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Socio-spatial Inequality & Polarization Trends in Canadian Metropolitan Areas, 1970-2010

INITIAL CMA COMPARISONS & WHERE TO NEXT?

David Hulchanski & Richard Maaranen
16 October 2014 Draft for discussion

NCRP Comparative Analysis of CMA Trends

Very little CMA comparative analysis thus far

Our CMAs

- 6 CMAs with NCRP local research teams
- 2 others being analyzed: Hamilton, Chicago
- 1 with matching data but not analyzed: Ottawa

More CMAs?

- Europe?
- Australia: Sydney or Melbourne?

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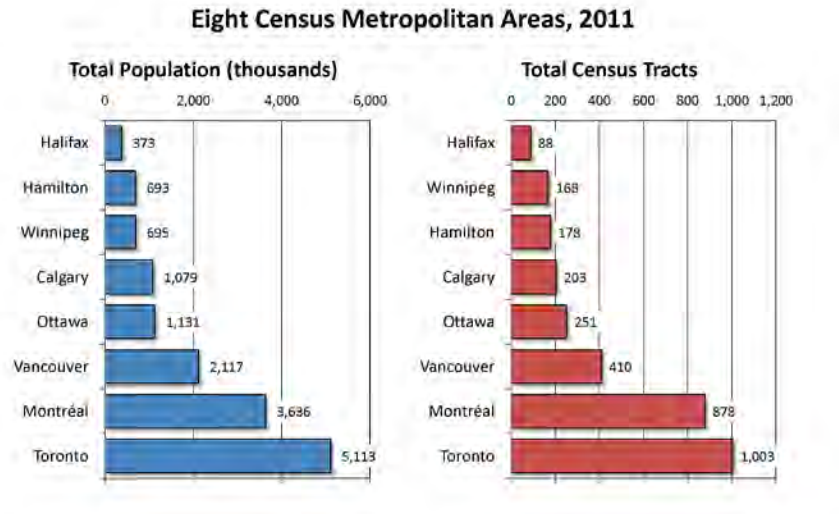

Why Compare CMAs?

To identify & explain

- similarities
- differences

In order to better understand

1) trends
2) processes
3) consequences
4) policy implications

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1990s 'Divided Cities' Hypothesis: In some or most CMAs?

As cited in the opening paragraph of our SSHRC proposal, Marcuse & van Kempen (2000:272) warn that we can expect to see:

Structural spatial divisions: "strengthened structural spatial divisions among the quarters of the city, with increased inequality and sharper lines of division among them"

- **Wealthy areas**: "wealthy quarters, housing those directly benefiting from increased globalization, and the quarters of the professionals, managers, and technicians that serve them, growing in size"

Continued …

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1990s 'Divided Cities' Hypothesis: In some or most CMAs?

Marcuse & van Kempen (2000:272) warn that we can expect to see:

- **Impoverished areas**: "quarters of those excluded from the globalizing economy, with their residents more and more isolated and walled in"
- **Ghettoization of the excluded**: "continuing formation of immigrant enclaves of lower-paid workers; … ghettoization of the excluded"

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1990s 'Divided Cities' Hypothesis: Comparative Analysis of CMA Trends

From paragraph 3 of our proposal:

- Little is known about how these trends fit the Canadian context
- Systematic quantitative and qualitative research on inequalities in Canada's major cities *in comparison with* selected cities in other countries is needed

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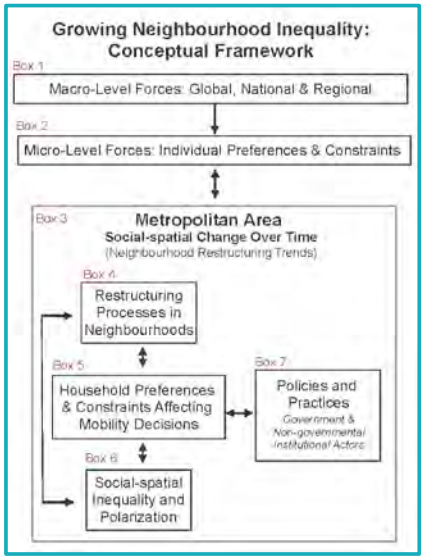
Our focus

Neighbourhood socio-spatial inequality and polarization (Box 6)

is a function of

- macro-level factors (Box 1) +
- micro-level forces (Box 2) +
- neighbourhood factors (Box 4) +
- household preferences (Box 5) +
- local housing, labour market, etc. policy effects (Box 7) +
- place-specific (CMA) factors (Box 3).

Our comparative analysis of CMAs is designed to evaluate these CMA factors/forces



 contact: david.hulchanski@utoronto.ca

Our Challenge

How do we move from our VERY rich empirical material

- to isolate the factors, and
- the priority of the factors,

that have caused these patterns and trends?

The very similar '3 cities' trend maps of CMAs, for example, suggests that similar processes are at work in the CMAs — or do they?

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Place-specific factors produce different clustering of particular trends

- **History**: Each CMA has its specific historical evolution (some older, some younger)
- **Economy**: Each has its evolving economic base
- **Geography**: CMAs have diverse physical locations (mountains, rivers, lakefront, or not)
- **Size and growth rates**: Each has different rates of population, immigrant settlement, and economic growth.

These and other factors contribute to differences in the number of CTs and the clustering or dispersion of CTs within CMAs even when the general trends are similar

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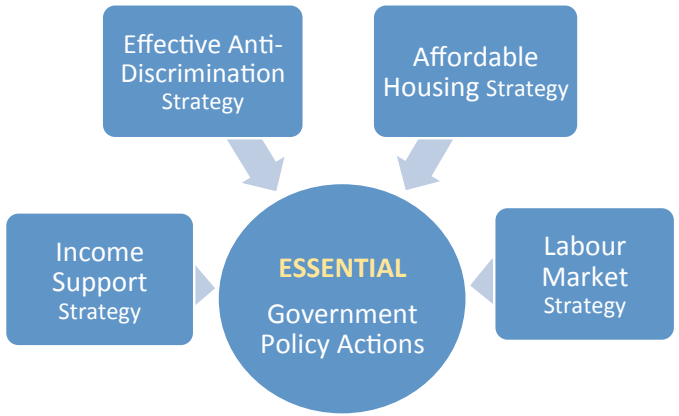
What can be done?

