

Divisions and Disparities in Lotus-Land:

Socio-Spatial Income Polarization in Greater Vancouver, 1970-2005

David Ley & Nicholas Lynch

Research Paper 223

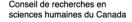
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Executive Summary

This paper examines growing inequality (the gap between rich and poor) and growing polarization (the numbers of rich and poor) in the Vancouver metropolitan area, and shows how these differences play out spatially through the region's different municipalities and neighbourhoods.

A recent study of Toronto, known as the "Three Cities Report," shows that since 1970, the city has become increasingly polarized between affluent neighbourhoods toward the centre (City #1) and larger numbers of disadvantaged neighbourhoods on the edges characterized by social exclusion in terms of employment opportunities, public services, and urban transit (City #3). Sandwiched between these extremes is a large group of more or less stable middle-income neighbourhoods (City #2). Are similar trends apparent in Vancouver?

We studied the City of Vancouver's 23 neighbourhoods and 15 principal suburban municipalities, and found considerable transformations in both demographic and economic characteristics in the past few decades.

City #1 consists of neighbourhoods in which average individual incomes increased by more than 15 percent above the metropolitan rate between 1970 and 2005. These higher-status neighbourhoods represent 30 percent of Greater Vancouver's census tracts and are generally consolidated spatially in three areas. The first is Vancouver's core, including historic middle-class and elite areas on the west side of the city (Shaughnessy, Kerrisdale, Point Grey), and gentrifying older inner-city neighbourhoods (Kitsilano, Fairview, False Creek, and Coal Harbour). The second is the suburban sections of North and West Vancouver on the North Shore, and the third includes outlying areas of the Lower Fraser Valley, where conversion from low-density rural land uses has occurred. There are also scattered "City #1" census tracts in other municipalities, typically associated with condominium redevelopment in New Westminster and south Richmond, and often associated with proximity to parks, views, or the waterfront.

City #2 consists of neighbourhoods that have remained relatively stable, with income changes within plus or minus 15 percent of the metropolitan average. These neighbourhoods include almost half (47 percent) of all census tracts and are widely dispersed through the metropolitan region. Despite this variable location, however, City #2, as a middle ground, often provides a rough separation between concentrated high-income levels in the north, west, and east, and lower-income levels in the central and southern parts of the region. Clusters of City #2 census tracts are found in North Vancouver City, East Vancouver, Burnaby, Coquitlam, and Port Coquitlam, with smaller counts in Richmond, Surrey, and Delta.

City #3 consists of neighbourhoods where the average income of the population fell by more than 15 percent relative to the growth of the metropolitan average income between 1970 and 2005. These areas include 22 percent of the region's census tracts and are relatively concentrated in the southern and eastern neighbourhoods of Vancouver and extending out to the southern and eastern suburbs. There are no tracts in City #3 on the North Shore municipalities of North and West Vancouver. In particular, clusters of neighbourhoods with declining average individual incomes relative to the metropolitan average include the Skytrain transit corridor in

the southeast of Vancouver, through parts of the suburban municipalities of Burnaby, New Westminster, and Coquitlam, and especially in Richmond, North Surrey, and Langley City.

The three neighbourhood groupings or "Cities" represent a dramatic transition from the old model of concentric social areas with poverty at the urban core and a solid band of middle-income districts in the suburbs. Relative to metropolitan changes, significant income gains and losses are occurring in both city and suburban neighbourhoods. There is more inequality with 54 percent of the 2006 CMA population living in tracts that either gained or lost more than 15 percent of their income relative to the metropolitan average over the 35-year period. Equal numbers of people, about 565,000, lived in the gaining and losing tracts.

We have thus identified ample evidence of a new geography of rising income inequality and polarization in metropolitan Vancouver from 1971 to the last complete census in 2006.

Further analysis of the three cities shows sharp distinctions involving immigration and ethnic status. City #1 is overwhelmingly the home of the native-born. In contrast there has been a marked increase in immigrants in the remainder of Metro Vancouver, and especially in City #3, which has shifted from a majority native-born in 1971 to an immigrant majority in 2006. City #3 also includes a plurality of visible minorities (61 percent) while City #1 does not (23 percent).

To paraphrase W. B. Yeats, "Things fall apart, the centre cannot hold." The erosion of the middle-income class and the movement toward a two-class society brings back dark memories of older divided societies and their social theories. We have not yet returned to those Dickensian times – 46 percent of the residents of the Vancouver CMA still live in middle-income City #2 – but the trends are unsettling.

Authors

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1. Introduction

The problem of growing inequality in Canada is now widely acknowledged. In a July 2011 report, the Conference Board of Canada noted that the top 20 percent of Canadians received almost 40 percent of after-tax national income in 2009, and that this share has risen from 36.5 percent in 1990 (Conference Board, 2011). Indeed research by the Canadian Centre for Policy Alternatives discovered that the top 1 percent of Canadians by income captured almost a third of all income growth from 1997 to 2007 (Yalnizyan, 2011). The economic ascension of the top 1 percent has been achieved due to the high salaries offered to senior managers and professionals in a postindustrial, globalizing economy, but also due to public policies that have disproportionately benefited the rich (such as tax reform) while penalizing the poor (through the reduction of public benefits). In this paper, we examine the growing inequality (the gap between rich and poor) and growing polarization (the numbers of rich and poor) in the Vancouver metropolitan area, and how these differences are inscribed spatially through the region's different municipalities and neighbourhoods.

The paper begins by summarizing socio-spatial patterns in Canadian cities from a baseline in the 1950s to contextualize the present distributions, noting significant change processes in the past 35 years. Using Census data we then examine socio-spatial patterns of change in income distribution across the Vancouver CMA from 1970 to 2005 (the 1971 and 2006 Census enumerators asked Canadians about their incomes in the preceding calendar year). Finally, we make some preliminary attempts to link these income changes to other census variables and offer some interpretive sketches of the map of growing polarization that we observe across metropolitan Vancouver over this period.

We shall be using two key terms, inequality and polarization, in this report. It is important to distinguish them from the beginning. Inequality refers to the *size* of the gap between different income groups, while polarization refers to the *number* of people at different points along the income spectrum. Growing inequality means that the gap between rich and poor is widening, while greater polarization means that, regardless of the size of the gap, there are more people at each end of the income distribution and fewer in the middle (see Hamnett, 2003, especially 74-79).

For the fifth straight year, the city of Vancouver has received the highest rank in a recent "livable cities" survey, defeating Melbourne and Vienna. The Economist Intelligence Unit declared that Canada's Pacific metropolis is the world's most livable city because of its high-quality health care and education, diverse culture, environmental sustainability, and comprehensive infrastructure. In many ways this accolade correctly describes a city that has been transformed through internal policies and external impacts over the last several decades from a "sleepy provincial town" to a dynamic global city, a key gateway to Asia Pacific, and a rising cosmopolis (Mitchell, 2004; Sandercock, 2003). As a result, some call Vancouver "lotus land" or a "Dream City"; others simply call its urban planning an "achievement" (Berelowitz, 2005; Punter, 2003).

No matter how it is labelled, it is clear that Vancouver has become a destination of choice for Canadians and immigrants seeking to live in some of the country's most vibrant neighbourhoods not far from snow-capped mountains, forests, oceans, and lakes. Indeed, the expansion of new downtown neighbourhoods like Yaletown and the consolidation of "ethnoburbs" like those in Richmond or Surrey speak both of a spirited return to an inner city bustling with land-scapes of leisure, conviviality, and cosmopolitanism, and an entrenchment of immigrant pathways to dynamic suburban communities.

Yet Vancouver, like most large cities in Canada, is not immune from the negative impacts of accelerated change that have been reconfiguring both the urban built form and the social lives of urban residents. Alongside an improved "livability" for some, transitions in Vancouver are characterized by significant restructuring of the local economy with accompanying employment shifts, changes in social service delivery, and evolving property development. For others, these changes have resulted in rising concerns about poverty, crime, housing affordability, income inequality, and social polarization – key issues that directly impact the health and vitality of local neighbourhoods.

This report provides an analysis of the changes taking place in Vancouver's urban regions. Drawing from a range of census data across a 35-year period, we explore how the districts of Greater Vancouver have experienced substantial socio-economic transition in response to both global and local forces. We begin this analysis with a brief discussion of the trajectory of urban growth and development in Canada focusing on the impacts of such factors as labour and employment markets, social and cultural change, and new political regimes as the main contexts for new divisions in the Canadian city. Second, we examine in detail recent census data that demonstrate a new scale and distribution of social and economic divisions across the neighbourhoods of Metro Vancouver. Third, we examine this emerging geography of polarization and inequality, classifying districts into three categories – those with rising incomes relative to the metropolitan mean (or average), those that are stable, and those with declining incomes relative to the mean – and suggest some reasons for this changing map over time.

2. Contextualizing the "Divided City"

Since the end of the Second World War, the pace of growth and development in Canadian cities has been staggering. In Toronto, Montreal, and Vancouver, Canada's three major cities, rapid economic and demographic change has consistently restructured their physical form, the types of available employment, the cultural character of communities, and the processes of local and regional politics (Bourne et al., 2011). In a short period, the largest urban centres have been remade into modern and globally aspiring cities and their successes have pointed to wider national achievements in providing prosperity, livability, and more healthy environments. Yet such success does not come without some unwanted consequences. Indeed, despite rising levels of affluence in these cities, the loss of affordable housing and homelessness, the retrenchment of social services, and, the declining relative incomes of recent immigrants have placed substantial pressures on the vitality of many communities (Walks, 2011).

