also make impacts in others. Because of this, it was determined that all indicators would be retained in all three factors. Each indicator is weighted according to its respective factor loading in each factor. Lower factor loadings correspond to lighter weighting, correcting for weak relationships in the underlying data.

The composite weight for each indicator was derived using the following formula:

Indicator Weight $= (Factor \ Score_1 \times Eigenvalue_1) + (Factor \ Score_2 \times Eigenvalue_2) + (Factor \ Score_3 \times Eigenvalue_3)$

Once each indicator weight is calculated, they are further standardized so the sum of all indicator weightings is equal to 1:

 $Standardized \ Indicator \ Weight = \frac{Indicator \ Weight}{Sum \ of \ all \ indicator \ weights}$

Table 3 summarizes the final weights for each of the indicators. As noted above, access to green space is negatively related to the underlying factors and has a correspondingly small, but negative weighting. Although excluding this indicator from the final selection criterion was considered, it was retained because the negative score does reflect a real conceptual and policy tension. Excluding green space would suggest that the concept of green space has no relationship with neighbourhood equity. Retaining the variable more appropriately includes this policy tension in the underlying weighting scheme.

Domains	Indicator	Weight	Domain Weight
Economic	Unemployment	10.6%	
Opportunities	Low Income	8.4%	30.3%
	Social Assistance	11.3%	
Social Development	High School Graduation	7.4%	
	Marginalization	9.6%	28.0%
	Post Secondary Completion	11.0%	
Participation in Decision-Making	Municipal Voting Rate	4.9%	4.9%
Physical	Community Places for Meeting	2.3%	
Surroundings	Walkability	7.1%	C 00/
	Healthy Food Stores	3.8%	6.9%
	Green Space	-6.4%	
Healthy Lives	Premature Mortality	4.1%	
	Mental Health	6.4%	29.9%
	Preventable Hospitalizations	7.7%	29.9%
	Diabetes	11.7%	

Table 3. Indicator Weights

3.5.3. Calculate Neighbourhood Equity Score

Weighted neighbourhood scores are calculated by first multiplying the standardized indicator values for each neighbourhood by their respective indicator weights and then summing the products. The resulting score ranges from 0 to 1, with 1 indicating maximum inequity:

Weighted Score =
$$\sum_{i}$$
 (Indicator Value_i × Indicator Weight_i)

Where *i* is one of the 15 Urban HEART@Toronto indicators.

To aid in the presentation and interpretation of the data, each weighted score is then reversed and multiplied by 100 so that the Neighbourhood Equity Score ranges from 0 to 100. A neighbourhood with a theoretical score of 0 would have the worst outcomes in Toronto for all 15 indicators. A theoretical score of 100 describes a neighbourhood with the best outcomes in Toronto for all 15 indicators. The final Neighbourhood Equity Score is calculated as follows:

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Neighbourhood Equity Score = (1 - Weighted Score) \times 100
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The final set of neighbourhood equity scores are summarized in Table 4 and spatially on the map on page 19.

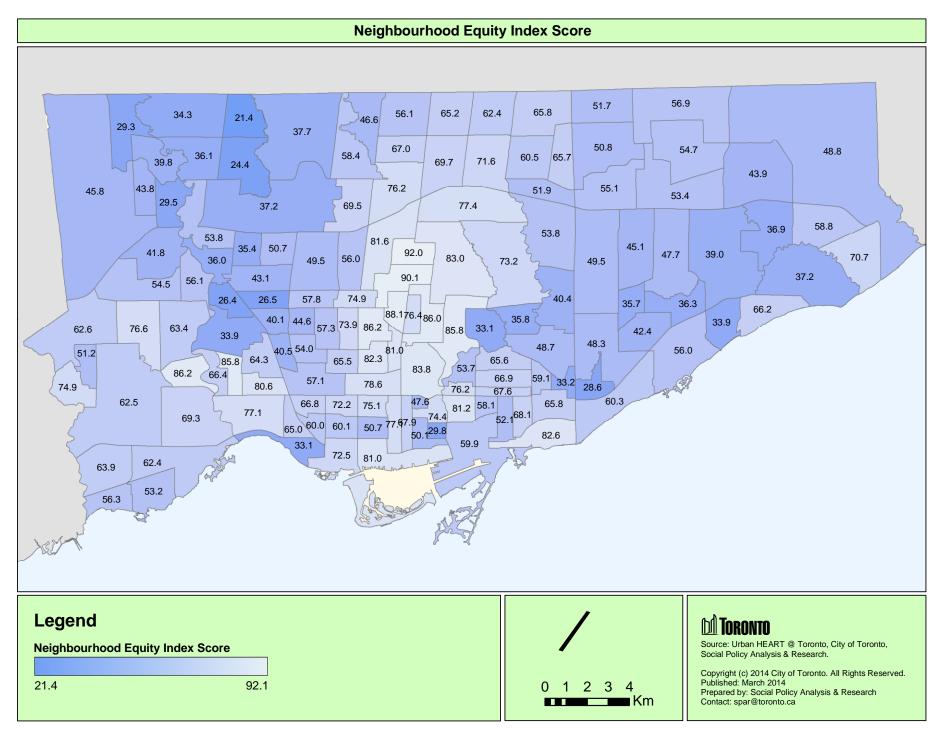
Rank	Neig	hbourhood Number and Name	Score
1	24	Black Creek	21.38
2	25	Glenfield-Jane Heights	24.39
3	115	Mount Dennis	26.39
4	112	Beechborough-Greenbrook	26.54
5	121	Oakridge	28.57
6	2	Mount Olive-Silverstone-Jamestown	29.29
7	5	Elms-Old Rexdale	29.54
8	72	Regent Park	29.81
9	55	Thorncliffe Park	33.09
10	85	South Parkdale	33.10
11	61	Crescent Town	33.21
12	111	Rockcliffe-Smythe	33.86
13	139	Scarborough Village	33.94
14	21	Humber Summit	34.30
15	28	Rustic	35.40
16	125	lonview	35.73
17	44	Flemingdon Park	35.81
18	113	Weston	35.99
19	22	Humbermede	36.09
20	138	Eglinton East	36.28
21	135	Morningside	36.89
22	26	Downsview-Roding-CFB	37.16
23	136	West Hill	37.25
24	27	York University Heights	37.66
25	137	Woburn	39.01
26	3	Thistletown-Beaumond Heights	39.78
27	110	Keelesdale-Eglinton West	40.14
28	43	Victoria Village	40.39
29	91	Weston-Pellam Park	40.47
30	6	Kingsview Village-The Westway	41.76
31	124	Kennedy Park	42.38
32	30	Brookhaven-Amesbury	43.07
33	4	Rexdale-Kipling	43.76
34	132	Malvern	43.89
35	109	Caledonia-Fairbank	44.65
36	126	Dorset Park	45.12
37	1	West Humber-Clairville	45.78
38	35	Westminster-Branson	46.57
39	74	North St. James Town	47.55

Table 4. Neighbourhood Equity Index Scores

Rank	Neig	hbourhood Number and Name	Score
40	127	Bendale	47.72
41	120	Clairlea-Birchmount	48.34
42	54	O'Connor-Parkview	48.67
43	131	Rouge	48.81
44	119	Wexford-Maryvale	49.47
45	31	Yorkdale-Glen Park	49.53
46	73	Moss Park	50.11
47	78	Kensington-Chinatown	50.70
48	29	Maple Leaf	50.72
49	117	L'Amoreaux	50.78
50	13	Etobicoke West Mall	51.19
51	116	Steeles	51.66
52	53	Henry Farm	51.87
53	65	Greenwood-Coxwell	52.13
54	18	New Toronto	53.21
55	128	Agincourt South-Malvern West	53.43
56	57	Broadview North	53.69
57	45	Parkwoods-Donalda	53.79
58	23	Pelmo Park-Humberlea	53.79
59	92	Corso Italia-Davenport	54.03
60	7	Willowridge-Martingrove-Richview	54.46
61	129	Agincourt North	54.67
62	118	Tam O'Shanter-Sullivan	55.14
63	123	Cliffcrest	55.95
64	32	Englemount-Lawrence	56.01
65	36	Newtonbrook West	56.07
66	8	Humber Heights-Westmount	56.13
67	19	Long Branch	56.26
68	130	Milliken	56.85
69	93	Dovercourt-Wallace Emerson-Junction	57.09
70	107	Oakwood Village	57.33
71	108	Briar Hill-Belgravia	57.81
72	69	Blake-Jones	58.07
73	34	Bathurst Manor	58.41
74	134	Highland Creek	58.77
75	60	Woodbine-Lumsden	59.08
76	70	South Riverdale	59.94
77	84	Little Portugal	60.04
78	81	Trinity-Bellwoods	60.09
79	122	Birchcliffe-Cliffside	60.28

Rank	Neig	hbourhood Number and Name	Score
80	47	Don Valley Village	60.52
81	17	Mimico	62.36
82	49	Bayview Woods-Steeles	62.37
83	14	Islington-City Centre West	62.51
84	11	Eringate-Centennial-West Deane	62.56
85	9	Edenbridge-Humber Valley	63.36
86	20	Alderwood	63.88
87	90	Junction Area	64.27
88	86	Roncesvalles	64.95
89	50	Newtonbrook East	65.18
90	94	Wychwood	65.46
91	58	Old East York	65.61
92	46	Pleasant View	65.72
93	62	East End-Danforth	65.82
94	48	Hillcrest Village	65.84
95	140	Guildwood	66.19
96	114	Lambton Baby Point	66.36
97	83	Dufferin Grove	66.79
98	59	Danforth East York	66.94
99	37	Willowdale West	67.04
100	66	Danforth	67.56
101	75	Church-Yonge Corridor	67.92
102	64	Woodbine Corridor	68.11
103	16	Stonegate-Queensway	69.29
104	33	Clanton Park	69.53
105	51	Willowdale East	69.67
106	133	Centennial Scarborough	70.75
107	52	Bayview Village	71.65
108	80	Palmerston-Little Italy	72.19
109	82	Niagara	72.54
110	42	Banbury-Don Mills	73.19
111	106	Humewood-Cedarvale	73.94
112	71	Cabbagetown-South St. James Town	74.42
113	12	Markland Wood	74.88
114	102	Forest Hill North	74.94
115	79	University	75.07
116	38	Lansing-Westgate	76.15
117	67	Playter Estates-Danforth	76.16
118	104	Mount Pleasant West	76.39
119	10	Princess-Rosethorn	76.57

Rank	Neig	hbourhood Number and Name	Score
120	76	Bay Street Corridor	77.07
121	87	High Park-Swansea	77.14
122	40	St. Andrew-Windfields	77.43
123	95	Annex	78.60
124	88	High Park North	80.58
125	97	Yonge-St. Clair	80.99
126	77	Waterfront Communities-The Island	80.99
127	68	North Riverdale	81.21
128	39	Bedford Park-Nortown	81.55
129	96	Casa Loma	82.31
130	63	The Beaches	82.62
131	41	Bridle Path-Sunnybrook-York Mills	83.04
132	98	Rosedale-Moore Park	83.78
133	56	Leaside-Bennington	85.82
134	89	Runnymede-Bloor West Village	85.85
135	99	Mount Pleasant East	86.04
136	15	Kingsway South	86.19
137	101	Forest Hill South	86.24
138	100	Yonge-Eglinton	88.11
139	103	Lawrence Park South	90.12
140	105	Lawrence Park North	92.05



3.5.4. Calculate Neighbourhood Equity Benchmark

There is no obvious benchmark value under which neighbourhoods are clearly facing greater inequities than other neighbourhoods. As Figure 1 illustrates, when neighbourhood scores are plotted against their ranked order, there are no large gaps between neighbourhoods. Instead, there is a smooth line with no clear breaks differentiating neighbourhoods.



