

**Master's Report:**

**"Affordability of Purpose-Built Rental Housing for Young Adult Singles in Greater  
Vancouver CMA, 2006"**

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# **Table of Contents**

<b><u>LIST OF FIGURES.....</u></b>	<b><u>6</u></b>
<b><u>ABSTRACT .....</u></b>	<b><u>7</u></b>
<b><u>ACKNOWLEDGEMENTS.....</u></b>	<b><u>9</u></b>
<b><u>CHAPTER 1 INTRODUCTION.....</u></b>	<b><u>12</u></b>
1.0 INTRODUCTION .....	12
1.1 RESEARCH QUESTIONS .....	12
1.2 IMPORTANCE OF RESEARCH QUESTIONS .....	13
1.3 SUB-AREAS OF GREATER VANCOUVER.....	15
1.4 YOUNG ADULT SINGLES.....	16
1.5 GREATER VANCOUVER CMA'S HOUSING MARKET CONTEXT.....	18
1.6 OUTLINE OF REPORT SECTIONS .....	20
1.7 SUMMARY .....	21
<b><u>CHAPTER 2 METHODOLOGY .....</u></b>	<b><u>22</u></b>
2.0 INTRODUCTION .....	22
2.1 RESEARCH APPROACH:.....	22
2.2 MEASURES OF HOUSING AFFORDABILITY .....	22
2.3 PARAMETERS FOR RESEARCH .....	24
2.4 SELECTION OF CASE STUDY AREA.....	25
2.5 METHODS AND DATA SOURCES .....	26
2.5.1 INDIVIDUAL INCOME DATA.....	28
2.5.2 HOUSING COSTS .....	28
2.5.3 AFFORDABILITY MEASURES METHOD #1 .....	29
2.5.4 AFFORDABILITY MEASUREMENT METHOD #2.....	29
2.6 DEFINITIONS .....	30
2.7 DATA CONSIDERATIONS.....	32
2.7.1 RELIABILITY .....	32
2.7.2 LIMITATIONS .....	32
2.7.3 GENERALIZABILITY .....	34
2.8 SUMMARY.....	34
3.0 INTRODUCTION.....	36
3.1 RESULTS BY UNIT TYPE .....	36
3.2 RESULTS BY SUB-AREA .....	37
3.3 RESULTS BY INCOME QUARTILE .....	39
3.4 SUMMARY.....	41
<b><u>CHAPTER 4 RESULTS FROM METHOD #2: .....</u></b>	<b><u>42</u></b>

4.0	INTRODUCTION .....	42
4.1	RESULTS BY UNIT TYPE .....	42
4.2	RESULTS BY SUB-AREA .....	43
4.3	RESULTS BY INCOME QUARTILE .....	46
4.4	SUMMARY.....	47

**CHAPTER 5 DISCUSSION OF AFFORDABILITY ANALYSIS..... 50**

5.0	INTRODUCTION .....	50
5.1	RESULTS FOR RESEARCH QUESTIONS.....	50
5.2	COMPARISON TO DUNNING'S STUDY .....	52
5.3	COMPARISON TO ACTUAL RENTAL EXPENDITURES .....	53
5.4	SUMMARY.....	55

**CHAPTER 6 COPING WITH HOUSING UNAFFORDABILITY..... 58**

6.0	INTRODUCTION .....	58
6.1	COPING STRATEGIES IN GENERAL .....	58
6.2	HOUSING RELATED STRATEGIES .....	59
6.3	WORK-RELATED STRATEGIES .....	61
6.4	EXPENDITURE-RELATED STRATEGIES.....	62
6.5	FAMILY HELP STRATEGIES.....	63
6.6	SUMMARY.....	63

**CHAPTER 7 IMPLICATIONS FOR RESEARCH AND FOR PLANNERS AND CONCLUSION..... 66**

7.0	INTRODUCTION .....	66
7.1	IMPLICATIONS FOR RESEARCH .....	66
7.2	IMPLICATIONS FOR PLANNERS .....	68
7.3	CONCLUSION .....	70

**REFERENCES ..... 72**

**APPENDICES ..... 76**

APPENDIX 1: PERCENTAGE OF TOTAL POPULATION THAT WAS COMPOSED OF YOUNG ADULT SINGLES (AGES 18 TO 29), BY SIX LARGEST CANADIAN CMAS, 2006.....	76
APPENDIX 2: LIST OF SOME OF THE MUNICIPAL AND PROVINCIAL HOUSING STRATEGIES IN B.C. AND GENERAL HOUSING MARKET INFORMATION SOURCES.....	76
APPENDIX 3: PERCENTAGE OF YOUNG ADULTS THAT WERE SINGLE, BY SIX LARGEST CANADIAN CMAS, 2006. ....	78
APPENDIX 4: TOTAL NUMBER OF YOUNG ADULTS, NUMBER OF YOUNG ADULT SINGLES, AND PERCENTAGE OF YOUNG ADULTS THAT WERE SINGLE, BY GREATER VANCOUVER SUB-AREA, 2006.....	78
APPENDIX 5: PERCENTAGE OF YOUNG ADULT SINGLES THAT LIVED WITH PARENTS OR RELATIVES, ROOMMATES, OR ALONE, BY SIX LARGEST CANADIAN CMAS, 2006. ....	79

<b>APPENDIX 6: MEDIAN INCOMES OF YOUNG ADULT SINGLES, BY SIX LARGEST CANADIAN CMAS, 2006.....</b>	<b>79</b>
<b>APPENDIX 7: AVERAGE RENTS FOR BACHELOR, 1 BEDROOM, AND 2 BEDROOM PURPOSE-BUILT RENTAL UNITS, BY SIX LARGEST CANADIAN CMAS, 2006.....</b>	<b>80</b>
<b>APPENDIX 8: AVERAGE RENTS FOR BACHELOR, 1 BEDROOM, AND 2 BEDROOM PURPOSE-BUILT RENTAL APARTMENT UNITS, BY GREATER VANCOUVER SUB-AREA, 2006.....</b>	<b>80</b>
<b>APPENDIX 9: NUMBER OF PURPOSE-BUILT RENTAL BACHELOR, 1 BEDROOM, 2 BEDROOM UNITS, 3+ BEDROOM UNITS, AND TOTAL UNITS, BY GREATER VANCOUVER SUB-AREA, 2006.....</b>	<b>81</b>
<b>APPENDIX 10: PERCENTAGE OF RENTAL HOUSING STOCK IN DIFFERENT TYPES OF RENTAL HOUSING, GREATER VANCOUVER SUB-AREAS, 2009. ....</b>	<b>82</b>
<b>APPENDIX 11: QUERY USED IN PUMF TO DETERMINE NUMBER OF YOUNG ADULTS IN DIFFERENT INCOME RANGES. ....</b>	<b>83</b>
<b>APPENDIX 12: FORMULAS UTILIZED FOR THE CALCULATION OF 1ST QUARTILE POINT , M, AND 3RD QUARTILE POINT INCOMES .....</b>	<b>83</b>
<b>APPENDIX 13: CALCULATION OF AVERAGE RENTS FOR PURPOSE-BUILT BACHELOR, 1 BEDROOM, AND 2 BEDROOM UNITS, BY SUB-AREA. ....</b>	<b>83</b>
<b>APPENDIX 14: CALCULATION OF AFFORDABILITY OF DIFFERENT HOUSING UNIT TYPES FOR LOW R/I FOR 1ST QUARTILE INCOME POINT INDIVIDUALS (E.G. BURNABY- NEW WEST SUB-AREAS) - METHOD #1. ....</b>	<b>84</b>
<b>APPENDIX 15: CALCULATION OF AFFORDABILITY FOR METHOD #2. ....</b>	<b>85</b>
<b>APPENDIX 16: HIGH AND LOW R/I PERCENTAGES FOR DIFFERENT INCOME QUARTILE YOUNG ADULT SINGLES, BY GREATER VANCOUVER SUB-AREA, FOR BACHELOR UNITS, 2006.....</b>	<b>85</b>
<b>APPENDIX 17: HIGH AND LOW R/I PERCENTAGES FOR DIFFERENT INCOME QUARTILE YOUNG ADULT SINGLES, BY GREATER VANCOUVER SUB-AREA, FOR 1 BEDROOM UNITS, 2006. ....</b>	<b>86</b>
<b>APPENDIX 18: HIGH AND LOW R/I PERCENTAGES FOR DIFFERENT INCOME QUARTILE YOUNG ADULT SINGLES BY GREATER VANCOUVER SUB-AREA, FOR 2 BEDROOM UNITS, 2006. ....</b>	<b>87</b>
<b>APPENDIX 19: PERCENTAGE OF YOUNG ADULT SINGLES WHO COULD HAVE 'AFFORDED' 'AVERAGE RENT' BACHELOR UNITS, BY GREATER VANCOUVER SUB-AREA, 2006. ....</b>	<b>89</b>
<b>APPENDIX 20: PERCENTAGE OF YOUNG ADULT SINGLES WHO COULD HAVE 'AFFORDED' 'AVERAGE RENT' 1 BEDROOM UNITS, BY GREATER VANCOUVER SUB-AREA, 2006. ....</b>	<b>90</b>
<b>APPENDIX 21: PERCENTAGE OF YOUNG ADULT SINGLES WHO COULD HAVE 'AFFORDED' 'AVERAGE RENT' 2 BEDROOM UNITS, BY GREATER VANCOUVER SUB-AREA, 2006. ....</b>	<b>91</b>

## List of Figures

Figure 1: Greater Vancouver Census Metropolitan Area (CMA) Sub-Areas.....	16
Figure 2: Parameters for Research .....	24
Figure 3: Sub-Areas and their Municipalities .....	26
Figure 4: Sources of Income and Rent Data .....	27
Figure 5: Limitations of Research.....	32
Figure 6: R/I ratios for a median income individual, by unit type, Greater Vancouver CMA. ....	36
Figure 7: R/I ratios for median income individuals, bachelor units, Greater Vancouver Sub-Areas, 2006.....	38
Figure 8: R/I ratio for median income individuals for 1 bedroom units, Greater Vancouver sub-areas, 2006.....	38
Figure 9: High R/I ratio for median income young adult singles for 2 bedroom units, Greater Vancouver sub-areas, 2006.....	39
Figure 10: High and low R/I ratios for individuals in different income quartiles, Greater Vancouver CMA, 2006.....	40
Figure 11: Percentage of individuals who could have afforded (based on spending less than 30% of income and less than 50% of income) different housing unit types, Greater Vancouver CMA, 2006.....	43
Figure 12: Percentage of individuals who could have afforded (based on core housing need thresholds) bachelor units, by Greater Vancouver sub-area, 2006.....	45
Figure 13: Percentage of individuals who could have afforded (based on core housing need thresholds) 1 bedroom units, by Greater Vancouver sub-area, 2006. ....	45
Figure 14: Percentage of young adult singles who could have afforded (based on core housing need thresholds) 2 bedroom units, by Greater Vancouver sub-area, 2006. ....	46
Figure 15: Percentage of individuals spending over 30% or 50% of their income on housing expenses, Greater Vancouver CMA, 2006.....	55

## **Abstract**

This study examined the affordability of purpose-built rental housing for young adult singles (ages 18 to 29) in the Greater Vancouver CMA. The aim of the report was to determine the affordability of different types of rental units (bachelor, 1 bedroom, and 2 bedroom), as well as units within different sub-areas of the Greater Vancouver CMA, and affordability of units for young adult singles in different income quartiles. This was completed using two methodologies. Both methods utilized an 'ability to afford' approach. The first method calculated the rent to income ratio that young adult singles in different income quartiles would have to have spent in order to afford 'average rent' units of different types in different sub-areas. The second method calculated the percentage of young adult singles who could have afforded to rent different types of units in different sub-areas. Both methods used income data from the 2006 Canadian census and rent data from Canada Mortgage and Housing Corporation's 2006 rental market report for the Greater Vancouver CMA.

The study found that sharing a 2 bedroom unit with 1 roommate was generally a more affordable option than living in a bachelor or 1 bedroom unit alone. Inner sub-areas and the central sub-area were found to be less affordable than the outer sub-areas in regards to rent. Finally, only the highest income young adult singles (those in the 4th quartile group) were able to afford most types of units in most sub-areas. The overall findings of the study were that young adult singles did not have high enough incomes to afford most types of purpose-built rental housing. The study was then compared to 'actual rent to income percentages' from 2006 Census data in a study for the City of Vancouver done by Will Dunning. The study was also compared to 'actual rent to

income percentages' from a Statistics Canada topic-based tabulation for the Greater Vancouver CMA. The 'actual rent to income percentages' indicated that there was a rental housing affordability problem for young adult singles in the Greater Vancouver CMA as well.

The study then examined some coping strategies that might be used by young adult singles to deal with the expensive housing market. These strategies included living with parents, living with roommates, and living in secondary suites instead of purpose-built rental units. There have been no studies completed in the Greater Vancouver CMA on how young adult singles (and young adults in general) cope with high housing costs.

Several recommendations for future research came out of this study. First, there is a need for qualitative studies (based on interviews etc.) similar to some studies done in the United Kingdom on methods used by young adult singles in coping with expensive housing markets. There is also a need for more quantitative research on housing affordability for young adult singles and a need for more information on secondary suites so that they can be included in analysis.

Several recommendations for planners also came out of this study. As young adult singles are a large population in the Greater Vancouver CMA, the housing needs of this group need to be addressed in municipal housing strategies. In addition, it is recommended that housing planners help encourage the development of 2 bedroom units for affordable housing, which when shared with a roommate, are more affordable than a single occupancy bachelor or 1 bedroom unit. As young adult singles have low incomes compared to the population as a whole, measures to raise incomes are also recommended.



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# Chapter 1 Introduction

## 1.0 Introduction

In 2006, young adult singles (ages 18 to 29) represented approximately 12.6% of Greater Vancouver's population or approximately 263,750 people. Despite the size of this sub-population and the high housing costs in Greater Vancouver that could severely affect their abilities to own or rent homes, there has been very little research completed on housing affordability for this group. This report aims to investigate the affordability of rental housing for young adult singles in the Greater Vancouver area. This report may be referred to as 'the Master's report' when appropriate throughout the report. Appendices 1-10 provide additional information on the topics discussed in the introduction.

## 1.1 Research Questions

This report examines the rental housing affordability for young adult singles and addresses three research questions:

1. How affordable were different purpose-built rental unit types (bachelor, 1 bedroom, 2 bedrooms) for young adult singles?
2. How did purpose-built rental housing<sup>1</sup> affordability vary by sub-area of Greater Vancouver<sup>2</sup>?
3. How affordable were different purpose-built rental unit types for young adult singles in different income quartile groups?

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<sup>1</sup> - Purpose-built rental housing is the term in CMHC rental market reports that refers to what is often called the 'primary rental market'.

<sup>2</sup> - The limitation of unit type to purpose-built rental units will be discussed in Section 2.3

The definition of affordability and how it was measured are discussed in the Chapter 2, as well as the reasons for the parameters shown in these questions (e.g. why only purpose-built rental housing was investigated). The methodology focused on the 'ability to afford' situation (i.e. determining affordability of purpose-built rental units for all young adult singles regardless of their real current living arrangement) because of the limited availability of data on how much young adult singles actually spent on rental housing. Affordability was examined for 2006 due to income data limitations for more recent years. The research included only purpose-built rental bachelor, 1 bedroom, and 2 bedroom unit types because of limited data on the secondary rental market.