Federal & **Provincial** Policy Action



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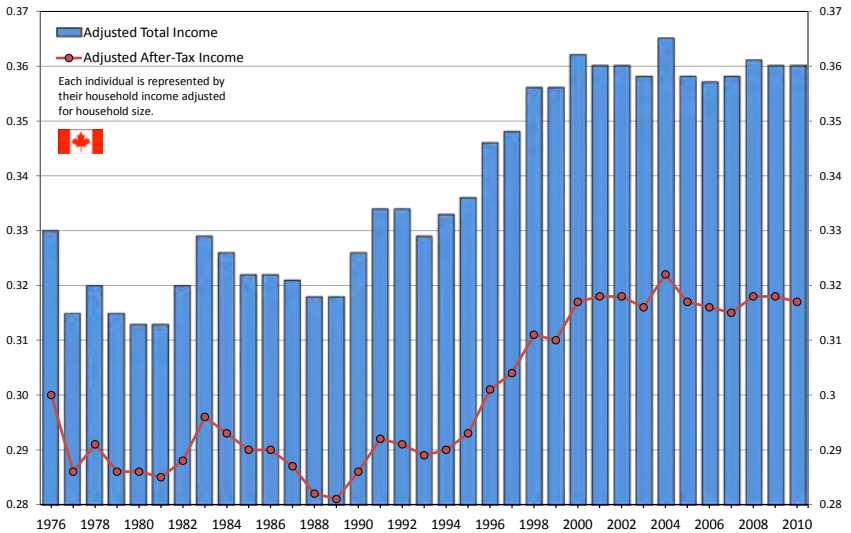
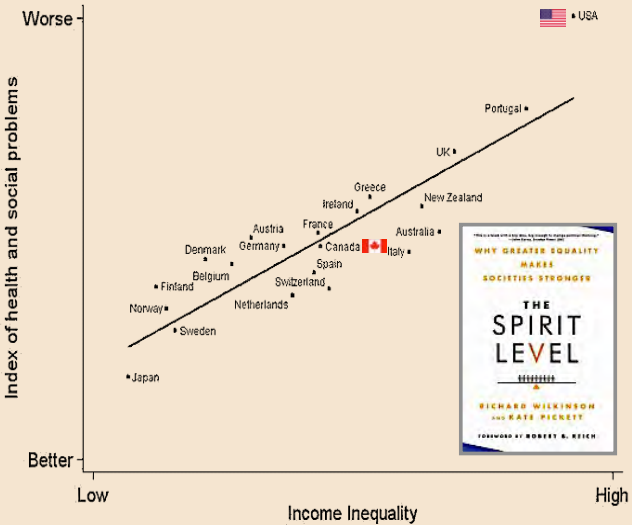
GINI Coefficient for Canada, 1976-2010
Adjusted Total & After-Tax Income, All Family Units



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



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Examples of Recent NCRP Comparisons of CMAs

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Change in number and % within CMAs

CENSUS TRACTS WITH HIGH, MIDDLE OR LOW INCOMES, 1970-2010

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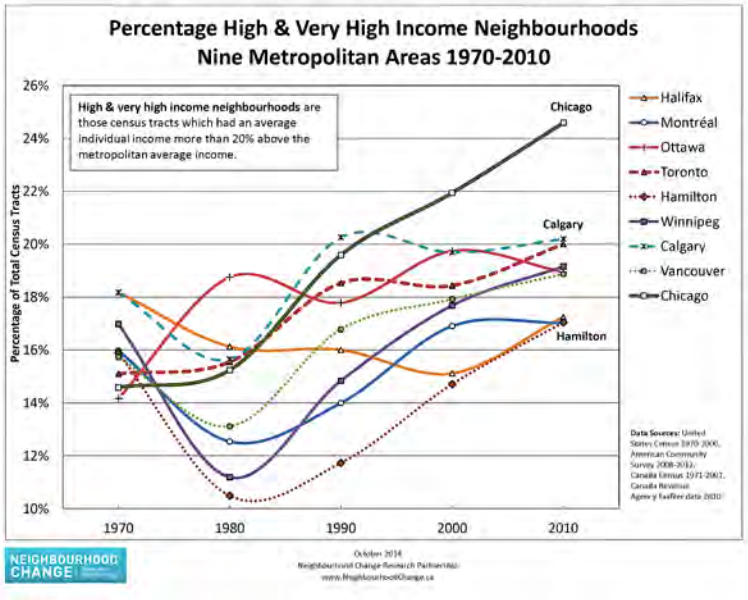

