

Low Incomes and High House Prices in Metro Vancouver

SITE ECONOMICS LTD.

Introduction

Site Economics Ltd., has conducted over 1,250 large-scale real estate development and financial studies. Clients include the majority of major developers in western Canada and all levels of government. Past projects include studies of hundreds of shopping centres and residential towers and thousands of acres of industrial parks and residential suburbs. The total value of the projects studied exceeds \$120 billion. The firm has an enduring interest in real estate and its economic and ethical role in the creation of public infrastructure, the basis of quality of life and the middle class.

Executive Summary: An Unsustainable Tax Situation

Based on the simple premise that the more a home costs, the more money a buyer must have, this report contrasts household family incomes reported to Revenue Canada, with the price of residential real estate in municipalities across Metro Vancouver. It is a standard, widely used statistical measure which yields useful, reliable results. There are always minor exceptions but they do not effect the key results when the sample size is so very large.

Reported Incomes Are Not Associated with Home Prices

The analysis concludes that reported taxable incomes are simply not related with the price of Metro Vancouver's real estate. Differences between communities in the percentage of elderly and likely retired citizens did not account for the failure to find a predictable relationship between income levels and housing prices.

These results point to possible inappropriate reporting of family incomes among high value property owners. The source of this problem is not the general public but rather inadequate governance by federal, provincial and municipal politicians who have not updated tax regulations to be fair or to reflect the modern economy.

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Average detached house prices can vary from the regional average by as much as 220% but incomes vary by only 25%. This is a striking difference as income levels should logically be high enough to support the high house prices. This market cannot even support a proper supply and demand equation.

The Lower the Reported Income the Higher the House Price

The unusual finding is that higher house prices are found in low income municipalities, and lower house prices are found in high income municipalities. Families in Metro Vancouver's traditionally "upper and upper middle class" western urban centres, such as Vancouver, Richmond and Burnaby, live in houses with very high values, routinely over \$1.5 million and often \$2 and \$3 million; far above the regional average. Yet taxpayers in these same cities are reporting unusually low taxable median family incomes well below the regional average.

Conversely, in newer, traditionally less affluent "middle and working class" eastern centres such as Port Moody, Coquitlam, Port Coquitlam, Langley, and Maple Ridge, house prices are well below the regional average. These areas are reporting incomes well above the regional average. The remote suburbs are now the high-income areas, at least as far as taxation and contribution to funding public infrastructure is concerned. For example, Port Moody now has the highest median taxable income in Metro Vancouver yet only average house prices and Richmond has the lowest median taxable income yet some of the highest house prices.

Perhaps Not All Income Is Reported

The housing affordability ratio created by these very low incomes and very high housing prices suggests that full incomes are not being reported. Richmond and Vancouver now have amongst the highest income-to-house price ratios in the world and such an anomaly should trigger a closer look at factors that underlie this disparity. Even the relatively high median incomes in West Vancouver cannot justify home prices in that suburb, which records an astronomical price to income ratio in 2016 of 37. Clearly the definition and treatment of taxable income needs to be updated by our government. The disconnected and irrational nature of the inner municipalities is in stark contrast to the more standard rational and expected ratios in the suburbs.



Conclusion and Recommendations

By failing to require that all contribute proportionally and appropriately, government simultaneously harms and overburdens some tax payers and inflates house prices. High, middle and low-income tax payers are subsidizing house prices for those who inappropriately report low incomes, enabling them to reallocate resources from taxation to paying higher house prices. This problem is widely recognized by federal, municipal and provincial levels of government as well as the private sector and all parties have observed the disparity. Logically therefore enforcing and updating tax policy would help resolve housing affordability, maintain quality of life and strengthen income equality.



Capital is the only measure of success in a high priced housing market as it has overwhelmed the virtues of ability, work and associated income. Bringing house prices down even slightly would create more balance, opportunity and fairness.

The government should take action by updating taxation laws to ensure everyone pays their fair share, evening the playing field for all. Realigning taxation ensures high quality of life, and equal access. It is an important step government can take, thereby preserving the middle class. The related benefit would be a decrease in real estate prices.

Importantly, the government should take steps to curtail real estate speculation by increasing transaction costs and property taxes for all investors in residential real estate, international and domestic. Residential real estate should carry its own weight, with increased property taxes and decreased preferential investment taxation thereby generating funds for higher levels of government and infrastructure investment.

