

Low Income Households in High Value Housing in Vancouver

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OVERVIEW

In this report we give an overview of low income households in high housing value areas based on standard census release data from the 2006 and 2011 Canada Census in Vancouver. This phenomenon has been observed by others and by us previously.

The purpose of this report is to refine previous arguments and put them into the context of other regions in Canada and provide visuals explaining the arguments.

We conclude that poverty in high dwelling value areas is higher and behaves differently in Vancouver compared to other regions in Canada. We can't use this data to estimate the effect, if any, that this phenomenon has on the Vancouver property market. But we believe it is important to monitor this phenomenon by obtaining and analyzing more current data linking incomes to housing transactions and housing values in order to better understand the Vancouver property market and inform policy.

HIGH VALUE HOUSING

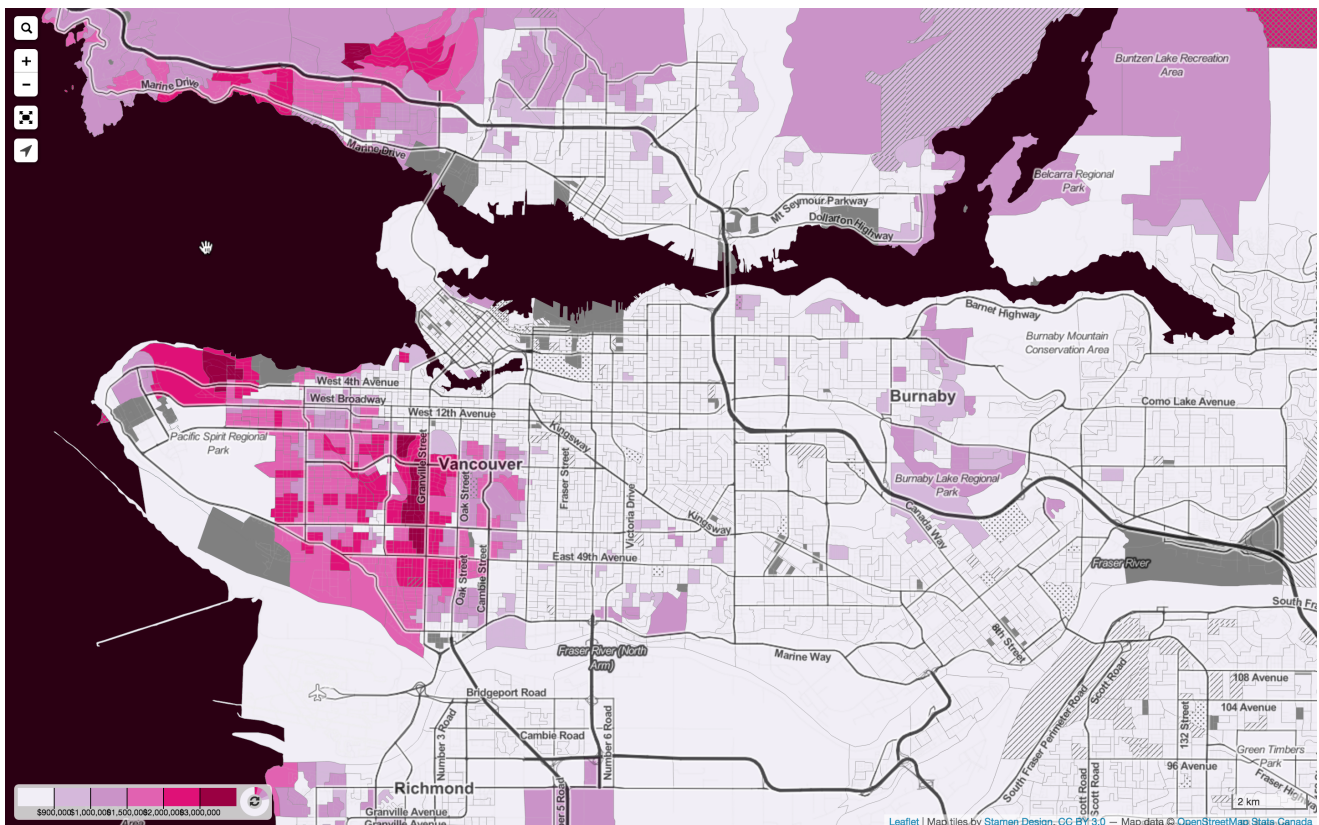


Figure 1. Median Dwelling Values, Focus on High Value Areas (2011)

In this report we are mostly focusing on high value housing. We define high value housing areas as those areas with median dwelling value 50% above the city-wide numbers in 2011. For reference we include a map of median dwelling values, starting at 50% above the Metro Vancouver median dwelling value of \$600,000 in Figure 1. An interactive version can be found at <https://censumapper.ca/maps/422>, which also links to a similar map using 2006 data. As expected, we can see how high value housing is concentrated on the west side of Vancouver.