An important but troubling result of these developments has been the creation of what some scholars have called the divided city. In a recent report, David Hulchanski (2010) highlights a growing division between distinct neighbourhoods in the City of Toronto (Figure 1). The report shows that since 1970, Toronto's neighbourhoods have fallen into three clear groups based on income change. While 20 percent of overall tracts, including older neighbourhoods in the inner city and upper middle-class North Toronto, have consistently risen in terms of average incomes relative to the City average (City #1), a much larger share of tracts (40 percent) in the postwar suburbs on the periphery of the City have shown steady decline relative to the overall City mean (City #3). Sandwiched between these extremes is a large group of more or less stable middle-income neighbourhoods (City #2). Canada's largest city is increasingly polarized between affluent neighbourhoods toward the centre and larger numbers of disadvantaged neighbourhoods on the edges enduring social exclusion in terms of employment opportunities, public services, and urban transit.

How generalizable is Toronto's pattern of neighbourhood change? We would not expect a direct parallel, since the Toronto study is limited to the administrative City of Toronto and does not incorporate the outlying suburbs included in the Vancouver Census Metropolitan Area (CMA), the unit of analysis in this report. Moreover the distinct social geographies of different cities have their roots in past as well as present forms, functions, and politics. Sketching these specific trajectories through time is essential to understanding how such patterns are developing in other cities, including Vancouver.

Change in Average Individual Income, City of Toronto, 1970 to 2005

Average Individual Income from all sources, 15 Years and Over, Census Tracts

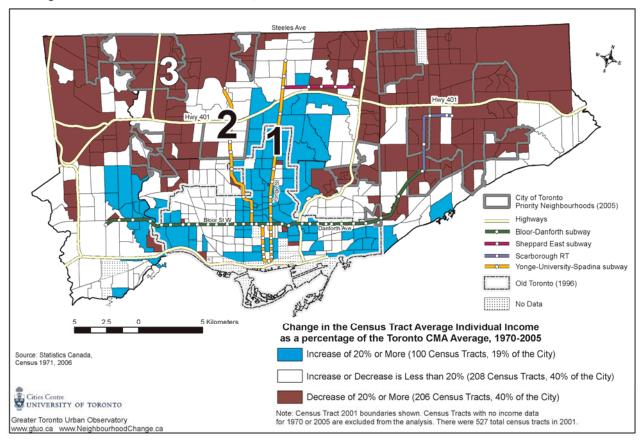


Figure 1: Toronto's Three Cities (Source: Hulchanski 2010)

2.1 The Social and Spatial Form of the Early Canadian City

Until 1945 the urban structure of many Canadian cities was characterized by distinct zones of land use, economic activity, and social and cultural groupings. Many major cities across North America fit a rough model of concentric rings defined by a downtown core or central business district (CBD), an adjacent industrial landscape composed of factories and warehouses located along rail networks and waterways, and beyond them, older residential neighbourhoods divided and segregated along lines of income and ethnicity (Bunting and Filion, 2010). The outermost residential zone housed a growing population of the middle-class and some working-class members. In the early postwar period, the suburbs drew a socio-cultural, as much as a spatial, line in the urban landscape, with a distinct separation between the types of activities and communities found in "urban" and "suburban" places. Richard Harris (2004) described this emerging pattern as a "creeping conformity," an apt metaphor for the way in which smaller and more diversified suburbs gradually became more homogenous in terms of lifestyle and class.

For the most part, Canada's largest cities followed this pattern of development, as growth was largely predicated on their roles in industrial production. In Toronto and Montréal, manufacturing and administrative economies played their part in developing inner-city industrial and corpo-

rate zones employing large numbers of blue-collar workers and a growing contingent of middle-class service employees. Unlike these cities, however, Vancouver's urban growth was deeply embedded in a distinct resource or "staple" economy centred on the Pacific region. Specifically, the extraction, processing and export of natural resources like fish, minerals, and timber represented the employment and production backbone of British Columbia, and was a key factor influencing both Vancouver's economic trajectory and its emergent urban form (Hutton, 2004) (Table 1).

Table 1: Change in Metropolitan Vancouver's Experienced Labour Force, by select major industry group and selected service categories, 1961–1991 (Source: Hutton 2004)

Industry	1961	1971	1981	1986	1991
Agriculture	3.8	5.4	7.7	10.2	11.6
Forestry	2.5	3.4	4.2	3.9	4.1
Fishing & Trapping	1.8	1.6	2.3	2.7	2.9
Mining	1.6	3.4	3.3	2.9	2.9
Manufacturing	57.5	78.8	96.3	89.9	98.7
Construction	19.9	32.0	44.6	43.7	64.3
Transport, Communications, Utilities	34.9	50.0	69.6	73.8	80.0
Wholesale & Retail Trade	59.9	85.7	126.5	129.9	162.1
Finance, Insurance & Real Estate (FIRE)	15.9	28.2	47.3	51.9	66.4
Community, Business & Personal Services	70.4	127.8	216.7	265.3	386.5
Business Services		18.2	42.0	50.6	70.1
Education Services	12.1	27.5	41.0	41.6	55.3
Health & Social Services	18.8	30.3	52.3	56.9	76.5
Accommodation, Food & Beverages	12.9	22.3	42.6	57.0	66.5
Government Services	18.0	22.3	37.9	39.5	45.1
Other Services	0.7	7.2	0.9	19.7	73.0
Total	268.3	416.2	618.6	673.0	883.1

Since the early 20th century, the central business district (CBD) housed the city's corporate and branch offices, financial services, and a stock exchange catering to "venture capital for speculative mining operations" (Barnes and Hutton, 2009). Surrounding this central core were large railway marshalling yards, linking a variety of sites dedicated to staple distribution, and heavy and light industry. Along the northern shore of the downtown peninsula were port export facilities, some industrial processing, and warehouses. Likewise, wrapping around the CBD from the south and east along False Creek, manufacturing activities dominated the landscape with tightly packed lumber mills and other industrial plants (Hardwick, 1974; North and Hardwick, 1992). While West Vancouver effectively rejected industry, opting for residential expansion in the postwar period, North Vancouver on the far side of the Burrard Inlet from downtown established

manufacturing employment in shipbuilding and forest-related firms. Stretching further east along the south shore of Burrard Inlet in suburban Burnaby and Port Moody were smaller industrial clusters like those found along the downtown waterfront, while along the Fraser River in Burnaby and New Westminster large sawmills and paper plants represented a large portion of the region's timber production workforce (North and Hardwick, 1992).



Figure 2: Neighbourhoods in the City of Vancouver (Source: City of Vancouver 2005)

A spatial sorting of residential districts connected to these vital economies brought neighbour-hoods housing a diverse group of the poor and working-class close to inner-city industrial and manufacturing sites. Although more pronounced in the United States, Canadian cities certainly had their share of such "districts of decline" in the most needy of these inner-city districts (Ley and Frost, 2006). Places such as Regent Park in Toronto, Jeanne-Mance in Montreal, and the Downtown Eastside (DTES) in Vancouver represented deep poverty districts. Other historically poor and working-class districts were often situated nearby. In Vancouver, neighbourhoods such as Chinatown-Strathcona and Grandview-Woodland housed many poor immigrant and blue-collar families dependent on the local resource economy (Figure 2). These areas were further distinguished by the presence of marginalized racial populations, largely of Asian and Aboriginal ancestry.



Figure 3: Municipalities of Metro-Vancouver

Map prepared by Eric Leinberger, Department of Geography, UBC

Other neighbourhoods in the early postwar period housed growing numbers of middle-class residents employed in corporate and service-related jobs. Older neighbourhoods, including the West End, Fairview, and Kitsilano (located west, south, and southwest of the downtown peninsula), offered some single-family housing, but also included by the 1950s and 1960s middle-class apartments, especially along the developing retail corridors. These early inner suburbs provided easy access to but also distance from the downtown core – a class-based refuge for many from the impoverished and industrialized central city. Among them were distinguished elite neighbourhoods, Shaughnessy Heights in Vancouver, Rosedale in Toronto, Westmount in Montreal, which provided a stable anchor for expanding waves of gentrification from the 1970s onwards (Ley, 1996).

2.2 Trajectories of Change in the Contemporary Canadian City

The social and economic geography of the contemporary "postindustrial" period has re-defined this conventional model of the Canadian city. Economic, political, and social transformations

have added new levels of complexity and inequality to the national urban system. Deindustrialization after about 1970 was a particularly important force of change, fuelled by new forms of employment and changing demands for urban land, and often resulting in novel urban landscapes. Over the years, the results have involved massive restructuring of the inner-city from a blue-collar industrial zone to redeveloped residential, commercial, and leisure districts, with the insertion of middle-class professional and managerial staff working in advanced services downtown and in the inner city. Furthermore, at a regional scale, the expansion of suburban municipalities has proceeded at a rapid pace as they became increasingly defined not primarily by their traditional middle-class status, but by their diversity, including low-income and immigrant districts (Figure 3).

In Vancouver, this trend was typified by substantial losses of the industrial base on both shores of False Creek and along the Burrard Inlet east of downtown. Some abandoned sections close to the CBD were redeveloped with corporate office buildings designed to house Vancouver's emerging service and management sectors. Steered in a new direction, job growth between 1971 and 2001 was largest in the community, business, and personal services sectors. The expansion of high-paying employment in white-collar sectors — particularly in the "knowledge" or "creative" economy (e.g., information technologies, media and publishing, many design fields, advertising, software production, scientific services, finance and legal services, real estate) — has consolidated a new employment character in the city and region (Hutton, 2008) (Table 2).

