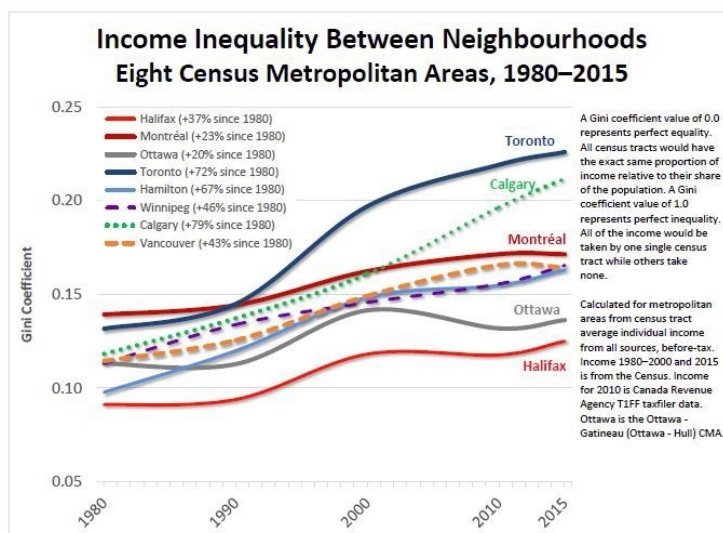


# Halifax: A City of 'Hotspots' of Income Inequality

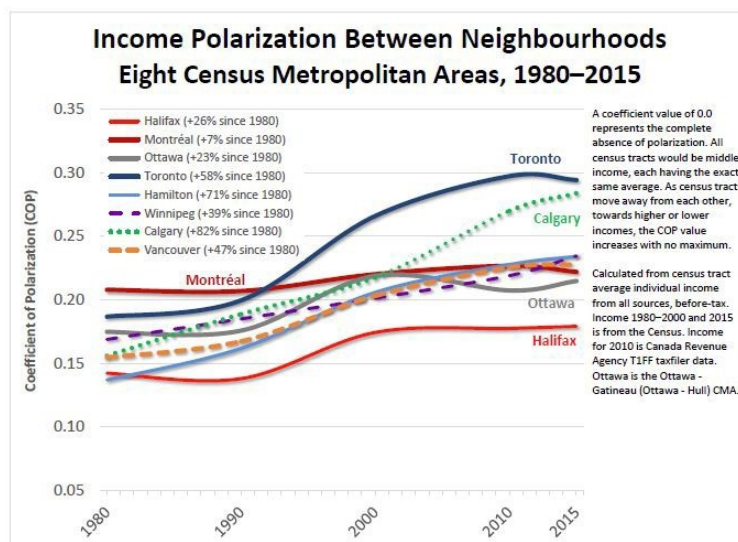
The discrepancy between low-income and high-income neighbourhoods is increasing in cities across the world.<sup>1</sup> At the same time, income polarization and the socio-spatial segregation of inequality has been increasing since at least the 1990s.<sup>2</sup> In Canada, the impact of overheated housing markets in Toronto and Vancouver have dominated debates on socio-economic inequality and affordability;<sup>3</sup> and the country's largest cities show evidence of income gaps across neighbourhoods and clustering of lower income neighbourhoods.<sup>4</sup> Far less is known about the country's secondary cities, including those in Atlantic Canada. For these reasons, this report examines socio-spatial patterns of income in the Halifax Regional Municipality (HRM) between 1980 and 2015 to identify the municipality's lower-income neighbourhoods. It does so by looking at census tracts across the municipality as a whole to identify income trends and map patterns. It also uses census data on a group of lower-income areas identified in the analysis to better understand the demographics of these areas and to identify policy interventions to alleviate inequity across the municipality. A socio-spatial examination of income in the HRM as a whole is important because discussions of the city are often centered on patterns in the Peninsula or other specific parts of cities rather than looking at the full range of communities that are part of the municipality. The HRM covers almost 5,500 km<sup>2</sup> and contains a variety of urban, suburban, and rural communities,<sup>5</sup> which all warrant inclusion in the understanding of income inequality in the municipality.