Figure 1: Neighbourhood Equity Score by Ranking

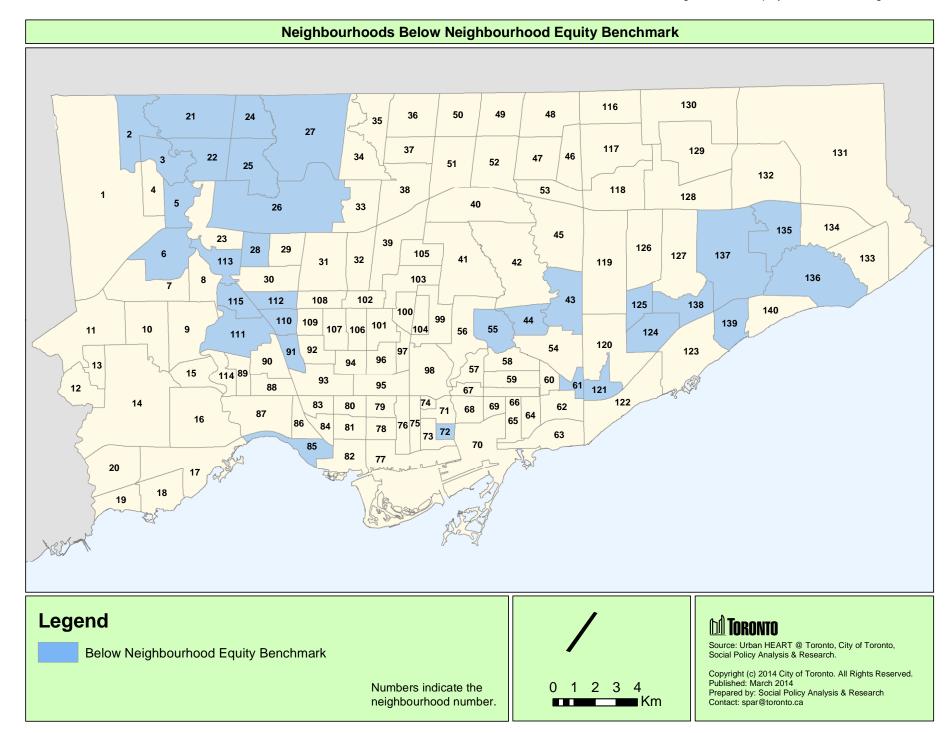
Nevertheless, a benchmark is required to facilitate the selection of neighbourhoods as NIAs. To calculate an objective, quantitative benchmark value, the recommended indicator benchmark values provided by Urban HEART@Toronto were used. These benchmark values were established by the Urban HEART@Toronto Benchmark Working Group and are based on one of four possible benchmarking methods: population quintiles, standard deviations, rate ratios or external markers. Table 5 summarizes the Urban HEART@Toronto recommended benchmarks as well as their weighted values based on the weighting scheme described in Sections 3.5.2 and 3.5.3.

More information on the individual indicator benchmarks can be found in the Urban HEART@Toronto technical documentation at http://www.torontohealthprofiles.ca/urbanheartattoronto.php.

The composite Neighbourhood Equity Benchmark was calculated at 42.89 using the same method used to calculate the Neighbourhood Equity Scores. As illustrated in the map on the next page, 31 out of 140 neighbourhoods in Toronto fall below this benchmark value.

Indicator	Urban HEART@Toronto Benchmark	Standardized Value	Weighted Value
Unemployment	11.3%	0.521	0.055
Low Income	28.1%	0.509	0.043
Social Assistance	15.1%	0.512	0.058
High School Graduation	Medium (Values of "Low" are below benchmark)	0.500	0.037
Marginalization	2.9 (out of 5)	0.792	0.076
Post Secondary Completion	62.1%	0.546	0.060
Municipal Voting Rate	41.4%	0.710	0.035
Community Places for Meeting	8.56 places within 10 min walking distance	0.859	0.020
Walkability	59.48 points (out of 100)	0.693	0.049
Healthy Food Stores	1.36 places within 10 min walking distance	0.929	0.035
Green Space	23.03 spaces	0.885	-0.057
Premature Mortality	271.4 cases per 100,000 pop	0.337	0.014
Mental Health	64.3%	0.658	0.042
Preventable Hospitalizations	292.6 cases per 100,000 pop	0.403	0.031
Diabetes	10.2 cases per 100 pop	0.616	0.072
Weighted Benchmark		0.571	
Neighbourhood Equity Be	42.89		

Table 5. Indicator Benchmark Values



3.6. Verification

To ensure that the Neighbourhood Equity Index accurately reflects key patterns of inequity in Toronto, the NEI was verified by cross-referencing Neighbourhood Equity Scores with data from other relevant social indicators. Though this verification process does not necessarily include an exhaustive list of indicators that could be analyzed, it does include indicators that were identified as important in the TSNS 2020 consultations and are available at a neighbourhood level of geography.

3.6.1. Population Groups

One of the most prevalent concerns raised by stakeholders about the Neighbourhood Equity Index was whether or not it sufficiently captures areas of the city with significant concentrations of equity-seeking groups. This includes children, youth, seniors, newcomers and visible minorities.

The demographic breakdown in Table 6 suggests that with the exception of seniors, neighbourhoods falling below the Neighbourhood Equity Benchmark have higher concentrations of important population subgroups compared to the City of Toronto average. Visible minorities, in particular, are disproportionately concentrated in below-benchmark neighbourhoods, capturing the link between racialization and social and health outcomes.

Population Group	Neighbourhoods Below Benchmark	Rest of Toronto	Toronto Overall
Children 0-14	19%	14%	15%
Youth 15-25	14%	12%	13%
Newcomers	20%	15%	16%
Seniors 65+	13%	15%	14%
Visible minority	66%	44%	49%
Low-income (After-tax LIM)	26%	17%	19%
Unemployed	13%	8%	9%
Social assistance recipients	18%	8%	10%

Table 6. Demographic Snapshot

Source: 2011 National Household Survey, Wellbeing Toronto

3.6.2. Other Social Indicators

Neighbourhood Equity Scores were also checked against a range of other indicators available through the Wellbeing Toronto application (<u>www.toronto.ca/wellbeing</u>). The expectation is that the Neighbourhood Equity Index should be strongly related with a range of important social indicators that are not included in the index. For example, although housing equity and community safety equity indicators were not available to include in the Urban HEART@Toronto model at this time, other proxies for these concepts were checked against the Index.

Table 7 summarizes the Pearson correlation coefficient scores between the Neighbourhood Equity Index and a range of other social indicators. Overall, the Neighbourhood Equity Index is strongly correlated to indicators measuring the suitability of housing, median property value and the number of people waiting for social housing. The NEI is also moderately correlated to the Early Development Instrument, a count of homicides by neighbourhood since 2009, housing affordability and the major crime rate.

Indicator	Correlation	Source
Housing Suitability	0.829	National Household Survey
Median Property Value	0.756	National Household Survey
Social Housing Waiting List	0.599	Housing Connections
Early Development Instrument	0.569	Mothercraft
Homicides Since 2009	0.407	Toronto Star Open Data
Housing Affordability	0.349	National Household Survey
Major Crime Rate	0.301	Wellbeing Toronto / TPS

Table 7. Neighbourhood Equity Index Verification

Source: Wellbeing Toronto; 2011 National Household Survey

The NEI is a good spatial match to these social indicators as well, with housing indicators exhibiting the closest match as can be seen on the maps in Appendix III. Table 8 summarizes these comparisons by showing how many of the 31 under benchmark neighbourhoods match the bottom 31 neighbourhoods for a variety of other social indicators. Housing exhibits the best match, with 77% of the 31 neighbourhoods under the NEI benchmark in the bottom 31 neighbourhoods in terms of housing suitability. Similarly, 74% of the NEI under-benchmark neighbourhoods are in the lowest 31 neighbourhoods in terms of median property value and

55% of the NEI under-benchmark neighbourhoods are in the top 31 neighbourhoods in terms of the number of applicants waiting for social housing.

Table 8. Comparison of NEI Under-Benchmark Neighbourhoods to Other Social Indicators

Indicator	Comparator List	% of Under-Benchmark Neighbourhoods in Comparator List
Housing Suitability Percentage of neighbourhoods with suitable housing	Bottom 31 neighbourhoods	77%
Median Property Value Self-reported property value	Lowest 31 neighbourhoods	74%
Social Housing Waiting List Number of social housing applicants	Top 31 neighbourhoods	55%
Early Development Index Categorized as "Low"	16 neighbourhoods categorized as "low"	69%
Homicides Since 2009 Number of homicides	28 neighbourhoods with 4 or more homicides since 2009	45%
Housing Affordability Percentage of households spending >30% of income on shelter costs	Top 31 neighbourhoods	35%
Major Crime Rate Highest major crime rate (per 10,000 population)	Top 31 neighbourhoods	42%

4. Next Steps

It is always difficult to achieve consensus on a single composite measure of social wellbeing. There are countless indices that attempt to, each with their own advantages and disadvantages. The Neighbourhood Equity Index described here is no different. The NEI was developed with significant consultation, much healthy debate and rigorous statistical evaluation over many months.

The NEI does have limitations and contains opportunities for future improvement. Driven by the need to be immediately implementable, the NEI does not contain some indicators that were suggested through consultations. In particular, high-quality equity indicators at the neighbourhood level for housing, safety and transit were flagged as important when evaluating how neighbourhoods in Toronto are doing. Equity indicators for participation in decision-making, racism and the strength of the community service system were also flagged as very important. Unfortunately, these indicators are not currently available for a neighbourhood-level analysis. There is, however, a significant opportunity to develop these indicators in the future.

Nevertheless, the Neighbourhood Equity Index described here is a suitable scientific and quantitative approach to identifying NIAs that takes into account the availability and inherent limitations of data at the current time. The result of this process is an indicator set that considers carefully the feedback received from Torontonians and well-serves the selection of NIAs for the Toronto Strong Neighbourhoods Strategy 2020.

References

City of Toronto. *Neighbourhood Social Infrastructure in Toronto: Strong Neighbourhoods Task Force Report #4.* City of Toronto. April 2005

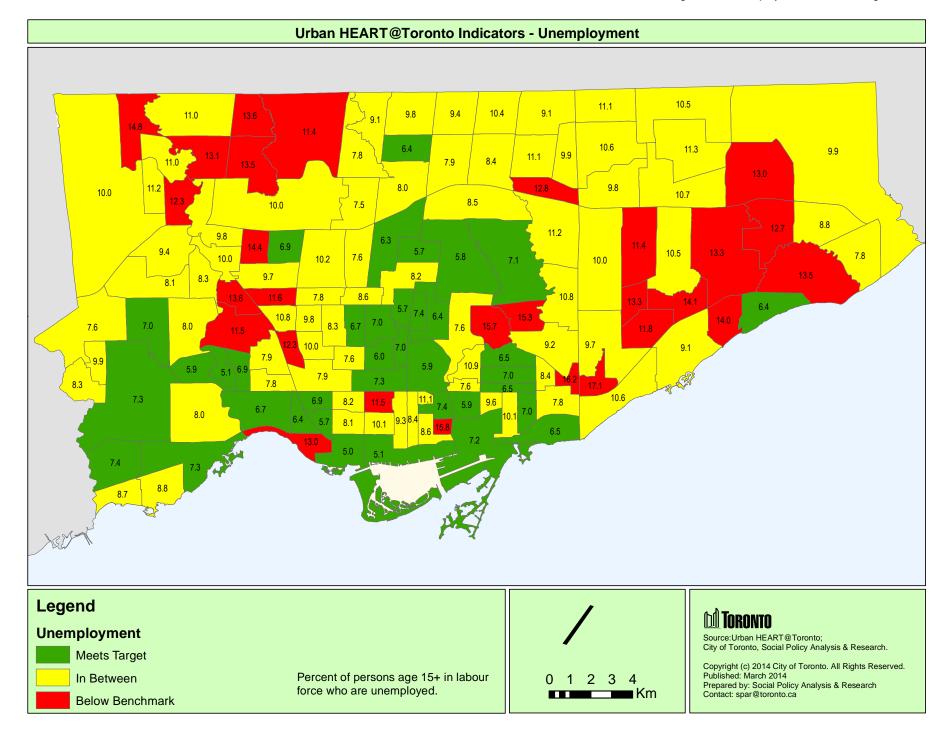
Krishnan, Vijaya. *Constructing an Area-based Socioeconomic Index: A Principal Components Analysis Approach*. Early Child Development Mapping Project Alberta. May 2010.

