



# Neighbourhood Socio-Economic Polarization & Segregation in Toronto

## Trends and Processes since 1970

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Neighbourhood Change Research Partnership, University of Toronto

TU Delft, September 2018



# NEIGHBOURHOOD CHANGE RESEARCH PARTNERSHIP

Trends | Processes | Consequences | Policy Interventions

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Two key national income trends — the growing gap between the rich and the poor and the progressively smaller middle-income group — have major social implications at the neighbourhood level that we are only beginning to identify, understand, and explain.



Social Sciences and Humanities  
Research Council of Canada

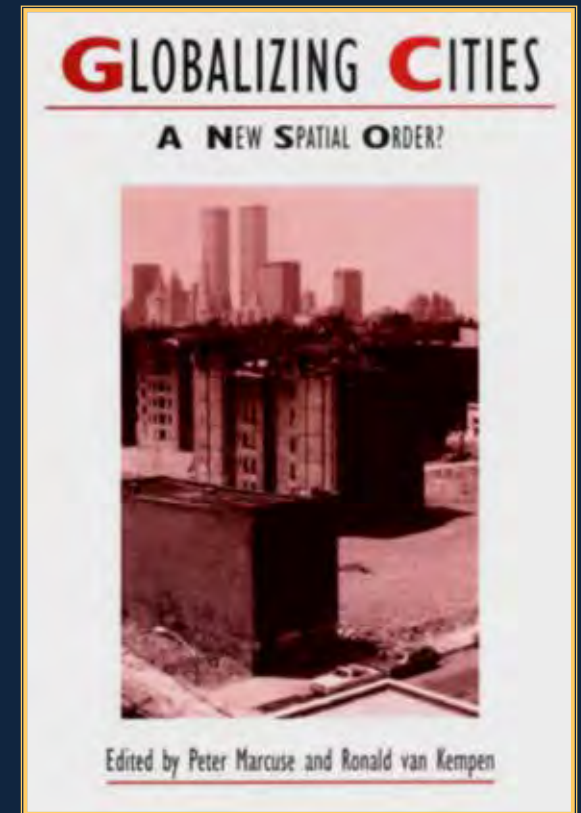
Conseil de recherches en  
sciences humaines du Canada

Canada

# Spatial Polarization and Segregation

*1990's 'Divided Cities' literature*

A new socio-spatial order  
with stronger (more rigid)  
divisions, and  
greater inequality



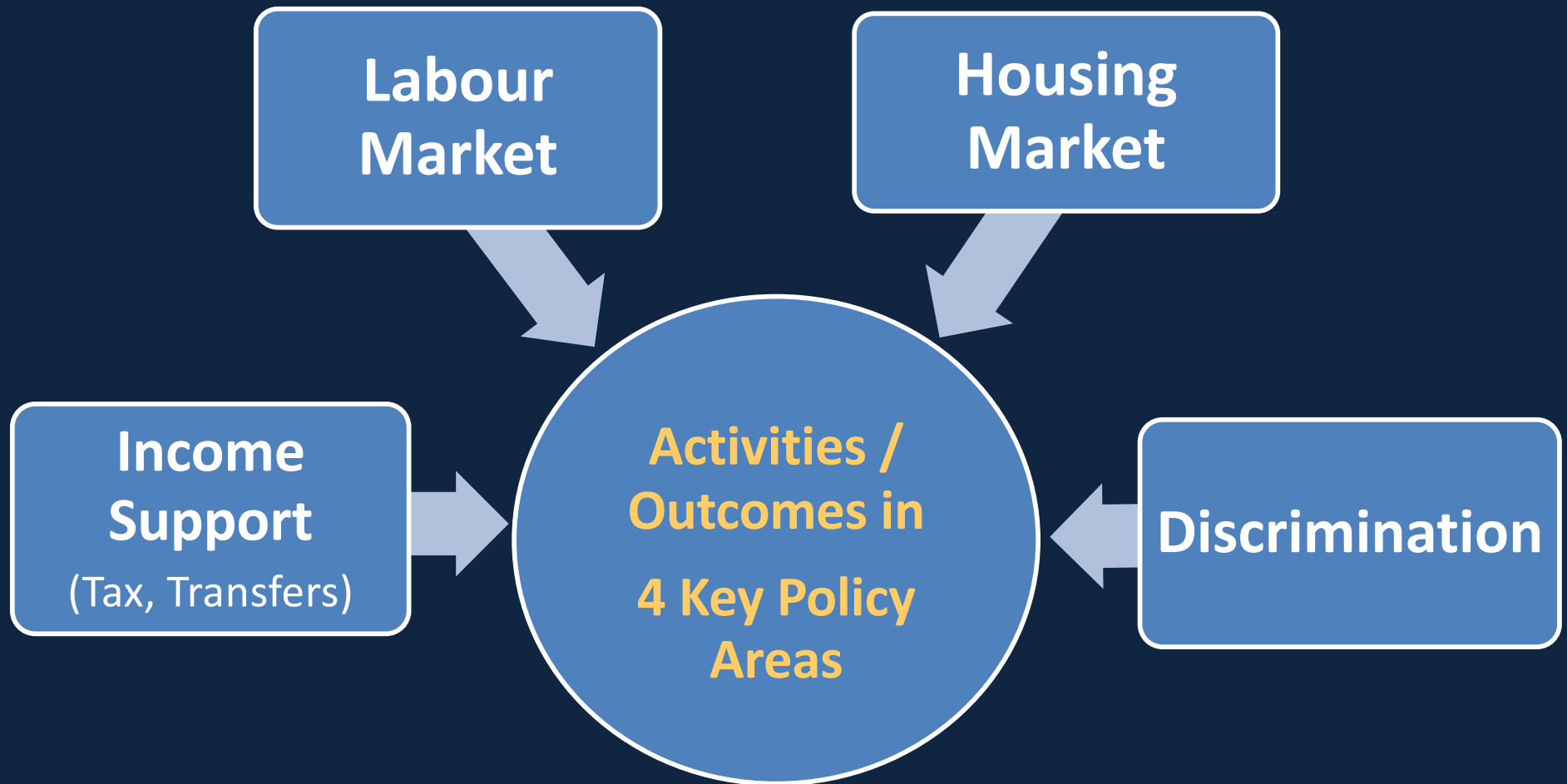
Peter Marcuse & Ronald van Kempen, 2000

# Toronto: Summary

1. Income inequality, income polarization, and SES/ethno-cultural segregation is increasing
2. Increased dramatically since the late-1980s, especially during the 1990s, at a slower pace since
3. There is no sign of a reversal
4. We have the strongest possible evidence; evidence that is being ignored by government
5. Cause: public policy; labour market and housing market dynamics; discrimination

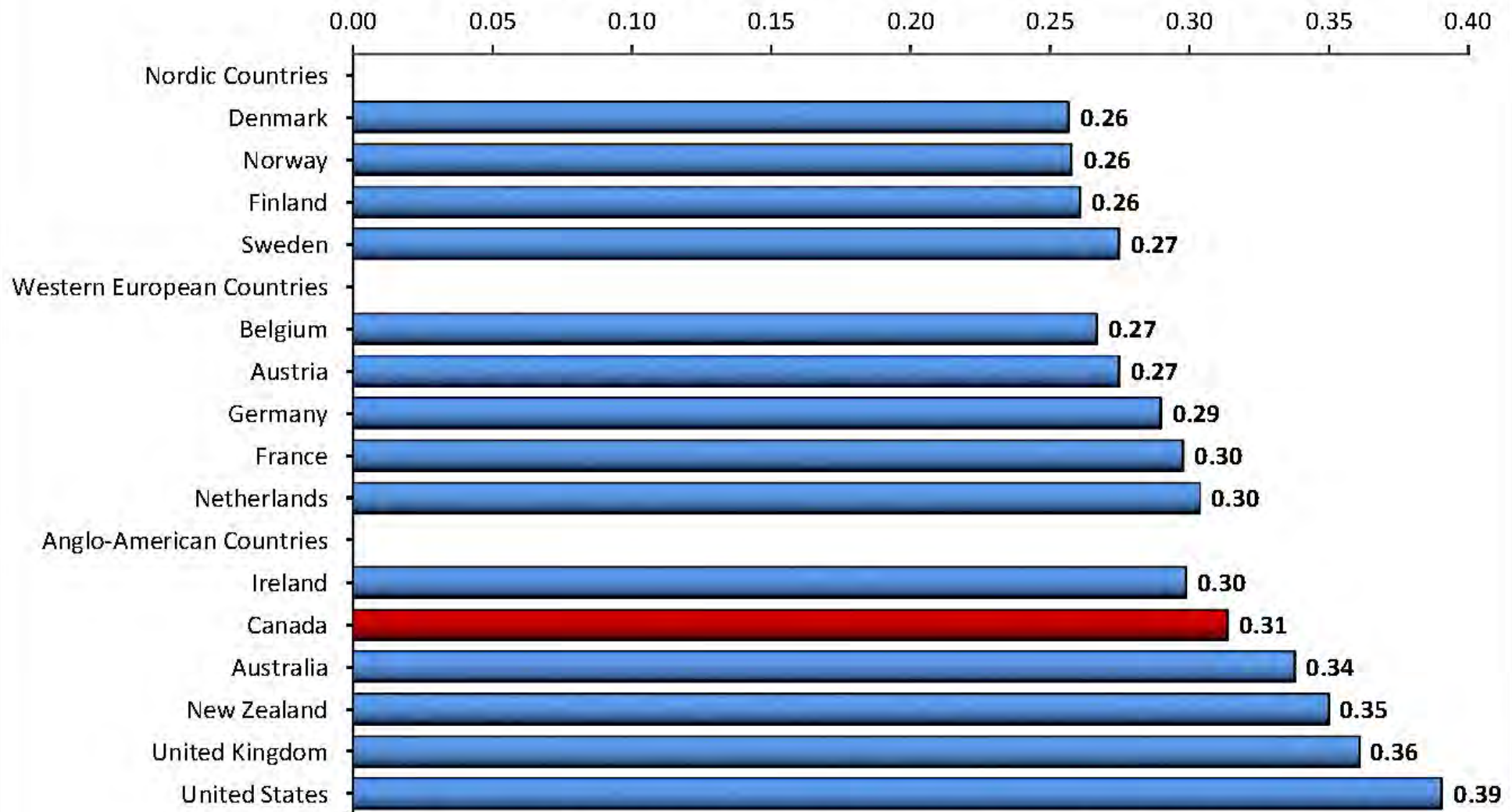
# Specific Processes: Cause and Solution

## Government / Governance





## Gini Coefficient for Fifteen OECD Countries in Three Groups, 2014-2015



**The Gini coefficient** takes values between 0 for a perfectly equal income distribution where every person has the same income, and 1 which refers to a situation of maximum inequality where all income goes to one person. OECD average = 0.30.

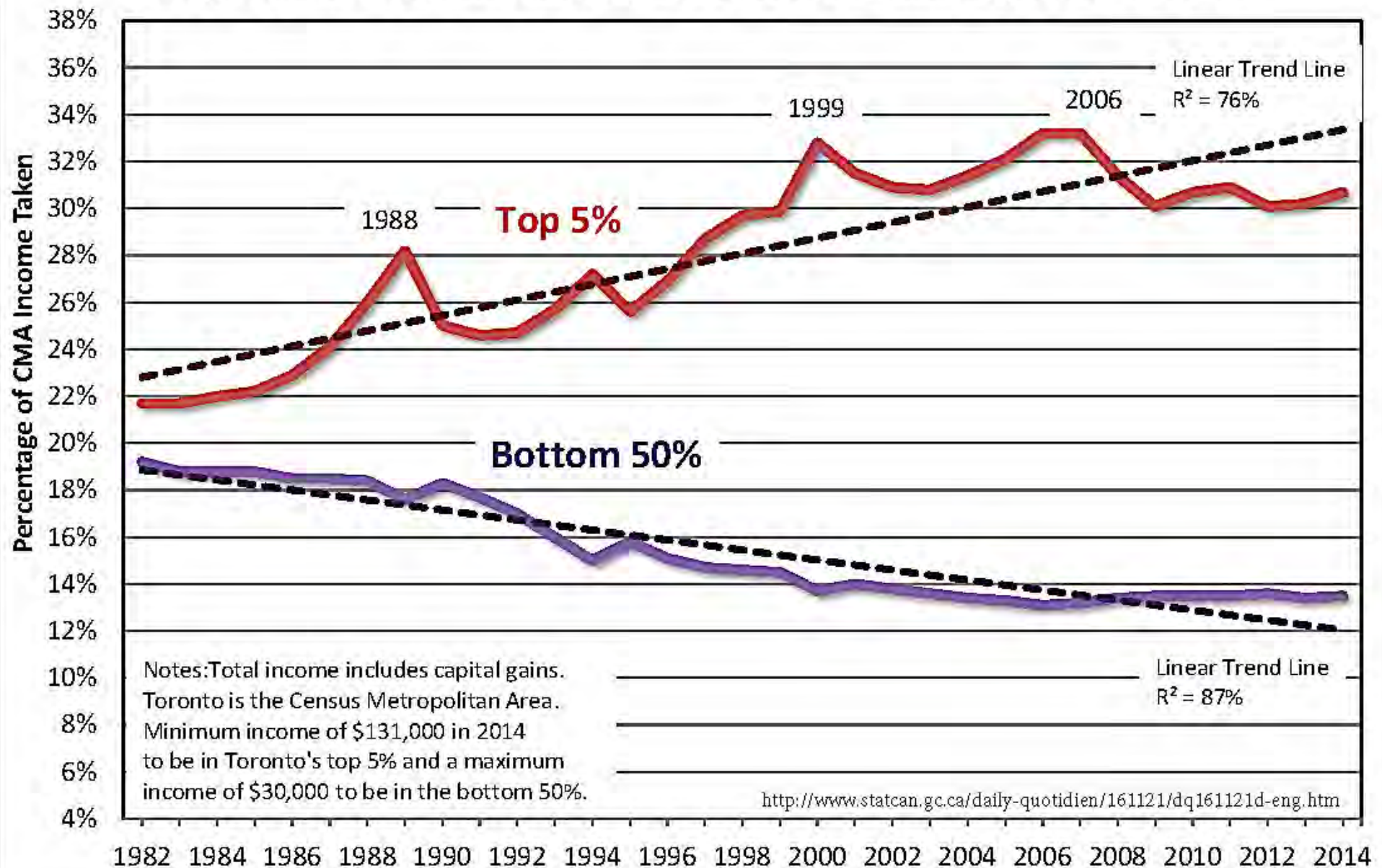
# Why does Income Inequality Matter?

## Index of:

- Life expectancy
- Math & Literacy
- Infant mortality
- Homicides
- Imprisonment
- Teenage births
- Trust
- Obesity
- Mental illness – incl. drug & alcohol addiction
- Social mobility



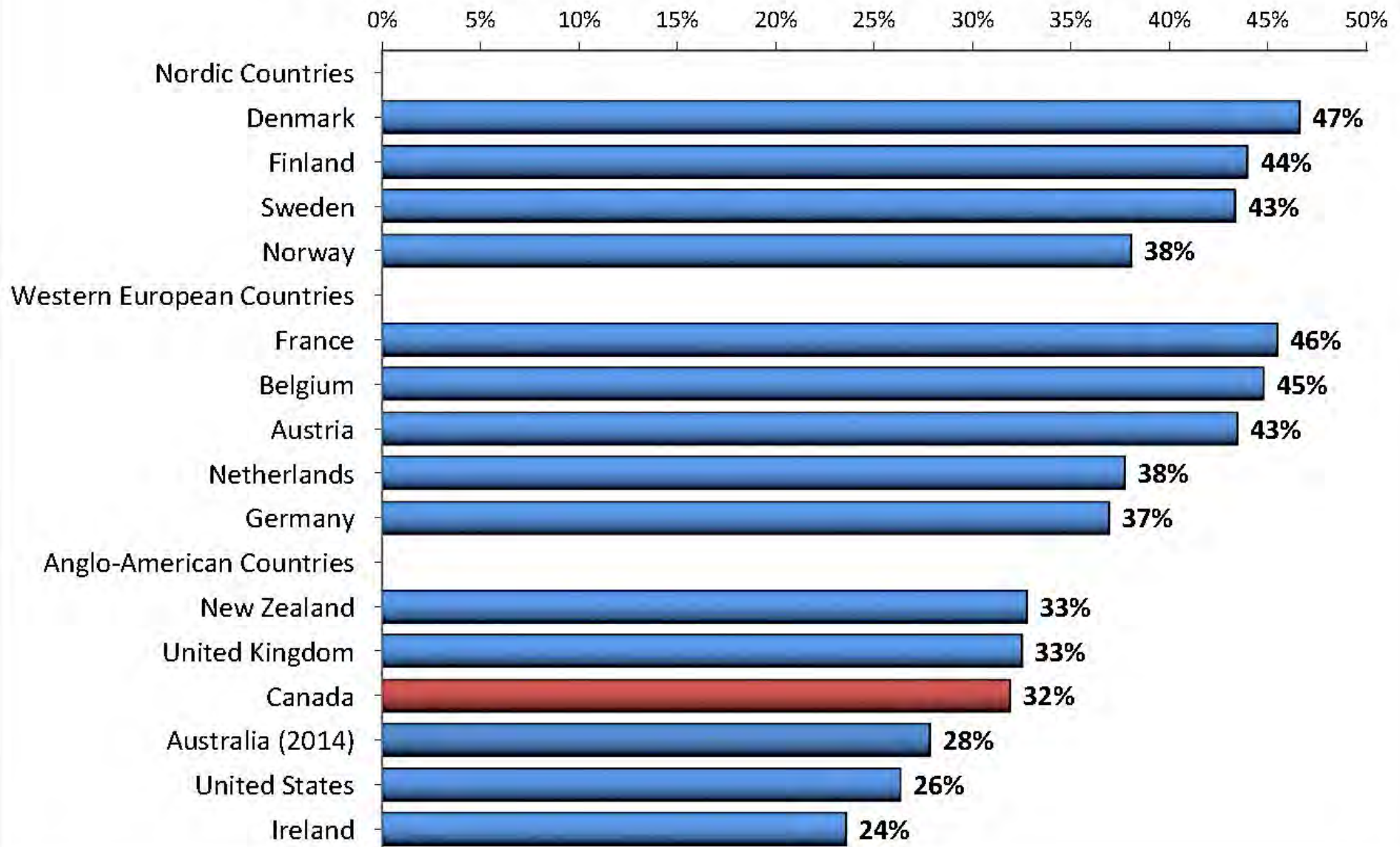
# Share of Toronto CMA's Annual Income Taken by Top 5% & Bottom 50% of Toronto's Taxfilers, 1982–2014





# Total Tax Revenues as a Percentage of GDP, 2015

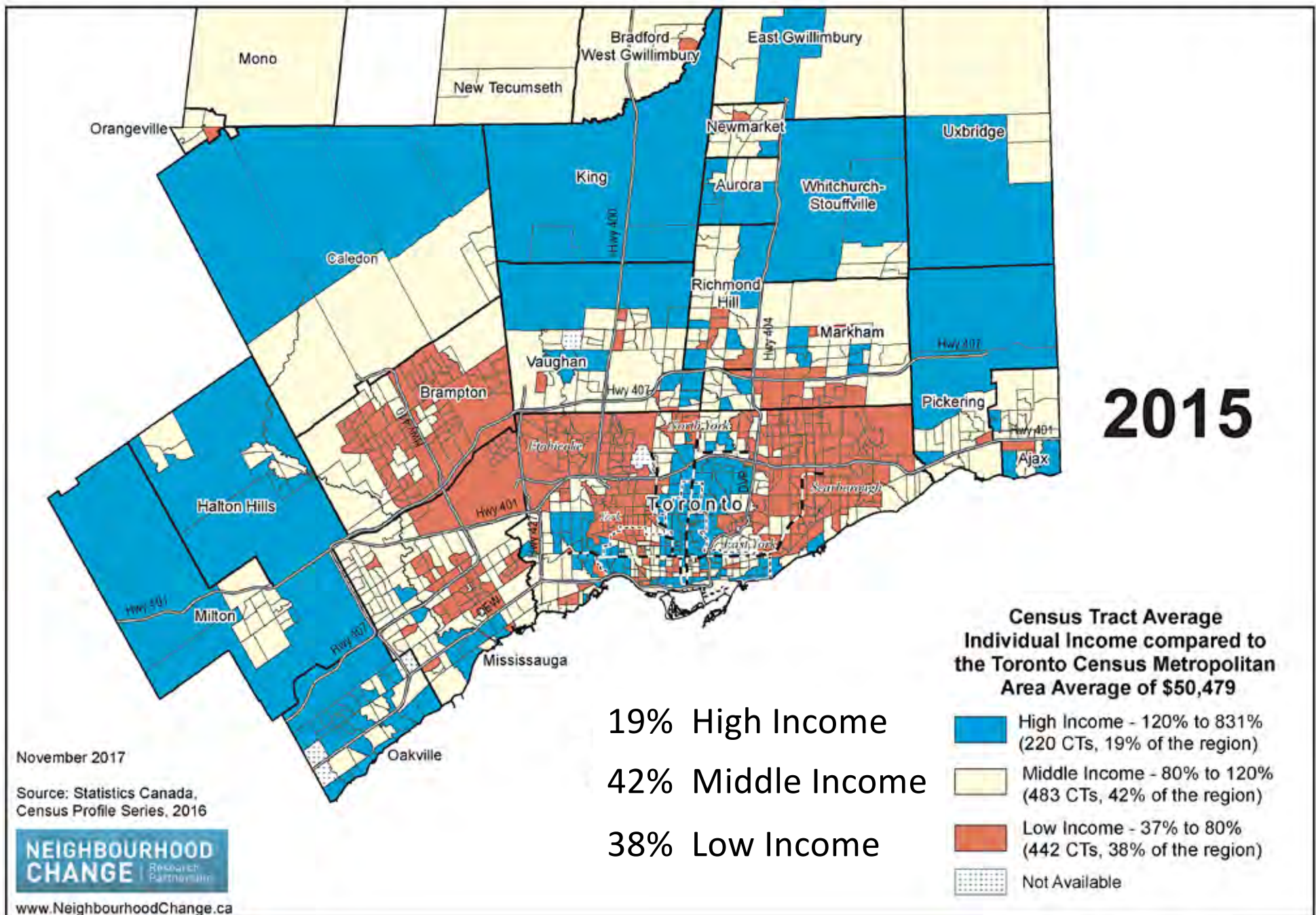
## Fifteen OECD Countries in Three Groups



# 1. Toronto Census Metropolitan Area, Spatial Trends, 1991 – 2016

INEQUALITY +56%  
POLARIZATION +47%  
SEGREGATION +14%

# Average Individual Income, Toronto Census Metropolitan Area, 2015



19% High Income

42% Middle Income

38% Low Income



## Populations of Selected Visible Minority Groups, 2001–2016

### Toronto Census Metropolitan Area

	2001 #	2001 %	2016 #	2016 %	Percent Change
Toronto CMA Population	4,648,000	100	5,863,000	100	26%
White	2,935,000	63	2,851,000	49	-3%
Visible Minorities	1,713,000	37	3,012,000	51	76%
Chinese	409,535	9	631,080	11	54%
South Asian	473,805	10	973,145	17	105%
Black	310,500	7	441,960	8	42%
Latin American	75,910	2	132,885	2	75%
Arab & West Asian	95,815	2	229,425	4	139%

Figures compiled by Richard Maaranen, Neighbourhood Change Research Partnership, University of Toronto, September 2018.

