

Income Support and the Affordability of Housing in British Columbia

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Abstract

In this report we show how current levels of income support in British Columbia are often inadequate for people with very low incomes to maintain housing. We show, however, that this has not always been the case, it is not always the case in all communities, and it is not always the case for all family compositions. This variety of outcomes is due to housing costs varying widely across communities while income support payments are the same regardless of where one lives in the province and due to differences in income support provided to families of different size and composition. The result is a patchwork where maintaining housing is extremely difficult for some family compositions in some communities but far easier for other family compositions or in other communities. We propose a way of modifying how income support is provided so that housing affordability can be improved and maintained over time as housing costs change.

Introduction

The claim that stable housing is important for health, a claim built on evidence produced by researchers in the fields of health, economics, and housing, has surely been given further credence by the COVID-19 pandemic of 2020. Yet housing remains far from secure for many individuals and families living with low income. Relying mainly on rental units, individuals and families with low income often lead a precarious life of continuously stretching a thin budget to try to meet basic needs. Housing is easily the largest and least flexible claim on the after-tax income of people living with low income. As the cost of housing rises relative to income, spending on other essentials gets squeezed. This results in hard choices between paying for food or paying for utilities. In the extreme, it can result in a choice between maintaining housing and abandoning it in favour of using a city's homeless shelter system or sleeping rough. Given the impact of housing security on health and one's resiliency in the face of short-term dislocations, any assessment of a program of income assistance must consider the degree to which it enables security of housing.

In this report we show how current levels of income support in British Columbia are often inadequate for people with very low incomes to maintain housing. We show, however, that this has not always been the case, it is not always the case in all communities, and it is not always the case for all family compositions. This variety of outcomes is due to housing costs varying widely across communities while income support payments are the same regardless of where one lives in the province and due to differences in income support provided to families of different size and composition. The result is a patchwork where maintaining housing is extremely difficult for some family compositions in some communities but far easier for other family compositions or in other communities. We propose a way of modifying how income support is provided so that housing affordability can be improved and maintained over time as housing costs change.

In the next section, we describe the importance of housing in the social safety net. We then justify our focus on social assistance as a measure of the income of individuals and families with very low incomes. In the third section, we describe the relevant stock of housing appropriate for understanding the affordability of housing for individuals and families with low income. We then review the way in which housing affordability has been defined in Canada and in other countries, and we apply data to a measure of housing affordability to show how affordability has changed over time and how it differs across communities. In the sixth section, we describe our proposal for modifying how the amount of income support is determined, and the cost of our proposal. We then compare our proposal to other solutions to the problem of ensuring individuals and families have sufficient income to maintain housing. Finally, we offer conclusions.

Housing in the Social Safety Net

The social safety net is a collection of services and transfers designed to “catch” individuals and families in need of support. In Canada, that part of the social safety net designed to ensure access to affordable housing by those with insufficient earned income is mainly, though not solely, accomplished with the provision of income support. For example, some provincial governments use rent controls to increase affordability of housing and all have relatively small programs for government provision of social housing. Providing sufficient income to access stable and safe housing is more attractive than these other approaches because it provides individuals and families with choice about the type of housing they prefer and gives them the freedom to trade housing quality for other goods and services that better satisfy their wants. The challenge is ensuring that income support is enough to guarantee access to at least some minimum standard of housing while leaving enough income available to purchase other necessities.¹

Foremost among those other necessities is food. Using national data from Statistics Canada’s Survey of Household Spending, Kirkpatrick and Tarasuk (2008) showed that after controlling for household income and composition, as the proportion of income allocated to housing increased for families in the three lowest income quintiles, food spending adequacy declined significantly. Focusing on low-income families in Toronto, Kirkpatrick and Tarasuk (2011) showed that food insecurity quickly rises with the percentage of household budget allocated to maintaining housing. Using Australian data, Bentley et al. (2011) provided evidence showing that among households with very low income, as housing costs rise above 30% of income, people experience a deterioration in their mental health.² In their investigation of the impact of high housing costs in Hong Kong, Chung et al. (2020) similarly noted that issues of mental and physical health that they associated with high housing costs impact most heavily those families who are left with the smallest after-housing budgets.

We note these associations between housing costs, food insecurity, and health for two related reasons. First, they highlight the essential role of housing in people’s lives. Without secure and affordable housing, it is extremely difficult to maintain health and employment and it is difficult to keep these impacts from affecting the future of one’s children. Second, they underscore the high rate of return to investments in housing affordability. Policy choices that make housing more affordable are often expensive, but that gross cost should be balanced against savings to the rest of the public sector that come from improvements in health, food security, and other ways.

As the studies cited above suggest, a key measure for evaluating housing affordability is the rent-to-income ratio. This measure will be at the centre of our investigation into how

¹ We limit the discussion to those income support and related benefit programs administered and delivered by provincial/territorial and/or local governments. While the federal government does make income assistance available to members of First Nations communities living on reserve, the legal and social context for these measures precludes meaningful comparative analysis.

² The authors suggested that the effect is limited to low-income households because high housing costs borne by high-income households reflects a voluntary housing investment and so is less deleterious to mental health.

changes in the way income support is provided might result in better outcomes not only in terms of security of housing but also in terms of food security and better physical and mental health.

Specifically, we focus on the rent-to-income ratio defined as R_i/Y_i , where R_i is the rent paid on housing by individuals and families with low income in period i and Y_i is the income available to those same individuals and families in that period. Developing an appropriate measure of the rent-to-income ratio requires attention be paid to defining the appropriate housing for families in need of income assistance, data on the rent they are observed to pay, and data on the income to which they have access. We begin with the income of the very poor.

Income Assistance and the Income of the Very Poor

For individuals and families with very low income, income transfers are a key source of income. In B.C. in 2018, earned income accounted for only 30% of the total pre-tax income received by families in the lowest income decile. For families in the second decile of incomes, earned income accounted for 62% of total pre-tax income. The remaining income received by households in the first and second decile of the income distribution came in the form of income transfers.³ When we think of families with very low incomes, we should think of families heavily reliant on government-provided income support.

Table 1 presents data for B.C. in 2018. It highlights how the after-tax incomes of families and persons not in an economic family compare to social assistance incomes of some sample family compositions.⁴ The message is that when we use measures of government-provided income support, we are using a measure that also accurately measures the after-tax incomes of the working poor. Families with very low earned income and families reliant on income assistance are often one and the same.

Table 1
Income of the Very Poor, 2018

	Average after-tax income		Maximum social assistance income			
	Lowest decile	Second decile	Single	Lone parent, one child	Couple, three children	Single disability
Economic family	\$23,400	\$46,200		\$20,782	\$33,407	
Persons not in an economic family	\$3,600	\$14,500	\$9,042			\$14,802

Note. Average after-tax income by income decile is from Statistics Canada Table 11-10-0192-01. Income assistance income is based on data from Tweddle and Aldridge (2018) and authors' calculations. Social assistance income represents the maximum benefit available, inclusive of all tax and child benefits from both the province and the federal government, to an individual or family with no other source of income.

³ Calculated using Statistics Canada Table 11-10-0192-01.

⁴ An economic family refers to two or more people living in the same residence and related to one another by blood, marriage, common-law union, adoption, or a foster relationship. Persons not in an economic family include people who are single and living alone or who are single and living with other singles not part of their economic family.

Income support in B.C. is delivered by three programs that differ by the degree of attachment an applicant is deemed to have to the labour market. Income Assistance (IA) is provided to someone who is deemed fully able to work. The Persons with Persistent Multiple Barriers (PPMB) program provides aid to persons who have barriers to employment that are not expected to be overcome in the short term. The program is intended to give people time to overcome their barriers and move toward employment or to transition to the Persons with Disabilities (PWD) program.

Several features of these programs are relevant to our examination of their impact on the affordability of housing. One is that the income support provided by the province is made in several forms. Some of that support is in the form of monthly cheque.⁵ This is the largest part of the support provided by the provincial government. It is not indexed for inflation. Thus, as in most provinces, the government periodically adjusts levels of income support, but between these adjustments, inflation whittles away at the purchasing power of income support. The provincial government also provides support in the form of tax credits and benefits and, for parents, a child benefit.⁶ Like the basic social assistance amount, provincial child benefits are not indexed for inflation. The tax credits and child benefit are only available to income support recipients who complete tax forms.

On top of these provincial benefits, the federal government provides a child benefit and a GST/HST tax credit. The Canada Child Benefit is a monthly benefit. It is considerably larger than the provincial child benefit and is indexed to inflation. The HST/GST rebate is paid quarterly and is indexed for inflation. All federal benefits are available only to claimants who complete tax forms.

In what follows, we assume income assistance recipients make claim for, and receive, all the income benefits to which they are entitled.⁷ We also assume recipients are successfully able to smooth payments that are received quarterly evenly across the intervening months. If, in fact, they are unable to do so, then the income available to meet monthly housing costs is less

⁵ This is split into two parts, a support allowance and a shelter allowance. Receipt of the shelter allowance is conditional providing proof of housing cost. The size of the shelter allowance is sensitive to the size of the recipient's family and subject to a maximum amount. If rent paid exceeds the maximum amount, the difference must come out of the support allowance.