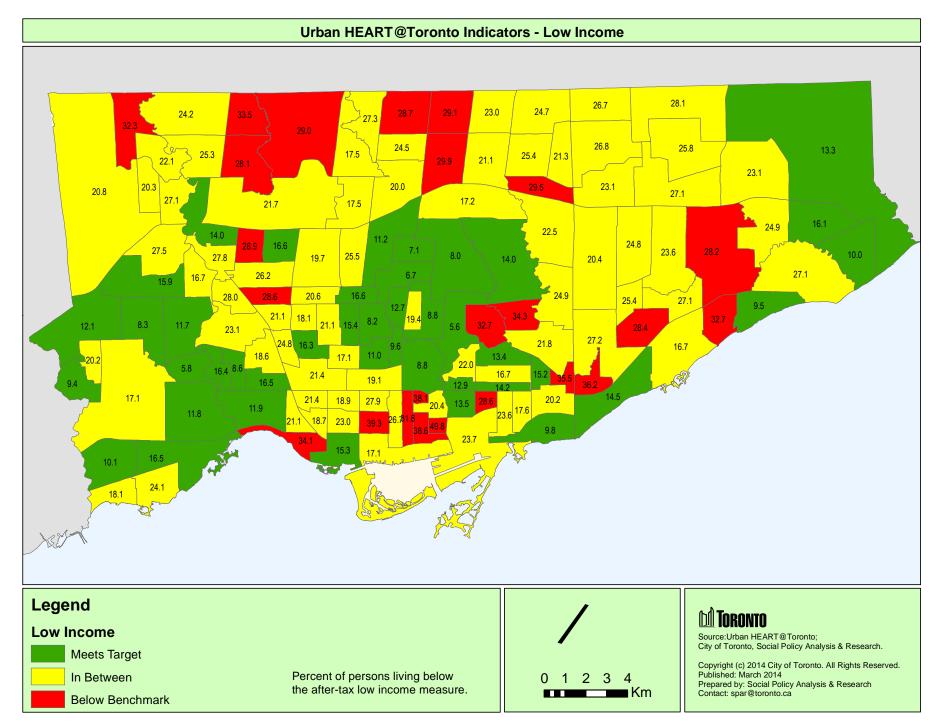
Murdie, Robert, Jennifer Logan and Richard Maaranen. *Eight Canadian Metropolitan Areas: Who Lived Where in 2006?* Cities Centre, University of Toronto. September 2013.

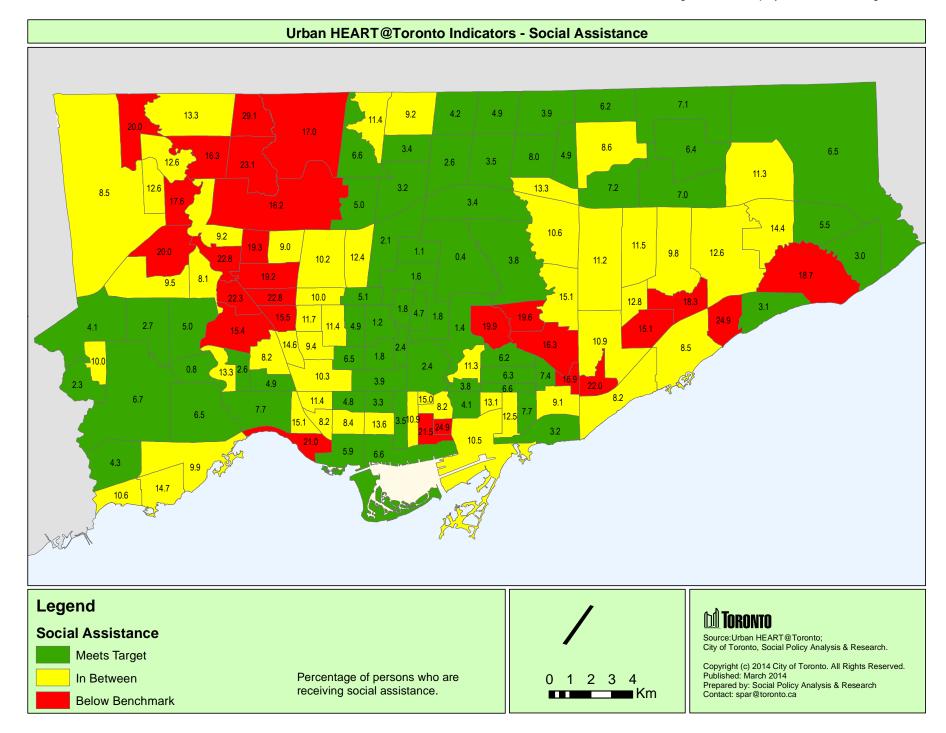
Appendix I. Urban HEART@Toronto Indicators

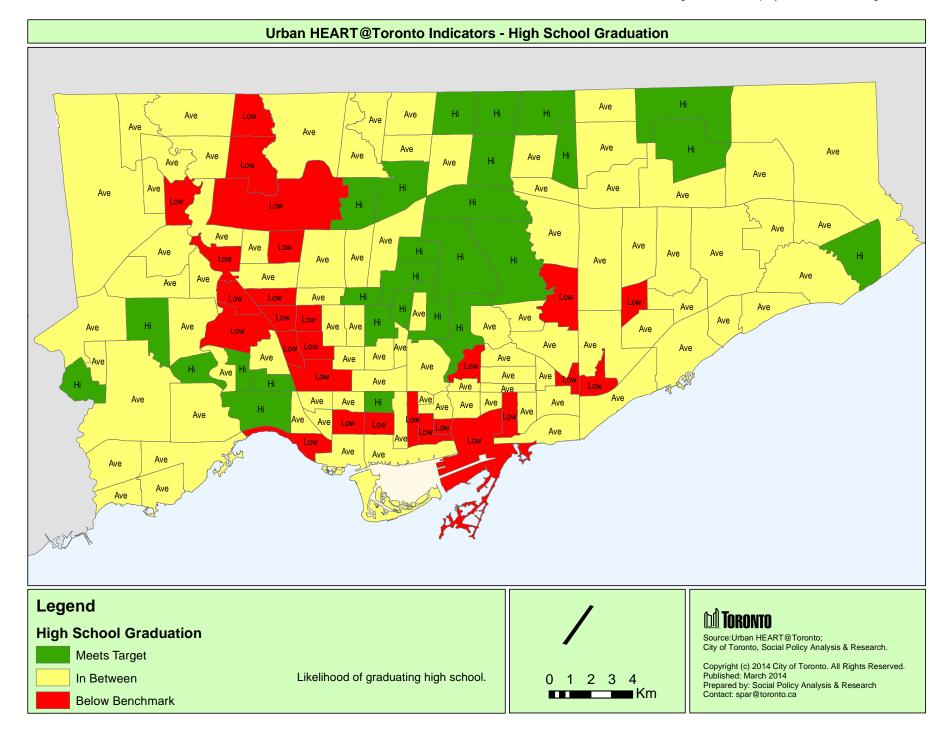
The maps on the following pages illustrate how the 15 indicators contained in the Neighbourhood Equity Index are distributed spatially in Toronto. Collection, analysis and verification of the 15 indicators was conducted by the Urban HEART@Toronto team and was provided to the City of Toronto for use as part of TSNS 2020.

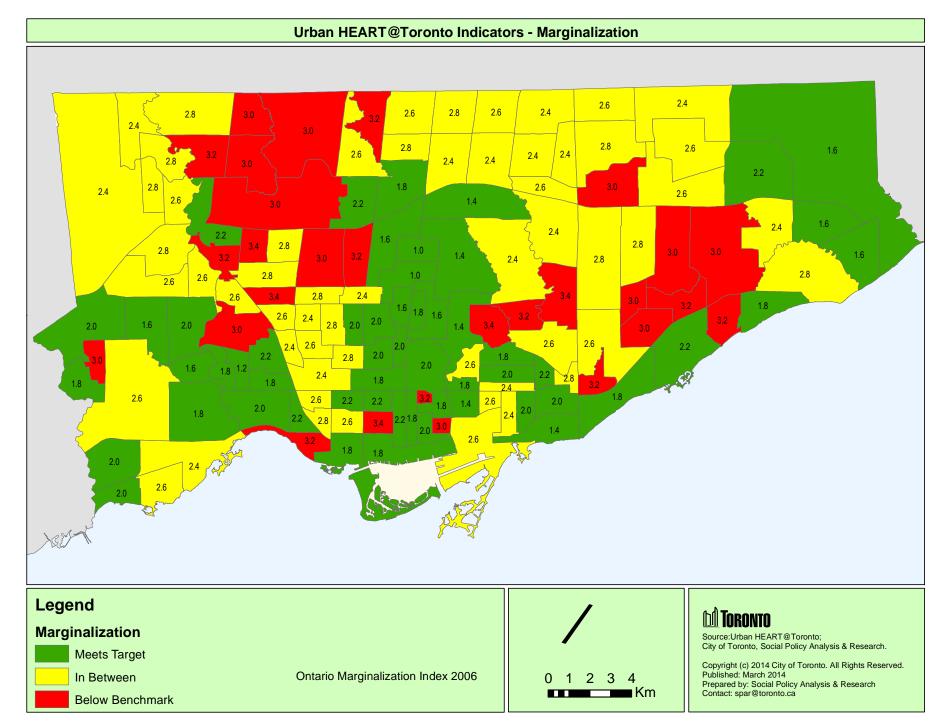
For more information about Urban HEART@Toronto, visit http://www.torontohealthprofiles.ca/urbanheartattoronto.php.