## **1.2 Importance of Research Questions**

Young adult singles made up a significant percentage of Greater Vancouver's population in 2006. With generally low incomes compared to other groups<sup>3</sup>, they are potentially vulnerable to housing affordability issues<sup>4</sup>. Although most municipalities in the Greater Vancouver CMA have completed housing strategies and reports, there has been relatively little research completed on the housing situations of young adult singles (or young adults in general) in Greater Vancouver or British Columbia. Young adults have been included in limited detail in some housing reports such as Will Dunning's "Rental Housing Strategy 1" report for the City of Vancouver<sup>5</sup> and the City of Squamish's "Affordable Housing Strategy"<sup>6</sup>. When young adults have been the topic of whole reports, it has generally been in the context of young adults who are homeless or have

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<sup>3</sup> - Statistics Canada, 2010.

<sup>4</sup> - Moore and Skaburskis, 2004.

<sup>5</sup> - Dunning, 2009.

<sup>6</sup> - Squamish, 2005.

various mental health or drug addiction issues, for example, Kraus and Woodward's "Vancouver Youth Housing Options" report<sup>7</sup>. Therefore, this report fills a void in the research on housing affordability for young adult singles in Greater Vancouver.

Based on previous research and the types of social housing assistance provided in the past, it appears that there has been low priority given to the housing needs of young adult singles in the Vancouver area as elsewhere in Canada. Subsidized affordable housing to address affordable housing needs has been targeted at seniors, those with disabilities, and low-income families, especially those with single parents<sup>8</sup>. Even though many young adult singles face similar and severe housing affordability problems in the Vancouver area, the rationale for meeting their needs has not been discussed.

One factor to explain this gap may be that the needs of this group are perceived as being related to their temporary low-income status. It may be assumed that their incomes will increase over a few years as they establish themselves in the workforce. However, young adults play an important role in the local workforce. A high housing cost burden may be a disincentive for them to take entry level positions in the area. This, in turn, can create difficulties for economic and business development. The impacts of housing costs on labour markets was beyond the scope of the current research and additional research is required on these factors.

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<sup>7</sup> - Kraus and Woodward, 2007.

<sup>8</sup> - BC Housing, 2010.

### **1.3 Sub-Areas of Greater Vancouver**

This report examines sub-areas in Greater Vancouver Census Metropolitan Area (herein referred to as 'CMA'), based on definitions of sub-areas in Metro Vancouver's Housing Data Book<sup>9</sup> (Figure 1).

In the results and discussion sections of this report, the sub-areas were grouped into categories of central sub-area, inner sub-areas, and outer sub-areas, as determined based on reports on metropolitan areas in Canada<sup>10</sup>. The sub-areas were grouped as follows:

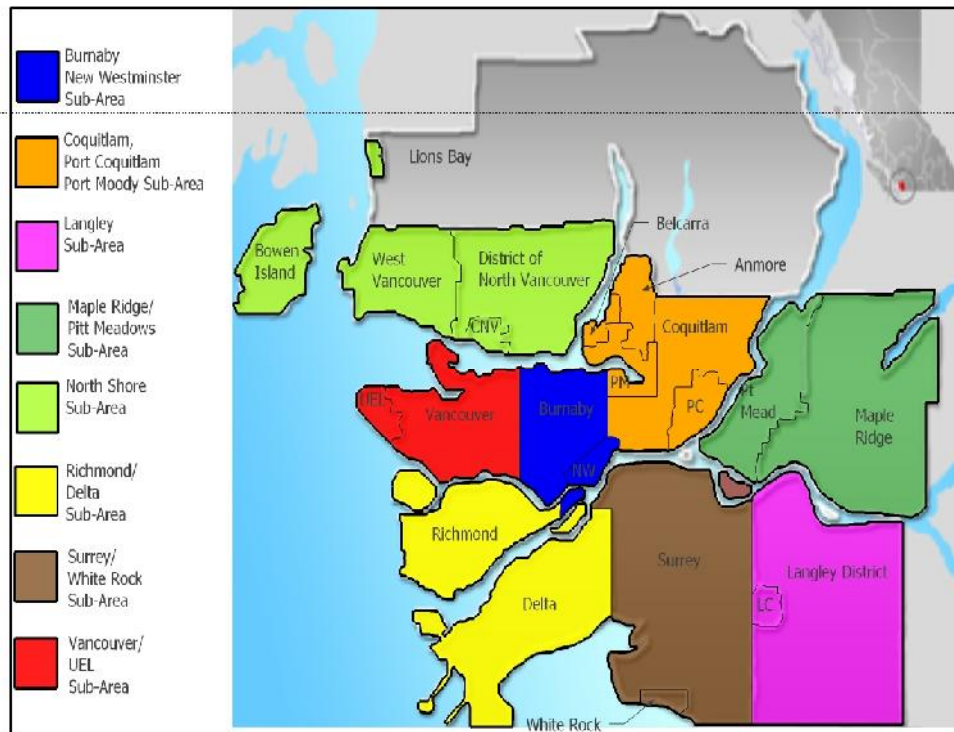
- The central sub-area included Vancouver/UEL Sub-Area.
- Inner sub-areas included the Burnaby/New Westminster Sub-Area, the Richmond/Delta Sub-Area, and the North Shore Sub-Area.
- Outer sub-areas included the Coquitlam, Port Coquitlam, and Port Moody Sub-Area, the Langley Sub-Area, the Maple Ridge/Pitt Meadows Sub-Area and the Surrey/White Rock Sub-Area

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<sup>9</sup> - Metro Vancouver, 2010.

<sup>10</sup> - Tomalty, 1997.

**Figure 1: Greater Vancouver Census Metropolitan Area (CMA) Sub-Areas**



Note: For Figure 1, CNV = City of North Vancouver, LC = Langley City, NW = City of New Westminster, PC = City of Port Coquitlam, PM = City of Port Moody, Pt Mead = Pitt Meadows, and UEL = University Endowment Lands (part of the unincorporated place of 'Electoral Area A').

### **1.4 Young Adult Singles**

There are several themes about young adult singles that are important for this report: young adult singles represented the majority of young adults in the region; most young adult singles lived with their parents and relatives; most young adults not living with their parents or relatives rented instead of owned their residence; young adult singles had relatively low incomes.



Young adult singles represented the majority of young adults in the Greater Vancouver CMA (76.6% of all young adults are young adult singles) and in other large Canadian CMAs<sup>11</sup>. This was the case in all Greater Vancouver CMA sub-areas<sup>12</sup>.

Most young adult singles in the Greater Vancouver CMA and other large metropolitan areas in Canada lived with their parents or relatives<sup>13</sup>. 76.2% of all Greater Vancouver CMA young adult singles lived with their parents or relatives, compared to the 13.2% of young adult singles who lived with roommates and the 10.6% of young adult singles who lived alone<sup>14</sup>.

Homeownership is not an option for the vast majority of young adult singles. Only 23.4% of young adult singles do not live with their parents or relatives; of those, only 23.8% own their own property<sup>15</sup>. Therefore, only 5.6% of young adult singles in the Greater Vancouver CMA live in a residence that they own. Separate studies are required to determine how many young adult singles are financially able to enter the home-ownership market and especially the influence of inherited wealth in facilitating purchase of housing.

Finally, young adult singles in Greater Vancouver CMA (median income in 2005: \$11,000/year) had low incomes compared to other people of working age (ages 15 to 64) (\$24,000/year)<sup>16</sup>, which was also a feature of other large Canadian CMAs<sup>17</sup>. Note that both the groups of young adult singles and working age people in the Greater Vancouver CMA included people who did not work during 2005 or only worked part-time. This had

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<sup>11</sup> - Statistics Canada, 2006.

<sup>12</sup> - Statistics Canada, 2006a.

<sup>13</sup> - Statistics Canada, 2006.

<sup>14</sup> - Statistics Canada, 2006.

<sup>15</sup> - Statistics Canada, 2010.

<sup>16</sup> - Statistics Canada, 2010.

<sup>17</sup> - Statistics Canada, 2010.

the effect of lowering the median incomes for both groups. The problem of low incomes of young adults in Canada (even among young adult singles working full-time) has been well-documented in government and policy studies.<sup>18</sup> Low incomes contribute to the housing affordability problems faced by young adults<sup>19</sup>.

## **1.5 Greater Vancouver CMA's Housing Market Context**

Greater Vancouver's housing market has five overarching themes of importance to this Master's report: expensive rental housing market (but less expensive than the home-ownership market); higher rents in central sub-area and inner sub-area; purpose-built rental housing primarily located in expensive inner sub-areas and central sub-area; diverse sources of rental housing stock; low vacancy rates.

First of all, malthough Greater Vancouver has an expensive rental housing market<sup>20</sup>, the rents were low relative to home-ownership housing prices<sup>21</sup>. Greater Vancouver CMA has had home-ownership housing prices far above other metropolitan areas in Canada<sup>22</sup>, although this was not the case for rental housing. While rental costs for an 'average rent' 2 bedroom purpose-built rental unit varied from \$1,045/month in 2006 to \$1,196/month in 2010 in the Greater Vancouver CMA, the homeownership costs for an 'average cost' 2 bedroom condominium were well over \$1,500/month for the Greater Vancouver CMA for the period from 2006 to 2009. In 2006, Greater Vancouver had

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<sup>18</sup> - Morisette, 1998.

<sup>19</sup> - Beaujot, 2004.

<sup>20</sup> - CMHC, 2006.

<sup>21</sup> - CMHC, 2009.

<sup>22</sup> - CMHC, 2010.

slightly higher rents than most other large metropolitan areas in Canada<sup>23</sup>, except for Toronto.

Secondly, the central area and inner sub-areas typically had higher rents for purpose-built rental housing than the outer sub-areas. The Vancouver/UEL Sub-Area (the central sub-area) had the highest 'average rent' purpose built rental units in 2006, with 2 bedroom units renting for an average of \$1,245/month in 2006<sup>24</sup>. The lowest 'average rent' purpose-built rental units in 2006 were found in the Maple Ridge/Pitt Meadows Sub-Area, an outer sub-area, with 2 bedroom units renting for an average of \$772/month<sup>25</sup>. The other sub-areas fell in between, with the inner sub-areas having higher 'average rents' than the outer sub-areas.

The affordability problem for purpose-built rental housing in Greater Vancouver was compounded by the fact that the majority of the purpose-built rental housing was located in the more expensive inner sub-areas and the central area (Appendix 9)<sup>26,27</sup>. The most expensive sub-area, the Vancouver/UEL Sub-Area, had more than half of Greater Vancouver's purpose-built bachelor (8,600 of the 11,890 purpose-built bachelor units) and 1 bedroom units (37,429 of the 65,447 purpose-built 1 bedroom units) in 2006. The inner sub-area of Burnaby/New Westminster had the second largest number of purpose-built rental units with 20,938 units in total. In contrast, the Maple Ridge/Pitt Meadows Sub-Area (an outer sub-area), had just 14 purpose-built bachelor units and 847 purpose-built 1 bedroom units in 2006. The main point is that the more expensive sub-areas have larger supplies of purpose-built rental housing than the less expensive sub-areas.

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<sup>23</sup> - CMHC, 2006a.

<sup>24</sup> - CMHC, 2006.

<sup>25</sup> - CMHC, 2006.

<sup>26</sup> - CMHC, 2006.

<sup>27</sup> - The number of purpose-built units for 2006 was used because that was the housing stock used in the affordability analysis in Chapters 3 and 4.

Greater Vancouver had diverse sources of rental housing stock. In 2009 (when data was available for the percentages of different housing stocks in Metro Vancouver's housing data book), purpose-built rental housing made up just 33% of Greater Vancouver's rental housing stock<sup>28</sup>. Secondary suites, which made up approximately 22-24% of Greater Vancouver's rental housing stock, social housing (16%), and private condominium rentals (12%) also made up significant portions of the housing stock, with other miscellaneous forms of housing stock (rented houses etc) making up the remainder of the rental housing stock. Purpose-built rental housing typically commanded higher rates than secondary suites and lower rents than condominium rentals<sup>29</sup>. Secondary suites and condominiums were not included in the affordability calculations in this Master's Report because of a lack of information available. Social housing, which had very few spaces for young adult singles<sup>30</sup>, was also not included.

Greater Vancouver typically has had one of the lowest vacancy rates in Canada in recent years, with a vacancy rate for purpose-built rental apartments of 0.7% in 2006<sup>31</sup>. This low vacancy rate severely impacted the level of choice that households had when deciding which units they could rent<sup>32</sup>.

## **1.6 Outline of Report Sections**

The remainder of this report is organized as follows. Chapter 2 discusses the methodology of this Master's Report; Chapter 3 reviews the results from method 1; Chapter 4 reviews the results from method 2. Chapter 5 provides a discussion of the

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<sup>28</sup> - Metro Vancouver, 2010.

<sup>29</sup> - Metro Vancouver, 2010.

<sup>30</sup> - BC Housing, 2010.

<sup>31</sup> - CMHC, 2006.

<sup>32</sup> - Dunning, 2009.

results in comparison to the results of Dunning's study and Statistics Canada's topic-based tabulations. Chapter 6 reviews some possible coping strategies that could be being used by young adult singles to cope with housing affordability issues. Chapter 7 provides implications for research and planners from this research as well as a conclusion to this report.

## **1.7 Summary**

Chapter 1 has provided the background context and research questions to the subjects of study in this report. Young adult singles made up the majority of young adults in Greater Vancouver. If they were not living with their parents or relatives, they were primarily renters who had to contend with an expensive rental housing market with low vacancy rates. Chapter 2 discusses the methodology that was used in the research of housing affordability for young adult singles in the Greater Vancouver CMA.

## **Chapter 2 Methodology**

### **2.0 Introduction**

This chapter describes the methodology used to study the affordability of rental housing for young adult singles ages 18 to 29 in Greater Vancouver. Appendices 11 to 15 provide additional information on methodological considerations.

### **2.1. Research Approach:**

The research used quantitative analysis methods of existing data on the affordability of housing for young adult singles aged 18 to 29 living in the Greater Vancouver area. Definitions of housing affordability were based on standard measures used in previous studies and reports on Canadian and international housing.

### **2.2 Measures of Housing Affordability**

**Affordability:** Affordability is concerned with securing some given standard of housing (or different standards) at a price or rent which does not impose, in the eyes of some third party (usually government), an unreasonable burden on household incomes<sup>33</sup>.

**Bachelor Unit:** Another term for a unit with 0 bedrooms<sup>34</sup>

**Core Housing Need:** Refers to households which are unable to afford shelter that meets adequacy, suitability, and affordability norms. If a household is spending at least 30% of

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<sup>33</sup> - Arthurson et al, 2005.

<sup>34</sup> - CMHC, 2010.

its household income on housing and is not able to afford to rent an 'average' rent unit in its area that is 'suitable' for its household size, the household is considered to be in core housing need<sup>35</sup>. For this report, this is broken down into 'Core Housing Need' as  $\geq 30\%$  and 'Severe Housing Stress' as  $\geq 50\%$  of income<sup>36</sup>. Note that 'Core Housing Need' includes individuals spending between 30% and 50% of their incomes on housing, as well as individuals spending  $\geq 50\%$  of income (i.e. severe housing stress individuals are also part of the core housing need group).

**Severe Housing Stress**<sup>37</sup>: People in core housing need and spending at least half (50% or more) of their income on housing costs<sup>38</sup>. Described by Metro Vancouver as 'extremely dire housing circumstances'<sup>39</sup>.

**Total Income**<sup>40</sup>: Refers to the total money income received from all reported sources during calendar year 2005 by persons 15 years of age and over.

**'Young Adult Single'**: Young Adult (ages 18 to 29)<sup>41</sup> currently not living with a spouse or common-law partner<sup>42</sup>. This young adult is also not the parent of a child (a single person with a child would be classified as a 'lone-parent family').<sup>43</sup>

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<sup>35</sup> - CMHC, 2011.

<sup>36</sup> - Arthurson et al, 2005.

<sup>37</sup> - Arthurson et al, 2005.

<sup>38</sup> - Metro Vancouver, 2010.

