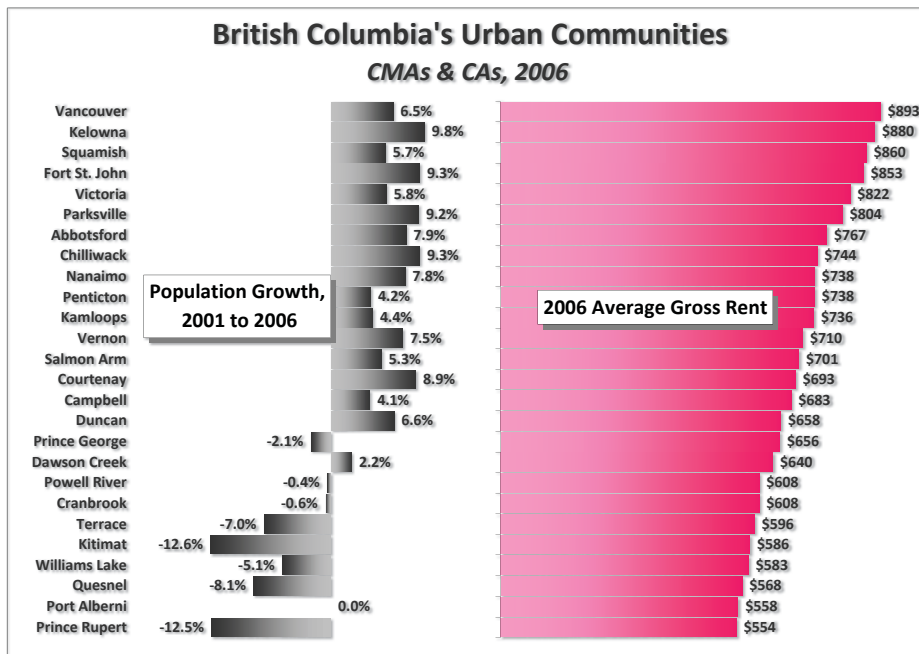

In the Eye of the Beholder:

Housing Affordability in British Columbia

Part 1: Evaluating Current Measures of Occupancy Affordability for Tenants



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Part 1: Evaluating Current Measures of Occupancy Affordability for Tenants

By Ryan Berlin

Background to a presentation by David Baxter
to the Canadian Home Builders' Association
on November 1, 2010

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Representation, interpretation, and conclusions drawn from the analysis are solely the responsibility of the author.

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I Introduction

There is considerable interest in issues of housing affordability in communities throughout British Columbia. Unfortunately, there is very little in the way of valid statistical evidence that can assist in measuring the extent of affordability problems, in identifying the causes of these problems, or in identifying the segments of our communities experiencing them. The data that are available show that, on average, people are well-housed and that there are not widespread housing affordability problems in BC. Furthermore, given the very nature of averages, it can be said that housing is affordable for the majority of the households in the province. These averages, however, do not reveal the circumstances of the minority that are experiencing affordability problems—they do not tell us where in the province these households are or what the specific nature of each household's individual situation is.

Housing affordability is a multidimensional, complex issue that embodies individual circumstance, local policy, and broad economic and social factors. Therefore, before we attempt to measure housing affordability, and certainly before we implement broad policies aimed at making housing more affordable, it is necessary to define the term "housing affordability". For some, it means being able to afford a large, single-family house on Vancouver's west side; for others, it is about being able to afford a room with single bed, under a roof, out of the rain. Given this range of meaning, no single definition or measure can adequately represent the essence of housing affordability as it pertains to all (or any) of us to the point that meaningful and targeted policies can be developed to address affordability issues.

The title of this series of reports on housing affordability—*In the Eye of the Beholder*—was chosen to emphasize that housing affordability, like so many other issues in society, is:

- *individual*, being determined by the unique circumstances, needs, wants, expectations and resources of people—not by averages, aggregates, or medians;
- viewed as *desirable*, but as it is both individual and intangible, it is difficult to define and to measure; and
- *complexly-determined* by a wide range of factors, from the specific characteristics of individuals to the broad characteristics of communities.

These characteristics mean that there can neither be singular nor simple policies that will adequately address housing affordability issues in British Columbia, and that simple definitions and measures of affordability will not reveal the extent nor the incidence of affordability. At best, simple definitions and measures will be confusing; at worst, they will be misleading.

This series of reports focuses on the big picture, looking at commonly-cited measures of housing affordability and what they do, and do not, tell us about housing affordability in BC. The reports consider these measures in the context of the current discussions of affordability and in the context of the province's regions. With regard to the geographical scope, data are presented for BC's 26 urban regions, comprising the central cities and their adjacent communities, including four Census Metropolitan Areas (CMAs) and 22 Census Agglomerations (CAs), using the Vancouver CMA as an example when detailed tabulations are required or where data are not available for CAs.

This first report is concerned with measures of *occupancy affordability for tenants*¹, as this subject represents the very core of housing affordability by addressing the question of whether or not tenant households can afford to put, or keep, a roof over their head. Subsequent reports will examine the issue

¹ It is important to note that references to tenant households, rent, and rental units throughout this report relate specifically to households in private accommodation (which includes those living in social housing), and thus do not consider the circumstances of those living in institutional or collective dwellings such as student dormitories, prisons, or care facilities.

of owners being able to afford to continue to own (occupancy affordability for owners) and tenants being able to afford to become homeowners (purchasing affordability for tenants).