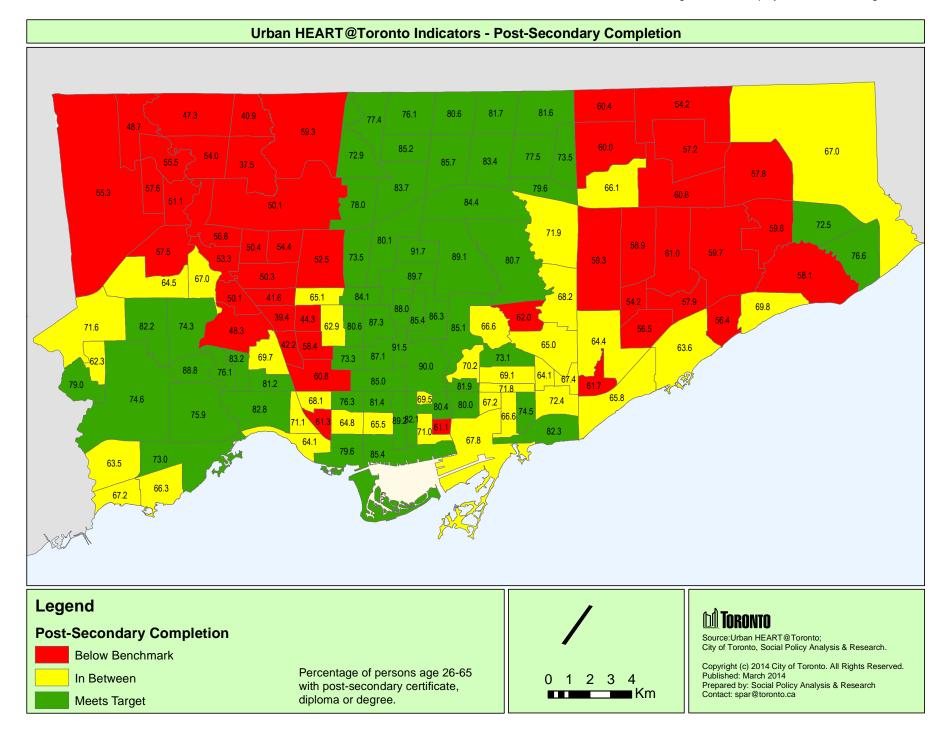


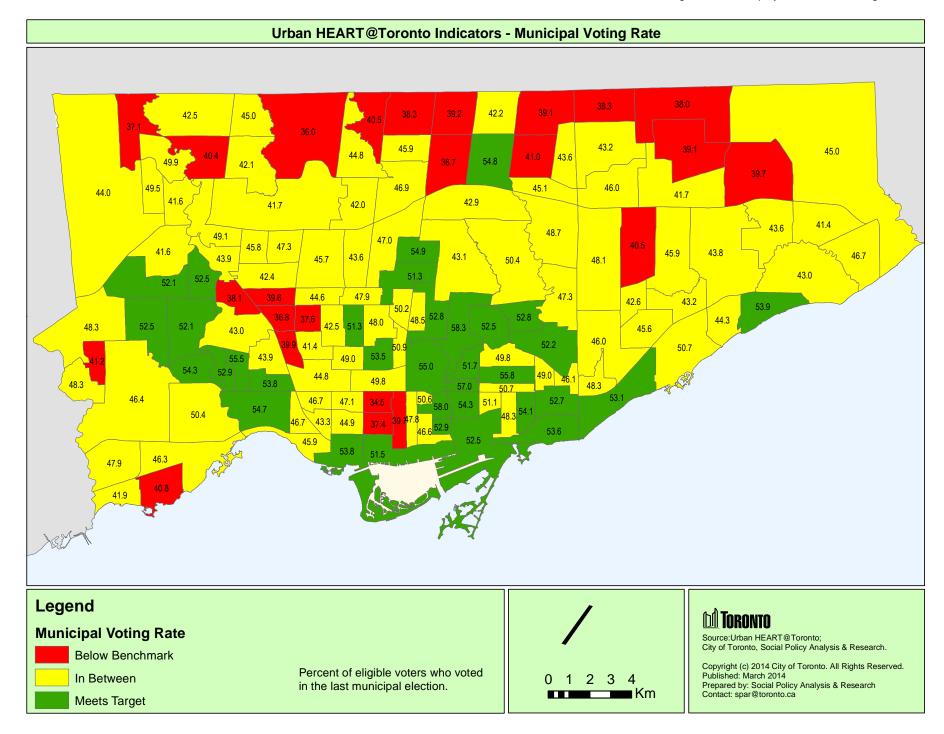


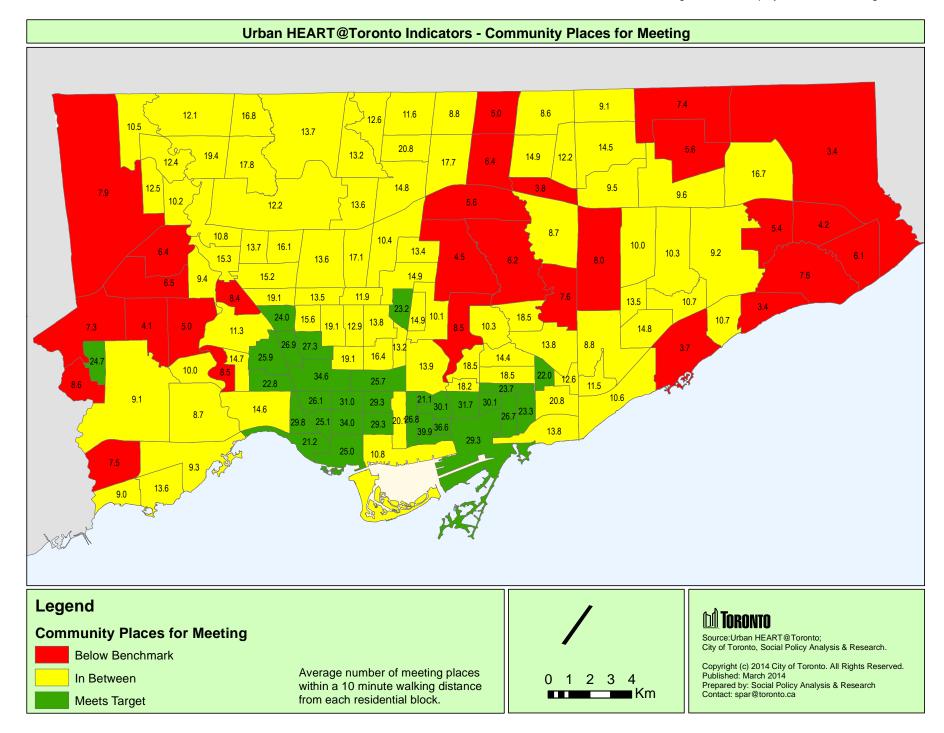


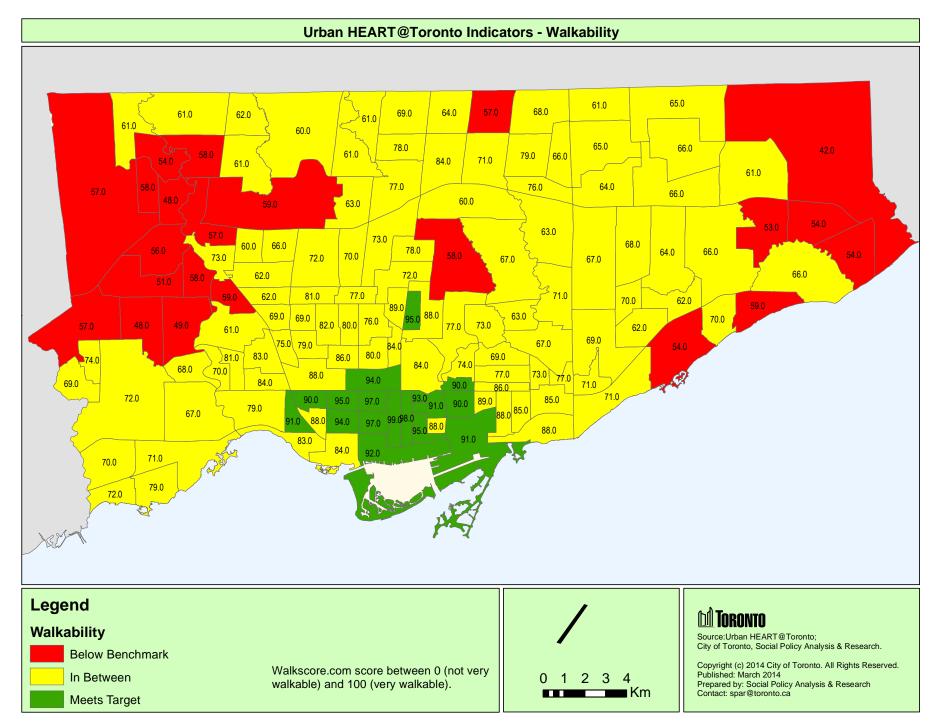


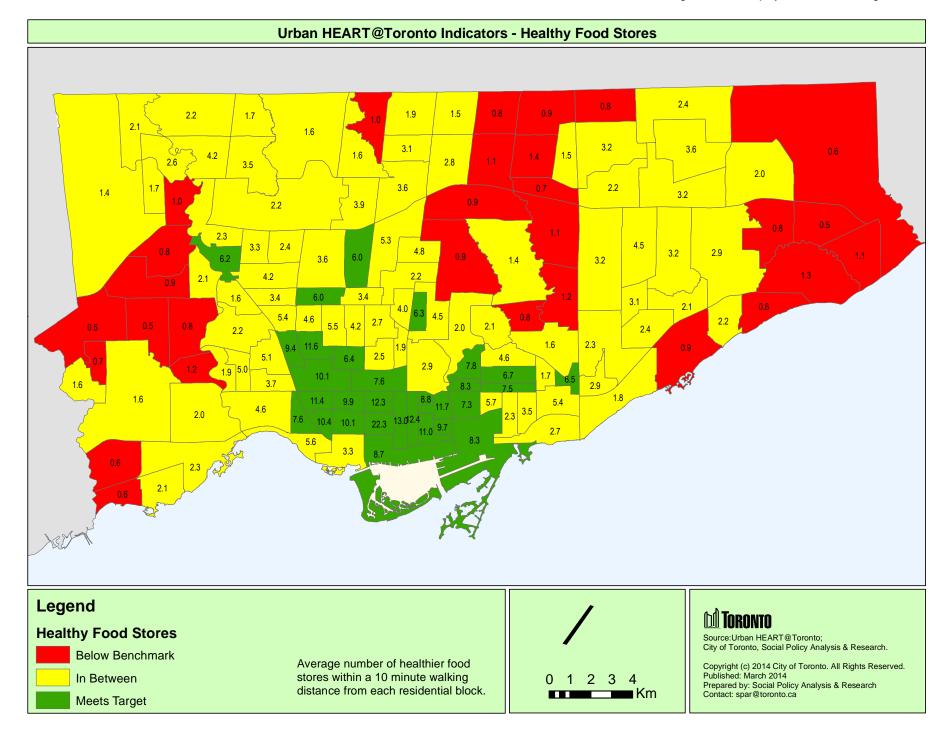


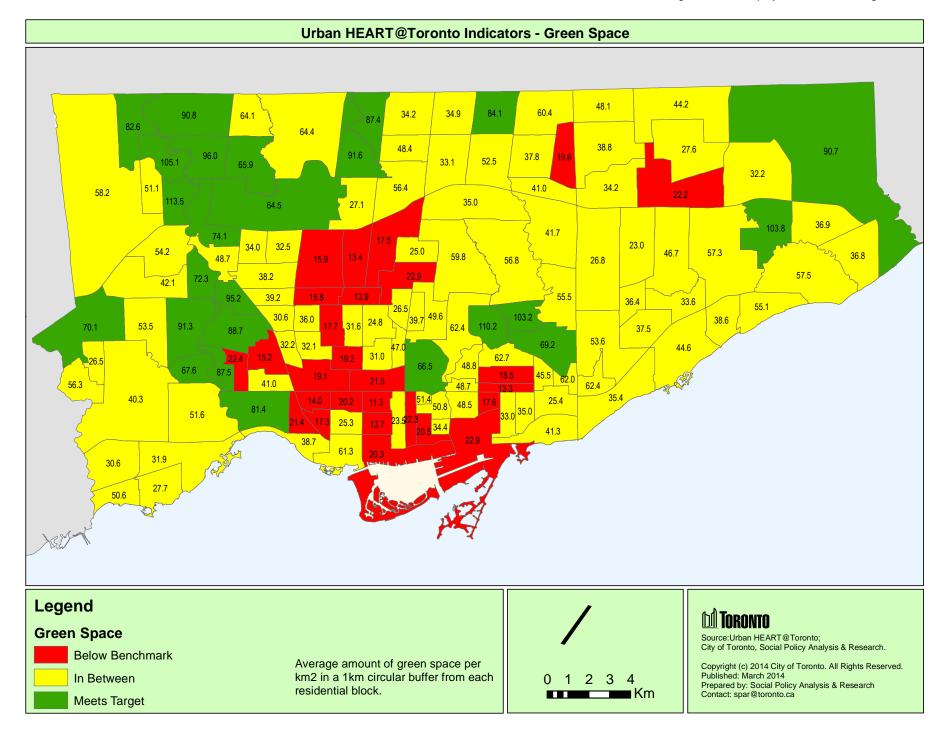


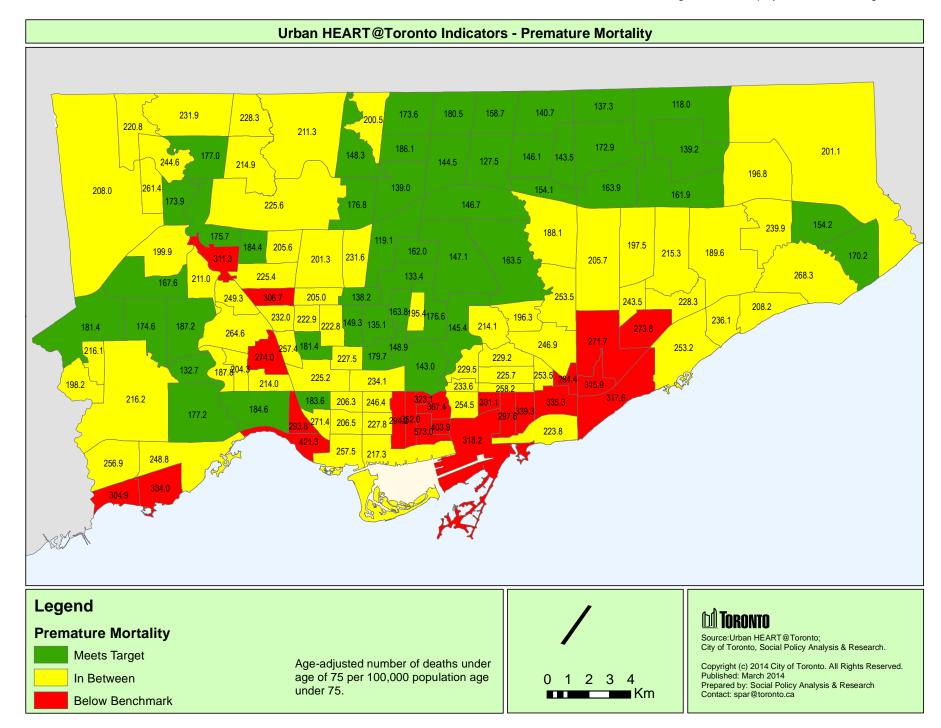


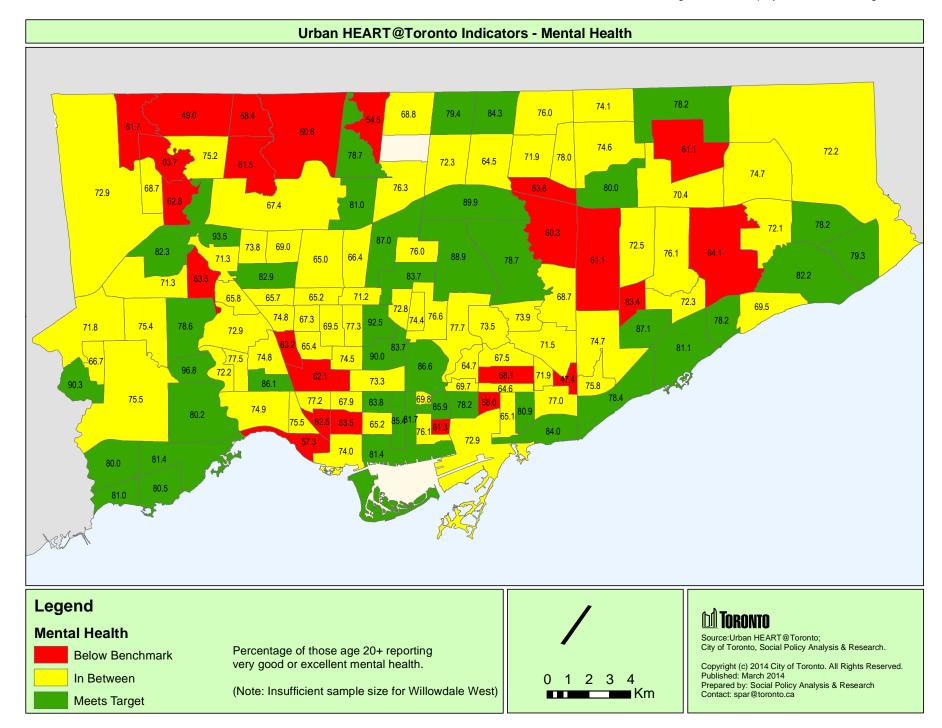


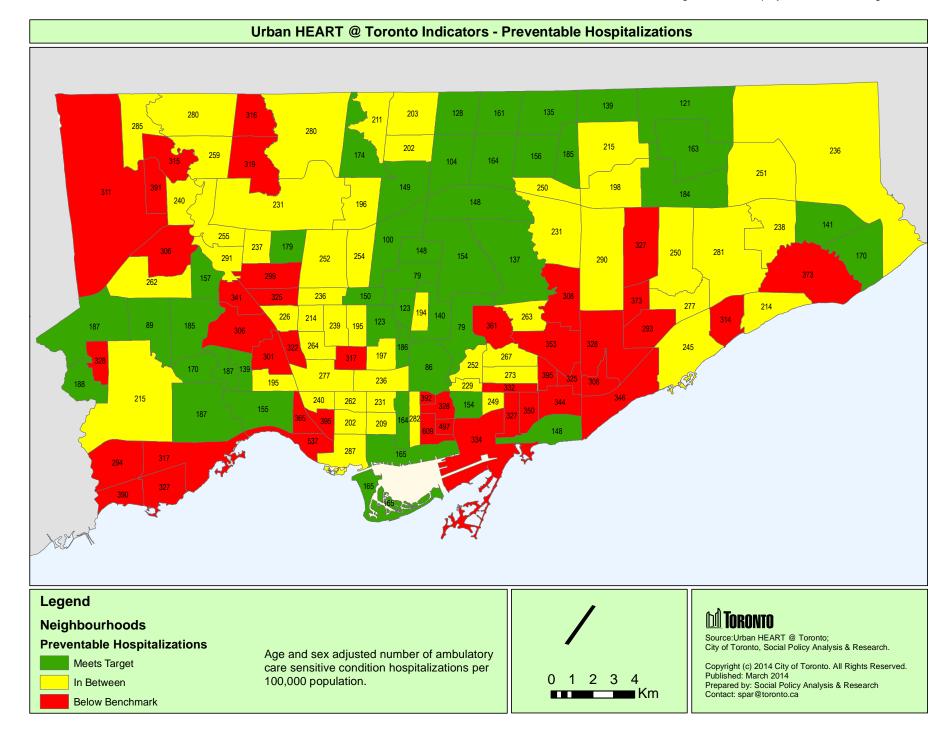


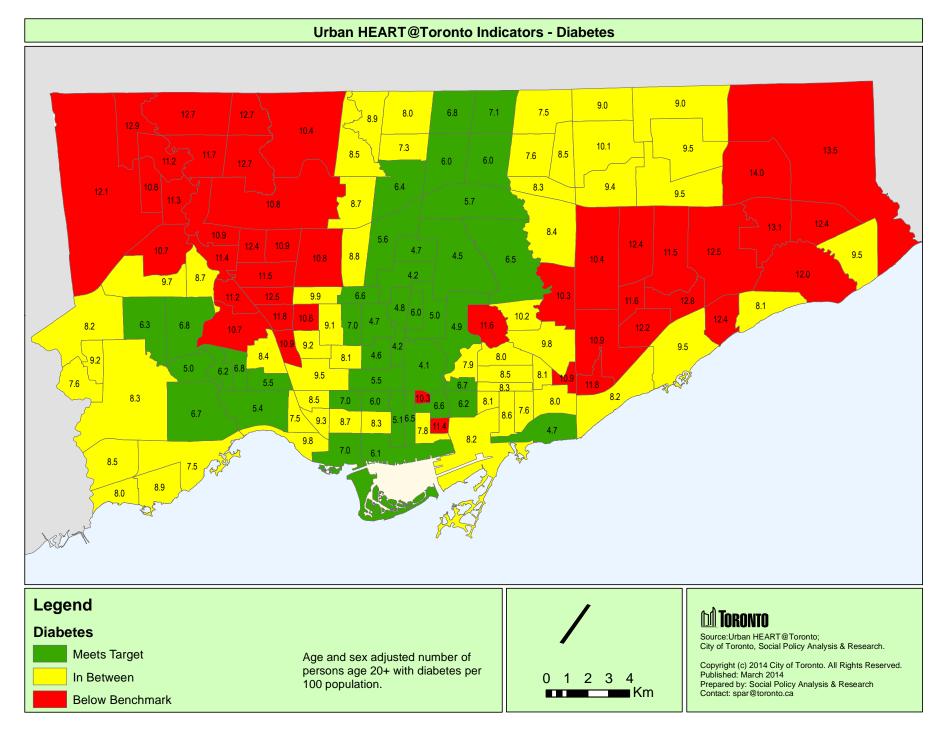












Appendix II. Standardized Urban HEART@Toronto Indicator Values

						(LOWE	er scores	are belle	<i></i>)							
Neig	hbourhood	Unemployment	Low Income	Social Assistance	High School Graduation	Marginalization	Post Secondary	Voting	Meeting Places	Walkability	Healthy Food	Green Space	Mortality	Mental Health	Hospitalizations	Diabetes
1	West Humber- Clairville	0.413	0.344	0.283	0.500	0.583	0.672	0.602	0.876	0.737	0.923	0.541	0.198	0.484	0.437	0.808
2	Mount Olive- Silverstone- Jamestown	0.810	0.604	0.684	0.500	0.583	0.793	0.889	0.805	0.667	0.873	0.302	0.226	0.711	0.389	0.889
3	Thistletown- Beaumond Heights	0.496	0.373	0.425	0.500	0.750	0.649	0.352	0.754	0.789	0.827	0.082	0.278	0.670	0.445	0.717
4	Rexdale-Kipling	0.512	0.332	0.426	0.500	0.750	0.629	0.372	0.750	0.719	0.901	0.611	0.315	0.569	0.589	0.657
5	Elms-Old Rexdale	0.603	0.487	0.601	1.000	0.667	0.749	0.702	0.815	0.895	0.961	0.000	0.123	0.688	0.303	0.727
6	Kingsview Village- The Westway	0.364	0.495	0.684	0.500	0.750	0.631	0.701	0.917	0.754	0.971	0.580	0.180	0.294	0.427	0.667
7	Willowridge- Martingrove-Richview	0.256	0.234	0.318	0.500	0.667	0.502	0.262	0.915	0.842	0.962	0.698	0.109	0.516	0.345	0.566
8	Humber Heights- Westmount	0.273	0.251	0.268	0.500	0.667	0.456	0.245	0.835	0.719	0.871	0.403	0.204	0.674	0.147	0.465
9	Edenbridge-Humber Valley	0.248	0.139	0.161	0.500	0.417	0.321	0.261	0.956	0.877	0.976	0.217	0.152	0.368	0.199	0.273
10	Princess-Rosethorn	0.165	0.062	0.078	0.000	0.250	0.175	0.243	0.979	0.895	1.000	0.587	0.124	0.433	0.018	0.222
11	Eringate-Centennial- West Deane	0.215	0.147	0.129	0.500	0.417	0.371	0.420	0.894	0.737	0.994	0.424	0.139	0.506	0.203	0.414
12	Markland Wood	0.273	0.087	0.065	0.000	0.333	0.234	0.421	0.859	0.526	0.906	0.560	0.176	0.132	0.205	0.354
13	Etobicoke West Mall	0.405	0.329	0.334	0.500	0.833	0.542	0.716	0.417	0.439	0.978	0.851	0.216	0.609	0.470	0.515
14	Islington-City Centre West	0.190	0.261	0.218	0.500	0.667	0.315	0.502	0.844	0.474	0.909	0.716	0.216	0.431	0.256	0.424