<sup>39</sup> - Metro Vancouver, 2010.

<sup>40</sup> - Statistics Canada, 2010.

<sup>41</sup> - Arnett and Tanner, 2005.

<sup>42</sup> - Statistics Canada, 2010.

<sup>43</sup> - Statistics Canada, 2010.

### 2.3. Parameters for Research

The reasons for the selection of the groups within the parameters are outlined in

Figure 2.

**Figure 2: Parameters for Research**

<u>Parameter</u>	<u>Selection</u>	<u>Reason for Selection</u>
<b>Age Range Selected</b>	18-29	Period of 'emerging' adulthood as noted by developmental psychologists <sup>44</sup> ; age range compatible with PUMF data.
<b>Group Characteristics</b>	Singles	Different housing needs than other groups (e.g. young single parents). Young adult singles are the largest group of young adults <sup>45</sup> .
<b>Time Period</b>	2006	Most recent census data for young adult singles was available from 2006. Income data was available from the 2006 census for the 2005 year.
<b>Housing Tenure and Types Considered</b>	Purpose-Built Rental Housing	Renting is the main tenure form of young adult singles <sup>46</sup> . It is beyond the scope of this Master's report to review both homeownership housing and rental housing. Furthermore, there was not enough information available on the average down-payment size in CMHC reports for young adult singles <sup>47</sup> to make accurate calculations for homeownership units. There was not adequate information available for secondary suites and condominium rentals to include them in the survey <sup>48</sup> . Social housing was not included because it was not an option for most young adult singles (due to application qualifications, a housing stock mostly for seniors and families, and a long waiting list) <sup>49</sup> . Student housing was only available to some young adult singles (who are students at particular post-secondary institutions such as UBC) and acquiring a room in student housing was considered difficult <sup>50</sup> .
<b>Number of Bedrooms</b>	Bachelor, 1 Bedroom, and 2 Bedroom Units	CMHC Rental Market Reports do not break down 3+ bedroom units into 3 bedroom, 4 bedroom, and 5 bedroom units by sub-area <sup>51</sup> . Thus, it was not possible to determine average rents for 3 bedroom units, 4 bedroom units, and 5 bedroom units.
<b>Income Ranges</b>	1st Quartile group, 2nd	Housing affordability is based on housing costs and incomes; therefore, affordability to young adult singles in different income ranges needed to be calculated. Quartile groups are used as income ranges in other housing studies <sup>52</sup> .

<sup>44</sup> - Arnett and Tanner, 2005.

<sup>45</sup> - Statistics Canada, 2010.

<sup>46</sup> - Statistics Canada, 2010.

<sup>47</sup> - CMHC, 2006.

<sup>48</sup> - CMHC, 2006.

<sup>49</sup> - BC Housing, 2010.

<sup>50</sup> - UBC Housing Registry, 2011.

<sup>51</sup> - CMHC, 2006.

<sup>52</sup> - Belsky et al, 2005.



	Quartile group, 3rd Quartile group, and 4th Quartile group.	
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## **2.4 Selection of Case Study Area**

The case study area selected was the Greater Vancouver CMA because of its renowned high housing costs<sup>53</sup> and the author's familiarity with the area. The next step involved defining the sub-areas and areas of the Greater Vancouver CMA for the research. The idea of examining the Greater Vancouver CMA by municipality was considered. The CMHC rental market report grouped some municipalities together (e.g. Langley City and Langley District are combined), while other municipalities were reported individually<sup>54</sup>. Therefore, for purposes of this report, the municipalities were grouped together into sub-areas of the Greater Vancouver CMA. The sub-areas chosen were based on the sub-areas defined by the regional planning agency for the Vancouver CMA, Metro Vancouver, in their regional growth strategy<sup>55</sup>. These sub-areas (Figure 3) are also used in Metro Vancouver's Housing Data Book for showing some of their trends and statistics<sup>56</sup>.

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<sup>53</sup> - Performance Urban Planning, 2010.

<sup>54</sup> - CMHC, 2006.

<sup>55</sup> - Metro Vancouver, 2010a.

<sup>56</sup> - Metro Vancouver, 2010.

**Figure 3: Sub-Areas and their Municipalities**

<b><u>Sub-Area</u></b>	<b><u>Constituent Municipalities</u></b>
Burnaby/New Westminster	Burnaby and New Westminster
Coquitlam, Port Coquitlam, and Port Moody	Anmore, Belcarra, Coquitlam, Port Coquitlam, and Port Moody
Langley	Langley City and Langley District
Maple Ridge/Pitt Meadows	Maple Ridge and Pitt Meadows
North Shore	Bowen Island, Lions Bay, City of North Vancouver, District Municipality of North Vancouver, and West Vancouver
Richmond/Delta	Richmond and Delta
Surrey/White Rock	Surrey and White Rock
Vancouver, UEL	Vancouver and UEL (University Endowment Lands - also known as 'electoral area a')

## **2.5 Methods and Data Sources**

Housing affordability is measured based on two factors: household incomes and housing costs<sup>57,58</sup>. Measures of housing affordability are based on benchmarks developed in the analysis of survey data including the core housing need concept used by CMHC and the percentage of income spent on housing. Quantitative data for the analysis of housing affordability was available from two major federal government sources: Statistics Canada and CMHC (Figure 4). This Master's report was based on an 'ability to afford' situation: i.e. if the whole young adult single population was renting in the purpose-built housing market, what percentage of this population could afford to pay the 'average rent'? What percentage of incomes would young adult singles in different income quartiles have to pay in order to afford the 'average rent'?. This was used because the majority of young adult singles lived with their parents; it is important to include this

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<sup>57</sup> - CMHC, 2011.

<sup>58</sup> - Clarke et al, 2009.

group to determine how affordable rental housing would have been for young adult singles as a whole. This method was also used because there was no data available by sub-area or municipality on the actual income spent on rent percentages by municipality or sub-area.

The method of using rents or housing costs as percentages of incomes is known as the 'ratio' method<sup>59,60</sup>. This method is widely-used by national housing agencies such as CMHC<sup>61</sup> due to its relative ease of calculation, understandability, and its efficiency<sup>62</sup>. However, housing experts have questioned whether or not the same affordability ratio benchmarks (e.g. 30% for core housing need) can be used for different groups<sup>63</sup>. For example, spending over 30% of income on housing costs may be more serious for single parents, who have less flexibility in their other expenditures (e.g. diapers, food for children etc.) than for young adult singles. Despite these shortcomings, the ratio measure is still considered to be a strong method for measuring housing affordability.

**Figure 4: Sources of Income and Rent Data**

<u>Data Elements</u>	<u>Surveys</u>	<u>Agency</u>	<u>Data files and Reports</u>
Individual Incomes	Census of Canada	Statistics Canada	Public Use Microdata File
Average Rents	Rental Market Surveys	CMHC	Rental Market Reports

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<sup>59</sup> - Arthurson et al, 2005.

<sup>60</sup> - Clarke et al, 2009.

<sup>61</sup> - Arthurson et al, 2005.

<sup>62</sup> - Arthurson et al, 2005.

<sup>63</sup> - Arthurson et al, 2005.

### **2.5.1 Individual Income Data**

Individual income data for young adult singles was obtained from the public use micro-data files (herein referred to as 'PUMF') from the most recent source, the 2006 Census of Canada. Census data on individual incomes represent the total individual incomes before taxes for individuals in the previous calendar year (2005).

Once the individual income data was obtained from PUMF, the 1st quartile point, the median income point, and the 3rd quartile points were calculated. These income points were used to determine the four quartiles for young adult singles.

### **2.5.2 Housing Costs**

Rent data was compiled for the various sub-areas and municipalities of the region from the 2006 CMHC rental market report<sup>64</sup>. The average rents were derived from table 1.1.2 (private apartment rents by zone and bedroom type) from the 2006 CMHC rental market report for bachelor, 1 bedroom, and 2 bedroom units. The number of units of each bedroom type by sub-area was derived from the universe number from table 1.1.3 from the 2006 CMHC rental market report.

It is noted that the CMHC rental market survey does not distinguish between whether or not utilities (such as heat, electricity etc.) are included in the rents<sup>65</sup>. The survey includes only purpose-built rental buildings with 3 or more apartment units<sup>66</sup>. No secondary suites, rental houses, or condominium (strata-titled rentals) are included in the

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<sup>64</sup> - CMHC, 2006.

<sup>65</sup> - CMHC, 2006.

<sup>66</sup> - CMHC, 2006.

private apartment average rents<sup>67</sup>. Rents were calculated using CMHC 2006 data from their rental housing market report.

### **2.5.3 Affordability Measures Method #1**

Affordability of rental housing was calculated by determining the percentage of the income of an individual that would be required to pay the average rent. The rent as a percentage of income method is widely used in numerous housing affordability reports<sup>68,69,70</sup>. This affordability indicator allowed for comparison to standard benchmarks. For example, the 30% rent/income ratio<sup>71</sup> (rent/income ratio herein referred to as 'R/I ratio') is used by CMHC as the upper end of housing affordability in defining core housing need. Severe housing stress (which is considered to be a more serious situation than core housing need) is represented by the 50% rent/income percentage by Metro Vancouver<sup>72</sup> and the Australia Housing and Research Institute<sup>73</sup>. Appendix 14 represents a sample calculation of rent/income percentage for 1st quartile point young adult singles for the Burnaby/New Westminster sub-area (calculations for other sub-areas and other income point incomes were similar).

### **2.5.4 Affordability Measurement Method #2**

Affordability method #2 provided a measure of what percentage of young adults could have afforded a particular unit type in a particular sub-area. This provides an

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<sup>67</sup> - CMHC, 2006.

<sup>68</sup> - Metro Vancouver, 2010.

<sup>69</sup> - Dunning, 2009.

<sup>70</sup> - Belsky et al, 2005.

<sup>71</sup> - CMHC, 2010.

<sup>72</sup> - Metro Vancouver, 2010.

<sup>73</sup> - Arthurson et al, 2005.

indication of how many young adult singles could potentially have had affordability problems if they were in a situation where they had to rent in the purpose-built rental housing market. This method uses the assumption that young adult singles (and other groups) should not spend 30% or more of their income on housing. This 30% measure was used to calculate the minimum income necessary to 'affordably' rent an 'average rent' unit. Then, by matching the percentage of young adult singles on the total incomes chart who had a monthly income at or above this level, the percentage of young adult singles who could have afforded this rent was calculated.

As an example, suppose the average rent for a bachelor unit in Sub-Area X is \$603/month. This would require a minimum qualifying income of \$2,010/month. However, the PUMF microdata only displays annual incomes in increments of thousands (e.g. \$20,000, then \$21,000), which we then converted to monthly incomes by dividing by 12. Therefore, instead of looking at the \$2,000/month, we look at the closest monthly income to \$2,010/month that is above \$2,010/month. This number happens to be \$2,100/month. We look at the chart and see that 22% of young adult singles earn \$2,100/month or more. Therefore, 22% of young adult singles could afford this unit.

## **2.6 Definitions**

**1st Quartile Group:** A young adult single whose income is lower than at least (3/4) 75%<sup>74</sup> of peers (other young adult singles). Short form of 1st Quartile income group young adult single. The lowest income group of young adult singles.

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<sup>74</sup> - Moore, 2007.

**1st Quartile Point Young Adult Single:** A young adult single whose income is higher than 1/4 (25%)<sup>75</sup> of peers but lower than 3/4 (75%) of peers. A lower than average income.

**2nd Quartile Group:** A young adult single whose income is higher than at least 1/4 (25%)<sup>76</sup> of peers but lower than at least 1/2 (50%) of peers. Short form of 2nd Quartile income group young adult single. The 2nd-lowest income group of young adult singles.

**Median Income Group:** A young adult single whose income that is higher than 1/2 (50%)<sup>77</sup> of peers but lower than 1/2 (50%) of peers. An 'average' income.

**3rd Quartile Group:** A young adult single whose income is higher than at least 1/2 (50%)<sup>78</sup> of peers but lower than at least 1/4 (25%) of peers. Short form of 3rd Quartile income group young adult single. The 2nd-highest income group of young adult singles.

**3rd Quartile Point Young Adult Single:** A young adult single whose income is higher than 3/4 (75%)<sup>79</sup> of peers but lower than 1/4 (25%) of peers. A higher than average income.

**4th Quartile Group:** A young adult single whose income is higher than at least 3/4 (75%)<sup>80</sup> of peers. Short form of 4th Quartile income group young adult single. The highest income group of young adult singles.

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<sup>75</sup> - Moore, 2007.

<sup>76</sup> - Moore, 2007.

<sup>77</sup> - Moore, 2007.

<sup>78</sup> - Moore, 2007.

<sup>79</sup> - Moore, 2007

<sup>80</sup> - Moore, 2007.

## 2.7 Data Considerations

Section 2.7 lists some of the data considerations in regards to reliability, limitations, and generalizability.

### 2.7.1 Reliability

PUMF is considered statistically accurate by Statistics Canada. The 2006 Census PUMF on individuals contains 844,476 individuals, representing 2.7% of the Canadian population<sup>81</sup>. The sample size of young adult singles in the Vancouver CMA was weighted by individual weighting<sup>82</sup>, resulting in an estimation of 261,187.7 young adult single responses to the income questions from the Vancouver CMA (based on an original sample of 7,060 young adult singles in the Vancouver CMA). The original data from CMHC from rental market rents that was used for this report was either rated 'a' (excellent data quality; for rents, this is a co-efficient of variation ('cv'):  $0 \leq cv \leq 2.5$ ) or 'b' (very good data quality; for rents,  $2.5 \leq cv \leq 5$ )<sup>83</sup>.

### 2.7.2 Limitations

The limitations of this report are primarily related to income data, housing data, time period, and methodology limitations, as demonstrated in Figure 5.

**Figure 5: Limitations of Research**

<b><u>Type of Limitation</u></b>	<b><u>Description of Limitation</u></b>	<b><u>Notes on Limitation</u></b>
Income	Rounding of original income data by Statistics Canada in conversion to PUMF.	Done because of privacy concerns of Statistics Canada. Results in slightly different income numbers shown in PUMF than was actually

<sup>81</sup> - Statistics Canada, 2010.

<sup>82</sup> - Statistics Canada, 2010.

<sup>83</sup> - CMHC, 2006.



		recorded by Statistics Canada.
Income	Income data for young adult singles only available for Greater Vancouver CMA, not by municipality or sub-area.	Done because of privacy concerns of Statistics Canada. Young adult singles are a mobile group <sup>84</sup> and can move within the Greater Vancouver CMA, so this lack of income data by municipality is not a major constraining factor on research.
Housing	Rent numbers from CMHC do not specify whether they include utility costs or not <sup>85</sup> .	Results in uncertainty about whether or not the average unit includes utilities or not - this is a common constraint on rental housing data. <sup>86</sup>
Housing	Data does not include data from secondary rental market.	Information available on secondary rental market, such as secondary suites and condominium rentals, is limited due to difficulties in collecting data for these unit types. This is a common limitation <sup>87</sup> for housing reports.
Housing	3+ bedroom units not included in analysis.	CMHC does not distinguish between 3 bedroom, 4 bedroom, and 5 bedroom units in their rental market reports <sup>88</sup>
Time	2006	Income data was only available from 2006 census (based on 2005 income data) and therefore, affordability could not have been calculated using 2005 incomes and 2010 rents.
Research Methods	Quantitative methods used primarily, no qualitative methods such as interviewing and focus groups used.	Future related research answering 'how' and 'why' questions <sup>89</sup> needs to use qualitative methods as well.

<sup>84</sup> - Bianchi and Casper, 2000.

<sup>85</sup> - CMHC, 2006

<sup>86</sup> - CMHC, 2006.

<sup>87</sup> - Dunning, 2009.

