The Opportunity Equation in the Greater Toronto Area:

An update on neighbourhood income inequality and polarization





United Way Toronto & York Region



Research Team

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Introduction

The opportunity equation—the principle that access to opportunity, together with hard work, equals success—is at the core of how we define our society. It is an essential building block for developing trust and a sense of belonging for members of our community. The opportunity equation is central to United Way's mission of ensuring that everyone has a fair chance at a good life.

In a society that values fairness, the opportunity equation should mean that everyone can get ahead. However, factors like the increasing concentration of poverty, deteriorating job quality, and growing income inequality are creating an uneven playing field and compromising the promise of access to opportunity.

The Opportunity Equation.

Effort + Opportunity = Success

To better understand this changing environment, United Way published *The Opportunity Equation: Building opportunity in the face of growing income inequality* in 2015. It asserted that growing income inequality in our region is threatening the opportunity equation. The report revealed that income inequality in the Greater Toronto Area (GTA) had outpaced provincial and national trends, growing at double the national rate. And, beyond comparisons between individuals and households, it also showed a growing divide between neighbourhoods in the City of Toronto, where inequality between neighbourhoods increased by 96% from 1980 to 2010. *The Opportunity Equation* suggested that as income inequality grows, the neighbourhood where you live increasingly matters in whether or not the promise of a fair chance is true for you.

^{*} This report is a collaboration of United Way Toronto and York Region and The Neighbourhood Change Research Partnership (NCRP) at the Factor-Inwentash Faculty of Social Work, University of Toronto. The NCRP is funded by the Social Sciences and Humanities Research Council of Canada.

[†]For more information, see Chapter 2 of The Opportunity Equation.

With the release of Census 2016 data, which provides incomes for 2015, we* are now able to partially update the numbers from *The Opportunity Equation*.[†]

This new report provides the most up to date portrait of neighbourhood income inequality and polarization in the GTA and reflects how our region has changed since 1970. It also compares what has happened in the neighbourhoods of Canada's other major metropolitan areas: Montréal, Calgary, and Vancouver.

Why focus on income inequality?

The growth of income inequality is widely acknowledged as 'the defining challenge of our time.' [‡] Concerns about its social and economic impacts have risen to the top of the agenda in countries across the globe. Of specific concern are its impacts on access to opportunity.

In *The Opportunity Equation*, we focused on the link between growing income inequality and access to opportunity because research demonstrates that as income inequality rises, access to opportunity decreases.

Opportunity can be understood as the factors that, over a lifetime, help to build material, social, and psychological well-being. These factors include access to good education, quality jobs, excellent health services, adequate and affordable housing, and meaningful social networks. Access to opportunity is influenced both by individual traits which are subject to personal choice—defined as effort—and things that are beyond individual control—defined as circumstances.¹ Circumstances are influenced by a number of factors and include:

- Characteristics that may subject an individual to discriminatory treatment by other people, institutions, and systems, such as gender, race, ethnicity, and/or other aspects that often result in unequal treatment for equally deserving individuals.²
- Access to resources, both public and private, such as housing, education, health services, social capital, etc.³

[‡]First used by U.S. President Barack Obama in a 2013 speech, this sentence is widely quoted and used today to describe income inequality in news articles across the world.

There is a growing body of research that demonstrates that as income inequality grows, circumstances have more influence on children's eventual outcomes as adults, and that these circumstances are particularly powerful at the top and bottom end of the income distribution in societies that are more unequal.⁴ We presented worrying evidence to support this in *The Opportunity Equation*, where we learned that the majority of people in Toronto felt that hard work was not a guarantee for success, and that background and circumstances, things like gender and race, are barriers to a good future. We found that the outlook for the next generation is bleak and that 52.1% of people thought that the next generation would be worse off. In short, we found broad consensus that the opportunity equation is broken, and growing income inequality was a likely driver of this challenge for our society.

In this report we use the latest 2016 Census data to paint a picture of the change in neighbourhood[§] inequality and polarization in our region, adding to the evidence that income inequality is growing in Canada.⁵ Measures of income inequality and polarization describe related but different shifts in the income distribution. Measures of inequality describe how unevenly income is distributed across individuals or neighbourhoods within a region.** In other words, income inequality is a snapshot of who gets how much of the pie compared to other people or neighbourhoods. Polarization, in contrast to inequality, reflects a process in which the incomes of individuals or neighbourhoods concentrate into two separate groups at opposite ends of the income spectrum.^{††} Rising polarization is associated with the idea of the 'disappearing middle class'. Taken together, these measures give us a more comprehensive picture of the growth of disparity between neighbourhoods in our region. Our findings raise further concerns about the impacts on access to opportunity.

⁺⁺We use the Coefficient of Polarization to measure income polarization. We selected this measure because it can be calculated using income data aggregated at neighbourhood level and has balanced sensitivity to both the high and low ends of the income distribution. A value of 0 indicates a lack of polarization but its maximum values are not capped at 1.

[§]We use neighbourhoods as the unit of analysis in this report.

^{**} We use the standard measure of income inequality, the Gini Coefficient. When the Gini Coefficient equals 1, one neighbourhood has all of the income. When the Gini Coefficient equals 0, every neighbourhood has the same income.