II Occupancy Affordability for Tenants

One of the most widely-used, and consistently misused, measures of rental affordability is Statistics Canada's Census-based Tenant Affordability calculation.² Over the years this measure has been used to justify everything from rent control to social housing, without much questioning of either its validity or its applicability. This absence of critical regard is, perhaps, changing. For example, in his recent column in the *Vancouver Sun* titled "Renters, the time has come to either put up or shut up", Pete McMartin comments:

"Here's a truism: Metro Vancouver has an affordable rental crisis. The assertion that a shortage of affordable rental stock exists and that too many working people pay too much of their income on rent has been made so often it is taken for fact. Housing experts routinely trot out statistics showing ... that the number of households paying over 30 per cent of their income in rent has skyrocketed ... Metro Vancouver's housing experts estimate 80,000 rental households are spending more than 30 per cent of their income on rent, and 30,000 households are spending more than 50 per cent of their income on rent." (Vancouver Sun, September 17, 2010)

He then goes on to ask if this really is a fact:

"Is the truism true? If there is a crisis, then where is the groundswell of complaint among renters?"

Alas, it is not possible to determine whether the truism is, in fact, true by using the "rent-to-income" measure. While this commonly-cited statistic is purported to show the percentage of a household's annual income that it spends on rent—with 30 percent used to describe the generally-accepted upper limit of an affordable housing situation—it does not, in fact, do so.

The rent-to-income calculations referred to can be found in Statistics Canada's Census-based table entries titled *Tenant-occupied households spending 30% or more of household income on gross rent*³ and *Tenant-occupied households spending 30% to 99% of household income on gross rent*. Figure 1 (on page 6) shows that the percentage of tenant households represented as spending 30 percent or more of their income on rent ranged from:

- 30 percent (Fort St John CA) to 35 percent (Williams Lake CA) in five communities;
- 39 percent (Prince George CA) to 44 percent (Cranbrook CA) in eleven communities; and
- 48 percent (Courtenay CA) to 50 percent (Salmon Arm CA) in ten communities.

While these calculations appear to show that in all urban communities in British Columbia a significant share of tenant households are spending at least 30 percent of their income on rent, it is essential to examine the values that are added together to achieve these totals before reaching any conclusions. The published tabulations represent that in the Salmon Arm CA, for example, 45 percent of tenant households spend between 30 and 99 percent of their income on rent, with an additional five percent spending 100 percent or more; that in the Vancouver CMA, 34 percent of tenant households spend between 30 percent and 99 percent of their income on rent, and nine percent spend 100 percent or more; and that in the Fort St. John CA, 27 percent of the tenant households spend 30 percent to 99 percent of their income on

2 Census data are collected directly from tenant households living in private dwellings (i.e. all non-institutional, non-collective dwellings), including those in apartments buildings, rented condos and houses, suites in flats and houses, and mobile homes, whether they are privately- or publicly-owned.

3 Statistics Canada defines "gross rent" as the average monthly total of all shelter expenses paid by tenant households. Gross rent includes monthly cash rent plus the costs of electricity, heat, and municipal services.

Figure 1

Tenant Shelter Costs in British Columbia's Urban Communities
CMAs & CAs, 2006

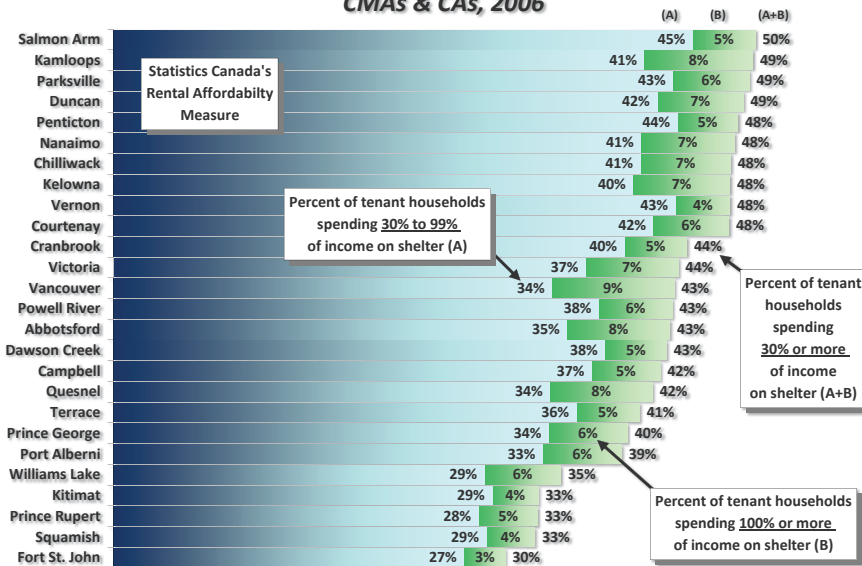


Figure 2

Shelter Costs of Tenant Households
with Annual Gross Incomes from \$1 to \$9,999, Vancouver CMA

Monthly Rent	Number of Households	Percentage	Annually
\$1,500+	1,755	6%	\$18,000+
\$1,200-\$1,499	1,995	7%	\$14,400-\$17,999
\$1,000-\$1,199	2,530	8%	\$12,000-\$14,399
\$900-\$999	2,125	7%	\$10,800-\$11,999
\$800-\$899	3,395	11%	\$9,600-\$10,799
-----			\$10,000
\$700-\$799	4,505	15%	\$8,400-\$9,599
\$600-\$699	3,485	11%	\$7,200-\$8,399
\$500-\$599	2,120	7%	\$6,000-\$7,199
\$400-\$499	1,720	6%	\$4,800-\$5,999
<\$400	6,980	23%	<\$4,800

\$799 per month (84 to 96 percent).

