Moving From Knowledge to Action:
Lessons for How Place Typologies Can Be Used to Inform Policy

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Abstract

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Income inequality has been growing in cities across Canada and the United States. Some researchers have compared today's high level of inequality with the situation that existed throughout the late 19th century, calling it a second Gilded Age (Short, 2013). With this trend, discourse around the subject has grown as well. Income inequality discourse has its roots in economics and sociology, and has seen an increase in media attention. The Neighbourhood Change Research Partnership (NCRP) is a seven-year project that aims to examine how income inequality and polarization play out in the Canadian context. Many of the studies emerging from the NCRP feature place typologies to describe neighbourhood differences and changes over time.

Although place typologies and neighbourhood categorizations are not a new tool, improved digital capacity and analysis software have allowed for the creation of more complex and nuanced analyses. Neighbourhood typologies have emerged as an important tool for describing neighbourhood variations and highlighting change, and these findings have implications for policy. Lessons are outlined below for how planning professionals and policymakers can use place typologies to help identify particular areas of need and create clear policy directives based on data in order to help inform policy.

Introduction: Income Inequality and Polarization

Income inequality and polarization have been growing in cities across North America and globally. Between 1997 and 2007 nearly one-third of all income growth went to Canada's richest 1%, greater than every before in Canadian history (Yalnizyan, 2010). Wealth is concentrated as top earners continually receive greater rates of return on capital (Piketty, 2014).

Income inequality refers to the dispersion of wages across income brackets (Kaufman and Distasio, 2015); income polarization refers to the distribution of high-income and low-income earners, and is associated with a hollowing out of middle-income groups. Economists use the Gini Coefficient to observe changes in income distribution (see Image 1). The Gini Coefficient is a tool used to graph the distribution of income across a set of census tracts. The calculation produces a number between zero and one, with zero equating to perfect equality and one equating to perfect inequality.

Income inequality has implications at the neighbourhood level, as well. Neighbourhoods are often organized along income lines, divided into rich and poor neighbourhoods (Distasio and Kaufman, 2015). This spatial element to income inequality creates patterns that often repeat through generations and can be extremely challenging to change. This spatial ordering of cities and neighbourhoods has tangible outcomes—people who live in poor neighbourhoods face greater challenges related to housing, employment, access to opportunities, and mobility (Distasio and Kaufman, 2015).

Income Inequality: An Emerging Discourse

As income inequality has been growing in both Canadian and American cities, a discourse on the subject has emerged. Charles Piketty's book Capital in the 21st Century (2014) helped to bring the issues of income and wealth inequality to the forefront. Piketty used historical data to highlight changes in concentration of income and wealth over time to present a timeline of inequality spanning from the 18th century to today.

Image 1: Gini Coefficient Relative to 1970 for Selected Census Metropolitan Areas
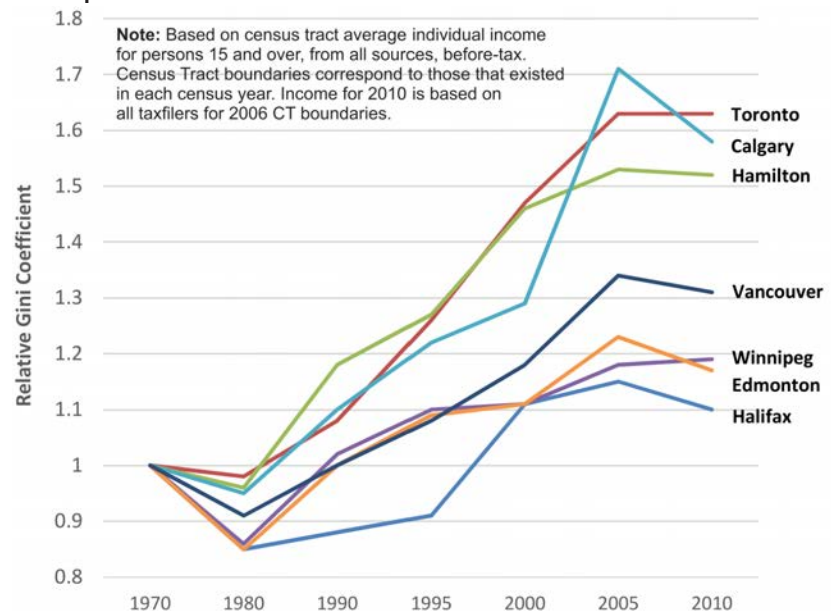
This image graphs the Gini Coefficients for seven Canadian cities between 1970 and 2010 to show how inequality has changed during this time.
Image Source: Distasio and Kaufman, 2015, adapted from data provided by the Cities Centre, University of Toronto.