Source: Statistics Canada, Census Tract Profile Series, 2001-2016



# Spatial Income Inequality Trend

Toronto CMA 1990 to 2015

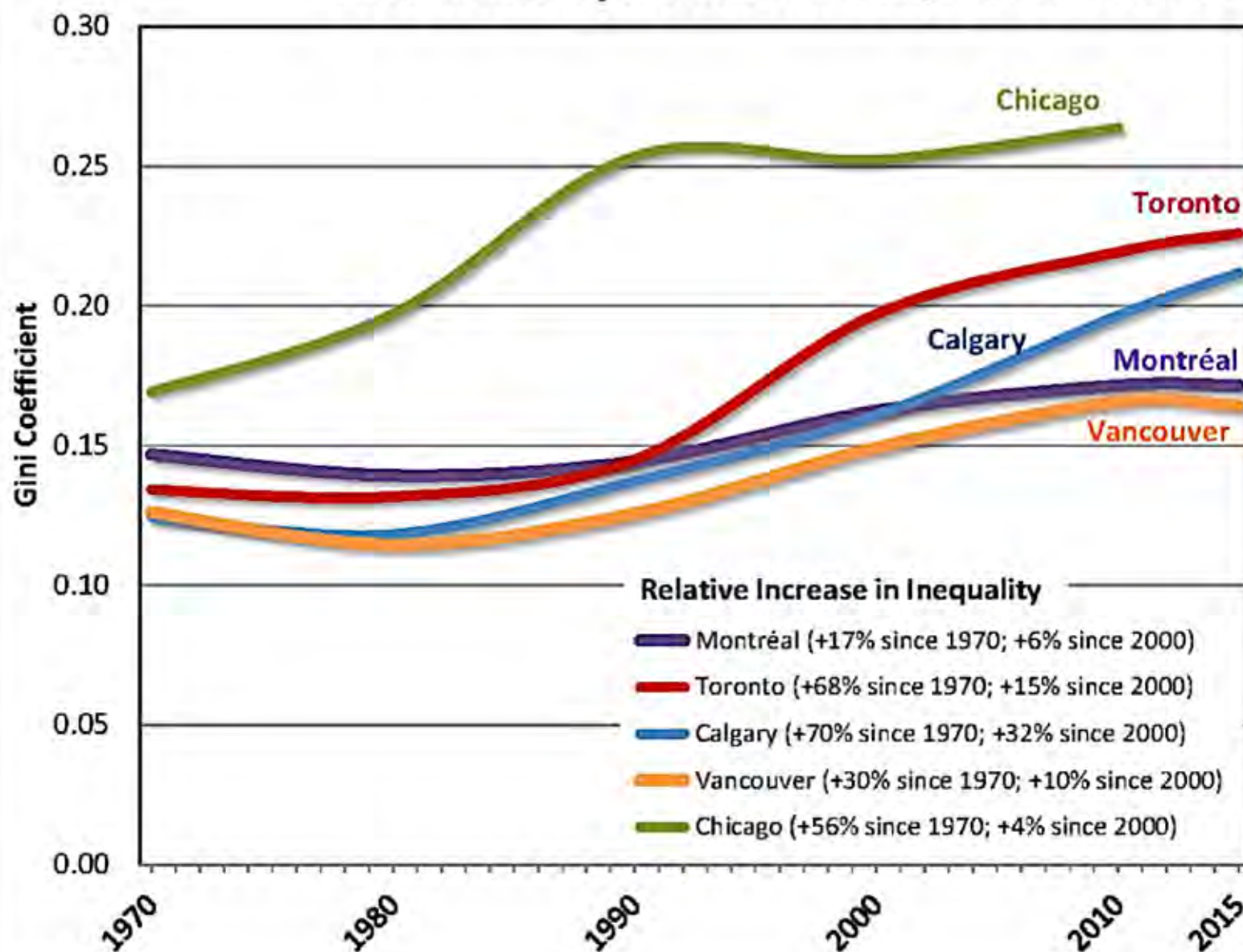
**Spatial** (census tract) **income inequality** (Gini)

**+56%** (from 0.145 in 1990 to 0.226 in 2015)

Census tracts are increasingly becoming dissimilar in average incomes with the group of more numerous higher income census tracts taking a larger share of Toronto's total income relative to their population size.

# Income Inequality Between Census Tracts

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

Chicago income from United States Census 1970–2000 and American Community Survey 2010.

# Spatial Income Polarization Trend

Toronto CMA 1990 to 2015

**Spatial** (census tract) **income polarization** (COP)

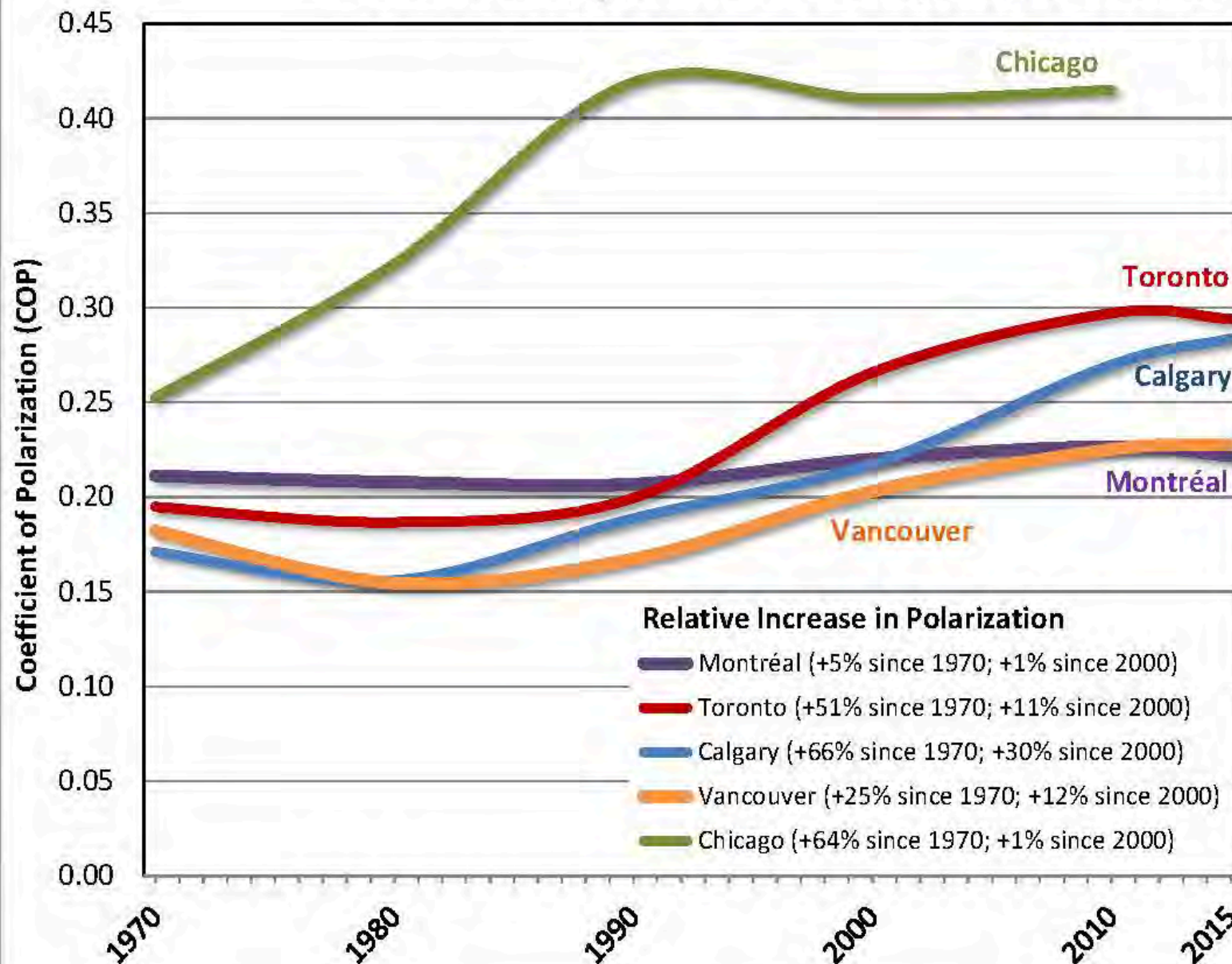
**+47%** (from 0.200 in 1990 to 0.294 in 2015)

Census tracts are dividing into  
two contrasting groups (polarizing),  
as the number of middle income  
census tracts become fewer

For Coefficient of Polarization (COP) see: 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. <http://neighbourhoodchange.ca/documents/2015/02/income-inequality-and-polarization-in-canadas-cities-an-examination-and-new-form-of-measurement.pdf>

# Income Polarization Between Census Tracts

## Five 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. Canadian income 1970–2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

Chicago income from United States Census 1970–2000 and American Community Survey 2010



# 'Racial' Segregation

## Toronto CMA 1991 to 2016

**'Racial' segregation** (non-Whites / Whites,  
index of dissimilarity)

**+14%** (from 0.395 in 1991 to 0.452 in 2016)

The visible minority and White populations  
in the Toronto CMA are increasingly not  
living side-by-side within and between census tracts.

Note: The Index of Dissimilarity considers number of visible minority vs White people within and between census tracts in relation to the distribution for the whole CMA. The Gini and COP only considers incomes between CTs (but not within CTs), comparing CT averages against each other in the CMA as a whole.

# Black Segregation: Toronto / Chicago

## Index of dissimilarity

- 0.512 Toronto CMA (2016)
- 0.836 Chicago Metro (2000)

See [http://www.censusscope.org/us/rank\\_dissimilarity\\_white\\_black.html](http://www.censusscope.org/us/rank_dissimilarity_white_black.html)

Chicago 63% higher than Toronto

If Toronto was a U.S. city it would rank #222

Walks, R.A., & Bourne, L.S. (2006). Ghettos in Canada's cities? Racial segregation, ethnic enclaves and poverty concentration in Canadian urban areas. *The Canadian Geographer/Le Géographe canadien*, 50(3), 273-297.

## Neighbourhood Segregation Levels of Selected Visible Minority Groups, 1991–2016 Toronto Census Metropolitan Area

	1991	2001	2016	Change
All Visible Minorities	0.395	0.435	0.452	14%
Chinese	0.435	0.577	0.585	34%
South Asian	0.433	0.535	0.579	34%
Black	0.423	0.487	0.512	21%
Latin American	0.600	0.479	0.395	-34%
Arab & West Asian	0.633	0.501	0.488	-23%

Coefficients are indices of dissimilarity, calculated in relation to the distribution of whites (non-visible minorities) based on census tract populations. Figures for 1991 and 2001 from Walks and Bourne, Table 3 (2006). Figures for 2016 calculated by Richard Maaranen, Neighbourhood Change Research Partnership, University of Toronto, September 2018.

Source: Statistics Canada, Census Tract Profile Series, 1991-2016

## 2. Demographic Segregation Trends City of Toronto, 1981, 2001, 2016

THREE CHARACTERISTICS; THREE POINTS IN TIME

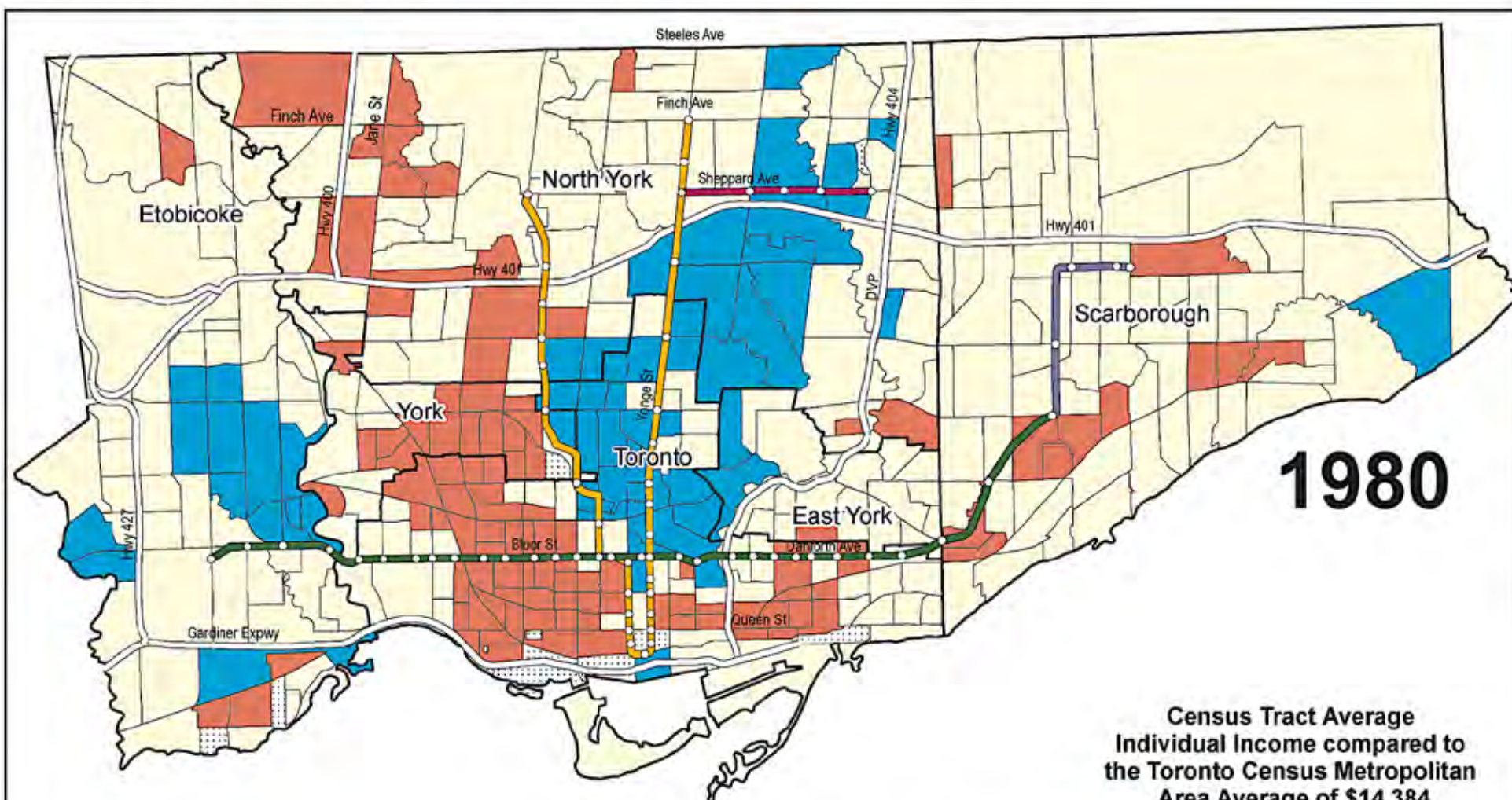
VISIBLE MINORITY POPULATION

IMMIGRANT POPULATION

EDUCATIONAL LEVEL



# Average Individual Income, Metro Toronto, 1980



**Census Tract Average Individual Income compared to the Toronto Census Metropolitan Area Average of \$14,384**

- High Income - 120% to 401% (61 CTs, 14% of the City)
- Middle Income - 80% to 120% (250 CTs, 59% of the City)
- Low Income - 41% to 80% (110 CTs, 26% of the City)
- Not Available

Average individual income from all sources, before-tax.

Census tract boundaries are for 1981.

Map data revised  
November 2017

Source: Statistics Canada,  
Census Profile Series, 1981

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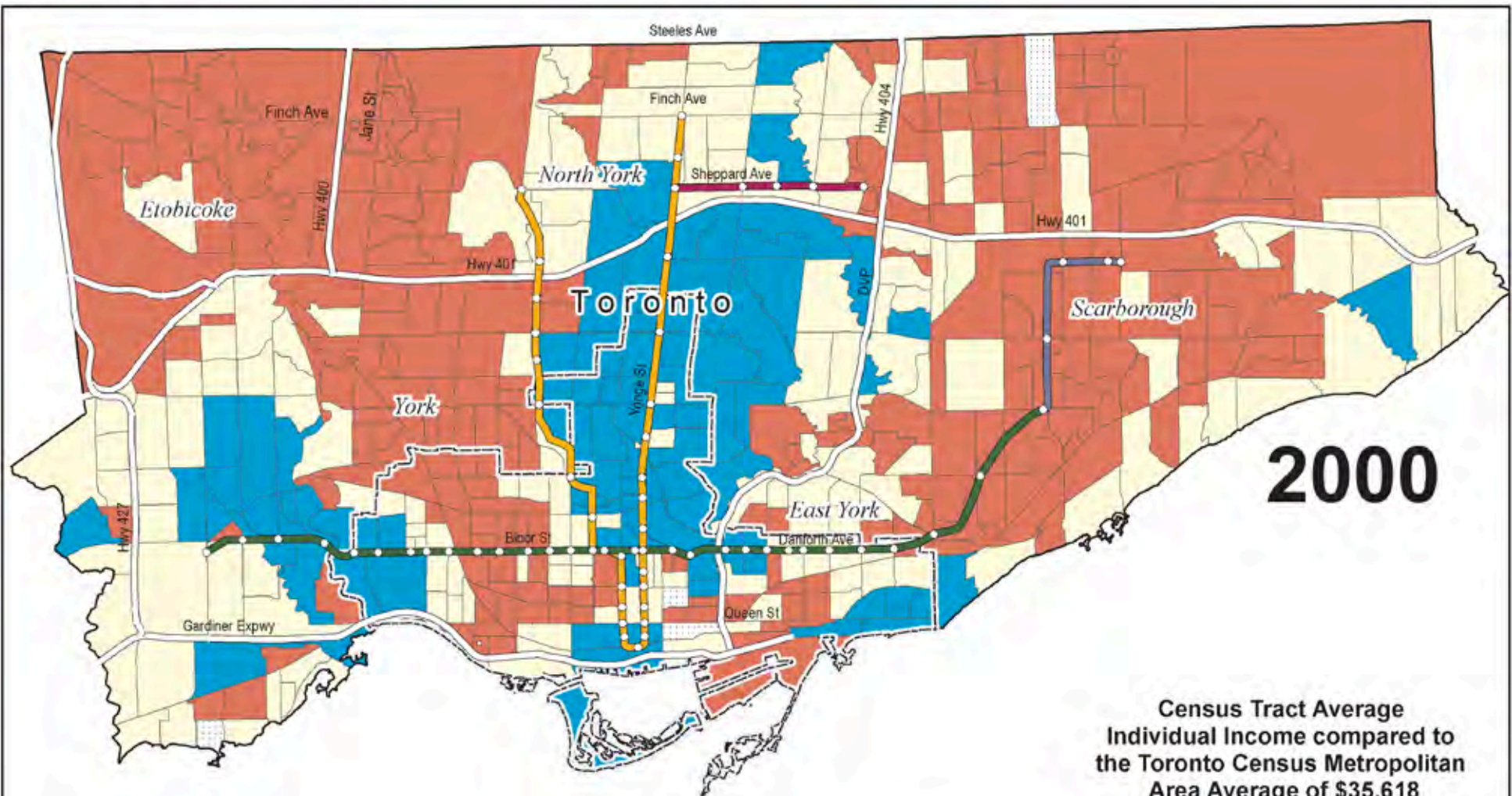
[www.NeighbourhoodChange.ca](http://www.NeighbourhoodChange.ca)

## Population

1981	2,137,000
2001	2,482,000
2016	2,732,000



# Average Individual Income, City of Toronto, 2000



**Census Tract Average Individual Income compared to the Toronto Census Metropolitan Area Average of \$35,618**

- High Income - 120% to 701% (95 CTs, 18% of the City)
- Middle Income - 80% to 120% (167 CTs, 32% of the City)
- Low Income - 38% to 80% (258 CTs, 50% of the City)
- Not Available

Average individual income from all sources, before-tax.

Census tract boundaries are for 2001.

