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## **Abstract**

This paper examines the system of income and social supports available to B.C. residents and how programs interact with each other. We observe that programs can interact through “eligibility interactions” and “benefit interactions”; that is, one program can affect eligibility for another program and benefits from one program can affect benefits from another program. We look in depth at both the disability tax credit and provincial social assistance and how these programs act as “gateway programs” for other programs: access issues to these gateway programs can limit access to other programs. We also examine the interaction between provincial social assistance and the Rental Assistance Program, both which provide a housing supplement to low-income B.C. residents; however, receipt of one precludes the receipt of the other. For a person deciding between these programs, knowing which program makes a person better off is complicated. Finally, we look at how receipt of the Seniors Bus Pass affects the level of other tax-delivered benefits, and how receiving provincial social assistance benefits affects receipt of the Canada Workers Benefit: for both, the receipt of one benefit reduces the other benefit level raising the question of whether this was intentional. These interaction effects have implications for how reforms should be approached. Reforms to programs are often approached as reforms to individual programs; however, they should be approached with the entire system in mind.

## Introduction

As seen in Petit and Tedds (2020b), British Columbia residents are offered a complex web of income and social support programs. A large reason for the complexity is that programs are often created to fill gaps in other programs or to address a particular policy problem faced by the government of the day. Because the new programs are often implemented without considering interactions with the existing suite of cross-ministry and cross-government programs, unfortunate and unintended outcomes can arise. Notably, because of an often piecemeal implementation of programs, some programs end up interacting with each other and with the tax system in ways that actually reduce the effectiveness of not only the programs but also the suite of programs. These interactions can reduce the ability of not only any one program to reach its intended target(s) but the full suite of programs, and they can reduce the ability of individual programs and the suite of programs to achieve goals such as poverty reduction or supporting transitions into paid work. For a beneficiary to understand how these interactions affect them requires detailed knowledge of how the system works and time, neither of which a beneficiary may have or be interested in acquiring. Furthermore, these interactions are often ignored by academics and policy analysts when studying the effects of these programs, potentially causing the measured effect of incentives on behaviour to be misreported. Looking at the income and social support system as a whole and understanding the interactions between the individual programs that create the whole is important in both understanding the effects of programs on behaviour and improving the design of programs.

There are two main ways in which programs can interact. The first is through “eligibility interactions.” That is, eligibility for one program can affect eligibility for another program. We examine a number of examples of these eligibility interactions. First, there are gateway programs where, to be eligible for a suite of other programs, a potential recipient must first be participating in the gateway program. We look at the disability tax credit (DTC) and Income Assistance (IA) as two examples of gateway programs in B.C. Second, there are programs that explicitly state that if a person is participating in program X, then they are not eligible for program Y. Here, we look at the example of housing supplements for low-income earners in B.C. and their choice between IA and the Rental Assistance Program (RAP): a recipient of IA cannot also receive RAP and vice versa, requiring a potential recipient to have in-depth knowledge of both programs to determine which is right for them. Both of these eligibility interactions reduce access to income and social support programs and decrease their potential impact.

The second way in which programs can interact is through “benefit interactions.” That is, the receipt of benefits from one program, such as provincial social assistance, may affect the level of benefits received from another program, such as refundable tax programs. This can reduce the effectiveness of the program and the ability of the program to achieve its stated objectives. For example, if we compare a person making \$10,000 of earned income to a person making \$5,000 of earned income plus receiving \$5,000 of social assistance benefits, both persons are eligible for the Canada Workers Benefit (CWB), a refundable tax credit with the

goal of increasing work incentives for low-income Canadians. The person receiving the social assistance income is eligible for the same amount of the CWB as the person receiving no social assistance. Although this appears to be a “fair” treatment of income for the purpose of calculating benefits, it may reduce the work incentives of the CWB in that a social assistance recipient receives less of the CWB per dollar of earned income, reducing their incentive to work and potentially increasing their dependence on social assistance. Since few studies consider labour supply responses when such potential interactions exist, those estimates may not reflect the actual behaviour responses of social assistance recipients. The large facilitator of these benefit interactions is how income is defined for the calculation of the benefit. We look at this in more detail using specific examples, such as how receiving the B.C. Seniors Bus Pass affects the level of other tax-delivered benefits, and how receiving IA benefits affects receipt of the Canada Workers Benefit.