## Income inequality across Canadian cities is growing

Studies of cities around the world show rising rates of income inequality. Canada is part of this trend. Income inequality has increased among neighbourhoods between 1980 and 2015 in eight of the country's major cities. This can be seen through an analysis of Gini coefficients for each city, calculated by accounting for the percentage of the total income in the municipality that is held by each neighbourhood while factoring in a neighbourhood's relative population size. A coefficient of 0 represents perfect equality and 1 represents complete inequality. Toronto consistently had the most inequality since the 1990s and Calgary had the greatest increase in its Gini coefficient between 1980 and 2015. By contrast, Ottawa had the lowest increase in inequality among its neighbourhoods, with a 20% increase in its Gini coefficient. During the 1980-2015 period, Halifax consistently had lower levels of income inequality among its neighbourhoods compared to other Canadian cities. Here, and throughout the report, we use Halifax interchangeably with HRM. In figures the shorter name of the municipality allows for easier interpretation and comparison across other cities.

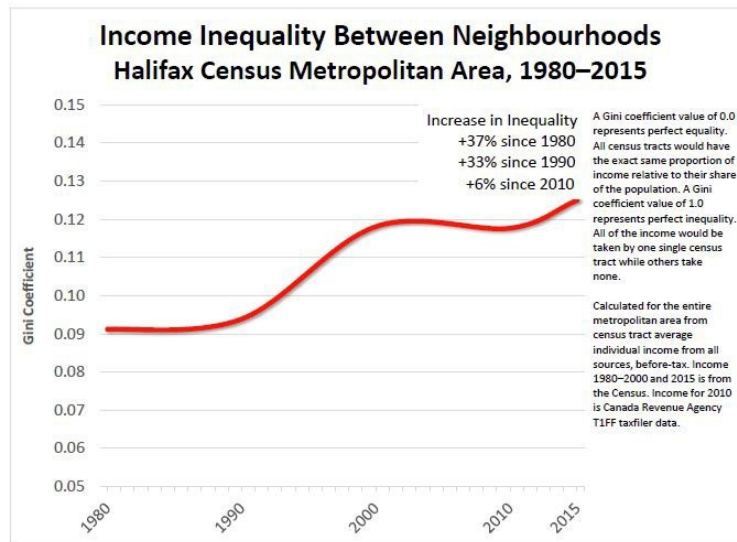


Income inequality is a gauge of how evenly income is distributed among neighbourhoods; however, it does not capture the degree to which people are geographically grouped by high income or low income. For this reason, we also examine income polarization through a coefficient of polarization (COP), which measures the distribution of average incomes among census tracts to see whether these averages are clustered into low-income and high-income groups.<sup>6</sup> When we examine the spread and grouping of census tract average incomes, we see that Calgary had the greatest increase in income polarization across neighbourhoods, with an 82% increase of its COP between 1980 and 2015. Toronto, however, had the most polarization for from the 1990s onward. The lowest increase in polarization was seen in Montreal, with an increase of 7%. Halifax consistently had the least amount of polarization across neighbourhoods.

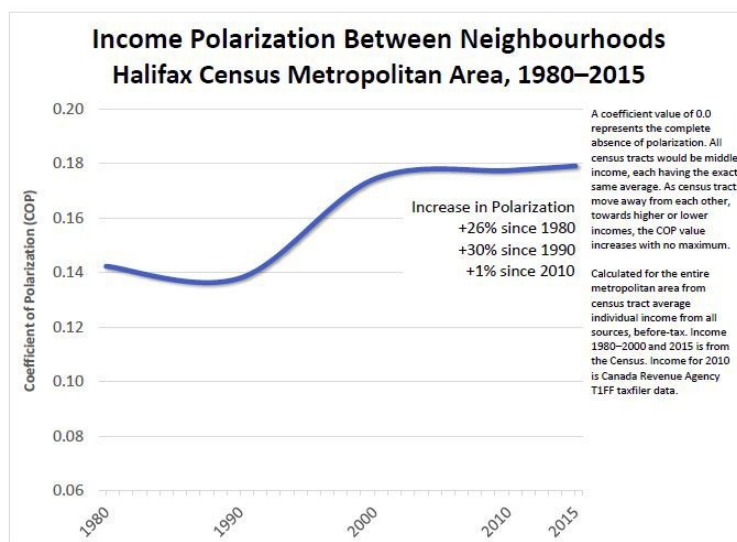


## Income inequality and income polarization in Halifax increased

When we look at the HRM specifically, we see that both income inequality and polarization increased substantially during the 1990s. This was a period of economic downturn in the Atlantic region, and the HRM was not spared. Military bases closed, government jobs were lost, the federal government reduced federal transfer payments to the province, and the unemployment rate was high.<sup>7</sup> Between 1980 and 2015, income inequality increased by 37%. Yet the most substantial increases occurred during the 1990s, with a 33% increase in income inequality from then until 2015. From 2010 onward, the increase has been 6%.