Key findings

Section 1 provides a picture of neighbourhood income inequality and polarization in Canada's major census metropolitan areas (Montréal, Toronto, Calgary, and Vancouver). The findings confirm a growing threat: since 1990, the gap between rich and poor has continued to rise in major cities throughout the country. It's worst in the Toronto region—the CMA is the income inequality capital of Canada, and we're at risk of getting stuck in this position.

Section 2 shows what neighbourhood income inequality and polarization look like in the Greater Toronto Area, including in the City of Toronto and the Regional Municipalities of York, Peel, Halton, and Durham. The data shows that the challenge of growing income inequality and polarization is now widespread throughout the region.

Section 3 maps the increasing neighbourhood income divides in the Toronto census metropolitan area and the municipalities in the Greater Toronto Area. The maps clearly demonstrate that a majority of all neighbourhoods in the GTA are now segregated into high- and low-income. Middle-income neighbourhoods are vanishing from our region.

Section 4 highlights the impacts income inequality can have and points to action to mitigate those impacts. We argue that this kind of inequality blocks too many people from getting ahead and threatens the values of fairness and opportunity that Canada is built on. We also issue a call to action for all sectors to take leadership on this issue, and highlight how United Way is working in partnership with others to close the gaps between people, and between neighbourhoods.

Income inequality and polarization in Canada's major metropolitan areas: Montréal, Toronto, Calgary, and Vancouver

From 1970 to 2015, neighbourhood income inequality and polarization grew significantly in Canada's four largest census metropolitan areas (CMAs)^{‡‡} (Figures 1 and 2).^{§§}

Each of these metropolitan areas became more unequal and more polarized over time, although the extent and pace of change varied from one area to another. Neighbourhood income inequality and polarization in Vancouver and Calgary declined slightly from 1970 to 1980. It increased beginning in 1980, with Calgary catching up to Toronto by 2015. Montréal's trajectory was relatively flat, increasing slightly after 1990.

In comparison to the other metropolitan areas, Toronto has become the most unequal and the most polarized. Until 1990, Toronto's levels of neighbourhood inequality and polarization were relatively similar to the levels of Vancouver, Calgary, and Montréal. However, beginning in 1990 and extending to 2015, neighbourhood income inequality grew significantly in Toronto. The trend was similar for polarization until 2010, with a slight decrease in 2015.

While the patterns of growth may be different, Canada's major metropolitan areas share a similar story—they are all becoming more unequal and polarized over time. This means that neighbourhoods in all of these metropolitan areas are not only increasingly becoming segregated by income, they are also increasingly being transformed into either high- or low-income neighbourhoods as the number of middle-income neighbourhoods is declining. This trend is clearly demonstrated in the maps and figures in section 3.

^{‡‡} A census metropolitan area (CMA) is formed by one or more adjacent municipalities centred on a population centre (known as the core). A CMA must have a total population of at least 100,000 of which 50,000 or more must live in the core.

^{§§} All figures and maps were produced by the Neighbourhood Change Research Partnership, University of Toronto, August/November 2017.





A Gini coefficient value of 0.0 represents perfect equality. All census tracts would have the exact same proportion of income relative to their share of the population. A Gini coefficient value of 1.0 represents perfect inequality. All of the income would be taken by one single census tract while others take none.

Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970-2005 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

Figure 2: Income Polarization Between Census Tracts, Four Census Metropolitan Areas, 1970-2015



A coefficient value of 0.0 represents the complete absence of polarization. All census tracts would be middle income, each having the exact same average. As census tracts move away from each other, towards higher or lower incomes, the COP value increases with no maximum.

Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970-2005 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

2. Income inequality and polarization in the Greater Toronto Area: The City of Toronto and the Regional Municipalities of York, Peel, Halton, and Durham

The diverging landscape that characterizes the four major metropolitan areas is also unfolding across the regional municipalities of the Greater Toronto Area (Map 1).***

Between 1970 and 2015, neighbourhood income inequality and polarization grew throughout the GTA (Figures 3 and 4).

For each area in the GTA, the trajectory of inequality mirrors that of polarization, with two decades of relatively little change followed by a rapid increase between 1990 and 2000.

York, Peel, and Halton followed each other closely over the entire 45-year period.

Durham departed from the rest of the region after 1990, maintaining the lowest levels of neighbourhood inequality and polarization in the GTA.

The City of Toronto stands out for its increasingly higher levels of neighbourhood inequality and polarization throughout the entire period. The divergence became more dramatic after 1990 and by 2015 the City of Toronto's levels of neighbourhood inequality and polarization were almost double those of the adjacent regional municipalities (almost triple that of Durham).

^{***} The GTA is larger than the Toronto CMA, which is illustrated in Map 1. Toronto is a single-tier municipality; the other four are uppertier municipalities within which there are three or more lower-tier municipalities.

Map 1: The Toronto Urban Region: The Census Metropolitan Area and the Greater Toronto Area

Toronto Urban Region, Census 2016

Census Metropolitan Area (CMA). Population 5,928,000. Census Tracts 1,151.

Greater Toronto Area (GTA). Population 6,418,000. Census Tracts 1,261.

Municipalities

Upper-tier Regions (Census Divisions)

Lower-tier Cities & Towns (Census Subdivisions)



Only parts of Dufferin and Simcoe regions are within the Toronto CMA. They are outside the GTA boundary.



Figure 3: Income Inequality Between Census Tracts, Greater Toronto Area, 1970-2015

A Gini coefficient value of 0.0 represents perfect equality. All census tracts would have the exact same proportion of income relative to their share of the population. A Gini coefficient value of 1.0 represents perfect inequality. All of the income would be taken by one single census tract while others take none.