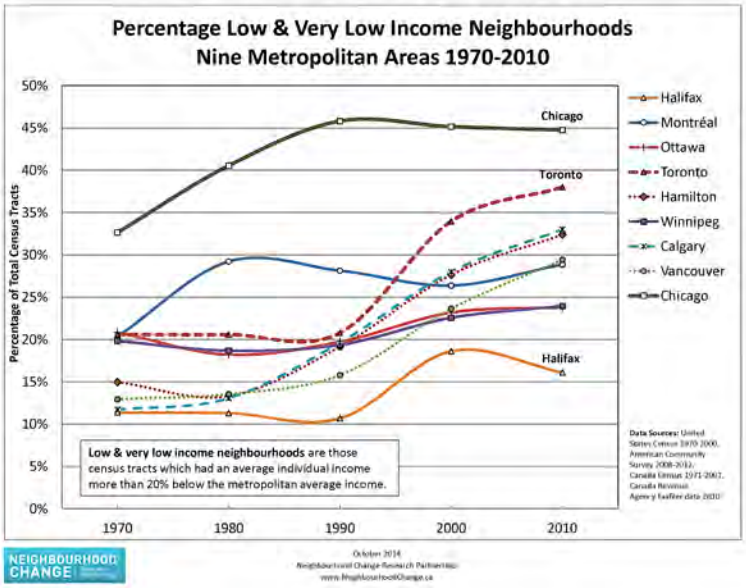

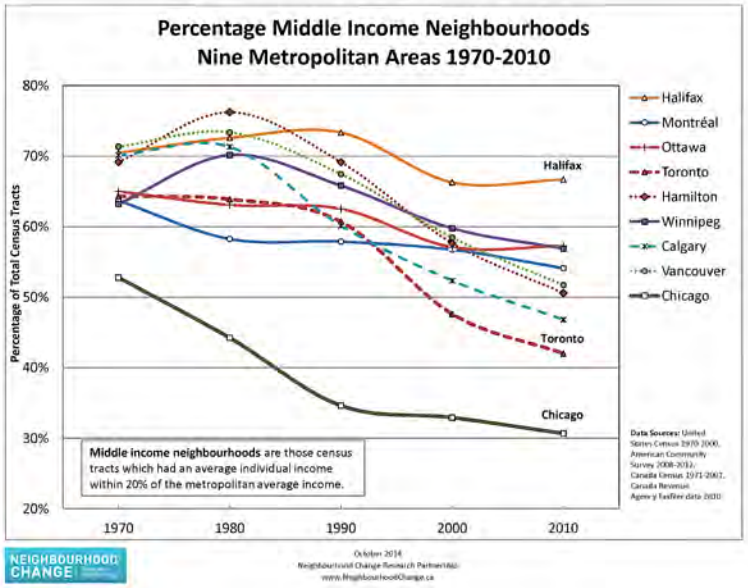

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Census Tract Gini coefficient & Coefficient of Polarization for CMAs

INCOME INEQUALITY & INCOME POLARIZATION, 1970-2010

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Income Inequality and Polarization in Canada's Cities: An Examination and New Form of Measurement

Alan Walks

Research Paper 227

Cities Centre, University of Toronto
August 2013

(formerly the Centre for Urban and Community Studies)

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CMA Inequality & Polarization Trends

TRENDS

1. Greater inequality and polarization 1970 through 2005, regardless of the index being used.
2. The trajectories of inequality and polarization show some distinct patterns among metropolitan areas.
3. Inequality and polarization are occurring among all households, among all neighbourhoods, and among all municipalities.

-- Alan Walks, RP#227, 2013

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CMA Inequality & Polarization Trends

TRENDS: Suburbs / Central Cities

- It is in the suburbs that both inequality and polarization grew most rapidly since 1990
- Levels of inequality and polarization grew much more slowly in the central cities as a whole
- Some gentrifying neighbourhoods reveal above-average rates of change

-- Alan Walks, RP#227, 2013, p.90.