Table 2: Employed Labour Force by Occupation, Vancouver CMA (%) (Source: Barnes et al., 2011, 302)

Population	1996	2001	2006
Management Occupations	10.7	11.9	11.3
Business, Finance, & Administration	21.1	19.8	19.1
Natural & Applied Sciences & Related Occupations	5.6	7.2	7.4
Health Occupations	4.8	5.2	5.4
Social Science, Education, & Government Services	6.9	7.4	7.8
Arts, Culture, Recreation & Sport	3.5	4.1	4.1
Sales & Service Occupations	27.5	25.9	26.1
Trades, Transport & Equipment Operators	13.1	12.1	12.6
Primary Industries	2.0	1.7	1.8
Processing, Manufacturing & Utilities	4.8	4.7	4.3
All Occupations	963,905	1,049,910	1,150,490

Simultaneously, and in contrast, is an expanding group in the lower-paid "service class" (e.g., tourism, leisure, food, and accommodation). Similar to the employment trajectories in other urban regions, Barnes et al. (2011:302) explain that "such [an] occupational distribution provides potential for [the] income polarization commonly ascribed to global cities." It has been known

for some time that the structure of the postindustrial workforce – particularly with the downsizing of unionized staff – exaggerates inequality, particularly in global white-collar cities (Hamnett, 2003). Professional-managerial occupations are the good-paying jobs that have been steadily growing, but so too have the low-paying personal service occupations (Kalleberg, 2011). An accompanying trend is the rise of precarious employment, short-term and part-time, associated with the creation of a flexible work force, and the rise of unemployment and underemployment.

A relatively new set of political-economic decisions has restructured the welfare state since the 1980s and further accentuated these rising inequalities. Neoliberalism – the tendency of government to withdraw from economic regulation and social service delivery in favour of market provision – has set the context for significant downsizing of key public services such as welfare benefits and social housing. During the 1990s, Canada's Gini coefficient (a measure of income inequality) rose sharply from a low of 0.28 in 1989 to 0.32 in 2001 (Conference Board, 2011). Neoliberal policies are of particular consequence in urban regions, where disadvantaged groups like the elderly and unemployed have long been dependent on local social and health-based services.

Furthermore, connected to these transitions, redevelopment in the city centre has been increasingly determined by megaprojects that are routinely directed to private-sector ends and the servicing of the more affluent groups of the knowledge economy. High-density residential condominiums, mixed-use corporate towers, and globally inspired leisure destinations are now common downtown assets welcomed by municipalities, which increasingly seek new ways to remain competitive before global as well as national consumers. Neighbourhoods such as Liberty Village in Toronto or Yaletown in Vancouver have been consciously refurbished from their industrial past as high-amenity residential areas catering to the service-sector employees who have elsewhere been referred to as the "new middle class" (Ley, 1996; Hutton, 2008; Catungal and Leslie, 2009). This affluent group of urban professionals is highly attuned to expressive postmodern landscapes akin to "village living" (Ley, 1987). Environmental quality, multi-modal options (including walkability and public transit), and cosmopolitan consumption spaces represent some of their demands. But the increasing appetite for such inner-city landscapes contributes to encroaching patterns of gentrification that supplant low-income neighbourhoods.

This pattern has been well studied in Toronto, where districts such as Queen Street West and Parkdale have been targeted by successive rounds of renovation and redevelopment by niche developers for middle- and upper-income residents (Slater, 2004). Displaced to ever-poorer private dwellings nearby or to the peripheries of the city are marginalized rooming-house residents, new immigrants and refugees, and the working poor. This process has been going on for a generation and has much to do with the homelessness that began to be observed in the 1980s. In Vancouver some 7,500 rental units were demolished between 1973 and 1981 to make way for condominium developments, most notably in the inner-city neighbourhoods of Kitsilano, Fairview, and the West End (Mills, 1988; Ley, 1996). Substantial displacement of affordable housing has continued with smaller-scale gentrification as well as massive private redevelopment schemes tied to internationally funded megaprojects built on waterfront and amenity-rich central locations.

Constructed on the former industrial lands and the site of the world's fair, Expo '86, the Pacific Place project and its sister development in Toronto, CityPlace, were initiated by Hong Kong de-

velopment interests and embody the deepening transnational ties between Canada and Asia Pacific (Olds, 2001; Ley, 2010). Since the early 1980s, researchers have noted an intensification of financial and capital transfers from Asia Pacific nations including Japan, Hong Kong, China, and Taiwan to major Canadian cities, with a specific focus on the Vancouver region (Gutstein, 1990; Ley and Tutchener, 2001; Olds, 2001; Mitchell, 2004; Ley, 2010). But these linkages have also been the result of no small effort by the state, at all levels, to lubricate and deepen flows of finance, commodities, ideas, and immigrants (Barnes, 2009).

Table 3: Immigration to British Columbia by Major Source Countries, 2006–2010 (Source: Government of British Columbia, Ministry of Jobs, Tourism and Innovation, 2011, B.C. Immigration Trends, Table 2)

Country of Origin	Total Number	Percent of Total
China	47,795	22.70
India	28,550	13.60
Philippines	23,961	11.40
South Korea	11,901	5.60
United Kingdom	11,584	5.50
United States	11,495	5.50
Taiwan	9,349	4.40
Iran	6,862	3.30
Other Countries	59,155	28.10
British Columbia	210,652	

A combination of government-led trade missions, investment incentives, and educational exchanges has consistently marketed Canada and Vancouver as key transnational partners with many Asia Pacific nations (Mitchell, 2004; Barnes et al., 2011). The resulting influx of investment over the years has transformed Vancouver's local property market, making it the city with the most expensive housing in Canada (Ley and Tutchener, 2001; Ley, 2010).

Some 40,000 to 45,000 immigrants typically enter British Columbia each year, with 80–90 percent locating in Greater Vancouver (Table 3). The recent immigration mosaic largely comprises individuals and families from East Asia and South Asia, but is diversified by its composition of specific admission-class arrivals (Table 4).

While Vancouver receives close to its due share of skilled workers and family class migrants, the CMA receives disproportionately few refugees and is vastly overrepresented among wealthy business immigrants. The latter, mostly from Taiwan and Hong Kong, have been instrumental in entrepreneurialism and investment following the terms of their landing in Canada. Many among these "millionaire migrants" live and invest in Vancouver's high-end real estate market, redefining both the class and ethnic contours of specific communities (Ley, 2010). In general, while asset-rich, they have not been economically successful in Vancouver. Similarly,

some skilled workers, especially those with foreign credentials and with poor English, are underemployed in de-skilled, low-paying service jobs (Barnes et al., 2011).

Table 4: Admission Class of Immigrants Landing in Vancouver, Toronto, and Montreal, 1989–2004, Indexed to Canadian Average (2005 IMDB), in Percentages (Source: Hiebert, 2011)

	Vancouver	Toronto	Montreal
Total Number	319,915	825,925	253,040
Family Class	97	103	85
Skilled Worker (Principal Applicant)	91	98	130
Business (Principal Applicant)	254	70	57
Skilled Worker (Spouse & Dependants)	98	105	93
Business (Spouse & Dependants)	241	74	66
Refugee	56	93	118

Rapidly growing suburban municipalities like Richmond (ethnic Chinese) and Surrey (ethnic South Asian) are major residential destinations for many of these new arrivals. New suburban downtowns have served as development nodes, and, with cultural amenities and ethnic retailing, have created distinct "ethnoburbs" similar to Toronto's Mississauga and Richmond Hill suburbs (Preston and Lo, 2005; Li, 2006; Hutton, 2008). Critically, however, while some recent arrivals have found suburban employment in high-technology industries and health and education professions, many others have been pushed to the suburban fringe with its cheaper housing but also its diminishing public services and precarious employment (Smith and Ley, 2008). This trend has led to a distinct racialization and decentralization of poverty over the last several decades (Galabuzi, 2006). Indeed, as Alan Walks (2011) shows, the relative incomes of recent immigrants to Canada's major metropolitan regions have dropped substantially in relative terms since 1981, when they earned on average 90 percent of the earnings of native-born Canadians; in 2001 they earned only 65 percent. In short, the troubling relationships between race and economic success are producing new forms of social exclusion that are most acute in Toronto and Vancouver.

2.3 Growing Polarization

One important outcome of the dynamic changes taking place in Canada's metropolitan regions is deeper social and spatial polarization. Far from the concentric ring model that accounted for the past structure of major urban areas, Canadian cities today are being reorganized by complex processes occurring at both local and global scales. Recent research by David Hulchanski (2007:10) has uncovered the resulting socio-spatial patterning evident in the City of Toronto, showing a clear case of what he calls "a city of disparities."

How similar is Greater Vancouver? The two metropolitan areas share many characteristics: white-collar downtowns, significant inner-city gentrification, expanding immigrant suburbs,

global economic and political connections, neoliberal governance, lack of affordable housing, and intensifying urban poverty. Is it possible that Vancouver's neighbourhoods, like those in the City of Toronto, are dividing into three distinct classes?

In the following sections we assess this possibility by presenting census data in maps and tables across a 35-year period (1971–2006). As the data will illustrate, an emerging geography of polarization and inequality in the Vancouver region is discernible, although it is a pattern that shows some variations from Toronto's sharply defined "three cities."

3. Contours of Change in Vancouver

In the City of Vancouver's 23 neighbourhoods and outlying districts in the 15 principal suburban municipalities, transformations in both demographic and economic characteristics have been considerable in the past generation. In order to capture some of this complexity, we examine census data from 1970 to 2005 – an adequate period to examine change in neighbourhood characteristics and to identify specific trends.

Our data measure average or mean income rather than median income, and individual instead of household income. For the purposes of this research, average income is a better measure than median income because it is more sensitive to inequality, that is, the presence of either very low-income or very high-income populations in a census tract. Furthermore, work in Toronto has shown that in most cases there are strong correlations between the maps of individual and household income (Hulchanski, 2007). Where possible results for both individual and household incomes are shown for Greater Vancouver.

Data are mapped by census tract, a small spatial unit with an average population of approximately 5,000; there were 178 census tracts in the Vancouver Census Metropolitan Area (CMA) in 1971. To permit comparison, these boundaries are held constant over time, although far more tracts existed by 2006. In the text, census tracts are often equated with neighbourhoods or parts of neighbourhoods.