Notes: Halton includes parts of the Hamilton CMA and Durham includes parts of the Oshawa CMA. Calculated from census tract average individual income from all sources, before-tax. Income 1970-2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.



Figure 4: Income Polarization Between Census Tracts, Greater Toronto Area, 1970-2015

A coefficient value of 0.0 represents the complete absence of polarization. All census tracts would be middle income, each having the exact same average. As census tracts move away from each other, towards higher or lower incomes, the COP value increases with no maximum.

Notes: Halton includes parts of the Hamilton CMA and Durham includes parts of the Oshawa CMA. Calculated from census tract average individual income from all sources, before-tax. Income 1970-2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

3. Patterns of income inequality and polarization in the Greater Toronto Area

Trends in neighbourhood income inequality and polarization can also be visualized using maps. The maps in this report illustrate the growing neighbourhood inequality and polarization of our region by showing areas of relatively high income in blue and areas of relatively low income in red. The darker the colours, the higher or lower the average individual income is in the census tract relative to the CMA average.^{†††}

The collection of maps labelled Map 2 shows the growth in the number of low- and high-income neighbourhoods and the decline in middle-income neighbourhoods across the Toronto CMA over the period 1980-2010. This trend has continued into the present day, as shown by the map of the Toronto CMA in 2015 (Map 3).

These maps reveal a metropolitan area becoming more and more divided along income lines. In 1980, the Toronto CMA was dominated by middle-income neighbourhoods. By 2010, this pattern completely reversed and continued to 2015: the majority of neighbourhoods are now either low- or high-income.

Figure 5 further illustrates this trend over time. In 1970, almost two thirds (64%) of neighbourhoods were middle-income, though only 42% were in 2015. In contrast, low- and very low-income neighbourhoods together made up about one-fifth (21%) of the Toronto CMA's neighbourhoods in 1980. By 2015, they made up 39% of all neighbourhoods. High- and very high-income neighbourhoods grew from 15 % to 19%.

Each area in the GTA echoes the broader trend, becoming increasingly divided over time.

⁺⁺⁺ In the legends we provide exact percentages that demonstrate increasing average income in census tracts at the top extreme, and decreasing average income in census tracts at the bottom extreme, relative to the CMA average. These percentages change from 1980 to 2015.





Only parts of Halton, Durham, Simcoe and Dufferin regions are within the Toronto CMA. Based on average individual income from all sources, before tax. Source: Statistics Canada, Census 1980-2000. Canada Revenue Agency T1FF Taxfiler data 2010.

Map 3: Average Individual Income, Toronto Census Metropolitan Area, 2015

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$50,479







Low & very low income neighbourhoods are those census tracts which had an average individual income more than

20% below the Toronto CMA average income. **Middle income** status is within 20% above or below the CMA average. **High & very high income** status is more than 20% above the CMA average.

Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970-2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

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In 1980, the City of Toronto and the Regional Municipalities of York, Peel, Halton, and Durham were all dominated by middle-income neighbourhoods (Maps 4, 7, 10, 13, and 16). At that time, the City of Toronto had many low-income neighbourhoods. However, it was still a middle-income city with middle-income neighbourhoods making up over half (56%) of the city's total in 1980 (Map 4).

The situation has changed dramatically since 1980. In 2015, each area in the GTA was more segregated by income, with middle-income neighbourhoods losing their place to low- or high-income neighbourhoods (Maps 6, 9, 12, 15, and 18).

The patterns illustrated on these maps is again evident in Figures 6, 7, 8, 9, and 10, which show how the City of Toronto and each regional municipality has changed over the last 45 years.

All areas in the GTA experienced a decline in middle-income neighbourhoods over the period 1970 to 2015. The substantial decline of most of these middle-income neighbourhoods began in 1990, after two decades of relative stability. York Region is the only exception. In York, a reverse pattern occurred, with the dramatic decline in middle-income neighbourhoods happening during the 1970s and 1980s and growth plateauing from 1990 onwards (Figure 7).

In every part of the GTA, with the exception of Halton, there was an increase in the number of low-and very low-income neighbourhoods, although the pace of growth varied across areas.

Low- and very low-income neighbourhoods grew the most over the period 1990 to 2000 for the City of Toronto and York Region (Figures 6 and 7).

In Peel Region, there was a dramatic increase in low-income neighbourhoods since 1980, growing from 2% to 52% (Figure 8).

Durham Region experienced only slight increases in low-income neighbourhoods over the entire study period (Figure 10).

The number of high- and very high-income neighbourhoods had also increased over time, or at least stayed the same, for the City of Toronto, York, and Durham Regions (Figure 6, 7, and 10). The number of high- and very high-income neighbourhoods in Peel, however, has declined from 1980 to 2015 (Figure 8).

Halton Region is quite distinct from the others with no low-income neighbourhoods over the study period. Here, several middle-income neighbourhoods have transformed into high- and very high-income neighbourhoods (Figure 9).