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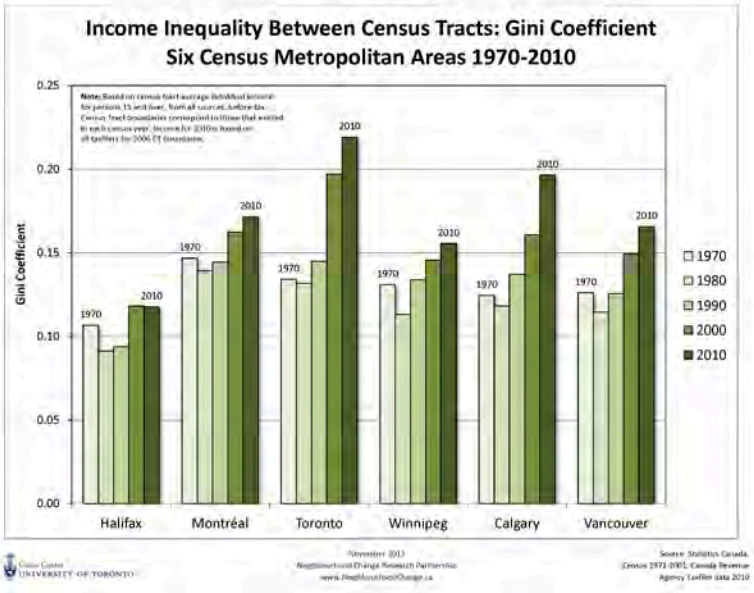
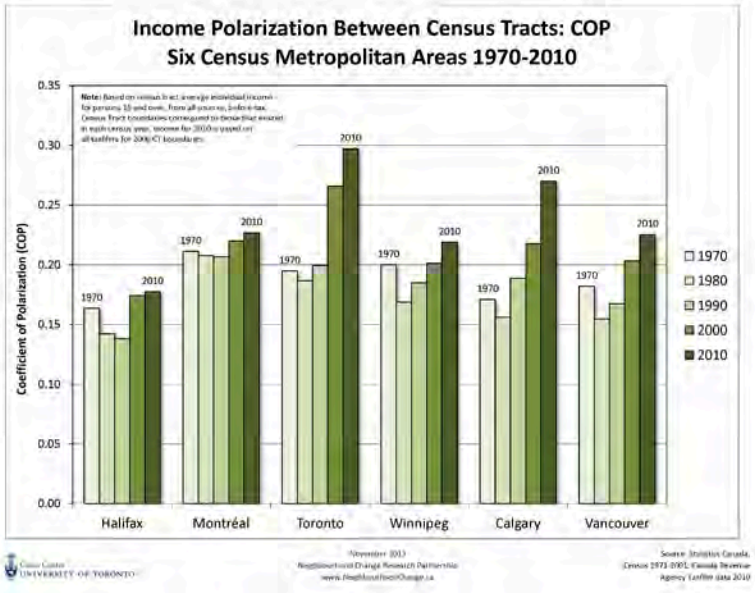
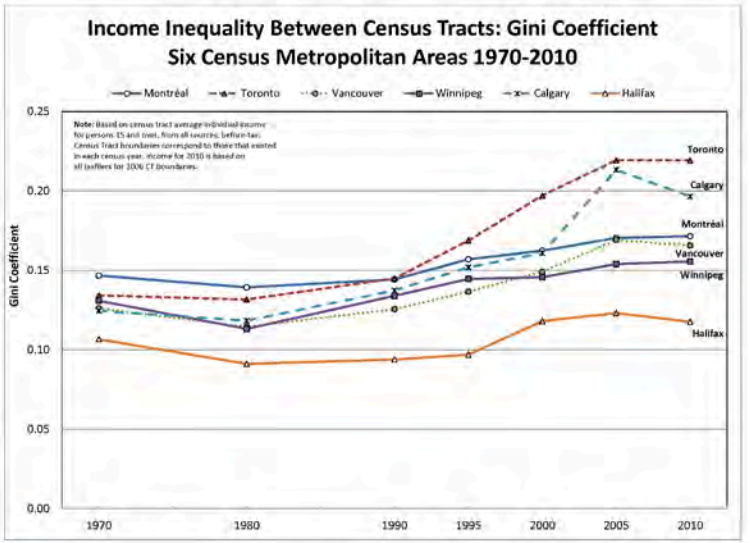
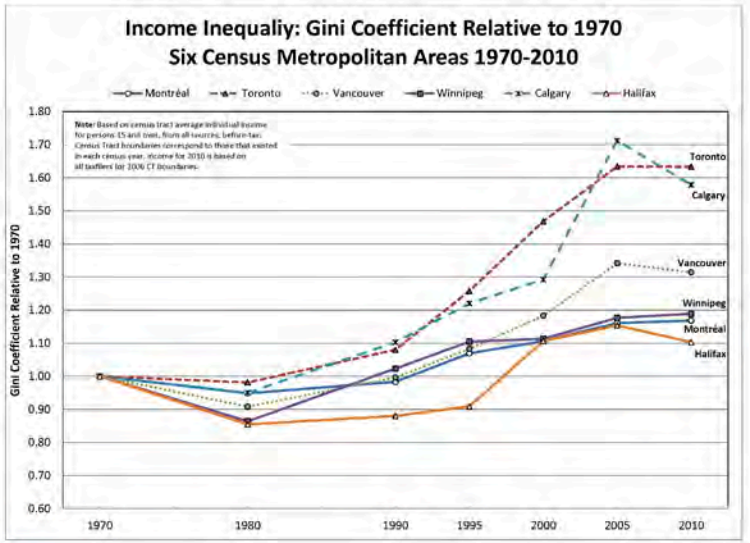





Income Inequality Between Census Tracts: Gini Coefficient
Six Census Metropolitan Areas 1970-2010
Montréal
Toronto
Vancouver
Winnipeg
Calgary
Halifax
Gini Coefficient
Toronto
Calgary
Montréal
Vancouver
Winnipeg
Halifax
1970
1980
1990
1995
2000
2005
2010


Income Inequaliy: Gini Coefficient Relative to 1970
Six Census Metropolitan Areas 1970-2010
Montréal
Toronto
Vancouver
Winnipeg
Calgary
Halifax
Gini Coefficient Relative to 1970
Toronto
Calgary
Vancouver
Winnipeg
Montréal
Halifax
1970
1980
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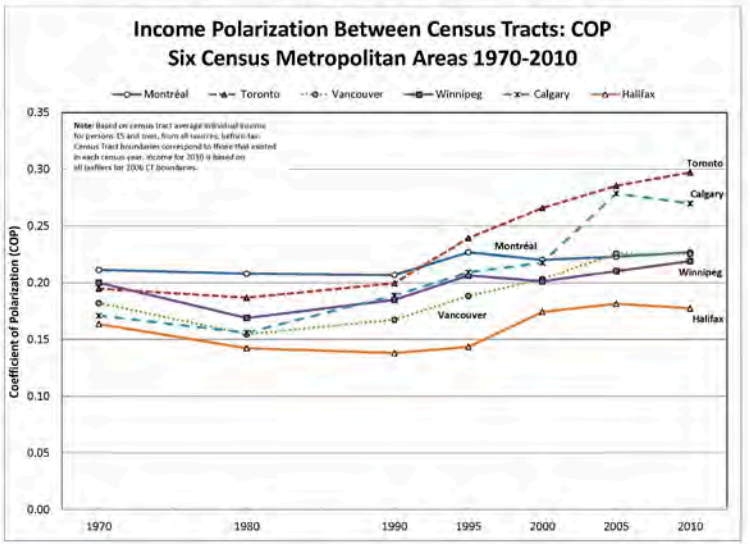
1995
2000
2005
2010