(Lower scores are better)

Neig	hbourhood	Unemployment	Low Income	Social Assistance	High School Graduation	Marginalization	Post Secondary	Voting	Meeting Places	Walkability	Healthy Food	Green Space	Mortality	Mental Health	Hospitalizations	Diabetes
15	Kingsway South	0.074	0.005	0.013	0.000	0.250	0.054	0.169	0.819	0.544	0.939	0.449	0.032	0.000	0.172	0.091
16	Stonegate- Queensway	0.248	0.141	0.210	0.500	0.333	0.292	0.333	0.855	0.561	0.874	0.605	0.130	0.336	0.203	0.263
17	Mimico	0.190	0.246	0.332	0.500	0.583	0.345	0.504	0.838	0.491	0.856	0.799	0.287	0.312	0.448	0.343
18	New Toronto	0.314	0.418	0.498	0.500	0.667	0.469	0.736	0.721	0.351	0.869	0.839	0.475	0.330	0.468	0.485
19	Long Branch	0.306	0.283	0.356	0.500	0.417	0.452	0.688	0.846	0.474	0.990	0.615	0.411	0.320	0.587	0.394
20	Alderwood	0.198	0.102	0.137	0.500	0.417	0.520	0.439	0.889	0.509	0.988	0.811	0.305	0.340	0.406	0.444
21	Humber Summit	0.496	0.420	0.448	0.500	0.750	0.819	0.662	0.761	0.667	0.858	0.222	0.250	0.968	0.379	0.869
22	Humbermede	0.669	0.445	0.556	0.500	0.917	0.696	0.750	0.562	0.719	0.701	0.171	0.130	0.437	0.340	0.768
23	Pelmo Park- Humberlea	0.397	0.191	0.305	0.500	0.500	0.644	0.389	0.797	0.737	0.853	0.385	0.127	0.067	0.331	0.687
24	Black Creek	0.711	0.630	1.000	1.000	0.833	0.937	0.560	0.632	0.649	0.901	0.483	0.242	0.777	0.446	0.869
25	Glenfield-Jane Heights	0.702	0.509	0.793	1.000	0.833	1.000	0.679	0.605	0.667	0.758	0.466	0.213	0.715	0.452	0.869
26	Downsview-Roding- CFB	0.413	0.365	0.551	1.000	0.833	0.768	0.698	0.759	0.702	0.861	0.479	0.236	0.595	0.286	0.677
27	York University Heights	0.529	0.530	0.580	0.500	0.833	0.598	0.937	0.719	0.684	0.912	0.480	0.205	0.733	0.380	0.636
28	Rustic	0.777	0.526	0.660	0.500	1.000	0.762	0.526	0.717	0.684	0.770	0.778	0.146	0.466	0.297	0.838
29	Maple Leaf	0.157	0.249	0.300	1.000	0.750	0.688	0.461	0.652	0.579	0.849	0.793	0.193	0.563	0.188	0.687
30	Brookhaven- Amesbury	0.388	0.467	0.657	0.500	0.750	0.764	0.667	0.677	0.649	0.700	0.737	0.236	0.281	0.415	0.747
31	Yorkdale-Glen Park	0.430	0.318	0.342	0.500	0.833	0.723	0.528	0.722	0.474	0.747	0.955	0.183	0.644	0.326	0.677
32	Englemount- Lawrence	0.215	0.450	0.417	0.500	0.917	0.336	0.616	0.624	0.509	0.560	0.979	0.250	0.615	0.331	0.475
33	Clanton Park	0.207	0.269	0.161	0.000	0.500	0.253	0.684	0.721	0.632	0.727	0.845	0.129	0.320	0.221	0.465