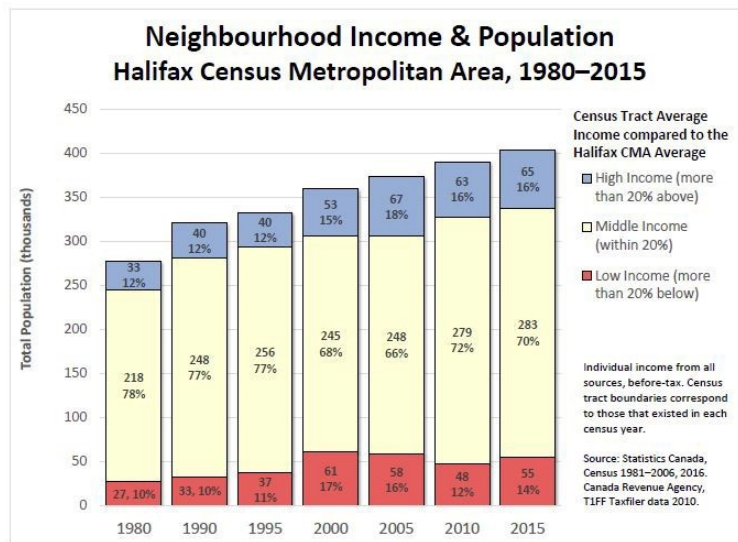


A similar pattern is seen with income polarization. Overall, from 1980 to 2015, the HRM saw a 26% increase in the coefficient of polarization. From the 1990 to 2015, the increase was 30%. There was relatively little change in polarization in the following decades, with just a 1% increase since 2010. Trends corresponds with regional economic strife during the 1990s.



While increasing income polarization is typically associated with a shrinking middle class, it can also occur when the average incomes of low-income neighbourhoods approach the average income of other low-income neighbourhoods, and vice versa. This results in an inter-neighbourhood income distribution characterized by a group of low-income and high-income neighbourhoods. To explore this, we look at the proportion of neighbourhoods that have different levels of income.

We define high-income neighbourhoods as those that have average incomes that are 20% higher than the municipality's average. Middle-income neighbourhoods are those within 20% of the municipality's average, and low-income neighbourhoods are specified as those that are more than 20% below the municipality's average.



Overall, we see modest change in the proportions of different income neighbourhoods over time. The most substantial change occurred during the 2000s, when the proportion of middle-income neighbourhoods decreased and the percentage of low-income neighbourhoods increased.

During the 1980s, 78% of the municipality's neighbourhoods were middle-income. At the time, 12% were high-income and 10% were low-income. A decade later, there was little change. However, by 2005 the percentage of middle-income neighbourhoods shrank to 66%. During the period, the percentage of high-income neighbourhoods increased to 18% and the low-income neighbourhoods increased to 16%. By 2010 and 2015, we see a slight increase of middle-income neighbourhoods and a decrease of high and low-income neighbourhoods but not a return to the situation in the 1980s. Taken together, these changes suggest that increased polarization in the HRM may be due to a shrinking middle class.

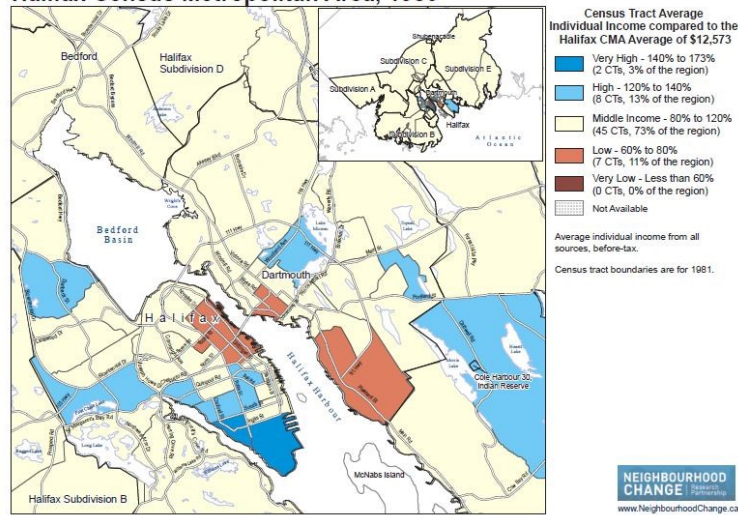
A recent survey of perceptions of neighbourhood change in the HRM adds to these trends by showing that the majority of residents are concerned with affordability. Only 14% of participants in the survey felt their neighbourhood became more affordable over the last five to ten years.<sup>8</sup>

## Where are Halifax's lower-income neighbourhoods?

The percentage of neighbourhoods that fall into different income brackets helps identify income inequality and polarization at the municipal level but does not show how it affects people on the ground. It also does not speak to whether socio-spatial clustering of neighbourhoods exacerbates income inequality and polarization. To understand this, we map incomes in the HRM for 1980 and 2015 and then map changes between those two periods.