MEASURES OF POVERTY

For this report we concentrate on two main measures of poverty. Poverty is always measured through income as reported on CRA tax returns.

A standard measure of poverty is the after-tax low income threshold used by Statistics Canada, which classifies households as low income based on the after tax household income and household size. Exact definitions for the 2006 and 2011 census years are listed in Appendix A.

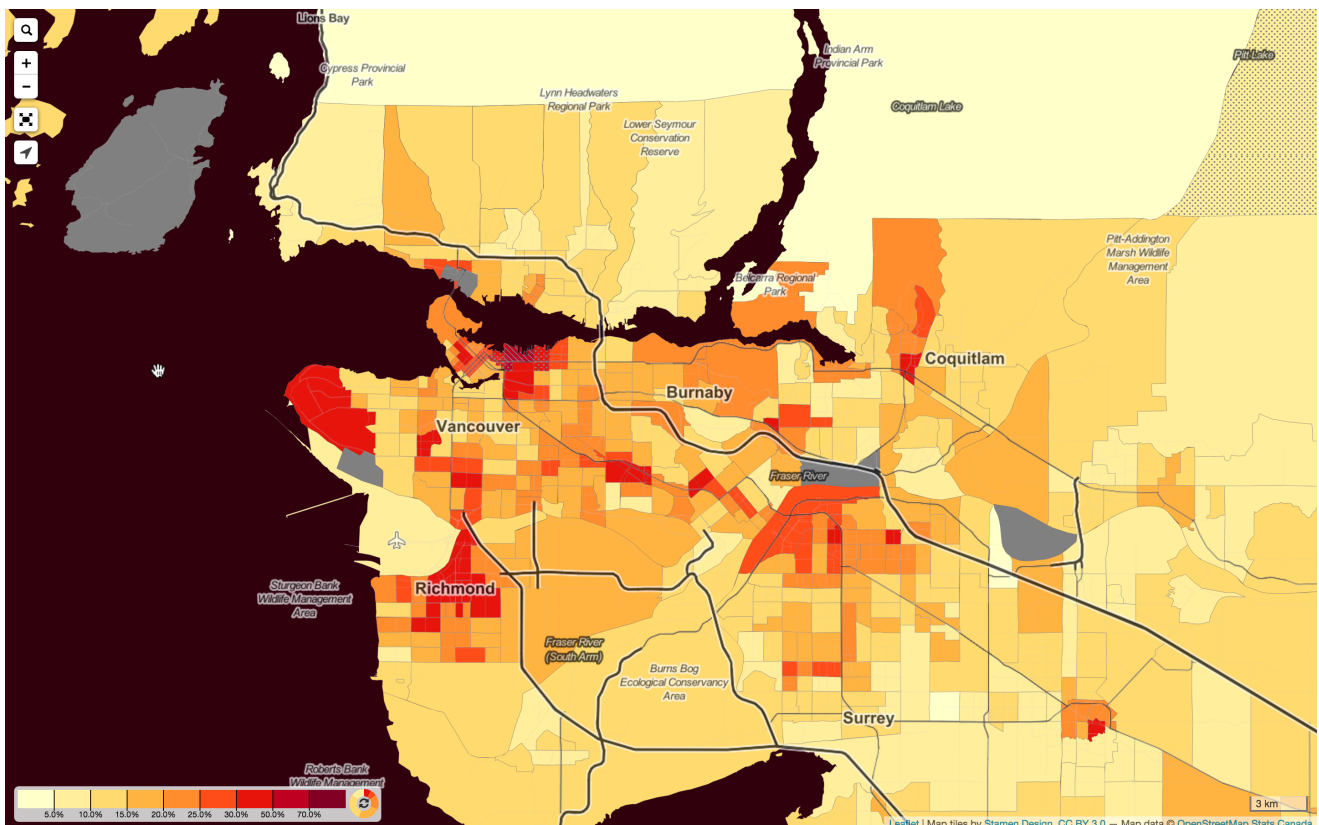


Figure 2. Prevalence of Poverty (2010)

The geographic distribution of poverty rates can be explored in a series of interactive maps that we made available at <https://censumapper.ca/maps/119>, an overview map for Vancouver is included in Figure 2. As expected, we see that downtown east side has elevated poverty rates, however it is surprising that some areas in West Side neighbourhoods also show high rates of poverty. This can be explored in more detail in our interactive maps.