In addition to reducing take-up rates and program effectiveness, both eligibility interactions and benefit interactions add complexity to the system of income and social supports offered in B.C. As seen in Petit and Tedds (2020b), complexity of the system arises from the large size of the system, methods of access, and understanding as a recipient what program to apply to when. Additionally, Petit and Tedds (2020c) show that there is also complexity within each individual program in terms of specific eligibility guidelines and rules recipients must follow while receiving benefits. The interactions examined in this paper create another layer of complexity in the system: they create confusion for recipients and may force some recipients to choose between one program and another. Gathering all the required information necessary to make a fully informed decision as to which program they would be better off applying to is very difficult and time-consuming, not to mention that many of the potential recipients are low-income persons focused on getting by day to day and who do not have time or energy or money to pay a financial advisor to figure out what mix of programs would work best for them.

These interaction effects have implications for how reforms should be approached. Reforms to programs are often approached as reforms to individual programs—tinkering at the margins. However, programs are not experienced by users as a single program but rather as a system, a point made in Hertz et al. (2020) on the user experience, and tinkering at the margins may change nothing if we have not looked at the interactions and incentives created by the system as a whole. We focus on detailing these interactions in this paper and take up this issue of potential reforms in our companion papers.

## Eligibility Interactions

### Gateway Programs

#### *The Disability Tax Credit*

Administered by the Canada Revenue Agency (CRA), the DTC is a federal non-refundable tax credit that helps persons with disabilities or their supporting persons who face a higher cost of living by reducing the income tax they owe (Government of Canada, 2017). The DTC is not a pure cash transfer (like Disability Assistance or the Canada Child Benefit), but rather it reduces taxes a recipient owes and thus is of benefit only to those who owe taxes (i.e., a non-refundable tax credit). It is argued that a non-refundable tax credit is best used as a tool to promote horizontal equity: it recognizes that persons with disabilities face higher costs, which is not true economic consumption and thus these costs should be deducted from the income tax base in order to preserve horizontal equity in the tax system (Smart & Stabile, 2006).

There are a number of programs that require an eligible recipient to be designated as a person with disabilities for the purpose of the DTC (“DTC-deemed eligible”).<sup>1</sup> These programs include:

- B.C. Home Renovation Tax Credit: refundable tax credit that covers 10% of the cost of certain permanent home renovations to improve accessibility. The maximum amount that can be claimed is \$1,000/year.
- The federal Home Accessibility Tax Credit: non-refundable federal tax credit that covers (a percentage of) up to \$10,000 of the cost of permanent home renovations that improve accessibility or reduce harm.
- Registered Disability Savings Plan (RDSP): a tax-free savings plan to help persons with disabilities save for the long term.
- Disability Savings Grant/bond: money that the Government of Canada pays into an RDSP. The grant matches contributions made by the beneficiary up to a maximum of \$3,500 in one year and \$70,000 over a beneficiary’s lifetime. The bond is a top-up to the grant of \$1,000/year for low-income persons with disabilities, up to a lifetime limit of \$20,000.
- Canada Workers Benefit disability supplement: top-up to the Canada Workers Benefits for persons with disabilities who are low-income earners. Recipients can receive up to a maximum of \$700/year.
- Child disability benefit: tax-free monthly payment made to families with children under age 18 who have a disability for the purposes of the DTC. From June 2019 to July 2020, the maximum payment was \$2,832/year for each child eligible for the DTC.

Thus, the DTC is the gateway program to these six other programs, all of which provide a non-trivial amount of support. Unfortunately, take-up of the DTC is low. Dunn and Zwicker

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<sup>1</sup> Some persons may be DTC-deemed eligible but may not collect the DTC because they do not owe taxes. In this case, they may still collect benefits from the listed programs. Actual receipt of the DTC is irrelevant.

(2018) estimate that only about 40% of working-age adults in B.C. who are eligible for the DTC are actually CRA-deemed eligible for the DTC. They note a number of factors driving this low uptake, including:

- awareness of the DTC: this supports what is discussed in Petit and Tedds (2020b)—the large size of the system as a whole means many programs are underused due to low awareness of them
- complexity of the application process
- the limited nature of the definition of disability for the DTC

To be eligible for the DTC, a person must have a “severe and prolonged impairment in physical or mental functions which is present all or substantially all of the time and that has lasted or is expected to last for a continuous period for at least 12 months” (Government of Canada, 2017). This excludes persons with temporary or episodic disabilities or disabilities that change in nature and severity over time. Furthermore, there are very strict criteria for persons with a mental illness and strict criteria related to life-sustaining therapy that exclude many persons with disabilities (Dunn & Zwicker, 2018).