September 2018

Source: Statistics Canada, Census Profile Series, 2001

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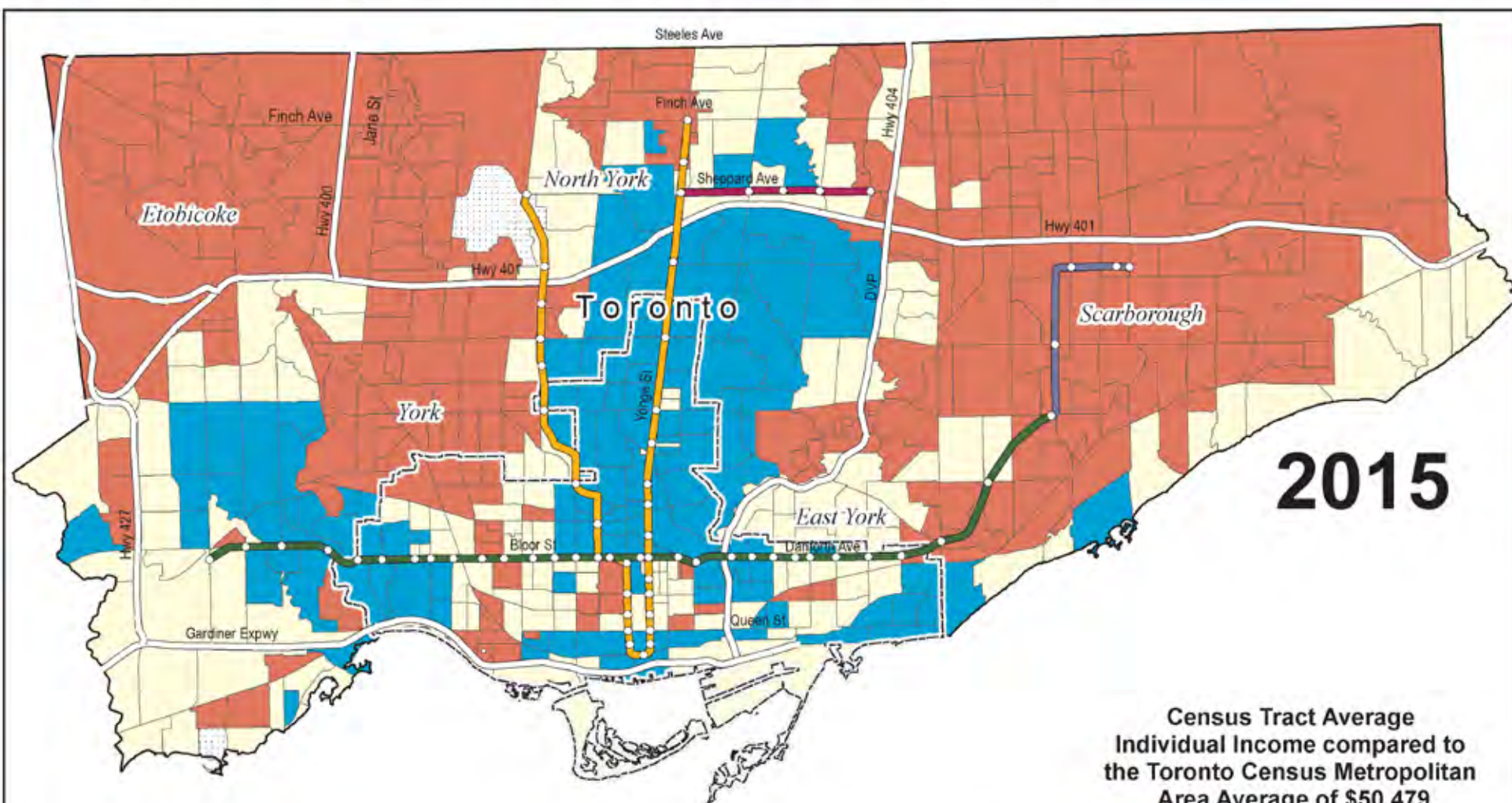
[www.NeighbourhoodChange.ca](http://www.NeighbourhoodChange.ca)

## Population

1981	2,137,000
2001	2,482,000
2016	2,732,000



# Average Individual Income, City of Toronto, 2015



**Census Tract Average  
Individual Income compared to  
the Toronto Census Metropolitan  
Area Average of \$50,479**

- High Income - 120% to 831%  
(126 CTs, 23% of the City)
- Middle Income - 80% to 120%  
(165 CTs, 29% of the City)
- Low Income - 37% to 80%  
(278 CTs, 48% of the City)
- Not Available

Average individual income from all  
sources, before-tax.

Census tract boundaries are for 2016.

November 2017

Source: Statistics Canada,  
Census Profile Series, 2016

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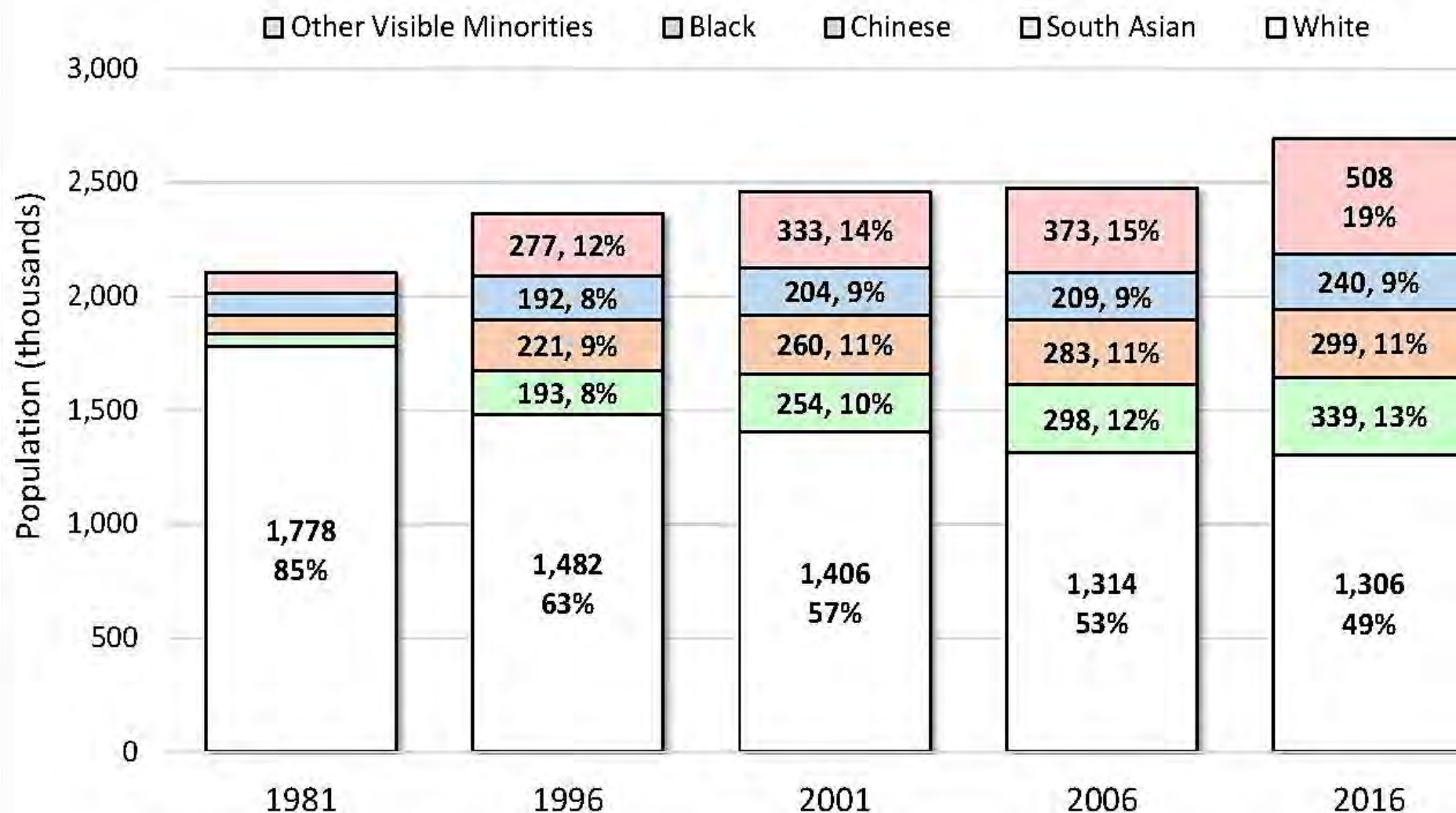
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## Population

1981	2,137,000
2001	2,482,000
2016	2,732,000

# Population by Visible Minority Status

## City of Toronto, 1981–2016



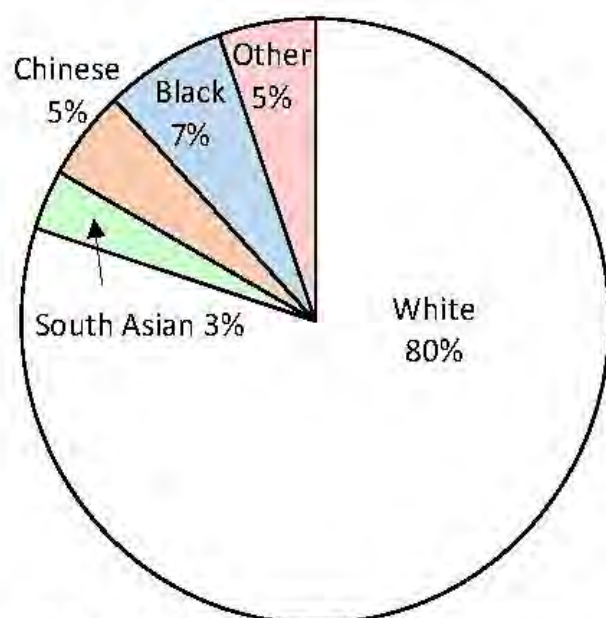
**Other Visible minorities** include Filipino, Korean, Japanese, South East Asian, Arab, West Asian, Latin American and other non-white groups. Visible minority status is not applicable to the Aboriginal population. Census 1981 data produced by Statistics Canada based on responses to ethnic origin, place of birth and language questions as part of a custom tabulation.



# Toronto's Segregated Ethno-Cultural Population, 1980

## Low Income Neighbourhoods

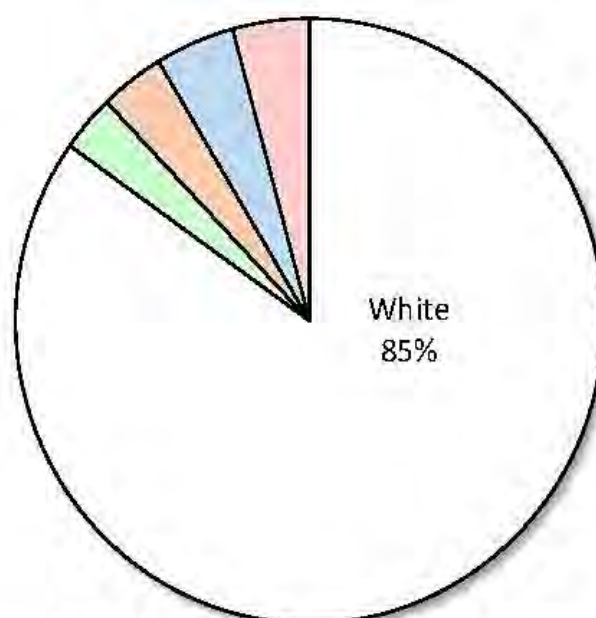
528,000 people  
26% of census tracts



**\$10,000** average income (1980)

## Middle Income Neighbourhoods

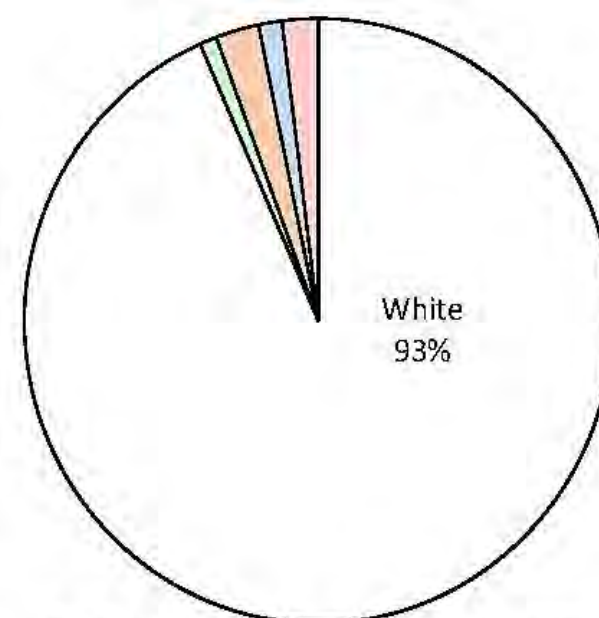
1,325,000 people  
59% of census tracts



**\$14,000** average income (1980)

## High Income Neighbourhoods

237,000 people  
14% of census tracts



**\$23,000** average income (1980)

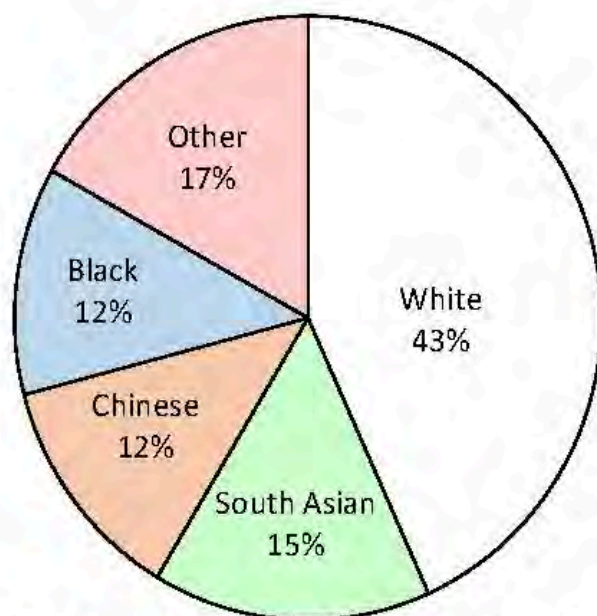
White Population 1,778,200: **85%** of the City. South Asian 60,100: **3%** of the City. Chinese 78,600: **4%** of the City. Black 97,100: **5%** of the City. Other Visible Minorities 89,200: **4%** of the City.

**Other Visible minorities** include Filipino, Korean, Japanese, Arab, West Asian, Latin American and other non-white groups. Visible minority status is not applicable to the Aboriginal population. **Census tract average individual income** is from all sources, before-tax. **Low income** status refers to census tracts with an average income below 80.0% of the Toronto census metropolitan area (CMA) average income of \$14,384 for 1980. **Middle income** status refers to census tracts with average income 80.0% to 119.9% of the Toronto CMA average income. **High income** status refers to census tracts with average income 120.0% and above the Toronto CMA average income.

# Toronto's Segregated Ethno-Cultural Population, 2001

## Low Income Neighbourhoods

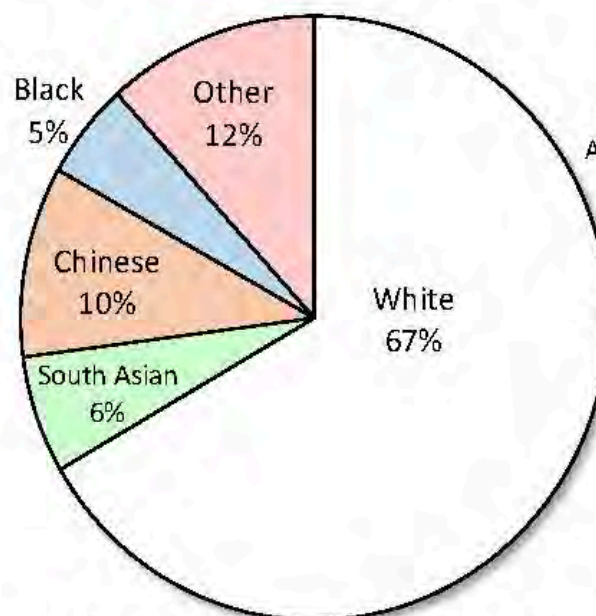
1,270,000 people  
50% of census tracts



**\$24,000** average income (2000)

## Middle Income Neighbourhoods

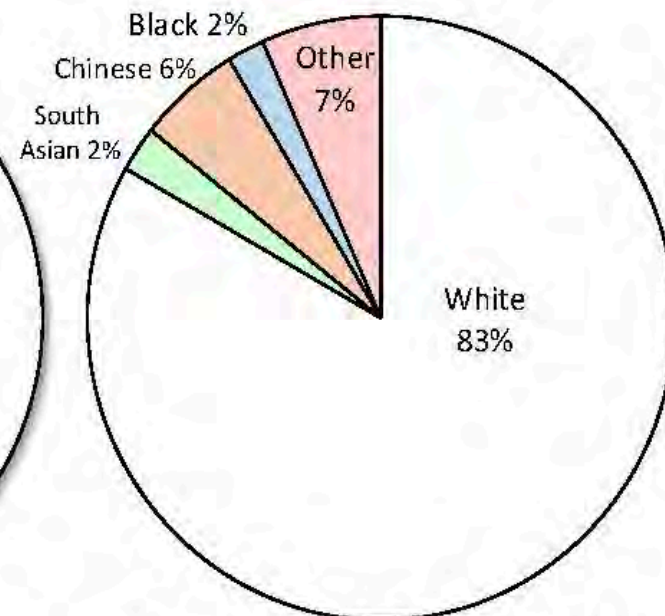
786,000 people  
32% of census tracts



**\$33,000** average income (2000)

## High Income Neighbourhoods

393,000 people  
18% of census tracts



**\$68,000** average income (2000)

White Population 1,405,700: **57%** of the City. South Asian 253,900: **10%** of the City. Chinese 259,700: **9%** of the City. Black 204,100: **8%** of the City. Other Visible Minorities 333,400: **14%** of the City.

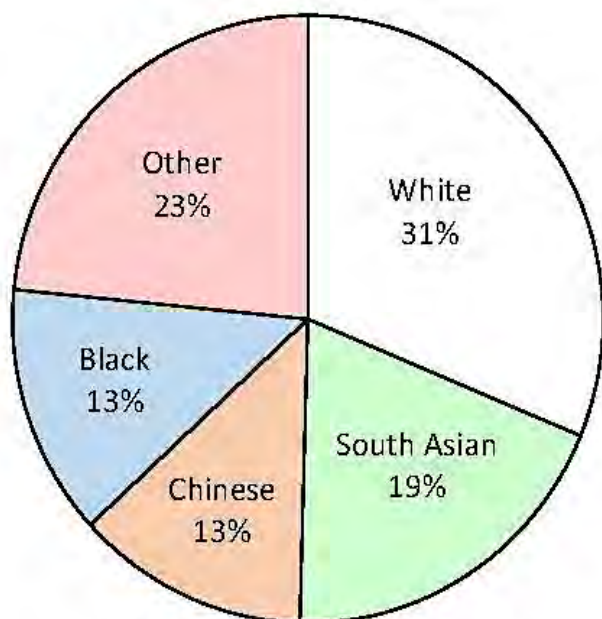
**Other Visible minorities** include Filipino, Korean, Japanese, Arab, West Asian, Latin American and other non-white groups. Visible minority status is not applicable to the Aboriginal population. **Census tract average individual income** is from all sources, before-tax. **Low income** status refers to census tracts with an average income below 80.0% of the Toronto census metropolitan area (CMA) average income of \$35,618 for 2000. **Middle income** status refers to census tracts with average income 80.0% to 119.9% of the Toronto CMA average income. **High income** status refers to census tracts with average income 120.0% and above the Toronto CMA average income.