⁶ All households receive the B.C. Sales Tax Credit and the B.C. Low Income Climate Action Tax Credit. These benefits are paid quarterly.

⁷ This is not an inconsequential assumption. Cameron et al. (2020) reported that in 2016, 13.5% of working-age adults in B.C. did not file taxes. Stapleton (2018) calculated that roughly one third of social assistance recipients in Ontario do not file taxes. For people seeking disability benefits, obtaining these benefits not only requires the skills necessary to accurately complete increasingly complex tax forms, but may also subject benefit claims to challenge by the Canada Revenue Agency. This is a dilemma that is proving to be increasingly problematic for families seeking support via programs aimed at helping families with children dealing with disabilities. Thus, the emphasis on providing benefits via the tax system means that benefits provided to many families are determined less by the considerations of a caseworker following an interview with applicants and reviewing medical files and more by the impersonal judgements of the Canada Revenue Agency. For a discussion of these issues, see Dunn and Zwicker (2018).

than we are assuming. Data on social assistance incomes in B.C. are available for years since 1986 from Tweddle and Aldridge (2018).⁸

The Relevant Stock of Housing

To determine the appropriate measure of the cost of housing relevant for individuals and families with low income, R_i , we need to make assumptions regarding the housing choice of individuals and families of different sizes and composition.

The cost of shelter that is most relevant for individuals and families with low income is the cost of renting.⁹ Rents vary by size of rental unit (one bedroom, two bedrooms, etc.) and by community. They also vary by quality (old units in need of repair versus new units with modern facilities) and by location within the community (some are close to schools, public transportation, etc., while others are not). When using rents as a measure of the shelter costs relevant for households with limited income, it is important to recognize that for most such households, the relevant rental market is for units of relatively poor quality and so offered at relatively low cost. Using the average (or median) rent paid on a rental unit in a community overstates the rent paid by most individuals and families with low income.

Figure 1 shows the range of rents paid on purpose-built studio, one-bedroom, and two-bedroom rental units in seven B.C. communities in 2018.^{10, 11} For each community, the width of the bars shows the range of rents paid on units in that community. Imagine a community having 100 rental units ordered from the least (unit 1) to the most expensive (unit 100). The range of rents identified by the light grey bars represents the rent paid on units 20 to 40. The medium grey bars show the rent paid on units 41 to 60, and the dark grey bars show the rent paid on units 61 to 80. The width of the bar for the first and fifth quintile of rents is suppressed for data confidentiality reasons.

These data show that the cost of rental accommodations varies widely by community. In 2018, the monthly rent paid on a lower-quality one-bedroom apartment in Vancouver was \$985.

⁸ The data in that published report are measured in real dollars deflated using the consumer price index for Canada. We thank Sherri Torjman, Anne Tweddle, and Ken Battle for providing us with the nominal values of these published data, which we use in this report.

⁹ While it is true that some individuals or families in low income, perhaps due to divorce or other circumstances, may find themselves to be homeowners, they are in the minority. Statistics Canada (CANSIM Table 11-10-0057-01) reported that in Canada in 2016, only 22% of individuals and families in low income owned a principal residence. Of these, only about half were mortgage-free. Even those who are mortgage-free face costs of homeownership (maintenance, utilities, and property taxes) that are like the costs of renting. For all these reasons, we believe the cost of renting is a good measure of the housing costs faced by those with low incomes.

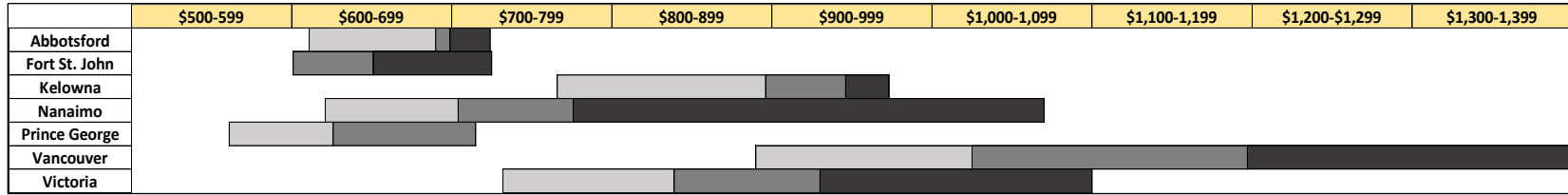
¹⁰ Data provided by special request to Canada Mortgage and Housing Corporation (CMHC). The rental data provided by CMHC are the actual amounts tenants pay for their rental unit. Rents are those paid on units in the primary rental market purposely built for rent. Utilities such as heating, electricity, and hot water may or may not be included in the rent.

¹¹ The rest of the rental universe appropriate for individuals and families with low income includes non-purpose-built rentals such as basement suites and non-market public housing units. We assume the rents paid on the first quintile of purpose-built market rentals are equal to or exceed the rent on these other sources of rental housing.

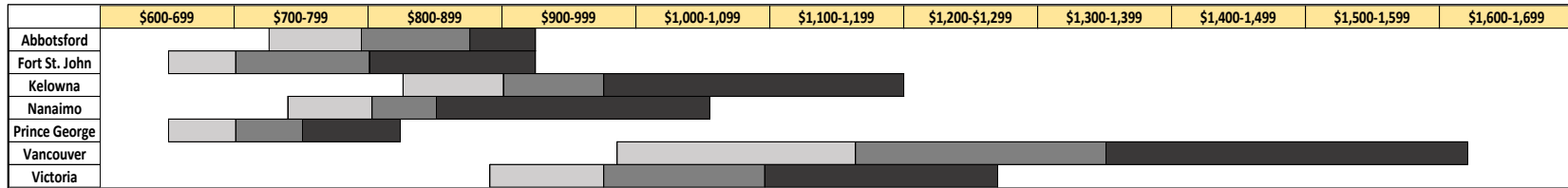
Figure 1

Rents on Purpose-Built Rentals, by Quintile and by Community

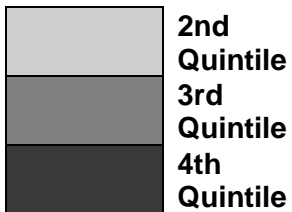
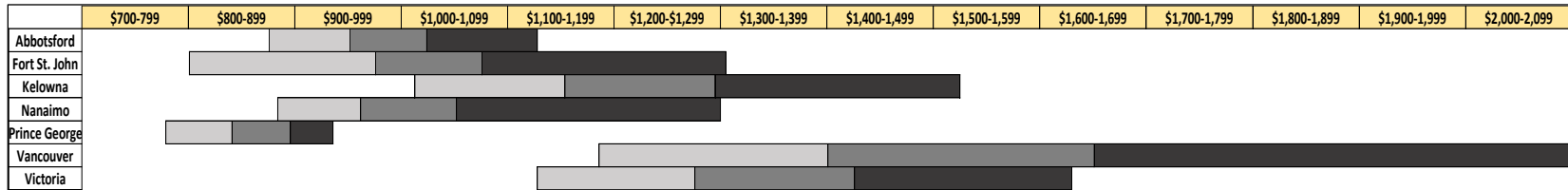
Studio



One Bedroom



Two Bedrooms



This compares to just \$650 in Fort St. John and Prince George. For two-bedroom units, the difference across communities was even wider; from a high of \$1,185 in Vancouver to a low of \$780 in Prince George.

We assume individuals and families with very low income choose to live in inexpensive rental units so they can better afford to pay for other necessities, such as food and utilities. In our calculations we assume low-income households pay a rent at the top of the first quintile of rents available in their community.

To gain a measure of the affordability of housing for individuals and families reliant on income support, we need to also make assumptions about the size of rental unit occupied. We assume a one-bedroom unit is rented by a couple with no children and by a lone parent with one child. Two-bedroom units are assumed to be rented by couples with one or two children and by lone parents with two children. Larger family units are assumed to rent a three-bedroom unit. Single people in receipt of income assistance are assumed to rent a studio apartment or contribute to the rent on shared accommodations. In what follows, we consider different ways in which singles might share accommodations with other singles.

We recognize that some of these assumptions are not always in compliance with National Occupancy Standards (NOS) for suitable accommodations. For example, our implicit assumption that a lone parent with one child might wish to use a sofa bed in a one-bedroom apartment (leaving the bedroom for the child) is contrary to the NOS, suggesting that a suitable accommodation would mean the parent and child have separate bedrooms. It is important to recognize, however, that the NOS are only guidelines and it remains to the discretion of provincial and municipal providers of public housing whether they use those guidelines when matching families to housing units. Our assumption is that in the private market, parents make choices that maximize the well-being of their family and that if the choice is between what the NOS define as crowding and forgoing other necessities, then they will choose crowding.

When Is Housing Affordable?