Growth should pay for itself with increased property taxes and fees.



Public Infrastructure Gives Private Real Estate Value

It is illogical that Metro Vancouver's housing can be so expensive that even high-income families, never mind middle income families, struggle to afford a detached or even multi family home. The problem is complex but one way it can be understood is by means of a simple and traditional economic analysis.

By way of background, private real estate value is typically created by its surrounding "location, location, location". A home's value is derived not just from its ability to provide shelter, but also from the roads and services it is connected to and proximity to all of the elements that make our daily lives function. This is the surrounding city and urban framework largely represented by public infrastructure investment. It is the public realm that generates most of the value and is the attraction of a city, not the private investment. People express the desire and intention to live in a specific city, but not in a specific private house.

Using taxes, federal, provincial and local levels of government invest heavily in public infrastructure for the benefit of society at large. These investments allow the marketplace to function and create private sector (residential, industrial and commercial) real estate value. Would your home hold the same value to you or a potential buyer if it were not serviced by water, sewer, gas and electricity? Would it be as valuable if it were not conveniently connected to roads, if there were no schools or hospitals in the area or if there were no green spaces and waterfront to enjoy? Public infrastructure in all its many forms is the basis of quality of life.

Equal access to public infrastructure is the basis of the middle class. When there is a surplus of infrastructure there is easy and equal access for all and a city becomes an attractive destination with an appealing lifestyle. When there is insufficient public investment and a deficit of infrastructure there is less quality of life, congestion and greater inequality arising from unequal access to essential services. Growth should pay for itself through new taxes that fund new investment in the public realm to ensure high standards of access are maintained and congestion is avoided.

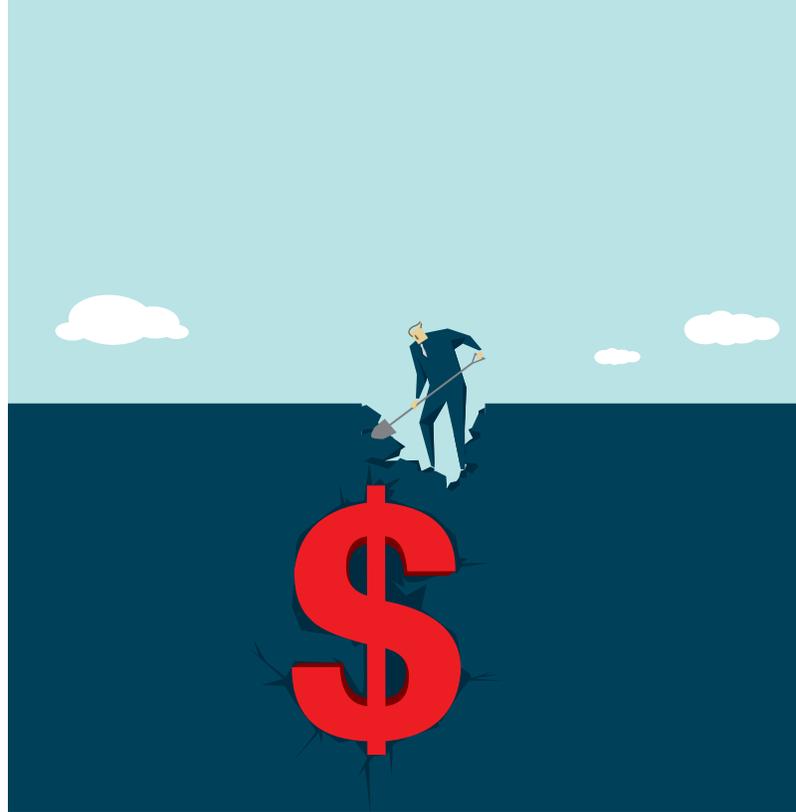
Public and private investment and value are symbiotic in that they arise and work together when all parts of the economy contribute to the development and maintenance of public infrastructure. Over the past 30 years private residential real estate has become more of an economic “free rider”, enjoying speculative, low risk, increases in value generated by public investment but avoiding making adequate contributions to the public realm which supports it.