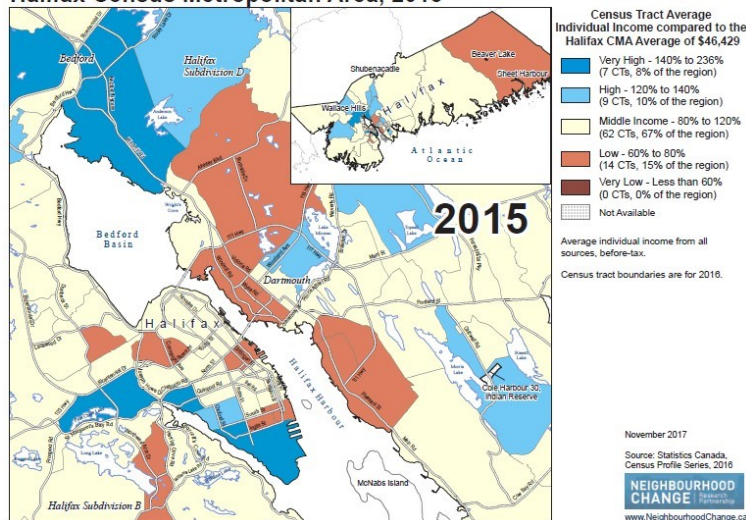
### Average Individual Income Halifax Census Metropolitan Area, 1980



Analysis of income maps of the municipality shows that income inequality follows no strict pattern or set of clustering. Rather, lower- and higher-income groups are scattered throughout the municipality in 'hotspots.' In 1980, for instance, seven census tracts had low incomes, where the average individual income was 60% to 80% of the municipality's average. They included the north end of the Halifax peninsula, downtown Dartmouth, and the area around the Woodside Ferry Terminal. They were surrounded by middle-income and high-income census tracts.

High-income neighbourhoods, those which had 120% to 140% of the municipal average, were even more dispersed. Some fell in Clayton Park, others were in Crichton Park in Dartmouth, Ellensvale (located between Portland Street and Main Street in Dartmouth), and Cole Harbour. There were also wealthier census tracts in the South End of Halifax's peninsula, along the Northwest Arm and where the peninsula connects with the mainland at the Armdale Rotary. The only two neighbourhoods that had 140% of the municipality's average income or higher were in Halifax's South End.

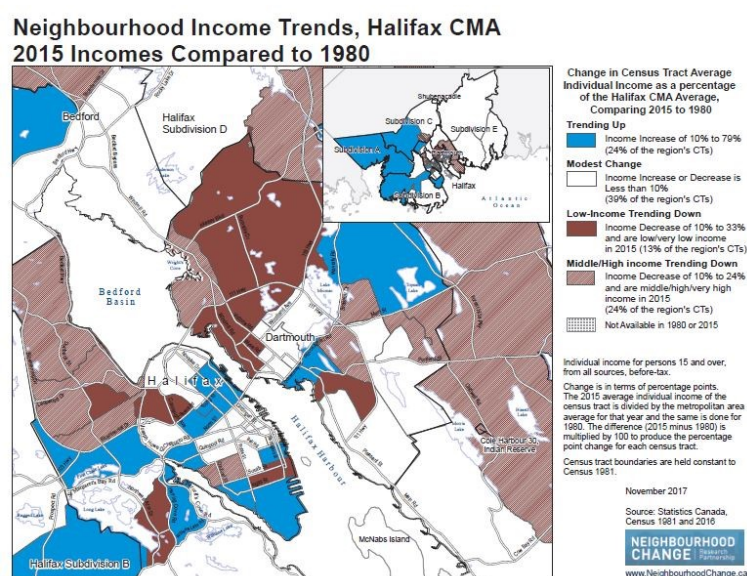
### Average Individual Income Halifax Census Metropolitan Area, 2015



By 2015, neighbourhoods in different income brackets were even more scattered across the municipality, again showing hotspots of high and low incomes. The area around the Woodside Ferry Terminal on the Dartmouth side of the harbour, North Dartmouth, the rural eastern part of the municipality, Spryfield, and parts of Clayton Park, and Halifax's peninsula and downtown Dartmouth were low-income census tracts.