Given the low take-up of the DTC, programs that use the DTC as a gateway program also likely have a low take-up rate. Whereas the DTC is a tax-fairness measure, the six DTC-eligible programs listed have other important policy objectives, such as promoting long-term savings, encouraging home ownership and independence within a person’s own home, and encouraging participation in paid work. These are important policy objectives that are likely falling short of their goals due to the use of the DTC as a gateway program. The questions then become whether the eligibility criteria for the DTC should change, whether the definition of disability should change for these other programs, or whether the status quo is the desired outcome.

### ***Income Assistance as a Gateway Program***

IA, delivered by the B.C. government, acts as the gateway program for 42 general and health supplements. That is, these general and health supplements are only available to persons or families who receive Income Assistance benefits (whether Temporary Assistance or Disability Assistance).<sup>2</sup> Figure 1 provides a visualization of these general and health supplement programs. Many of these programs are medical/health programs that take the place of programs usually considered to be employer-covered benefits, such as dental and optical coverage.<sup>3</sup>

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<sup>2</sup> See Petit and Tedds (2020c) for more detailed information on Income Assistance in B.C.

<sup>3</sup> The various terms used in Figure 1 are defined in Petit and Tedds (2020b).

**Figure 1**  
*General and Health Supplements Provided to IA Recipients*



General supplements address a range of social policy issues. Some of the general supplements help with large, unexpected expenses. For example, the crisis supplement is a lump-sum payment to IA recipients experiencing an unexpected emergency.<sup>4</sup> Other general supplements help with pregnancy expenses. For example, the natal supplement provides a cash transfer to IA recipients to assist in meeting extra costs associated with pre-natal and post-natal expenses.<sup>5</sup> Other general supplements help with things like addictions (transportation and

<sup>4</sup> See Petit and Tedds (2020c) for more detailed information on the crisis supplement.

<sup>5</sup> See Petit and Tedds (2020a) for more detailed information on programs for women and single parents.



treatment), transportation (generally), children's school and camp fees, service dogs, and so forth.

Many of the general supplements are lump-sum payments intended to help with life transitions. For instance, the security deposit supplement is a lump-sum payment given to IA recipients who are entering into a rental agreement that requires the last month's rent as a security deposit: the security deposit supplement helps them cover this cost, which can be quite large for persons with low/no income. Likewise, the confirmed job supplement provides a supplement to persons receiving IA benefits who find a job but must buy their own tools before starting the job.

Limiting these supplements to IA recipients limits their ability to support all vulnerable populations. For many of these supplements, it is not just IA recipients who can benefit from them but low-income persons in general. Using IA as a gateway program for these supplements creates access barriers and reduces the potential effectiveness of these programs: many persons who are eligible for IA may fall through the cracks and not be receiving IA.

### **Programs That Exclude Other Programs**

Eligibility for some programs may require an applicant to not be receiving benefits from another program. For instance, to be eligible for the Rental Assistance Program (RAP) in B.C., an eligible recipient must not be receiving Income Assistance or subsidized housing. The rationale for this is that IA recipients are already receiving shelter support as a component of their IA benefit, so receiving RAP would double their shelter support. We provide more details below.

Before we delve into this interaction in more detail, we provide some background on RAP and IA. RAP provides eligible low-income working families with cash assistance to help cover their monthly rent payments. It is only available to persons/couples who are working and have a gross household annual income of \$40,000 or less, who rent their home, and who have dependent children. Additionally, more than 30% of the household income must be going to rent, the households assets must be less than \$100,000, and the family must have lived in B.C. for at least 12 months (BC Housing, 2019). The calculation for the benefit level of RAP is complicated and differs depending on geography, the actual amount of rent paid, household earned income, and family structure. It is calculated on a sliding scale, meaning that those with less earned income receive a higher level of RAP.<sup>6</sup> BC Housing does provide a calculator on its website to assist in estimating the amount of RAP for which an applicant would be eligible.

IA is the largest social assistance program in B.C (Petit & Tedds, 2020b). It provides a cash transfer to low-income, low-asset persons/families to cover basic necessities. Part of the IA payment amount is a "shelter amount." To receive the shelter amount, a recipient must have either rental or mortgage payments. The maximum shelter amount is \$375 for one-person households and \$570 for two-person households (with even larger households receiving more).