Most public infrastructure investment that we rely on today was built before 1990. Society has drawn down much of that value by growing the private sector with new real estate development but neglecting to make a commensurate contribution back to the public realm. This is needed to grow and sustain the public infrastructure that makes it all possible. The government and public appears reluctant to expand infrastructure compared to past generations for whom the benefits of being generous to the future were more obvious. Obviously Growth should pay for itself.

If some home owners can buy not just their house but all the associated public services without having to shoulder the full burden of taxation then the public at large is indirectly subsidizing house prices. Logical and fair taxation could lead to more logical and fair house prices.

The source of the problem is outdated governance.

The report explores this issue through one of the well-established economic tools which correlates demand with supply – the family income to house value ratio, or “median multiple”. This is an accurate if not fully comprehensive statistical analysis.



Methodology: Metro Vancouver’s Unaffordability

In a modern capitalist economy, which is supposed to run on merit, it is illogical that even highly paid professionals, such as medical doctors, have trouble buying a detached or even multi family house in Metro Vancouver. If you were lucky enough to get into the real estate market more than 15 years ago, you’re probably breathing a sigh of relief, even if there is angst regarding the next generation’s ability to do the same. Yet prices remain high which indicates that somebody is able to buy in this market.

In real estate development, any market analysis must consider both supply and demand. To do this, a simple measurement called the “Median Multiple” is used. The Median Multiple, often referred to as the Housing Affordability Ratio, is determined as follows:

This measurement is the preferred measurement for the Demographia international housing affordability study. It is described by the authors of that report as a measurement that “is widely used for evaluating urban markets, has been recommended by the World Bank and the United

Nations and is used by the Joint Center for Housing Studies, Harvard University.” They note that this measurement is used to compare housing affordability between markets by the Organization for Economic Cooperation and Development, the International Monetary Fund, media outlets like The Economist, and other organizations.

To help interpret this data, Demographia has set out the following rough guidelines for the spectrum of affordability.¹

MEDIAN MULTIPLE	AFFORDABILITY RATING
3.0 and under	Affordable
3.1 to 4.0	Moderately Unaffordable
4.1 to 5.0	Seriously Unaffordable
5.1 and Over	Severely Unaffordable

The widespread adoption of this measurement internationally enables the reader to understand the financial implications of the ratios uncovered by this research. For example, the Demographia study for 2015 shows Hong Kong has a median multiple of 19; Sydney, Australia a multiple of 12.2; and San Francisco a multiple of 9.4. By using the same measurement in this study, the reader can usefully compare these cities with other cities across Metro Vancouver.

Analysis

The more a home costs, the more money a buyer must have to purchase that home. Logically, a high-priced real estate market like Vancouver’s would require very high income earners to buy into that market, but Metro Vancouver’s median multiple exceeds 20 and several of its individual municipalities exceed 30! How is this possible? How can the median household income be so low when the homes that are being purchased are so expensive? This finding, these median multiples, are logically and even technically improbable, and yet easily demonstrable in the Metro Vancouver real estate market.

Source of Data - Income²

This report compiles Canada Revenue Agency data for annual taxable median income for families (also known as “households”) across Metro Vancouver for the period 2008 to 2013. Originally, this data was freely available from BC Stats. However, since the defunding and restructuring of BC Stats, this information is no longer freely available from the provincial government.

The data for this report were obtained indirectly from Canada Revenue Agency via Metro Vancouver. As 2014, 2015 actual data was not available by this report’s publishing date, these data have been estimated by applying the actual three year historic increase from 2010 to 2013 to the past three years 2013 to 2016.

Not all housing studies use taxable median income as a benchmark but rather use census and survey data that is easy to obtain but less precise and reliable. The data has several flaws and major assumptions such as, only the incomes for multi person families were used in an attempt to remove most renters from the analysis, wealth and income are eventually correlated over time and historic long time low income home owners have not been accounted for etc. These issues and exceptions are all typical in a broad statistical overview and data for all urban markets have similar exceptions and they are too minor to influence these findings.

Source of Data – House Prices

This report, like virtually all other comparable reports, relies on publicly released data produced by the Vancouver Real Estate Board and the Fraser Valley Real Estate Board, which provide the median prices for multi-family, detached single family, and “all” housing types in the years 2008, 2013 and 2016, as of September in each year.

(Adopted from Demographia 2016 report, available online at <http://www.demographia.com/dhi.pdf>)

Findings Related to Household Income in Metro Vancouver

The income data used in this study does not include single person households and thus it efficiently and effectively removes much of the influence of renters (as opposed to owners) from the housing analysis.