High-income census tracts in 2015 were found in Cole Harbour, Crichton Park, and parts of the South End. Since 1980, high-income census tracts have appeared on the north side of the Bedford Basin, the Port Wallace neighbourhood of Dartmouth, and in more rural areas of the municipality towards Shubenacadie, Middle Sackville, and Upper Tantallon. The very high-income census tracts are in Bedford and Fall River, Halifax's South End, and the mainland just past the Armdale Rotary. When we compare the 2015 map to the 1980 map, we see that much of Dartmouth North, suburban Dartmouth and Spryfield has transitioned from middle-income to low-income areas.

To explore patterns further, we also map income trends over time to show which census tracts are trending up, and which ones are trending down. Some clearer patterns emerge from this analysis. The municipality has hotspots of lower income rather than consistent bands of high- and low-income as seen in some larger centres like Toronto.



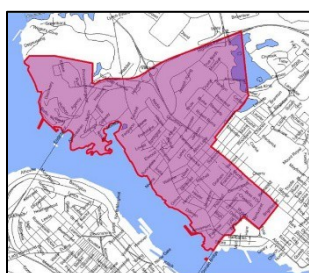
Mapping income trends over time shows that most neighbourhoods that are trending up, those experiencing increases in their average income between 1980 and 2015, are found in Halifax's peninsula and in the western part of the municipality. Specifically, the upward-trending census tracts are located in downtown Dartmouth, suburban Dartmouth, the North End and the South End as well as new off-peninsula developments in the western part of the Census Metropolitan Area such as Tantallon along Highway 103.

By contrast, many of the downward trending neighbourhoods, those experiencing decreases in their average income between 1980 and 2015, are found in Dartmouth North and in Dartmouth's aging suburban developments which have transitioned from middle to lower-income areas. This pattern is also reflected in older parts of Clayton Park along the Bedford Highway, census tracts around Saint Mary's University, Spryfield, Fairview, and the Preston area. The area surrounding the Woodside Ferry

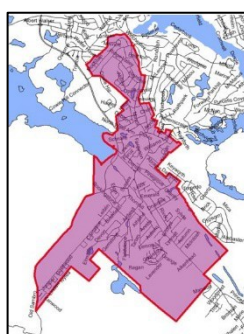
Terminal has experienced low income since 1980 and is trending downwards. Although popular discourse and attention focus on the precariousness of the North End of the Halifax peninsula,<sup>9</sup> some census tracts in that area trended upward during the period examined. At the same time, others had modest change, showing some evidence of gentrification.<sup>10</sup> The presence of hotspots of lower-income areas close to or beside higher-income areas shows that the municipality has ‘polarized adjacencies’ — or areas of stark contrast where low-income and high-income neighbourhoods are in close proximity.<sup>11</sup> Taken together, the maps presented in this report pinpoint several lower-income areas across the municipality that merit further analysis.

## Probing into some of Halifax’s lower-income areas

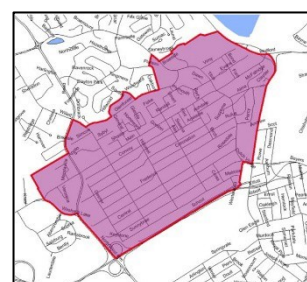
The analysis of maps of income inequality show a number of lower-income areas throughout the HRM. For instance, Dartmouth North, Spryfield, Fairview, and HRM’s ‘rural east’ are in low-income census tracts in 2015. The three of the neighbourhoods are also currently trending downwards in terms of income. United Way Halifax has selected these neighbourhoods as well as the Preston area, which is also trending downward in terms of income, as places to focus its work. In the rest of the report we explore demographic features of these ‘neighbourhoods of focus’ to better understand what might be driving lower income trends.