Income Polarization Between Census Tracts: COP
Six Census Metropolitan Areas 1970-2010
Montréal
Toronto
Vancouver
Winnipeg
Calgary
Halifax
Coefficient of Polarization (COP)
Toronto
Calgary
Montréal
Winnipeg
Vancouver
Halifax
1970
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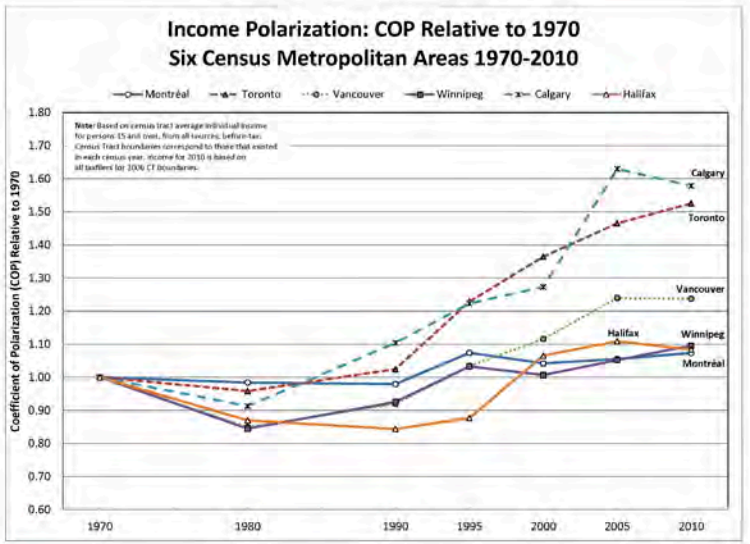
2010


Income Polarization: COP Relative to 1970
Six Census Metropolitan Areas 1970-2010
Montréal
Toronto
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Calgary
Halifax
Coefficient of Polarization (COP) Relative to 1970
Calgary
Toronto
Vancouver
Halifax
Winnipeg
Montréal
1970
1980
1990
1995
2000
2005
2010

6 CMAs

THE TOP 1%:
SHARE OF CMA INCOME

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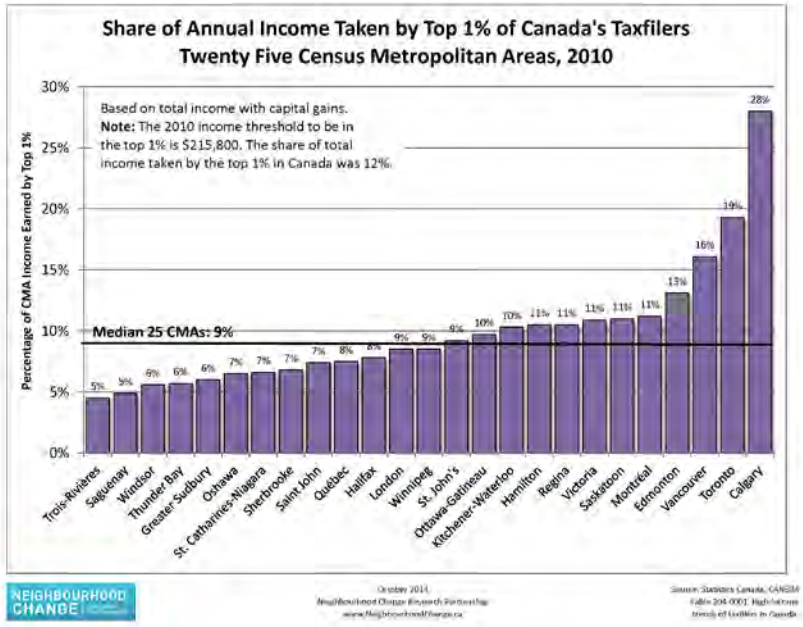

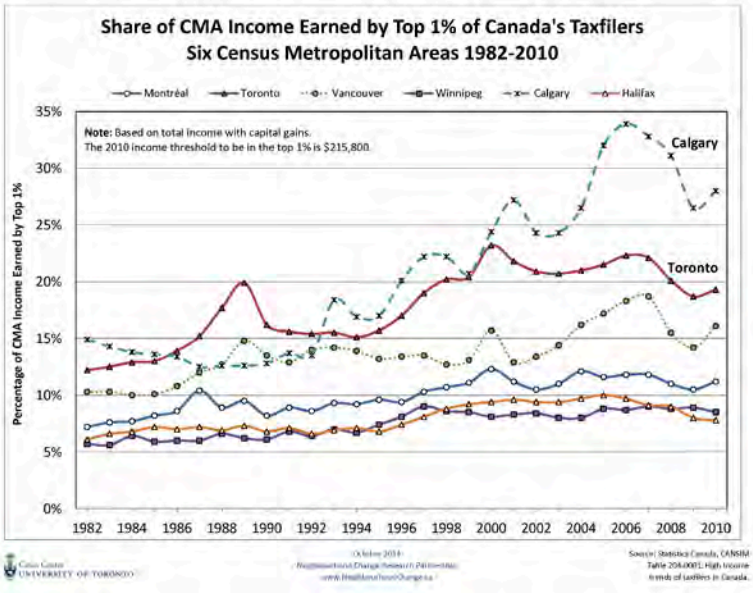

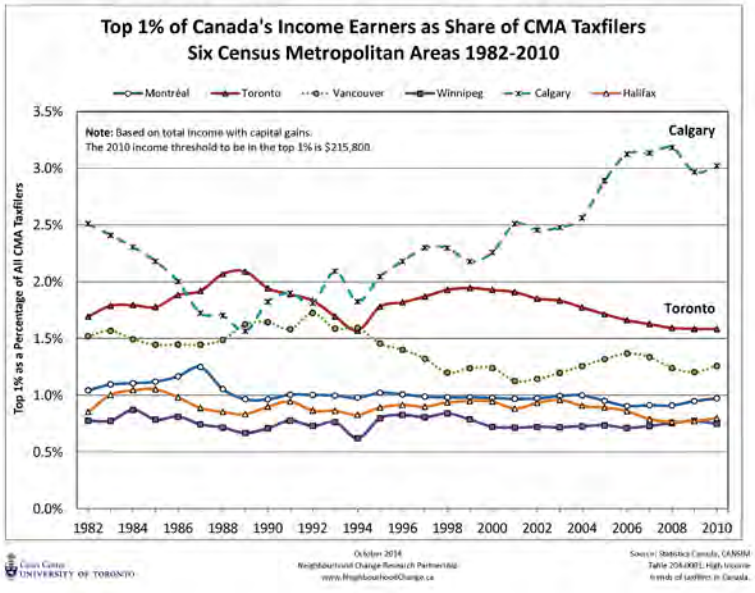

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Joint Analysis of 8 CMAs

NEIGHBOURHOOD TYPOLOGIES, 2006, & 1981-2006

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Bibliography and Review of Neighbourhood Typologies with a Focus on Canada, the United States, and Australia/New Zealand

Robert Murdie
and
Jennifer Logan

Research Paper 233

Neighbourhood Change Research Partnership
October 2014

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Eight Canadian Metropolitan Areas: Who Lived Where in 2006?