<sup>88</sup> - CMHC, 2006.

<sup>89</sup> - Yin, 2009.

### **2.7.3 Generalizability**

Vancouver CMA is sometimes regarded as a 'special case' in Canada in regards to housing because of its land constraints and high prices<sup>90</sup>. However, these reports typically refer to home-ownership housing. In the case of rental housing, Vancouver CMA had comparable rents in 2006 to Calgary and Toronto CMAs<sup>91</sup>, with young adult single incomes being very similar to the Toronto CMA<sup>92</sup>. It is presumable that rental housing affordability challenges also exist in other centres in Canada (and vary geographically within each metropolitan area). Therefore, studies of this kind could be carried out in other metropolitan areas.

## **2.8 Summary**

Chapter 2 described the methodology used in this report, as well as offering a critique of this methodology. The group, the study area, and the housing data were broken down into groups using various data exclusions as mentioned in Figure 2. The two data analysis methods used 'ability to afford' methods. The first method measured the percentage of income that young adult singles in different income quartiles would use to be able to afford different unit types. The second method measured the percentage of young adult singles who could afford different unit types based on minimum qualifying incomes. As in any housing affordability analysis<sup>93</sup>, limitations in housing data and income data affected the results of this analysis. Chapters 3 and 4 describe and display the results of the housing analysis performed using the methodologies described in Chapter 2.

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<sup>90</sup> - Performance Urban Planning, 2010.

<sup>91</sup> - CMHC, 2006.

<sup>92</sup> - Statistics Canada, 2010.

<sup>93</sup> - Arthurson et al, 2005.



# Chapter 3 Results from Method #1

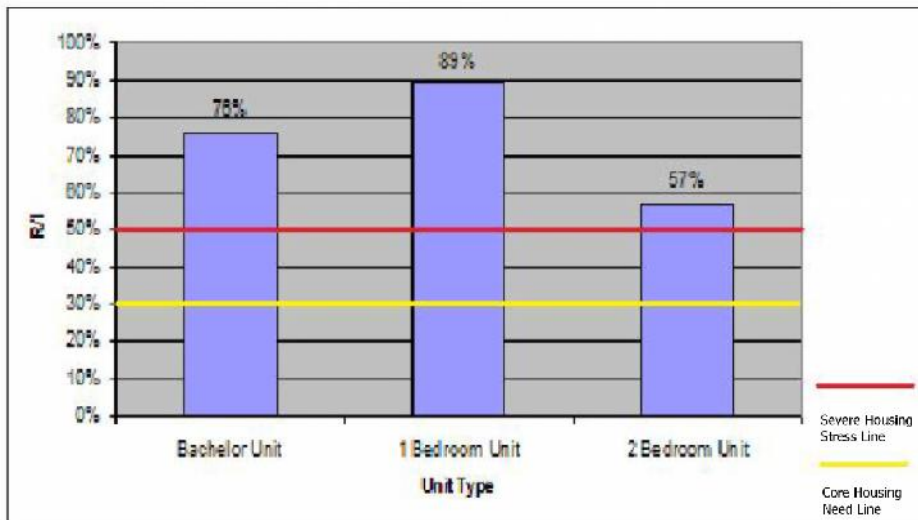
## 3.0 Introduction

Chapter 3 (as well as Appendices 16-18) describes the results obtained using method #1. As described in Chapter 2, this method determines the percentage of income (R/I ratio) that would have to be used to afford average rent units. These results are discussed in relation to unit type, sub-area, and income quartiles.

## 3.1 Results by Unit Type

In Greater Vancouver CMA as a whole, average rents for 2 bedroom units (double occupancy) had the lowest R/I percentages and required 57% of the median income individual's income. Bachelor units (single occupancy) required 76% of income and 1 bedroom units required 89% of income (single occupancy). However, all three unit types was 'unaffordable' for a median income individual, as more than 50% of their income would have to be spent on rent for each unit type (Figure 6).

**Figure 6: R/I ratios for a median income individual, by unit type, Greater Vancouver CMA.**



Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

### **3.2 Results by Sub-Area**

The Vancouver/UEL Sub-Area, the central area in our study area, had the highest R/I values for all income quartiles and all unit types and was the least affordable sub-area, followed by the inner Sub-Area of North Shore. The outer Sub-Area of Maple Ridge/Pitt Meadows had the lowest R/I values for all income quartiles and all unit types and was the most affordable sub-area, followed by the outer Sub-Area of Surrey/White Rock. Figures 7 to 9 represent the R/I percentages for 'average rent' bachelor (single occupancy), 1 bedroom (single occupancy), and 2 bedroom (double occupancy) for median income individuals.

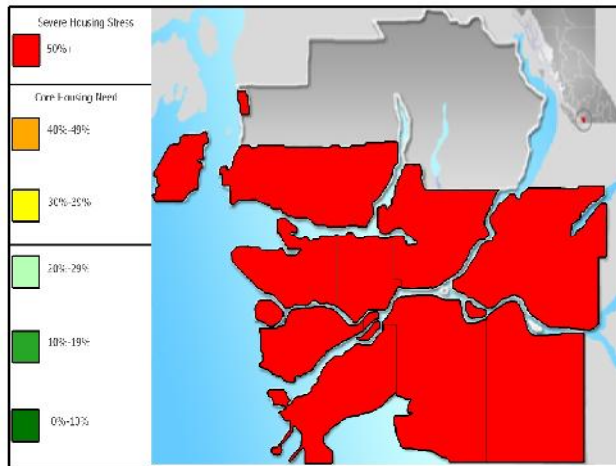
For the Vancouver/UEL Sub-Area, median income individuals would have had to have spent over 50% of their income (above the 'severe housing stress' threshold) for all unit types, from 68% for two bedroom units to 95% for 1 bedroom units.

The unit types in all inner sub-areas were also unaffordable, as all unit types in all inner sub-areas required at least 50% of income for rents. After the central Sub-Area of Vancouver/UEL mentioned in the previous paragraph, the inner Sub-Area of North Shore had the highest R/I ratios (and the lowest affordability), particularly for 1 bedroom units, which required 95% of median individual incomes.

The outer sub-areas had the lowest R/I ratios. Bachelor and 1 bedroom units in the outer sub-areas required over 50% of incomes for rents, although the R/I ratios were lower than for the inner sub-areas and the central sub-area. 2 bedroom units in all outer sub-areas fell below the 'severe housing stress' threshold of 50% but above the 'core housing need' threshold of 30%, with all of the R/I ratios being between 40% and 50%.

The outer Sub-Area of Maple Ridge/Pitt Meadows had the lowest R/I ratio for 2 bedroom units for median income individuals at 42%.

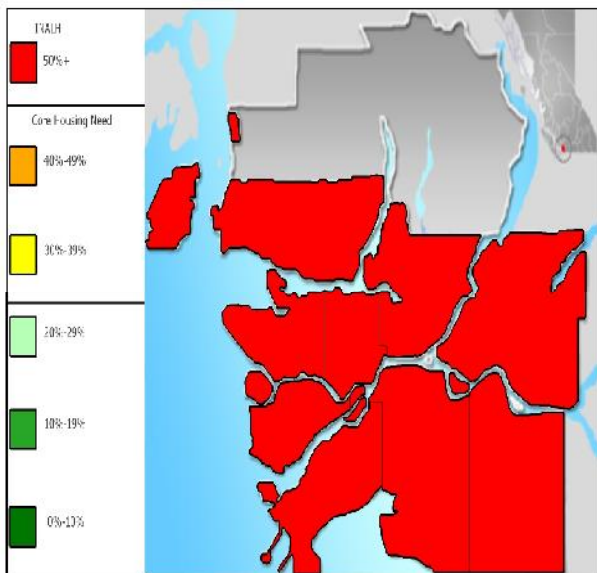
**Figure 7: R/I ratios for median income individuals, bachelor units, Greater Vancouver Sub-Areas, 2006**



Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

Note: Bachelor units were based on single occupancy.

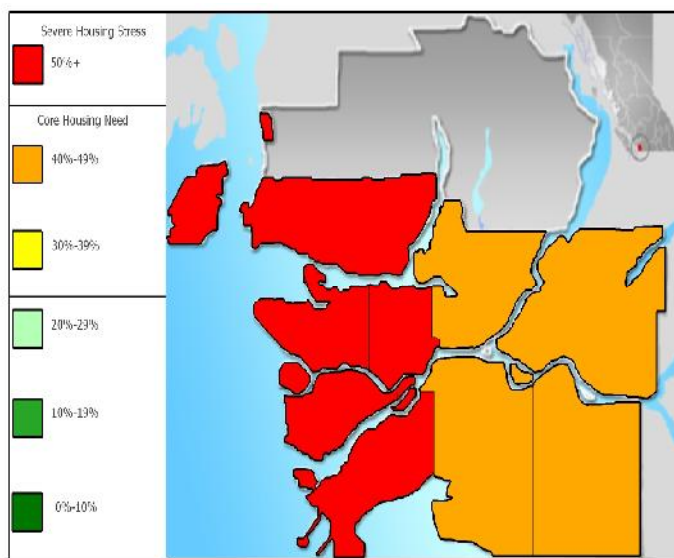
**Figure 8: R/I ratio for median income individuals for 1 bedroom units, Greater Vancouver sub-areas, 2006.**



Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

Note: 1 bedroom units were based on single occupancy.

**Figure 9: High R/I ratio for median income young adult singles for 2 bedroom units, Greater Vancouver sub-areas, 2006.**



Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

Note: 2 bedroom units were based on double occupancy (with the rent being split between the two occupants).

This 'unaffordability' had different impacts on different income quartiles, which is demonstrated in the Section 3.3.

### **3.3 Results by Income Quartile**

In the Greater Vancouver CMA as a whole, for the 1st quartile group, the R/I ratios for all types were above 100% (Figure 10), meaning that the 'average rent' was higher than the incomes of individuals in 1st quartile group. This was also true for

individuals at the 1st quartile income point (representing the high R/I for the 2nd quartile group and the low R/I for the 1st quartile group).

For median income individuals (representing the high R/I for the 3rd quartile and the low R/I for the 2nd quartile) the R/I ratios were above 50% for average units in 2006, with the lowest R/I ratios being 57% for a 2 bedroom unit for median income individuals, and the R/I ratios being 76% for bachelor units and 89% for 1 bedroom units, indicating that all unit types were unaffordable for median income individuals and would have put them above the severe housing stress threshold.

**Figure 10: High and low R/I ratios for individuals in different income quartiles, Greater Vancouver CMA, 2006.**

	<b><u>Bachelor (High R/I to Low R/I)</u></b>	<b><u>1 Bedroom (High R/I to Low R/I)</u></b>	<b><u>2 Bedroom (High R/I to Low R/I)</u></b>
<b>1st Quartile Group</b>	> 100% to >100%	>100% to >100%	>100% to >100%
<b>2nd Quartile Group</b>	>100% to 76%	>100% to 89%	>100% to 57%
<b>3rd Quartile Group</b>	76% to 37%	89% to 43%	57% to 27%
<b>4th Quartile Group</b>	37% to ≈ 0%	43% to ≈ 0%	27% to ≈ 0%

Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

Note #1: The low R/Is for 4th Quartile Group were close to 0% of income, but of unknown value (due to uncertainty about the highest income recorded in the PUMF micro-data).

Note #2: More detailed information on income levels that are represented by High R/I for 1st Quartile group (for example) and all other R/Is for other income quartiles can be found in Appendix 16. Bachelor units and 1 bedroom units were based on single occupancy, while 2 bedroom units were based on double occupancy (with the two occupants splitting the rent).

For those at the 3rd quartile income point (representing the low R/I for the 3rd quartile group and the high R/I for the 4th quartile group), rental costs for bachelor and 1 bedroom units for the Greater Vancouver CMA as a whole would have required over 30% of incomes, but less than 50% of incomes: 37% of income for bachelor units and 43% of income for 1 bedroom units. This would have put the 3rd quartile income point



individuals above the core housing need threshold, but not above the severe housing stress threshold. 2 bedroom units would have been affordable for people at this income point, requiring less than 30% of income to rent (27% of income for Greater Vancouver CMA 2 bedroom units as a whole).

Accurate data was not available for the highest income earners within the 4th quartile group (i.e. the low R/I ratio for the 4th quartile group), but based on the highest figure shown in the PUMF data (at \$18,820/month), R/I ratios would have been very small (i.e. close to 0%) for this group for all unit types

### **3.4 Summary**

This chapter has shown the results of the first method, namely displaying the percentages of incomes that young adult singles in different income quartiles would have to have spent in order to rent 'average rent' units of different unit types in different sub-areas. Affordability was a problem for all unit types (especially 1 bedroom units), in all sub-areas (although the outer sub-areas had lower R/Is), and for all income quartiles (especially the lowest two income quartiles). Chapter 4 displays the results of the percentage of young adult singles that could afford to rent 'average rent' units of different unit types in different sub-areas without going into core housing need or severe housing stress.

## **Chapter 4      Results from Method #2:**

### **4.0    *Introduction***

This chapter describes the results of method #2, namely, what percentage of young adult singles could have afforded 'average rent' units without spending  $\geq 30\%$  of income on housing costs and without spending  $\geq 50\%$  of income on housing costs. The results are organized by unit types, sub-areas, and income quartiles.

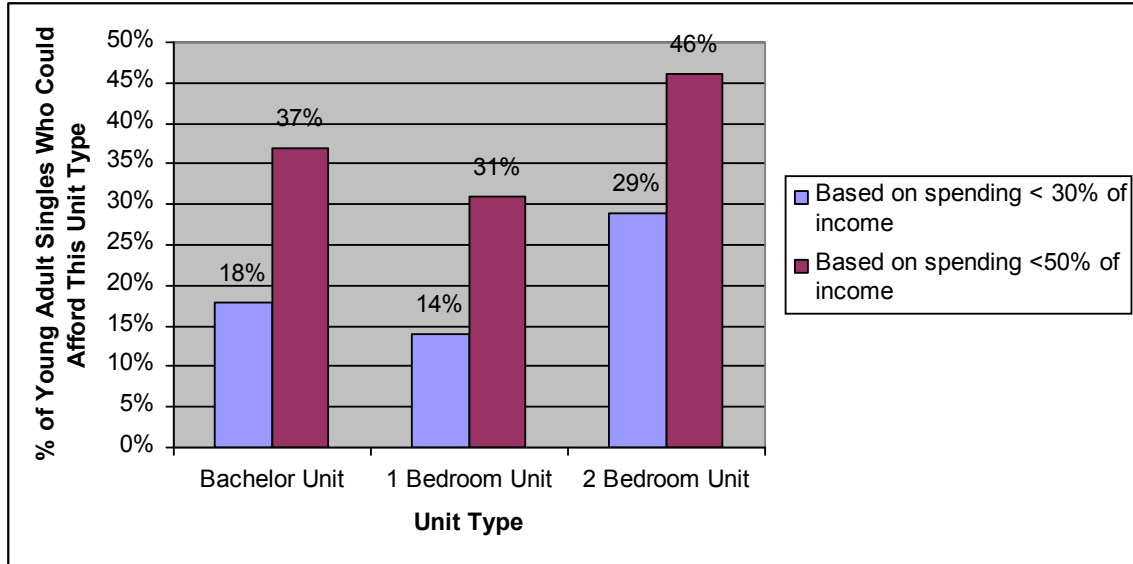
More detailed data and information is available for 'average rent' bachelor units (Appendix 19), 1 bedroom units (Appendix 20), and 2 bedroom units (Appendix 21).

### **4.1    *Results by Unit Type***

For the Greater Vancouver CMA, based on spending below the core housing need thresholds ( $\geq 30\%$  of income on housing costs), 18% of individuals could have afforded the 'average rent' bachelor unit (single occupancy). 14% of individuals could have afforded the 'average rent' 1 bedroom (single occupancy) unit, and 29% of individuals could have afforded the 'average rent' 2 bedroom (double occupancy) unit (Figure 11).