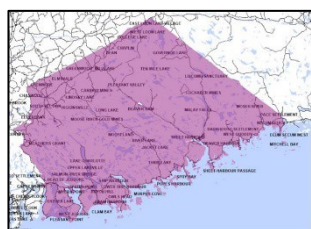
Dartmouth North



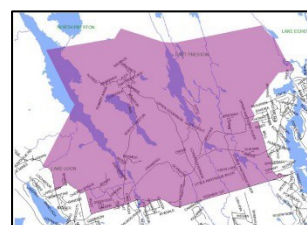
Spryfield



Fairview



‘Rural east’



Preston area

When we examine average household income across these areas, we see that in Dartmouth North it is 47% lower than the municipality’s. This is the biggest difference from the municipality’s average household income among the neighbourhoods we are probing. The ‘rural east’ of the municipality has the smallest difference at 24% lower than the municipality’s average. It should be noted that the ‘rural east’ is sparsely populated, relative to the urban core of the municipality and that its many small communities likely experience the area’s lower income unevenly. When average income is examined by family types we see that there is lower income across all family types and neighbourhoods of focus. In Dartmouth North and Fairview, couple families with children had noticeably lower incomes compared to other family types; however, this was not as clear in the other neighbourhoods we examined.



Table 1: Average income by family type in select neighbourhoods

	HRM	Dartmouth North		Fairview		Spryfield		Preston area		HRM Rural East	
	Average income	Average income	Difference from HRM	Average income	Difference from HRM	Average income	Difference from HRM	Average income	Difference from HRM	Average income	Difference from HRM
Couple Families with Children	\$ 132,993	\$ 69,487	-48%	\$ 74,898	-44%	\$ 96,138	-28%	\$ 97,499	-27%	\$ 98,755	-26%
Couple Families without Children	\$ 98,899	\$ 61,316	-38%	\$ 70,249	-29%	\$ 72,570	-27%	\$ 72,408	-27%	\$ 71,445	-28%
Lone Parent Families	\$ 61,771	\$ 40,323	-35%	\$ 38,372	-38%	\$ 47,029	-24%	\$ 58,571	-5%	\$ 51,907	-16%
Persons Living Alone	\$ 44,657	\$ 30,118	-33%	\$ 34,652	-22%	\$ 31,727	-29%	\$ 29,909	-33%	\$ 34,589	-23%
Average Household Income	\$ 86,753	\$ 45,890	-47%	\$ 54,809	-37%	\$ 57,611	-34%	\$ 63,384	-27%	\$ 66,346	-24%

\*Annual average household income before tax

\*Data compiled by DVPilkey Consulting

\*Statistics Canada (2016 Census) (Catalogue no. 98-401-X2016043 &amp; 98-401-X2016044)

We next examined the relationship between age and lower income in the same neighbourhoods. Dartmouth North has the highest percentage of low-income residents among neighbourhoods, with 34% of residents reporting low income. The low-income rate in Dartmouth North is 19% more than the municipality as a whole. The HRM 'rural east' has the lowest percentage of low-income residents among neighbourhoods in our analysis. When we examine age and low-income, we find a much higher percentage of minors in Dartmouth North, Fairview, and Spryfield experience low-income compared to the municipal average. Age and low income appear to have a different relationship in the urban-fringe and rural neighbourhoods, as seen in the Preston area and 'rural east.' These neighbourhoods have a lower overall percentage of low-income residents and this appears to be related to a smaller percentage of low-income minors. Taken together with the findings on couples with children, it appears that there is a relationship between having children and being low income in these neighbourhoods.

Table 2: Low-income rate by age group in select neighbourhoods

	HRM	Dartmouth North		Fairview		Spryfield		Preston area		HRM Rural East	
	Percent of age group	Percent of age group	Difference from HRM	Percent of age group	Difference from HRM	Percent of age group	Difference from HRM	Percent of age group	Difference from HRM	Percent of age group	Difference from HRM
0 to 17 years	19%	49%	30%	49%	30%	40%	21%	27%	8%	24%	5%
18 to 64 years	14%	32%	17%	28%	14%	26%	12%	20%	5%	16%	2%
65 years and over	12%	27%	15%	21%	9%	25%	13%	25%	14%	23%	11%
Total with Low Income (after tax)	15%	34%	19%	30%	16%	29%	14%	22%	7%	19%	4%

\*Low income measure after-

\*Data compiled by DVPilkey Consulting

\*Statistics Canada (2016 Census) (Catalogue no. 98-401-X2016043 &amp; 98-401-X2016044)

We analyzed trends further by looking at four additional demographic factors: immigration status, visible minority and Indigenous identity, and education. When racialized and Indigenous identity are examined, we find that the Preston area has 47% more visible minority residents compared to the municipality overall. This area is historically African Nova Scotian. It also has a higher percentage of Indigenous residents, with 15% identifying as such compared to the municipality at 4%. In all other neighbourhoods, save the 'rural east', there was a higher percentage of visible minority residents than for the municipality. With respect to Indigenous identity, differences in other neighbourhoods compared to the municipality as a whole were marginal. The areas of focus also have a higher percentage of residents with high school or less education and they have a lower percentage of residents with university credentials than the municipality. For instance, 31% of residents in the Preston area have less than high school and another 28% only high school education. This is compared to 15% and 25% in the

municipality, respectively. Likewise, 7% of Preston area residents have a university certificate, diploma or degree, compared to 31% for the municipality as a whole. The same pattern is seen across the other neighbourhoods of focus.