According to this tabulation, 39 percent of households in the Vancouver CMA were represented as spending more than 100 percent of their income on rent. Considered in more detail, there were 2,125 households with incomes between \$1 and \$9,999 that paid between \$900 and \$999 per month in rent; in other words, they spent between 108 percent and 120 percent of their income on rent. Another 2,530 households spent between 120 percent and 140 percent, 1,995 spent between 140 percent and 180 percent, and 1,755 spent at least 180 percent of their income on rent. In addition to these households represented as spending in excess of 100 percent of their incomes on rent, there were 2,710 households

4 Statistics Canada, catalogue number 97-554-XCB2006053.

rent, with an additional three percent spending 100 percent or more.

This is simply untrue: it is impossible for a household to spend 100 percent of its income on rent, as it would not have any money left over for food, clothing, transportation, education, entertainment, or taxes. As such, the numbers contained in these tables cannot be used as measures, or in discussions, of housing affordability.

Even more perplexingly, these tables represent that some households are spending significantly more than 100 percent of their income on rent. For example, consider Figure 2, which shows the tabulations for the lowest income group with incomes—that is, households with incomes greater than zero but under \$10,000 per year—in the Vancouver CMA.⁴ Of the 30,610 tenant households in this income group in 2006, 6,980 (23 percent) were spending less than \$400 per month (\$4,800 per year) on gross rent, implying that households at the top of this bracket (i.e. those earning \$10,000 per year) were spending 48 percent of their income on rent. Moving up the rent scale, another 1,720 were paying between \$400 and \$499 per month (between 48 percent and 60 percent of the income at the top of this bracket), 2,120 were paying between \$500 and \$599 per month (60 percent to 72 percent), 3,485 were paying between \$600 and \$699 per month (72 percent to 84 percent), and 4,505 were paying between \$700 and

in the region who purportedly paid for rented accommodation but had no income.⁵

These tabulations describe situations that do not exist: they are either not telling the whole story on rents or they are not telling the whole story on incomes. As a result, they do not provide any insight into issues of housing affordability.

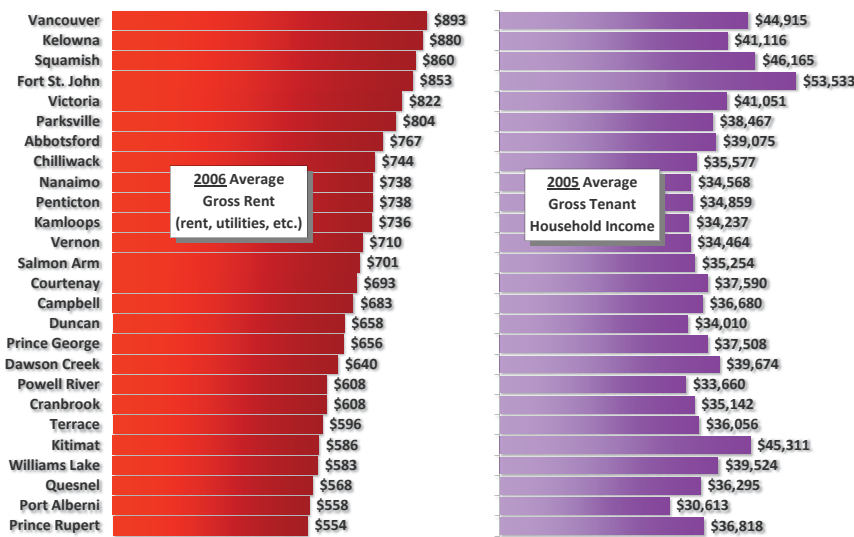
The reason that the rent-to-income ratio, as it is calculated by Statistics Canada, cannot be used to identify housing affordability problems, is that it is a “derived variable” using data from two different time periods. On page 39 of the long-form Census questionnaire, households are asked to report their housing costs, including, for tenants, current (2006) cash rent plus current payments for electricity, oil, gas, coal, wood or other fuels, water, and other municipal services. As tenant households pay rent every month, there is little reason to presume that they would overstate (or understate) what they pay; thus, the rent

component of the housing affordability equation can be considered reasonable. What these data show is a wide range of average rents across the urban regions of the province, from a high of \$893 per month in the Vancouver CMA to a low of \$554 per month in the Prince Rupert CA (Figure 3).

If the rents are reasonable, then the unreasonable rent-to-income ratios must result from the reported incomes being too low. This is not to suggest that tenant households intentionally under-report their income when the government asks them about it. Rather, the problem is that the income used in Statistics Canada’s rent-to-income calculation is not the income that the rent is being paid from.

Figure 3

**Tenant Shelter Costs in British Columbia's Urban Communities
CMAs & CAs, 2006**



Earlier in the 2006 long-form Census questionnaire, on pages 32 to 36, respondents are asked to provide income information for each person in the household for the year ending December 31, 2005, with the results being summed across all household members to calculate total household income. In addition to the range of (2006) average gross rents seen throughout British Columbia, Figure 3 also shows there is a wide range of (2005) tenant household incomes, ranging from a high of \$53,533 in the Fort St. John CA to a low of \$30,613 in the Port Alberni CA.

Together, these data—2006 gross rent and 2005 tenant household income—are used by Statistics Canada to produce, or “derive”, the Census-based rent-to-income statistic. If incomes did not change from year to year, such a calculation might make sense; however, incomes do change, and in some cases dramatically. Between 2005 and 2006, the average weekly wage rate in British Columbia increased by 3.1 percent (from \$704.49 to \$726.02), employment increased by 3.1 percent (from 2,130,500 to 2,195,500 employed workers), and the unemployment rate fell from 5.9 percent to 4.8 percent (with the number of persons unemployed falling from 132,900 in 2005 to 109,600 in 2006, a drop of 17.5 percent).⁶ Combined, these

⁵ This was calculated by comparing the number of non-farm, non-reserve tenant households in the Vancouver CMA with incomes (281,045) with the number of non-farm, non-reserve tenant households in the Vancouver CMA in total (283,755). These data can be found in Statistics Canada’s household tabulations, catalogue numbers 97-554-XCB2006053 and. 97-563-XCB2006049.