Map 4: Average Individual Income, City of Toronto, 1980

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$14,384

- Very High: 140% to 403% (38 CTs, 9% of the City)
- High: 120% to 140% (28 CTs, 7% of the City)
- Middle: 80% to 120% (236 CTs, 56% of the City)
- Low: 60% to 80% (116 CTs, 27% of the City)
- Very Low: 42% to 60% (5 CTs, 1% of the City)
- Not Available

500 Subway / LRT (2016)



Metro Toronto in 1981 was a regional municipality which included Scarborough, North York, Etobicoke, York, East York and City of Toronto. This is not to be confused with the Toronto Census Metropolitan Area (CMA) which is the larger region that also includes municipalities in the "905 region" adjacent to Metro Toronto.

Source: Statistics Canada, Census Profile Series, 1981.

Notes: (1) Census tract and municipal boundaries are for 1981. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.

Map 5: Average Individual Income, City of Toronto, 2000

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$35,618

Very High: 140% to 701% (72 CTs, 14% of the City)

High: 120% to 140% (23 CTs, 4% of the City)

Middle: 80% to 120% (167 CTs, 32% of the City)

Low: 60% to 80% (212 CTs, 41% of the City)

Very Low: 38% to 60% (46 CTs, 9% of the City)

Not Available

DDD Subway / LRT (2016)



Source: Statistics Canada, Census Profile Series, 2001.
Notes: (1) Census tract and municipal boundaries are for 2001. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.

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Map 6: Average Individual Income, City of Toronto, 2015

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$50,479

- Very High: 140% to 831% (94 CTs, 17% of the City)
- High: 120% to 140% (32 CTs, 6% of the City)
- Middle: 80% to 120% (165 CTs, 29% of the City)
- Low: 60% to 80% (190 CTs, 33% of the City)
- Very Low: 37% to 60% (88 CTs, 15% of the City)
- Not Available

500 Subway / LRT (2016)



Source: Statistics Canada, Census Profile Series, 2016.
Notes: (1) Census tract and municipal boundaries are for 2016. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.



Figure 6: Neighbourhood Income Distribution, City of Toronto, 1970-2015

Low & very low income neighbourhoods are those census tracts which had an average individual income more than 20% below the Toronto CMA average income. Middle income status is within 20% above or below the CMA average. High & very high income status is more than 20% above the CMA average.

Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970-2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

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Map 7: Average Individual Income, York Region, 1980

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$14,384

- Very High: 140% to 170% (2 CTs, 5% of York region)
- High: 120% to 140% (8 CTs, 19% of York region)
- Middle: 80% to 120% (33 CTs, 77% of York region)
- Low: 60% to 80% (0 CTs, 0% of York region)
- Very Low: Below 60% (0 CTs, 0% of York region)
- Not Available



Source: Statistics Canada, Census Profile Series, 1981.

Notes: (1) Census tract and municipal boundaries are for 1981. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.

Map 8: Average Individual Income, York Region, 2000

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$35,618

- Very High: 140% to 220% (14 CTs, 11% of York region)
- High: 120% to 140% (14 CTs, 11% of York region)
- Middle: 80% to 120% (85 CTs, 67% of York region)
- Low: 60% to 80% (14 CTs, 11% of York region)
- Very Low: Below 60% (0 CTs, 0% of York region)
- Not Available



Source: Statistics Canada, Census Profile Series, 2001.

Notes: (1) Census tract and municipal boundaries are for 2001. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.

Map 9: Average Individual Income, York Region, 2015

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$50,479

- Very High: 140% to 186% (19 CTs, 10% of York region)
- High: 120% to 140% (17 CTs, 9% of York region)
- Middle: 80% to 120% (129 CTs, 65% of York region)
- Low: 60% to 80% (24 CTs, 12% of York region)
- Very Low: 53% to 60% (8 CTs, 4% of York region)
- Not Available



Source: Statistics Canada, Census Profile Series, 2016.

Notes: (1) Census tract and municipal boundaries are for 2016. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.



Figure 7: Neighbourhood Income Distribution, York Region, 1970-2015

Low & very low income neighbourhoods are those census tracts which had an average individual income more than 20% below the Toronto CMA average income. Middle income status is within 20% above or below the CMA average. High & very high income status is more than 20% above the CMA average.

Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970-2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

Map 10: Average Individual Income, Peel Region, 1980

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$14,384

- Very High: 140% to 145% (3 CTs, 3% of Peel region)
- High: 120% to 140% (9 CTs, 9% of Peel region)
- Middle: 80% to 120% (85 CTs, 86% of Peel region)
- Low: 60% to 80% (2 CTs, 2% of Peel region)
- Very Low: Below 60% (0 CTs, 0% of Peel region)
- Not Available



Source: Statistics Canada, Census Profile Series, 1981.

Notes: (1) Census tract and municipal boundaries are for 1981. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.

Map 11: Average Individual Income, Peel Region, 2000

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$35,618

- Very High: 140% to 258% (8 CTs, 5% of Peel region)
- High: 120% to 140% (12 CTs, 7% of Peel region)
- Middle: 80% to 120% (118 CTs, 67% of Peel region)
- Low: 60% to 80% (38 CTs, 22% of Peel region)
- Very Low: Below 60% (1 CT, 1% of Peel region)
- Not Available



Source: Statistics Canada, Census Profile Series, 2001.

Notes: (1) Census tract and municipal boundaries are for 2001. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.