Robert Murdie, Jennifer Logan, and Richard Maaranen

Research Paper 229

Cities Centre, University of Toronto
September 2013

(formerly the Centre for Urban and Community Studies)

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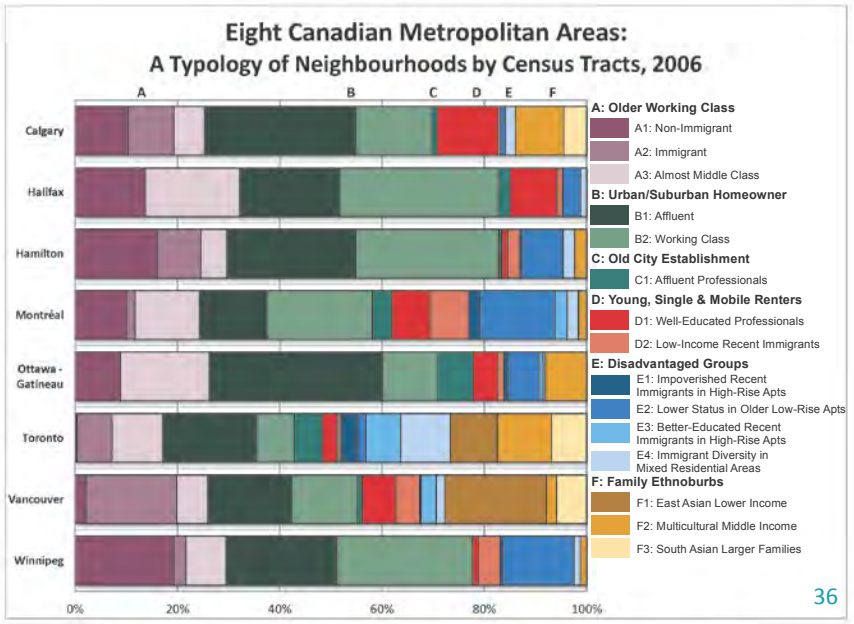

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Eight Canadian Metropolitan Areas: Spatial Patterns of Neighbourhood Change, 1981–2006

A Typology Based on a Combined Statistical Analysis of Census Tract Data

Robert Murdie
Richard Maaranen
Jennifer Logan

Research Paper 234

Neighbourhood Change Research Partnership
October 2014

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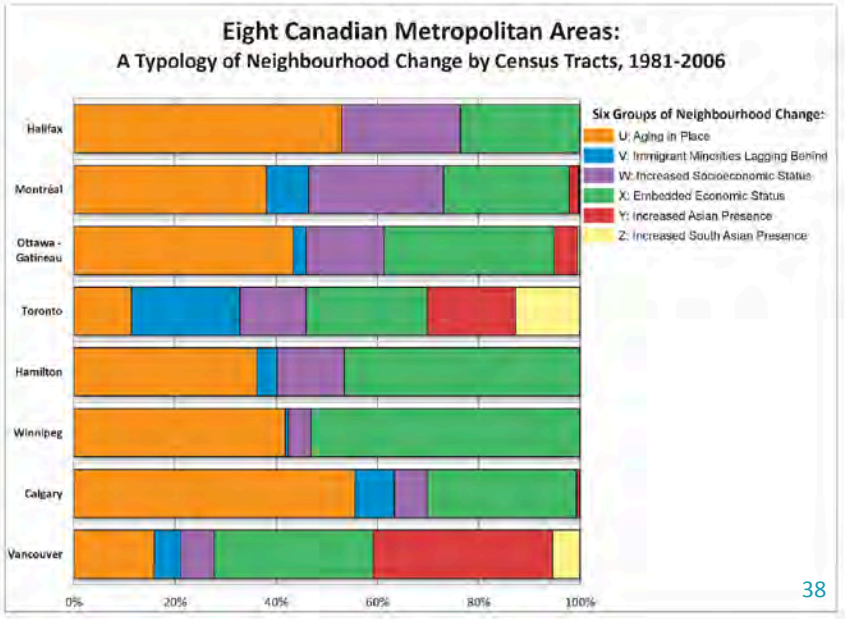

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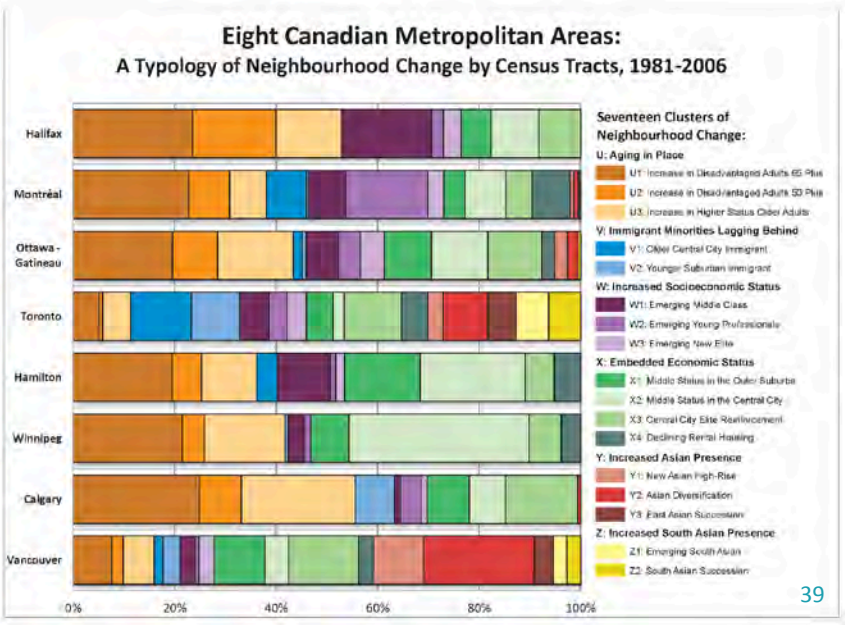