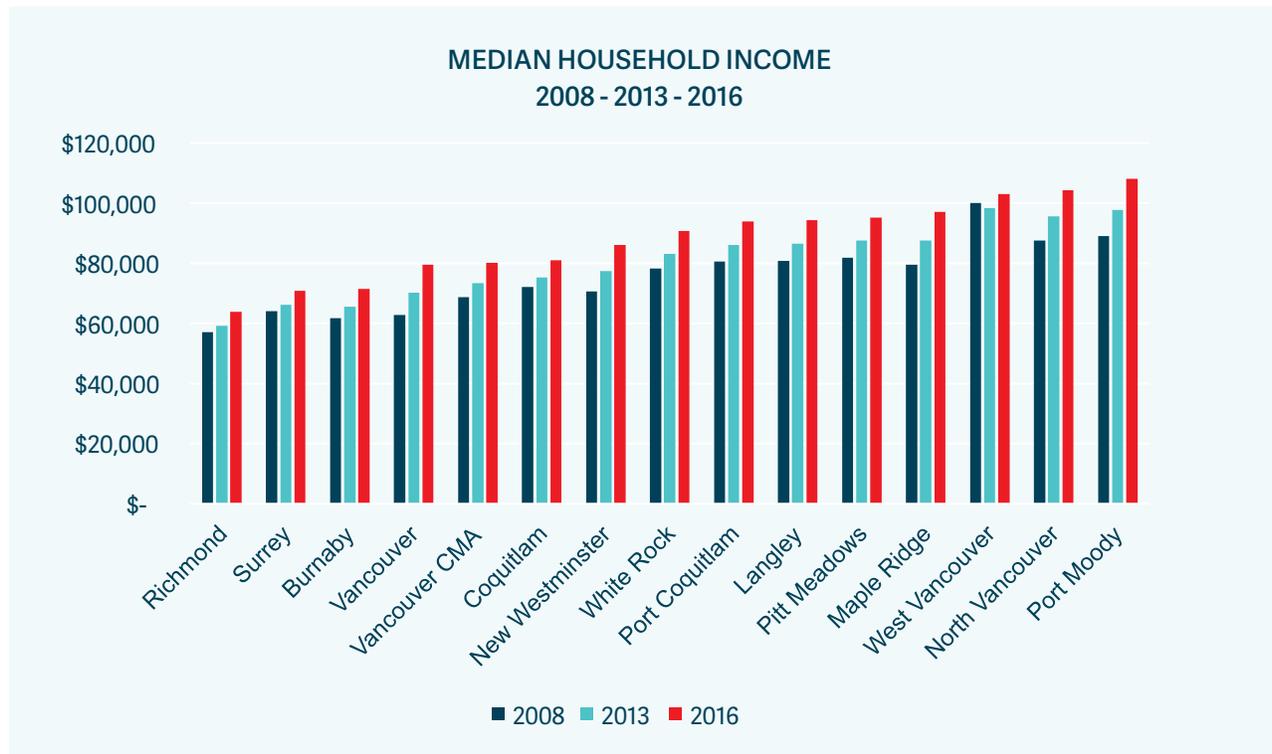
- Analysis of multi person household income by Metro Vancouver municipality suggests that family income across the region is relatively uniform and varying from the regional average by, at most, 25%.
- Taxpayers in Metro Vancouver’s traditionally “upper and middle class” western urban centres, such as Vancouver, Richmond and Burnaby, are reporting unusually low taxable median family incomes, well below the regional average.
- Conversely the newer, traditionally less affluent, “middle and working class” eastern centres such as Port Moody, Coquitlam, Port Coquitlam, Langley, and Maple Ridge, are suddenly and unusually reporting incomes above the regional average. The remote suburbs are now the high-income areas, at least as far as taxation and contribution to funding public infrastructure is concerned.
- This finding is not logical as the majority of multi person families are expected to have incomes sufficient to support a middle class lifestyle.
- Differences between communities in the percentage of elderly and likely low income retired citizens did not account for the failure to find a predictable relationship between income levels and housing prices.