The second measure we use is the number of households that spend 100% or more of their reported pre-tax income on shelter costs. Shelter costs include mortgage payments (if any), property taxes and utilities for owner households and rent and utilities for tenant households. This is an indirect measure derived from census data that is typically used to exclude odd cases in housing affordability analyses. Focusing on owner households we exploit this to highlight the unusual prevalence of these cases in Vancouver. Senior households would typically draw income from RRSPs to pay for running shelter costs and living expenses and thus would not fall into this category.

A number of scenarios could explain cases with shelter costs higher than incomes: student households that may not have income and receive money from parents, households where

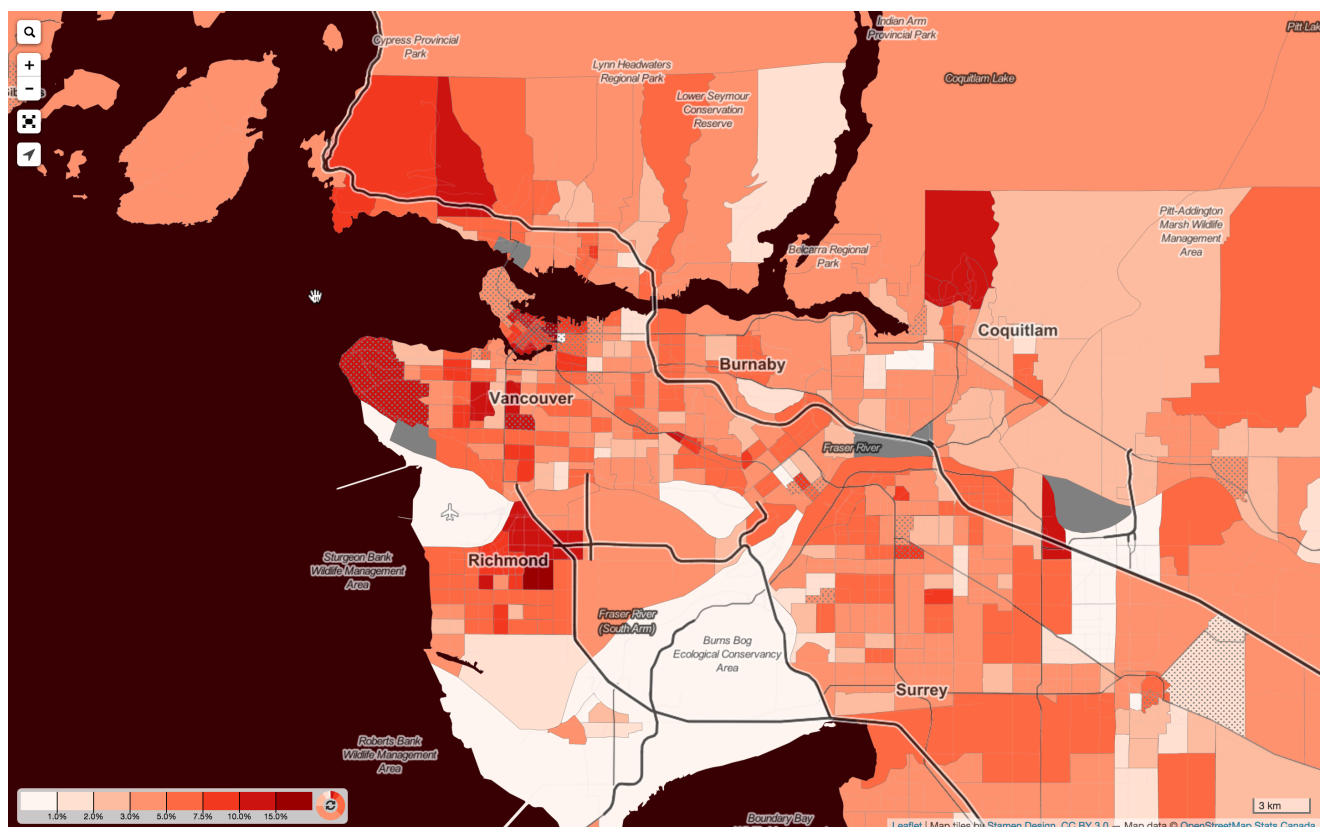


Figure 3. Owner Households with Shelter Cost Higher than Income

the maintainer is between jobs and lives off of savings to bridge the gap. However, one would not expect to find these kind of cases in high housing value areas.