Neig	hbourhood	Unemployment	Low Income	Social Assistance	High School Graduation	Marginalization	Post Secondary	Voting	Meeting Places	Walkability	Healthy Food	Green Space	Mortality	Mental Health	Hospitalizations	Diabetes
34	Bathurst Manor	0.231	0.269	0.216	0.500	0.667	0.347	0.567	0.733	0.667	0.913	0.215	0.067	0.366	0.178	0.444
35	Westminster-Branson	0.339	0.492	0.384	0.500	0.917	0.264	0.748	0.747	0.667	0.960	0.255	0.181	0.856	0.249	0.485
36	Newtonbrook West	0.397	0.523	0.307	0.500	0.667	0.288	0.838	0.775	0.526	0.883	0.776	0.122	0.567	0.234	0.394
37	Willowdale West	0.116	0.428	0.105	0.500	0.750	0.120	0.519	0.523	0.368	0.789	0.637	0.150	0.509	0.232	0.323
38	Lansing-Westgate	0.248	0.327	0.097	0.000	0.333	0.148	0.479	0.688	0.386	0.747	0.558	0.046	0.415	0.132	0.232
39	Bedford Park- Nortown	0.107	0.127	0.058	0.500	0.250	0.214	0.474	0.807	0.456	0.612	0.939	0.002	0.198	0.038	0.152
40	St. Andrew- Windfields	0.289	0.263	0.103	0.000	0.167	0.135	0.646	0.941	0.684	0.963	0.768	0.063	0.140	0.130	0.162
41	Bridle Path- Sunnybrook-York Mills	0.066	0.055	0.000	0.000	0.167	0.048	0.639	0.969	0.719	0.965	0.525	0.064	0.160	0.141	0.040
42	Banbury-Don Mills	0.174	0.190	0.119	0.000	0.583	0.203	0.331	0.923	0.561	0.928	0.555	0.100	0.366	0.110	0.242
43	Victoria Village	0.479	0.437	0.512	1.000	1.000	0.434	0.462	0.886	0.491	0.942	0.568	0.298	0.569	0.432	0.626
44	Flemingdon Park	0.851	0.650	0.670	0.500	0.917	0.548	0.230	0.586	0.632	0.970	0.101	0.172	0.464	0.348	0.616
45	Parkwoods-Donalda	0.512	0.382	0.355	0.500	0.583	0.365	0.402	0.856	0.632	0.950	0.703	0.154	0.739	0.286	0.434
46	Pleasant View	0.405	0.354	0.156	0.000	0.583	0.336	0.617	0.758	0.579	0.916	0.919	0.056	0.381	0.200	0.444
47	Don Valley Village	0.504	0.449	0.264	0.500	0.583	0.262	0.728	0.685	0.351	0.929	0.741	0.062	0.504	0.145	0.354
48	Hillcrest Village	0.339	0.433	0.122	0.000	0.583	0.186	0.807	0.857	0.544	0.962	0.519	0.050	0.421	0.105	0.343
49	Bayview Woods- Steeles	0.446	0.395	0.157	0.000	0.667	0.185	0.675	0.956	0.737	0.974	0.287	0.089	0.253	0.155	0.303
50	Newtonbrook East	0.364	0.531	0.131	0.000	0.750	0.205	0.802	0.852	0.614	0.917	0.769	0.137	0.352	0.091	0.273
51	Willowdale East	0.240	0.549	0.077	0.500	0.583	0.111	0.909	0.607	0.263	0.810	0.786	0.058	0.496	0.046	0.192
52	Bayview Village	0.281	0.351	0.109	0.000	0.583	0.153	0.148	0.919	0.491	0.952	0.597	0.021	0.654	0.160	0.192

Neig	hbourhood	Unemployment	Low Income	Social Assistance	High School Graduation	Marginalization	Post Secondary	Voting	Meeting Places	Walkability	Healthy Food	Green Space	Mortality	Mental Health	Hospitalizations	Diabetes
53	Henry Farm	0.645	0.540	0.448	0.500	0.667	0.223	0.553	0.990	0.404	0.980	0.709	0.079	0.668	0.323	0.424
54	O'Connor-Parkview	0.347	0.365	0.554	0.500	0.667	0.493	0.257	0.716	0.561	0.913	0.433	0.283	0.512	0.518	0.576
55	Thorncliffe Park	0.884	0.612	0.679	0.500	1.000	0.463	0.244	0.811	0.456	0.872	0.032	0.211	0.472	0.533	0.758
56	Leaside-Bennington	0.215	0.000	0.034	0.000	0.167	0.122	0.000	0.859	0.386	0.876	0.500	0.060	0.387	0.000	0.081
57	Broadview North	0.488	0.371	0.380	1.000	0.667	0.397	0.280	0.587	0.439	0.416	0.633	0.245	0.650	0.327	0.384
58	Old East York	0.124	0.176	0.203	0.500	0.333	0.343	0.358	0.700	0.526	0.667	0.497	0.244	0.593	0.354	0.394
59	Danforth East York	0.165	0.251	0.204	0.500	0.417	0.417	0.106	0.586	0.386	0.498	0.929	0.237	0.783	0.366	0.444
60	Woodbine-Lumsden	0.281	0.217	0.245	0.500	0.500	0.509	0.392	0.491	0.456	0.902	0.666	0.298	0.504	0.596	0.404
61	Crescent Town	0.926	0.676	0.575	1.000	0.750	0.448	0.512	0.748	0.386	0.516	0.504	0.366	1.000	0.464	0.687
62	East End-Danforth	0.231	0.330	0.304	0.500	0.417	0.356	0.235	0.522	0.246	0.606	0.862	0.478	0.401	0.500	0.394
63	The Beaches	0.124	0.096	0.096	0.500	0.167	0.173	0.200	0.714	0.193	0.825	0.706	0.233	0.259	0.129	0.061
64	Woodbine Corridor	0.165	0.272	0.255	0.500	0.417	0.317	0.179	0.455	0.246	0.759	0.768	0.486	0.322	0.510	0.354
65	Greenwood-Coxwell	0.421	0.408	0.422	1.000	0.583	0.463	0.420	0.362	0.193	0.851	0.788	0.395	0.642	0.467	0.455
66	Danforth	0.124	0.195	0.217	0.500	0.583	0.367	0.318	0.445	0.228	0.441	0.980	0.308	0.652	0.478	0.424
67	Playter Estates- Danforth	0.215	0.166	0.117	0.500	0.333	0.181	0.057	0.595	0.158	0.372	0.634	0.254	0.549	0.283	0.263
68	North Riverdale	0.074	0.180	0.129	0.500	0.167	0.216	0.169	0.224	0.158	0.457	0.636	0.300	0.377	0.141	0.212
69	Blake-Jones	0.380	0.520	0.444	0.500	0.667	0.452	0.302	0.269	0.175	0.581	0.939	0.402	0.785	0.320	0.404
70	South Riverdale	0.182	0.410	0.352	1.000	0.667	0.441	0.245	0.290	0.140	0.372	0.886	0.440	0.484	0.480	0.414
71	Cabbagetown-South St. James Town	0.198	0.335	0.271	0.500	0.333	0.208	0.015	0.269	0.140	0.106	0.613	0.548	0.221	0.469	0.253
72	Regent Park	0.893	1.000	0.855	1.000	0.833	0.565	0.227	0.091	0.193	0.265	0.774	0.628	0.785	0.788	0.737
73	Moss Park	0.298	0.746	0.737	1.000	0.417	0.382	0.493	0.000	0.070	0.162	0.909	1.000	0.419	1.000	0.374

Neigl	hbourhood	Unemployment	Low Income	Social Assistance	High School Graduation	Marginalization	Post Secondary	Voting	Meeting Places	Walkability	Healthy Food	Green Space	Mortality	Mental Health	Hospitalizations	Diabetes
74	North St. James Town	0.504	0.735	0.510	0.500	0.917	0.410	0.324	0.516	0.105	0.335	0.608	0.451	0.547	0.591	0.626
75	Church-Yonge Corridor	0.281	0.592	0.366	1.000	0.333	0.177	0.444	0.358	0.018	0.048	0.892	0.514	0.306	0.382	0.242
76	Bay Street Corridor	0.355	0.476	0.108	0.500	0.500	0.046	0.782	0.542	0.000	0.000	0.881	0.387	0.231	0.159	0.101
77	Waterfront Communities-The Island	0.008	0.260	0.216	0.500	0.333	0.116	0.288	0.798	0.123	0.345	0.912	0.218	0.312	0.161	0.202
78	Kensington- Chinatown	0.421	0.761	0.461	1.000	1.000	0.483	0.877	0.291	0.035	0.000	0.976	0.241	0.640	0.245	0.424
79	University	0.537	0.505	0.101	0.000	0.500	0.190	1.000	0.292	0.035	0.057	1.000	0.282	0.263	0.287	0.192
80	Palmerston-Little Italy	0.264	0.302	0.154	0.500	0.500	0.284	0.470	0.244	0.070	0.249	0.913	0.194	0.585	0.346	0.293
81	Trinity-Bellwoods	0.256	0.394	0.279	1.000	0.667	0.496	0.563	0.161	0.088	0.233	0.862	0.195	0.674	0.232	0.465
82	Niagara	0.000	0.220	0.192	0.500	0.333	0.223	0.190	0.408	0.263	0.777	0.511	0.307	0.462	0.392	0.293
83	Dufferin Grove	0.157	0.358	0.383	0.500	0.667	0.435	0.488	0.379	0.158	0.124	0.973	0.144	0.397	0.304	0.444
84	Little Portugal	0.058	0.295	0.270	0.500	0.750	0.561	0.630	0.407	0.193	0.208	0.941	0.337	0.694	0.597	0.525
85	South Parkdale	0.661	0.643	0.720	1.000	0.917	0.509	0.523	0.512	0.281	0.586	0.731	0.667	0.800	0.865	0.576
86	Roncesvalles	0.116	0.350	0.512	0.500	0.500	0.380	0.488	0.276	0.140	0.430	0.901	0.386	0.431	0.539	0.343
87	High Park-Swansea	0.140	0.143	0.255	0.000	0.417	0.164	0.153	0.694	0.351	0.671	0.314	0.146	0.443	0.142	0.131
88	High Park North	0.231	0.246	0.158	0.000	0.333	0.194	0.190	0.468	0.263	0.743	0.710	0.211	0.217	0.219	0.141
89	Runnymede-Bloor West Village	0.157	0.068	0.076	0.000	0.083	0.157	0.117	0.692	0.316	0.640	0.891	0.190	0.391	0.112	0.273
90	Junction Area	0.240	0.294	0.273	0.500	0.500	0.406	0.605	0.384	0.281	0.629	0.962	0.343	0.445	0.420	0.434
91	Weston-Pellam Park	0.603	0.433	0.495	1.000	0.583	0.913	0.773	0.356	0.421	0.290	0.796	0.306	0.680	0.459	0.687
92	Corso Italia- Davenport	0.413	0.241	0.314	1.000	0.667	0.614	0.709	0.346	0.351	0.107	0.796	0.139	0.636	0.348	0.515