3.1 Changing Geographies of Income, 1970-2005

We start by examining change in the average individual income of people 15 years and older in 1970 and in 2005. Figure 4 shows patterns of income change across the Vancouver metropolitan area over the 35-year period, standardized against the metropolitan average.

Following the precedent of the Toronto study (Hulchanski, 2010), neighbourhood groupings of census tracts are divided into three classes. The first group (City #1), shows neighbourhoods in which average individual incomes increased by more than 15 percent above the metropolitan rate between 1970 and 2005. These higher-status neighbourhoods represent 30 percent of Greater Vancouver's census tracts and are generally consolidated spatially in three distinct areas: (1) Vancouver's core, including both historic middle-class and elite areas on the west side of the city (Shaughnessy, Kerrisdale, Point Grey), and also gentrifying older inner-city neighbourhoods (Kitsilano, Fairview, and, downtown, False Creek, and Coal Harbour); (2) in the

suburban sections of North and West Vancouver on the North Shore; and (3) in newer outlying areas of the Lower Fraser Valley, where conversion from low-density rural land uses has occurred (see also Figures 2 and 3). In these districts we see both the deepening of wealth in historic elite areas and the diffusion of that wealth in nearby gentrifying areas, including the massive downtown redevelopments of Pacific Place (False Creek) and Coal Harbour, both financed by Hong Kong capital. There are also scattered "City #1" census tracts in other municipalities, typically associated with condominium redevelopment in New Westminster and Steveston (south Richmond), and often associated (like gentrification) with proximity to parks, views, or the waterfront.

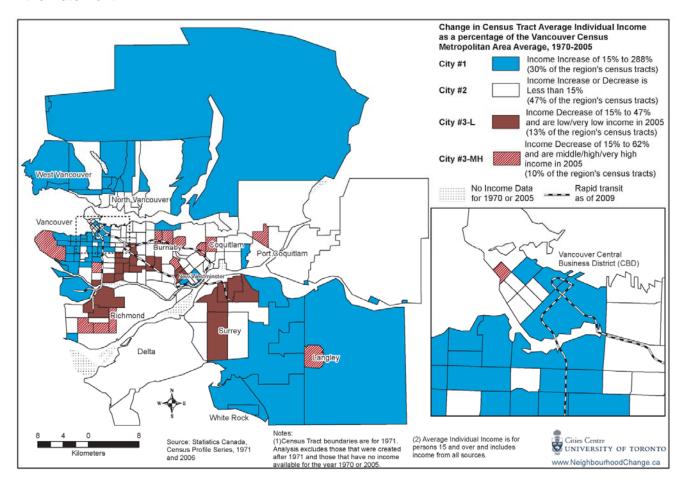


Figure 4: Change in Average Individual Income, Vancouver Region, 1970-2005

A second group of neighbourhoods has remained relatively stable, with income changes within plus or minus 15 percent of the metropolitan average (Figure 4). These neighbourhoods (called City #2) include almost half (47 percent) of all census tracts and are widely dispersed through the metropolitan region. Despite this variable location, however, City #2, as a middle ground, often provides a rough separation between concentrated high-income levels in the north, west, and east, and lower-income levels in the central and southern parts of the region. Clusters of City #2 census tracts are found in North Vancouver City, East Vancouver, Burnaby, Coquitlam, and Port Coquitlam, with smaller counts in Richmond, Surrey, and Delta (see Figure 3).

Neighbourhoods where the average income of the population fell by more than 15 percent relative to the growth of the metropolitan average income between 1970 and 2005 comprise City #3 (Figure 4). These areas include 22 percent of the region's census tracts and are relatively concentrated in the southern and eastern neighbourhoods of Vancouver and extending out to the southern and eastern suburbs. There are no City #3 tracts in the North Shore municipalities of North and West Vancouver. In particular, clusters of neighbourhoods with declining average individual incomes relative to the metropolitan average include the Skytrain transit corridor in the southeast of Vancouver, through parts of the suburban municipalities of Burnaby, New Westminster, and Coquitlam, and especially in Richmond, North Surrey, and Langley City. The large single tract encapsulating the peninsula at the western edge of the city is the location of the University of British Columbia. This tract's low-income population includes large numbers of students, most in halls of residence on the university campus.

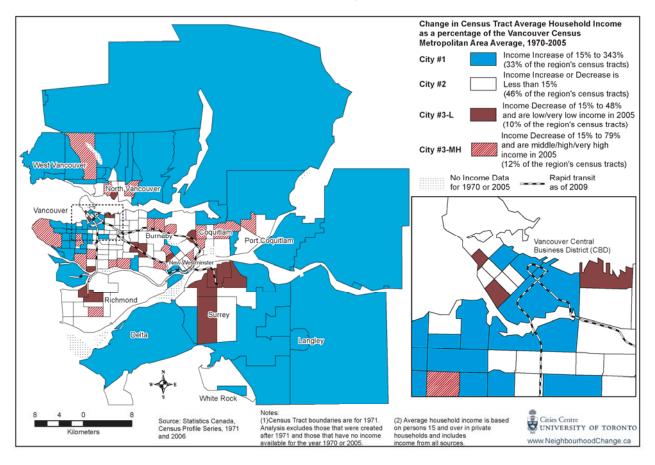


Figure 5: Change in Average Household Income (1970–2005), Vancouver CMA

We can also see the results for the change in average household incomes rather than individual incomes (Figure 5). By and large, the patterns described above remain consistent, although changes in detail occur. While the number of tracts in City #1 (with incomes rising more than 15 percent above the CMA average) rises somewhat from 30 percent to 33 percent of all tracts, City #2, with more stable incomes (46 percent versus 47 percent of average individual income), and City #3 (with relatively declining incomes) are both marginally smaller. There are some

changes in detail in the spatial distribution of income change, including the appearance of several City #3 tracts on the North Shore, but the overall geographical trends remain intact.

Whether we are examining individual or household incomes, the three neighbourhood groupings described here represent a dramatic transition from the old model of concentric social areas with poverty at the urban core and a solid band of middle-income districts in the suburbs. Relative to metropolitan changes, significant income gains and losses are occurring in both city and suburban neighbourhoods. There is more inequality, with 54 percent of the 2006 CMA population living in tracts that either gained or lost more than 15 percent of their income relative to the metropolitan average over the 35-year period. Equal numbers of people, about 565,000, lived in the gaining and losing tracts.

3.2 Changes in Neighbourhood Incomes

In addition to examining the geography of individual income change over a 35-year period, we can also look at the static maps of incomes for the two end-points, 1970 and 2005 (Figures 6 and 7).

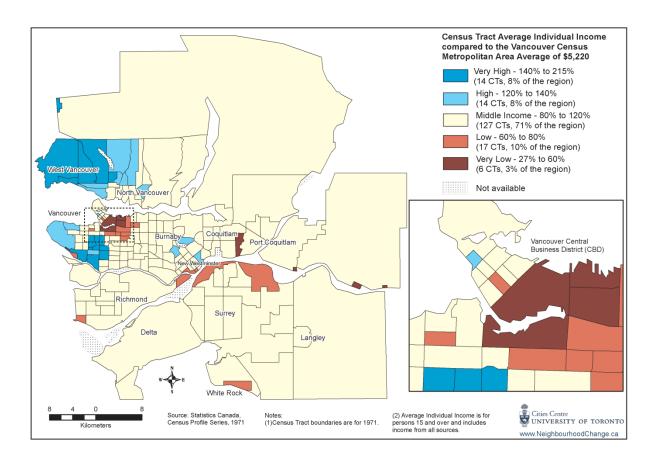


Figure 6: Average Individual Income (1970), Vancouver CMA

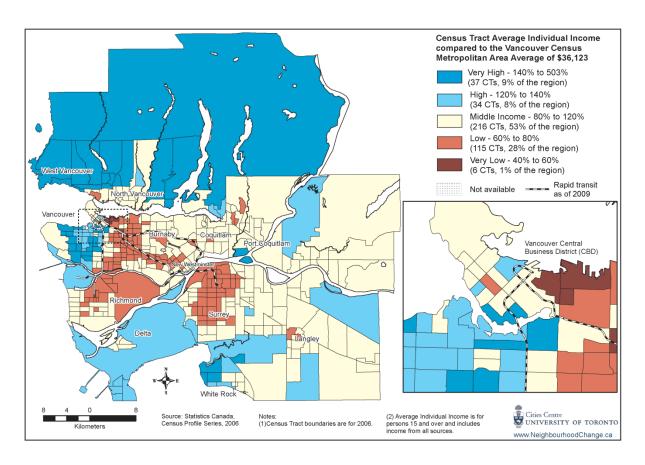


Figure 7: Average Individual Income (2005), Vancouver CMA

We are here using a different classification demarcating five types of neighbourhoods according to their income range around the metropolitan average. These five classes identify neighbourhoods where individual incomes were, in turn, 140 percent or more of the metropolitan mean, 120–140 percent, 80–120 percent, 60–80 percent, and below 60 percent. It is immediately apparent that in 1970 (Figure 6) the majority of tracts (71 percent) were "middle income," with an average individual income within 20 percent of the CMA average of \$5,220. Only 16 percent of tracts were above the mean, clustered primarily in West Vancouver and Vancouver's west side neighbourhoods. In contrast, 13 percent of tracts fell more than 20 percent below the mean; this group is dominated by a centralized cluster of tracts coinciding with Vancouver's deprived Downtown Eastside district.