²The reader can access the median income for families data on the Metro Vancouver website here: http://www.metrovancouver.org/services/regional-planning/PlanningPublications/IncomeTaxfiler_Families_Muni.pdf

The reader can access the median income for families directly on the Canada Revenue Agency website here: <http://www.cra-arc.gc.ca/gncy/stts/itsa-sipr/2013/prvtbl1bc-eng.pdf>

The data used in some of the other comparable studies is based on the census which is not deemed to be as reliable as actual tax filer data.



If Port Moody has the highest taxable income, the government should update taxable income measurements.

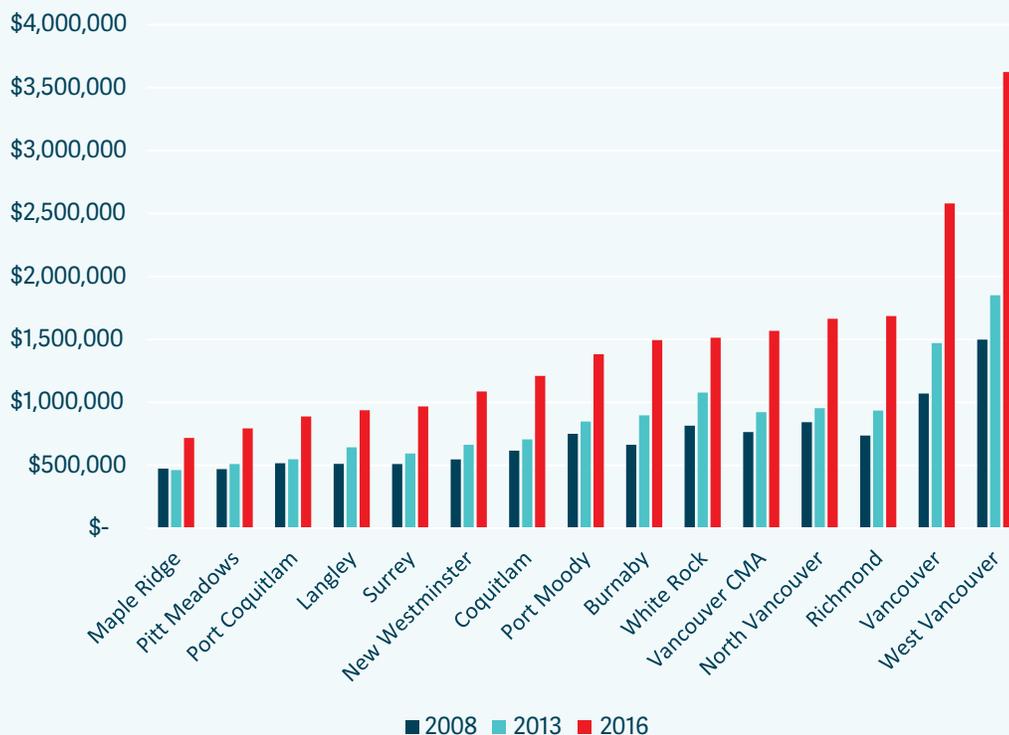
The lowest income cities in Metro Vancouver, such as Richmond, have median family incomes not only well below the urban average but also well below some poor and remote rural areas of BC. Does that not strike anyone as inexplicably strange.

- Any variance from statistical averages is a concern and Metro Vancouver has much lower average incomes than vaguely comparable cities such as Seattle or Portland yet also, somehow, has much higher house prices.
- Detached House Prices in Metro Vancouver
- The detached house price data used in this study is from the Vancouver and Fraser Valley Real Estate Boards as of September, in the years 2008, 2013 and 2016.
- Analysis of detached house prices by Metro Vancouver municipality suggests that, unlike income which has a 25% variance between municipalities, detached house prices vary from the regional average by 220%. This is a

striking difference and a range which is not explicable or logical as income levels are supposed to be high enough to generate demand sufficient to support the high-priced end of the market.