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Beyond Canada: CMA Comparisons

CHICAGO & TORONTO

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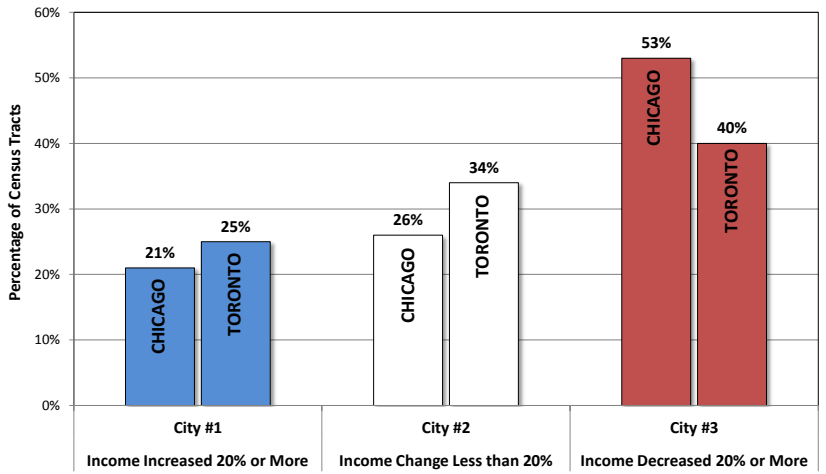
Neighbourhood Income Change
City of Chicago and City of Toronto, 2010 versus 1970



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. Chicago CT boundaries are constant 2010 while Toronto's are constant 2001.

Data Sources: United States Census 1970, American Community Survey 2008-2012, Canada Census 1971, Canada Revenue Agency Taxfiler data 2010.

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Neighbourhood Income Change: Cities of Chicago & Toronto, 2010 vs. 1970

Income: Individual income for persons 15 and over, from all sources, before-tax.

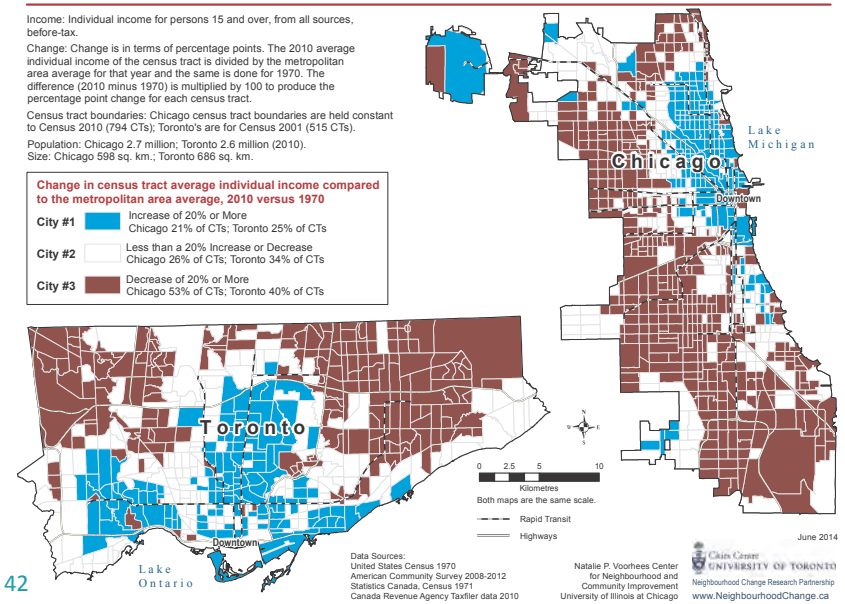
Change: Change is in terms of percentage points. The 2010 average individual income of the census tract is divided by the metropolitan area average for that year and the same is done for 1970. The difference (2010 minus 1970) is multiplied by 100 to produce the percentage point change for each census tract.

Census tract boundaries: Chicago census tract boundaries are held constant to Census 2010 (794 CTs); Toronto's are for Census 2001 (515 CTs).

Population: Chicago 2.7 million; Toronto 2.6 million (2010).
Size: Chicago 598 sq. km.; Toronto 686 sq. km.