A significant shift occurred by 2005, as the share of the middle-income neighbourhoods fell to 53 percent of the region's census tracts (Figure 7). A substantial increase occurred in the prevalence of the two poles, above and below the middle-income class. The share of low- and very low-income neighbourhoods increased from 13 percent to 23 percent and the proportion of high- and very high-income neighbourhoods increased from 16 percent to 24 percent, respectively. Here we see clear evidence of income polarization, with a growth in the number of tracts both above and below the middle-income category, and the emptying out of the middle-income category.

Figures 8 and 9 repeat the analysis for household income. In 1970 (Figure 8) the middle-income category is prevalent, although with 62 percent of tracts it is not as dominant as for individual incomes. While there are more tracts above and below the middle-income category dispersed in the suburbs, the major concentrations of wealth and poverty are the same for household income as for individual income, with the lower-income categories expanding to occupy the entire downtown peninsula and a circle of enveloping neighbourhoods. Moreover, the same shrinkage of the middle-income category (from 62 percent to 48 percent of tracts) reappears as we move to the 2005 geography (Figure 9).

Neighbourhoods in the "Low" and "Very Low" categories show a small increase (from 18 percent in 1970 to 22 percent of tracts in 2005), while those in the "High" and "Very High" classes have risen from 19 percent to 30 percent of tracts. Considerable dispersal of low-income and even a few very low-income tracts has occurred outside the Downtown Eastside, southeast along the Skytrain corridor to New Westminster, and into nodes in north Surrey and north Richmond. The location of "High" and "Very High" tracts has also evolved. While the cores of westside Vancouver and the North Shore have consolidated (and expanded), dispersed neighbourhoods occur singly and in clusters in most suburbs.

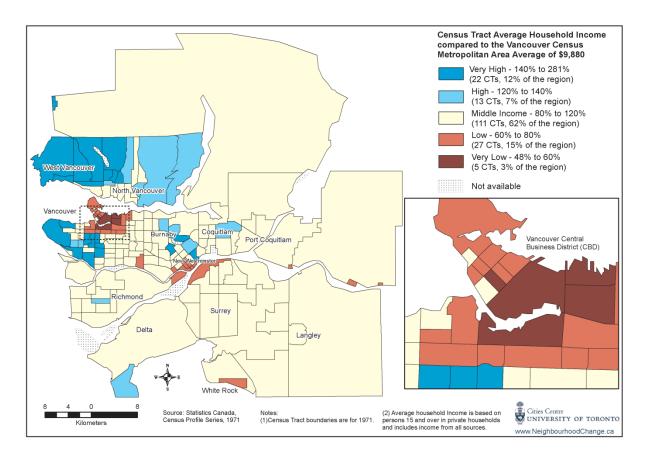


Figure 8: Average Household Income (1970), Vancouver CMA

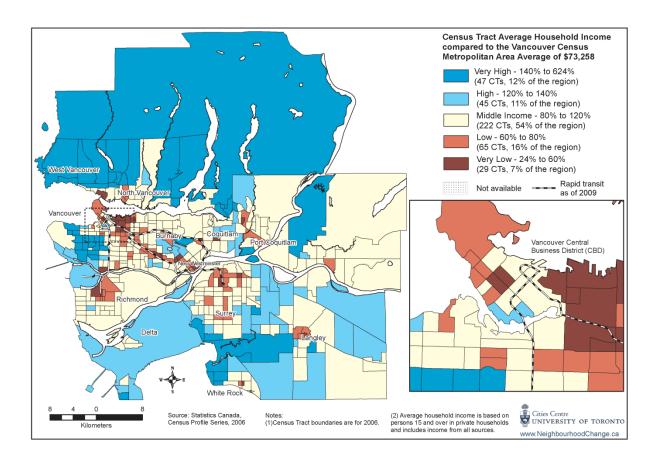


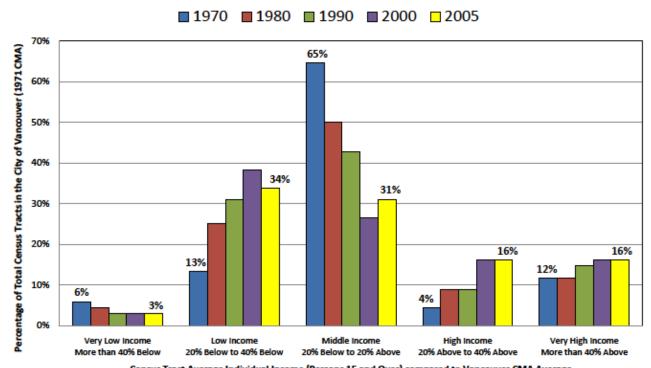
Figure 9: Average Household Income (2005), Vancouver CMA

Four conclusions emerge. First, we see more income polarization appearing over time as tracts are leaving the middle category to join either high- or low-income clusters. Second, this transition has given rise to a much more complex geography in 2005 than in 1970, with low- and high-income neighbourhoods in both the City and the suburbs. Third, household incomes are more polarized than individual incomes in both time periods, with a greater number of tracts above and below the middle-income band. Fourth, when we map household incomes, we see slightly more tracts in the high-income bands than we do when we map individual incomes; this pattern was more pronounced in 2005 than it was in 1970.

3.3 The Shrinking Middle-Income Groups

Another way to approach the growing polarization of neighbourhood incomes is to trace the evolution of the five individual income classes in more detail through time. Figure 10 presents this information for the City of Vancouver, with vertical bars proportional to the number of census tracts in each of the five income classes for five census dates from 1970 to 2005. Figure 11 adds the suburban observations, and Figure 12 incorporates the full metropolitan database of City and suburban neighbourhoods.

Figure 10 shows the substantial reduction of the City of Vancouver's middle-income census tracts – those with average individual incomes within 20 percent above or below the CMA average. Over the 35-year period their number has more than halved (from 65 percent of tracts in 1970 to 31 percent in 2005) with the greatest losses occurring in the 1970s and the 1990s. Seepage from the middle-income tracts has occurred to both the high and low poles of the income range.

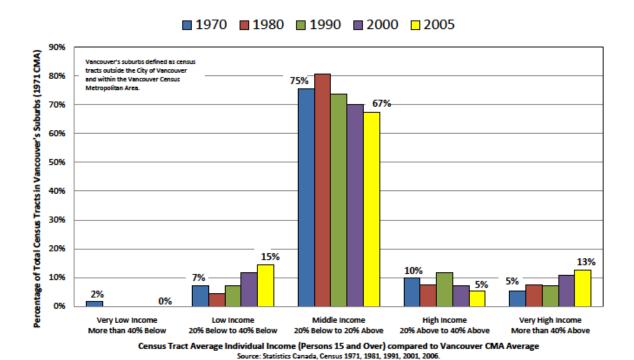


Census Tract Average Individual Income (Persons 15 and Over) compared to Vancouver CMA Average Source: Statistics Canada, Census 1971, 1981, 1991, 2001, 2006.



www.NeighbourhoodChange.ca

Figure 10: Change in Neighbourhood Income Distribution in the City of Vancouver, 1970–2005, Constant 1971 Census Tract Boundaries



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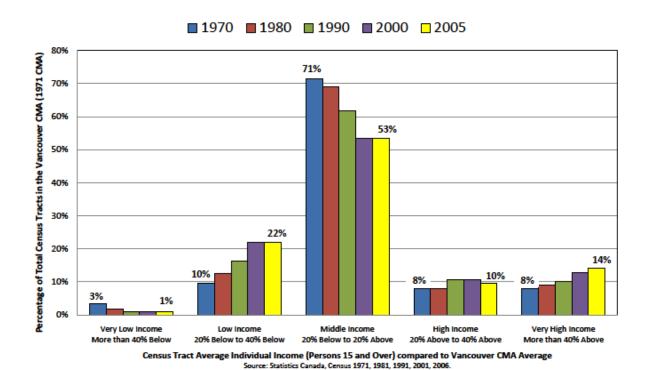
www.NeighbourhoodChange.ca

Figure 11: Change in Neighbourhood Income Distribution in Suburbs

High and very-high income neighbourhoods have doubled from 16 percent to 32 percent of all Vancouver tracts, while low and very low-income neighbourhoods have risen from 19 percent to 37 percent of the total. Interestingly, while there is an excess of tracts at the low end of the scale, in 2005 there were far more very high-income tracts (16 percent) than very low-income tracts (3 percent), providing evidence at least in part of the growth of what is sometimes called "the executive city." The data showing growth in the number of neighbourhoods at both ends of the income range clearly identify growing income polarization in the City of Vancouver.

A similar but much less pronounced shift is evident in suburban areas (Figure 11). While middle-income neighbourhoods remain the norm, slight shrinkage did occur (from 75 percent to 67 percent of tracts) between 1970 and by 2005. Meanwhile, lower-income neighbourhoods have risen from 9 percent to 15 percent of all tracts, while the proportion of higher-income neighbourhoods has grown more slowly from 15 percent in 1970 to 18 percent in 2005.

Overall CMA results show the moderating effect of suburban changes over the more exaggerated class polarization in the City (Figure 12). With the shrinkage of middle-income neighbourhoods from 71 percent to 53 percent of the entire metropolitan area, both low- and high-income poles have grown by similar amounts; each accounted for just under a quarter of total census tracts in 2005.



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Figure 12: Change in Neighbourhood Income Distribution in CMA

A further step compares these polarizing trends with the earlier analysis of growing inequality with its identification of Cities #1, #2, and #3, the three regions of the metropolitan area that were growing apart in income trends through time. To what extent are middle-income tracts disappearing in these three Cities?

In Figures 13, 14, and 15 we see a decline in middle-income groups over the 35-year period. For City #1, where individual average tract incomes were rising at least 15 percent above the metropolitan average, the middle-income proportion fell from one-half to one-third of all tracts, while there has been a massive growth in high- and very high-income tracts to two-thirds of the whole (Figure 13). Low- and very low-income neighbourhoods had entirely disappeared by 2005, as gentrification expanded affluence into districts that had been poorer in 1970. City #1 has moved from middling to privileged status, with more than 40 percent of tracts in the very high-income class by 2005.