Neigl	nbourhood	Unemployment	Low Income	Social Assistance	High School Graduation	Marginalization	Post Secondary	Voting	Meeting Places	Walkability	Healthy Food	Green Space	Mortality	Mental Health	Hospitalizations	Diabetes
93	Dovercourt-Wallace Emerson-Junction	0.240	0.357	0.344	1.000	0.583	0.570	0.569	0.144	0.193	0.233	0.923	0.236	0.702	0.373	0.545
94	Wychwood	0.215	0.261	0.213	0.500	0.750	0.339	0.391	0.570	0.228	0.528	0.923	0.241	0.451	0.448	0.404
95	Annex	0.190	0.307	0.123	0.500	0.333	0.124	0.357	0.390	0.088	0.428	0.900	0.255	0.476	0.295	0.141
96	Casa Loma	0.083	0.122	0.048	0.500	0.417	0.085	0.201	0.643	0.333	0.839	0.807	0.136	0.138	0.222	0.051
97	Yonge-St. Clair	0.165	0.092	0.070	0.500	0.417	0.004	0.313	0.731	0.263	0.887	0.651	0.068	0.265	0.202	0.010
98	Rosedale-Moore Park	0.074	0.073	0.070	0.500	0.417	0.031	0.141	0.713	0.263	0.806	0.460	0.056	0.206	0.013	0.000
99	Mount Pleasant East	0.116	0.072	0.048	0.000	0.250	0.100	0.231	0.817	0.193	0.677	0.625	0.129	0.409	0.115	0.091
100	Yonge-Eglinton	0.058	0.161	0.048	0.000	0.250	0.068	0.339	0.458	0.175	0.715	0.851	0.101	0.486	0.082	0.071
101	Forest Hill South	0.165	0.060	0.028	0.000	0.417	0.081	0.433	0.715	0.404	0.822	0.868	0.038	0.087	0.082	0.061
102	Forest Hill North	0.298	0.249	0.162	0.000	0.583	0.140	0.437	0.768	0.386	0.765	0.975	0.044	0.518	0.134	0.253
103	Lawrence Park South	0.264	0.026	0.041	0.000	0.000	0.037	0.297	0.685	0.474	0.859	0.887	0.034	0.265	0.000	0.010
104	Mount Pleasant West	0.198	0.311	0.149	0.500	0.333	0.116	0.411	0.686	0.070	0.532	0.722	0.170	0.453	0.216	0.192
105	Lawrence Park North	0.058	0.033	0.025	0.000	0.000	0.000	0.142	0.727	0.368	0.657	0.866	0.097	0.421	0.129	0.061
106	Humewood- Cedarvale	0.140	0.222	0.158	0.500	0.417	0.205	0.293	0.740	0.333	0.698	0.802	0.069	0.395	0.218	0.293
107	Oakwood Village	0.273	0.351	0.385	0.500	0.750	0.531	0.664	0.571	0.298	0.601	0.937	0.230	0.553	0.301	0.505
108	Briar Hill-Belgravia	0.231	0.340	0.335	0.500	0.750	0.491	0.577	0.724	0.316	0.556	0.956	0.191	0.640	0.296	0.586
109	Caledonia-Fairbank	0.397	0.283	0.394	1.000	0.583	0.875	0.869	0.666	0.526	0.669	0.758	0.231	0.597	0.255	0.657
110	Keelesdale-Eglinton West	0.479	0.350	0.528	1.000	0.667	0.965	0.902	0.435	0.526	0.606	0.811	0.251	0.445	0.277	0.778
111	Rockcliffe-Smythe	0.537	0.397	0.522	1.000	0.833	0.801	0.643	0.785	0.667	0.865	0.243	0.322	0.484	0.428	0.667
112	Beechborough- Greenbrook	0.545	0.520	0.780	1.000	1.000	0.924	0.785	0.569	0.649	0.767	0.727	0.415	0.630	0.463	0.848

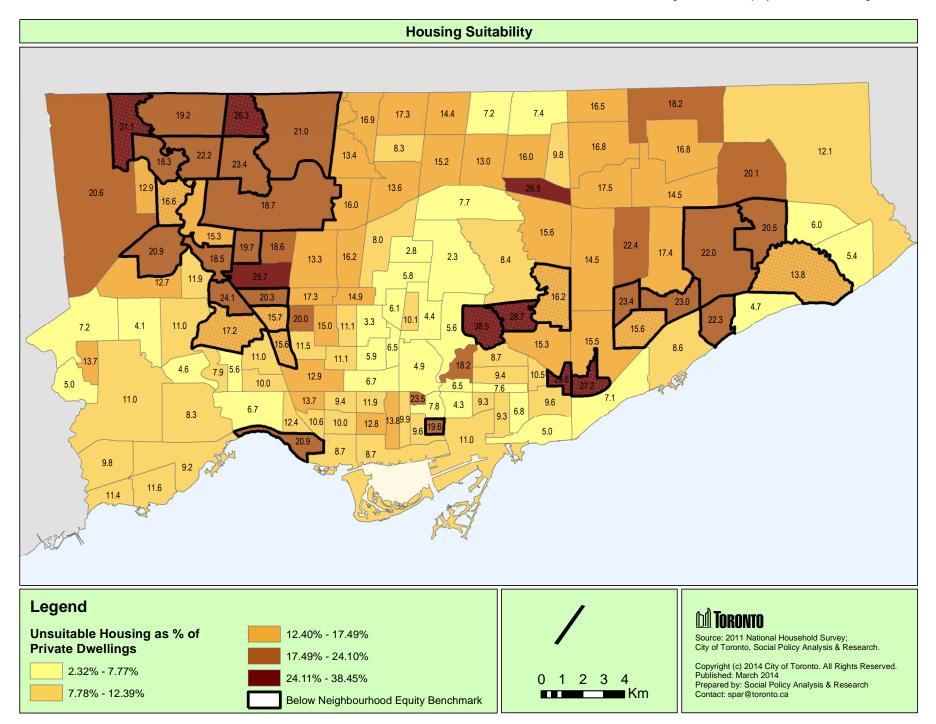
Neigł	nbourhood	Unemployment	Low Income	Social Assistance	High School Graduation	Marginalization	Post Secondary	Voting	Meeting Places	Walkability	Healthy Food	Green Space	Mortality	Mental Health	Hospitalizations	Diabetes
113	Weston	0.413	0.502	0.783	1.000	0.917	0.708	0.603	0.675	0.456	0.543	0.634	0.425	0.516	0.401	0.737
114	Lambton Baby Point	0.008	0.244	0.448	0.500	0.333	0.288	0.230	0.860	0.509	0.889	0.255	0.153	0.498	0.204	0.212
115	Mount Dennis	0.711	0.508	0.765	1.000	0.667	0.768	0.848	0.863	0.702	0.912	0.179	0.289	0.628	0.495	0.717
116	Steeles	0.504	0.478	0.201	0.500	0.667	0.577	0.841	0.844	0.667	0.975	0.640	0.042	0.460	0.113	0.495
117	L'Amoreaux	0.463	0.480	0.284	0.500	0.750	0.585	0.633	0.695	0.596	0.782	0.731	0.121	0.449	0.256	0.606
118	Tam O'Shanter- Sullivan	0.397	0.396	0.237	0.500	0.833	0.472	0.519	0.834	0.614	0.858	0.776	0.101	0.340	0.224	0.535
119	Wexford/Maryvale	0.413	0.334	0.375	0.500	0.750	0.598	0.430	0.875	0.561	0.781	0.848	0.193	0.723	0.397	0.636
120	Clairlea-Birchmount	0.388	0.489	0.364	0.500	0.667	0.504	0.517	0.853	0.526	0.851	0.586	0.338	0.447	0.469	0.687
121	Oakridge	1.000	0.691	0.752	1.000	0.917	0.554	0.422	0.778	0.491	0.809	0.500	0.435	0.425	0.432	0.778
122	Birchcliffe-Cliffside	0.463	0.202	0.271	0.500	0.333	0.478	0.218	0.804	0.491	0.896	0.764	0.439	0.372	0.503	0.414
123	Cliffcrest	0.339	0.252	0.284	0.500	0.500	0.518	0.320	0.991	0.789	0.963	0.674	0.297	0.318	0.313	0.545
124	Kennedy Park	0.562	0.516	0.514	0.500	0.833	0.649	0.532	0.689	0.649	0.845	0.744	0.342	0.196	0.404	0.818
125	Ionview	0.686	0.447	0.432	1.000	0.833	0.692	0.658	0.723	0.509	0.793	0.754	0.276	0.676	0.554	0.758
126	Dorset Park	0.529	0.434	0.387	0.500	0.750	0.605	0.749	0.820	0.544	0.680	0.885	0.175	0.492	0.469	0.838
127	Bendale	0.455	0.407	0.327	0.500	0.833	0.566	0.521	0.811	0.614	0.779	0.653	0.214	0.419	0.322	0.747
128	Agincourt South- Malvern West	0.471	0.487	0.230	0.500	0.667	0.574	0.698	0.829	0.579	0.780	0.894	0.096	0.534	0.197	0.545
129	Agincourt North	0.521	0.457	0.208	0.000	0.667	0.637	0.808	0.939	0.579	0.753	0.841	0.047	0.723	0.159	0.545
130	Milliken	0.455	0.508	0.232	0.000	0.583	0.692	0.851	0.890	0.596	0.843	0.678	0.000	0.377	0.079	0.495
131	Rouge	0.405	0.173	0.213	0.500	0.250	0.456	0.561	1.000	1.000	0.992	0.223	0.183	0.498	0.295	0.949
132	Malvern	0.661	0.397	0.379	0.500	0.500	0.625	0.779	0.637	0.667	0.874	0.796	0.173	0.447	0.324	1.000
133	Centennial	0.231	0.101	0.092	0.000	0.250	0.279	0.487	0.926	0.789	0.947	0.750	0.115	0.354	0.172	0.545

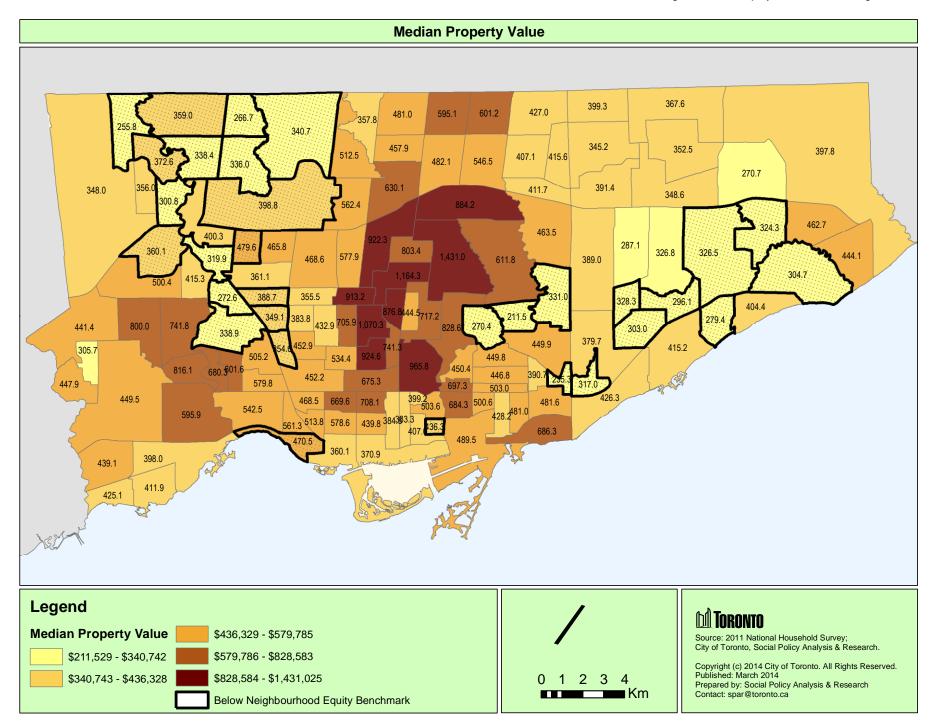
Neigh	nbourhood	Unemployment	Low Income	Social Assistance	High School Graduation	Marginalization	Post Secondary	Voting	Meeting Places	Walkability	Healthy Food	Green Space	Mortality	Mental Health	Hospitalizations	Diabetes
40.4	Scarborough	0.044	0.000	0.470	0 500	0.050	0.054	0.740	0.077	0.700	4 0 0 0	0.750	0.000	0.077	0.447	0.000
134	Highland Creek	0.314	0.238	0.178	0.500	0.250	0.354	0.710	0.977	0.789	1.000	0.750	0.080	0.377	0.117	0.838
135	Morningside	0.636	0.437	0.488	0.500	0.583	0.592	0.616	0.947	0.807	0.971	0.095	0.268	0.500	0.300	0.909
136	West Hill	0.702	0.486	0.640	0.500	0.750	0.620	0.643	0.886	0.579	0.930	0.548	0.330	0.296	0.556	0.798
137	Woburn	0.686	0.512	0.427	0.500	0.833	0.590	0.610	0.842	0.579	0.807	0.550	0.157	0.662	0.381	0.848
138	Eglinton East	0.752	0.485	0.623	0.500	0.917	0.624	0.635	0.799	0.649	0.866	0.781	0.242	0.496	0.373	0.879
139	Scarborough Village	0.744	0.613	0.854	0.500	0.917	0.651	0.587	0.801	0.509	0.865	0.733	0.260	0.377	0.443	0.838
140	Guildwood	0.116	0.089	0.095	0.500	0.333	0.404	0.184	0.999	0.702	0.992	0.571	0.198	0.553	0.255	0.404