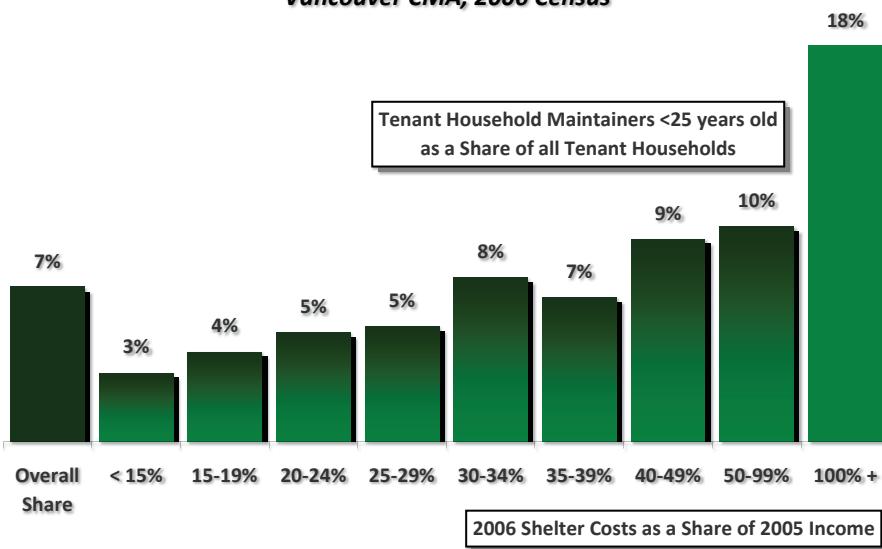
⁶ 2009 Labour Force Survey.

changes would have increased tenant household incomes noticeably between 2005 and 2006, with the 2006 income that the 2006 rent was being paid out of being larger than the 2005 income. Hence, current rent-to-income ratios would be lower than those calculated by Statistics Canada.

In addition to the aggregate year-to-year changes to incomes that occur, some groups experience unique year-to-year changes in household income. For example, both the income earned and rent paid by young labour force entrants increases dramatically as they make the transition from living at home and not paying rent in one year, to earning a steady pay cheque and renting an apartment in the next. Thus, using the 2006 rent/2005 income derivation as a measure of housing affordability, where the measure includes rent paid in one year but the income earned in the previous year, will misrepresent the situation being experienced by younger households, as some who paid rent in 2006 may not have had incomes

Figure 4

Age of Household Maintainer and Shelter Costs
Vancouver CMA, 2006 Census



in 2005. This is further compounded for this group by the fact that “the income concept excludes ... loan payments received”.⁷ While perhaps making sense on some level, student loans are what many students use to pay their rent.

While the impact of income change on the rent-to-income calculations for younger households cannot be directly measured with currently-available data, its significant magnitude can be inferred. Tenant households maintained by a person under the age of 25 only account for seven percent of all tenant households, but 18 percent of all households spending 100 percent or more of last year’s income on this year’s rent (Figure 4). The Census-based rent-to-income measures overstate the proportion of income spent on rent

because they do not account for the general and specific year-to-year changes in incomes.

When experts trot out Statistics Canada’s calculations in discussions of housing affordability, they rarely mention that the data are for two different time periods. The reason they do not mention this fact is that it is hard for data users to discover that the data are not actually from the same year, because it is rarely mentioned on Statistics Canada’s tables. One has to dig down into the table footnotes to find the relevant details.⁸

Total - Gross rent as a percentage of 2005 household income
Refers to the proportion of average monthly 2005 total household income which is spent on gross rent.

The relatively high shelter costs to household income ratios for some households may have resulted from the difference in the reference period for shelter costs and household income data. The reference period for shelter costs data is 2006, while household income is reported for the year 2005. As well, for some households, the 2005 household income may represent income for only part of the year.

⁷ Statistics Canada: <http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?TABID=1&LANG=E&A=R&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=933&GID=838071&GK=10&GRP=1&O=D&PID=96272&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=0&Temporal=2006&THEME=81&VID=0&VNAMEE=&VNAMEF=&D1=4&D2=0&D3=0&D4=0&D5=0&D6=0>

⁸ Statistics Canada, catalogue number 97-554-XCB2006051.

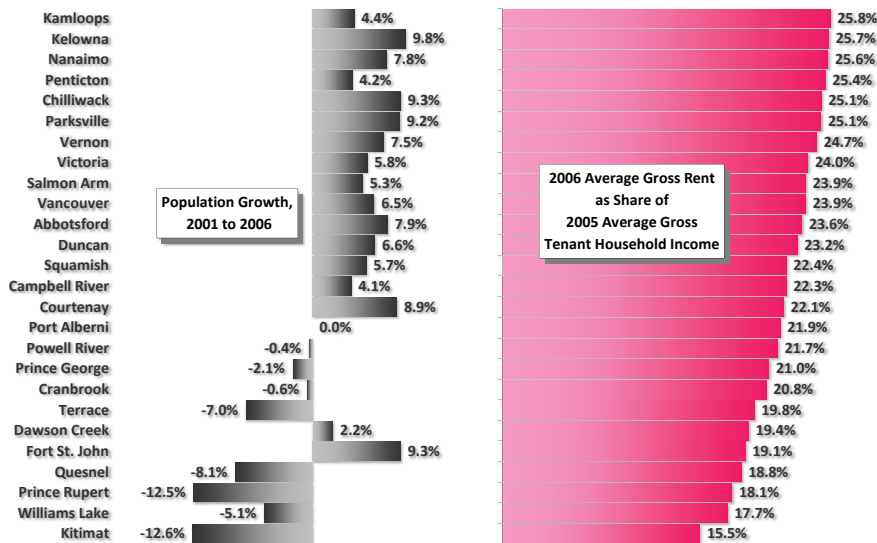
Given the table's title—"Gross rent as a percentage of 2005 household income", not "2006 Gross rent as a percentage of 2005 household income"—it is not surprising that people referencing these data are not generally aware that they are relying on data that represent misleading measures of housing affordability.