Map 12: Average Individual Income, Peel Region, 2015

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$50,479

- Very High: 140% to 279% (9 CTs, 4% of Peel region)
- High: 120% to 140% (4 CTs, 2% of Peel region)
- Middle: 80% to 120% (105 CTs, 43% of Peel region)
- Low: 60% to 80% (116 CTs, 47% of Peel region)
- Very Low: 52% to 60% (11 CTs, 4% of Peel region)
- Not Available



Source: Statistics Canada, Census Profile Series, 2016.

Notes: (1) Census tract and municipal boundaries are for 2016. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax.



Figure 8: Neighbourhood Income Distribution, Peel Region, 1970-2015

Low & very low income neighbourhoods are those census tracts which had an average individual income more than 20% below the Toronto CMA average income. Middle income status is within 20% above or below the CMA average. High & very high income status is more than 20% above the CMA average.

Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970-2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

Map 13: Average Individual Income, Halton Region, 1980

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$14,384

- Very High: 140% to 170% (4 CTs, 9% of Halton region)
- High: 120% to 140% (9 CTs, 21% of Halton region)
- Middle: 80% to 120% (30 CTs, 70% of Halton region)
- Low: 60% to 80% (0 CTs, 0% of Halton region)
- Very Low: Below 60% (0 CTs, 0% of Halton region)
- Not Available



Source: Statistics Canada, Census Profile Series, 1981.

Notes: (1) Census tract and municipal boundaries are for 1981. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax. (3) Halton region overlaps both the Toronto CMA and Hamilton CMA. All CTs are measured relative to the larger Toronto CMA for consistency.

Map 14: Average Individual Income, Halton Region, 2000

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$35,618

- Very High: 140% to 226% (21 CTs, 25% of Halton region)
- High: 120% to 140% (7 CTs, 8% of Halton region)
- Middle: 80% to 120% (55 CTs, 66% of Halton region)
- Low: 60% to 80% (0 CTs, 0% of Halton region)
- Very Low: Below 60% (0 CTs, 0% of Halton region)
- Not Available



Source: Statistics Canada, Census Profile Series, 2001.

Notes: (1) Census tract and municipal boundaries are for 2001. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax. (3) Halton region overlaps both the Toronto CMA and Hamilton CMA. All CTs are measured relative to the larger Toronto CMA for consistency.

Map 15: Average Individual Income, Halton Region, 2015

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$50,479

- Very High: 140% to 444% (23 CTs, 21% of Halton region)
- High: 120% to 140% (27 CTs, 24% of Halton region)
- Middle: 80% to 120% (61 CTs, 55% of Halton region)
- Low: 60% to 80% (0 CTs, 0% of Halton region)
- Very Low: Below 60% (0 CTs, 0% of Halton region)
- Not Available



Source: Statistics Canada, Census Profile Series, 2016.

Notes: (1) Census tract and municipal boundaries are for 2016. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax. (3) Halton region overlaps both the Toronto CMA and Hamilton CMA. All CTs are measured relative to the larger Toronto CMA for consistency.



Figure 9: Neighbourhood Income Distribution, Halton Region, 1970-2015



Low & very low income neighbourhoods are those census tracts which had an average individual income more than

20% below the Toronto CMA average income. **Middle income** status is within 20% above or below the CMA average. **High & very high income** status is more than 20% above the CMA average.

Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970-2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

Map 16: Average Individual Income, Durham Region, 1980

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$14,384

- Very High: 140% and above (0 CTs, 0% of Durham region)
- High: 120% to 140% (2 CTs, 4% of Durham region)
- Middle: 80% to 120% (42 CTs, 88% of Durham region)
- Low: 60% to 80% (4 CTs, 8% of Durham region)
- Very Low: Below 60% (0 CTs, 0% of Durham region)
- Not Available



Source: Statistics Canada, Census Profile Series, 1981.

Notes: (1) Census tract and municipal boundaries are for 1981. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax. (3) Durham region overlaps both the Toronto CMA and Oshawa CMA. All CTs are measured relative to the larger Toronto CMA for consistency.

Map 17: Average Individual Income, Durham Region, 2000

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$35,618

- Very High: 140% to 150% (1 CTs, 1% of Durham region)
- High: 120% to 140% (8 CTs, 8% of Durham region)
- Middle: 80% to 120% (84 CTs, 80% of Durham region)
- Low: 60% to 80% (12 CTs, 11% of Durham region)
- Very Low: Below 60% (0 CTs, 0% of Durham region)
- Not Available



Source: Statistics Canada, Census Profile Series, 2001.

Notes: (1) Census tract and municipal boundaries are for 2001. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax. (3) Durham region overlaps both the Toronto CMA and Oshawa CMA. All CTs are measured relative to the larger Toronto CMA for consistency.

Map 18: Average Individual Income, Durham Region, 2015

Census Tract Average Individual Income Compared to the Toronto CMA Average of \$50,479

- Very High: 147% (1 CT, 1% of Durham region)
- High: 120% to 140% (13 CTs, 10% of Durham region)
- Middle: 80% to 120% (97 CTs, 73% of Durham region)
- Low: 60% to 80% (18 CTs, 14% of Durham region)
- Very Low: 54% to 60% (3 CTs, 2% of Durham region)
- Not Available



Source: Statistics Canada, Census Profile Series, 2016.

Notes: (1) Census tract and municipal boundaries are for 2016. (2) Average Individual Income is for persons 15 and over and includes income from all sources, before-tax. (3) Durham region overlaps both the Toronto CMA and Oshawa CMA. All CTs are measured relative to the larger Toronto CMA for consistency.