Based on spending below the severe housing stress thresholds, 37% of individuals could have afforded the 'average rent' bachelor unit, 31% of individuals could have afforded the 'average rent' 1 bedroom unit, and 46% of individuals could have afforded the 'average rent' 2 bedroom unit, (Figure 11).

**Figure 11: Percentage of individuals who could have afforded (based on spending less than 30% of income and less than 50% of income) different housing unit types, Greater Vancouver CMA, 2006.**



Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

Note: Bachelor and 1 bedroom units were based on single occupancy, while 2 bedroom units were based on double occupancy (with the 2 occupants splitting the rent).

2 bedroom units were clearly the most affordable unit type for young adult singles, with 1 bedroom units being the least affordable unit type. This was consistent with the results of method #1. However, none of the unit types were affordable to most individuals, even when using the less stringent criteria of the 'severe housing stress' line. Section 4.2 discusses how affordability varied by sub-area.

## **4.2 Results by Sub-Area**

Based on spending 30% or less of income on housing costs, therefore, spending below the core housing need threshold, the lowest percentages of individuals could have

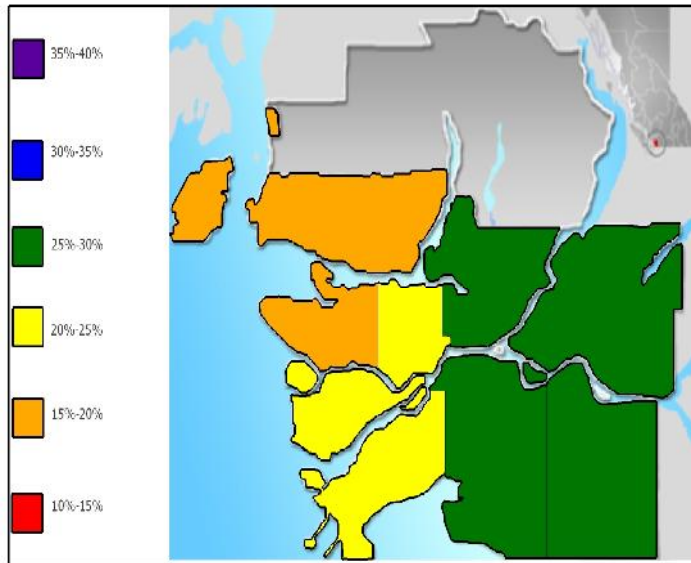
afforded units in the central Sub-Area of Vancouver/UEL. The highest percentages of individuals could have afforded units in the outer Sub-Area of Maple Ridge/Pitt Meadows. Figures 12-14 represent the percentage of individuals who could afford bachelor units (single occupancy), 1 bedroom units (single occupancy), and 2 bedroom units (double occupancy).

For the central Sub-Area of Vancouver/UEL, only 12% of individuals could have afforded 1 bedroom units, 17% of individuals could have afforded bachelor units, and 23% of individuals could have afforded 2 bedroom units.

Slightly higher percentages of individuals could have afforded units in the inner sub-areas, with the North Shore Sub-Area typically being the least affordable of the inner sub-areas, with percentages similar to the central Sub-Area. For example, only 12% of individuals could have afforded 1 bedroom units in the North Shore Sub-Area. However, in the other two inner sub-areas of Burnaby/New Westminster and Richmond/Delta, 17% and 16% of individuals could have afforded 1 bedroom units.

Of the three sub-area types, the outer sub-areas were affordable to the highest percentage of individuals, particularly the Maple Ridge/Pitt Meadows Sub-Area. 29% of individuals could have afforded bachelor units, 23% could have afforded 1 bedroom units, and 39% could have afforded 2 bedroom units in the Maple Ridge/Pitt Meadows Sub-Area.

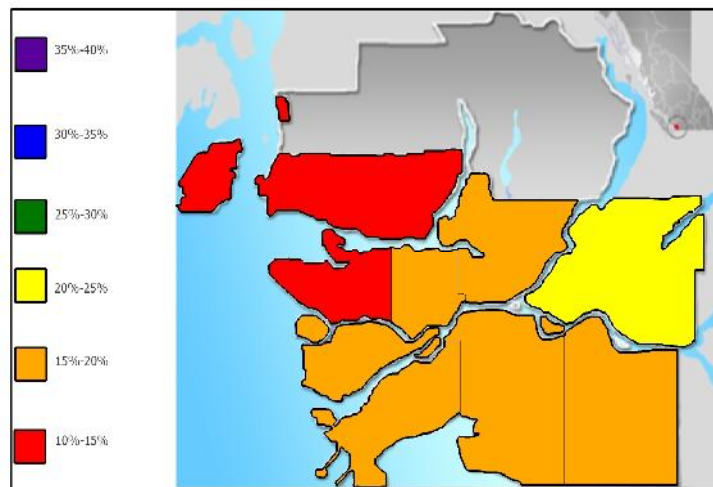
**Figure 12: Percentage of individuals who could have afforded (based on core housing need thresholds) bachelor units, by Greater Vancouver sub-area, 2006.**



Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

Note: Bachelor units based on single occupancy.

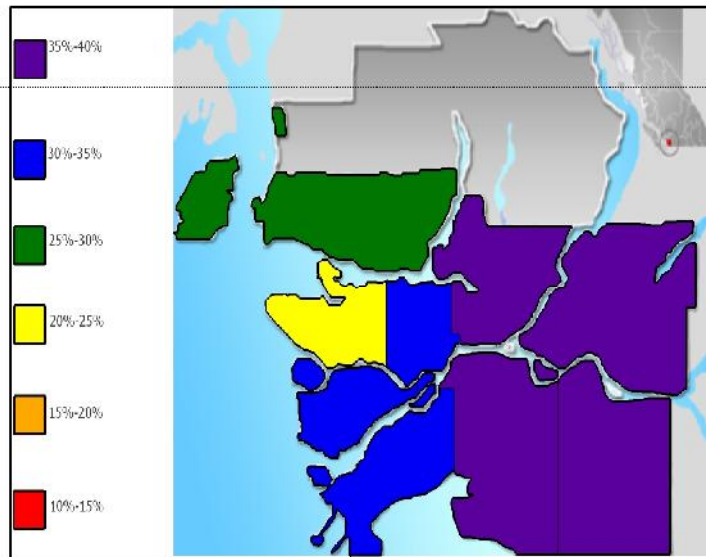
**Figure 13: Percentage of individuals who could have afforded (based on core housing need thresholds) 1 bedroom units, by Greater Vancouver sub-area, 2006.**



Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

Note: 1 bedroom units based on single occupancy.

**Figure 14: Percentage of young adult singles who could have afforded (based on core housing need thresholds) 2 bedroom units, by Greater Vancouver sub-area, 2006.**



Source: For Rents, CMHC, 2006. For Income, Statistics Canada, 2010.

Note: 2 Bedroom Units are based on double occupancy (with 2 occupants splitting the rent).

The percentage of individuals who could have afforded units varied by sub-area, but even in the most affordable sub-areas such as Maple Ridge/Pitt Meadows, the majority of individuals could not have afforded units. Section 4.3 describes results for rental housing affordability for young adult singles in different income quartiles.

### **4.3 Results by Income Quartile**

For the Greater Vancouver CMA as a whole, whether the standard for affordability was the core housing need threshold or the severe housing stress threshold,

none of the 1st quartile group and 2nd quartile group could have afforded the 'average rent' bachelor (single occupancy), 1 bedroom (single occupancy), and 2 bedroom (double occupancy) units.

Based on the core housing need threshold, none of the 3rd quartile group could have afforded the 'average rent' bachelor or 1 bedroom units, although some of the 3rd quartile group could have afforded the 'average rent' 2 bedroom units. Using the severe housing stress threshold, some of the 3rd quartile group could have afforded the 'average rent' bachelor, 1 bedroom, and 2 bedroom units.

Based on the core housing need threshold, some of the 4th quartile group could have afforded the 'average rent' bachelor or 1 bedroom units. All of them could have afforded the 'average rent' 2 bedroom units. Based on the severe housing stress threshold, all of the 4th quartile group could have afforded the 'average rent' bachelor, 1 bedroom and 2 bedroom units.

These results show that the 1st quartile group and 2nd quartile group could not have been able to afford any unit types, while the highest income earners among the 3rd quartile group young adult singles could have afforded a few unit types (e.g. Maple Ridge/Pitt Meadows 2-bedroom units). The 4th quartile group could have afforded some of the unit types. Clearly, most young adult singles in most income quartiles could not have afforded 'average rent' units in all sub-areas.

Section 4.4 summarizes the results of Chapter 4.

#### **4.4 Summary**

The percentage of young adult singles who could have afforded 'average rent' units depended on the unit type and the sub-area. In general, most young adult singles

were not able to afford 'average rent' units of all unit types in all sub-areas. This was consistent with the findings of 'unaffordability' using method #1. Chapter 5 discusses the implications of the results of Chapter 3 and Chapter 4.





## Chapter 5 Discussion of Affordability Analysis

### 5.0 Introduction

This Chapter discusses the implications of the results in relation to the research questions, as well as the results compared to actual rent expenditure results from other studies.

### 5.1 Results for Research Questions

The first research question asked *'How affordable were different purpose-built rental unit types (e.g. bachelor, 1 bedroom, 2 bedrooms) for young adult singles?'*

Although none of the unit types were affordable for most individuals, sharing an 'average rent' 2 bedroom unit (with one roommate) required a lower percentage of income and was affordable to a greater percentage of individuals than living alone in a bachelor unit or a 1 bedroom unit. This was fairly consistent with the findings of other reports that suggest that young adults live with roommates to save money<sup>94,95</sup>. Living with roommates as a method for coping with housing affordability issues is discussed in Chapter 6.

The second research question asked *'How did purpose-built rental housing affordability vary by sub-area of Greater Vancouver?'*

Not surprisingly, the results from both methods indicated that the central Sub-Area of Vancouver/UEL and the inner sub-areas, particularly the North Shore Sub-Area,

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<sup>94</sup> - Jones, 2001.

<sup>95</sup> - Burrows et al, 2002.

had lower levels of affordability than the outer sub-areas, particularly the Maple Ridge/Pitt Meadows Sub-Area. However, this was a matter of degree, as most individuals could not have afforded a unit in any of the sub-areas.

The finding of higher levels of affordability in outer sub-areas was not surprising, as it followed general economic principles. Economic theory generally dictates that areas closest to the 'hub' of a region command the highest rents<sup>96</sup>. However, this report did not investigate the impact of commuter costs on young adult singles. In other metropolitan areas, such as Boston<sup>97</sup> and Washington D.C.<sup>98</sup>, research on both housing and transportation costs found that, in many cases, increased transportation costs for those families living in the outer areas offset the savings in housing costs.

In summary, none of the sub-areas were affordable for young most individuals.

The third research question asked *'How affordable were different purpose-built rental unit types for young adult singles in different income Quartiles?'*

As would be expected, young adult singles with the lowest incomes had the lowest ability to afford average units. The results of both methods indicate that most rental units were not affordable to most young adult singles, but that the affordability problems were the most severe for the young adult singles in the 1st quartile and 2nd quartile groups, who could not afford any units in any of the sub-areas (based on core housing need thresholds - spending <30% of income on housing). Most of the 3rd quartile group could not afford unit types in most sub-areas. However, for those 3rd quartile group individuals with earnings close to the 3rd quartile income point could afford to rent 2 bedroom units (double occupancy) in some of the most sub-areas and bachelor units (single occupancy)

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<sup>96</sup> - Lucas et al, 2002.

<sup>97</sup> - ULI, 2010.

<sup>98</sup> - ULI, 2010a.

in some of the outer sub-areas. Only the 4th quartile group were able to afford most units in most sub-areas.

In summary, 4th quartile group living in the outer Sub-Area of Maple Ridge/Pitt Meadows in a 2 bedroom unit (sharing with 1 roommate) would have been in the best affordability situation, but affordability would have been a problem for most other young adult singles in all sub-areas for all unit types. Again, the results of the 2 methods are based on an 'ability to afford' situation (not on actual rent as percentage of income expenditures spent). Section 5.2 compares the results with other studies and data.

## **5.2 Comparison to Dunning's Study**

Will Dunning's study for the City of Vancouver in 2009 used census data to determine the percentage of people in different groups (age groups, family types etc.) in core housing need as of 2006<sup>99</sup>. The age ranges used were 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, and 75+. The closest age ranges to the analysis presented earlier in the master's report were 15-24 and 25-34. The core housing need percentages for these groups were 24.2% and 22.8%<sup>100</sup> in Dunning's study.

However, the results were difficult to compare with this Master's report for a variety of reasons, including: different age groups; different study area (City of Vancouver for Dunning's study); the non-separation of individuals between living alone or living with roommates in Dunning's study; and the inclusion of all housing unit types for Dunning's study. Furthermore, Dunning's study was based on young adult singles who did not live with their parents or relatives.

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<sup>99</sup> - Dunning, 2009.

<sup>100</sup> - Dunning, 2009.

Dunning's results indicated a much lower percentage of young adult singles in core housing need than would be suggested by methods 1 and 2 in the Master's report. Dunning also acknowledged that his core housing need data excluded full-time students (whether or not they were working), those people who spent 100% or more of their income on housing, and those people who could afford 'average rent' units but were spending 30% of their income on more expensive units (which sometimes occurred because Vancouver's low vacancy rents prevent people from having a choice in which units to rent<sup>101</sup>). Dunning stated that the core housing need estimates were an underestimate, which means that the calculated core housing need percentages of 24.2% and 22.8% were likely lower than the 'real' rate of core housing need. He explained this underestimate in the context of the exclusion of various groups (as mentioned earlier) in his study and the challenge of low vacancy rates forcing people into high rent units.

The next section discusses the results of another set of actual rent as a percentage of income calculations, based on a Statistics Canada topic-based tabulation from the 2006 census.

### **5.3 Comparison to Actual Rental Expenditures**

The analysis in the master's report is meant to represent a hypothetical 'ability to afford', performed for reasons described in Chapter 1 and Chapter 2. The closest approximation of data based on the actual situations of young adult singles and their real R/I ratios was found in a series of topic-based tabulations from Statistics Canada<sup>102</sup>. These tabulations had several differences from the master's report: the age ranges (under

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<sup>101</sup> - Dunning, 2009.

<sup>102</sup> - Statistics Canada, 2006b.

25 and ages 25 to 34 were the closest to the age ranges used in the master's report); data only being available at the Greater Vancouver CMA level (data not available at the sub-area level); and data used for all rental types (instead of just purpose-built rental units), although none of the rental types were listed in the topic-based tabulation provided by Statistics Canada (i.e. results were not broken down by rental type). The publication did not measure core housing need as it did not determine whether the young adult singles could have afforded to pay for an 'average rent' unit in the area: i.e. if someone 'chooses' to rent a 'higher than average rent' unit and pay 30% or more of their income for housing costs, they are said to not be in core housing need<sup>103</sup>. However, it did provide some insight into the levels of housing spending for young adult singles.

Many young adult singles living alone in the Greater Vancouver CMA spent 30% or more of their income on rental housing costs (Figure 15) in 2006. Over half of individuals living alone in both age groups spent over 30% or more of their income on housing, with the percentage being particularly high (80%) for those in the under 25 age group. The situation was slightly better for those individuals living with roommates, although 56% of these individuals under 25 years of age living with roommates spent 30% or more of their income (Figure 15). Among those between 25 and 34 years of age, it was only 29%.