Although its roots are in economics and sociology, academic discourse on income inequality has been taken up by a number of other disciplines. The body of literature examining income inequality looks at macro-level drivers, including racism and socio-demographic status, as well as more site-specific drivers (Kaufmann and Distasio, 2015). Urban geographers have contributed to this discourse by examining the socio-spatial dynamics of income inequality—how forces of income inequality and polarization play out at the neighbourhood level.

Image 2

Image Source: Bernstein and Spielberg, 2015.

Media coverage of inequality has grown in recent years, as well, with publishers such as the New York Times, the Canadian Broadcasting Corporation (CBC), the Atlantic, and the Globe and Mail increasingly exploring how income inequality is affecting our urban areas. This discourse is continually evolving. A recently published article in the Atlantic looks beyond just income inequality and wealth inequality

(which accumulates over time) to explore the concept of total inequality—"the sum of financial, psychological, and cultural disadvantages that come with poverty" (Thompson, 2016).

Neighbourhood Change Research Partnership

Increased income inequality, income polarization and ethno-cultural divisions have been documented in cities all around the world. Although many of these trends are global, they play out at the local level, in neighbourhoods and communities (Distasio and Kaufman, 2015). This raises questions about how socio-economic and cultural divides can be addressed to provide more equal access to opportunity for everybody.

The Neighbourhood Change Research Partnership (NCRP) looks at how these global trends play out in the Canadian landscape. Specifically, the NCRP explores how income inequality, diversity, and change play out at the neighbourhood level in eight Canadian cities. The NCRP received $2.5 million in funding over seven years from the Social Sciences and Humanities Research Council (SSHRC), which is being used by local research teams in

each city to investigate how factors such as age, gender, ethnicity, Aboriginal identity and immigration status relate to documented trends and processes.

The NCRP seeks to identify trends, explain processes causing neighbourhood restructuring trends, and explore the consequences of these trends as well as their policy implications. Researchers seek to gain insight into on how inequality affects different cities in different ways, what factors accelerate or slow down the trend towards inequality, and whether interventions that have been successful in one location can be used elsewhere

The NCRP explores how income inequality, diversity and neighbourhood change play out in either Canadian cities.

to achieve the similar results (Neighbourhood Change Research Partnership, 2015). One of the primary questions underlying the research is how policy and programs are responding, or failing to respond, to physical and social neighbourhood restructuring trends (Neighbourhood Change Research Partnership, 2015).

The Divided Prairie City: Income Inequality Among Winnipeg's Neighbourhoods, 1970-2010, edited by Distasio and Kaufman (2015), was undertaken through the NCRP and brings together a collection of essays intended to provide an impression of how income inequality plays out at the neighbourhood level in Winnipeg and, in particular, how inclusive communities are built and dismantled in Winnipeg. A directive that came out of the research points to the need to extend the conversation to build collaborative relationships with a greater number of community partners.
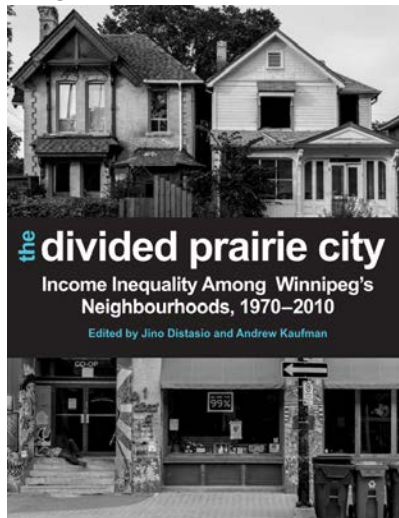
Image 3

Image Source: Kaufman and Distasio, 2015

Place Typologies

A number of studies emerging from the NCRP focus on identifying socio-spatial variation at the neighbourhood level. Many of these studies use place typologies to differentiate neighbourhoods, examine how neighbourhoods have changed and reorganized according to income, and highlight areas of deprivation (Hulchanski, 2007; Murdie, Logan and Maaranen, 2013; Kaufman and Distasio, 2015). Murdie and Logan (2014) compiled an extensive bibliography and review of neighbourhood typologies, which focuses on examples from Canada, the United States, Australia and New Zealand, and provides a history of neighbourhood typology development.