Figure 10: Neighbourhood Income Distribution, Durham Region, 1970-2015

Low & very low income neighbourhoods are those census tracts which had an average individual income more than 20% below the Toronto CMA average income. Middle income status is within 20% above or below the CMA average. High & very high income status is more than 20% above the CMA average.

Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970-2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

4. Understanding the impact, defining the action

Neighbourhood income inequality and polarization continue to grow in and across the Toronto region. The Toronto CMA has the highest level of neighbourhood income inequality and polarization compared to other major metropolitan areas across the country. Across the GTA, middle-income neighbourhoods continue to disappear. They are being replaced by low-income neighbourhoods on one end, and high-income neighbourhoods on the other.

Our region risks paying a heavy price for these growing gaps. High levels of income inequality are linked to a variety of undesirable social and economic outcomes, including:

- Lower levels of trust, educational performance, and life expectancy.⁶
- Higher rates of teenage pregnancy, violence, imprisonment, mental illness, addiction, and obesity.⁷
- Unstable and unsustainable economies.⁸
- Higher rates of bankruptcy and financial distress among individuals.⁹
- Increasing pessimism.¹⁰
- Decreasing concern between people from different backgrounds, a decreasing feeling of a common stake with others and sense of shared fate between opposite ends of the income distribution.¹¹

And high levels of income inequality have an impact on access to opportunity—a central element of the opportunity equation—too.

With persistent and growing income inequality, as demonstrated in this report, our region's reputation for social inclusion is being compromised. Recent evidence on social mobility^{‡‡‡} in Canada by Miles Corak confirmed that the Toronto region of the 1980s was a springboard for opportunity. Regardless of their circumstances, people who grew up in our region in the 1980s had a relatively high likelihood of being upwardly mobile compared to the rest of the country. Not surprisingly, Corak's main finding was that regions with higher mobility tended to also have lower poverty and inequality. Unfortunately, while the Toronto region of the 1980s fit that description, growing inequality and polarization means that the Toronto region of 2015 does not.

⁺⁺⁺ Social mobility measures access to opportunity by assessing how dependent a person's socio-economic position is, either relative to their position in the past or relative to their parents' socio-economic position (Galiani, 2008). If nothing is done to combat the rise of income inequality, there is a real threat to our shared value that everyone should have a fair chance to build a good life. Not only are the assets that we identified in *The Opportunity Equation*—high levels of trust between individuals and their strong belief in their own ability to make a difference in their communities—compromised, but our foundation as a fair society is at risk as well.

It is critical to understand that these trends and outcomes are not inevitable. Timely evidence of how our region is changing is an essential foundation for constructive discussions about the challenges we face and the solutions to address them. Income inequality and the polarization of our region is a complex issue that cuts across all sectors of our society and was decades in the making. Effective solutions will require collaboration and coordination between federal, provincial and municipal governments, the private sector, labour, community organizations, and educational institutions.

The first edition of *The Opportunity Equation* offered a starting point for a conversation on how we can all work together to reduce income inequality and mitigate its impacts. We called for all sectors of society to take leadership from their own place and to prioritize collaborations focused on three key areas for collective action:

- Providing young people with the opportunities they need to build a good future.
- Working toward a labour market that offers job opportunities as real pathways to stability and security.
- Working together to ensure that background and circumstances are never barriers to opportunity.

In light of these latest findings on the continued growth of inequality, these priorities remain as central and relevant as when United Way first raised this issue two years ago.

With these priorities in mind, United Way has started doing its part. Since the launch of *The Opportunity Equation* in 2015, United Way has taken action in a number of areas, and in partnership with many others, to ensure our work is helping to rebuild the opportunity equation:

- We established a new Anchor Agency investment strategy with a targeted focus on helping people who live in poverty, and those at risk of falling into poverty. This new way of working ensures people have access to a broad range of programs and services close to home. It also allows us to collaborate more closely with our community partners, better positioning us to respond to emerging needs in our changing neighbourhoods.
- 2. We launched our Youth Success Strategy, designed to connect youth facing multiple barriers to meaningful career opportunities. This strategy works with the business, labour, community, and education sectors to provide support and tools to bridge the opportunity gap and improve young people's social and economic futures. By 2025, we will have connected 10,000 young people to education, skills, and professional networks and experiences that will put them on the path to long-term economic stability.
- 3. Over 2017/18, building on the past 10-year's work of our **Building Strong Neighbourhoods Strategy**, we are leading a multi-sector social innovation lab to tackle the lack of economic opportunities faced by many neighbourhoods across our region. This work will build on our neighbourhood-focused supports to individuals and communities to make the connections and foster the relationships needed to develop solutions to the issues that affect residents.

In addition, we will continue to explore and publish research on the issue of income inequality and access to opportunity. *The Opportunity Equation* and the updated profile of inequality provided here fill an important gap in knowledge, but also prompt further questions about how these trends are playing out in the lives of different groups of people across our region. We know from our previous research, and the research of others, that few social trends, be it poverty or precarious employment, touch us all equally. Some of us are bearing a bigger part of the burden. Why should income inequality, and its impact on access to opportunity, be any different? Due out in 2018, we will aim to present an analysis that shows how the impacts of income inequality vary across the population in our region, and highlight those groups bearing the burden of these trends.

But this issue is not "us" versus "them". Fairness and opportunity are core values of who we are. They are at the heart of the community we love and feel proud of. That is why we all have a stake in this issue, and a role to play in finding solutions.