Alarmingly, 67% of young adult singles under 25 years of age living alone spent 50% or more of their income on housing costs. Even for individuals under 25 years of age living with roommates, 42% (or close to half) spent 50% of their income or more on housing costs. Most individuals between the ages of 25 and 34 did not spend 50% or more of their income on housing costs, with a higher percentage of those living alone

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<sup>103</sup> - Dunning, 2009.

(40%) than those living with roommates (21%) spending more than 50% of their income on housing costs.

**Figure 15: Percentage of individuals spending over 30% or 50% of their income on housing expenses, Greater Vancouver CMA, 2006.**

	<b><u>Spending 30% or More of Their Income on Housing (Core Housing Need Threshold)</u></b>	<b><u>Spending 50% or More of Their Income on Housing (Severe Housing Stress Threshold)</u></b>
Singles Under 25 Years of		
a. Living Alone	80%	67%
b. Living With Roommates	56%	42%
Singles Between 25 and 34 Years of Age		
a. Living Alone	51%	40%
b. Living With Roommates	29%	21%

Source: Statistics Canada, 2006b.

Note: Percentage of individuals spending 30% or more of their income on housing is inclusive of both those spending between 30% and 50% of their income on housing and those spending over 50% of their income on housing.

This figure indicated that young adult singles spent significant portions of their income on housing costs, as would be expected from the results from methods #1 and #2 from Chapters 3 and 4.

## **5.4 Summary**

Dunning's report and Statistics Canada's tabulations provided a comparison with actual percentage of income spent on rent data from the 2006 census. Comparisons were limited due to the many differences between the data categories etc. The actual percentage of income spent on rent data from both studies indicated that many young adult singles experienced affordability challenges. However, the percentages of young

adult singles that actually experienced affordability troubles were lower in these two studies than the percentage of young adult singles that would have had affordability challenges based on this Masters' report. As many young adult singles continue to live in the Greater Vancouver CMA, there must be some coping mechanisms that they are using to deal with the high housing costs. This would have helped to lead to lower levels of affordability challenges among young adult singles (as shown by the two studies) compared to the predicted affordability based on the Master's Report data.

Based on the analysis in the Master's Report, purpose-built rental housing units were unaffordable to most young adult singles. Based on Will Dunning's data and the Statistics Canada data, rental housing in general was unaffordable to many young adult singles, but not necessarily to most young adult singles. As rental housing consists of other housing forms in addition to purpose-built rental housing, it is possible that other housing types (e.g. secondary suites) are helping to alleviate the affordability burden. In addition, other coping strategies such as living with parents may be helping young adult singles to deal with the high housing costs.

Chapter 6 discusses some of the coping strategies that young adult singles may have been using to deal with high levels of unaffordability.





## **Chapter 6      Coping With Housing Unaffordability**

### **6.0    *Introduction***

Chapter 5 indicated a gap between the 'ability to afford' and 'actual rent expenditures', which may have been indicative of housing coping strategies helping to bridge the affordability gap. Chapter 6 discusses the importance of housing coping strategies from studies in the United Kingdom and their possible applicability to the Greater Vancouver CMA context.

Research has shown that young adult singles are not a priority group in many housing policies. Housing in Greater Vancouver is clearly unaffordable for young adult singles. Yet, young adult singles, because of their flexibility and their housing coping strategies, perhaps have more options than other groups such as lone-parent families. Some of these housing coping strategies will be discussed in this section.

### **6.1    *Coping Strategies in General***

Based on a study by Pickvance and Pickvance (1994) in the United Kingdom, a list of four main housing coping strategies was developed: housing related strategies, work related strategies, expenditure related strategies, and family help strategies<sup>104</sup>. Other reports from the United Kingdom have also discussed housing related strategies<sup>105</sup>. Each of these strategies of young adults is discussed during the remainder of this chapter to assess their applicability to the Greater Vancouver CMA.

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<sup>104</sup> - Pickvance and Pickvance, 1994.

<sup>105</sup> - Jones, 2001.

## **6.2 Housing Related Strategies**

Housing strategies include living in overcrowded dwellings (e.g. 5 people in a 2 bedroom unit)<sup>106</sup>, living in substandard dwellings<sup>107</sup>, living in cheap forms of housing, or living in housing far out of the city centre. This can also include living with parents or with roommates to save money<sup>108</sup>.

Living in cheap forms of housing would be one strategy that appears to be used in the Greater Vancouver CMA. The rents used for the master's report were 'average rents'. There are purpose-built rental units that are much more expensive and much less expensive than the average rent units shown in the report<sup>109</sup>. Some of the young adult singles could be residing in the cheapest purpose-built rental units, which would result in improved affordability, but concerns about housing quality (e.g. many of the cheaper rental apartment buildings are older and are rapidly aging<sup>110</sup>).

Secondary suites represent an alternative form of accommodation that typically commands much lower rents than purpose-built apartment units in Metro Vancouver<sup>111</sup>. As secondary suites make up approximately 22-24% of Greater Vancouver's rental housing stock (as of 2009)<sup>112</sup>, it is likely that some young adult singles are coping with Greater Vancouver CMA's high rents by living in secondary suites. However, information on secondary suites is difficult to obtain<sup>113</sup> and thus, more research would be needed in order to determine if young adult singles are using this strategy. Although the information on secondary suites is not as complete as the information on rental

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<sup>106</sup> - McEwen, 2008.

<sup>107</sup> - McEwen, 2008.

<sup>108</sup> - Beaujot, 2004.

<sup>109</sup> - CMHC, 2006.

<sup>110</sup> - TRAC, 2004.

<sup>111</sup> - Metro Vancouver, 2010.

<sup>112</sup> - Metro Vancouver, 2010.

<sup>113</sup> - Smart Growth B.C., 2003.

apartments, the role of secondary suites in affordable housing is recognized as important by many Greater Vancouver CMA municipalities<sup>114</sup>. Many municipalities have undergone policy changes to legalize secondary suites in order to increase their supply of affordable housing.

One strategy that is clearly used by young adult singles is the strategy of living with one's parents or relatives. As mentioned in Chapter 1, approximately 76.2% of young adult singles in Greater Vancouver CMA lived with their parents<sup>115</sup>. The young adult single living with their parents as of 2006 had a median income of \$10,000 (in 2005), much less than the median income of young adult singles living with roommates (\$15,000 in 2005) or living alone (\$25,000 in 2005)<sup>116</sup>. This could indicate that young adult singles in difficult financial circumstances are more likely to live with their parents or relatives<sup>117</sup>. Other research reports indicate that young adults often live with their parents to save money or during times of unemployment or going to school<sup>118,119</sup>. PUMF micro-data indicates that young adult singles that lived with their parents or relatives were more likely to be attending school (60% attended school during the past year) than those young adult singles that were living with roommates (39%) or living alone (32%).

As the results in Chapters 3 and 4 pointed out, living in a 2 bedroom rental unit with 1 roommate often is more affordable than living alone in a bachelor or 1 bedroom rental unit. Living with roommates as a method for saving money has been mentioned in

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<sup>114</sup> - Curran and Wake, 2008.

<sup>115</sup> - Statistics Canada, 2006.

<sup>116</sup> - Statistics Canada, 2010.

<sup>117</sup> - Research by Beaujot, 2004 and Clarke, 2007 also indicates that there is a cultural component to living with one's parents as an adult and is more common in certain ethnic groups (e.g. South Asians, Chinese). Therefore, attributing living with parents to financial reasons alone should be done with caution.

<sup>118</sup> - Hughes, 2003.

<sup>119</sup> - Beaujot, 2004.

numerous reports<sup>120,121,122</sup>. As of the 2006 census, 13.6% of young adult singles in the Greater Vancouver CMA lived with roommates, compared with the 10.2% of young adult singles who lived alone. There is strong evidence that this strategy is being used in Greater Vancouver.

Based on statistical analysis and literature review, there is evidence that young adult singles in the Greater Vancouver CMA are using housing related strategies in order to afford to live in the Greater Vancouver CMA. However, further qualitative research in the form of interviews and surveys, similar in methodology to studies completed in the United Kingdom<sup>123,124,125</sup> would provide more insight into the housing-related strategies used by young adult singles.

### **6.3 Work-Related Strategies**

Work-related strategies<sup>126</sup> are another method that can be used to cope with housing affordability stresses. These could include working extra overtime or taking on a second job, among other work-related strategies to increase income levels.

Pickvance and Pickvance's 1994 study in the United Kingdom indicated that young adults often worked longer hours or stayed in a job that they didn't like in order to afford housing<sup>127</sup>. A study by Katherine Marshall for Statistics Canada in 2010 determined that young adults often are employed during their post-secondary studies in

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<sup>120</sup> - Burrows et al, 2002.

<sup>121</sup> - Jones, 2001

<sup>122</sup> - Henderson et al, 2007.

<sup>123</sup> - Pickvance and Pickvance, 1994.

<sup>124</sup> - Burrows et al, 2002.

<sup>125</sup> - Jones, 2001.

<sup>126</sup> - Pickvance and Pickvance, 1994.

<sup>127</sup> - Pickvance and Pickvance, 1994.

order to pay for expenses<sup>128</sup>. There have also been studies on the work-related strategy of commuting a long distance to work in order to live in suburban areas where housing costs are lower<sup>129</sup>. It is true that the rents are much lower in the outer sub-areas than in the central Sub-Area of Vancouver/UEL. However, there is also a much more limited and less varied supply of rental housing in the outer sub-areas compared to Vancouver/UEL<sup>130</sup>.

Furthermore, studies in other large metropolitan areas such as Boston<sup>131</sup> and Washington D.C.<sup>132</sup> demonstrated that savings in rent are often off-set by additional commuting costs including money spent on car-related expenses<sup>133</sup>. A similar study would need to be completed for the Greater Vancouver CMA in order to determine the relative savings in rent versus the additional commuting costs.

As current information is limited for the Greater Vancouver CMA in regards to work-related strategies, further qualitative research would help to determine the importance of work-related strategies for young adult singles in the Greater Vancouver CMA.

## **6.4 Expenditure-Related Strategies**

Expenditure related strategies<sup>134</sup> can include foregoing other expenses, including going out with friends, buying a car, shopping etc., in order to afford rent.

Pickvance and Pickvance's 1994 study in the United Kingdom indicated that young adults were likely to forego holidays or vacations in order to save money. There

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<sup>128</sup> - Marshall, 2010.

<sup>129</sup> - Pickvance and Pickvance, 1994.

<sup>130</sup> - Metro Vancouver, 2010.

<sup>131</sup> - ULI (Urban Land Institute), 2010.

<sup>132</sup> - ULI (Urban Land Institute), 2010a.

<sup>133</sup> - ULI (Urban Land Institute), 2010.

<sup>134</sup> - Pickvance and Pickvance, 2004.

were no available similar studies in Canada on expenditure related strategies to save money for housing. Therefore, further qualitative research would help to determine the importance of this strategy for young adult singles in the Greater Vancouver CMA.

## **6.5 Family Help Strategies**

Family help strategies<sup>135</sup> include methods such as borrowing money from parents or relatives. Studies in the United Kingdom indicate that many young adults rely on their parents as 'back-up' who can lend them money or general goods (e.g. furniture) if the young adults fall upon hard times<sup>136</sup>. There were no similar studies for the Greater Vancouver CMA or Canada. Therefore, further qualitative research would help to determine the importance of this strategy for young adult singles in the Greater Vancouver CMA.

## **6.6 Summary**

Strategies used by young adult singles to cope with high housing costs are important in order to determine how young adult singles react to the housing markets<sup>137</sup>. This research can help inform policy directions to help young adult singles in ways that they recognize and will utilize to be able to afford housing<sup>138</sup>. However, other than housing-related strategies (e.g. living with parents or roommates), there has been almost no research completed in Canada or the Greater Vancouver CMA in regards to these types of strategies. It is not within the scope of this master's report to undertake such a study; however, a study similar to the one completed by Pickvance and Pickvance (1994)

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<sup>135</sup> - Pickvance and Pickvance, 2004.

<sup>136</sup> - Henderson et al, 2007.

<sup>137</sup> - Pickvance and Pickvance, 1994.

<sup>138</sup> - Pickvance and Pickvance, 1994.

in the United Kingdom or several of the other studies completed in the United Kingdom<sup>139,140</sup> would be useful in filling this gap and is recommended for future research on this topic.

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<sup>139</sup> - Jones, 2001.

<sup>140</sup> - Burrows et al, 2002.





## **Chapter 7      Implications for Research and for Planners and Conclusion**

### **7.0    *Introduction***

This Master's report is a potential starting point for researching young adult singles and Greater Vancouver's housing market. Much more work needs to be completed in order to better understand young adult singles and their interactions with this housing market. This section discusses the implications for research and for planners from this Master's report.

### **7.1    *Implications for Research***

Overall, the implications for research can be summarized as follows: the need for qualitative research to compliment the quantitative research; the need for further quantitative research on this topic; and the importance of finding new statistical sources to obtain housing situation information for young adult singles and other groups (due to the changes in the Canadian census structure).

This report, as well as Dunning's report and the Statistics Canada topic-based tabulations, provides a quantitative view of the housing affordability situation for young adult singles in the Greater Vancouver CMA. There is a need for more qualitative research based on techniques such as interviews and case studies. Qualitative research can provide additional insight into the why and how questions around housing affordability<sup>141</sup>, such as how young adult singles cope with housing affordability in the Greater Vancouver CMA. Such qualitative studies on housing coping strategies have been completed in United Kingdom and could be used in the Greater Vancouver CMA as

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<sup>141</sup> - Yin, 2009.

well. Qualitative studies on housing coping strategies would be potential complementary studies to this 'ability to afford' Master's report.

In feedback on this Master's report, a former housing planner with the City of Vancouver noted the lack of political support for addressing the needs of young adult singles. Furthermore, she notes that, in her experience, young adult singles tend to be less vocal about their housing problems than other groups in the community. Therefore, their needs have not drawn the attention of planners or politicians at the local level. Given these factors, it tends to be assumed that they have more coping strategies than other groups. These factors require further investigation in qualitative research recommended in this report.

As mentioned in Chapter 1, there is also a lack of quantitative research on young adult singles and housing markets in Canada. This is true for both 'ability to afford' methods and 'actual expenditures on rent as percentage of income' studies. There is a need to do further research on these topics in different metropolitan areas. Young adult singles make up 11% or more of the total population in all of the six largest metropolitan areas in Canada and are an important part of the housing market.

Finally, this Master's report would not have been possible without data from Statistics Canada's long-form census<sup>142</sup>. In 2010, the Canadian federal government decided to replace the long-form census with a voluntary household survey<sup>143</sup>. The quality of information from a voluntary survey is subject to the effects of response bias<sup>144</sup>. Information from a voluntary survey would not have been reliable enough to do this

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<sup>142</sup> - Statistics Canada, 2010.

<sup>143</sup> - Statistics Canada, 2011.

<sup>144</sup> - Moore, 2007.

Master's report<sup>145</sup>. Therefore, there is also a need for researchers to find different methods for making up for the lost information from a long-form census to use for housing affordability studies of this type. Housing affordability studies do not just have impacts for future research, but also for planners.

## **7.2 Implications for Planners**

The overall implications of this Master's report for planners are as follows: municipal planners need to consider young adult singles in their housing strategies; affordable housing developers and planners need to create more 2 bedroom units; secondary suite creation needs to be encouraged by planners; and economic planners need to consider how to increase the incomes of young adult singles (in order to help them to better afford housing).

Young adult singles are a large group in Greater Vancouver with affordability housing challenges. Consequently, it is important that municipal planners and consulting companies consider the needs of young adult singles in their municipal housing strategies. As the results of this report demonstrate, all sub-areas are unaffordable to most young adult singles, so it is important for municipalities within all of these sub-areas to study young adult singles in their area.