Note that it is not possible to "adjust" the calculations in some way to compensate for the significant year-to-year change in some households' incomes. Knowing that all households must spend something on food, clothing, transportation, personal care, and entertainment means that households spending 100 percent or more of what they earned last year on current rent have to be excluded from the analysis, as would those spending more than, perhaps, 75 percent, or 60 percent, or 50 percent. The problem with trying to adjust these Census data to be more reflective of the actual situation is that there is no way to know when to stop excluding households, nor is there any way to identify which household's income went up or down dramatically between 2005 and 2006. The reality of not having rent and income data for the same year means that meaningful rent-to-income ratios cannot be calculated. Further, the fact that the Census does not ask tenants directly what percentage of their income they spend on rent, food, clothing, and other components of their budget means that there is no other way of using existing Census data to adequately measure housing affordability.

While the Census-based rent-to-income tabulations are not useful in identifying housing affordability issues in terms of households spending in excess of 30 percent of their income on rent, they do show

Figure 5

**Tenant Shelter Costs in British Columbia's Urban Communities
CMAs & CAs, 2006**



that the ratio of average 2006 rents to average 2005 tenant household incomes is relatively consistent across most of the province (Figure 5). This average rent-to-income ratio generally sits in the 22 percent to 26 percent range, with tenants spending roughly the same proportion of what they earned in 2005 on rent in 2006, regardless of where in the province they lived. Note, that there are some communities where this ratio fell below 22 percent, from 21.9 percent in the Port Alberni CA to 15.5 percent in the Kitimat CA. There are two types of communities in this relatively low rent-to-income group: those of the gas patch, with high incomes and population growth, and those with shrinking economies and populations, such as the Kitimat and Williams Lake CAs. In both these cases, the explanation of low

2006 rent/2005 income ratios lies with external economic conditions rather than with the rental housing market.

Overall, Figure 5 paints an interesting picture, showing that average rents account for approximately one-quarter of tenant household incomes in communities across the province; if 2005 incomes were increased by the growth in average wage rates in British Columbia to estimate 2006 incomes, all rent-to-income averages would be below one-quarter. Thus, these data indicate that on average, rental accommodation is affordable throughout British Columbia. Unfortunately, they are of no value in identifying the specific challenges that are faced by certain households in securing affordable rental housing in BC.

III Composition of Household Spending

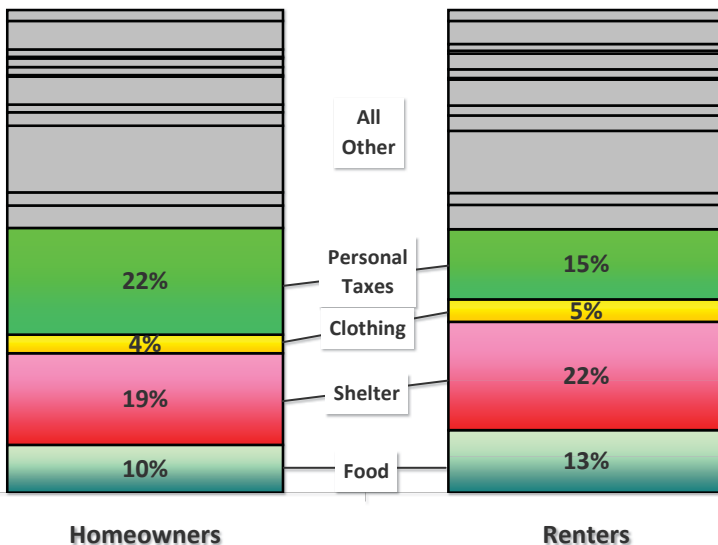
If an income-based measure of affordability is used to identify the extent and incidence of rental affordability issues in British Columbia, then it is essential to directly ask tenant households how much they spend on rent and on other items in their budget, and compare these to the income and other resources the household has to pay for them. This is the vital ingredient in the data gathering process: asking households specifically about their spending not only on shelter, but on everything from food, clothing, and transportation to health care, recreation, and taxes, as this would eliminate the situation where households are represented as spending 100 percent or more of their income on rent (shelter). It would also create a temporally-consistent measure, as households would consider all of the resources they have at their disposal in a year—including employment income, tips, gifts from parents, loans, and tax rebates—to pay for their expenditures in the same year.

Ironically, while it does not do this for the widely-used Census-based tabulations, Statistics Canada does ask for this information in another, largely unknown, survey. Every two years, the Survey of Household Spending (SHS) interviews a sample of households in every major region in Canada, gathering details of both household expenditures and sources of revenue. This sample includes both tenant households (which accounted for 36 percent of the sample in BC in the 2008 survey) and owner-occupied households. Unfortunately, tabulations of these survey data that include spending details by household tenure (tenant- versus owner-occupied) and income group are not made publicly-available for individual regions in Canada. That being said, it is useful to briefly consider the data from the SHS that are made publicly-available.