# Toronto's Segregated Ethno-Cultural Population, 2016

## Low Income Neighbourhoods

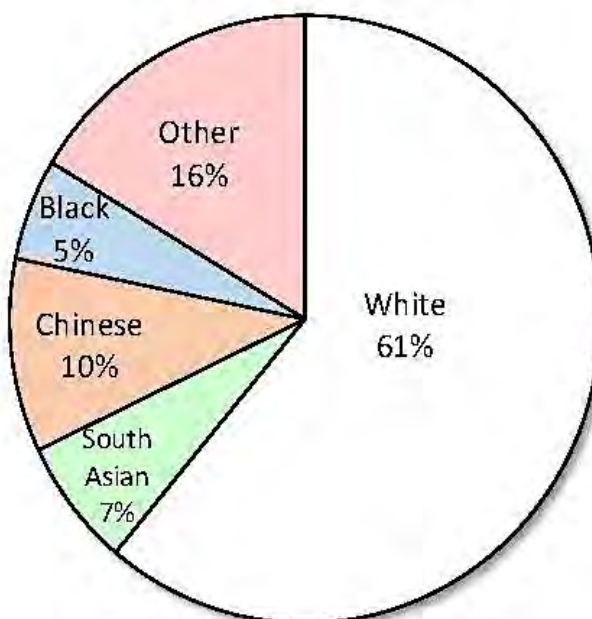
1,368,000 people  
48% of census tracts



**\$32,000** average income

## Middle Income Neighbourhoods

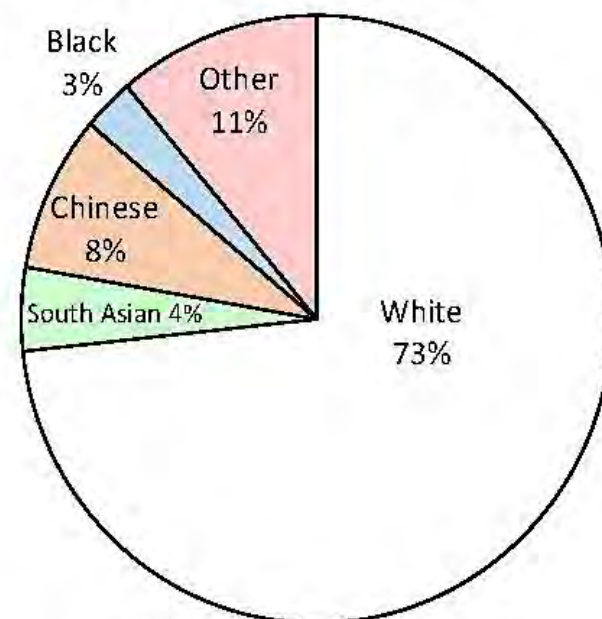
757,000 people  
29% of census tracts



**\$49,000** average income

## High Income Neighbourhoods

568,000 people  
23% of census tracts

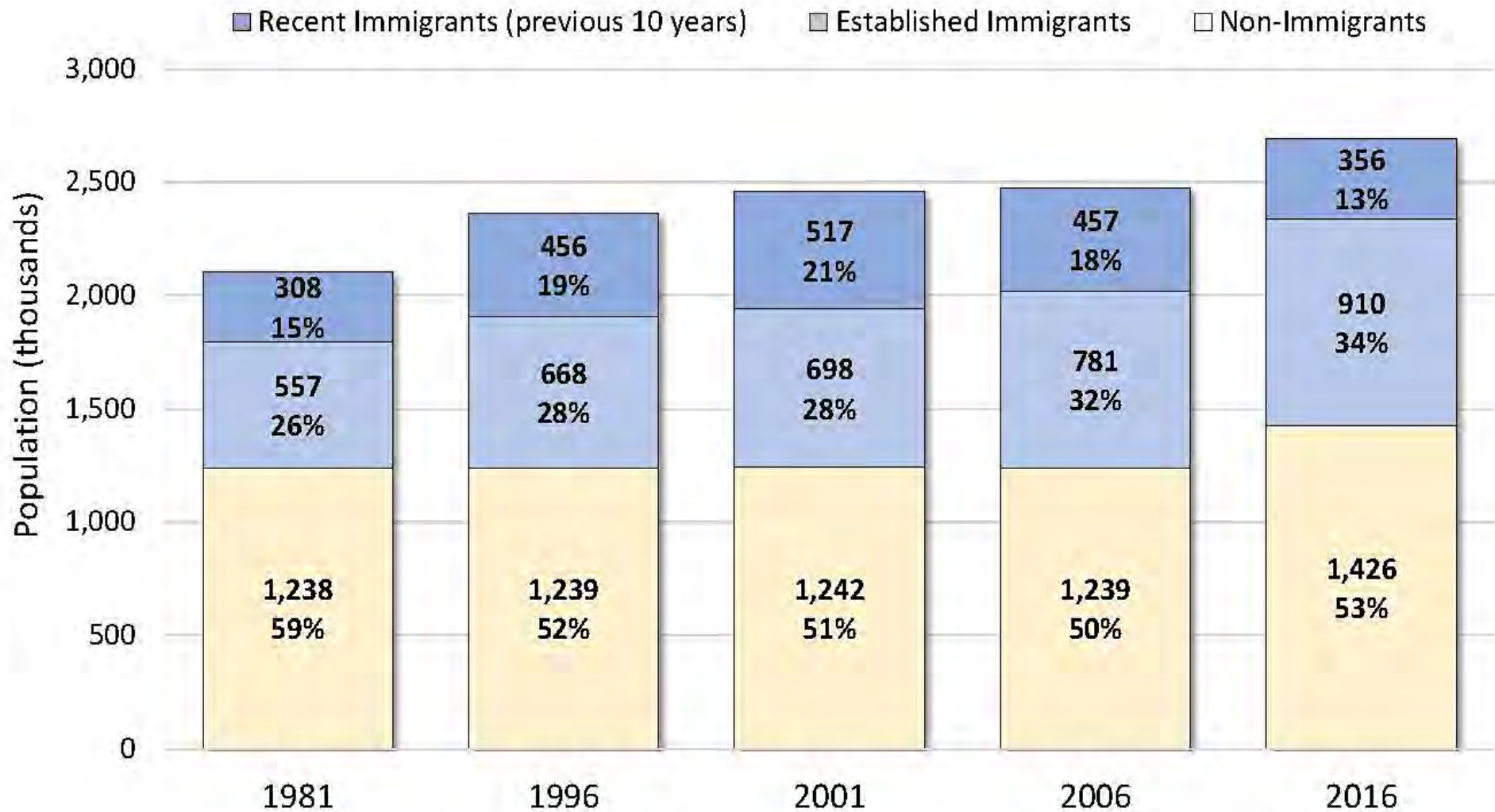


**\$102,000** average income

White Population 1,305,800: **49%** of the City. South Asian 339,000: **13%** of the City. Chinese 299,500: **11%** of the City. Black 239,900: **9%** of the City. Other Visible Minorities 507,600: **19%** of the City.

**Other Visible minorities** include Filipino, Korean, Japanese, Arab, West Asian, Latin American and other non-white groups. Visible minority status is not applicable to the Aboriginal population. **Census tract average individual income** is from all sources, before-tax. **Low income** status refers to census tracts with an average income below 80.0% of the Toronto census metropolitan area (CMA) average income of \$50,479 for 2015. **Middle income** status refers to census tracts with average income 80.0% to 119.9% of the Toronto CMA average income. **High income** status refers to census tracts with average income 120.0% and above the Toronto CMA average income.

# Population by Immigrant Status City of Toronto, 1981–2016



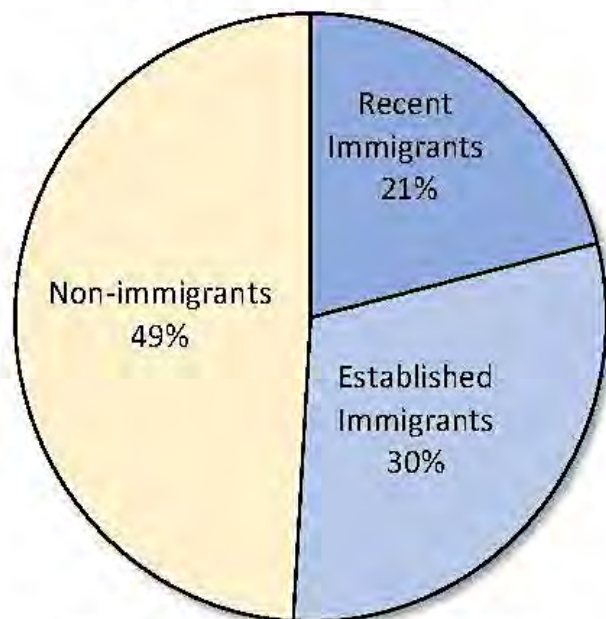
**Immigrant** refers to landed immigrants and permanent residents. **Non-immigrant** refers to persons born in Canada and non-permanent residents. Non-permanent residents not counted by the Census in 1981.



# Toronto's Segregated Immigrant Population, 1981

## Low Income Neighbourhoods

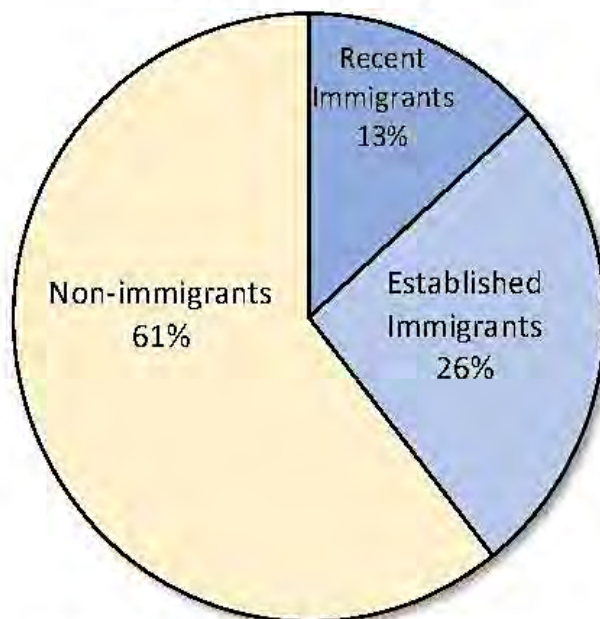
528,000 people  
26% of census tracts



**\$10,000** average income (1980)

## Middle Income Neighbourhoods

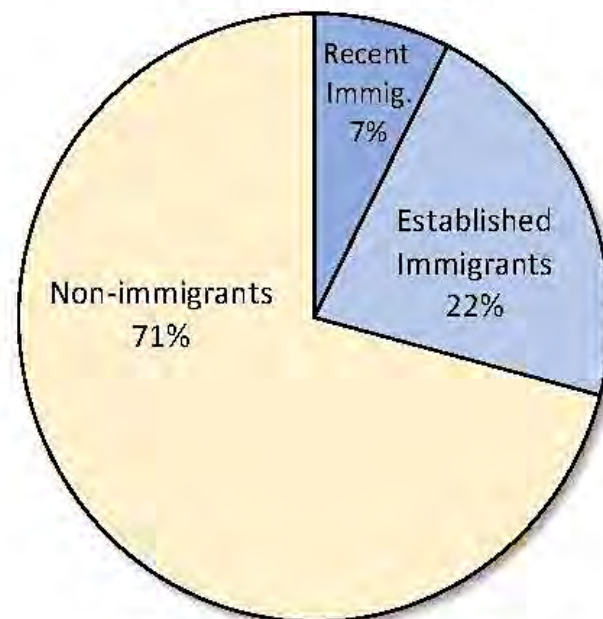
1,325,000 people  
59% of census tracts



**\$14,000** average income (1980)

## High Income Neighbourhoods

237,000 people  
14% of census tracts



**\$23,000** average income (1980)

Recent Immigrants (1971-1981 arrivals) 307,800: **15%** of the City. Established Immigrants (pre-1971 arrivals) 557,100: **26%** of the City. Non-immigrants 1,238,300: **59%** of the City.

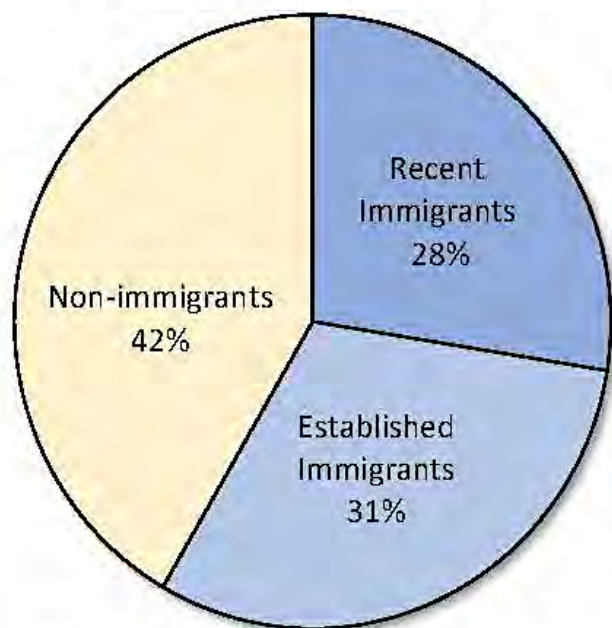
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# Toronto's Segregated Immigrant Population, 2001

## Low Income Neighbourhoods

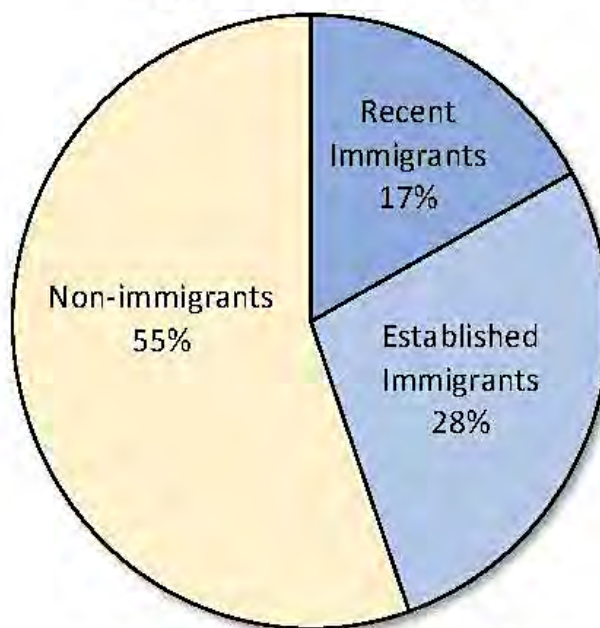
1,270,000 people  
50% of census tracts



**\$24,000** average income (2000)

## Middle Income Neighbourhoods

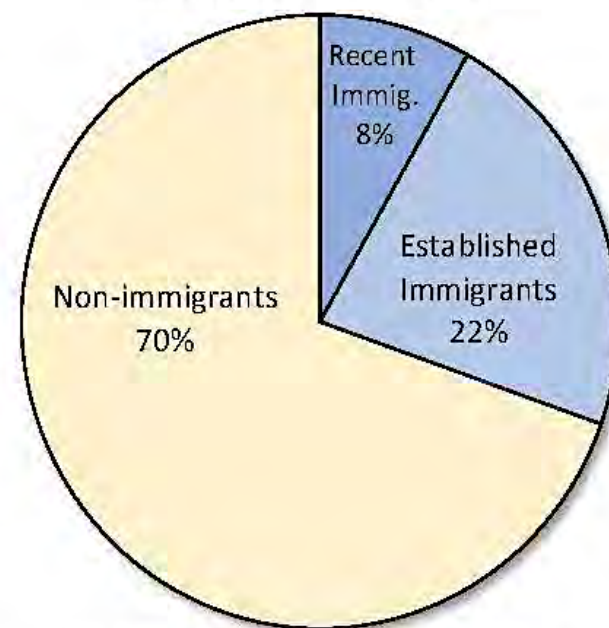
786,000 people  
32% of census tracts



**\$33,000** average income (2000)

## High Income Neighbourhoods

393,000 people  
18% of census tracts



**\$68,000** average income (2000)

Recent Immigrants (1991-2001 arrivals) 516,600: **21%** of the City. Established Immigrants (pre-2001 arrivals) 698,000: **28%** of the City. Non-immigrants and non-permanent residents 1,242,200: **51%** of the City.

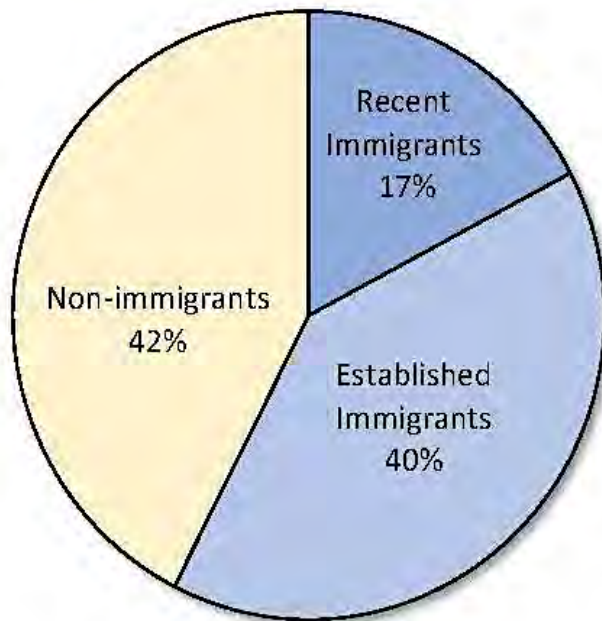
**Immigrant** refers to landed immigrants and permanent residents. **Non-immigrant** refers to persons born in Canada and non-permanent residents. **Census tract average individual income** is from all sources, before-tax. **Low income** status refers to census tracts with an average income below 80.0% of the Toronto census metropolitan area (CMA) average income of \$35,618 for 2000. **Middle income** status refers to census tracts with average income 80.0% to 119.9% of the Toronto CMA average income. **High income** status refers to census tracts with average income 120.0% and above the Toronto CMA average income.



# Toronto's Segregated Immigrant Population, 2016

## Low Income Neighbourhoods

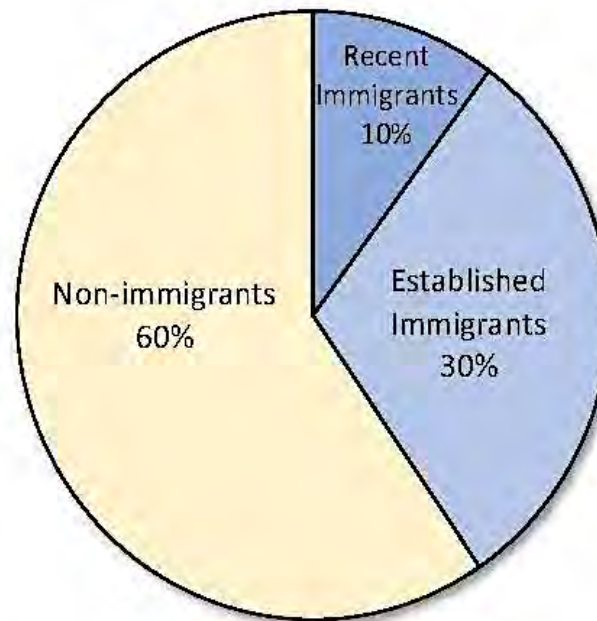
1,368,000 people  
48% of census tracts



**\$32,000** average income

## Middle Income Neighbourhoods

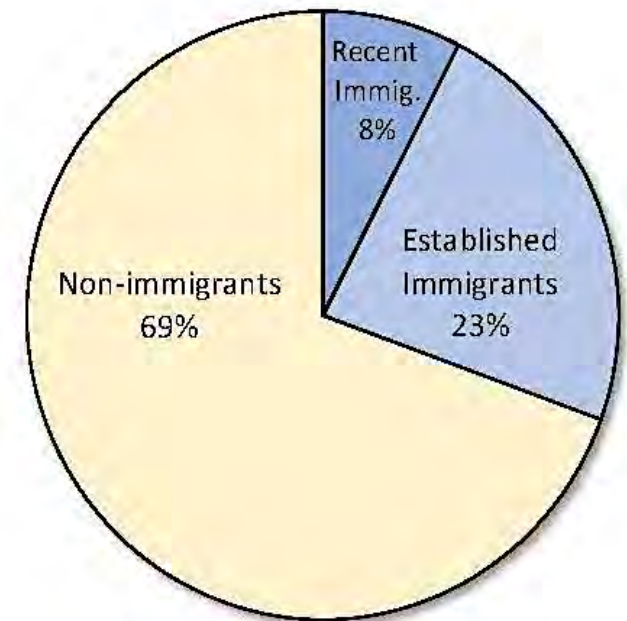
757,000 people  
29% of census tracts



**\$49,000** average income

## High Income Neighbourhoods

568,000 people  
23% of census tracts



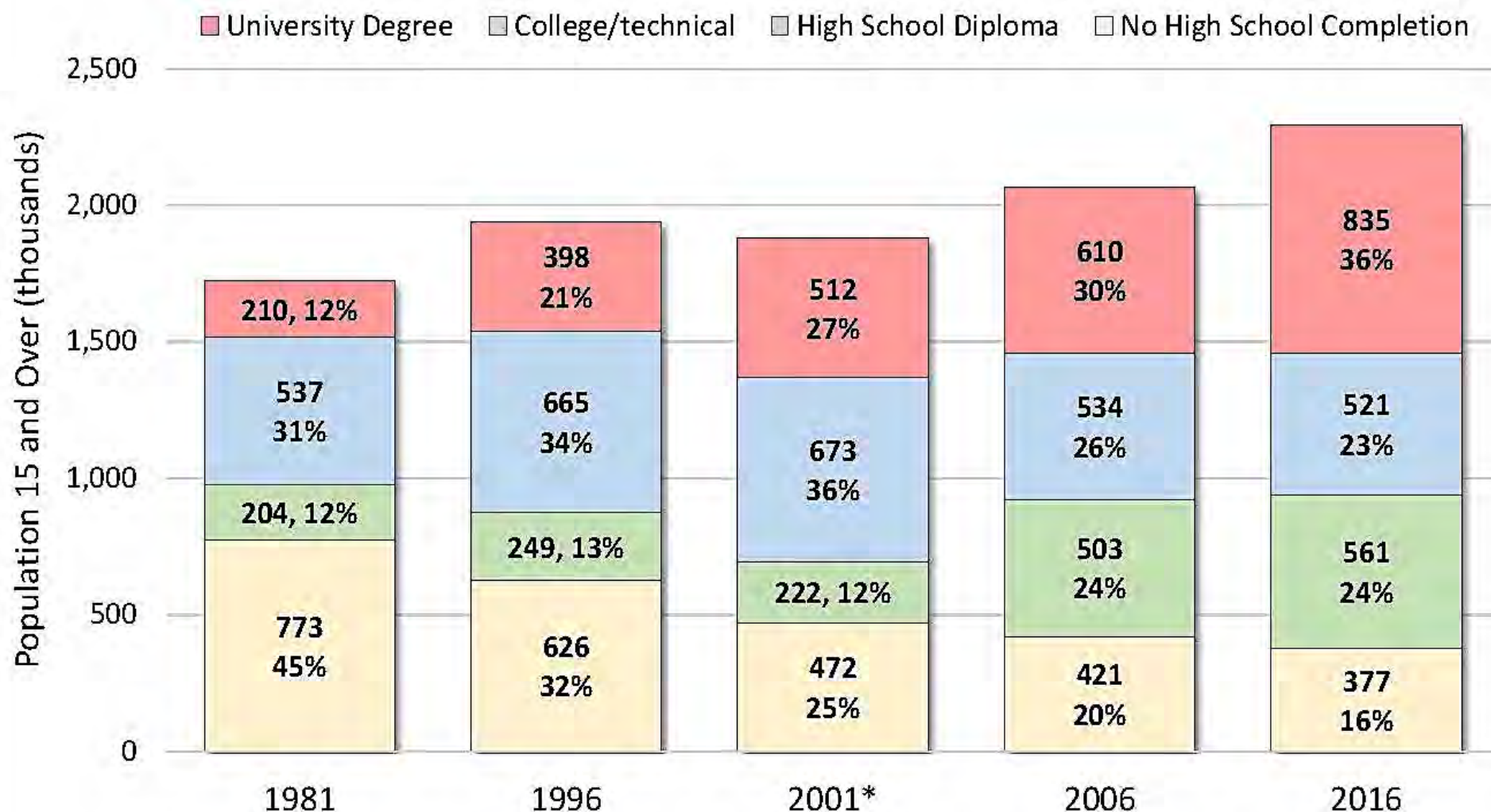
**\$102,000** average income

Recent Immigrants (2006-2016 arrivals) 355,700: **13%** of the City. Established Immigrants (pre-2006 arrivals) 910,300: **34%** of the City. Non-immigrants and non-permanent residents 1,425,700: **53%** of the City.