- Families in Metro Vancouver’s traditionally “upper and upper middle class” western urban centres, such as Vancouver, Richmond and Burnaby, live in houses with very high values, routinely over \$1.5 million and often over \$2 and even \$3 million; far above the regional average.
- House prices in the newer traditionally less affluent “middle and working class” eastern centres, such as Port Moody, Coquitlam, Port Coquitlam, Langley, and Maple Ridge, are well below the regional average.
- The analysis has determined that on average high house prices can be matched with low incomes and low house prices can be matched with high incomes. This pairing is not logical and it defies rational economic explanation.
- Average annual house price growth was 23% or 8 times income growth, a major value leap of 70% from 2013 to 2016

MEDIAN DETACHED HOUSE PRICES 2008 -2013 -2016



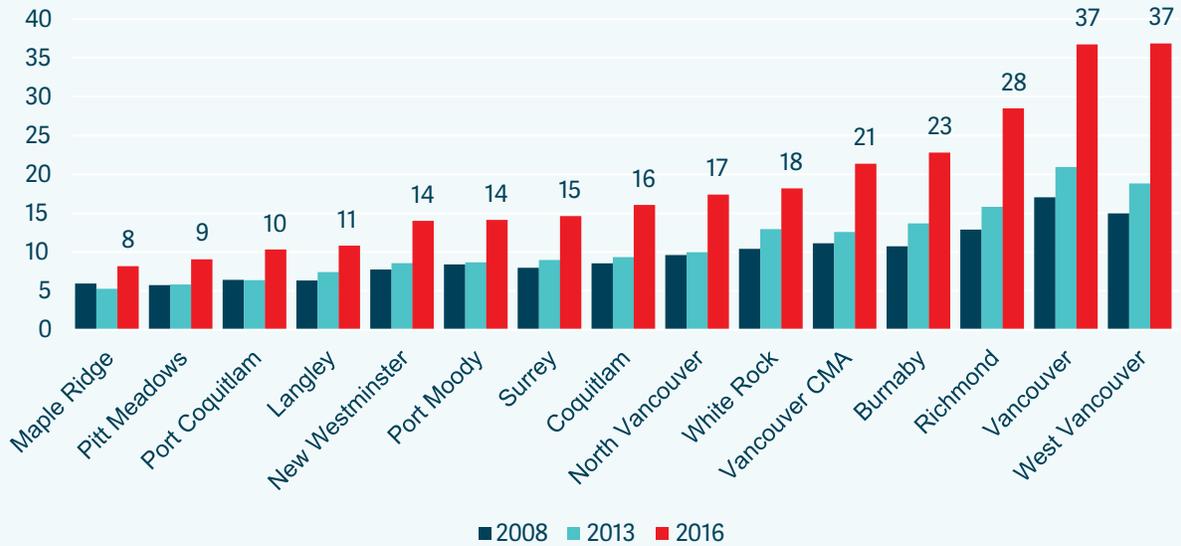
The Ratio of Incomes to House Prices – the Median Multiple

The highest housing unaffordability ratios are in the most attractive urban areas, notably Vancouver, Richmond and Burnaby. These areas are amongst the poorest in terms of median family income, yet they have the highest house prices.

The housing affordability ratio created by these very low incomes and very high housing prices makes it clear that either house prices are being unrealistically reported, which is highly unlikely, or not all income is being reported for tax purposes, which is likely and perhaps the only possible explanation. Otherwise, for no apparent reason, Richmond has perhaps the highest income to house price ratio in the world. Again, it is important to note that a ratio of 5 is considered overpriced and our region is over 20. Burnaby is 23, Richmond is 28 and neither is dominated by renters or seniors.

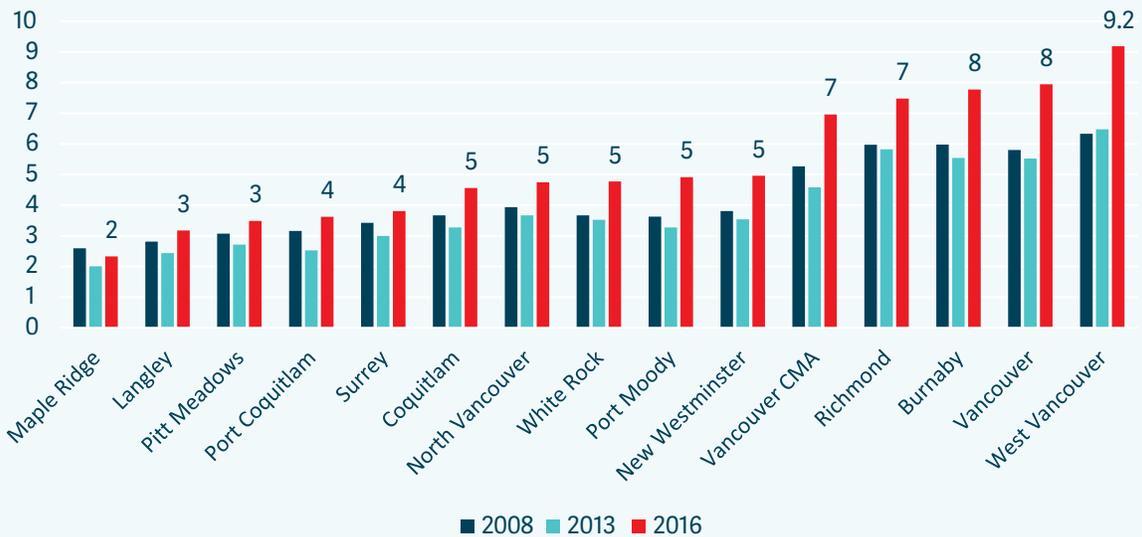
It is not logical that so many low-income residents buy expensive houses. The analogous situation would be people reporting minimum wage routinely buying Rolex watches and luxury limousines.