According to the survey, while tenant and owner-occupier households in Canada each spent 55 percent of their income on the basics in 2008—food, shelter, clothing, and taxes—tenants spent more on shelter

Figure 6

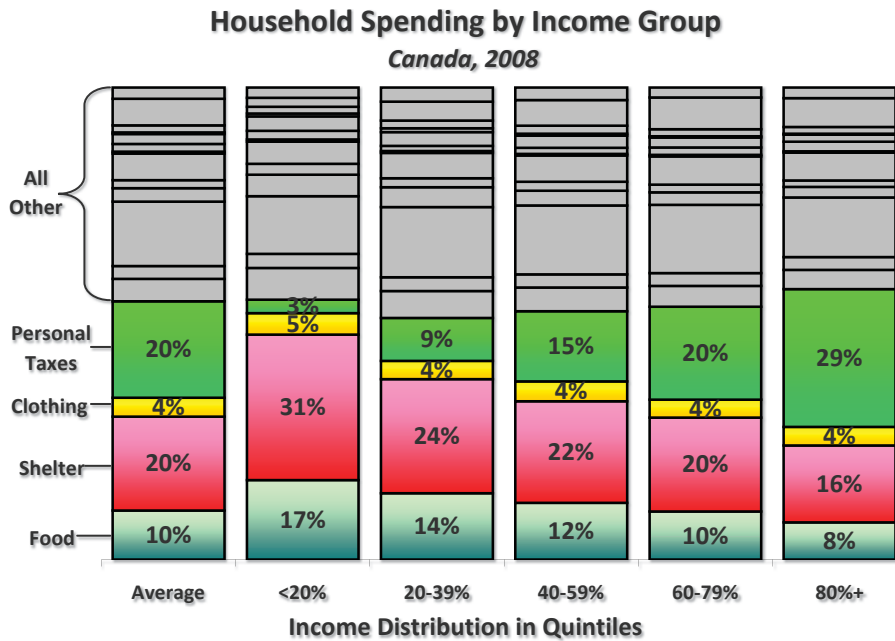
Household Spending by Tenure
Canada, 2008



than their owner-occupier counterparts: 22 percent (\$9,665 spent on shelter out of \$42,989 of income) versus 19 percent (\$16,312 out of \$85,789, Figure 6). These two averages are well below the 30 percent shelter cost-to-income threshold, showing that, on average, there is not a widespread occupancy affordability problem for tenants in Canada. As averages, however, they do not provide any insight into the extent or specific nature of existing affordability issues that some tenant households are facing.

From an affordability perspective, a slightly more useful data set from the most recent SHS is shown in Figure 7, which describes the composition of household spending by household income quintile (each quintile represents 20 percent, or one-fifth, of all households) in Canada in 2008. Again, the data show that in all income groups, approximately 55 percent of income is spent on the basics. The highest-earning 20 percent of households spend the most on personal taxes as a percentage of their income, and the

Figure 7



least on food and shelter.⁹ Using the generally-accepted 30 percent shelter cost-to-income affordability threshold, the data show that the top 80 percent of households (in terms of income) in Canada do not, on average and overall, have an affordability problem.

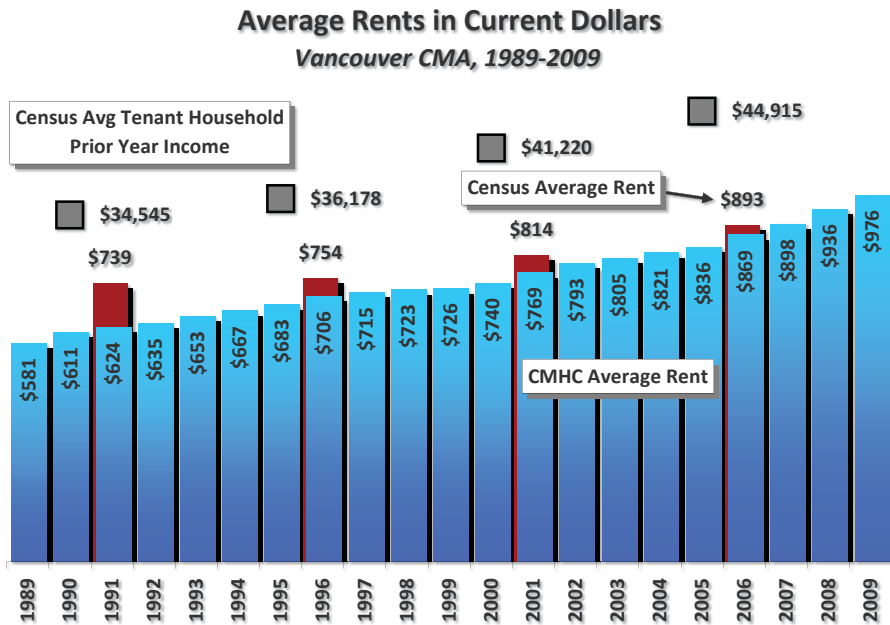
The lowest-earning one-fifth of households in Canada, with a 31 percent shelter cost-to-income ratio, are on average essentially at the generally-accepted affordability threshold. However, as these data do not provide any insight into the distribution of spending around this average, they do not identify the extent to which some households have an affordability problem, nor do they reveal which households are specifically affected.

⁹ As this report is concerned with housing affordability, non-shelter spending is considered insofar as its inclusion in the data precludes the situation where households are spending extremely high percentages of their income, or percentages equal to or in excess of their income.

IV Other Rental Market Information

It is useful to close the discussion of existing measures of housing affordability by considering a final source of rental market information: Canada Mortgage and Housing Corporation's (CMHC) Rental Market Report, which details rents and indices of affordability for major regions throughout Canada. While CMHC does not address the incidence or extent of housing affordability problems for the entire rental market (as it only considers average rents in the purpose-built rental stock¹⁰), it does provide some comparative information with respect to the data gathered by Statistics Canada.