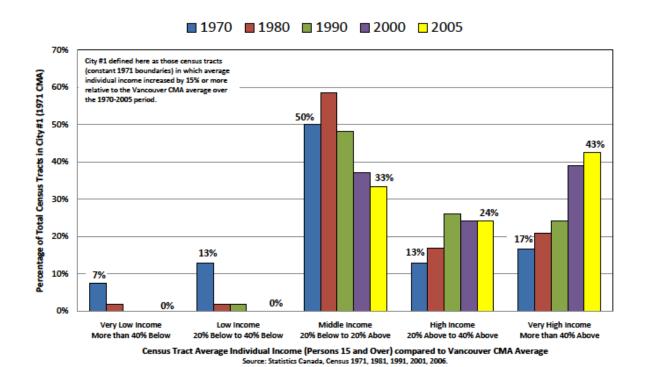
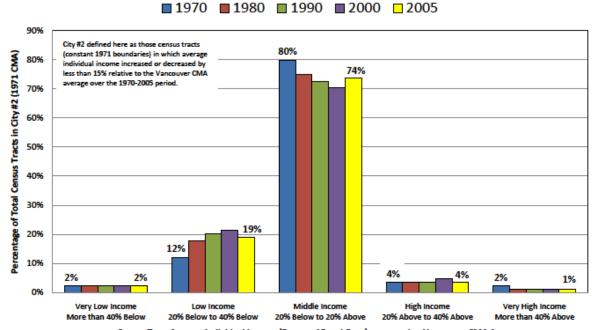


Figure 13: Change in Neighbourhood Income Distribution in City #1



Census Tract Average Individual Income (Persons 15 and Over) compared to Vancouver CMA Average Source: Statistics Canada, Census 1971, 1981, 1991, 2001, 2006.

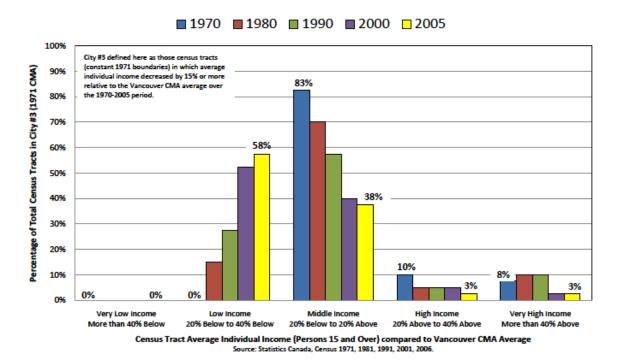


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Figure 14: Change in Neighbourhood Income Distribution in City #2

As might have been expected, City #2 shows much more stability, with three-quarters of tracts remaining middle-income, though where seepage out of this class has occurred, tracts have moved into low-income status (Figure 14). There is a surprise in the trend in City #3, where individual average incomes of census tracts fell 15 percent or more below the rate of overall income growth (Figure 15).

While the higher-income tracts have been eviscerated, and major erosion of the number of middle-income neighbourhoods has taken place, all the gain has been in the low-income category, with no cases at all in the very low-income class. The proportion of low-income tracts has exploded from zero to 58 percent. We can summarize this dramatic shift by noting from Figure 15 that whereas in 1970, City #3 comprised overwhelmingly a middle-income urban region with a few higher-income tracts, by 2005 it was predominantly a low-income region with a large middle-income minority in terms of average individual incomes. It is in City #3 that we see significant economic damage with a substantial loss of middle-income standing.



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Figure 15: Change in Neighbourhood Income Distribution in City #3

Figure 16 follows up this pattern of change by locating neighbourhoods that departed from middle-income status in Cities #1, #2, and #3 over the 35 years. Altogether, 52 tracts left the middle-income band; 20 tracts rose to a higher-income class and 32 fell to lower-income status. Gains occurred primarily adjacent to the existing two high-income clusters in Vancouver's west side neighbourhoods and on the North Shore. A clear spatial pattern emerges, with losses clustering in north Richmond, in a solid block of 17 tracts in southeast Vancouver, including the Skytrain corridor, and following that corridor through south Burnaby and into North Surrey. The splintering of middle-income tracts is leading to income gains adjacent to traditional high-income areas (with a few suburban outliers, including South Surrey and Tsawwassen). But more extensive is the growth of low-income areas that have tumbled out of the middle-income class. They are no longer in the historic poverty core in the central city, but are now south and southeast on the edges of Vancouver and in the suburbs of Burnaby, Richmond, and Surrey.

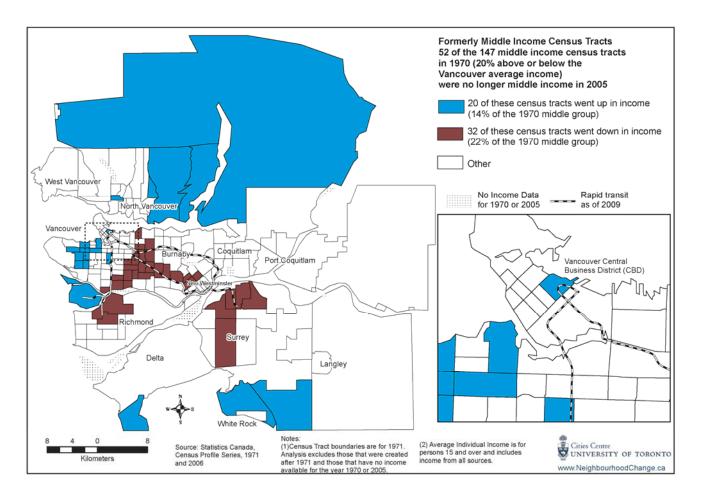


Figure 16: Formerly Middle-Income Neighbourhoods in the Vancouver Region, 1970-2005

3.4 Who Lives in Vancouver's Cities #1,# 2, and #3?

Income is only one defining characteristic of socio-economic status. The three cities shown in Figure 4 also differ on other important characteristics. With reference to Table 5, we shall briefly highlight several key relationships that are associated with income inequality and polarization across Greater Vancouver's neighbourhoods.

Table 5: The "Three Cities" in the Vancouver Census Metropolitan Area: Selected Characteristics

	City #1 (Income increased 15% or more since 1970)	City #2 (Income increased 15% or more since 1970)	City #3 (Income increased 15% or more since 1970)	CMA (area total)
Number and % of census tracts in CMA (based on 1971 census tract geography held constant over time)	54/30%	84/47%	40/22%	178/100%
2. Land area, square kilometres and % of CMA land area	1,577/57%	993/36%	177/6%	2,748/100%
3. Total dwellings (thousands) and % of CMA, 1971	90/26%	171/50%	85/24%	346/100%
4. Total dwellings (thousands) and % of CMA, 2001	207/27%	355/47%	193/26%	755/100%
5. Total dwellings (thousands) and % of CMA, 2006	230/28%	371/46%	206/26%	806/100%
6. Dwellings Density (dwellings per sq. km) 1971	57	173	477	126
7. Dwellings Density (dwellings per sq. km) 2006	146	374	1159	293
8. Population in 1971 (thousands) and % of CMA	272/25%	529/49%	280/26%	1,082/100%
9. Population in 2001 (thousands) and % of CMA	507/26%	935/47%	537/27%	1,979/100%
10. Population in 2006 (thousands) and % of CMA	557/27%	965/46%	568/27%	2,103/100%
11. Population density (persons per sq. km), 1971	173	533	1580	394
12. Population density (persons per sq. km), 2006	353	971	3,200	766
Average Individual Income (persons 15 a	nd over, before	tax, from all so	ources)	
13. 2005 average individual income	\$48,100	\$33,300	\$28,600	\$36,100
14. 2005 as a % of the CMA average (n.b.: CMA is the Census Metropolitan Area)	133%	92%	79%	100%
15. Change 1970 to 2005, as a % of the CMA average	29%	-3%	-23%	0%
16. Change 2000 to 2005, as a % of the CMA average	6%	-2%	-3%	0%
17. Taxation rate on individuals, 2005 (difference between before and after tax)	30%	15%	16%	17%

	City #1 (Income increased 15% or more since 1970)	City #2 (Income increased 15% or more since 1970)	City #3 (Income increased 15% or more since 1970)	CMA (area total)
18. 2005 average individual income after tax	\$33,800	\$28,500	\$24,200	\$29,900
19. 2005 median individual income after tax	\$27,000	\$23,800	\$19,900	\$22,900
Average Household Income (persons 15	and over, befor	e tax, from all s	ources)	
20. 2005 average household income	\$95,300	\$72,400	\$60,800	\$73,300
21. 2005 as a % of the CMA average	130%	99%	83%	100%
22. Change 1970 to 2005, as a % of the CMA average	23%	5%	-24%	0%
23. Change 2000 to 2005, as a % of the CMA average	7%	4%	-3%	0%
24. Taxation rate on households (difference between before and after tax)	23%	21%	14%	17%
25. 2005 average household income after tax	\$73,200	\$57,200	\$52,600	\$60,600
26. 2005 median household income after tax	\$57,100	\$49,500	\$44,600	\$48,500
Immigrant, Visible Minorities				
27. Immigrant population 1971/2006	28%/28%	27%/38%	24%/51%	27%/41%
28. Non-immigrant population, 1971/2006	72%/72%	73%/62%	76%/49%	73%/59%
29. Recent Immigrants 1971 (arrived between 1965-1971)	6%	7%	6%	7%
30. Recent Immigrants 2006 (arrived between 2001-2006)	4%	6%	11%	7%
31. White population (not a visible minority), 1996/2006	83%/77%	68%/58%	56%/39%	69%/58%
32. Visible minority population, 1996/2006	17%/23%	32%/42%	44%/61%	21%/42%
33. Black population, 1996/2006	1%/1%	1%/1%	1%/1%	1%/1%
34. Chinese population, 1996/2006	9%/10%	16%/18%	22%/27%	15%/18%
35. South Asian population, 1996/2006	2%/3%	6%/9%	12%/17%	7%/10%
36. Other visible minorities, 1996/2006 (Filipino, Latin American, Korean, Arab, etc.	5%/9%	9%/14%	10%/15%	8%/13%
37. Ethnic Diversity 2006, number of distinct ethnic groups living in each area and % of total ethnic groups (100% = 222 groups*). Includes multiple ethnic origins.	190/86%	209/94%	199/90%	217/98%