Having established measures of the income of individuals and families with low income, Y_i , and an appropriate measure of the rent paid by those individuals and families, R_i , we next need to determine what values of the rent-to-income ratio, R_i/Y_i , are indicative of housing being affordable.

The Canada Mortgage and Housing Corporation (CMHC) identifies two measures of housing affordability. CMHC defines a household as being “housing burdened” should it devote 30% of before-tax income to housing costs.¹² The second measure of housing affordability that

¹² CMHC assesses whether a household is in “core housing need” based on three criteria: suitability, adequacy, and affordability. Satisfaction of the affordability criteria is based on whether the household spends more than 30% of its gross income on housing. If a household spends more than 30% of income on housing, and if its income is not enough to afford the median rent on a suitable and adequate dwelling with 30% of its income, then that household is said to be in core housing need. Pomeroy (2011) noted that failing the affordability criteria is far and away the main reason households become classified as being in core housing need.

has been introduced by CMHC applies a 50% standard. A household is described as “severely cost burdened” if it must pay more than 50% of its gross income for rent and utilities.

Hulchanski (1995) described the history of the 30% standard and how arbitrary its adoption has been as a rule for identifying housing affordability. Even so, it is widely used in Canada and around the world.¹³ In the absence of a more firmly grounded metric of housing affordability, we will highlight a 40% rent-to-income measure, a choice between the widely adopted measures of a household being “housing burdened” and being “severely cost burdened.” We discuss the sensitivity of the costs of applying this affordability rule in what we present below.

Rent-to-Income Ratios

In this section we provide measures of the rent-to-income ratio over time and across B.C. communities. Our data span the period 1990–2018 and examine the affordability of the lowest-cost housing available to the very poor living in 26 urban centres in B.C. We examine the affordability of housing for four family compositions: singles, lone parents with one child, and couples with two children all receiving Income Assistance (IA) and a single person reliant on PWD benefits. For each family composition, we apply the assumption described earlier about the size of rental accommodation chosen. Because singles have more housing options than families, we consider a number of options for the housing choices of singles reliant on IA. We will see that those calculations show that the affordability of housing for individuals and families reliant on income support is not, and has not always been, uniformly bad in all parts of B.C. and for all family compositions. In some centres, however, the affordability crisis has been very serious and prolonged.

Table 2 calculates what percentage of the income available to a family receiving IA must be devoted to paying rent. In panel A the rent-to-income ratio is presented for a lone parent with one child wholly reliant on IA benefits, in receipt of the maximum benefits available, and living in a one-bedroom apartment priced at the top of the first quintile of the rent distribution in that community. In panel B we report the same measure using the same assumptions for a couple with two children living in a two-bedroom apartment. We show rent-to-income ratios every 5 years since 1990 and for the final four years of our dataset. In 2018, 13% and 0.8% of all IA cases comprised a lone parent with one child and a couple with two children, respectively.¹⁴

It is important to emphasize that the calculations in Table 2 are based on an amount of income support that is the same in all communities. That is, a lone parent with one child, for

¹³ The U.S. Department of Housing and Urban Development (HUD) also uses the 30% and 50% rules as boundaries of affordability and severe rent burdens. The OECD (2019) defines a household as being cost-burdened when the ratio of rent to income exceeds 40%. The Australian Housing and Urban Research Institute (2019) applies the 30% rule to households with income levels in the bottom 40% of Australia's income distribution.

¹⁴ In 2018, the number of PPMB cases was less than 7% of the number of IA cases. PPMB clients receive only slightly higher monthly income (less than \$50 in 2018) than IA clients. For ease of presentation, in what follows we ignore the difference between PPMB and IA cases. In each case we assume the benefit recipient has no earned income to report and completes all necessary tax forms required to receive maximum benefits.

Table 2*Housing affordability in select cities in British Columbia, % of Families with Children*

A. Lone parent with one child renting a one-bedroom apartment									
	1990	1995	2000	2005	2010	2015	2016	2017	2018
Abbotsford	40%	39%	41%	45%	42%	42%	42%	42%	42%
Fort St. John	29%	39%	35%	47%	45%	51%	44%	39%	38%
Kelowna	37%	44%	42%	48%	47%	47%	47%	49%	48%
Nanaimo	39%	39%	35%	42%	40%	39%	41%	41%	43%
Prince George	40%	40%	37%	39%	37%	38%	38%	39%	38%
Vancouver	50%	49%	51%	56%	53%	54%	55%	56%	57%
Victoria	44%	46%	46%	51%	50%	50%	50%	51%	51%

B. Couple with two children renting a two-bedroom apartment									
	1990	1995	2000	2005	2010	2015	2016	2017	2018
Abbotsford	39%	39%	38%	42%	39%	39%	39%	37%	39%
Fort St. John	26%	35%	33%	42%	43%	49%	43%	37%	36%
Kelowna	35%	39%	39%	44%	45%	43%	43%	43%	45%
Nanaimo	37%	39%	35%	39%	41%	40%	39%	39%	39%
Prince George	34%	37%	34%	34%	35%	37%	37%	36%	35%
Vancouver	49%	45%	47%	50%	50%	50%	51%	51%	53%
Victoria	43%	43%	43%	47%	49%	49%	49%	48%	50%

Note. Colours indicate the severity of the affordability problem in that jurisdiction and year by identifying a range of values. White cells indicate 35% or less of a family's social assistance income needed to be devoted to paying rent on a low-quality rental unit. Other colours indicate different ranges as follows:

0%–35%	35%–50%	50%–65%	> 65%
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Rental data provided by Canada Housing and Mortgage Corporation via a special data request. Income assistance data is from Tweddle and Aldridge (2018).

example, receives the same IA benefit regardless of where the family lives in B.C. Since, as shown in Figure 1, housing costs vary widely by community, so too will the percentage of the income support received that will need to be devoted to housing. The calculations show that for families receiving IA, housing costs have often forced them to devote very large fractions of their income to remaining housed.¹⁵ The calculations also show that affordability is much better in some communities than others and that for a given community, affordability can change quickly and by a significant amount.

The calculations in Table 2 assume that families live in their own accommodation separate from other families. A similar assumption need not be made for singles who can choose to share accommodations. Table 3 presents rent-to-income ratios for a single person,

¹⁵ If we imposed the NOS on the lone parent with one child, she would be required to rent a two-bedroom apartment. In 2018, had she lived in Vancouver, her rent-to-income ratio would have been 68% rather than 57%. Had she lived in Victoria, her rent-to-income ratio would have been 65% rather than 51%.

Table 3*Housing affordability in select cities in British Columbia, % of Singles***A. Single renting a studio apartment**

	1990	1995	2000	2005	2010	2015	2016	2017	2018
Abbotsford	62%	69%	70%	79%	77%	84%	86%	84%	81%
Fort St. John	50%	61%	66%	84%	84%	97%	92%	78%	80%
Kelowna	56%	70%	78%	86%	83%	92%	96%	113%	102%
Nanaimo	63%	70%	66%	74%	70%	81%	84%	86%	82%
Prince George	63%	69%	66%	70%	69%	77%	77%	84%	74%
Vancouver	81%	82%	94%	107%	104%	115%	123%	123%	118%
Victoria	71%	74%	81%	89%	88%	99%	104%	103%	97%

B. Two singles renting and sharing a two-bedroom apartment

	1990	1995	2000	2005	2010	2015	2016	2017	2018
Abbotsford	50%	51%	54%	60%	54%	59%	61%	59%	58%
Fort St. John	34%	46%	47%	60%	59%	73%	68%	59%	53%
Kelowna	45%	51%	55%	63%	62%	65%	67%	69%	67%
Nanaimo	48%	50%	49%	56%	56%	59%	61%	63%	59%
Prince George	43%	48%	48%	48%	48%	56%	58%	57%	52%
Vancouver	63%	59%	66%	72%	69%	75%	80%	81%	79%
Victoria	55%	56%	61%	67%	67%	73%	76%	77%	75%

C. Three singles renting and sharing a three-bedroom apartment

	1990	1995	2000	2005	2010	2015	2016	2017	2018
Abbotsford	37%	41%	44%	44%	39%	45%	46%	42%	38%
Fort St. John	25%	28%	34%	42%	45%	51%	49%	42%	38%
Kelowna	27%	33%	39%	42%	45%	46%	49%	48%	45%
Nanaimo	35%	38%	39%	43%	45%	48%	53%	46%	49%
Prince George	33%	36%	33%	37%	36%	44%	42%	42%	39%
Vancouver	47%	45%	51%	54%	52%	57%	59%	59%	55%
Victoria	42%	42%	47%	50%	54%	58%	61%	63%	60%

Note. Colours indicate the severity of the affordability problem in that jurisdiction and year by identifying a range of values. White cells indicate 35% or less of a family's social assistance income needed to be devoted to paying rent on a low-quality rental unit. Other colours indicate different ranges as follows:

0%–35%	35%–50%	50%–65%	> 65%
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Rental data provided by Canada Housing and Mortgage Corporation via a special data request. Income assistance data is from Tweddle and Aldridge (2018).

dependent on IA, living on her own and in two alternative shared living accommodations: sharing a two-bedroom unit with a roommate and sharing a three-bedroom unit with two roommates. Rents are assumed to be shared equally. In 2018, just short of 70% of all IA cases involved single people.