The development and use of place typologies originated in the late 19th and early 20th centuries in London and Chicago. Charles Booth (1902) mapped socio-economic data for London, while Ernest Burgess (1925) conducted neighbourhood-based analyses which led to the development of the concentric zone model—the first spatial model of socio-economic status in cities (Murdie and Logan, 2014). Social area typologies, another precursor to more modern neighbourhood classifications, originated in the 1950s and examined social change theories at the level of the census tract. These studies, however, focused primarily on theoretical relationships and did little empirical work (Murdie and Logan, 2014). The origin of the more modern approach to place typologies, which usually employs a multivariate statistical approach and from which today's complex neighbourhood typologies evolved from, began in the 1970s.

More recent neighbourhood typologies such as those developed through the NCRP have built on these foundations while benefitting from increased digital capacity and improved software, Geographic Information Systems (GIS) software in particular. These technological advancements have allowed spatial analysis to greatly increase the number of factors taken into account resulting in more complex and nuanced analyses.

Application of Neighbourhood Categorizations in Winnipeg

Neighbourhood categorizations have been used for various purposes and to varying degrees in Winnipeg (City of Winnipeg, 2000; Carter and Polevychok, 2003; Institute of Urban Studies, 2006; 2008). These studies indicate that, in Winnipeg, inner-city neighbourhoods have faced decline as wealth moves toward the fringes (Distasio and Kaufman, 2015). A number of studies examining neighbourhood restructuring and concentration of Indigenous populations found that income appears to be the primary determinant of neighbourhood-level sorting in Winnipeg (Peters, 2005; Walks and Bourne, 2006).

Image 4: City of Winnipeg Housing Policy (2000) Neighbourhood Designation Categories

■ Major Improvement Areas	(14)	
☐ Rehabilitation Areas	(21)	
☐ Conservation Areas	(135)	
☐ Emerging Areas	(23)	
☐ No Designation *	(35)	
	(228)	

Major Improvement Areas

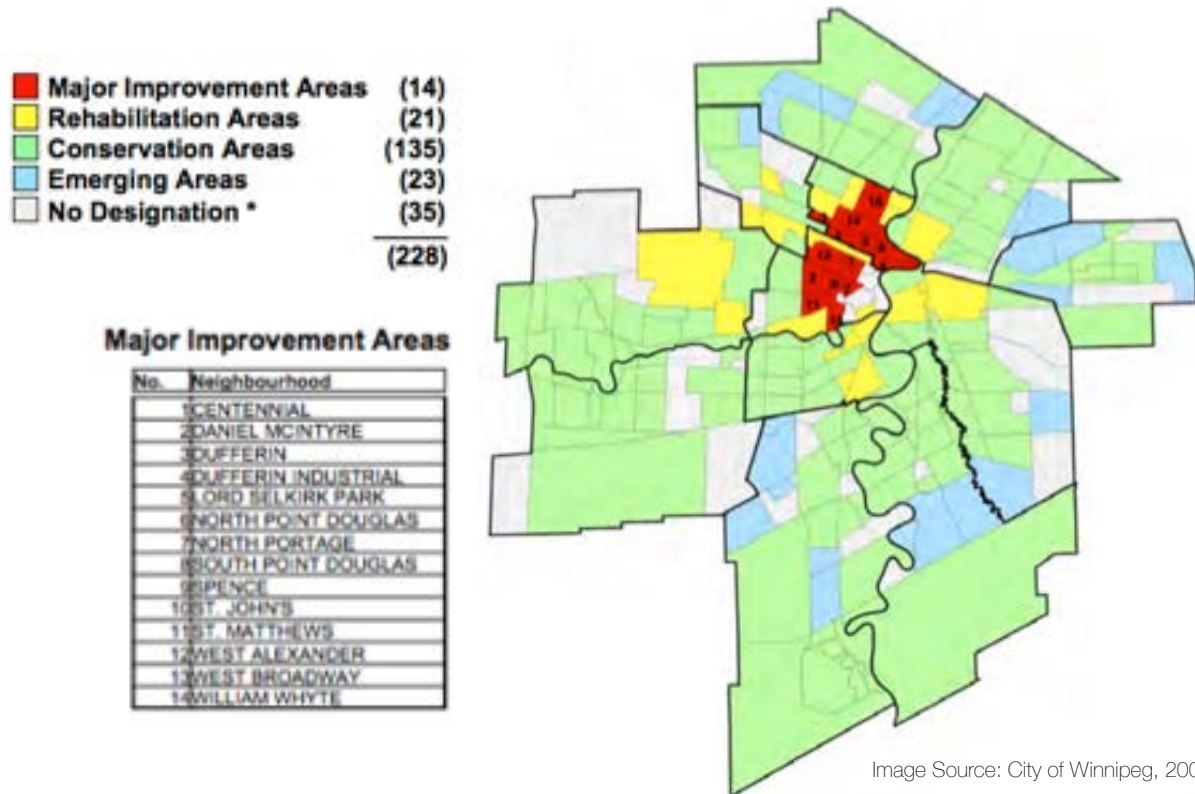| No.	Neighbourhood
1	CENTENNIAL
2	DANIEL MCINTYRE
3	DUFFERIN
4	DUFFERIN INDUSTRIAL
5	LORD SELKIRK PARK
6	NORTH POINT DOUGLAS
7	NORTH PORTAGE
8	SOUTH POINT DOUGLAS
9	SPENCE
10	ST. JOHN'S
11	ST. MATTHEWS
12	WEST ALEXANDER
13	WEST BROADWAY
14	WILLIAM WHYTE