Figure 8



As background, the Census shows that average (gross) rents for the total occupied rental housing stock in the Vancouver CMA increased by 21 percent between 1991 (\$739) and 2006 (\$893), with tenant household incomes for the preceding years increasing by 30 percent (from \$34,545 in 1990 to \$44,915 in 2005, Figure 8). This indicates that the ratio of current-year rent to previous-year income for tenant households fell slightly from 26 percent to 24 percent between 1990 and 2005, with this ratio generally prevailing at each Census date.

The average rent data for purpose-built rental units from the CMHC survey show a corresponding pattern of growth, with rents increasing by 39 percent between 1991 and 2006, going from \$624 to

\$869. Average rents for the purpose-built stock have always been less than that for the total housing stock, reflecting the compositional differences between purpose-built rental units in CMHC's survey and the rest of the rental universe included in Statistics Canada's. This gap, however, has consistently shrunk over the past two decades: rents in the purpose-built segment have increased faster than in the rest of the rental stock, which is partly attributable to changes in the composition of the rental stock being sampled by CMHC.¹¹

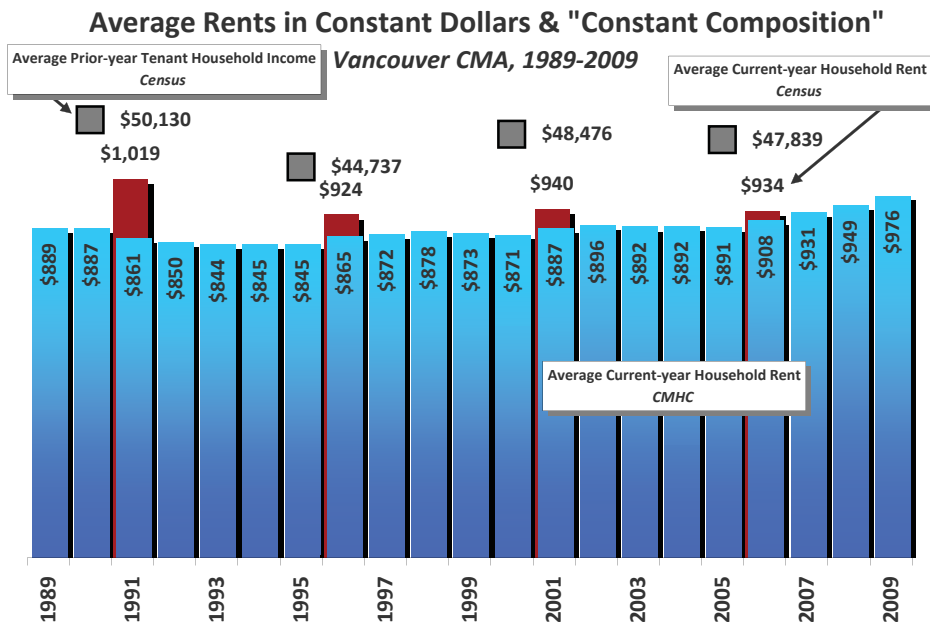
To adjust for the compositional differences, CMHC's constant-composition index for changes in rents for the 2006 to 2009 period was used to adjust recent current-dollar rents. In conjunction with this, changes in the Vancouver CMA Consumer Price Index (CPI) from 1989 to 2009 were used to consider the pattern of constant-dollar rents in the Vancouver CMA over the past two decades relative to Census average tenant household incomes and Census average rents (Figure 9).

The picture that this paints is one of relative constancy over the past two decades, with average constant-dollar tenant household incomes falling slightly from \$50,130 in 1990 to \$47,849 in 2005 (a five percent

¹⁰ CMHC collects rental market information from building owners and managers for units in privately-initiated apartment structures of three or more units ("purpose-built rental buildings"). Units in publicly-owned buildings, secondary suites in private dwellings, rented condos, and rented houses are excluded from their data samples.

¹¹ More specifically, CMHC notes that the increasing rents are partly a function "changes in the composition of the rental universe (e.g. the inclusion of newly-built luxury rental buildings in the survey, rental units being renovated/upgraded, or changing tenants would put upward pressure on average rents in comparison to the previous year) as well as by the rent level movements (e.g. increase/decrease in the level of rents that landlords charge their tenants)."

Figure 9



drop), and Census average constant-dollar rents falling from \$1,019 in 1991 to \$934 in 2006 (an eight percent decline). As both Census rents and incomes were adjusted using changes in the CPI, the constant-dollar rent-to-income ratios remain essentially the same as they were for current-dollar estimates (ranging between 23 and 25 percent over the period). Over the same period, constant-dollar rents in the purpose-built stock as measured by CMHC increased from \$861 to \$908, a five percent increase. It is worth noting here that differences in the rents, and in the rate of change in rents, from the two sources can likely be attributed to the differences in statistical definitions, sampling methodologies, and the rental universes being sampled.

Despite their differences, the two approaches to measuring rents reveal that average rents in the Vancouver CMA did not, when adjusted for inflation and for composition, change significantly between 1991 and 2006 (an observation that applies equally to tenant household incomes over the same period). It should be noted, however, that more recently inflation- and composition-adjusted CMHC average rents have increased beyond their long-term historical trend, to an estimated \$976 in 2009. While interesting, consideration of CMHC's estimates of average rents does not shed any light on issues of affordability, as it is necessary to consider these changes in the context of changes to the other dimension of the affordability equation, income.