**Immigrant** refers to landed immigrants and permanent residents. **Non-immigrant** refers to persons born in Canada and non-permanent residents. **Census tract average individual income** is from all sources, before-tax. **Low income** status refers to census tracts with an average income below 80.0% of the Toronto census metropolitan area (CMA) average income of \$50,479 for 2015. **Middle income** status refers to census tracts with average income 80.0% to 119.9% of the Toronto CMA average income. **High income** status refers to census tracts with average income 120.0% and above the Toronto CMA average income.

# Population by Educational Attainment

## City of Toronto, 1981–2016



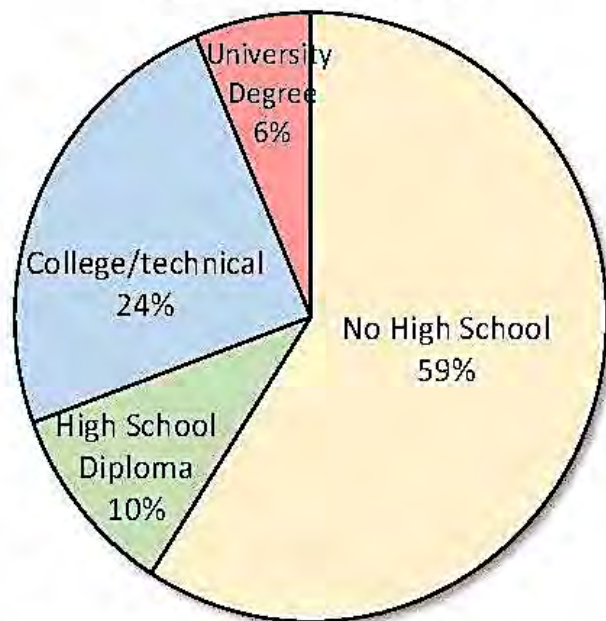
**Educational attainment** refers to the highest certificate, diploma or degree completed for the population age 15 and over. Census 2001 data only reported for the the population age 20 and over. University degree refers to Bachelor's or higher. College/technical category refers to any postsecondary education below the completion of a university Bachelor's degree.



# Educational Attainment of Toronto's Population, 1981

## Low Income Neighbourhoods

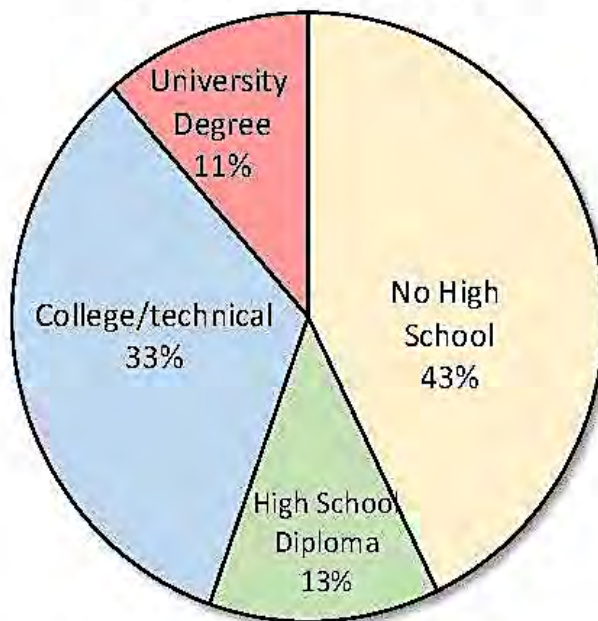
419,000 people (age 15+)  
26% of census tracts



**\$10,000** average income (1980)

## Middle Income Neighbourhoods

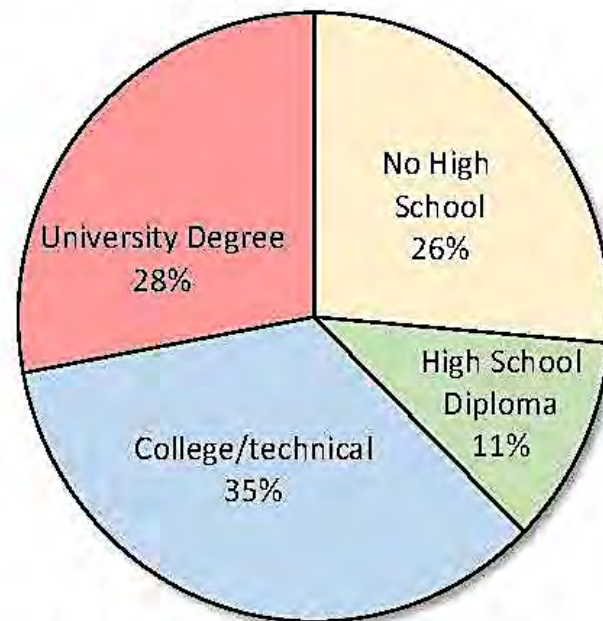
1,092,000 people (age 15+)  
59% of census tracts



**\$14,000** average income (1980)

## High Income Neighbourhoods

202,000 people (age 15+)  
14% of census tracts



**\$23,000** average income (1980)

University Degree (Bachelor's or higher) 209,900: **12%** of the City. College/technical 537,300: **31%** of the City.  
High School Diploma 204,400: **12%** of the City. No High School Completion 773,300: **45%** of the City.

**Educational attainment** refers to the highest certificate, diploma or degree completed for the population aged 15 years and over.

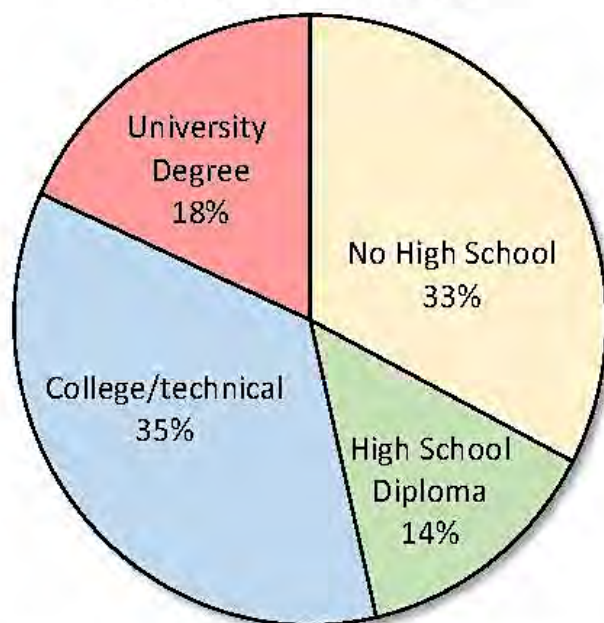
**Census tract average individual income** is from all sources, before-tax. **Low income** status refers to census tracts with an average income below 80.0% of the Toronto census metropolitan area (CMA) average income of \$14,384 for 1980. **Middle income** status refers to census tracts with average income 80.0% to 119.9% of the Toronto CMA average income. **High income** status refers to census tracts with average income 120.0% and above the Toronto CMA average income.



# Educational Attainment of Toronto's Population, 2001

## Low Income Neighbourhoods

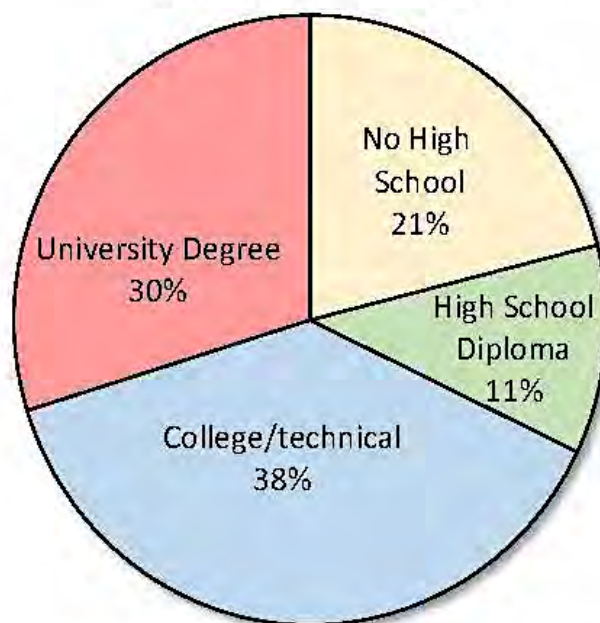
936,000 people (age 20+)  
50% of census tracts



**\$24,000** average income (2000)

## Middle Income Neighbourhoods

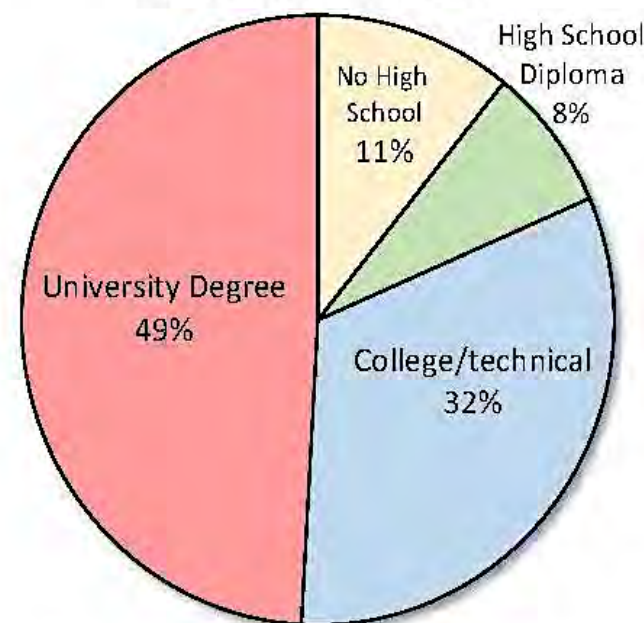
623,000 people (age 20+)  
32% of census tracts



**\$33,000** average income (2000)

## High Income Neighbourhoods

313,000 people (age 20+)  
18% of census tracts



**\$68,000** average income (2000)

University Degree (Bachelor's or higher) 512,000: **27%** of the City. College/technical 673,000: **36%** of the City.  
High School Diploma 222,000: **12%** of the City. No High School Completion 472,000: **25%** of the City.

**Educational attainment** refers to the highest certificate, diploma or degree completed for the population aged 20 years and over.

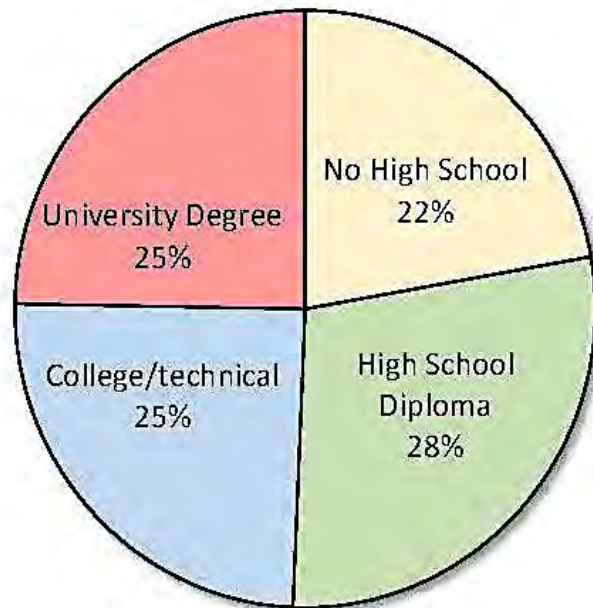
**Census tract average individual Income** is from all sources, before-tax. **Low income** status refers to census tracts with an average income below 80.0% of the Toronto census metropolitan area (CMA) average income of \$35,618 for 2000. **Middle income** status refers to census tracts with average income 80.0% to 119.9% of the Toronto CMA average income. **High income** status refers to census tracts with average income 120.0% and above the Toronto CMA average income.



# Educational Attainment of Toronto's Population, 2016

## Low Income Neighbourhoods

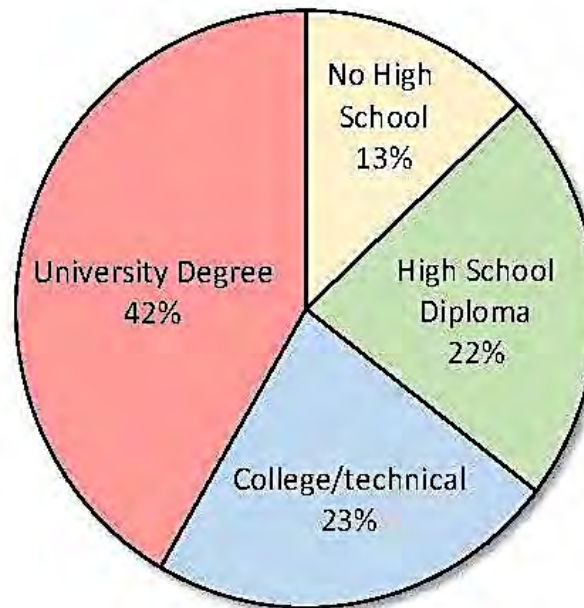
1,146,000 people (age 15+)  
48% of census tracts



**\$32,000** average income

## Middle Income Neighbourhoods

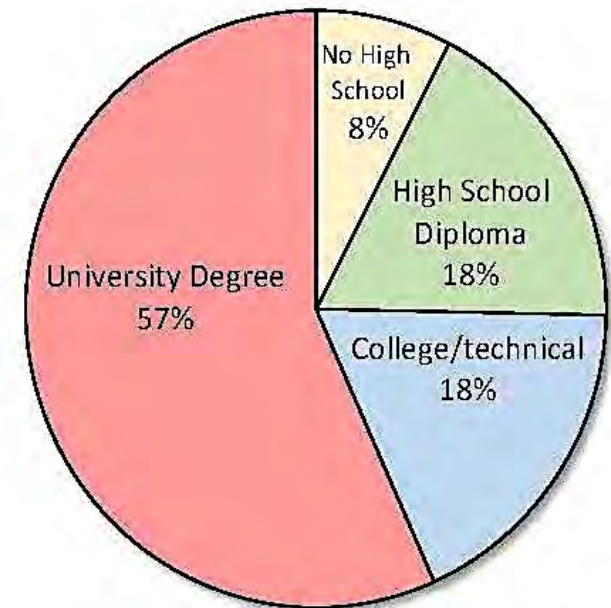
659,000 people (age 15+)  
29% of census tracts



**\$49,000** average income

## High Income Neighbourhoods

489,000 people (age 15+)  
23% of census tracts



**\$102,000** average income

University Degree (Bachelor's or higher) 835,300: **36%** of the City. College/technical 521,100: **23%** of the City. High School Diploma 561,100: **24%** of the City. No High School Completion 377,300: **16%** of the City.

**Educational attainment** refers to the highest certificate, diploma or degree completed for the population aged 15 years and over.

**Census tract average individual income** is from all sources, before-tax. **Low income** status refers to census tracts with an average income below 80.0% of the Toronto census metropolitan area (CMA) average income of \$50,479 for 2015. **Middle income** status refers to census tracts with average income 80.0% to 119.9% of the Toronto CMA average income. **High income** status refers to census tracts with average income 120.0% and above the Toronto CMA average income.

### 3. City of Toronto, 1970 - 2015

## Neighbourhood Income Polarization

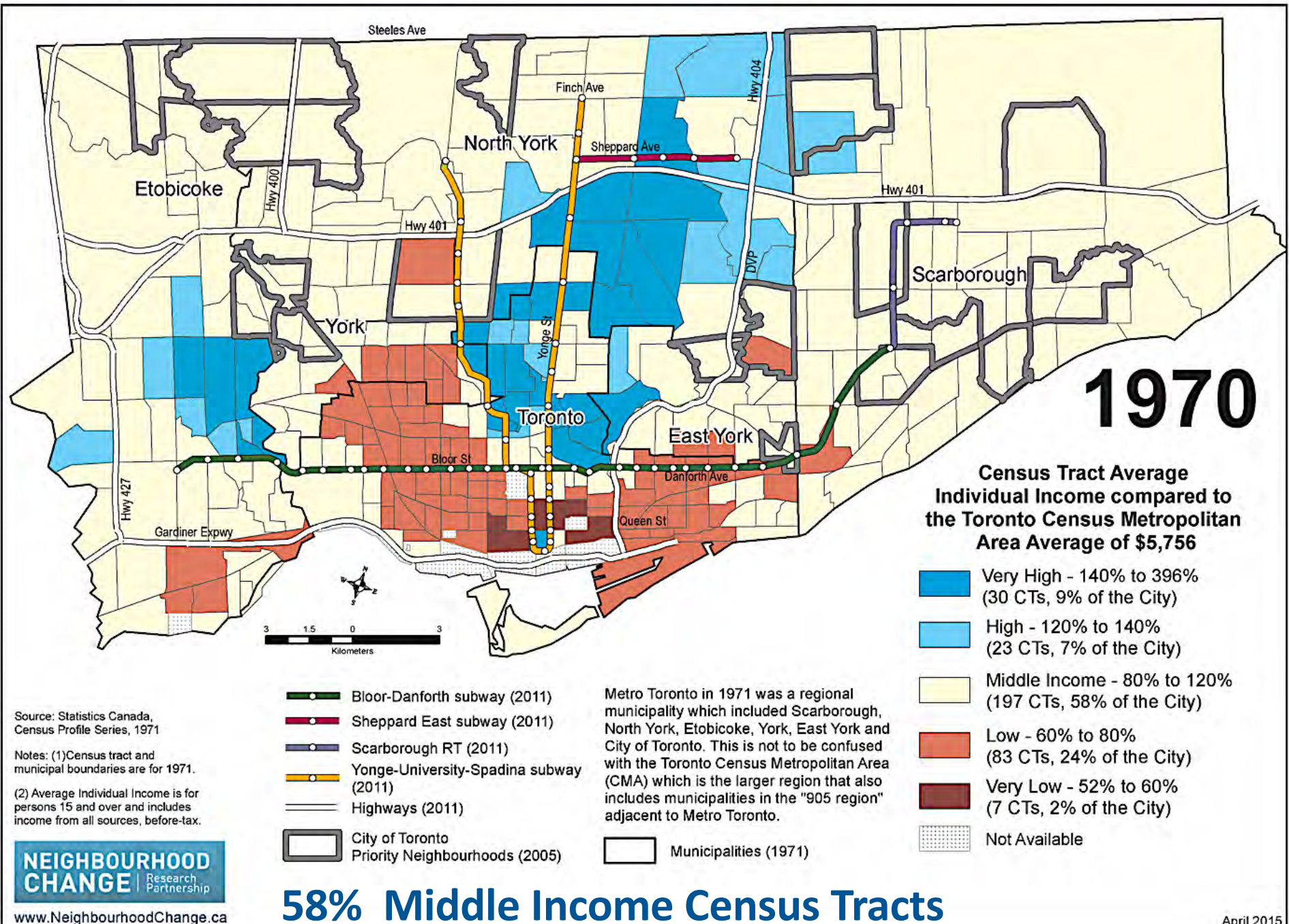
Decline of Middle Income Neighbourhoods (census tracts)

CENSUS TRACTS: SERIES OF MAPS

HIGH INCOME	FROM 16%	→ 23%
MIDDLE INCOME	FROM 58%	→ 29%
LOW INCOME	FROM 26%	→ 48%



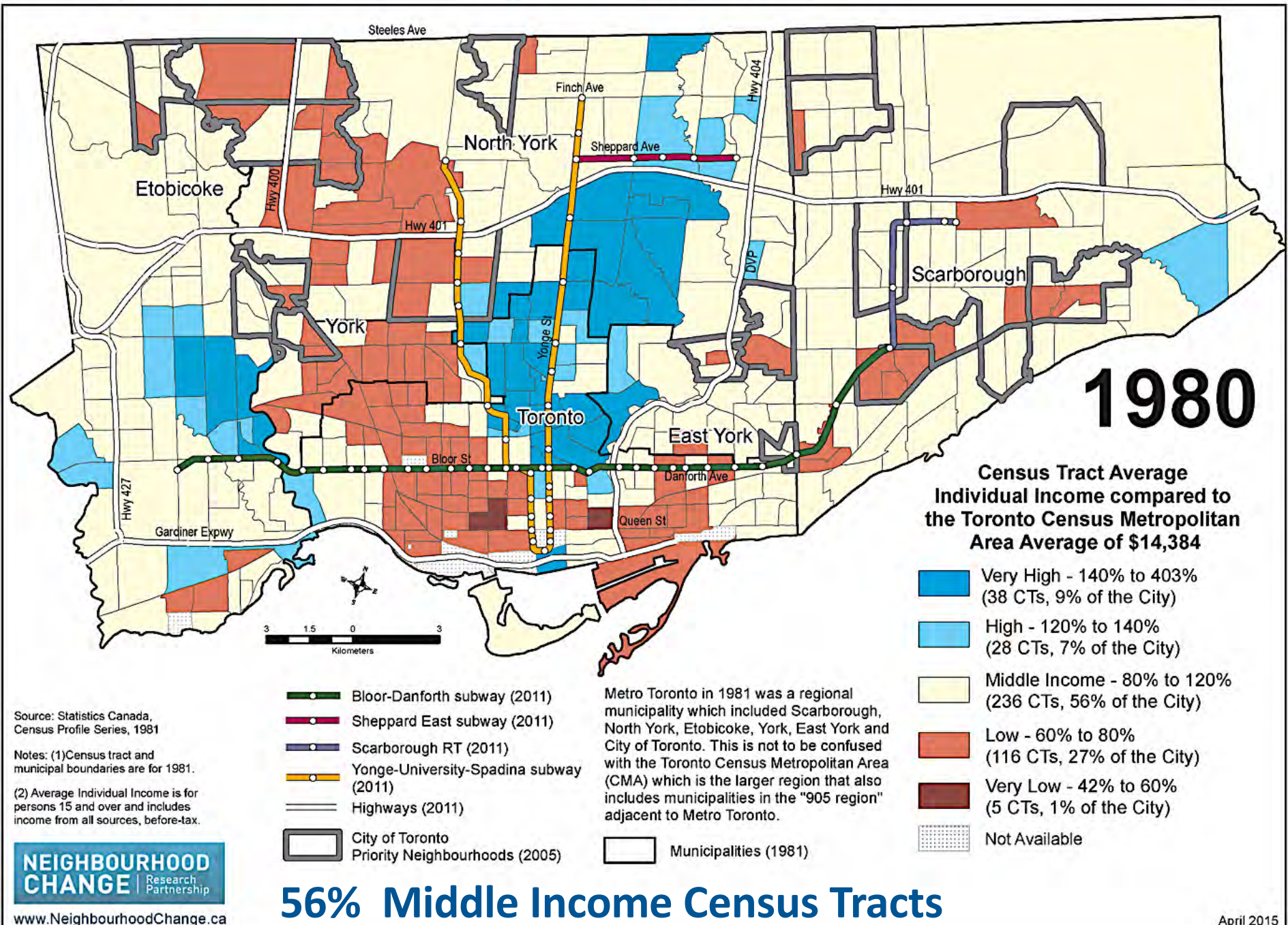
# Average Individual Income, Metro Toronto, 1970