Image Source: City of Winnipeg, 2000

One particular set of intervention of serves as an example of how neighbourhood categorizations have helped to direct policy and funding in Winnipeg. The Winnipeg Core Area Initiative (CAI), which operated between 1981 and 1992, identified and targeted an area of Winnipeg's inner city of approximately 25 square kilometers. The CAI was a tripartite agreement aimed at addressing neighbourhood decline in Winnipeg by improving the social and physical condition of the targeted area.

The CAI, which ended in 1992, was succeeded by a number of similar tripartite agreements (Leo and Pyl, 2007), including the Winnipeg Development Agreement (WDA) and Winnipeg Partnership Agreement (WPA), 1994-2001, and the Winnipeg Housing and Homelessness Initiative (WHHI), 2001-2012. The City of Winnipeg's Housing Policy (2000) clearly identified Major Improvement zones as areas to focus on for rehabilitation (see Image 4). This classification of distressed areas helped to create a clear policy directive and served as an avenue to direct funding to areas in greatest need.

In *The Divided Prairie City: Income Inequality Among Winnipeg's Neighbourhoods, 1970-2010* (Distasio and Kaufman, 2015), methods used to develop neighbourhood typologies in previous NCRP studies were adapted in order to study socio-demographic factors in neighbourhoods impacted by income inequality and polarization in Winnipeg. In order to develop neighbourhood typologies that could more effectively capture factors affecting Winnipeg's neighbourhoods, analysis had to be modified to capture particular traits of Winnipeg, in particular slow growth trends with a less-populated urban centre and a significant Indigenous population (Distasio and Kaufman, 2015). Forty variables were used from the 2011 National Household

Survey (NHS). These variables were organized into larger groupings to organize education, occupation, income, age,

Previous City of Winnipeg policy documents clearly identified Major Improvement zones as areas to focus on for reabilitation.

household size, ethnic status, immigration status, mobility, and housing status.

Analysis resulted in the generation of twelve types of neighbourhoods that fall under five broader categories (see Image 5). This analysis found, similar to previous studies, that Winnipeg's neighbourhoods were sorted by socio-economic and demographic factors, with a concentration of marginalized populations living in the inner city. It highlighted a different pattern than is seen in larger cities like Toronto and Vancouver—instead of rapidly gentrifying inner cities, Winnipeg displays a hollowing out of inner-city areas (Ley and Frost, 2006). These findings highlight a need to better understand how policies and processes maintain

inequality, and how they can better support marginalized populations in transcending income inequality patterns.