Panel A of Table 3 shows that it is impossible for a single person reliant on IA to live on her own if social assistance is her only source of income. Rent on even a poor-quality studio apartment often exhausts all income available. The tables in panels B and C suggest sharing a three-bedroom unit with two roommates is the most feasible option, particularly in Vancouver and Victoria.

Table 4 shows the rent-to-income ratio faced by a single person reliant on PWD benefits and renting a studio apartment prices at the top of the first quintile of rents. In 2018, 88% of all PWD cases involved single people. We assume someone reliant on PWD has limited options for sharing accommodations and so consider only this one housing option.

Table 4

Housing Affordability in Select Cities in British Columbia, % of Singles Reliant on Disability Assistance Renting a Studio Apartment

	1990	1995	2000	2005	2010	2015	2016	2017	2018
Abbotsford	45%	49%	46%	48%	52%	58%	57%	52%	49%
Fort St. John	36%	44%	43%	51%	57%	66%	61%	48%	49%
Kelowna	41%	50%	51%	52%	57%	63%	64%	70%	62%
Nanaimo	45%	50%	43%	45%	48%	55%	56%	54%	50%
Prince George	45%	49%	43%	42%	47%	53%	51%	52%	45%
Vancouver	58%	58%	62%	65%	71%	79%	82%	77%	72%
Victoria	51%	53%	53%	54%	60%	68%	69%	64%	59%

Note. Colours indicate the severity of the affordability problem in that jurisdiction and year by identifying a range of values. White cells indicate 35% or less of a family’s social assistance income needed to be devoted to paying rent on a low-quality rental unit. Other colours indicate different ranges as follows:

0%–35%	35%–50%	50%–65%	> 65%
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Rental data provided by Canada Housing and Mortgage Corporation via a special data request. Income assistance data is from Tweddle and Aldridge (2018).

The rent-to-income ratios in Tables 2, 3, and 4 highlight that even rent paid on a poor-quality rental unit is a challenge for individuals and families reliant on income support to pay. When housing burden is high, the income remaining after paying rent is such to make it difficult to purchase other of life’s necessities. Thus, as we discussed earlier, it is not surprising that the evidence shows food insecurity is high for families with low income, as are the health and other problems that are associated with low income.

But this is not necessarily true in all communities. The severity of housing cost burden varies by community because income support benefits are legislated to be the same across communities while rental costs vary widely. Thus, whereas in 2018 a low-quality one-bedroom

rental was priced at \$985 per month in Vancouver, a similar apartment in Port Alberni rented for only \$525 per month. For a lone parent with one child, the \$460 per month difference is a large benefit for the family living in Port Alberni and may represent what is necessary to avoid issues of food insecurity.

This example illustrates the disadvantage a family reliant on social assistance has by living in a community, usually large, where housing is expensive. Assuming two families equal in all respects but location, the family living in a community with more expensive housing sees its budget for food, utilities, and other necessities squeezed into smaller amounts. The family may wish to move to a community with lower-cost housing but, if that new community is relatively devoid of employment prospects, the family may become trapped in a location where its opportunities for escaping poverty are relatively few. Similarly, the family living in a community where housing is relatively inexpensive is hesitant to move to where employment prospects are improved but housing is unaffordable. By providing the same level of income support to all families regardless of location, the current income support system creates, as emphasized by Steele (2007, pp. 70, 71), a “vast disparity in the standard of living of recipients living in the large cities compared with that elsewhere.”

The Crowding Out of the Non-Rent Budget by Rent Increases

The prices paid for goods and services change over time. A system of income support must provide a mechanism by which income support is adjusted in consideration of those price increases. We noted earlier that only portions of the income received by people reliant on income support is indexed to account for price increases. Most importantly, the basic cash benefit is not. Thus, except for the quarterly HST/GST rebate, the income support provided to single people, the largest demographic of income support recipients in B.C., is not indexed for inflation. The lack of some formal method of price indexation leaves individuals and families reliant on income assistance at the mercy of governments to periodically reset income support levels to account for price increases. Over the period 2008–2015, for example, IA provided to single people increased by an annual average of just 0.08% and PWD benefits increased by an annual average of 0.04%. At the same time, the rent on studio, one-bedroom, two-bedroom, and three-bedroom rental units in Vancouver increased by an annual average of 2.6%, 2.3%, 2.1%, and 2.3%, respectively. Over this period then, the crowding out of non-rent expenditures in Vancouver—home to 45% of all income support cases in B.C. in 2015—was relentless and substantial.

The Problem in Sum

The disconnect between annual changes in rents and annual changes in income support payments has resulted in volatility in, and generally rising, rent-to-income ratios. During prolonged periods when income support has not been adjusted for inflation, these changes in the rent-to-income ratio have in turn translated into volatile and decreasing non-rent budgets—the budget for food, utilities, and other necessities—of individuals and families with low income. It has also given rise to significant differences in living standards for individuals and families

dependent on income support who are similar in all respects other than where they live. The impact of these changes has been most heavily felt in Vancouver and Victoria, home to over half of all income support cases in the province, and among single people, the largest demographic among recipients of income assistance.

A Proposal

In this section we describe and then provide a costing of a proposal for changing the way income support is structured. The proposal focuses on the variable that is identified as a key indicator of well-being for persons and families with low income, namely, the rent-to-income ratio. The approach is simple and involves an adjustment to income support that is sufficient to ensure the rent-to-income ratio does not exceed a specified maximum value. An implication of the proposal is that it indexes income support to rent inflation and eliminates the disadvantage suffered by people as a result of where in the province they live.

The maximum value chosen for the rent-to-income ratio determines the cost of the proposal. If the government is tolerant of income support recipients devoting a large fraction of their income to rent, the proposal is cheaper than otherwise. To provide an initial costing of our proposal and to illustrate the implications of the proposal, we will assume a policy of regionally sensitive and variable income support that maintains a rent-to-income ratio of no more than 40% in all communities and for all family compositions.

Table 5 shows, for three family categories over 9 years, calculations of how much monthly social assistance payments would have needed to be adjusted to ensure no family devoted more than 40% of social assistance income to paying rent.¹⁶ These calculations are based on the rent charged on a market-provided rental unit priced at the top of the first quintile of the rent distribution in that community and based on our assumptions about the size of rental unit housing each family unit. Shaded cells indicate in which communities and in which years the amount of social assistance could have been lowered to meet the target of devoting no more than 40% of income to rent. We show results for the same seven communities we used earlier to illustrate calculations. Our costing estimates, which follow, include the cost of implementing the program in 26 communities in the province.

These calculations reveal several issues. First, in some communities, maintaining a 40% rent-to-income ratio would have had to involve a substantial increase in levels of income support. This is evidence of the high housing costs in those communities. On the other hand, in some communities and in some years, housing costs were so low that reductions in income support would have been required to establish rent-to-income ratios at 40%. Second, the cost of this program varies by year because, of course, so too do rents and current levels of income

¹⁶ These calculations, and those performed to provide a cost estimate for our proposal, assume no further adjustments to the income of poor renters is required. This requires we make assumptions about the sensitivity of market rents to changes in the income of individuals and families with low income living in expensive housing. We discuss this issue in Appendix A, where we also provide evidence in support of our assumptions. As a practical matter, our assumption of there being no further income adjustments requires the policy proposal be defined for a narrow band of acceptable rent-to-income ratios.