The 2006 Census data allows us to separate out owner households with income lower than running shelter costs, Figure 3 shows a screenshot from our interactive Canada-wide map of such households that we have made available at <https://censusmapper.ca/maps/420>. In this map we can clearly see how some areas on the expensive West Side of Vancouver feature high rates of households with shelter cost lower than income. There were 6,800 such households in the City of Vancouver and 24,380 in Metro Vancouver.

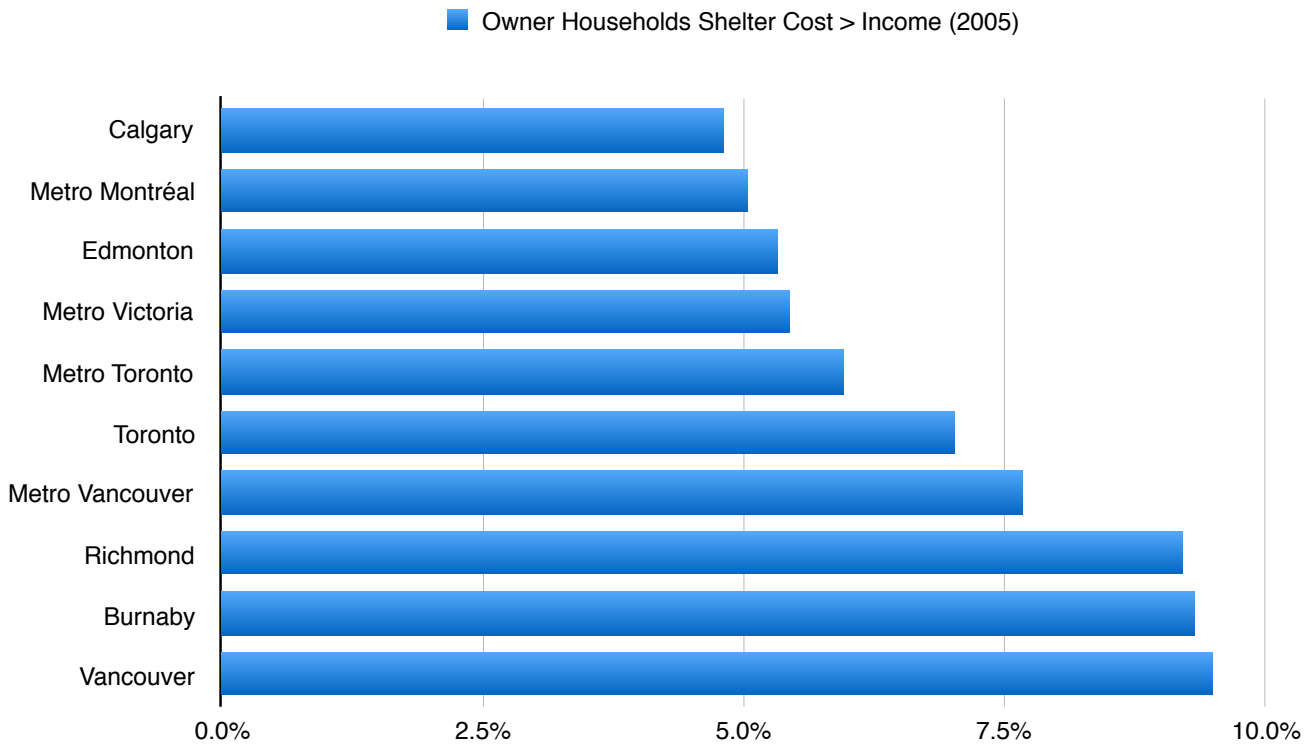


Figure 4. Owner Households with Shelter Cost Higher than Income (2006)

Further we compare the rates in Vancouver to other Canadian municipalities and regions in Figure 4. We see that this phenomenon is more pronounced in Vancouver than in other regions. Just like with poverty rates we notice an unusual pattern of clustering in some areas with high housing values.

Standard census release data from 2011 does not allow to separate out owner households, making it more difficult to interpret data on households with shelter costs higher than income as ownership rates vary considerably across regions in Canada and this phenomenon is more prevalent in tenant households. Overall, the portion of households in this category has increased more in the Vancouver region than in other regions in Canada.

POVERTY AND DWELLING VALUES

To explore how poverty rates relate to median dwelling values we first grouped the dissemination areas (the smallest census aggregation unit for which this data is available) in several municipalities and census metropolitan areas into bins according to their median dwelling value. We then computed the poverty rates, that is the proportion of the population below the 2010 after-tax low income cutoff, for each of those bins and graph the result in Figure 5.