Change in census tract average individual income compared to the metropolitan area average, 2010 versus 1970

- City #1: Increase of 20% or More — Chicago 21% of CTs; Toronto 25% of CTs
- City #2: Less than a 20% Increase or Decrease — Chicago 26% of CTs; Toronto 34% of CTs
- City #3: Decrease of 20% or More — Chicago 53% of CTs; Toronto 40% of CTs



Data Sources:
United States Census 1970
American Community Survey 2008-2012
Statistics Canada, Census 1971
Canada Revenue Agency Taxfiler data 2010

Natalie P. Voorhees Center for Neighbourhood and Community Improvement
University of Illinois at Chicago

June 2014

Chris Choi
University of Toronto
Neighbourhood Change Research Partnership
www.NeighbourhoodChange.ca

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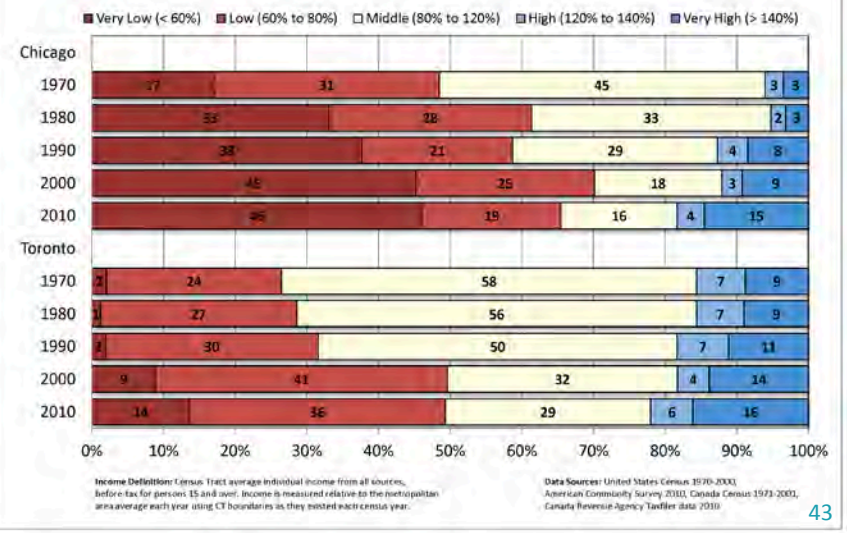
Census Tract Income Distribution, 1970-2010
City of Chicago and City of Toronto



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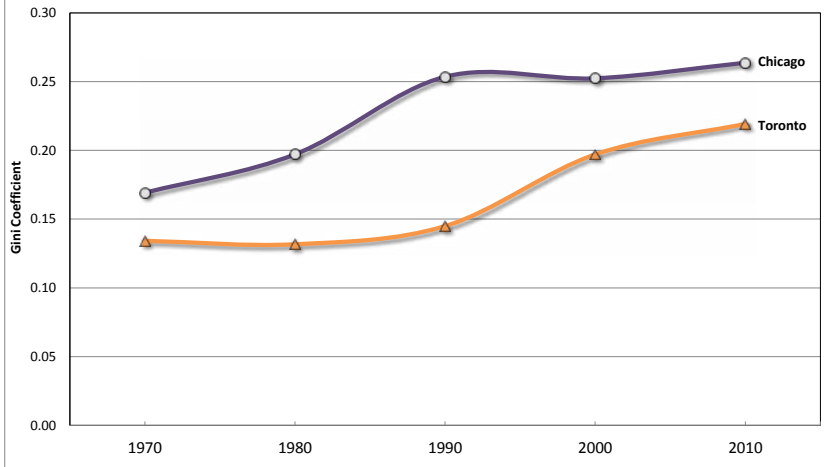
Income Inequality Between Census Tracts: Gini Coefficient
Chicago and Toronto Metropolitan Areas, 1970-2010



Note: Based on census tract average individual income for persons 15 and over, from all sources, before-tax. Census tract boundaries correspond to those that existed in each census year.

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

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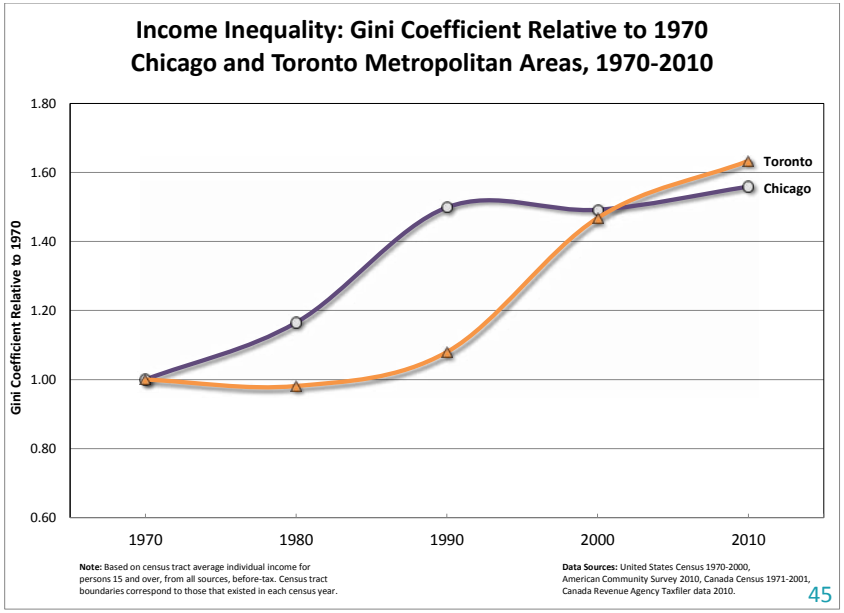

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CMA Comparisons

WHAT ELSE? WHY? WHEN? BY WHOM? ADDITIONAL CMAs?

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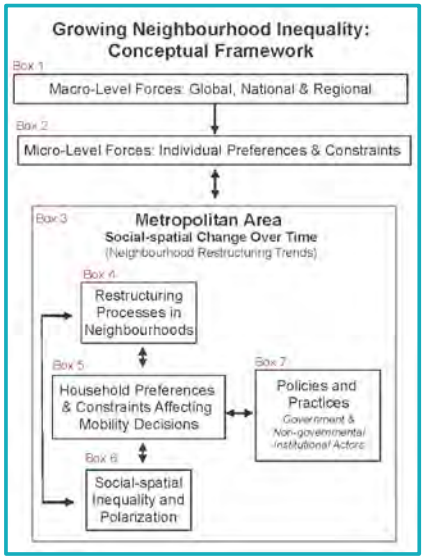

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