Table 5*Monthly Cost (\$) of Guaranteeing a 40% Rent-to-Income Ratio***A. Lone parent with one child renting a one-bedroom apartment**

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Abbotsford	\$73	\$50	\$79	\$106	\$123	\$79	\$82	\$85	\$81
Fort St. John	\$191	\$175	\$229	\$306	\$368	\$434	\$157	-\$60	-\$107
Kelowna	\$236	\$200	\$229	\$293	\$310	\$254	\$282	\$370	\$331
Nanaimo	-\$2	-\$13	\$14	\$43	\$60	-\$21	\$32	\$38	\$116
Prince George	-\$89	-\$75	-\$83	\$6	-\$2	-\$58	-\$93	-\$37	-\$107
Vancouver	\$466	\$500	\$522	\$556	\$610	\$554	\$604	\$663	\$731
Victoria	\$366	\$387	\$417	\$431	\$460	\$392	\$407	\$438	\$493

B. Three singles renting and sharing a three-bedroom apartment

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Abbotsford	-\$17	\$50	\$69	\$74	\$57	\$78	\$106	\$31	-\$45
Fort St. John	\$77	\$67	\$108	\$136	\$161	\$182	\$140	\$41	-\$45
Kelowna	\$77	\$67	\$108	\$115	\$141	\$99	\$140	\$136	\$91
Nanaimo	\$86	\$67	\$87	\$95	\$116	\$135	\$219	\$96	\$163
Prince George	-\$73	-\$83	-\$84	\$7	\$56	\$57	\$36	\$31	-\$27
Vancouver	\$198	\$198	\$223	\$261	\$266	\$280	\$313	\$328	\$287
Victoria	\$223	\$171	\$254	\$257	\$274	\$296	\$348	\$391	\$372

C. Single person receiving disability (PWD) renting a studio apartment

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Abbotsford	\$297	\$312	\$324	\$369	\$386	\$424	\$423	\$334	\$292
Fort St. John	\$412	\$462	\$469	\$514	\$571	\$624	\$523	\$221	\$267
Kelowna	\$397	\$412	\$386	\$419	\$449	\$549	\$585	\$816	\$679
Nanaimo	\$192	\$287	\$286	\$269	\$349	\$361	\$385	\$371	\$317
Prince George	\$172	\$187	\$224	\$282	\$286	\$304	\$273	\$334	\$167
Vancouver	\$734	\$749	\$786	\$857	\$876	\$924	\$1,023	\$996	\$989
Victoria	\$484	\$524	\$556	\$619	\$649	\$659	\$710	\$659	\$594

support. These variations from one year to the next are indicative of the potential variability in the non-housing budgets of families reliant on income support should increases in income support fail to keep up with rent inflation. Third, these calculations emphasize that housing affordability is mainly a big-city issue (Vancouver and Victoria). Finally, the calculations presented in panel C reveal that housing affordability is a particularly large problem for single people reliant on disability assistance. This is in part due to our assumption that recipients of

PWD benefits are less able to house-share than might be the case for those reliant on IA benefits.

What would be the total cost of this program to the government of B.C.? To answer this, we were provided with data on the number and composition of families reliant on IA and PWD benefits in each community in the province. Applying these data along with assumptions about the size of rental unit occupied by each family, we can provide an estimate of the total cost of the program.

Table 6 shows the cost of this proposal had it been in effect in 2018. We show the cost of the program for four different family compositions. In producing these cost estimates, we do not assume reductions in income support in those communities where rent-to-income ratios were less than 40%.

Table 6
Costing Estimate (\$)

	Total (millions \$)	Per case (\$ per year)
Transitional assistance		
Singles	\$187.6	\$7,275
Lone parents	\$36.8	\$3,745
Couples	\$6.1	\$12,395
Couple parents	\$4.3	\$4,274
Disability assistance		
Singles	\$660.6	\$8,062
Lone parents	\$5.4	\$869
Couples	\$20.8	\$6,717
Couple parents	\$3.5	\$1,707
Total cost	\$925.1	

Note. Authors' calculations.

Striking from this table is the size of the cost associated with single people. Guaranteeing that single people reliant on PWD benefits face no more than a 40% rent-to-income ratio requires 71% of the total cost of this program (\$660.6 / \$925.1). Making the same guarantee for single people reliant on IA requires another 21% of the total cost of the program. Thus, 92% of the cost of the program is directed toward ensuring single people have income enough to devote no more than 40% of their income to rent. By way of contrast, only 8% of the total program cost, or \$76.9 million, is required to make the same guarantee to all other family structures.

If the program were adjusted to vary income support both up, to lower rent-to-income ratios to the preferred ratio, and down, to raise rent-to-income ratios to the chosen ratio, then the total cost of the program would fall to \$854.7 million.¹⁷ These cost savings are not large

¹⁷ Phasing in this adjustment over several years would likely be required to allow support recipients to adjust.

because of the dominant role played by singles in driving total program costs. In only 4 of the 26 communities in our sample would a single person reliant on PWD benefits have received a reduction in benefits, and that would have impacted only 2.8% of all cases. For singles reliant on IA, only 17% of cases would have seen a reduction in income support.

Cost by Community

Since rents vary by community, so too does the cost of our proposal. In 2018 the total cost of guaranteeing rent-to-income ratios do not exceed 40% was \$691.6 million in Vancouver, or 74.8% of the total cost of the program. The cost of the program in Vancouver and Victoria together was 84.5% of the total. The fact that in 2018 only 52% of income support clients in B.C. lived in Vancouver and Victoria indicates the size of the mismatch between rents on low-quality units in those cities and levels of income support available to individuals, particularly single individuals reliant on social assistance.

A Family-Specific Policy

To this point our cost estimates assume the imposition of the same policy variable to all family compositions and sizes. Other options can be considered. Singles have always been treated differently from families. We certainly see this in terms of the total amount of income support provided to a single person relative to other family compositions. In 2018 a single parent with one child and a couple with two children received 2.3 times and 3 times the amount of income support as a single person, while poverty measures assume the cost of living would be only 1.7 times and 2 times, respectively, that for a single person.¹⁸ Steele (2007) suggested this different treatment has to do with concerns about work disincentives, a concern that is focused on single people. It may also be based on a greater expectation of governments that singles, as opposed to others, should have to rely on income earned up to or beyond the exempt portion of their income support payments as a way of meeting their rent. Whatever the explanation, there would be nothing unusual in treating singles differently.¹⁹

Suppose, for example, we modify the policy variable to ensure single people receive income support sufficient to guarantee they need devote no more than 50% of income to rent while maintaining the guarantee of 40% for all other households. Table 7 shows these calculations with the original proposal included for easy comparison.

¹⁸ These calculations are based on the square root rule used by the Market Basket Measure to calculate poverty lines for different family sizes.

¹⁹ This is also seen in the Rent Assist Program (RAP), a program to help households with low income who are not receiving income support to pay rent. An eligibility requirement is to have at least one dependent child. Singles are excluded from the program.

Table 7*Alternative Costing Estimate*

	40% rule for all		50% rule for singles, 40% for all others	
	Total (millions \$)	Per case (\$ per year)	Total (millions \$)	Per case (\$ per year)
Transitional assistance				
Singles	\$187.6	\$7,275	\$49.1	\$1,902
Lone parents	\$36.8	\$3,745	\$36.8	\$3,745
Couples	\$6.1	\$12,395	\$6.1	\$12,395
Couple parents	\$4.3	\$4,274	\$4.3	\$4,274
Disability assistance				
Singles	\$660.6	\$8,062	\$314.1	\$3,833
Lone parents	\$5.4	\$869	\$5.4	\$869
Couples	\$20.8	\$6,717	\$20.8	\$6,717
Couple parents	\$3.5	\$1,707	\$3.5	\$1,707
Total cost	\$925.1		\$440.0	

Note. Authors' calculations.

This adjustment cuts the total cost of the program by more than half to \$440 million. Obviously, other combinations can also be considered. For example, a policy of guaranteeing single people devote no more than 50% of income support to rent and a guarantee that all others devote no more than 35% would have a total cost of \$508 million.

How Expensive Is This?

A useful way of evaluating the cost of this proposal is to compare it to the size of the provincial health-care budget. The cost of applying the 40% rule across all individuals and families in 2018 (\$925.1 million) would have been equal to 4.7% of the provincial health-care budget. Had the proposal been implemented with a 50% rent-to-income guarantee for singles and 35% for all others, the gross cost would have been 2.6% of the health-care budget.

The comparison of the cost of the proposal to the size of the provincial health-care budget is relevant in recognition of a literature that has recently developed that emphasizes the rate of return on investments in the social determinants of health. Using data from 30 industrialized countries, Bradley et al. (2011, 2016) showed that the spending on *both* health and social programs explain health outcomes and that the marginal dollar devoted to social programs yields a higher return in measured mortality than the marginal dollar spent on traditional health care. Using a similar methodology and Canadian provincial government spending data, Dutton et al. (2018) reported the same results for Canada and concluded that a reallocation of tax revenue from traditional modes of health spending toward spending on social programs would have a significant impact on potentially avoidable mortality and life

expectancy.²⁰ The conclusion to be drawn from this research is that proposals that improve the ability of people dealing with low income to maintain their housing could be financed by a reallocation of tax dollars from low-return investments in traditional modes of health care to investments in the social determinants of health, investments that yield higher rates of return in terms of lower rates of avoidable mortality and longer life expectancy.

Indexing

Any action taken to tackle poverty must address how income support is to be adjusted to account for changes in the cost of living over time. The current approach to providing income support in B.C. largely ignores this issue. Some portions of income support are indexed to inflation as defined by the consumer price index (CPI), but certainly not all. For single people who comprise the largest demographic of people reliant on social assistance in B.C., only 3% of their income (the HST/GST quarterly benefit) is currently indexed to inflation.

If indexing income support levels to inflation is desirable, what rate of inflation are we talking about? Changes in the CPI measures the change in the prices of goods and services purchased by the average Canadian household. However, the average Canadian household does not spend 70% or 80% of its income on housing in the way single people in poverty often do. The CPI is, therefore, a poor measure of the changes in prices that matter most to single people in poverty. As suggested by the high rent-to-income ratio faced by most people reliant on social assistance, a more relevant rate of inflation for them is the rate of inflation in rents.