For those planners working for agencies developing 'affordable' housing, it is important to emphasize the creation of more 2 bedroom units, as a 2 bedroom unit shared with a roommate is generally more affordable than a bachelor or 1 bedroom unit occupied by one person. However, even 2 bedroom units are fairly unaffordable, so it is important for planners to look at the potential role of secondary suites in meeting affordability

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<sup>145</sup> - Moore, 2007.

objectives. Strategies on secondary suites have already been formed in many municipalities<sup>146</sup>, but there is a need to continue this work.

As other groups (e.g. Aboriginals, lone-parent families etc.) have housing affordability issues as well, but there is limited funding available for affordable housing, there is a need to do comparison studies between the housing affordability challenges faced by young adult singles and other groups. This could help to prioritize which groups are most in need of funding for affordable housing. With limited federal and provincial funding for affordable housing, planners must research and determine which groups have the most pressing housing needs. Simultaneously, general housing policies which can increase the affordable housing stock, such as inclusionary zoning and legalizing secondary suites<sup>147</sup>, can improve housing affordability for many groups as once. A rising tide of affordable housing may lift the boats of all groups.

For economic planners, there is a need to investigate the reasons for the low-incomes of young adult singles, as the low incomes are a significant problem for young workers<sup>148</sup>. Determining which methods could be used to raise the incomes of young workers as a demand-side measure is important. In addition to the aforementioned creation of affordable housing as a supply side measure, this action could help with the affordability challenges.

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<sup>146</sup> - Smart Growth BC, 2003.

<sup>147</sup> - Curran and Wake, 2008.

<sup>148</sup> - Beaujot, 2004.

### **7.3 Conclusion**

Young adult singles make up a significant portion of Greater Vancouver's population (12.6%)<sup>149</sup>, but there have been few studies completed on the affordability of housing for this group. This report provides an important insight into the housing affordability dynamics for young adult singles in the Greater Vancouver CMA. By use of the R/I ratio method (method #1) and the 'percentage of young adults who can afford units' method (method #2), it was determined that most young adults would not be able to afford 'average rent' purpose-built rental units in most Greater Vancouver sub-areas. This raises the question of how young adult singles in the Greater Vancouver CMA cope with high housing costs.

Based on the findings of this report, it is recommended that more quantitative and qualitative research be completed on housing affordability for young adult singles, not only in the Greater Vancouver CMA, but in other large CMAs in Canada as well. In regards to actions, creating more 2 bedroom units, as opposed to bachelor and 1 bedroom units, would assist in making housing for more affordable for young adult singles. Secondary suites strategies should be also investigated as methods for creating affordable housing for young adult singles. Finally, demand-side actions to increase the incomes of young adult singles should be investigated and potentially adopted.

The rationale for housing strategies to address the needs of young adult singles merits further consideration, especially to determine whether or not the high housing cost burden is having an effect on labour supply at entry levels in the local economy.

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<sup>149</sup> - Statistics Canada, 2010.



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## Appendices

### **Appendix 1: Percentage of total population that was composed of young adult singles (ages 18 to 29), by six largest Canadian CMAs, 2006.**

<u>Area</u>	<u>Percentage of Population that was composed of Young Adult Singles</u>
Canada	10.7%
<b><u>CMA</u></b>	
Calgary	12.5%
Edmonton	12.5%
Montreal	11.1%
Ottawa	11.5%
Toronto	12.5%
<b>Vancouver</b>	<b>12.6%</b>

Source: Statistics Canada, 2010.

### **Appendix 2: List of some of the municipal and provincial housing strategies in B.C. and general housing market information sources**

<u>Author</u>	<u>Name of Report/Site</u>	<u>Year of Report</u>	<u>Jurisdiction Covered</u>	<u>Website Link</u>
BC Housing	Housing Matters	2006	British Columbia	1
Metro Vancouver	Metro Vancouver Affordable Housing Strategy	2007	Greater Vancouver	2
Metro Vancouver	Housing Data Book	2010	Greater Vancouver	3
CMHC	Rental Housing Market Outlook 2010	2010	Greater Vancouver and Abbotsford CMAs	4
CMHC	Housing Market Outlook: Fall 2010	2010	Greater Vancouver and Abbotsford CMAs	5
City of	Affordable Housing	2007	Coquitlam	6

Coquitlam	Strategy			
SPARC BC	Affordable Housing Strategy	2009	Langley City	7
City Spaces	Affordable Housing Strategy Backgrounder 2	2008	New Westminster	8
Jim Woodward & Associates; M.Ninow Consultants	Affordable Housing Strategy for Port Moody	2009	Port Moody	9
McClanaghan & Associates	City of Richmond Affordable Housing Strategy	2007	Richmond	10
City of Surrey	Housing Action Plan	2010	Surrey	11
City of Vancouver	Vancouver Housing Centre (Website)	2011	Vancouver	12

1-

[http://www.bchousing.org/resources/About%20BC%20Housing/Housing\\_Matters\\_BC/Housing\\_Matters\\_BC\\_FINAL.pdf](http://www.bchousing.org/resources/About%20BC%20Housing/Housing_Matters_BC/Housing_Matters_BC_FINAL.pdf)

2-

<http://www.metrovancouver.org/planning/development/housingdiversity/AffordableHousingStrategyDocs/AdoptedMetroVancAffordHousStrategyNov302007.pdf>

3 -

[http://www.metrovancouver.org/planning/development/housingdiversity/HousingDataBookDocuments/Metro\\_Vancouver\\_Housing\\_Data\\_Book\\_2010.pdf](http://www.metrovancouver.org/planning/development/housingdiversity/HousingDataBookDocuments/Metro_Vancouver_Housing_Data_Book_2010.pdf)

4- [https://www03.cmhc-](https://www03.cmhc-schl.gc.ca/catalog/productDetail.cfm?lang=en&cat=79&itm=53&fr=1294602590750)

[schl.gc.ca/catalog/productDetail.cfm?lang=en&cat=79&itm=53&fr=1294602590750](https://www03.cmhc-schl.gc.ca/catalog/productDetail.cfm?lang=en&cat=79&itm=53&fr=1294602590750)

5- [https://www03.cmhc-](https://www03.cmhc-schl.gc.ca/catalog/productDetail.cfm?lang=en&cat=63&itm=53&fr=1294602613940)

[schl.gc.ca/catalog/productDetail.cfm?lang=en&cat=63&itm=53&fr=1294602613940](https://www03.cmhc-schl.gc.ca/catalog/productDetail.cfm?lang=en&cat=63&itm=53&fr=1294602613940)

6- <http://www.coquitlam.ca/NR/rdonlyres/D3E3257C-FFC1-44F9-9AAC-69494F386775/66244/AffordableHousingStrategyforweb.pdf>

7-

[http://www.city.langley.bc.ca/sites/langley2/files/Reports/Affordable\\_Housing\\_Strategy.pdf](http://www.city.langley.bc.ca/sites/langley2/files/Reports/Affordable_Housing_Strategy.pdf)

8 - <http://www.newwestcity.ca/database/rte/AHS%20Backgrounder2.pdf>

9 - <http://www.cityofportmoody.com/NR/rdonlyres/7E87F623-A2AA-4EE7-AF48-B49C8A8462A1/93144/AffordableHousingStrategyFINAL.pdf>

10 - [http://www.richmond.ca/\\_\\_shared/assets/Appendix1-StakeholderConsultation16586.pdf](http://www.richmond.ca/__shared/assets/Appendix1-StakeholderConsultation16586.pdf)

11- <http://www.surrey.ca/files/HAPBackgroundInformationRevisedJan2010.pdf>

12 - <http://vancouver.ca/commsvcs/housing/>

**Appendix 3: Percentage of young adults that were single, by six largest Canadian CMAS, 2006.**

<u>Area</u>	<u>Percentage of Young Adults that were Single</u>
Canada	69.0%
<b>CMA</b>	
Calgary	68.7%
Edmonton	66.8%
Montreal	69.1%
Ottawa	71.1%
Toronto	77.3%
<b>Vancouver</b>	<b>76.6%</b>

Source: Statistics Canada, 2006.

**Appendix 4: Total number of young adults, number of young adult singles, and percentage of young adults that were single, by Greater Vancouver sub-area, 2006.**

<u>Sub-Area</u>	<u>Total Young Adult Population</u>	<u>Total Young Adult Single Population</u>	<u>Percentage of Young Adults that are Single</u>
<b>Greater Vancouver Total</b>	<b>344,320</b>	<b>263,750</b>	<b>76.6%</b>
Burnaby New West Sub-Area	44,520	33,925	76.2%
Coquitlam, Port Coquitlam, Port Moody Sub-Area	30,455	24,175	79.4%
Langley Sub-Area	17,180	12,365	72.0%
Maple Ridge/Pitt Meadows Sub-Area	11,155	8,010	71.8%
North Shore Sub-Area	22,580	18,885	83.6%
Richmond/Delta Sub-Area	41,550	34,375	82.7%
Surrey/White Rock Sub-Area	64,090	45,215	70.5%
Vancouver/UEL Sub-Area	111,580	85,880	77.0%

Source: Statistics Canada, 2006a.

**Appendix 5: Percentage of young adult singles that lived with parents or relatives, roommates, or alone, by six largest Canadian CMAs, 2006.**

<u>Area</u>	<u>% of Young Adults Singles that lived with Parents or Relatives</u>	<u>% of Young Adult Singles that lived with Roommates</u>	<u>% of Young Adult Singles that lived Alone</u>
Canada	75.8%	13.2%	11.0%
<b><u>CMA</u></b>			
Calgary	65.7%	21.9%	12.4%
Edmonton	67.0%	19.0%	14.0%
Montreal	71.1%	13.8%	15.1%
Ottawa	70.6%	17.0%	12.4%
Toronto	83.7%	9.2%	7.1%
<b>Vancouver</b>	<b>76.2%</b>	<b>13.2%</b>	<b>10.6%</b>

Source: Statistics Canada, 2006.

**Appendix 6: Median incomes of young adult singles, by six largest Canadian CMAs, 2006.**

<u>Area</u>	<u>Median Income</u>
Canada	\$11,000
<b><u>CMA</u></b>	
Calgary	\$15,000
Edmonton	\$15,000
Montreal	\$11,000
Ottawa	\$11,000
Toronto	\$10,000
<b>Vancouver</b>	<b>\$11,000</b>

Source: Statistics Canada, 2010.

**Appendix 7: Average rents for bachelor, 1 bedroom, and 2 bedroom purpose-built rental units, by six largest Canadian CMAs, 2006.**

	<u>Bachelor</u>	<u>Bedroom <sup>1</sup></u>	<u>Bedrooms <sup>2</sup></u>
Calgary	\$617	\$780	\$960
Edmonton	\$561	\$666	\$808
Montreal	\$481	\$574	\$636
Ottawa	\$633	\$774	\$941
Toronto	\$740	\$896	\$1,067
<b>Vancouver</b>	<b>\$701</b>	<b>\$816</b>	<b>\$1,045</b>

Sources: CMHC, 2006.

**Appendix 8: Average rents for bachelor, 1 bedroom, and 2 bedroom purpose-built rental apartment units, by Greater Vancouver sub-area, 2006.**

<u>Sub-Area</u>	<u>Bachelor</u>	<u>Bedroom <sup>1</sup></u>	<u>Bedrooms <sup>2</sup></u>
<b>Greater Vancouver Total</b>	<b>\$701</b>	<b>\$816</b>	<b>\$1,045</b>
Burnaby/New Westminister Sub-Area	\$603	\$732	\$909
Coquitlam, Port Coquitlam, Port Moody Sub-Area	\$589	\$695	\$834
Langley Sub-Area	\$596	\$708	\$837
Maple Ridge/Pitt Meadows Sub-Area	\$504	\$602	\$772
North Shore Sub-Area	\$718	\$868	\$1,164
Richmond/Delta Sub-Area	\$610	\$753	\$972
Surrey/White Rock Sub-Area	\$575	\$677	\$826
Vancouver/UEL Sub-Area	\$727	\$870	\$1,245

Source: CMHC, 2006.



**Appendix 9: Number of purpose-built rental bachelor, 1 bedroom, 2 bedroom units, 3+ bedroom units, and total units, by Greater Vancouver sub-area, 2006.**

	<u>Unit Type</u>				<u>Total Units in Sub-Area</u>
<u>Sub-Area</u>	Bachelor	1 Bedroom	2 Bedroom	3+ Bedroom	
Burnaby/New Westminster Sub-Area	1,628	13,229	5,488	593	<b>20,938</b>
Coquitlam, Port Coquitlam, Port Moody Sub-Area	183	2,344	1,588	197	<b>4,312</b>
Langley Sub-Area	80	990	960	47	<b>2,077</b>
Maple Ridge/Pitt Meadows Sub-Area	14	847	544	58	<b>1,463</b>
North Shore Sub-Area	938	5,242	2,816	254	<b>9,250</b>
Richmond/Delta Sub-Area	264	1,814	1,707	195	<b>3,980</b>
Surrey/White Rock Sub-Area	170	3,552	2,770	363	<b>6,855</b>
Vancouver/UEL Sub-Area	8,600	37,429	9,392	643	<b>56,064</b>
<b><u>Greater Vancouver CMA Total</u></b>	<b>11,890</b>	<b>65,447</b>	<b>25,264</b>	<b>2,351</b>	<b>104,952</b>

Source: CMHC, 2006.

Note: Due to rounding, numbers in the boxes for each sub-area may not add up to the total number of units. (Some units in the total were reported to CMHC, but the municipality that they were located in was not recorded).

Note 2: Calculations were completed using Table 3.1.3 on p.32 of CMHC, 2006 as follows (example):

Burnaby/New Westminster Sub-Area 2 Bedroom units = 2 Bedroom units in Burnaby (Zones 12-14) line + 2 Bedroom units in New Westminster line.

Coquitlam, Port Coquitlam, and Port Moody Sub-Area 2 Bedroom units = 2 Bedroom units in Tricities Line.

Langley Sub-Area 2 Bedroom units = 2 Bedroom units in Langley City and Langley DM line.

Maple Ridge/Pitt Meadows Sub-Area 2 Bedroom units = 2 Bedroom units in Maple Ridge/Pitt Meadows line.

North Shore Sub-Area 2 Bedroom units = 2 Bedroom units in North Vancouver City line + 2 Bedroom units in North Vancouver D.M. line + 2 Bedroom units in West Vancouver line.

Richmond/Delta Sub-Area 2 Bedroom units = 2 Bedroom units in Richmond line + 2 Bedroom units in Delta line.

Surrey/White Rock Sub-Area 2 Bedroom units = 2 Bedroom units in Surrey line + 2 Bedroom units in White Rock line.

Vancouver/UEL Sub-Area 2 Bedroom units = 2 Bedroom units in Vancouver (Zones 1-10) line + 2 Bedroom units in University Endowment Lands line.

**Appendix 10: Percentage of rental housing stock in different types of rental housing, Greater Vancouver sub-areas, 2009.**

<u>Metro Vancouver Total</u>	<u>% Purpose-Built Rental</u>	<u>% Social Housing</u>	<u>% Private Condo Rental</u>	<u>% Single Family Detached</u>	<u>% Townhome and Duplex Rentals</u>	<u>% Secondary Suite Rentals</u>
<b>Greater Vancouver Total</b>	<b>33%</b>	<b>16%</b>	<b>12%</b>	<b>9%</b>	<b>6-8%</b>	<b>22-24%</b>
Burnaby/New Westminister Total	44%	17%	12-13%	6%	4-6%	15-16%
Coquitlam, Port Coquitlam, Port Moody Total	22%	18%	15-17%	12%	1-5%	28-29%
Langley Total	21%	16%	7%	23%	12-19%	14-22%
Maple Ridge/Pitt Meadows Total	21%	16%	6%	22%	14%	21%
North Shore Total	36%	10%	10-12%	9%	0-5%	30-34%
Richmond/Delta Total	19%	18%	15%	19%	11-19%	10-18%
Surrey/White Rock Total	15%	15%	6-7%	13%	2-3%	48%
Vancouver/UEL Total	41%	17%	13-14%	4%	5-8%	17-19%

Source: Metro Vancouver, 2010.