Lessons for Planning Professionals

Site-specific place typologies or neighbourhood categorizations, such as those seen in previous version of Winnipeg's Housing Policy (Image 4) and those developed through the NCRP (image 5), can serve a number of functions in directing policy. Although this list is not conclusive, the following outlines

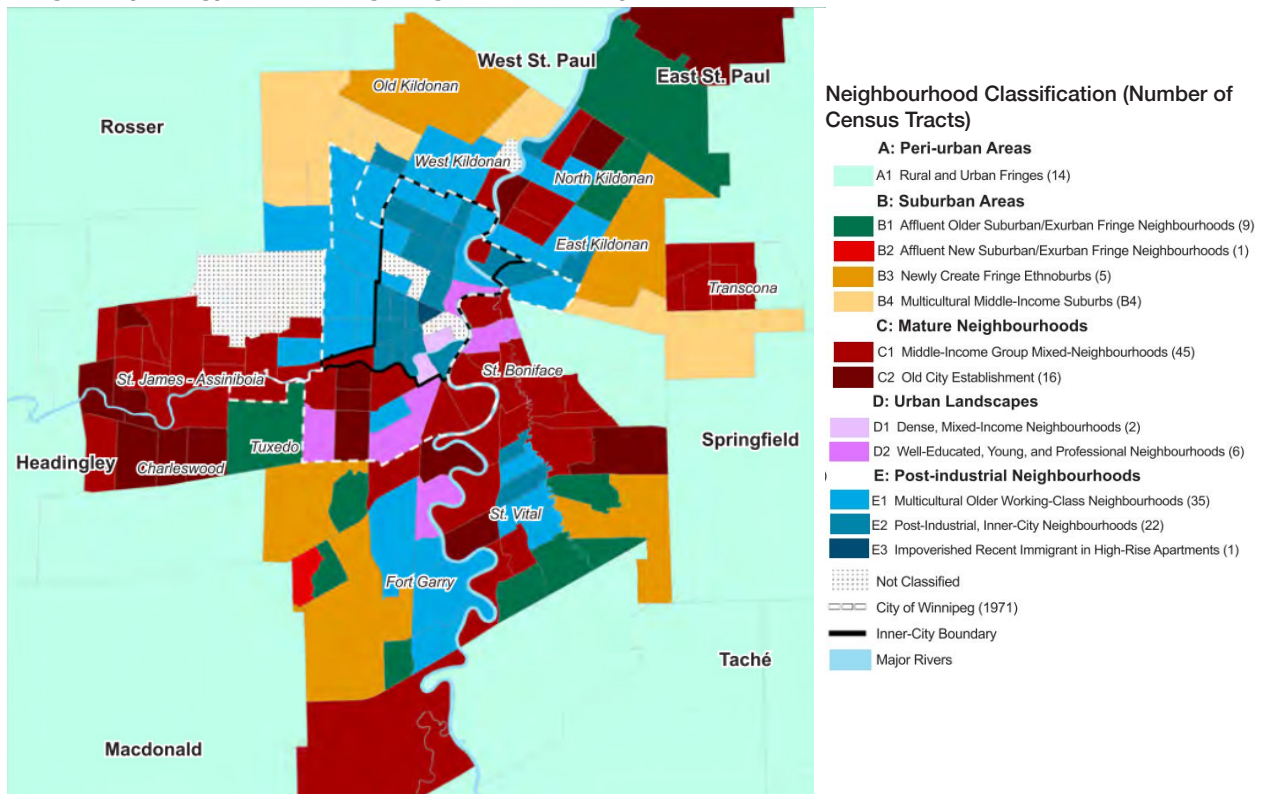**Image 5: Typology of Winnipeg Neighbourhoods by Census Tract, 2011**

Image Source: Kaufman and Distasio, 2015

some lessons for how place typologies can help planning professionals and policymakers in directing policy and resources.

First, place typologies help to clearly define which neighbourhoods are struggling, and to what extent. This allows policymakers to target particular areas for intervention and clearly identifies areas to concentrate limited resources. In the case of the CAI, a geographic area was targeted for intervention based on criteria related to decline, creating a clear policy directive and a defined area to focus interventions.

Second, place typologies can help planners and policymakers to determine the most pressing issues faced in distressed areas. This can assist not only in identifying targeted areas for investment, but also in determining which types or combinations of interventions— social programs vs. housing rehabilitation grants, for example—would have the greatest impact.

Finally, place typologies or neighbourhood categorizations can highlight potential challenges for delivery (Lupton et. al., 2011). Although typologies should not be used in isolation, but rather to develop greater understanding about local circumstances, they can help to identify potential barriers to implementation of policy and programs. Areas with a high proportion of new immigrants,

for example, might require tailored delivery methods in order for interventions to have the greatest impact in areas where English literacy levels might be low.