As we show in Appendix B, if we annually change income support enough to hold the rent-to-income ratio constant, then the rate of change in the real (and nominal) budget for non-rent expenditures must be in the same direction and in exactly the same percentage as the change in real (or nominal) rent. Thus, adjusting income support enough to hold the rent ratio constant means the non-rent budget is no longer crowded out by rent increases, as can occur currently due to the absence of any form of indexing, but instead automatically rises with the rate of rent inflation experienced in the local community.

As with any approach to indexing, ours is imperfect. We are only indexing one component of the budget of a person living with very low income. If the prices of non-housing goods and services rise faster or slower than rent, the real income of assistance recipients will fall or increase despite indexation of that income to local rents. A potential solution to this problem would be to design a consumption price index that is appropriately weighted by the quantities of goods and services purchased by an individual or family living with very low income. Such an index would have a much larger weight attached to housing than the CPI. But because, as we have seen, there are substantial differences in rent across communities, then that new index would be prone to the problem of not accurately measuring cost inflation in communities where rent changes more or less quickly than elsewhere. In our approach, this

²⁰ In their paper “Shorter Lives in Stingier States,” Beckfield and Bambra (2016) estimated that life expectancy in the U.S. would be approximately 3.77 years longer if it had just the average social policy generosity of other OECD countries. Reynolds and Avendno (2019) came to a similar conclusion.

problem is minimized by indexing support to what is easily the largest expenditure item in the budget of an individual or family living with low income, namely, the local price of housing.²¹

Comparing Our Proposal to Other Solutions for Making Housing Affordable

The purpose of our policy proposal is to enable individuals and families living with low income to maintain their housing. Other approaches are also available to meet this goal. In this section we briefly compare our approach to alternatives.

Rent Control

One alternative approach is rent control. Rent control is typically introduced to protect tenants from high and volatile rents. By fixing rents, rent control helps people maintain their housing while also preventing rent increases from reducing the non-rent budgets. These are the same outcomes as our proposal.

A key difference in the two approaches is who is expected to absorb the costs of preventing changes in the price of housing from impacting people with low income. Rent controls impose this cost on landlords. This not only forces landlords to deal with a social problem that is not of their making, but elicits a response from them that exacerbates the problem by reducing the number of rental units.²² Our proposal protects people dealing with very low incomes from volatility in rents by adjusting social assistance payments to guarantee they need never spend more than a policy-specified percentage of their income on rent. The housing market is not impinged by our proposal. On the contrary, by increasing the income made available to people on social assistance to purchase housing, the market will increase the quantity of units available for rent. Our proposal removes volatility in the non-rent budget and moves it to the government's budget, where that volatility can be more effectively and more cheaply financed.

But Won't This Proposal Cause Rent to Increase?

If we do not control rents, will they not increase if we increase income support to individuals and families with low income? In Appendix A we provide evidence to show that income support payments directed toward those with low income will most likely have only a small influence on market rents. That discussion emphasizes the fact our proposal provides additional income support to only a fraction of individuals and families in the rental market and that the income elasticity of demand for rental housing by families with low income is small. But

²¹ Our proposal does not preclude *ad hoc* adjustments to support incomes should over several years the prices of non-rent expenditures grow noticeably faster or slower than rents. Our proposal minimizes the need for the *ad hoc* adjustments upon which B.C. policy makers currently rely upon.

²² See, for example, the recent study of the effects of rent control in San Francisco by Diamond, McQuade, and Qian (2019). They showed that rent control reduced the supply of rental housing by 15% as landlords rapidly converted rental properties to condominiums. Over time there was a 30% decline in the number of renters living in units protected by rent controls. The authors found that rent control offered large benefits to current tenants but also very large welfare losses for those who in the future were unable to enter the housing market due to the reduced stock of housing.

there are other reasons to believe rents will not be significantly affected, reasons related to how our proposal is designed.

Concerns about rent inflation resulting from increasing the income support programs usually stem from discussions of housing vouchers, whereby a tenant is expected to contribute a certain percentage of income to rent and any difference between that amount and the rent charged to the tenant is paid by the government voucher program. Tenants have little incentive to resist rent increases since the voucher amount rises automatically to fill the gap between what the renter pays and the landlord charges. Landlords have incentive to raise rents by amounts limited only by the amount non-voucher recipients are willing to pay. Similar concerns are expressed over rent subsidies that fill the gap between what the tenant is required to pay and what rent the landlord charges to the tenant.

Our proposal links additional income support not to the rent actually paid by each individual or family but to the top of the first quintile of rents observed to have been paid in the broader community.²³ Individual tenants therefore have incentive to resist rent increases. The burden of rent increases falls on them and the benefit from resisting rent increases goes wholly to them. Still further separation between the income subsidy and rent could be established by tying the rent subsidy to the community-wide first quintile rent observed in the previous year and to allow no retroactive payments. Tenants again have every incentive to resist rent increases and to shop for better rents.

The experience in Manitoba, which has recently introduced a rent support program with some similarities to what we have proposed, shows little evidence that income subsidies lead to any substantial increase in rents.²⁴ Brandon, Hajer, and Mendelson (2017) compared rent inflation on units priced in the first quartile to the median rent, believing that if the rent support program were to cause rent inflation, it would occur on the lowest-priced units. They reported no significant difference in rates of rent inflation at the low end of the distribution of rents relative to the median rent, and so concluded that the rent support program is having no impact on rent inflation.

²³ The program could be modified to tie income support to the first quintile rent observed in a broader catchment area than the local community and so put even greater distance between the rent paid by income support clients and the rent used to determine the subsidy.

²⁴ In 2015 the Province of Manitoba introduced an important change in the design of its income support program. The amount of income support would now be tied to 75% of the median market rent (MMR) paid in Winnipeg. As the MMR increases in Winnipeg, so too would income support payments to all social assistance clients in the province. While in tying income support to rents, the Manitoba program bears some similarity to our proposal, there are important differences. First, whereas our proposal is based on the need to guarantee a maximum rent-to-income ratio, this is not the case with the Manitoba program. The size of the housing cost burden is therefore not directly controlled in the Manitoba program. Second, whereas our proposal indexes the total amount of income support to rent inflation, that is not the case in Manitoba, where the non-rent budget is left unindexed to inflation. Third, in our proposal we tie the level of support to local rents, whereas in Manitoba, increases in housing support are tied to rent inflation in one community (Winnipeg). If rent inflation in Winnipeg consistently outpaces that elsewhere, then the advantage to families reliant on income support living in small communities grows over time.

Basic Income

Our proposal has similarities to a basic income. A basic income provides recipients with a stable income floor but leaves recipients with the problem of dealing with fluctuating housing costs and the effect that has on their non-housing budget. Our proposal protects the non-housing budget for individuals and families reliant on income support by adjusting income in a way to offset fluctuating housing costs. Both approaches thus offer stability to the non-housing budget of those with low incomes.

Both approaches also face similar challenges. Whether it is a basic income, our proposal, or any proposal to improve income support to individuals and families with low income, the suggestion will be made that we are building a welfare wall behind which people will wish to remain or even seek to slip behind by leaving paid employment. Research on these issues is consistent in showing that the labour supply response is likely small²⁵ and that the benefits to society—benefits in terms of reduced health costs and improved education outcomes of affected children²⁶—are large relative to the costs that may be suffered from reduced labour supply.

A key difference between our proposal and a basic income is that our proposal has a clear goal, namely, to ensure individuals and families with low income can maintain their housing. This focus on housing allows us to determine an appropriate size of income transfer that is specific to family size, family composition, and family location. A basic income, whether defined as a “one size fits all” transfer or as a negative income tax, suffers from the problem of costs of living varying, sometimes widely as shown in Figure 1, by community and by family size and composition. By focusing on a specific purpose—to maintain housing—our proposal defines a much more finely tuned program of income support.

An important difference between our proposal and a basic income is that by focusing on social assistance incomes, we exclude the working poor and so our proposal does not address all income poverty. This shortcoming can be addressed by modifying the existing Rent Assist Program (RAP) to provide rent support payments that are sensitive to local rental market conditions. Access to the RAP is currently limited to families with children and provides an amount of support that is the same regardless of whether one lives in downtown Vancouver or Port Alberni. The same principles underpinning our proposal—to vary support according to the local rent-to-income ratio appropriately defined for family size and composition—could be equally well applied to RAP.

Finally, it is worth noting that many other anti-poverty measures, including the working or earned income tax benefits provided by both senior levels of government, explicitly exclude individuals and families without earned income. Still other anti-poverty measures exclude families without children and of course the Guarantee Income Supplement provided by the federal government to support low-income seniors excludes those aged less than 65 years. So,

²⁵ See, for example, Hum and Simpson (1993) and more recently Gilbert et al. (2018), whose reviews of the results of past guaranteed income experiments concluded that labour supply responses are modest.