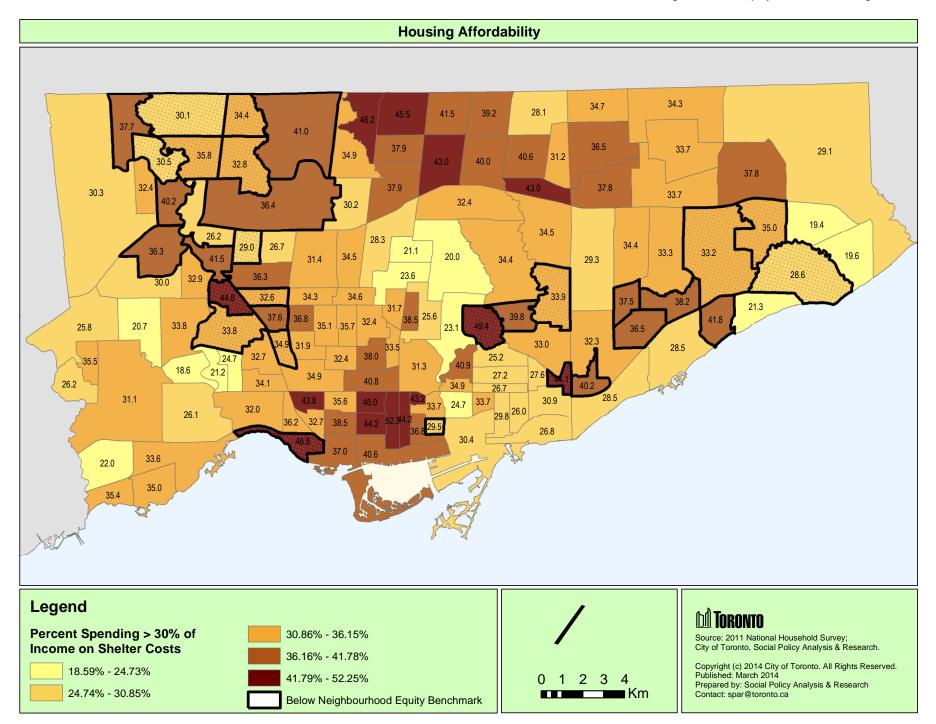
Note: Urban HEART@Toronto did not assign a score for Mental Health to Willowdale West (#37) due to insufficient sample size. For the purposes of the NIA selection process, the neighbourhood was assigned the average mental health score of the 6 surrounding neighbourhoods.

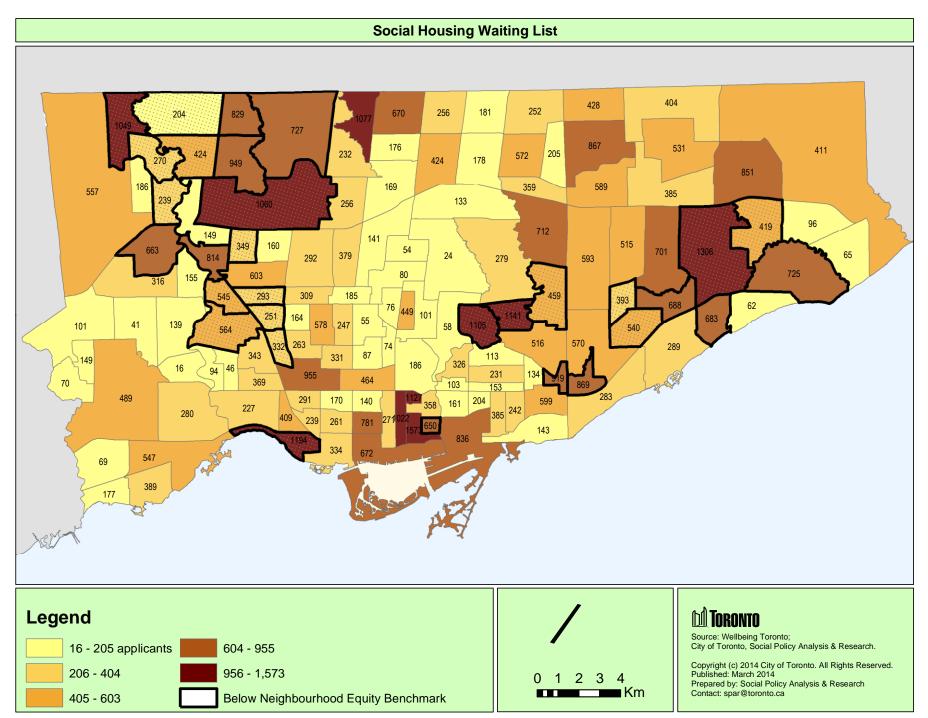
Appendix III. Cross-Reference Social Indicators

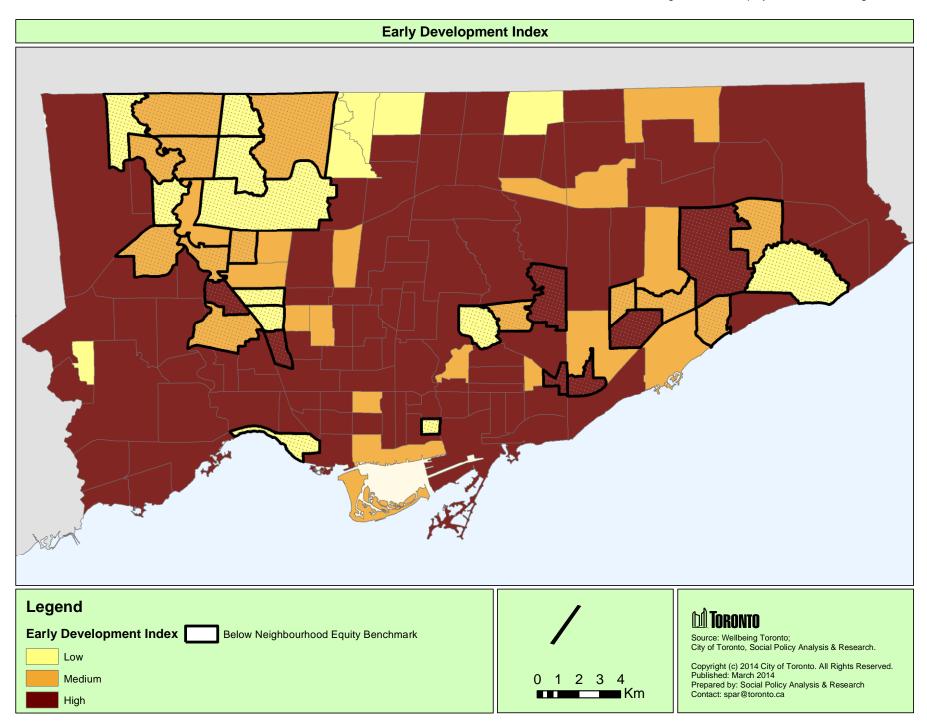
The maps on the following pages illustrate how other social indicators not included in the NEI are distributed spatially in Toronto.

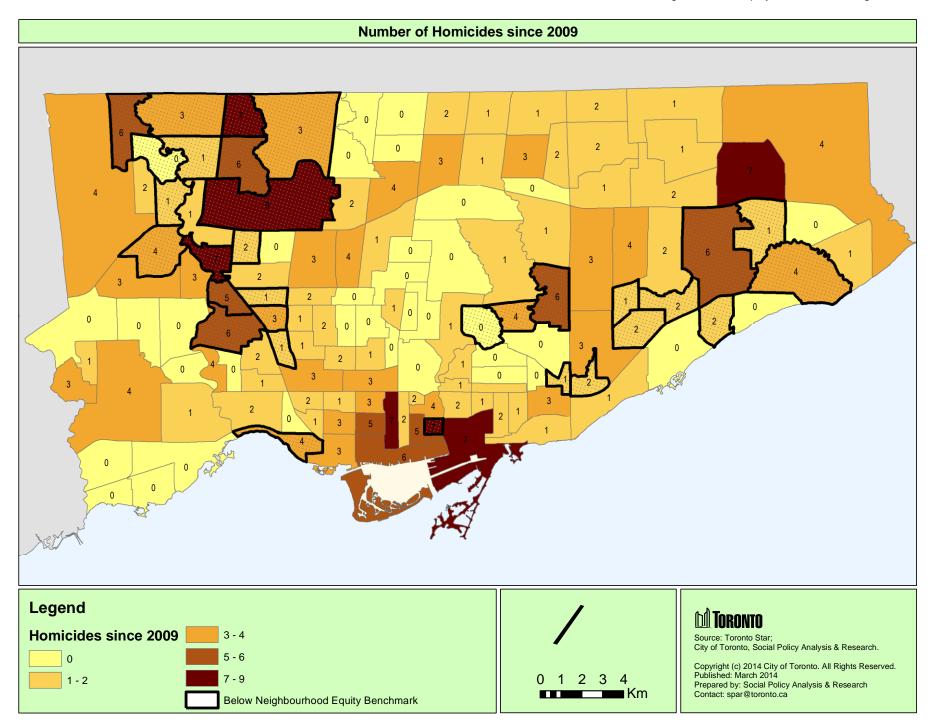


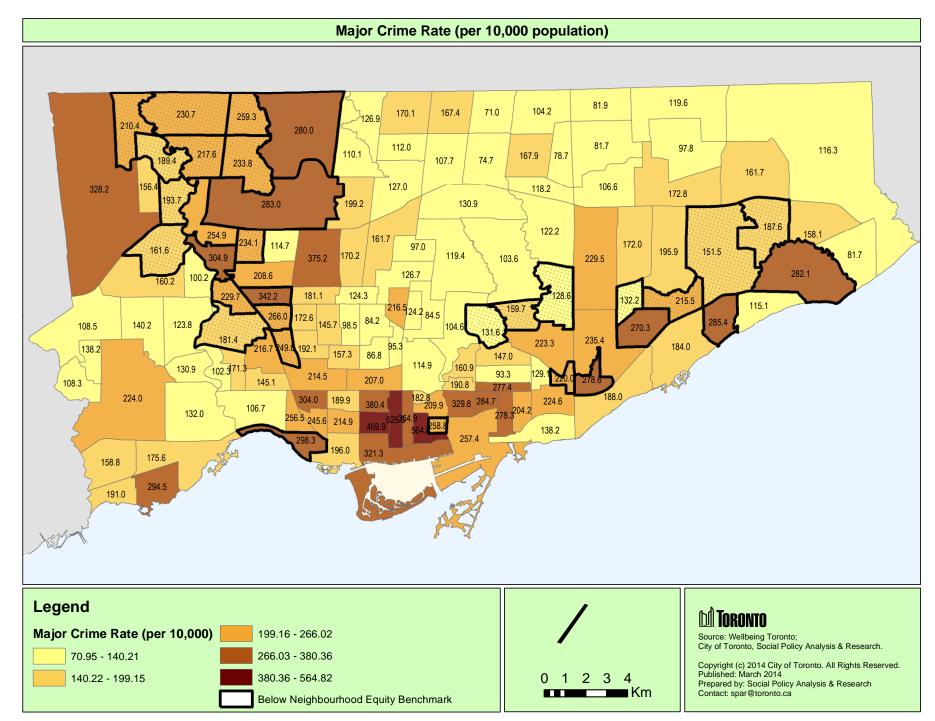












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