It should be stressed that place typologies are not meant to captures the entire scope of complexity that exists in neighbourhoods. Place typologies are a simplification of reality, and should be used to supplement knowledge of local context, not replace it. They have potential to play a role in guiding policy, but should not be looked at as perfect reflection of neighbourhoods and complex neighbourhood dynamics.

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As income inequality continues to grow across the globe, similar trends play out at the neighbourhood level, concentrating poverty and creating recurring patterns of marginalization. Place typologies can help to generate understanding about what particular forces are at play at the neighbourhood level. By generating greater understanding about local trends and patterns, place typologies can serve as a tool to help policymakers adapt policies and processes in order to provide support to the places that need it most.

Resources

Bernstein and Spielberg. (June 5, 2015). Inequality Matters. The Atlantic. Retrieved from
http://www.theatlantic.com/business/archive/2015/06/what-matters-inequality-or-
opportuniy/393272/

Carter, T., & Polevychok, C. (2003). Comprehensive Neighbourhood Studies:
Characterizing Decline. Winnipeg, MB: Institute of Urban Studies, The University of
Winnipeg.

City of Winnipeg. Community Services Department. (2000). Neighbourhood Designation
Report.

Hulchanski, D. (2010). The Three Cities Within Toronto: Income Polarization Among
Toronto's Neighbourhoods, 1970–2005. Toronto, ON: Cities Centre, University of
Toronto.

Institute of Urban Studies. (2006). Housing Distress in Winnipeg: Implications for Policy,
Programs, and Services. Winnipeg, MB: Institute of Urban Studies, The University
of Winnipeg.

Institute of Urban Studies. (2008). Community Distress Towards a National Measure.
Winnipeg, MB: Institute of Urban Studies, The University of Winnipeg.

Kaufman and Distasio (2015). The Divided Prairie City: Income Inequality Among
Winnipeg's Neighbourhoods, 1970-2010. Winnipeg, MB: Institute of Urban Studies,
University of Winnipeg.

Leo, C., & Pyl, M. (2007). Multi-level Governance: Getting the Job Done and Respecting
Community Difference, Three Winnipeg Cases. Canadian Political Science Review,
1(2), 1–26.

Ley, D., & Frost, H. (2006). The Inner City. In T. Bunting & P. Filion (Eds.), Canadian Cities
in Transition: Local Through Global Perspectives (Third, pp. 192 – 210). Don Mills,
ON: Oxford University Press.

Lupton et. al. (2011). Using and Developing Place Typologies for Policy Purposes.
London, ON: Department for Communities and Local Government.

Murdie, R., Logan, J., and Maaranen, R. (2013). Who Lived Where in 2006: A
Neighbourhood Typology of Eight Canadian Metropolitan Areas. Toronto, ON: Cities
Centre, University of Toronto.

Murdie, R., and Logan, J. (2014). Bibliography and Review of Neighbourhood Typologies
with a Focus on Canada, the Unived States, and Australia/New Zealand. Toronto,
ON: Cities Centre, University of Toronto.

Neighbourhood Change Research Partnership. (n.d.) Informational Brochure.
    Retrieved from http://neighbourhoodchange.ca/wp-content/uploads/2015/04/
    neighbourhood-change-research-partnership-brochure-2015.pdf

Peters, E. (2005). Indigeneity and marginalisation: Planning for and with urban Aboriginal
    communities in Canada. Progress in Planning, 63(4), 327–404.

Piketty, T. (2014). Capital in the Twenty-First Century. Cambridge, MA: Harvard University
    Press.

Short, J. R. (2013). Economic wealth and political power in the second Gilded Age. In I.
    Hay (Ed.), Geographies of the Super-Rich (pp. 26–42). Cheltenham, UK: Edward
    Elgar Publishing.

Thompson, D. (April 1, 2016). Total Inequality. The Atlantic. Retrieved from http://www.
    theatlantic.com/business/archive/2016/04/total-inequality/476238/

Walks, A., & Bourne, L. (2006). Ghettos in Canada's cities? Racial segregation, ethnic
    enclaves and poverty concentration in Canadian urban areas. The Canadian
    Geographer, 50(3), 273–297.

Yalnizyan, A. (2010). The Rise of Canada's Richest 1%. Ottawa, ON: The Canadian
    Centre for Policy Alternatives.