²⁶ See, for example, Forget (2011).

while it is true our proposal is not a comprehensive solution to poverty as it is experienced by all demographics, we deem it to be a valuable contribution to the suite of public policy responses currently in place.

Conclusion

We propose a change to the current system of income support that focuses on facilitating that program's intended purpose, namely, to ensure families can "meet basic needs." Housing is inarguably a basic need, but the current system of income support does not effectively enable individuals and families living with low income to meet that need. Our policy proposal answers the question of what it would take to guarantee that individuals and families living with low income can maintain their housing.

Even someone with only a cursory understanding of housing markets knows that the cost of staying housed is much greater in some communities than others. This is certainly true in B.C. Our proposal must, therefore, be attentive to how housing costs vary by community. In doing so we add an element to programs of income support that is a key part of another program of income support, namely, Employment Insurance. Eligibility requirements for Employment Insurance are sensitive to local labour market conditions and vary over time as those conditions change. The more dire local employment prospects are, the longer EI support is provided. Our proposal adds that same element to income support programs. The more costly housing is in one's community, the greater the amount of income support received.

Besides guaranteeing that families receiving social assistance need allocate no more than a fixed proportion of their income to housing, there are three other attractive features of this proposal. First, it would transfer household budget uncertainty arising from variation in rents from families receiving social assistance to the provincial government. For families, there would now be far greater certainty in the income they have available after paying for housing, income they use for food, utilities, transportation, and other necessities. The proposal, then, introduces a feature that is touted by advocates as a critically important feature of a guaranteed basic income, namely, relieving families of the stress of budget uncertainty. Second, the proposal also has the benefit of indexing benefits to the cost of housing and in this way protects recipients of social assistance from inflation. Finally, the proposal facilitates the geographic mobility of people receiving social assistance. To the extent housing costs inhibit families from moving, perhaps to take advantage of better employment prospects, our proposal removes that barrier.

We have provided estimates of the cost of our proposal. The cost is dependent on the policy choice of what ought to be the rent-to-income guarantee and to whom that guarantee should be extended. Mirroring the current policy of providing significantly less support to singles than to households with children, we have provided estimates that guarantee singles face a higher maximum rent-to-income ratio than other households. In some sense this makes explicit what is now only implicit in programs of income support, namely, that single people should be expected to supplement social assistance with earned income to a greater extent than families with children.

In evaluating the cost of our proposal, we have compared it to the provincial health-care budget. It makes sense to do so because investments that guarantee individuals and families can maintain their housing are widely recognized as investments in their health. Given the growing national and international evidence showing that marginal returns, as measured by improved health outcomes, from the last dollar spent by ministries of health are small relative to those from additional dollars spent by ministries of social services, there is a very strong case for a reallocation of resources. Our proposal, then, does not require additional taxation but only a shift of tax dollars between government ministries. Our cost estimates suggest this shift would be an amount equal to between 3% and 5% of the current health-care budget depending on the exact policy parameters chosen, but have also emphasized that this cost is gross of significant cost offsets stemming from the improved health of people stably housed.

Our proposal is not a basic income, though its impact of households dealing with low income is similar. It stabilizes income, it stabilizes housing, and it protects against food insecurity. It is targeted to those who need it most and it is available at a cost requiring only a modest reallocation of resources from a large health-care budget that is currently providing relatively small returns on marginal dollars spent.

References

- Australian Housing and Urban Research Institute. (2019). *Understanding the 30:40 indicator of housing affordability stress* (AHURI Brief). <https://www.ahuri.edu.au/policy/ahuri-briefs/3040-indicator>
- Beckfield, J., & Bamba, C. (2016). Shorter lives in stingier states: Social policy shortcomings help explain the US mortality disadvantage. *Social Science Medicine* (December). <https://doi.org/10.1016/j.socscimed.2016.10.017>
- Bentley, R., Baker, E., & Mason, K. (2011). Association between housing affordability and mental health: A longitudinal analysis of a nationally representative household survey in Australia. *American Journal of Epidemiology*, 174(7), 753–760. <https://doi.org/10.1093/aje/kwr161>
- Bradley, E. H., Canavan, M., Rogan, E., Talbert-Slagle, K., Ndumele, C., Taylor, L., & Curry, L. (2016). Variation in health outcomes: The role of spending on social services, public health, and health care, 2000–09. *Health Affairs*, 35(5), 760–768. <https://doi.org/10.1377/hlthaff.2015.0814>
- Bradley, E. H., Elkins, B. R., Herrin, J., & Elbel, B. (2011). Health and social services expenditures: Associations with health outcomes. *BMJ Quality and Safety*, 20(10), 826–831. <https://doi.org/10.1136/bmjqs.2010.048363>
- Brandon, H., & Mendelson, M. (2017, October). *What does an actual housing allowance look like? Manitoba's rent assist program*. Caledon Institute of Social Policy. <https://maytree.com/wp-content/uploads/1117ENG.pdf>
- Cameron, A., Tedds, L., Robson, J., & Schwartz, S. (2020). The merits of automatic income tax assessments for low-income Canadians. School of Public Policy, University of Calgary, *Tax Policy Trends*.
- Chung, R., Chung, G., Gordon, D., et al. (2020). Housing affordability effects on physical and mental health: Household survey in a population with the world's greatest housing affordability stress. *Journal of Epidemiology and Community Health*, 74(2). <https://doi.org/10.1136/jech-2019-212286>
- Collinson, R., & Ganong, P. (2018). How do changes in housing voucher design affect rent and neighborhood quality? *American Economic Journal: Economic Policy*, 10(2), 62–89. <https://doi.org/10.1257/pol.20150176>
- Diamond, R., McQuade, T., & Qian, F. (2019). The effects of rent control expansion on tenants, landlords, and inequality: Evidence from San Francisco. *American Economic Review*, 109(9), 3365–3394. <https://doi.org/10.1257/aer.20181289>
- Dunn, S., & Zwicker, J. (2018, January). *Why is the uptake of the disability tax credit low in Canada? Exploring possible barriers to access*. School of Public Policy, University of Calgary, *SPP Briefing Paper*, 11(2). <https://doi.org/10.11575/sppp.v11i0.43187>
- Dutton, D., Forest, P. G., Kneebone, R., & Zwicker, J. (2018). Effect of provincial spending on social services and health care on health outcomes in Canada: An observational study.

- Canadian Medical Association Journal*, 190(3), E66–E71.
<https://doi.org/10.1503/cmaj.170132>
- Eriksen, M., & Ross, A. (2015). Housing vouchers and the price of rental housing. *American Economic Journal: Economic Policy*, 7(3), 154–176.
<https://doi.org/10.1257/pol.20130064>
- Eerola, E., & Lyytikäinen, T. (2019). Housing allowance and rents: Evidence from a stepwise subsidy scheme. *Scandinavian Journal of Economics* (August, pre-publication version).
<https://doi.org/10.1111/sjoe.12396>
- Forget, E. (2011). The town with no poverty: The health effects of a Canadian guaranteed annual income field experiment. *Canadian Public Policy*, 37(3), 283–304.
- Friedman, J., & Weinberg, D. (1981). The demand for rental housing: Evidence from the housing allowance demand experiment. *Journal of Urban Economics*, 9(3), 311–331.
[https://doi.org/10.1016/0094-1190\(81\)90030-9](https://doi.org/10.1016/0094-1190(81)90030-9)
- Gilbert, R., Murphy, N., Stepka, A., Barrett, M., & Worku, D. (2018). Would a basic income guarantee reduce the motivation to work? An analysis of labor responses in 16 trial programs. *Basic Income Studies*, 13(2).
- Hulchanski, J. D. (1995). The concept of housing affordability: Six contemporary uses of the housing expenditure-to-income ratio. *Housing Studies*, 10(4), 471–491.
doi:10.1080/02673039508720833
- Hum, D., & Simpson, W. (1993). Economic response to a guaranteed annual income: Experience from Canada and the United States. *Journal of Labor Economics*, 11(1, pt. 2), S263–S296.
- Hyslop, D., & Rea, D. (2019). Do housing allowances increase rents? Evidence from a discrete policy change. *Journal of Housing Economics*, 46(December).
<https://doi.org/10.1016/j.jhe.2019.101657>
- Ihlanfeldt, K. (1982). Income elasticities of demand for rental housing: Additional evidence. *Urban Studies*, 19, 65–69. <https://doi.org/10.1080/00420988220080061>
- Kirkpatrick, S., & Tarasuk, V. (2008). Adequacy of food spending is related to housing expenditures among lower-income Canadian households. *Public Health and Nutrition*, 10(12), 1464–1473. <https://doi.org/10.1016/j.socscimed.2016.10.017>
- Kirkpatrick, S., & Tarasuk, V. (2011). Housing circumstances are associated with household food access among low-income urban families. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 88(2). <https://doi.org/10.1007/s11524-010-9535-4>
- Organisation for Economic Co-operation and Development (OECD). (2019). *Society at a glance 2019: OECD social indicators*. OECD Publishing. https://doi.org/10.1787/soc_glance-2019-en
- Pomeroy, S. (2001, October). *Toward a comprehensive affordable housing strategy for Canada*. Caledon Institute of Social Policy.
<http://www.urbancentre.utoronto.ca/pdfs/elibrary/CaledonCompHousing.pdf>