Table 3: Demographic variation across select neighbourhoods

	HRM	Dartmouth North		Fairview		Spryfield		Preston area		HRM Rural East	
	Percent of population	Percent of population	Difference from HRM	Percent of population	Difference from HRM	Percent of population	Difference from HRM	Percent of population	Difference from HRM	Percent of population	Difference from HRM
<b>Immigrant</b>	9%	8%	-2%	18%	8%	9%	0%	1%	-8%	3%	-6%
<b>Visible minority</b>	11%	15%	4%	23%	12%	14%	2%	58%	47%	1%	-10%
<b>Aboriginal identity</b>	4%	6%	2%	4%	0%	5%	1%	15%	11%	6%	2%
<b>Education</b>											
Less than High School	15%	22%	8%	19%	4%	25%	10%	31%	16%	28%	13%
High School Certificate	25%	32%	7%	27%	2%	27%	2%	28%	3%	25%	0%
Non-university diploma	29%	32%	3%	28%	-1%	29%	0%	34%	5%	34%	6%
University accreditation	31%	14%	-18%	26%	-5%	20%	-12%	7%	-25%	13%	-19%

\*Data compiled by DWPIkey Consulting

\*Statistics Canada (2016 Census) (Catalogue no. 98-401-X2016043 & 98-401-X2016044)

When we look at the percentage of people who are tenants or renters, we see that Dartmouth North, Fairview, and Spryfield all have a high percentage of renters compared to the municipality's average – ranging from 14% more in Spryfield to 42% more in Dartmouth North. The Preston area and HRM 'rural east' both have low percentages of renters, at 24% and 26% below the municipal average, respectively. A greater proportion of tenants in those areas live in subsidized units, with 22% more residents in the Preston area and 10% more residents in the 'rural east' receiving subsidy compared to the municipal average.

Table 4: Housing and employment variation across select neighbourhoods

	HRM	Dartmouth North		Fairview		Spryfield		Preston area		HRM Rural East	
	Percent of population	Percent of population	Difference from HRM	Percent of population	Difference from HRM	Percent of population	Difference from HRM	Percent of population	Difference from HRM	Percent of population	Difference from HRM
<b>Housing</b>											
Owners	60%	18%	-42%	31%	-29%	46%	-14%	85%	24%	87%	26%
30%+ on shelter costs	13%	12%	-1%	17%	4%	15%	2%	20%	8%	13%	0%
Tenants	40%	82%	42%	69%	29%	54%	14%	15%	-24%	13%	-26%
30%+ on shelter costs	43%	46%	2%	44%	0%	45%	2%	16%	-28%	37%	-7%
In a Subsidized Unit	8%	7%	-1%	6%	-2%	11%	3%	30%	22%	18%	10%
Shelter cost index	20%	25%	5%	25%	5%	23%	3%	19%	-1%	16%	-4%
<b>Employment Status</b>											
Employed	62%	59%	-3%	60%	-2%	57%	-5%	49%	-13%	47%	-15%
Unemployed	5%	7%	2%	5%	0%	6%	1%	8%	3%	6%	1%
Not in the Labour Force	33%	34%	1%	35%	2%	37%	4%	43%	10%	47%	14%
<b>Occupations</b>											
Sales, service	25%	37%	12%	34%	9%	30%	5%	33%	8%	19%	-6%
Management	11%	6%	-5%	8%	-3%	9%	-2%	4%	-7%	8%	-3%
Primary industry	1%	1%	0%	1%	-1%	1%	0%	2%	1%	9%	8%
Trades, transport, equipment	12%	17%	5%	12%	1%	16%	4%	19%	8%	23%	12%

\*Household income, aftertax

\*Data compiled by DWPIkey Consulting

\*Statistics Canada (2016 Census) (Catalogue no. 98-401-X2016043 & 98-401-X2016044)

The impact of such difference is seen when expenditure on shelter cost is assessed. Twenty-eight percent and 7% fewer renters in the Preston area and HRM 'rural east' spend more than 30% of their income on rent, compared to the municipality's average and the urban neighbourhoods examined in this report. This pattern of differences between urban and rural areas is also seen in the shelter cost

index. Residents of Dartmouth North, Fairview, and Spryfield spend a greater percentage of their household after-tax income on shelter costs compared to the municipal average, and the opposite is true in the Preston area and the 'rural east.'