This report uses a socio-spatial analysis of income inequality and polarization for major Canadian CMAs and the municipalities within the GTA. The analysis focuses on documenting levels and trends in income inequality and polarization between neighbourhoods over the period 1970 to 2015, and includes the most recent 2016 census data.

Income inequality and polarization measures

Income inequality describes a situation in which income is distributed unevenly in a region or a country. Inequality exists when one group receives income that is disproportionate to its size. The Gini Coefficient was used to measure income inequality. It is the bestknown and most accurate income inequality measure and, therefore, the one cited most extensively in international studies that compare income inequality among countries. It is the most accurate measure as it meets all of the criteria for valid measures of inequality. The Gini Coefficient measures how much the distribution of income—between individuals, families, households, or neighbourhoods within a region or a country—deviates from an absolutely equal distribution. At a Gini of 0, every individual, family, household, or neighbourhood receives the same amount of income. At a Gini of 1, one individual, family, household, or neighbourhood receives all of the income and everyone else receives no income at all.¹³

Income polarization describes a process in which income concentrates into two separate groups—the rich and the poor creating a hollowed-out middle. Rising polarization is associated with claims about the 'disappearing middle class.' While it is difficult to precisely define and measure a middle class for research purposes, it is possible to define and measure a group in the middle of the income spectrum.¹⁴ The Coefficient of Polarization was used to measure income polarization. We selected this measure because of its balanced sensitivity to both the high and low ends of the income distribution.¹⁵

Both income inequality and polarization have been measured between neighbourhoods. These spatial measures combine two types of information. First, they provide information on the extent to which individuals or households are geographically concentrated and segregated by income in a city or region. Second, they reflect the rising income gap between individuals or households in the city or region as a whole. In other words, they partially reflect those changes captured by non-geographic measures. For this reason, it is appropriate to speak of socio-spatial inequality or polarization when assessing the geographic income change. However, in this paper, we have used the terms inequality and polarization in order to more plainly communicate these concepts to a general audience.

Income inequality and polarization were not calculated for Ontario or Canada. Our unit of analysis, census tracts, only exist within CMAs and a few larger census agglomerations. As such, calculations of income inequality and polarization for these geographies would only reflect urban/suburban neighbourhoods in Canada and Ontario, excluding the rural population, and were therefore not used.

Only spatial measures were used to calculate income inequality and polarization because there is no reliable non-spatial microdata currently available after the 2005 Census, either in the Research Data Centre or through the Public Use Micro-Data Files. The National Household Survey 2011, while available, is not comparable to previous census releases given the different methodology and target population reached. Information on non-spatial income inequality up to 2005 can be found in *The Opportunity Equation*.

Neighbourhoods

We define neighborhoods by census tracts as in most small area research. Census tracts are small geographic units created by Statistics Canada whose boundaries follow main transportation routes, waterways, and other environmental features such as parks. They typically contain between 2,500 and 8,000 people. Census tracts are located in census metropolitan areas and in census agglomerations with an urban core population of 50,000 or more in the previous census.

Over the time period studied, we used the census tract boundaries as they existed in each year. We recognize that the number of census tracts in a CMA can change over time, mainly through the addition of new tracts which might slightly affect neighbourhood inequality. However, most of the census tracts remained longitudinally consistent. Furthermore, using the census tract boundaries as they existed each year reflected the actual situation in that given year. Also, the alternative of using a set of fixed census tract boundaries would mean applying assumptions of average income to those census tracts that split over time or excluding those census tracts, which reduces the amount of information in the system of the region's census tracts. The maps of 1980, 2000 and 2015 incomes place census tract average incomes into five groups: Very low (below 60% of the CMA average), Low (60% to 79.9%), Middle (80% to 119.9%), High (120% to 139.9%) and Very High (140% and above). Another way to describe the middle category is income within 20% above or below the CMA average. At the extremes, we provide exact percentages that demonstrate increasing average income in census tracts at the top, and decreasing average income in census tracts at the bottom, relative to the CMA average. These percentages change from 1980 to 2015.

Income measure and income units

This report used before-tax income for Gini and Coefficient of Polarization calculations. Before-tax income includes income from all sources—wages, salaries, self-employment income, investment and private pension income. We used this measure to allow for comparisons over time. Prior to 2005, the Census did not collect information on taxes paid. There is no ideal measure of income for the purposes of measuring inequality and polarization. While the after-tax measure is preferable, the choice of income definition is somewhat dependant on the availability of data. The main focus of this study is trends over time, which are not affected by the income type. Absolute values of inequality and polarization change but the overall trend lines don't change very much. Individuals have been used as income reporting units. Individual income reflects the wage structure and the relative position of workers within the labour market.

Data sources

This report used 1970 to 2005 and 2015 census data aggregated at census tract level for calculating inequality and polarization measures. This is the most reliable data currently available that allows for trend analyses that include the most recent 2015 census data. The 2015 census micro files are not yet available.

2010 income data comes from the T1 Family File tables produced by Statistics Canada based on Canada Revenue Agency (CRA) tax returns. The census and tax-filer data are comparable in terms of income as most census income data came from tax-filer data up to 2005 and 2015 census income data is gathered directly from tax-filer data for the first time.

2010 NHS data were not included in trend analyses because NHS data is not comparable to previous census releases given the different methodology and target population reached.