^{*}The census does not identify every possible ethnic group separately, only 222 groups

	City #1 (Income increased 15% or more since 1970)	City #2 (Income increased 15% or more since 1970)	City #3 (Income increased 15% or more since 1970)	CMA (area total)
Housing Tenure and Affordability				
38. Home owners, 1971/2006	60%/69%	56%/64%	64%/62%	59%/65%
39. Owner-occupied condos (% of total dwellings), 1981/2006. N.b.: not available for rented condos in the census	5%/21%	5%/18%	5%/22%	5%/20%
40. Average property value of owner- occupied dwellings, 1971/2006 (in thou- sands of constant 2006 dollars)	\$169/\$642	\$152/\$477	\$146/\$455	\$155/\$521
41. Average property value as a % of CMA average, 1971/2006	109%/123%	98%/92%	94%/87%	100%/100%
42. Owner households spending 30% or more of income on housing, 1981/2006 (% of owners)	20%/25%	20%/27%	19%/30%	20%/27%
43. Renters, 1971/2006	40%/31%	44%/36%	36%/38%	41%/35%
44. Average monthly rent, 1971/2006 (constant 2006 dollars)	\$775/\$1,020	\$746/\$857	\$800/\$849	\$761/\$893
45. Average monthly rent as a % of CMA average, 1971/2006	104%/114%	100%/96%	108%/95%	100%/100%
46. Renter households spending 30% or more of income on housing 1981/2006 (% of renters)	38%/44%	38%/42%	37%/44%	37%/43%
Education**				
47. Persons 20 years or over with a university degree, 1971/2001	11%/29%	5%/20%	6%/19%	7%/23%
48. Persons 25 years or over with a university certificate, diploma or degree, 2006.	42%	32%	32%	35%
49. Persons 20 years or over without a school certificate, diploma or degree, 2001	12%	15%	17%	15%
50. Persons 25 years or over without a school certificate, diploma or degree, 2006	9%	15%	19%	14%
51. Persons 25 years or over with a doctorate degree (PhD), 2006	2%	1%	1%	1%
Employment				
52. White-collar professional occupations, 1971/2006 (management, business, teaching, health, government and other related but excluding secretarial/clerical workers)	22%/48%	14%/38%	14%/33%	16%/39%

^{**}Education data changed in the census between 2001 and 2006 from persons age 20 and over to those 25 and over.

	City #1 (Income increased 15% or more since 1970)	City #2 (Income increased 15% or more since 1970)	City #3 (Income increased 15% or more since 1970)	CMA (area total)
53. Blue-collar occupations, 1971/2006 (manufacturing, construction, transportation, utilities)	21%/12%	30%/17%	31%/20%	28%/17%
54. Arts, literary, recreation occupations, 1971/2006 (artists, actors, musicians, writers, athletes and related)	2%/5%	1%/4%	1%/3%	1%/4%
55. Sales and service occupations, 1971/2006 (retail, food, hospitality and related)	23%/22%	24%/25%	23%/28%	24%/25%
56. Other occupations, 1971/2006 (primary industry, secretarial/clerical, occupations not stated)	32%/13%	31%/16%	31%/16%	31%/15%
57. Unemployment rate, 15 years and over, 1971/2006	9%/5%	10%/6%	10%/7%	10%/6%
58. Youth unemployment rate, 15-24 years, 2006	10%	11%	11%	11%
59. Self-employed, 15 years and over, 1971/2006	8%/17%	5%/12%	5%/11%	6%/13%

3.4.1 Size and Population

Vancouver's three cities vary considerably in terms of size and population (lines 1 to 12 on Table 5). While City #1 and City #3 each contained over 550,000 residents in 2006, almost half of Greater Vancouver's population (965,000 or 46 percent of the CMA) lives in City #2. It is important to note that City #3 has significantly higher dwelling and population densities (over 3,000 persons per sq. km) than the two others and relative to the CMA average (766 persons per sq. km).

3.4.2 Income

City #1 has both the highest average incomes (individual: \$48,100, household: \$95,300) and is the only one of the three to have increasing individual incomes relative to the metropolitan average (+29 percent, line 15 of Table 5) over the 35-year period. The income advantage has deepened in the neighbourhoods that were already privileged in 1970. In contrast, the less privileged neighbourhoods have fallen further behind during the same period, as Cities #2 and #3 have decreased in relative individual average incomes by 3 percent and 23 percent, respectively. This growing inequality is moderated a little by mean household income, but the overall trends remain (lines 20–26). As always, progressive taxation reduces the level of inequality (lines 18–19, 25–26). At a national scale, taxation removes about 5 points from the Gini coefficient for untaxed total income (Conference Board, 2011).

3.4.3 Ethnicity and Immigrants

Ethnic and immigrant composition (lines 27–37) is an important characteristic of the Vancouver CMA and its three cities. A huge shift has occurred in the scale and character of cultural diversity over our study period in the three Cities. In 1971, the immigrant share was about a quarter in all three urban regions. It has remained at 28 percent in City #1, but has increased substantially in City #2 (from 27 percent to 38 percent) and in City #3 (from 24 percent to 51 percent).

Visible minority populations are significant in all three Cities, but particularly so in City #3, where they accounted for 61 percent of residents in 2006. City #3 has also seen the most rapid growth of visible minorities. Unsurprisingly, it also has the greatest share of recent arrivals (11 percent of the 2006 population). Immigrants, visible minorities, and recent arrivals are a defining characteristic of City #3, while City #1 has remained substantially native-born and white. In most of the characteristics listed on Table 5, City #2 is close to the overall Vancouver CMA average.

Figures 17 and 18 highlight the changing geographies of recent immigrants across the Vancouver CMA. While the pattern of recent arrivals in 1971 (Figure 17) favoured the traditional reception neighbourhoods of the inner city, with the highest tally in East Vancouver (especially Chinatown), by 2006 there was massive re-location away from the urban core to most suburbs (Figure 18). Notable are the clusters along the Skytrain alignment in southeast Vancouver, South Burnaby (especially Metrotown), and New Westminster. Other concentrations occur in Richmond and Surrey. Indeed, north-central Richmond has the highest concentration of tracts in Greater Vancouver, where recent arrivals comprise more than 20 percent of the population. The suburbanization of recent immigration has been noted in a number of North American cities, and Vancouver is no exception.

3.4.4 Housing, Tenure and Affordability

There is a surprisingly modest differential in housing indicators across the three cities (Table 5, lines 38–46). In all three urban regions, between 62 percent and 69 percent of residents were homeowners in 2006, although this figure has increased in Cities #1 and #2, but slightly decreased in City #3 since 1971. However, the centralization of housing price gains since the 1970s in the Vancouver region (Ley and Tutchener, 2001) has disproportionately affected City #1, where housing values grew substantially relative to the metropolitan average while in Cities #2 and #3, relative property values fell. Like income gains, disproportionately more real estate wealth is accumulating in the historically more affluent neighbourhoods.

Nonetheless, the income differential between the three regions was even greater, so that affordability burdens were heavier in Cities #2 and #3 despite the lower gain in property values; indeed, City #3 is where housing burdens have been multiplying most grievously. Differentials are less marked in the rental market, with affordability burdens shared across all three regions, as over 40 percent of tenants in each region spent more than 30 percent of their income on rents. It is worth noting, however, that while the share of tenants has fallen in Cities #1 and #2, it has risen in City #3. Indeed, while City #3 had the lowest share of tenant households in 1971, it had the highest level in 2006.