- Reynolds, M., & Avendano, M. (2019). Social policy expenditures and life expectancy in high-income countries. *American Journal of Preventative Medicine*, 54(1), 72–79.
<https://dx.doi.org/10.1016/j.amepre.2017.09.001>
- Stapleton, J. (2018). *A fortune left on the table*. Open Policy Ontario.
<https://openpolicyontario.s3.amazonaws.com/uploads/2018/06/INFORMAL-A-Fortune-Left-R3.pdf>
- Steele, M. (2007). Canadian housing allowances. In P. Kemp (Ed.), *Housing allowances in comparative perspective* (pp. 61–86). Policy Press. https://www.frpo.org/wp-content/uploads/2015/05/Steele_Canadian_Housing_Allowances_20072.pdf
- Tiwari, P., & Hasegawa, H. (2002). Effective rental housing demand in the Tokyo metropolitan region. *Review of Urban and Regional Development Studies*, 12(1), 54–73.
<https://doi.org/10.1111/1467-940X.00021>
- Tweddle, A., & Aldridge, H. (2018, November). *Welfare in Canada, 2018*. Canada Social Report, The Maytree Foundation. https://maytree.com/wp-content/uploads/Welfare_in_Canada_2018.pdf

Appendix A

Convergence

An issue with respect to our proposal is whether convergence to the specified rent-to-income ratio will be possible. To understand the issue, assume that in a community with expensive housing the amount of income support is increased to reduce the rent-to-income ratio to 40%. The increase in income support will increase the demand for housing and so increase the market rent. This will cause the rent-to-income ratio to increase above 40% and so require another increase in income support to catch up. Will this process require ongoing increases in income support? Similarly, were our proposal to be applied to force all rent-to-income ratios to be established at 40%, then in communities where the ratio is currently less than this a reduction in income support would be required. This would depress market rents, requiring still further reductions in income support. Would rents continually fall demanding ongoing reductions in income support?

The rate of change in the rent-to-income ratio is

$$\left(\frac{\dot{R}}{Y}\right) = \frac{1}{Y}\dot{R} - \frac{R\dot{Y}}{Y^2}$$

Let $\dot{R} = \alpha \dot{Y}$, where α measures the size of the change in rent as a fraction of the change in income. Substituting, $\left(\frac{\dot{R}}{Y}\right) < 0$ if $\alpha - \frac{R}{Y} < 0$. That is, the rent-to-income ratio converges to a constant value so long as when income changes, the change in rent is less than the initial value of the rent-to-income ratio. A policy target of a 40% rent-to-income ratio would therefore require that $\alpha < 0.40$. The speed with which convergence occurs is greater the smaller the value of α .

There are two reasons for believing the value of α to be small. First, recent evidence suggests that the income elasticity of rental housing demand is small particularly if one focuses on households with low income. Hyslop and Rea (2019) exploited a natural experiment in New Zealand where a rent supplement was offered to individuals and families with low income in a specified zone surrounding Auckland. They derived an elasticity of housing expenditure with respect to income of about 0.55. Collinson and Ganong (2018) found a \$1 increase in U.S. housing vouchers provided to low-income families increased rent by \$0.46. Eriksen and Ross (2015) looked at the impact on rents of increasing the availability of housing vouchers to low-income households in the U.S. and found this did not affect the price of rental housing. Eerola and Lyytikäinen (2019) similarly found that increasing the size of housing allowances in Finland did not translate into increase in rents. We note in the text the evidence reported by Brandon, Hajer, and Mendelson (2017) suggesting rents in Manitoba have not been significantly affected by the rent support program in that province.

These recent results are consistent with earlier estimates by Friedman and Weinberg (1981), who used the results of a large U.S. housing allowance experiment directed specifically toward renters with low income to derive an estimate of 0.36. They reported this value as being consistent with other studies from that time period examining how rents respond to increases in

income targeted at low-income households. As noted by Ihlanfeld (1982), the income elasticity of rental housing demand may be small for families in low income in part because such families have other pressing needs, such as ensuring food security, that they first seek to satisfy as income rises.

The second reason to believe the value of α to be small is that our proposal provides additional income support to only a fraction of renters. Data drawn from the National Housing Survey shows that in Vancouver in 2011, 13.5% of 136,135 renter households were devoting 50% to 99% of their income to rent. These would be the households that would receive additional income under our proposal; the great majority of renters would not. For both these reasons the value of α , measuring the response of market rents to a change in the incomes of a small percentage of renters with very low incomes, should be expected to be small. The implication is that the rental market will converge quickly to the identified rent-to-income ratio with a minimum of follow-up income adjustments.

An example is helpful. Suppose rent is \$700 per month and income is \$1,250 per month. With these assumptions, the rent-to-income ratio is 56%. To lower the ratio to 40%, income is increased to \$1,750. Assuming an income elasticity of demand of 0.40 for families with low income and assuming 14% of the rental market is affected by the increase in income support, we expect the income elasticity of the market demand curve to be 0.056. The \$500 increase in income therefore increases market rent to \$728 and the rent-to-income ratio to 41.6%. A second increase in income support (\$70) would return the rent-to-income ratio to 40%.

This example assumes a rigid adherence to a 40% rent-to-income ratio. As the example shows, a low market income elasticity of demand means that specifying a narrow acceptable band for the policy variable—between 40% and 42% in our example—would be sufficient to not require any follow-up increase in the level of income support.

It is useful to emphasize that these calculations assume a perfectly rent inelastic market supply curve. Policies to increase the price elasticity of supply—policies such as fast approvals for new construction of rental properties or rapid approval of secondary suites—would lower the response of rents to our proposal even further.

Finally, concerns about rent inflation can also be tempered by policies to increase the supply of housing priced at amounts affordable to individuals and families with low income. As is the case in all public policies associated with housing markets, both demand- and supply-side policies work more effectively when implemented together.

Appendix B

Indexing

This appendix supports statements made in the text about how our proposal protects the non-rent expenditures of individuals and families with low income from inflation.

Define R = nominal rent

I = real value of income support

P = general price index

N = nominal spending non-rent on goods and services

Budget constraint: $I = \frac{R}{P} + \frac{N}{P}$ Rent-to-income ratio: $\frac{R}{PI}$

Differentiating the rent ratio, $d\left(\frac{R}{PI}\right) = \frac{R}{PI}\left[\frac{dR}{R} - \left(\frac{dI}{I} + \pi\right)\right]$ where $\pi = \frac{dP}{P}$ (A)

The rate of change in the rent-to-income ratio is equal to the difference in the rates of inflation in nominal rent and nominal income support. From the budget constraint

$$dI = d\left(\frac{R}{P}\right) + d\left(\frac{N}{P}\right) = \frac{R}{P}\left[\frac{dR}{R} - \pi\right] + \frac{N}{P}\left[\frac{dN}{N} - \pi\right]$$

so that

$$\frac{dI}{I} = \frac{R}{PI}\left[\frac{dR}{R} - \pi\right] + \frac{N}{PI}\left[\frac{dN}{N} - \pi\right] \quad (B)$$

If real income support is held constant ($dI/I = 0$), then we can write

$$\left[\frac{dR}{R} - \pi\right] = -\frac{N}{R}\left[\frac{dN}{N} - \pi\right].$$

This indicates that if real income support is held constant, then non-rent expenditures must fall by N/R times the percentage increase in real rent. If N and R are equal (rent is 50% of the total budget), the non-rent budget falls by the same percentage as the increase in real rent. Indexing income support to general inflation does not protect non-rent expenditures from the impact of rent increases unless rent increases at the rate of general inflation.

Substituting (B) into (A) we impose the budget constraint to give us

$$d\left(\frac{R}{PI}\right) = \frac{R}{PI}\left[\frac{dR}{R} - \pi - \frac{R}{PI}\left[\frac{dR}{R} - \pi\right] - \frac{N}{PI}\left[\frac{dN}{N} - \pi\right]\right]$$

or, equivalently

$$d\left(\frac{R}{PI}\right) = \left(\frac{R}{PI}\right)\left(\frac{N}{PI}\right)\left[\left(\frac{dR}{R}\right) - \left(\frac{dN}{N}\right)\right] = \left(\frac{RN}{R+N}\right)\left[\left(\frac{dR}{R}\right) - \left(\frac{dN}{N}\right)\right].$$

If we change income support enough to hold the rent-to-income ratio constant, then the rate of change in real (and nominal) non-rent expenditures must be in the same direction and in exactly the same percentage as the change in real (or nominal) rent. Adjusting income support enough to hold the rent ratio constant means non-rent expenditures are no longer crowded out by rent increases. Adjusting income support in such a way as to hold the rent-to-income ratio constant indexes non-rent expenditures to the rate of rent inflation.