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References

Block, S. (2017). Losing Ground: Income inequality in Ontario 2000-2015. Canadian Centre for Policy Alternatives. Retrieved on 15/08/2017 from: https:// www.policyalternatives.ca/ losing-ground

Brunori, P. Ferreira, F.H.G., and Peragine, V. (2003). Inequality of opportunity, income inequality and economic mobility: Some international comparisons. Policy Research Working Paper 6304. World Bank, Development Research Group.

Carpantier, J.F. and Sapata, C. (2013). An Ex-Post view of inequality of opportunity in France and its regions. Journal of Labour Research, 34: 281-311.

Corak, M. (2017). Divided landscapes of economic opportunity: The Canadian geography of intergenerational income mobility. Human Capital and Economic Opportunity Global Working Group. Retrieved on 15/08/2017 from: https://econresearch.uchicago. edu/sites/econresearch. uchicago.edu/files/Corak_2017_ Divided_Landscapes.pdf

Corak, M. (2013). Income inequality, equality of opportunity, and intergenerational mobility. Institute for the Study of Labour. Discussion Paper No. 7520. Dinca-Panaitescu M. and Walks, A. (2015). Income inequality, income polarization, and poverty: How are they different? How are they measured? United Way Toronto & York Region, Neighbourhood Change Research Partnership, University of Toronto.

Ferreira, F.H.G., Gignoux, J. and Aran, M. (2011). Measuring inequality of opportunity with imperfect data: The case of Turkey. Journal of Economic Inequality, 9: 651-680.

Fleubaey, M. and Peragine, V. (2013). Ex ante versus expost equality of opportunities. Economica, 80: 118-130.

Fong, F. (2017). Income inequality in Canada: The urban gap. Chartered Professional Accountants Canada. Retrieved on 15/08/2017 from: https:// www.cpacanada.ca/en/the-cpaprofession/about-cpa-canada/ cpa-canadas-key-activities/ cpa-canada-economic-policyresearch/income-inequality-incanada

Frank, R.H., Levine, A.S. and Dijk, O. (2014). Expenditure cascades. Review of Behavioural Economics. 1: 55-73. Galiani, S. (2008). Social mobility: What is it and why does it matter? SSRN Working Paper. 7th Social Equity Forum, Inter-American Development Bank.

Isaacs, J.B., Sawhill, I.V., and Haskins, R. (2008). Getting ahead or losing ground: Economic mobility in America. The Brookings Institution. Economic Mobility Project, Pew Charitable Trusts.

Marrero, G.A. and Rodriguez, J.G. (2013). Inequality of opportunity and growth. Journal of Development Economics 104: 107-122.

Paes de Barros, R., Ferreira, F.H.G., Vega, J.R.M. and Chanduvi, J.S. (2009). Measuring inequality of opportunities in Latin America and the Caribbean. Washington, D.C: The World Bank.

Pignataro, G. (2012). Equality of opportunity: Policy and measurement paradigms. Journal of Economic Surveys, 26(5): 800-834.

Roemer, J.E. (1998). Equality of Opportunity. Harvard University Press.

Rothstein, B. and Uslaner, E.M. (2005). All for all: Equality, corruption and social trust. World Politics, 58: 41-72. Stiglitz, J. (2013). The Price of Inequality: How today's divided society endangers our future. New York, NY: W.W. Norton & Company, Inc.

United Way Toronto. (2015). The Opportunity Equation: Building opportunity in the oace of growing income inequality. https://www.unitedwaytyr.com/ document.doc?id=286

Uslaner, E. M. (2012). Income inequality in the United States fuels pessimism and threatens social cohesion. A working paper from the Centre for American Progress.

Uppal, S. and LaRochelle-Côté, S. (2015). Changes in wealth across the income distribution, 1999-2012. Statistics Canada. 75-006-X. Retrieved on 15/08/2017 from: http://www.statcan.gc.ca/ pub/75-006-x/2015001/article/ 14194- eng.pdf

Walks, A. (2013). Income inequality and polarization in Canada's cities: An examination and new form of measurement. Research Paper 227. Cities Centre, University of Toronto.

Wilson, R. and Pickett, K. (2010). The Spirit Level: Why inequality is better for everyone. London: Penguin.

Endnotes

- ¹ Carpantier and Sapata, 2013; Fleurbaey and Peragine, 2013; Marrero and Rodriguez, 2013; Pignataro, 2012; Ferreira, Gignoux and Aran, 2011; Paes de Barros et al., 2009; Roemer, 1998
- ² Paes de Barro et al. 2009
- ³ Brunori, Ferreira and Peragine, 2013; Corak, 2013; Isaacs, Sawhill and Haskins, 2008
- ⁴ Corak, 2017; Corak, 2013
- ⁵ Block, 2017; Fong, 2017; Uppal and LaRochelle-Côté, 2015
- ⁶ Wilson and Pickett, 2010
- ⁷ Wilson and Pickett, 2010
- ⁸ Stiglitz, 2013
- ⁹ Frank, Levine and Dijk, 2014
- ¹⁰ Uslaner, 2012
- ¹¹ Rothstein and Ulsaner, 2005
- ¹² Corak, 2017
- ¹³ Dinca-Panaitescu and Walks, 2015
- ¹⁴ Dinca-Panaitescu and Walks, 2015
- ¹⁵ Walks, 2013



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