**MEDIAN HOUSEHOLD INCOME TO DETACHED HOUSE PRICE RATIO
BY MUNICIPALITY 2008 -2013-2016**

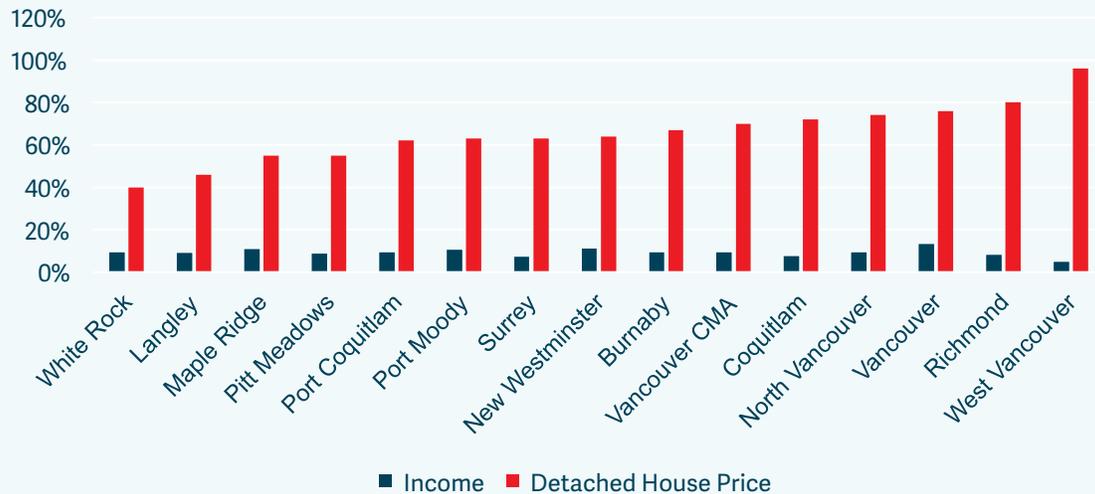


The multifamily house to income ratio shown below is logical and expected with a regional average of just over 7. This is still high compared to international standards and even well located multi-family units are becoming unaffordable.

**MEDIAN HOUSEHOLD INCOME TO MULTIFAMILY HOUSE PRICE RATIO
BY MUNICIPALITY 2008 -2013 -2016**



INCREASE IN FAMILY INCOME VS INCREASE IN DETACHED HOUSE PRICES 2013 TO 2016



Detached prices are unaffordable and even well located multi-family is very expensive.

Even the relatively high median income of West Vancouver cannot justify home prices in that suburb, which records an astronomical ratio in 2016 of 37.

The disconnected and irrational nature of these urban ratios is underscored by the more standard and expected ratios in the suburbs, where most residents have traditional employment and obvious sources of income that generate tax statements (for example, T4s).

Informal buyer surveys conducted by major condo developers regularly indicate that over half of the units in concrete condominiums downtown, at urban nodes and near rapid transit are purchased by investors, and that they are the driving force in that market. It is reasonable to conclude that housing prices are being impacted by investors who very effectively compete with those trying to buy a home they can live in. More importantly, the low incomes that are reported have the double negative impact of giving those people who are not paying sufficient taxes, more buying power, thus increasing market prices, and drawing on community infrastructure, all without supporting the renewal and expansion of the public realm.