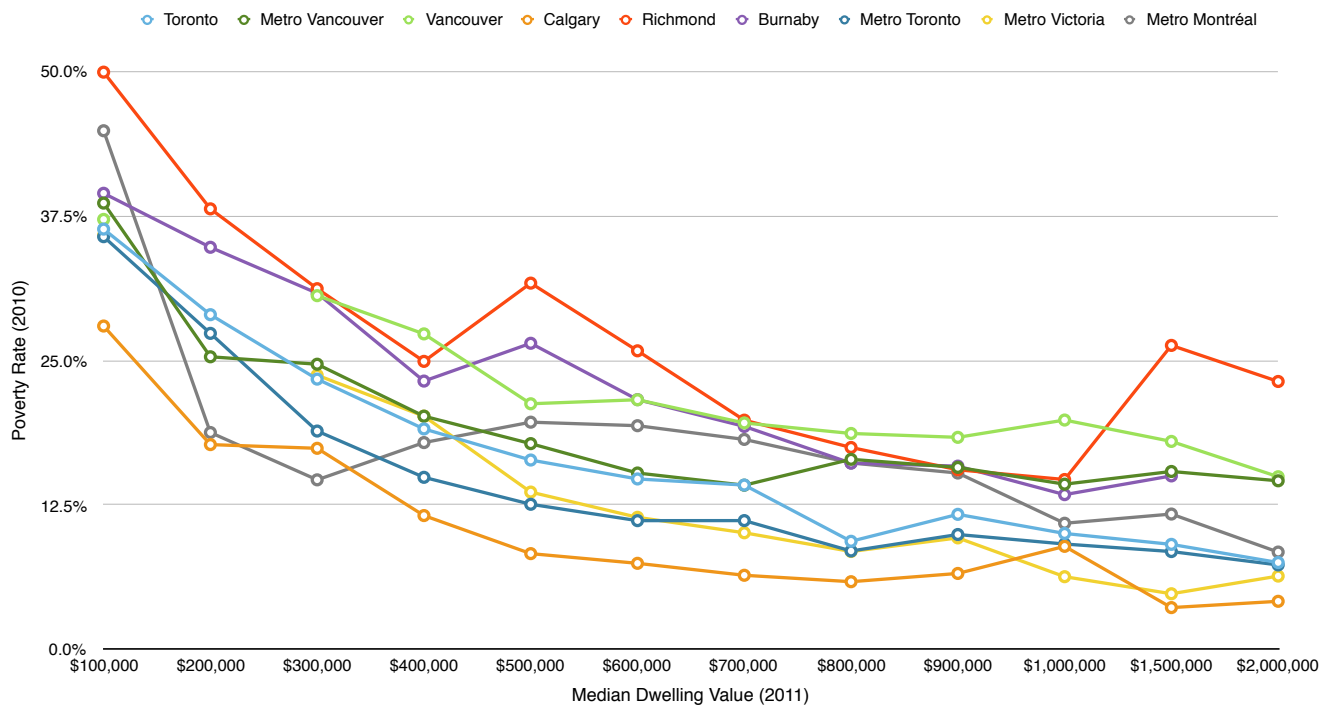


Figure 5. Poverty Rates by Median Dwelling Value Areas (2010/2011)

One would expect poverty rates to drop drastically as dwelling values increase. However, in Vancouver poverty rates fail to drop off in high dwelling value areas as they do in comparable regions in Canada. Running the same analysis against only 18 to 64 year olds in poverty, to exclude seniors and children that might skew results because of high child or senior poverty in some areas, yields very similar results.

While we see that overall poverty rates in Vancouver, Richmond and Burnaby are higher than comparable regions in Canada, we also see that for regions with dwelling values above \$700,000 Metro Vancouver as a whole displays distinctly different poverty rates than comparable regions.

We conclude that poverty, as measured by tax data, in high housing value areas in the Vancouver region differed significantly from that in other comparable regions in Canada and should be closely monitored.

APPENDIX A

The cut-offs used to define low income households in the 2006 and 2011 census for after-tax household income, including government transfer payments and RRSPs, are summarized in the following table.

LOW INCOME CUT-OFFS

Household size	2006	2011
1	17,219	19,460
2	20,956	27,521
3	26,095	33,706
4	32,556	38,920
5	37,071	43,514
6	41,113	47,667
7+	45,155	51,486