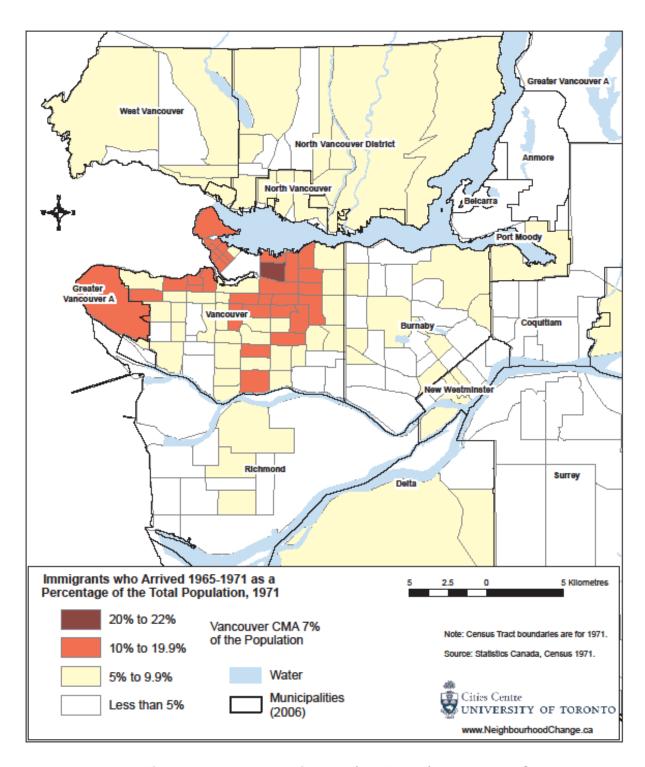


Figure 17: Recent Immigrants (1965-1971), Vancouver CMA

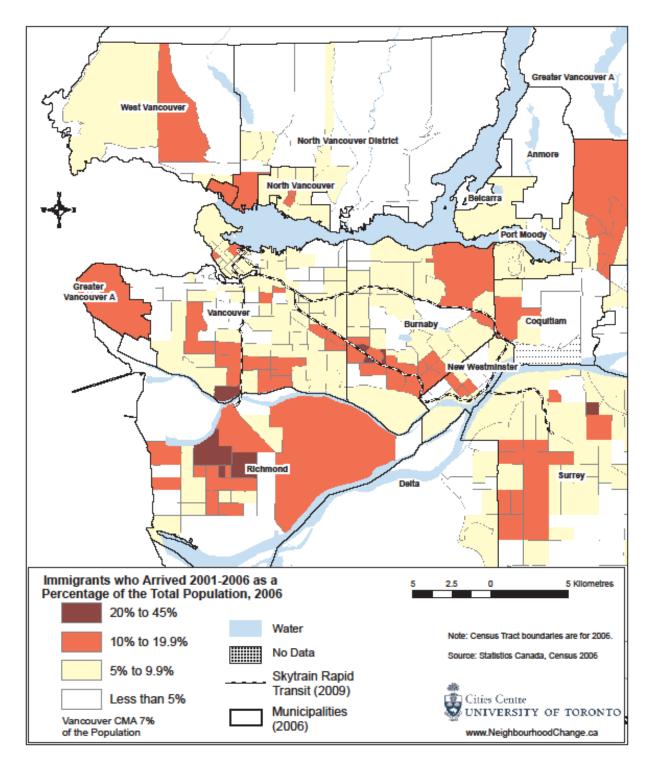


Figure 18: Recent Immigrants (2001-2006), Vancouver CMA

3.4.5 Education and Employment

The final attributes of the three cities we shall consider are education and employment (Table 5, lines 47–59). All three cities show that an increasing proportion of the population is attaining a higher level of education (line 47). While City #1 leads both in its overall level of postsecondary education, and its rate of growth, the differences are not huge, and do not support a simple human capital explanation for the scale of income inequality and polarization we have observed.

Connected to trends in education are trends in employment. In each of the three regions, there has been a substantial increase in both white-collar and professional occupations, and a decrease in blue-collar jobs. As expected, City #1 is the most strongly white-collar, but the overall shift to a postindustrial economy has been significant everywhere. Surprisingly, sales and service jobs, which often demarcate the lower tier of the polarized postindustrial economy, are fairly evenly distributed among all three regions, although City #3 has a larger share.

There were no significant unemployment differences among the three urban regions in 2006, a year when the metropolitan level of 6 percent unemployment was comfortably below the average unemployment for the preceding 35 years. We would have expected education and labour market differentials to be more marked between the three regions than the data show. Of course the employment data only show job type and not job level, and it is possible that workers in City #1 enjoy more seniority in their respective fields than those in other parts of the metropolitan area.

5. Discussion and Conclusions: Vancouver's Three Cities

We have seen that there has been considerable reconfiguration of the concentric model of the 1950s and 1960s, where poor households lived in the inner city, while the suburbs were dominantly middle-class, and aside from a few enclaves the whole metropolitan area comprised European-origin residents. Currently, the poor and recent immigrants, two of the groups concentrated in the inner city, are being displaced and relocated because of neighbourhood gentrification and reinvestment in large downtown redevelopment projects. Poverty districts are now scattered through many suburbs, while immigrants, both recent and long-settled, are moving to these municipalities in large numbers. At the same time, there are clear areas of stability in the map of urban neighbourhoods. Wealthy areas in particular have survived and in recent years expanded through steady accretion at their borders, while the deepening of wealth in these existing elite areas has occurred with the very high salaries awarded top executives and professionals in the globalizing economy of the postindustrial city.

In this turbulent environment, we have identified ample evidence of a new geography of rising income inequality and polarization in metropolitan Vancouver from 1971 to the last complete census in 2006. Using the precedent of research in the City of Toronto, we began by dividing Greater Vancouver's neighbourhoods into three groups, Cities #1, #2, and #3, according to the trend of average individual incomes in census tracts from 1970 to 2005 relative to the changing metropolitan income. In City #1, incomes were more than 15 percent ahead of the metropolitan trend, in City #3 they fell more than 15 percent behind, while in City #2 increases were within 15 percent of the metropolitan mean. Equal numbers of people, about 27 percent, lived in the gaining and losing tracts in 2006, while 46 percent lived in City #2. This spread in the income profiles of tracts is an indication of inequality in the metropolitan area. The spatial pattern of City #3 shows considerable dispersal of these neighbourhoods that are falling behind in older suburban areas in southeast Vancouver, Burnaby, North Richmond, and North Surrey.

We also analysed the geography of incomes at each end of the period, 1970 and 2005. Whereas in 1970, lower-income tracts were located in Vancouver's inner east side tracts, by 2005 considerable outward dispersal had occurred east and southeast in the City and into South Burnaby along the Skytrain transit corridor, and also into North Surrey and North Richmond. Higher-income areas showed more stability around traditional elite neighbourhoods in west side Vancouver and the North Shore. This analysis also showed evidence of polarization,

as close to 20 percent of tracts in Metro Vancouver left middle-income status and moved in almost equal numbers into lower- or higher-income classes. There was less movement of this kind in the suburbs (only 8 percent of tracts), but much more turbulence in the City of Vancouver, where a third of tracts left middle-income status and shifted in similar proportions either to richer or to poorer. As a result, the dominantly middle-income City of 1971 is now divided three ways: one-third lower income, one-third higher income, and one-third middle-income. The middle-income city of the 1970s has become the polarized city of the 2000s.

Examining this polarization not by city and suburb but by the three Cities (#1, #2, #3) focuses the lens of income change. City #1, where income gains are at least 15 percent ahead of the metropolitan average, has moved unequivocally from middle-income to high- and very high-income status. In 1970, 70 percent of its tracts were of middle- or low-income status; by 2005 this figure had fallen to 33 percent, and the largest of the five income classes, comprising 43 percent of tracts, was very high-income, at least 40 percent above the metropolitan average (Figure 13). This represents a dramatic transition toward income polarization. We see the other side of the coin in City #3, where overwhelmingly middle-income status in 1970 (100 percent middle- or higher-income tracts) has slipped into lower-income territory by 2005 (58 percent of tracts).

To paraphrase W. B. Yeats, "Things fall apart, the centre cannot hold." While Yeats' next line is at present too apocalyptic – "Mere anarchy is loosed upon the world" – the erosion of the middle-income class and the movement toward a two-class society brings back dark memories of older divided societies and their social theories. We have not yet returned to those Dickensian times – 46 percent of CMA residents still live in middle-income City #2 – but the trend lines are unsettling.

In the final part of the analysis, we reviewed some population characteristics of Cities #1, #2, and #3 (Table 5). City #3 has the highest population densities, the lowest gross incomes (though progressive taxation mitigates these excesses), a declining share of homeowners despite the cheapest property prices, fewer professional and managerial jobs, and more blue-collar and service occupations. While substantial, not all of these differences are excessive. Unemployment rates in 2005, for example, ranged from only 5 percent (City #1) to 7 percent (City #3).

The sharpest distinctions in the variables we have examined so far involve immigration and ethnic status. City #1, comprising the most privileged metropolitan neighbourhoods, is overwhelmingly the home of the native-born and this plurality (72 percent) has not eroded at all between 1971 and 2006. In contrast, there has been a marked increase in immigrants in the remainder of Metro Vancouver, and especially in City #3, which has shifted from a majority native-born (76 percent) in 1971 to an immigrant majority (51 percent) in 2006. Reflecting the ethnic status of immigrants to Vancouver in the past 35 years, City #3 (where 11 percent of the population landed in Canada from 2001–2006) comprises a plurality of visible minorities (61 percent) while City #1 does not (23 percent).

Our database ends in 2006, and it is natural to speculate how these trends have unfolded in the past five years, especially during the recession that began in 2007. Some evidence from the United States is disturbing. A report from the Pew Research Center (Hochhar et al., 2011)

examined changes in the personal wealth of Americans between 2005 and 2009. It made two ominous discoveries. Partitioning the population racially, it discovered that Blacks, Hispanics, and Asians have been hit much harder by the recession than Whites in their accumulated household wealth, due in significant measure to their greater vulnerability to the bursting of the housing bubble. While the median net worth of White households has fallen by 16 percent, the equivalent losses for the other groups are much more severe: 66 percent for Hispanics, 54 percent for Asians, and 53 percent for Blacks. As a result, the White "advantage" is higher at present than at any time over the 25-year life of the data set. Second, there has been a remarkable elevation in the proportional household wealth held by the richest members of each of the four racial groups. In just four years (2005–2009), the share of total household wealth held by the top 10 percent has risen from 49 percent to 56 percent, an extraordinary reallocation of family resources and opportunities.

Canada, of course, is not the United States and so far this nation's housing bubble – notably in Vancouver and Toronto – has not burst, although if it did, immigrants in these cities would be vulnerable. But knowing what we do about the precarious state of immigrant employment and many immigrant businesses, we would anticipate disproportionate income losses by immigrants (and thus visible minorities) in Canada through the recession, while the native-born, more secure with good jobs and a diversified portfolio, have survived more successfully. In fact low-income rates rose by over 6 percent in Vancouver from 2007 to 2009 (Conference Board, 2011). As a result, we anticipate that income polarization in urban neighbourhoods in Greater Vancouver has deteriorated further since 2005.

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