April 2015



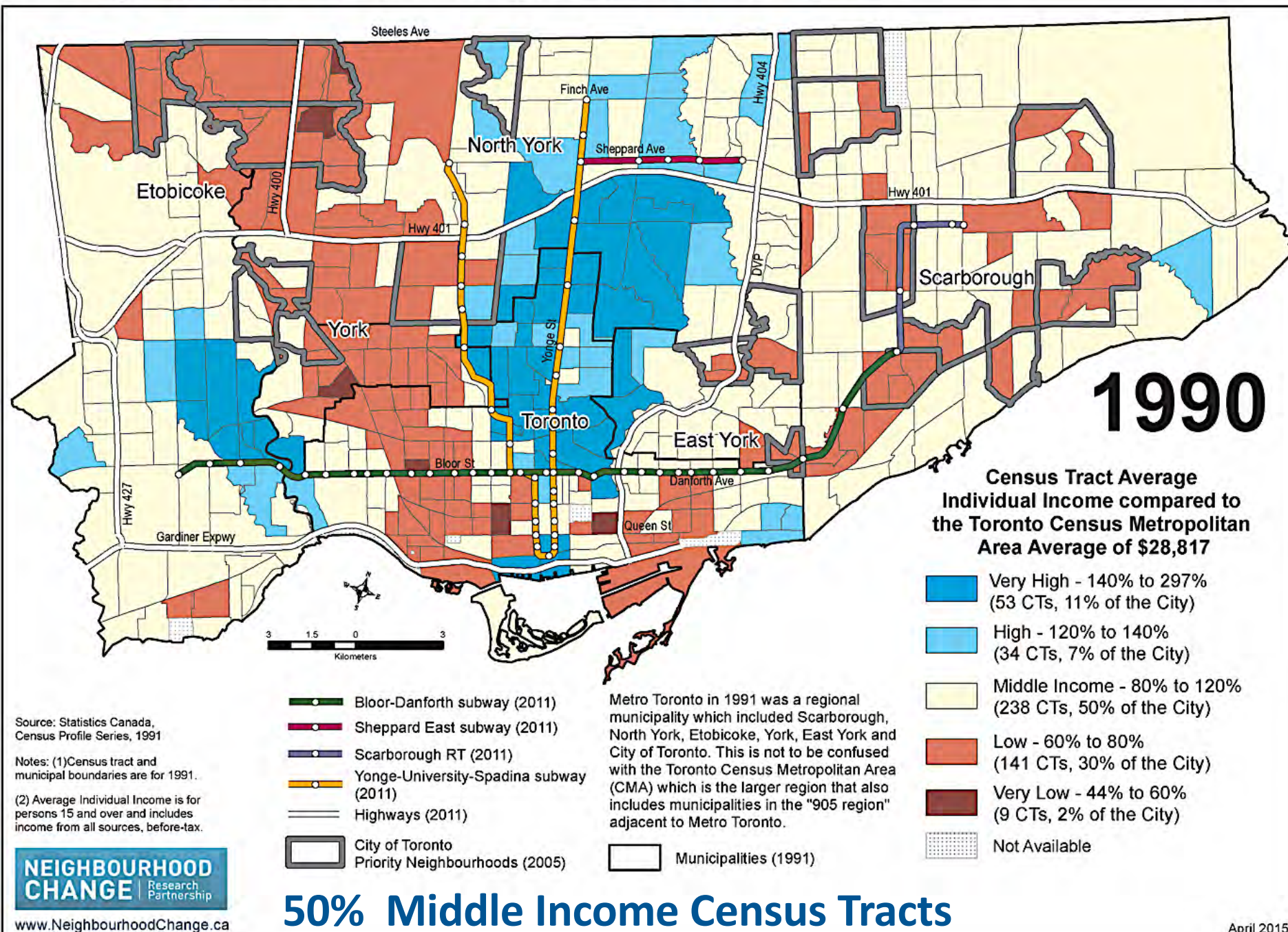
# Average Individual Income, Metro Toronto, 1980



April 2015



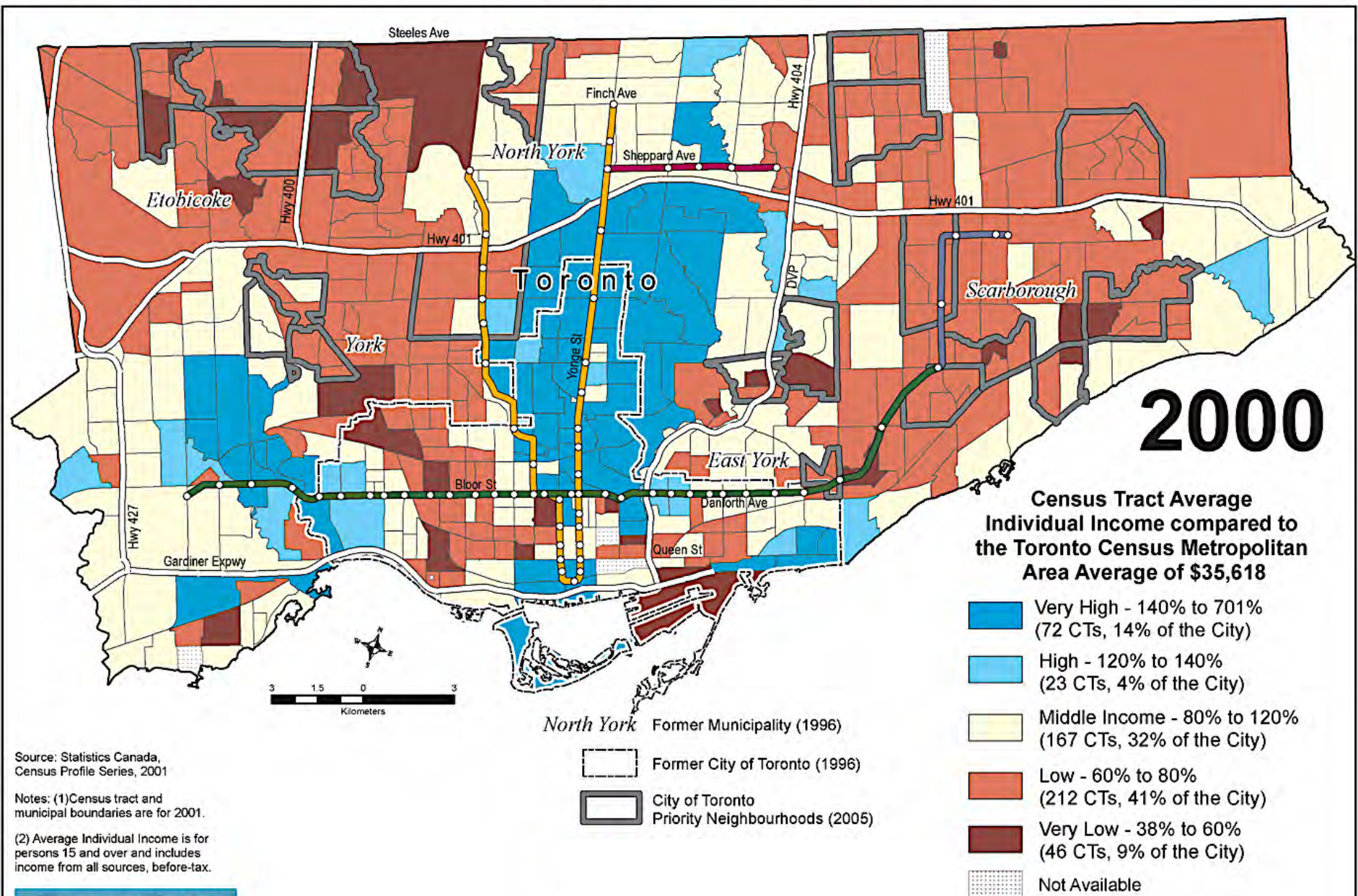
# Average Individual Income, Metro Toronto, 1990



April 2015



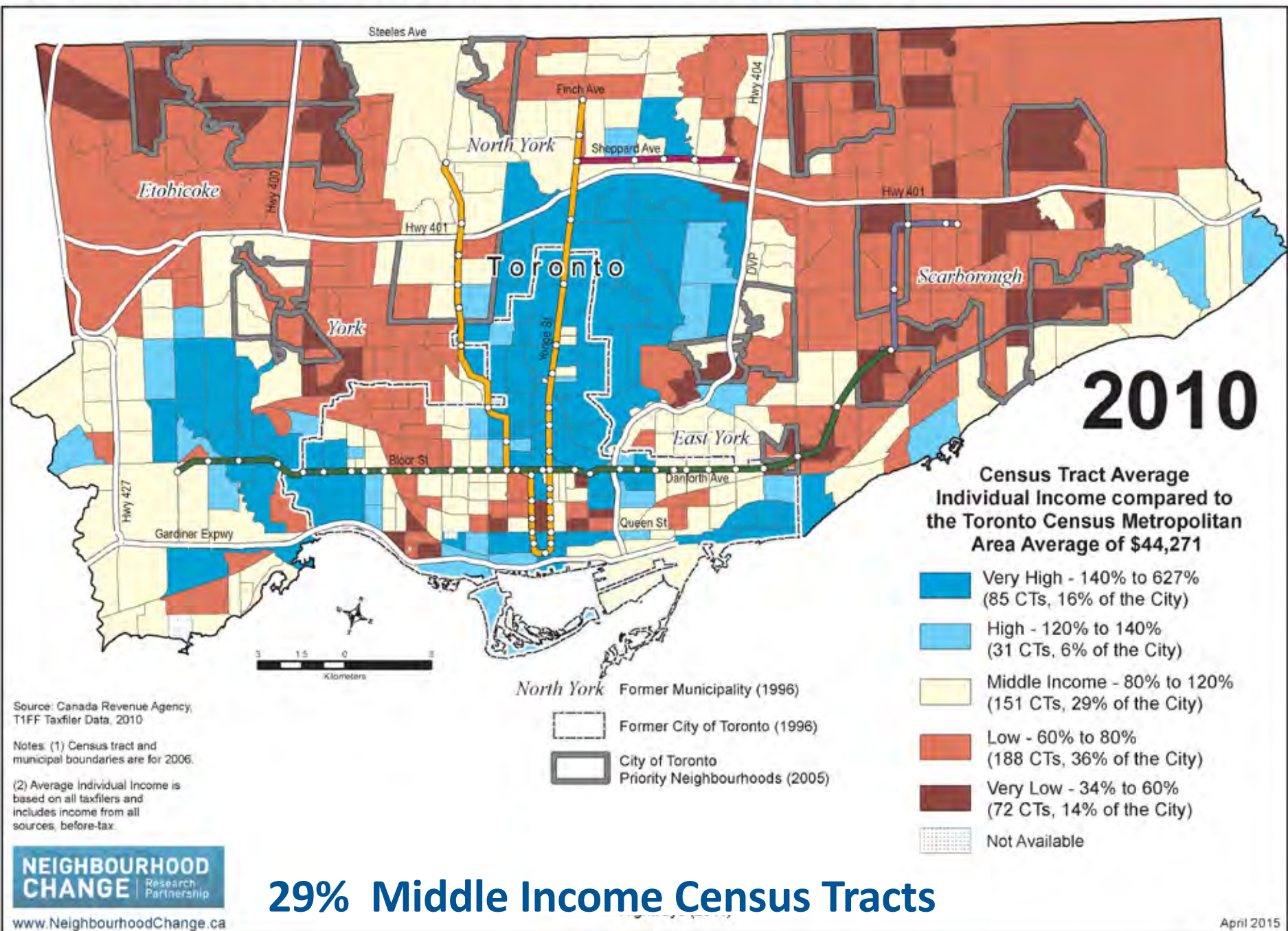
# Average Individual Income, City of Toronto, 2000



April 2015

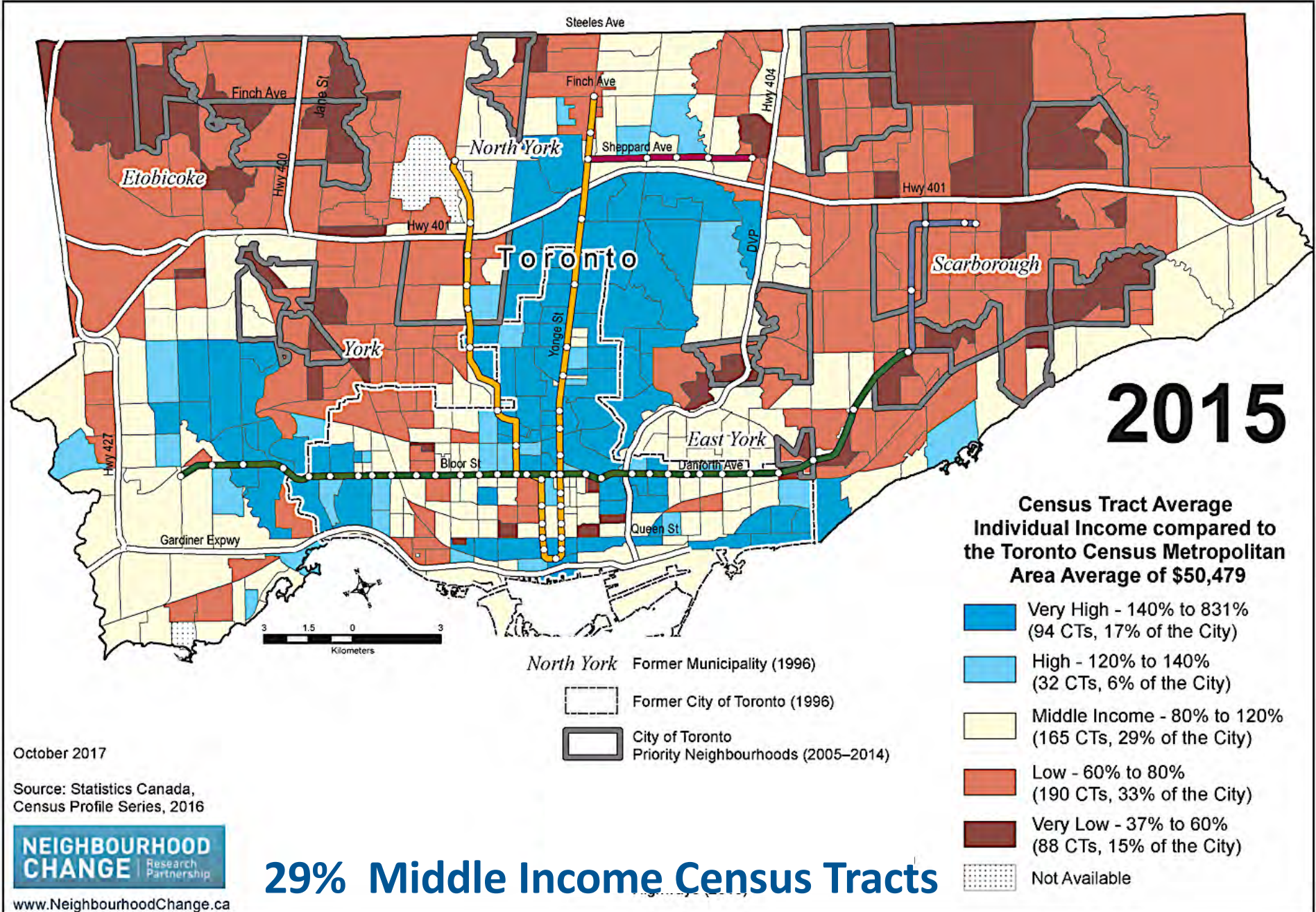


# Average Individual Income, City of Toronto, 2010



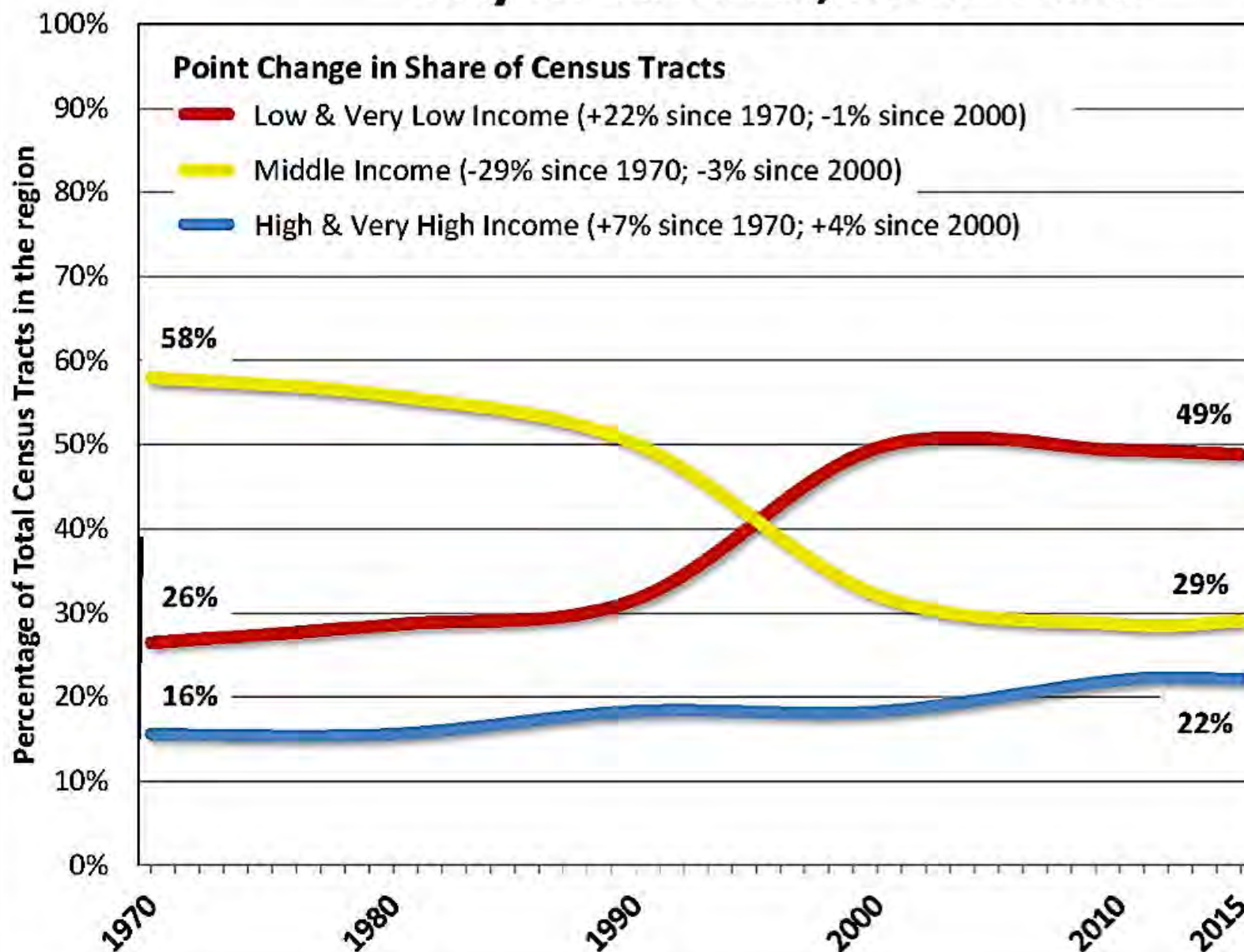


# Average Individual Income, City of Toronto, 2015





# 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.

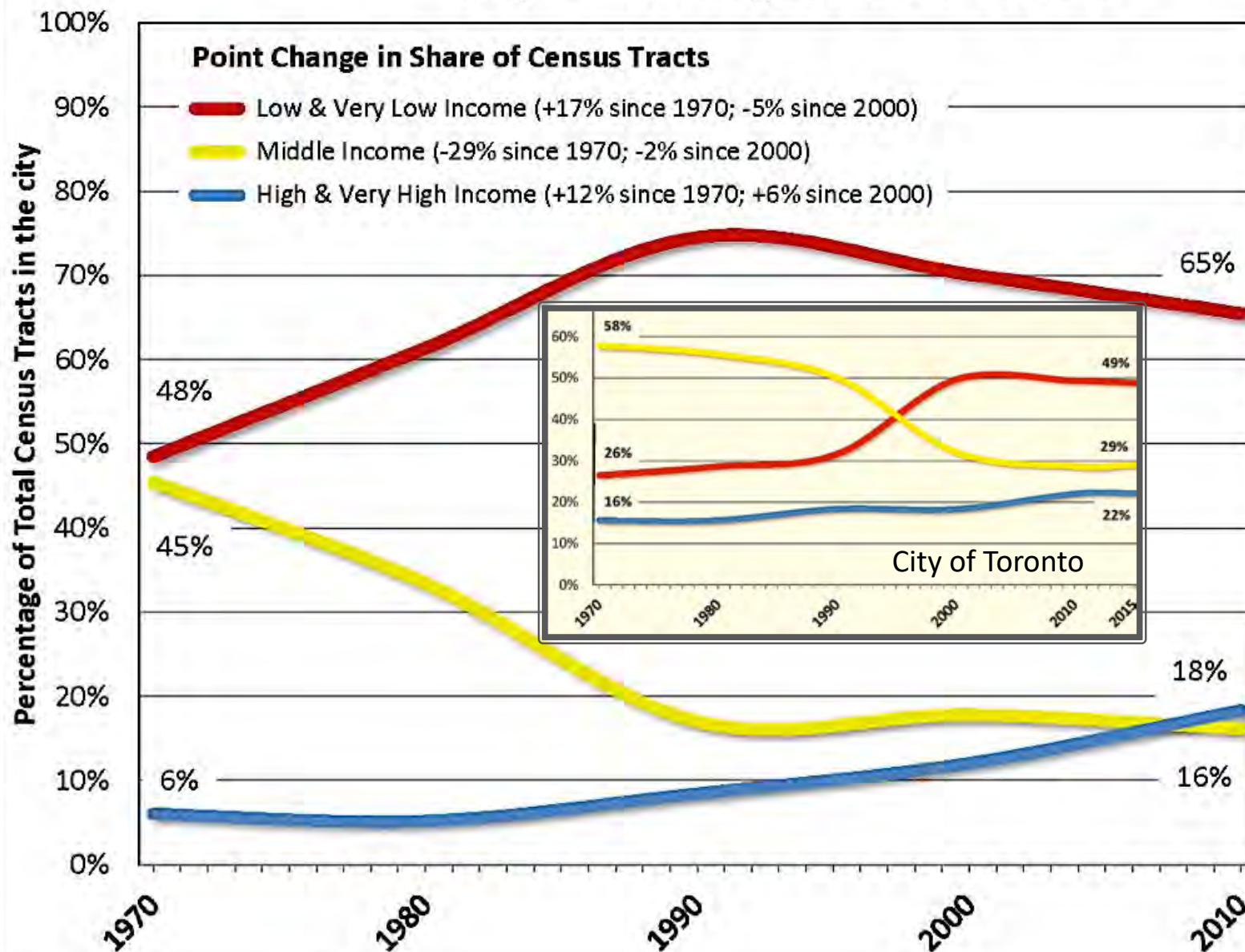
Notes: Calculated from census tract average individual income from all sources, before-tax. Income 1970–2000 and 2015 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