Note: Percentage (%) equals the percentage of the rental housing stock in that sub-area that is made up of that particular type of housing (e.g. 44% of all rental housing stock in Burnaby/New Westminister is made up of purpose-built rental housing.).

**Appendix 11: Query used in PUMF to determine number of young adults in different income ranges.**

Group	Query Used
Young Adult Singles	<p>Rows = totinc (or total income of individual - income before tax).</p> <p>Filter: ( [CMA] Census metropolitan area = Vancouver ) and ( [AGEGRP] Age groups &gt;= 18 to 19 years ) and ( [AGEGRP] Age groups &lt;= 25 to 29 years ) and ( [CFSTAT] Detailed Census family status and household living arrangements &gt;= Child of married couple )</p> <p>Weight: [WEIGHT] Individuals weighting factor</p>

**Appendix 12: Formulas utilized for the calculation of 1st Quartile point , M, and 3rd Quartile point incomes**

Item	Symbol	How to Calculate
1st Quartile Point	1st Quartile	1st Quartile= income at the $(1/4) * (n+1)$ th observation
Median	M	if n is an odd number, M = income at the $(n+1)/2$ observation; if n is an even number, M = income as ( income at the $((n+1)/2)-0.5$ th observation + income at the $((n+1)/2+0.5)$ th observation ) /2)
3rd Quartile Point	3rd Quartile	3rd Quartile = income at the $(3/4) * (n+1)$ th observation

Source: Moore, 2007.

Note: n = total number of young adult singles.

**Appendix 13: Calculation of average rents for purpose-built bachelor, 1 bedroom, and 2 bedroom units, by sub-area.**

Sub-Area	Calculation
Burnaby/New Westminster	$( (\text{average rent Burnaby units} * \text{number of Burnaby units}) + (\text{average rent New Westminster units} * \text{number of New Westminster units}) ) / (\text{number of Burnaby units} + \text{number of New Westminster units})$
Langley	Taken directly from the Langley City and Langley District Line in Table 1.1.2

Maple Ridge/Pitt Meadows	Taken directly from Maple Ridge/Pitt Meadows line in Table 1.1.2
North Shore	$((\text{average rent North Vancouver City units} * \text{number of North Vancouver city units}) + (\text{average rent North Vancouver District units} * \text{number of North Vancouver District units}) + (\text{average rent West Vancouver units} * \text{number of West Vancouver units})) / (\text{number of North Vancouver City units} + \text{number of North Vancouver District units} + \text{number of West Vancouver units})$
Richmond/Delta	$((\text{average rent Richmond units} * \text{number of Richmond units}) + (\text{average rent units} * \text{number of Delta units})) / (\text{number of Richmond units} + \text{number of Delta units})$
Surrey/White Rock	$((\text{average rent Surrey units} * \text{number of Surrey units}) + (\text{number of White Rock units} * \text{number of White Rock units})) / (\text{number of Surrey units} + \text{number of White Rock units})$
Coquitlam, Port Coquitlam, and Port Moody	taken directly from Tri-Cities line from Table 1.1.2
Vancouver, UEL	$((\text{average rent Vancouver units} * \text{number of Vancouver units}) + (\text{average rent University Endowment Land units} * \text{number of University Endowment Land units})) / (\text{number of Vancouver units} + \text{number of University Endowment Land units})$

Data Source: CMHC, 2006.

**Appendix 14: Calculation of affordability of different housing unit types for low R/I for 1st Quartile income point individuals (e.g. Burnaby- New West sub-areas) - method #1.**

<u>Housing Type</u>	<u>Calculation</u>
Bachelor	$(\text{average rent bachelor unit burnaby-new westminster}) / \text{1st quartile point income} * 100\%$
1 Bedroom	$(\text{average rent 1 bedroom unit burnaby-new westminster}) / \text{1st quartile point income} * 100\%$
2 Bedroom	$((\text{average rent 2 bedroom unit burnaby-new westminster}) / 2 \text{ people}) / \text{1st quartile point income} * 100\%$

Source: For rents, CMHC, 2006. For incomes, Statistics Canada, 2010.

Note: for the 2 bedroom units, the rent was divided by 2 to represent that the rent would be split between the two roommates.

### **Appendix 15: Calculation of Affordability for Method #2.**

#1: Minimum monthly income required =  $(1/0.3) \times (\text{average monthly rent bachelor unit burnaby-new westminster})$ .

#2: Find the monthly income level on the chart that is just above or closest to (but above) the minimum monthly income required. Use the list of incomes from the PUMF microdata to determine what percentage of young adult singles have this income level or higher.

### **Appendix 16: High and low R/I percentages for different income quartile young adult singles, by Greater Vancouver sub-area, for bachelor units, 2006.**

	<u>1st Quartile Group (High R/I to Low R/I)</u>	<u>2nd Quartile Group (High R/I to Low R/I)</u>	<u>3rd Quartile Group (High R/I to Low R/I)</u>	<u>4th Quartile Group (High R/I to Low R/I)</u>
<b>Greater Vancouver Total</b>	<b>&gt;100% to &gt;100%</b>	<b>&gt;100% to 76%</b>	<b>76% to 37%</b>	<b>37% to ≈0%</b>
Burnaby/ New Westminister Sub-Area	>100% to >100%	>100% to 66%	66% to 31%	31% to ≈0%
Coquitlam, Port Coquitlam, Port Moody Sub-Area	>100% to >100%	>100% to 64%	64% to 31%	31% to ≈0%
Langley Sub-Area	>100% to >100%	>100% to 65%	65% to 31%	31% to ≈0%
Maple Ridge/Pitt Meadows Sub-Area	>100% to >100%	>100% to 55%	55% to 26%	26% to ≈0%
North Shore Sub-Area	>100% to >100%	>100% to 78%	78% to 37%	37% to ≈0%
Richmond/Delta Sub-Area	>100% to >100%	>100% to 67%	67% to 32%	32% to ≈0%
Surrey/White Rock Sub-Area	>100% to >100%	>100% to 63%	63% to 30%	30% to ≈0%

Vancouver/UEL Sub-Area	>100% to >100%	>100% to 79%	79% to 38%	38% to ≈0%
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Sources: For Rents, CMHC, 2006. For Incomes, Statistics Canada, 2010. ≈

The low R/Is for 4th Quartile Group are close to 0% of income, but of unknown value (due to uncertainty about the highest income recorded in the PUMF micro-data).

Note (for bachelor, 1 bedroom, and 2 bedroom units):

Bachelor units were based on single occupancy, 1 bedroom units were based on single occupancy, and 2 bedroom units were based on double occupancy.

High R/I for 1st Quartile group based on income of \$0/month. Low R/I for 1st Quartile group based on income of \$333/month (1st Quartile point income)

High R/I for 2nd Quartile group based on income of \$333/month (based on 1st Quartile point income). Low R/I for 2nd Quartile group based on income of \$917/month (based on median point income)

High R/I for 3rd Quartile group based on income of \$917/month (based on median point income). Low R/I for 3rd Quartile group based on income of \$1,917/month (based on 3rd Quartile point income)

High R/I for 4th Quartile group based on income of \$1,917/month (based on 3rd Quartile point income). Low R/I for 4th Quartile group was unknown (due to some data values being 'not available') but was at least \$18,830/month - based on highest available value for individual income data from PUMF).

Rents were for 'average rent' units.

***Appendix 17: High and low R/I percentages for different income quartile young adult singles, by Greater Vancouver sub-area, for 1 bedroom units, 2006.***

	<u>1st Quartile Group (High R/I to Low R/I)</u>	<u>2nd Quartile Group (High R/I to Low R/I)</u>	<u>3rd Quartile Group (High R/I to Low R/I)</u>	<u>4th Quartile Group (High R/I to Low R/I)</u>
<b>Greater Vancouver Total</b>	<b>&gt;100% to &gt;100%</b>	<b>&gt;100% to 89%</b>	<b>89% to 43%</b>	<b>43% to ≈0%</b>
Burnaby/ New Westminster Sub-Area	>100% to >100%	>100% to 80%	80% to 38%	38% to ≈0%
Coquitlam, Port Coquitlam, Port Moody Sub-Area	>100% to >100%	>100% to 76%	76% to 36%	36% to ≈0%

Langley Sub-Area	>100% to >100%	>100% to 77%	77% to 37%	37% to ≈0%
Maple Ridge/Pitt Meadows Sub-Area	>100% to >100%	>100% to 66%	66% to 31%	31% to ≈0%
North Shore Sub-Area	>100% to >100%	>100% to 95%	95% to 45%	45% to ≈0%
Richmond/Delta Sub-Area	>100% to >100%	>100% to 82%	82% to 39%	39% to ≈0%
Surrey/White Rock Sub-Area	>100% to >100%	>100% to 74%	74% to 35%	35% to ≈0%
Vancouver/UEL Sub-Area	>100% to >100%	>100% to 95%	95% to 45%	45% to ≈0%

Sources: For Rents, CMHC, 2006. For Incomes, Statistics Canada, 2010.

***Appendix 18: High and low R/I percentages for different income quartile young adult singles by Greater Vancouver sub-area, for 2 bedroom units, 2006.***

	<u>1st Quartile Group (High R/I to Low R/I)</u>	<u>2nd Quartile Group (High R/I to Low R/I)</u>	<u>3rd Quartile Group (High R/I to Low R/I)</u>	<u>4th Quartile Group (High R/I to Low R/I)</u>
<b>Greater Vancouver Total</b>	<b>&gt;100% to &gt;100%</b>	<b>&gt;100% to 57%</b>	<b>57% to 27%</b>	<b>27% to ≈0%</b>
Burnaby/ New Westminister Sub-Area	>100% to >100%	>100% to 50%	50% to 24%	24% to ≈0%
Coquitlam, Port Coquitlam, Port Moody Sub-Area	>100% to >100%	>100% to 45%	45% to 22%	22% to ≈0%
Langley Sub-Area	>100% to >100%	>100% to 46%	46% to 22%	22% to ≈0%
Maple Ridge/Pitt Meadows Sub-Area	>100% to >100%	>100% to 42%	42% to 20%	20% to ≈0%
North Shore Sub-Area	>100% to >100%	>100% to 64%	64% to 30%	30% to ≈0%
Richmond/Delta Sub-Area	>100% to >100%	>100% to 53%	53% to 25%	25% to ≈0%

Surrey/White Rock Sub-Area	>100% to >100%	>100% to 45%	45% to 22%	22% to ≈0%
Vancouver/UEL Sub-Area	>100% to >100%	>100% to 68%	68% to 32%	32% to ≈0%

Sources: For Rents, CMHC, 2006. For Incomes, Statistics Canada, 2010.



**Appendix 19: Percentage of young adult singles who could have 'afforded' 'average rent' bachelor units, by Greater Vancouver sub-area, 2006.**

Sub-Area	Monthly Rent	Minimum Monthly Qualifying Income Required (Core Housing Need Standard)	Percentage of Young Adult Singles With this Income or Higher	Minimum Monthly Qualifying Income Required (Severe Housing Stress Standard)	Percentage of Young Adult Singles With this Income or Higher
Greater Vancouver Total	\$701	\$2,337	18%	\$1,402	37%
Burnaby/New Westminster Sub-Area	\$603	\$2,010	23%	\$1,206	41%
Coquitlam, Port Coquitlam, and Port Moody Sub-Area	\$589	\$1,963	25%	\$1,178	41%
Langley Sub-Area	\$596	\$1,987	25%	\$1,192	41%
Maple Ridge/Pitt Meadows Sub-Area	\$504	\$1,680	29%	\$1,008	46%
North Shore Sub-Area	\$718	\$2,393	18%	\$1,436	35%
Richmond/Delta Sub-Area	\$610	\$2,034	23%	\$1,221	41%
Surrey/White Rock Sub-Area	\$575	\$1,917	26%	\$1,150	43%
Vancouver/UEL Sub-Area	\$727	\$2,423	17%	\$1,454	35%

Sources: For Rents, CMHC, 2006. For Incomes, Statistics Canada, 2010.

Note: All numbers are rounded to the closest whole number. Bachelor units were based on single occupancy.

**Appendix 20: Percentage of young adult singles who could have 'afforded' 'average rent' 1 bedroom units, by Greater Vancouver sub-area, 2006.**

<b>Sub-Area</b>	<b>Monthly Rent</b>	<b>Minimum Monthly Qualifying Income Required (Core Housing Need Standard)</b>	<b>Percentage of Young Adult Singles With this Income or Higher</b>	<b>Minimum Monthly Qualifying Income Required (Severe Housing Stress Standard)</b>	<b>Percentage of Young Adult Singles With this Income or Higher</b>
Greater Vancouver Total	\$816	\$2,720	14%	\$1,632	31%
Burnaby/New Westminster Sub-Area	\$732	\$2,438	17%	\$1,463	35%
Coquitlam, Port Coquitlam, and Port Moody Sub-Area	\$695	\$2,317	19%	\$1,390	37%
Langley Sub-Area	\$708	\$2,360	18%	\$1,416	37%
Maple Ridge/Pitt Meadows Sub-Area	\$602	\$2,007	23%	\$1,204	41%
North Shore Sub-Area	\$868	\$2,893	12%	\$1,736	29%
Richmond/Delta Sub-Area	\$753	\$2,509	16%	\$1,505	33%
Surrey/White Rock Sub-Area	\$677	\$2,256	19%	\$1,354	37%
Vancouver/UEL Sub-Area	\$870	\$2,902	12%	\$1,741	29%

Sources: For Rents, CMHC, 2006. For Incomes, Statistics Canada, 2010.

Note: All numbers are rounded to the closest whole number. One bedroom units were based on single occupancy.

**Appendix 21: Percentage of young adult singles who could have 'afforded' 'average rent' 2 bedroom units, by Greater Vancouver sub-area, 2006.**

<b>Sub-Area</b>	<b>Monthly Rent Total (# in ( ) = Monthly Rent Per Roommate)</b>	<b>Minimum Monthly Qualifying Income (Per Roommate) Required (Core Housing Need Standard)</b>	<b>Percentage of Young Adult Singles With this Income or Higher</b>	<b>Minimum Monthly Qualifying Income (Per Roommate) Required (Severe Housing Stress Standard)</b>	<b>Percentage of Young Adult Singles With this Income or Higher</b>
<b>Greater Vancouver Total</b>	\$1,045 (\$523)	\$1,742	29%	\$1,045	46%
Burnaby/New Westminster Sub-Area	\$909 (\$454)	\$1,515	33%	\$909	51%
Coquitlam, Port Coquitlam, and Port Moody Sub-Area	\$834 (\$417)	\$1,390	37%	\$834	51%
Langley Sub-Area	\$837 (\$419)	\$1,395	37%	\$837	51%
Maple Ridge/Pitt Meadows Sub-Area	\$772 (\$386)	\$1,287	39%	\$772	55%
North Shore Sub-Area	\$1,164 (\$582)	\$1,941	25%	\$1,164	43%
Richmond/Delta Sub-Area	\$972 (\$486)	\$1,620	31%	\$972	48%
Surrey/White Rock Sub-Area	\$826 (\$413)	\$1,377	37%	\$826	55%
Vancouver/UEL Sub-Area	\$1,245 (\$622)	\$2,075	23%	\$1,245	41%

Sources: For Rents, CMHC, 2006. For Incomes, Statistics Canada, 2010.

Note: All numbers are rounded to the closest whole number. Two bedroom units were based on double occupancy (with the rent being split evenly between the two occupants).