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<sup>6</sup> RAP allocates subsidies based on the formula  $RAP = \beta(\min[R, R^*] - 0.3Y)$  where  $\beta$  is the sliding scale that varies inversely with income,  $Y$  is earned income,  $R$  is the actual rent paid, and  $R^*$  is the maximum allowable rent in a particular geographic area.

Unlike RAP, an IA recipient does not have to have a dependent child in order to receive the shelter amount. If an IA recipient starts paid work, their IA benefits, including the shelter amount, are phased out by one dollar for every dollar earned over an earned income exemption. This means that an IA recipient participating in paid work may not be receiving the maximum benefit amount, depending on how much they are earning.

As discussed above, a recipient of RAP benefits cannot be receiving IA benefits, and vice versa. It is possible that a household is eligible for both IA and RAP if they are in the labour market, have low earnings, rent their primary residence, and have dependent children. The problem with this interaction is that it makes it difficult for a potential recipient to know whether RAP or IA would be a better option for them financially. For example, suppose a single parent is receiving Temporary Assistance (TA), is renting their residence in Vancouver for \$900/month, and is working (but is earning less than the amount at which TA would be cut off). This single parent is eligible for both TA and RAP, but they can only receive one or the other. Figure 2 shows the relative benefit levels of TA and RAP over monthly earned income. If this single parent's monthly earned income is less than \$1,208, they receive a higher benefit level if they remain on TA. If their monthly earned income is greater than \$1,208, they receive a higher benefit level from RAP. However, to be eligible for RAP, they must first stop receiving TA. If they stop receiving TA, they may lose access to some of the general and health supplements (Petit & Tedds, 2020c). If they cannot afford these supplements on their own or they are not covered by their employer, this may increase the cost of going off TA.

In sum, choosing between TA and RAP can be a complicated and time-consuming decision. First, a potential recipient must know about RAP. Second, they must know the relative amounts of TA and RAP they are eligible for given their monthly earned income. Although we have shown the relative benefit amounts in Figure 2, it is for a very particular recipient. RAP benefit levels change according to geography, rental amount, earned income, and household size. (The B.C. government has provided a RAP calculator to make this step easier.) Third, a potential recipient must determine the value of the IA general and health supplements for their household circumstances and factor those values into their considerations. This seems like a fairly complicated decision matrix for any individual to navigate and may impede transitions out of and between programs. Mendelson and Kesselman (2020) go into more detail regarding alternative ways of providing housing support.