Neighbourhood Change  
Research Partnership  
University of Toronto  
October 2017

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# Neighbourhood Income Distribution

## City of Chicago, 1970–2010



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

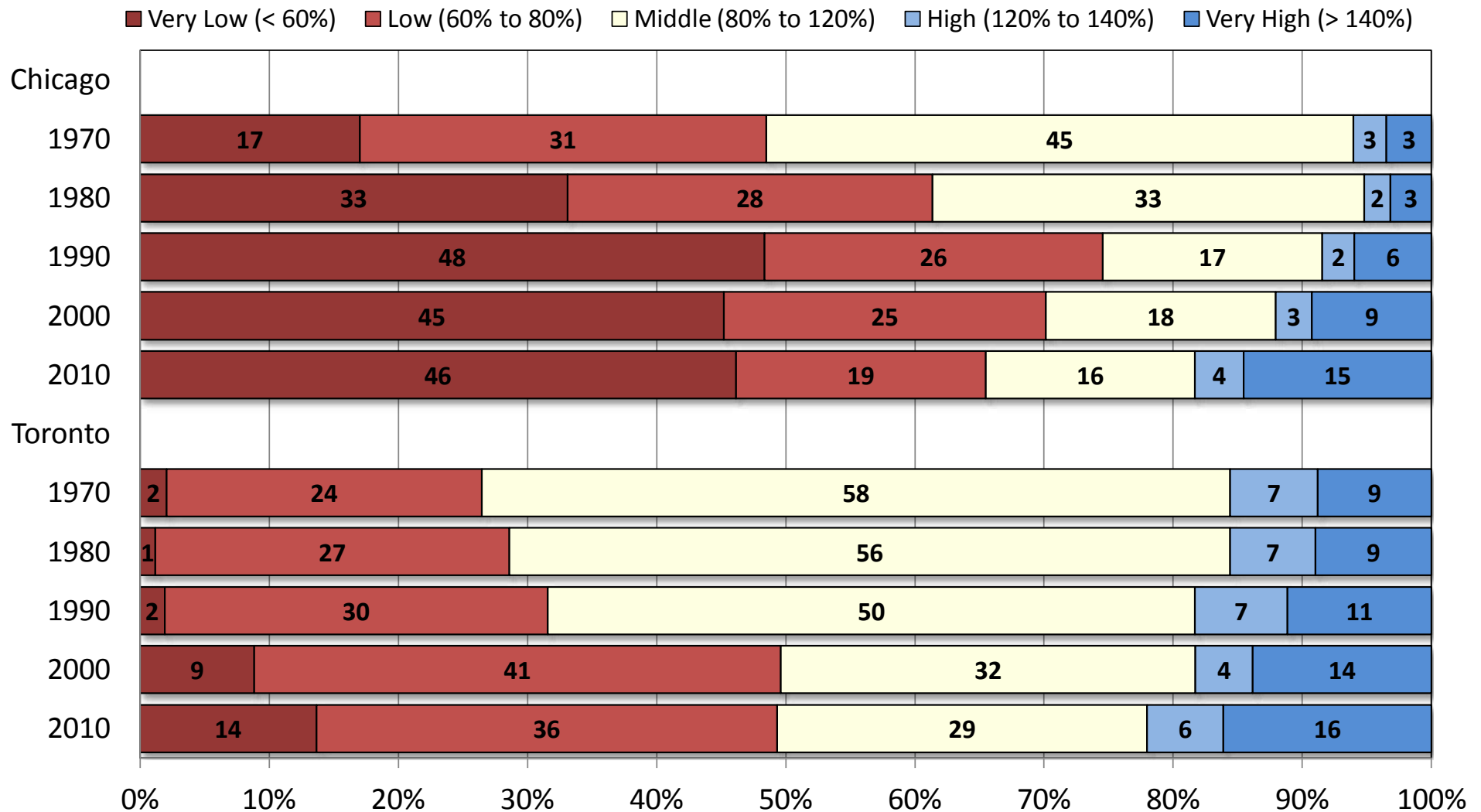
Notes: Calculated from census tract average individual income from all sources, before-tax. Income from United States Census 1970-2000 and American Community Survey 2010.

Natalie P. Voorhees  
Center, University of  
Illinois at Chicago and  
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November 2017

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CHANGE** | research  
partnership

# Census Tract Income Distribution, 1970-2010

## City of Chicago and City of Toronto



**Income Definition:** Census Tract average individual income from all sources, before-tax for persons 15 and over. Income is measured relative to the metropolitan area average each year using CT boundaries as they existed each census year.

**Data Sources:** United States Census 1970-2000, American Community Survey 2010, Canada Census 1971-2001, Canada Revenue Agency Taxfiler data 2010.



## 4. Processes

Explaining the Trends?

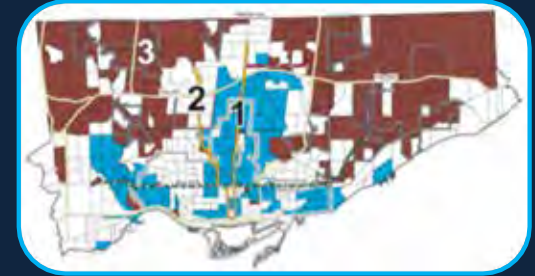
# Macro Level Processes

## Global / National Forces

- Globalization
- Neoliberalism
- Financialization
- Economic Inequality & Polarization

What about specific regional and local processes / forces / factors?

# Solution? Year-by-year reverse the negative trends



**GOVERNMENT:** Fair, inclusive policies

**LABOUR MARKET:** Wages, Regulations

**HOUSING SYSTEM:** Cost of Housing

**TAXES & TRANSFERS:** Fair Distribution

**DISCRIMINATION:** Effective Protections

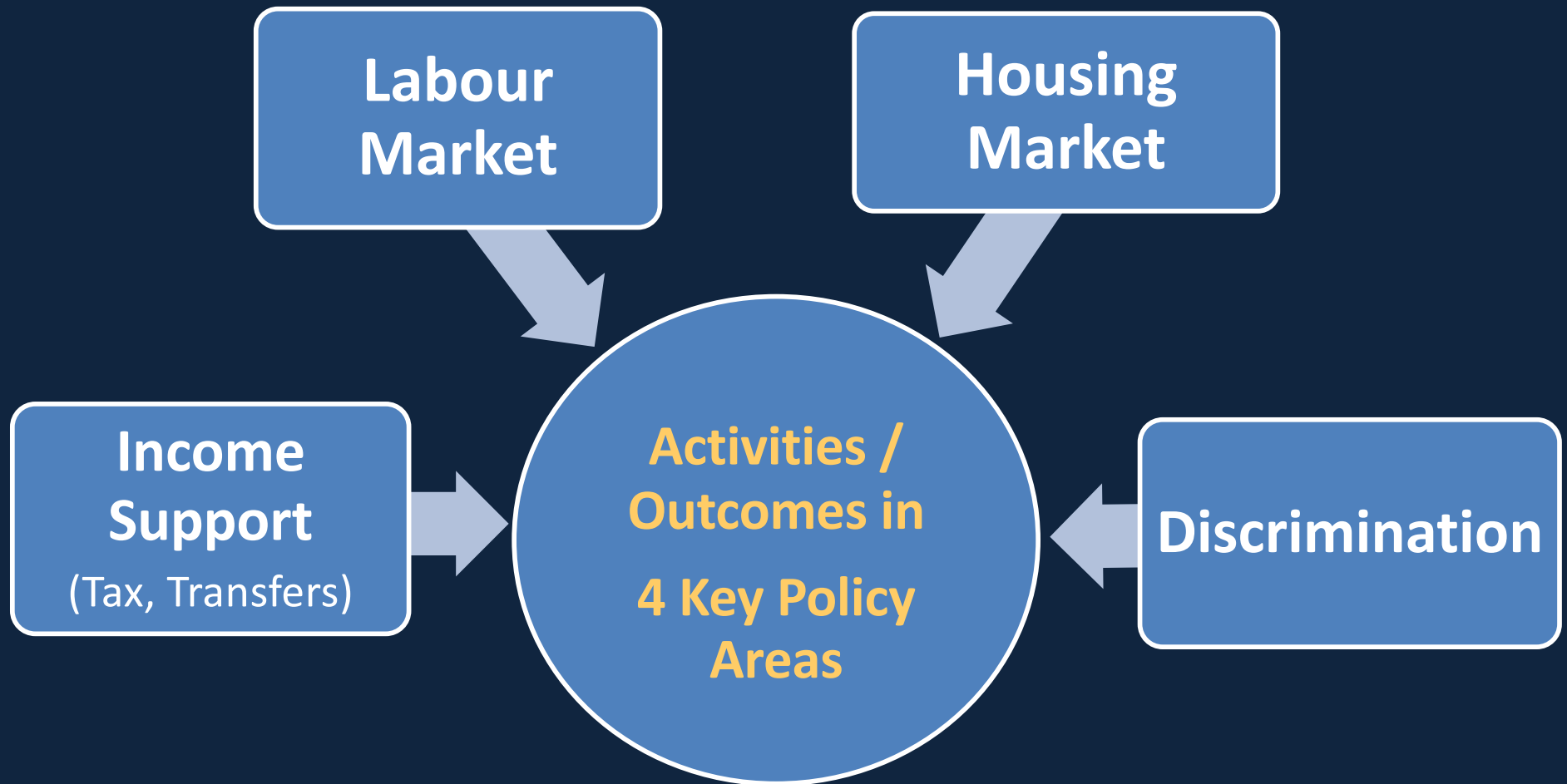


# What Explains the Divisions? Van Kempen 2007

1. **The physical setting** of a city (can heavily constrain the impact of forces of change)
2. **History** (a major determinant of physical form, spatial pattern and urban development in general)
3. **Economic development** (type and stage)
4. **Levels of inequality** (exercises an independent influence on the divisions of cities)
5. **Race and racism** (income differences explain very little of black segregation in US cities)
6. **Political power** (the shift to the right, neoliberal policies)
7. **Governance** (government has become governance; fragmentation in decision making via privatisation, deregulation, partnerships, and multi-actor policy-making)

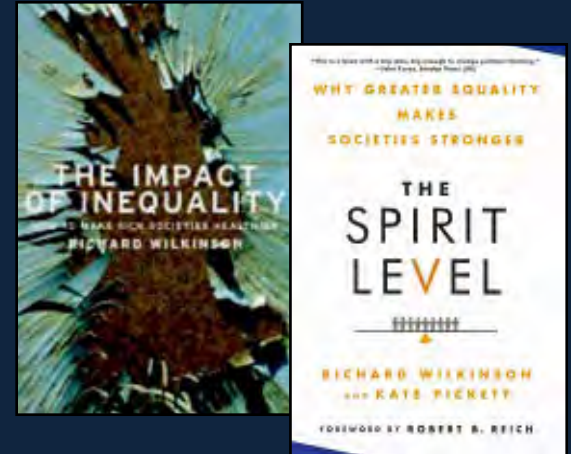
# Specific Processes: Cause and Solution

## Government / Governance





# Why worry about more rigid socio-spatial divisions and greater inequality?



“Inequality promotes strategies that are more self-interested, less affiliative, often highly antisocial, more stressful, and likely to give rise to higher levels of violence, poorer community relations, and worse health.”

– Richard Wilkinson, *The Impact of Inequality*, 2005:22

# Socio-spatial Segregation

“The very concept of urban segregation, after all, is self-contradictory.

Cities are places where many different people come together, congregate, and create great agglomerations—where geographical distances between people are diminished, not increased.”

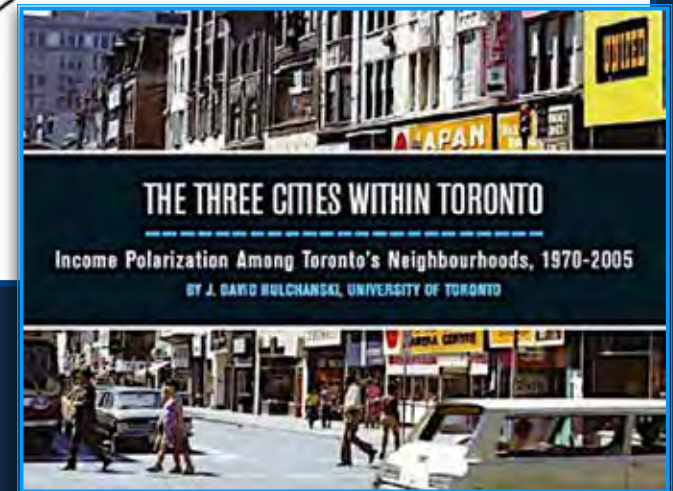
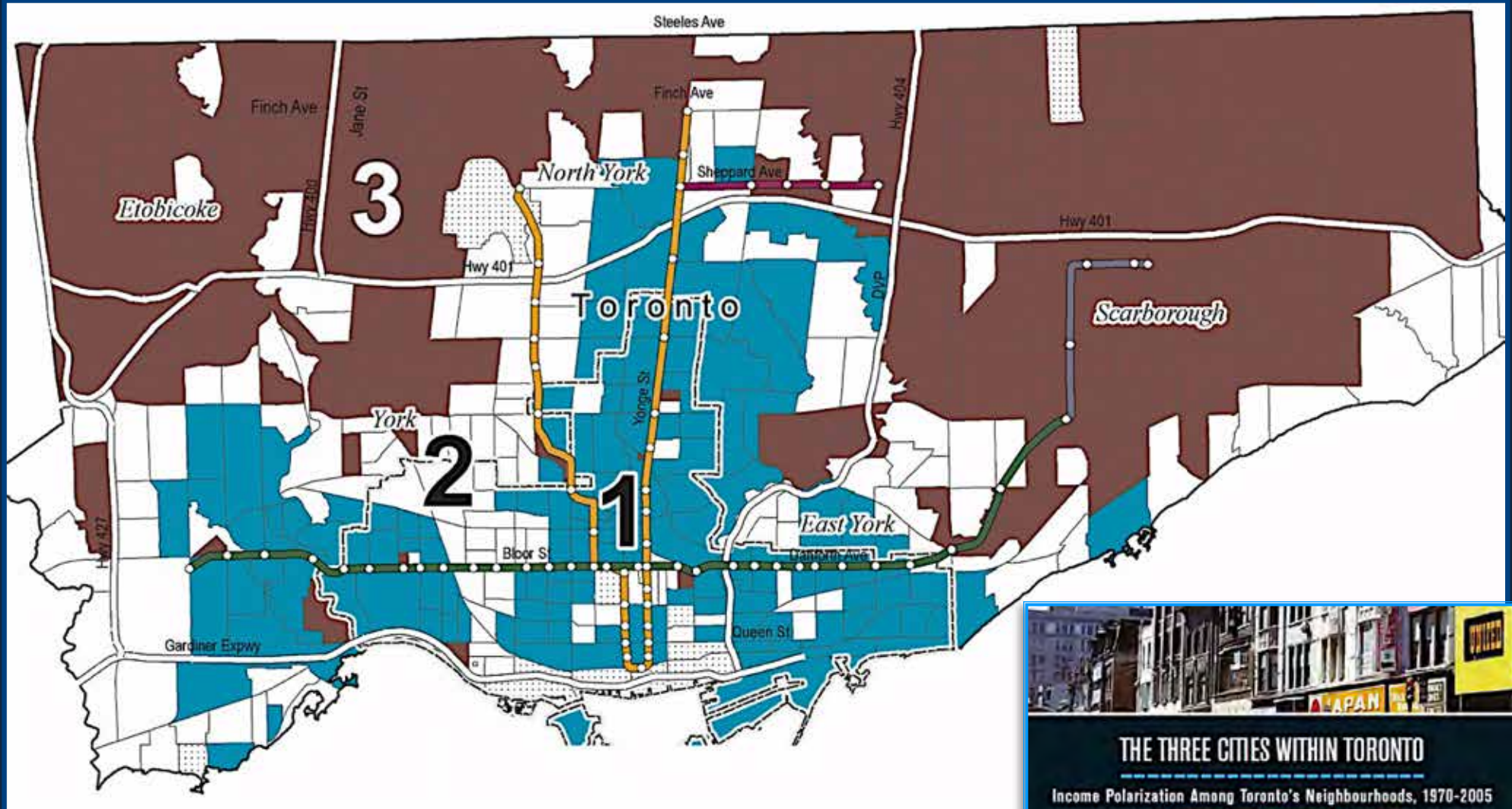
Carl Nightingale (2012) *Segregation: A Global History of Divided Cities*,  
U of Chicago Press, p. 10.



# Research Required: Power

- The analysis of power in and over cities
- How power is exercised by the drivers that possess power
- How the impacts of the exercise of power over cities can be better guided, and
- What the goals should be

Peter Marcuse (2016) "For the Repoliticization of Global City Research." *City & Community*, 15(2), 116.



*For further information*

[www.NeighbourhoodChange.ca](http://www.NeighbourhoodChange.ca)

Larry Bourne, David Ley, Richard Maaranen, Robert Murdie, Damaris Rose, Alan Walks

# Appendix



## Neighbourhood Socio-Economic Polarization & Segregation in Toronto: Trends and Processes since 2015



# Gini Coefficient

## as a standard measure of income inequality

The Gini coefficient measures the extent to which the distribution of income among individuals, families, households, or geographic areas within a country or region deviates from an absolutely equal distribution.

The Gini coefficient uses values between 0 and 1:

- 0 for maximum equality – all households receive the same income
- 1 for maximum inequality – one household receives all income.

Higher Gini Coefficient numbers (e.g., 0.30 rather than 0.20) indicates greater inequality.

# Calculating the Gini Coefficient for Spatial Units like Census Tracts (1)

To calculate the Gini coefficient for a spatial unit (neighbourhoods, census tracts, municipalities, etc) the total amount of income in a given census tract is used to compare that amount as a share of the total CMA income to the share of the CMA total population.

The Gini calculation does not use the 'average' of a census tract (or other spatial unit). It captures the entire distribution of income, but does so among neighbourhoods (CTs) as the unit of analysis rather than individuals or households (as is the case in calculating the non-spatial Gini, the Gini for all people in a country or province or city).

# Calculating the Gini Coefficient for Spatial Units like Census Tracts (2)

Ginis calculated using spatial units (neighbourhoods, census tracts, municipalities, etc.) result in much lower coefficient values (number) than when calculated using individuals or households. This is to be expected.

The two measures, the spatial and the non-spatial Gini, measure and indicate very different things.

In the case of spatial units such as census tracts it is a measure of income segregation. The higher the Gini coefficient for the spatial unit the greater the income segregation in that geography.



# Coefficient of Polarization (COP)

a measure of income polarization between census tracts

Inequality and polarization are distinct concepts and require their own measures (indexes). Income polarization increases if the population shifts away from the middle of the income distribution towards the extremes.