The problem can be partially resolved by following steps taken by other governments who have been in similar situations.



Conclusion: Resolving One Aspect of Unaffordability

Based on this review of the housing market and income levels, there is a problem with fair and appropriate reporting of income for taxation purposes in Metro Vancouver. In the words of President Abraham Lincoln, “laws without enforcement are just good advice”. The fault lies not with the public or business, but with the politicians who should bring appropriate tax policies to bear and ensure that everyone pays their fair share. Politicians must be committed to the public realm; hence action must keep pace with the speed of growth. Negligence in doing so results in significant decline and damage to quality of life and the middle class.

Residential real estate, like food and water, is a necessity. Individual homes were never intended to be an investment vehicle to be hoarded, or to be subject to artificial, non-market-driven shortages. This basic concept is reflected in Federal tax law, which exempts a primary residence from capital gains taxes, and are emphasized by the conditions limit this exemption to a single tax exempt property per family.

With its new emphasis on banking, the global economy has helped fuel the excessive appreciation of house prices worldwide, thereby encouraging speculation. Canadian tax laws are clearly outdated and unprepared for specialized requirements. They need periodic amendment in order to better reflect ever changing conditions and ensure they are fair and balanced.

Uncontrolled residential prices hinder industrial and office development by competing for land and not paying sufficient property taxes. This harms business thereby retarding job generation in an already handicapped economy, something no society should permit. This is in addition to high prices creating a problem with work force housing.

The government should revisit and revise tax regulations to ensure everyone pays their fair share.

In order to maintain quality of life, government needs to enforce and update income tax laws. Such action would help with housing unaffordability in Metro Vancouver as real estate prices would not be subsidized by under-priced public services.

Currently all tax payers subsidize those who inappropriately report low incomes. By allowing some to not contribute sufficiently, government simultaneously harms and overburdens tax payers and inflates house prices.

The government should take steps to curtail real estate speculation by increasing transaction costs and property taxes for anyone buying individual houses for investment purposes.

Real estate speculators who buy and hold properties can often capture, but not pay for, the value that the general public creates and pays for in taxes and infrastructure investment. The justification for an increased tax burden on speculators is obvious. Price and value increases are often due to public sector investments and are therefore “windfall profits” over and above normal economic profits and, as such, should be fully taxed. The public should not continue to subsidize the financial return of the speculator, particularly at these high prices. Real estate speculators value housing inappropriately harming those buyers who intend to live in their home. Speculators also increase community costs and undermine community services and local economies by increasing vacancy. The City of Vancouver reportedly has over 20,000 vacant homes, likely due largely to speculation.

The housing shortage and affordability problem harms the local economy by forcing vibrant new businesses to relocate to secondary cities, in large part because those cities can offer abundant, low cost housing for their workforce. In Metro Vancouver, which is facing affordability ratios at worldwide highs, property taxes should be increased for all residential real estate particularly that which is not owner-occupied, excluding rental apartment buildings. If incomes are no longer a reliable source of taxes, then real estate, which can be taxed, should be required to contribute more revenue to all levels of government.

Proposals like UBC’s Sauder School of Business Housing Affordability Fund property tax initiative are good examples of the kinds of policies that could be adopted by the provincial government in order to reduce the potential returns of holding property for investment purposes.³



Real estate ownership is an essential pillar of middle-class family wealth as it facilitates capital being passed down through the generations. Government which delivers quality infrastructure also offers a high quality of life and strong legal protections. The uncounted billions of dollars being generated by real estate should be subject to updated taxation and fees and some of these funds reallocated to expand and enhance all forms of civic and natural infrastructure.

The weakening of the middle class, income inequality, and decline of public infrastructure are all interlinked and reflect an increasing failure to govern based on ethical and fair guiding principles to promote the public good. Excessive investment in passive, unproductive or overpriced real estate can often be a sign of illegal or immoral financial activity such as money laundering. The primary ingredient of a real estate market is capital and why would so much of it want to be stored in unproductive houses and not a stock market.

Irrationally high-priced real estate is not harmless or “green”. There are plenty of victims, from the environment to the middle class. Simply stated, Metro Vancouver is worth more than it charges in property taxes and fees. □

³ <http://www.housingaffordability.org/>