Employment is lower in all five areas of focus, compared to the municipality as a whole, as is participation in the labour force. The HRM 'rural east' has 15% fewer residents employed compared to the municipality overall. All other areas examined show a similar pattern. A higher percentage of residents in all of the focus neighbourhoods, except the 'rural east,' are employed in the service industry, ranging from 5% more in Spryfield to 12% more in Dartmouth North. Each of the neighbourhoods have a greater percentage of people working in trades, transportation, or as equipment operators, particularly in the Preston area, where this figure is 8% higher, and the 'rural east,' where it is 12% higher. The 'rural east' also has 8% more residents working in primary industries. Fewer residents in the focus neighbourhoods work in management positions, ranging from 2% fewer in Spryfield to 7% fewer in the Preston area.

## **Income inequality, income polarization, and Halifax's lower-income areas**

Although income trends show less inequality and polarization in the HRM than other major Canadian cities, both have increased between 1980 and 2015, and the municipality has several low-income neighbourhoods.

When we look at the municipality as a whole, we see that inequality and polarization increased rapidly during the 1990s. This corresponds to an economic downturn and the loss of many high-paying and normally stable jobs in the region. This was followed in the 2000s with a hollowing-out of middle-income earners. The impact of the changes seems to have created 'hotspots' of lower-income neighbourhoods across the municipality.

Groups of low-income earners are dispersed across the municipality rather than concentrated in a consistent socio-spatial pattern. This makes Halifax different than cities like Toronto, where lower-income areas are concentrated in rings of inner and outer suburbs with wealthier and higher income in the downtown core. Instead, Halifax's lower-income areas are dispersed throughout the municipality in places like the area around the Woodside Ferry Terminal, North Dartmouth, the 'rural east' of the municipality, Fairview, Spryfield, and parts of downtown Dartmouth and Halifax.

Analysis of demographic patterns in the North Dartmouth, Fairview, Spryfield, Preston, and 'rural east' areas showed that low income is linked to families with children, those who are renting, being a visible minority, lower rates of post-secondary education, higher rates of unemployment, and employment in lower-paying sectors. In North Dartmouth, Fairview, and Spryfield people also spend a greater proportion of their income on shelter.

Taken together, these findings offer seven key areas for policy intervention, including:

- Income inequality and polarization appear lower in the HRM, but the municipality has hotspots of lower income.
- Focusing on neighbourhood specific programs rather than ones for the municipality as a whole is likely to have greater impact.
- Income dynamics are different in the rural versus urban areas of the municipality.

- Low-income neighbourhoods are linked to families with children. For this reason, programs that offer child and family support are likely to have great impact on alleviating inequality in the city.
- Low-income neighbourhoods have higher rates of unemployment. Considering the link to family and children, programs that support child care may improve employment in low-income neighbourhoods.
- Low-income neighbourhoods are tied to lower levels of education. Programs for skill upgrading and opportunities to complete high school and pursue post-secondary education in such areas could alleviate precarious employment and unemployment in the municipality's lower-income areas.
- Low-income neighbourhoods are tied to higher rates of renting and a greater share of income spent on shelter costs. A focus on affordable housing with units that can accommodate families and children should be a priority.

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## Note on data sources and methods of analysis

All maps and charts tracking changes in income inequality and polarization and the percentage of low-income, middle-income, and high-income census tracts were produced by Richard Maaranen, data analyst for the Neighbourhood Change Research Partnership (NCRP): <http://neighbourhoodchange.ca/>. The partnership is led by David Hulchanski, Principal Investigator. All income data come from the Canadian Census of Population and tax records.

Dennis Pilkey of DWPilkey Consulting compiled data from the 2016 Census to compare the demographic composition of the entire Halifax Regional Municipality and five neighbourhoods we identify as areas of concern. This analysis was conducted for the United Way of Halifax. Some data were collapsed by Kathleen MacNabb, a researcher at Dalhousie University.

Information on Haligonians' perception of changing affordability in their neighbourhoods is based on a telephone survey of 462 residents in the spring of 2017 by researchers on the Perceptions of Change in Atlantic Canada research project, based at Dalhousie University:  
<http://perceptionsofchange.ca/neighbourhoodchange.html>

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