In this regard, CMHC provides indices of rental affordability, introducing a revised affordability index in 2009 that:

"Examines a three-year moving average of median income of renter households and compares it to the median rent for a two-bedroom apartment in that centre. More specifically, the level of income required for a household to rent a median priced two-bedroom apartment, using 30 per cent of its income, is calculated. The three-year moving average of median income of households in a centre is then divided by this required income. The resulting number is then multiplied by 100 to form the indicator. An indicator value of 100 indicates that 30 per cent of the median income of renter households is necessary to rent a two-bedroom apartment going at the median rental rate. A value above 100 indicates that less than 30 per cent of the median income is required to rent a two-bedroom apartment, conversely, a value below 100 indicates that more than 30 per cent of the median income is required to rent the same unit. In general, as the indicator increases, the market becomes more affordable; as the indicator declines, the market becomes less affordable.

"The rental affordability indicator in Vancouver stood at 98 for 2009, a decline from last year's value of 99."

As with the Census tenant affordability measure, this raises questions about the measure itself rather than providing insight into the extent or incidence of affordability problems. As with Statistics Canada's

calculations, a historical income figure—the average of the previous three years—is used in conjunction with a current-rent figure, with such a calculation overstating the rent-to-income ratio whenever incomes increase. For example, as the average weekly wage rate in British Columbia increased by 2.5 percent between 2008 and 2009 then, all other things equal, use of the current-year income out of which rent is paid would have resulted in the indicator being above 100, hence showing that rental accommodation was affordable.

Further, it is difficult to understand why the median rent for two-bedroom units is used as CMHC's basis for rental costs, as its data show that the vast majority of tenants in the Vancouver CMA occupy bachelor apartments (eleven percent) and one-bedroom units (63 percent). Two-bedroom units (24 percent) and larger units (one percent) account for the minority.¹² If the median income for all tenant households is used, it would be reasonable to compare it to the median rent for all rental units. Given that the total purpose-built rental stock is dominated by smaller units that are associated with generally lower rents than two-bedroom units, a consistent and more appropriate calculation of rent and income could make rental accommodation on the whole appear more affordable, with the rental affordability indicator being above 100.

Furthermore, from a statistical perspective, the fact that the two medians lie within 98 percent of each other in 2009 does not tell us whether there is parity across the income spectrum, with all households spending 30.6 percent of their income on rent,¹³ or if some households are spending much more and others much less. The reality is that a rental affordability indicator of 98, based on three-year moving average median incomes and median rents for two-bedroom purpose-built units, is not useful in measuring occupancy affordability for tenants.

Finally, in CMHC's words, the discussion of affordability is founded on the "generally accepted rule of thumb for affordability ... that a household should spend less than 30 per cent of their gross income on housing". Ironically, it could be argued that this rule is not generally accepted, as neither CMHC nor Statistics Canada considers how much of gross incomes households actually spend on rent; they merely represent this using independent data sets. The problems associated with this approach are well-stated by CMHC in their research paper titled *An International Comparison of Housing Need Indicators in Australia, Canada, England, and the United States* (June 2004), which notes that "a number of technical flaws and degrees of imprecision are evident in current indicators [of affordability]", including "the use of a standard norm (such as 30 percent [of income spent on rent]) applied across all households, regardless of size or composition". They also acknowledge that they had "concerns ... directed at the statistical sources and data collection methods used (e.g. self-reported income and related issues of under reporting, mismatched dates for income and rent data and seasonal variance in utility costs)." The concerns are well-founded: neither CMHC's nor Statistics Canada's measure actually addresses the issue of housing affordability, as they do not provide assistance in determining who or how many of BC's households have affordability problems.

¹² CHMC, October 2010.

¹³ If 30.6 percent of tenant households' income is required to pay for their rent then the rental affordability indicator would be 98, as it was in 2009.

V Conclusion

The absence of appropriate measures of affordability is largely a function of historical precedent and a desire for a simple and singular way to describe the complex and multidimensional issues of housing markets, social dynamics, and the economy. Current measures are merely a tribute to cleverness in manipulating existing data sets that were not collected to measure housing affordability and do not describe the wide range of tenant experiences and situations. On average, current measures indicate that rental affordability problems are not systemic. Within this general framework of an affordable rental market there are households that suffer from affordability problems; however, currently-available measures, at their best, are unable to help us identify where in the province these households are, how many of them there are, and what the specific nature of each household's affordability problem is.

General rules, medians, and averages are not going to help us address affordability problems, as they do not reflect the complexity of individual households' affordability concerns. For example, a household that elects to spend 40 percent of its income on rent so that it may reside in a highly-accessible location and reduce its transportation costs to a small fraction of its budget would be seen as having a housing affordability problem, while a household that lives in a less-accessible location, devoting only 20 percent of its income to rent but having to commute long distances that requires a large proportion of its income to be spent on transportation would not. Individual circumstances and requirements—not inappropriate ratios, comparisons of incomparable data sets, and derived variables—are what must be considered in evaluations of affordability problems.

In order to specifically address the issue of housing affordability, tenant household expenditure data for all items (including shelter), delineated by household tenure (rental versus owned), would need to be tabulated for specific regions or housing market areas. While Statistics Canada does not make detailed cross-tabulated data from the SHS publicly-available, they can be purchased (although it is worth noting that there would be value in increasing the size of the sample from which the data are collected). Within such as tabulation, and with a view to informing the analysis of rental affordability, one would want to know the percentage of, or how many, tenant households there are in each income quintile (or decile) for each rent-to-income quintile (or decile). Data of this nature would address the core of the housing affordability issue, by cutting through averages and medians, by excluding higher-income earning renters who choose to spend more of their income on rent, by focusing the analysis on specific housing markets and, most importantly, by identifying those most in need. Apart from this, the only way we can know how many people, and *which* people, are actually suffering from housing affordability problems—and some people most definitely are—is to ask them.