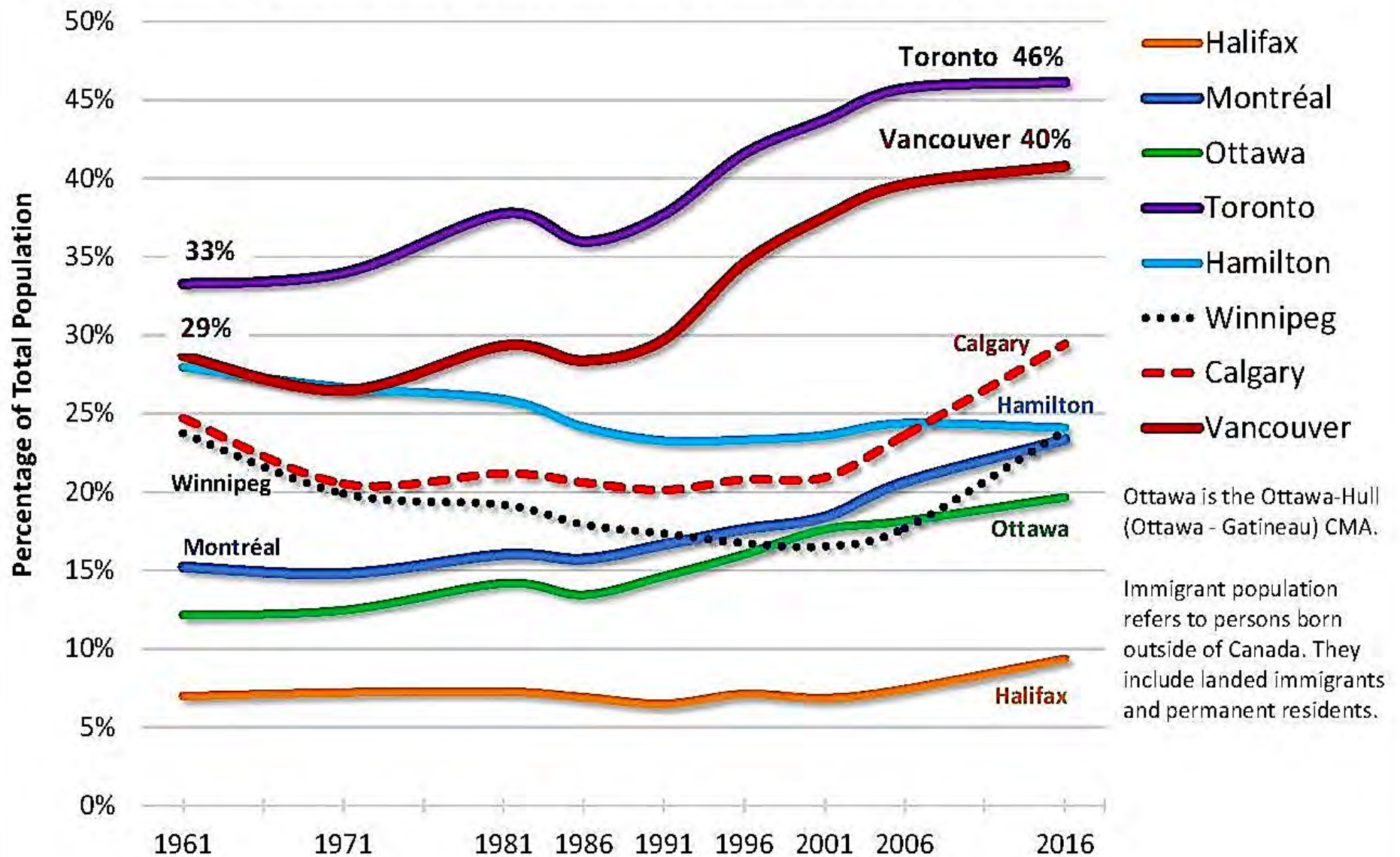
The Coefficient of Polarization (COP) is determined by comparing incomes (individuals, families, households or geographic areas such as census tracts) to the median income (middle). The farther away the incomes of the observations (e.g., census tracts) are from the median in terms of dollars, the higher the COP value. The closer incomes are to the median, the lower the COP. The COP has a minimum value of zero (all incomes are the same as the median) and no maximum value as there is no limit to the amount of possible income dollar separation.

A polarized or polarizing income structure is different from an unequal one, although changes in one tend to be mirrored in the other. (Walks, 2013:92)

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

<http://neighbourhoodchange.ca/documents/2015/02/income-inequality-and-polarization-in-canadas-cities-an-examination-and-new-form-of-measurement.pdf>

# Immigrant Population Share Eight Metropolitan Areas in Canada, 1961–2016

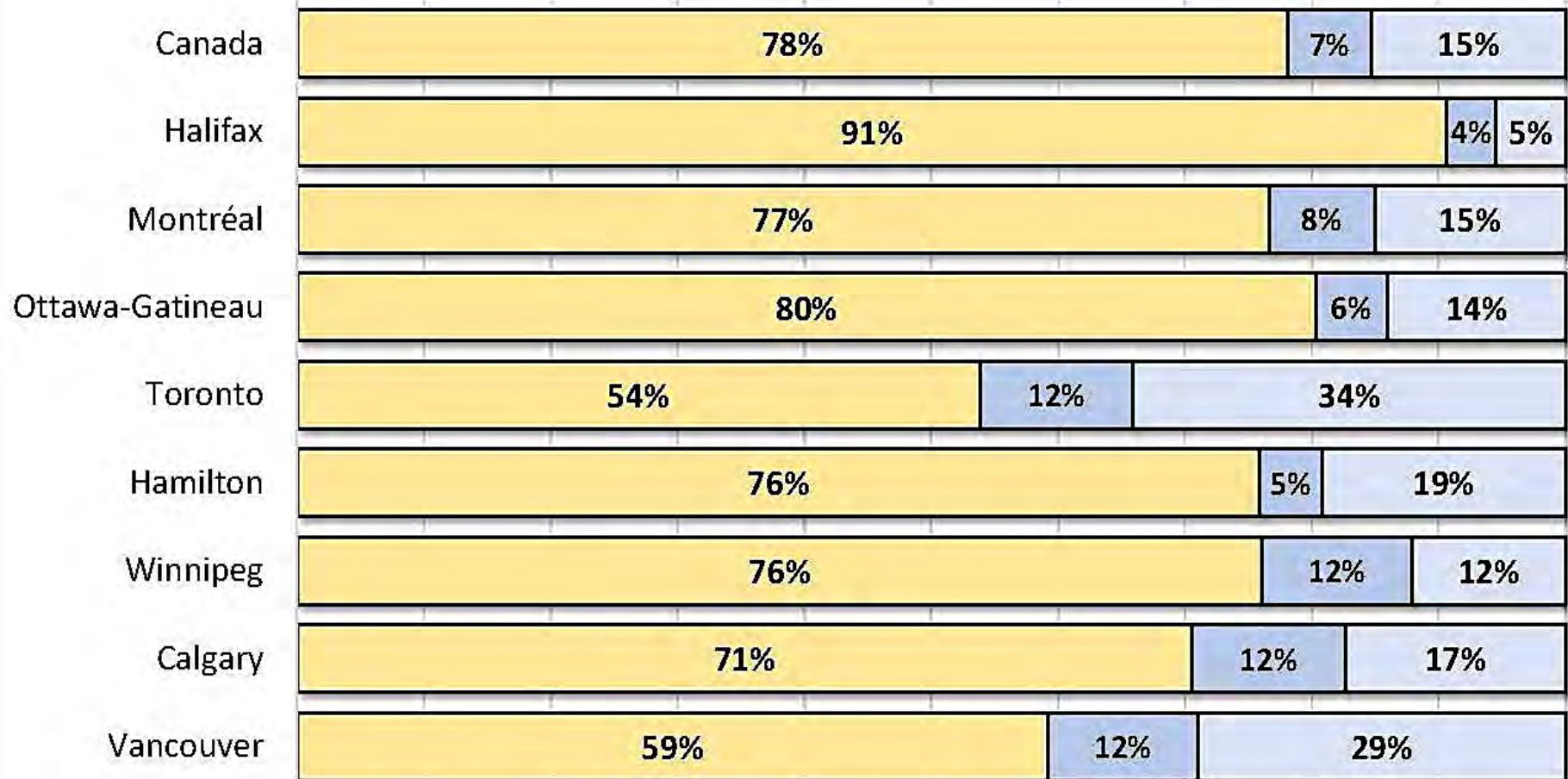


# Immigrant Status of the Population, 2016

## Canada and Eight Census Metropolitan Areas

■ Non-immigrants 
 ■ Recent immigrants (2006-2016 arrivals) 
 ■ Established immigrants (pre-2006 arrivals)

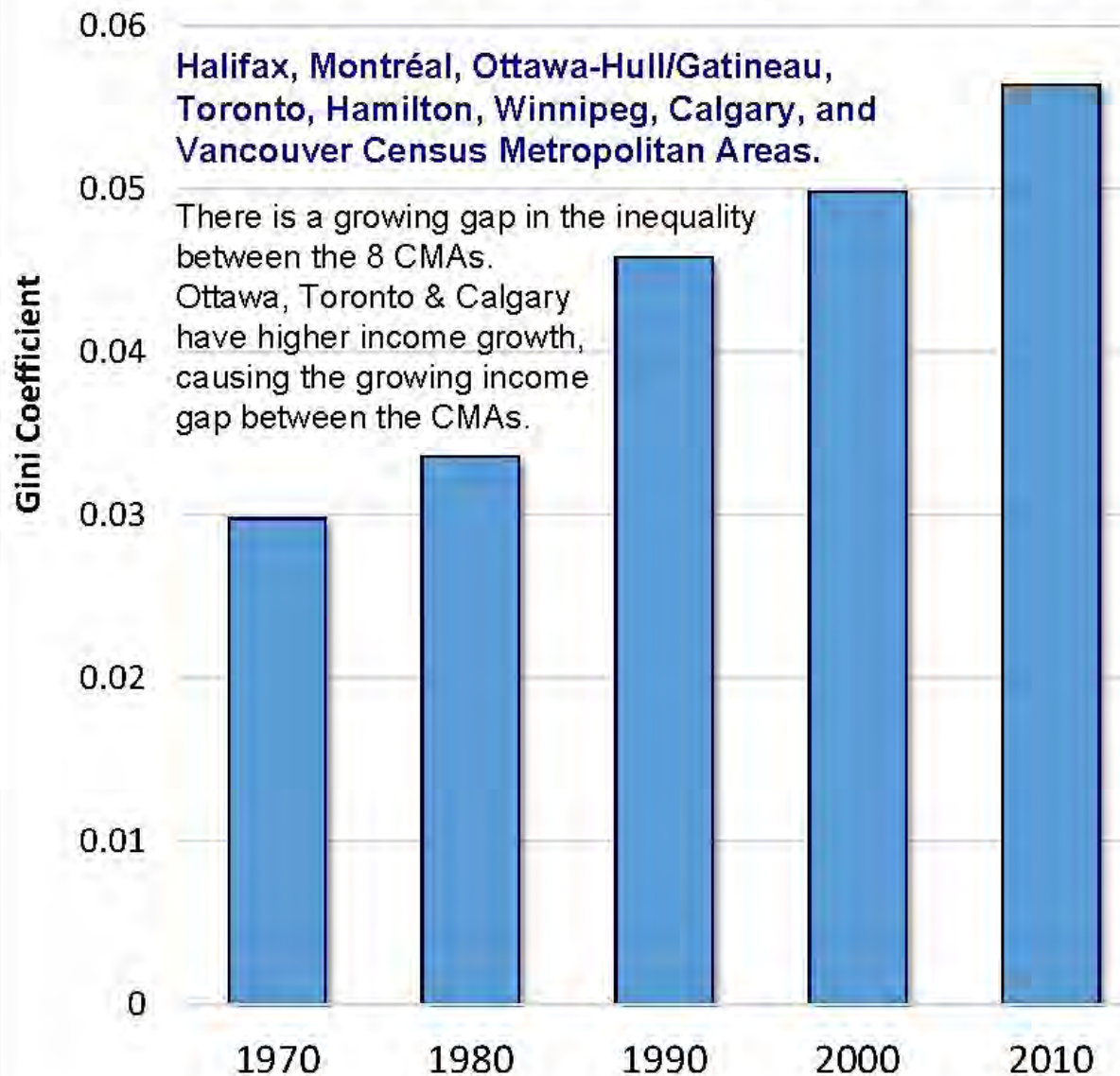
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



Immigrant refers to landed immigrants and permanent residents. Non-immigrant refers to persons born in Canada and non-permanent residents.



# Growing Income Inequality Between Eight Canadian Metropolitan Areas, 1970–2010



Halifax, Montréal, Ottawa-Hull/Gatineau, Toronto, Hamilton, Winnipeg, Calgary, and Vancouver Census Metropolitan Areas.

There is a growing gap in the inequality between the 8 CMAs. Ottawa, Toronto & Calgary have higher income growth, causing the growing income gap between the CMAs.

This chart combines the income data for the eight CMAs. If inequality did not increase between the CMAs, there would be no change each decade.

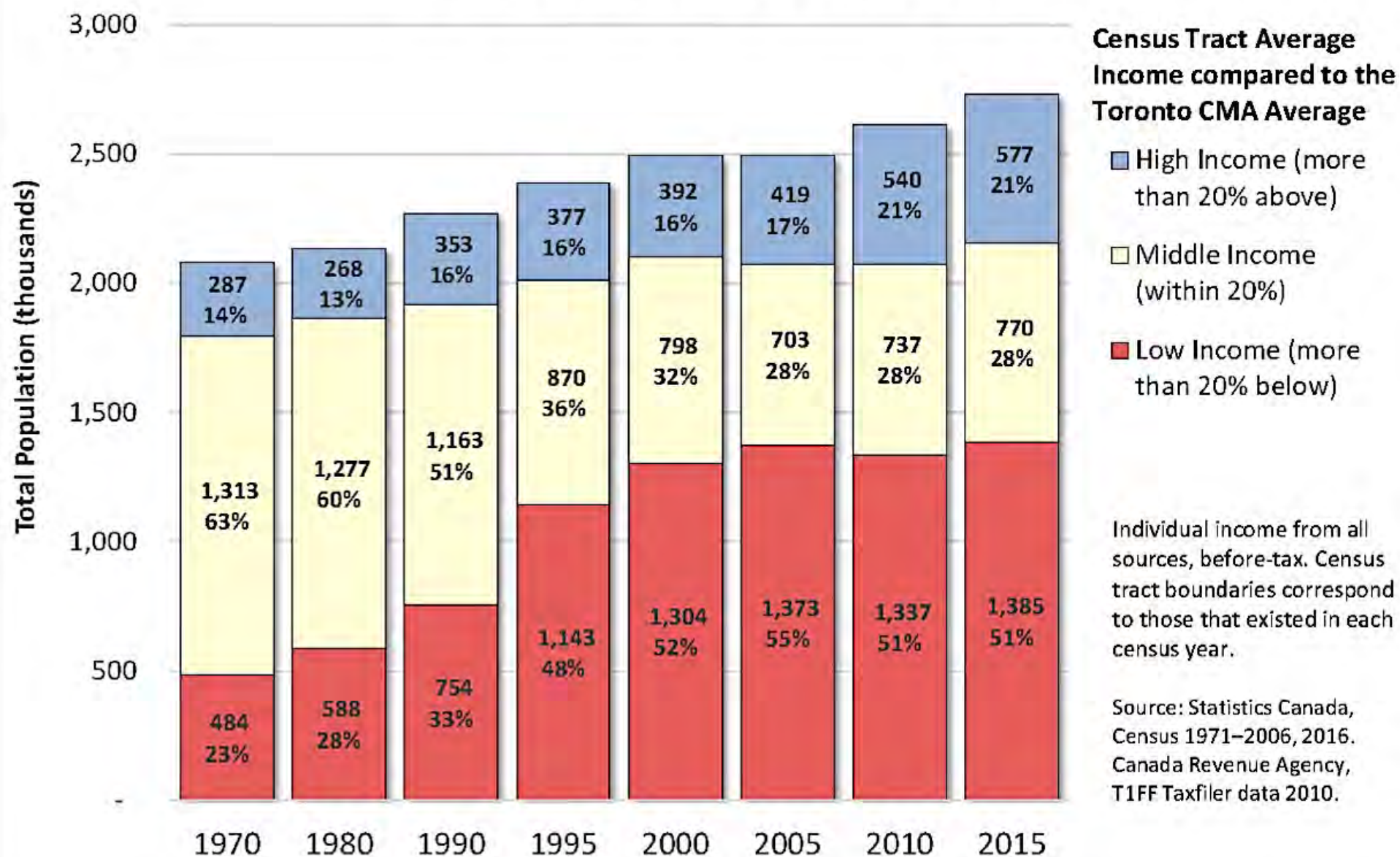
Ottawa-Hull/Gatineau, Toronto & Calgary in 1970 were 43% of the 8-CMA total population and received 45% of the 8-CMA total income. By 2010, they were 50% of the 8-CMA total population and received 54% of the 8-CMA total income. In 2010 the other 5 CMAs with 50% of the 8-CMA population received 46% of the combined income. The increase in inequality is due to the Ottawa, Toronto, and Calgary CMAs.

*Measuring inequality between geographies:* A Gini coefficient value of 0.0 represents perfect equality. All eight CMAs would have the same proportion of combined income relative to their share of their combined population. A Gini coefficient value of 1.0 represents perfect inequality. All of the income would be taken by one single CMA while others take none.

Calculated from metropolitan area average individual income from all sources, before-tax. Income 1970–2000 is from the Census. Income for 2010 is Canada Revenue Agency T1FF taxfiler data.

# Neighbourhood Income & Population

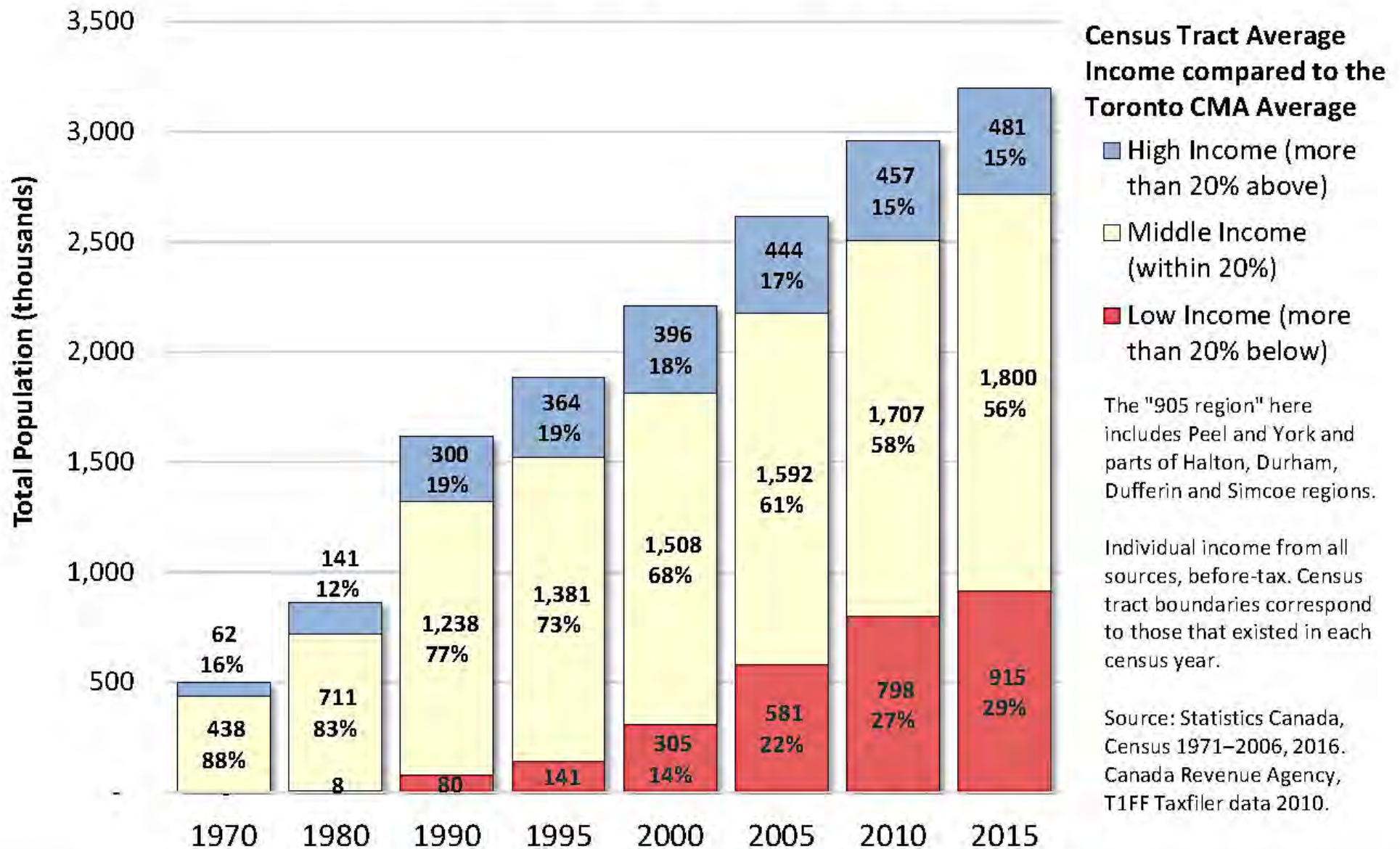
## City of Toronto, 1970–2015





# Neighbourhood Income & Population

## Toronto's "905 Region", 1970–2015





# References

Neighbourhood Socio-Economic Polarization &  
Segregation in Toronto:  
Trends and Processes since 2015

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- Walks, A., & Bourne, L. S. (2006). Ghettos in Canada's cities? Racial segregation, ethnic enclaves and poverty concentration in Canadian urban areas. *The Canadian Geographer/Le Géographe canadien*, 50(3), 273-297.
- Wilkinson, R., & Pickett, K. (2010). *The spirit level: Why equality is better for everyone*. Penguin UK.