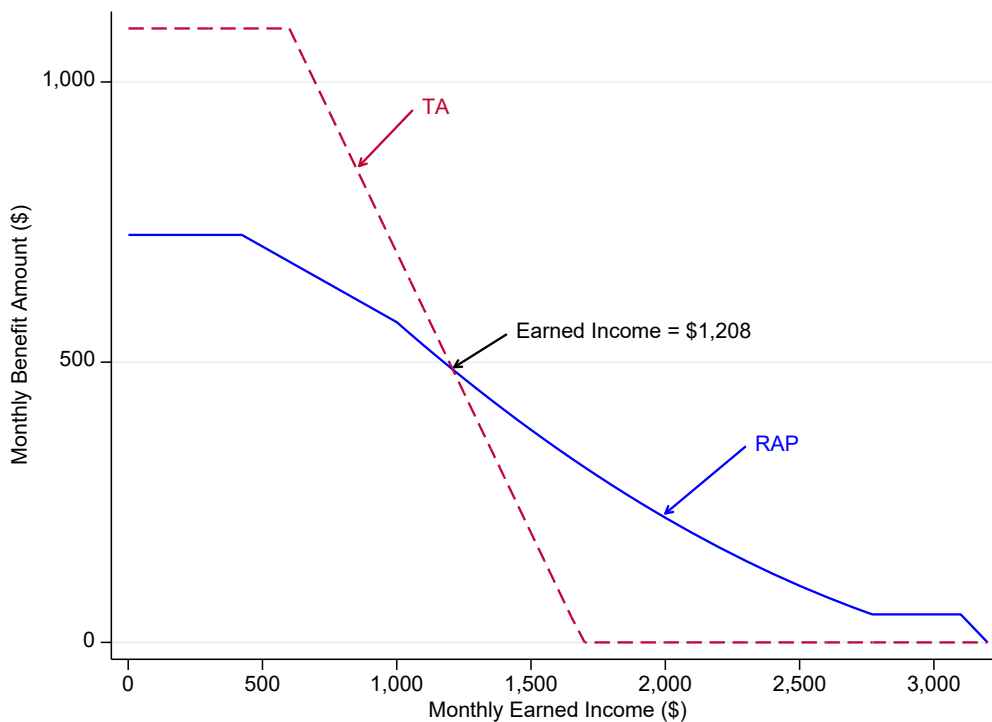
## **Benefit Interactions**

### **Background: Use of the Word “Income” and the Canadian Tax System**

A T5007 is a statement of benefits that is issued to every person who receives workers' compensation benefits or provincial (though not municipal) social assistance (whether issued as cash or an in-kind benefit), where the social assistance is income- or means-tested and amounts to at least \$500 in value in the tax year. The income shown on the T5007 slip is not considered to be taxable income under the personal income tax system, but recipients must

**Figure 2**

*Rental Assistance Program Versus Temporary Assistance for a Single Mother With Rental Costs of \$900/month*



include the amounts in their net income. That is, after a T5007 slip has been issued, the amount is entered into the recipient's tax filing form (T1) and counted toward the derivation of "total income" (Line 15000). It carries through and is included in "net income" (Line 23600), a definition of income frequently used to assess eligibility for and benefit levels of many income assistance programs.<sup>7</sup> Net income, then, is the sum of all sources of income, including social assistance income (i.e., total income), less allowable deductions, which includes various pension adjustments, RRSP/RPP contributions, and the like.

Table 1 shows the inclusions and deductions for net income. Total income is derived by adding up all the income sources in Column 1. Net income is derived by subtracting all the deductions in Column 2 from total income in Column 1. As we can see from Table 1, social assistance is included in both total income and net income, as it is not an allowable deduction. We should note here, however, that social assistance is not included in taxable income: social assistance payments included on a T5007 are deducted from net income to arrive at taxable income. Thus, two persons, person A and person B, who make the same wage/salary, will have the same working income. If person A receives social assistance and is issued a T5007, and person B does not receive social assistance or a T5007 (all else being equal), person A will

<sup>7</sup> Social assistance income reported on a T5007 along with various federal income supplements are deducted before determining taxable income.

**Table 1***Total Income and Net Income Calculations*

Sources of income included in total income (Column 1)	Allowable deductions from total income to calculate net income (Column 2)
All employment income	RRSP/RPP contributions
Old Age Security benefits	Elected split pension amount
Canada/Quebec Pension Plan benefits	Union, professional, and related amount
Disability benefits	UCCB repayments
Other pension/superannuation payments	Eligible child care expenses
Split pension amount	Disability supports
Universal Child Care Benefit (UCCB)	Business investment loss
Employment Insurance benefits	Eligible moving expenses
Taxable dividends	Support payments made
Interest and investment income	Carrying charges and interest expenses
Net partnership income	CPP/QPP contributions
Registered Disability Savings Plan income	Exploration and development expenses
Rental income	Other employment expenses
Taxable capital gains	Clergy residence deduction
Support payments received	Other deductions
Registered Retirement Savings Plan (RRSP) income	Social benefits repayments
Any other income	
Self-employment income	
Workers' Compensation benefits (T5007)	
Social assistance payments (T5007)	
Net federal supplements	

have a higher total income and a higher net income than person B. However, both person A and person B will have the same taxable income.

Interactions between social assistance programs that issue a T5007 and other programs occur when those other programs use net income (or total income) to calculate the amount of benefits a recipient may be eligible for. In particular, a number of tax-delivered programs (i.e., programs delivered by the CRA) use "household adjusted net family income" (AFNI) to calculate the benefit levels. AFNI is net income for the tax filer plus their spouse or common-law partner adjusted for Universal Child Care Benefit and RDSP payments received or paid. Table 2 provides a list of income definitions used by refundable tax credits and non-taxable tax payments. For all of these programs, except the Guaranteed Income Supplement and Allowance for the Survivor and Allowance for Persons Ages 60-64, provincial social assistance programs that issue a T5007 are counted as income in some portion of the calculation of the benefit amount. This creates an interaction between the social assistance programs and the tax-

**Table 2**

*Definitions of Income Used by Tax-Delivered Programs (Refundable Tax Credits and Non-Taxable Tax Payments)*

<b>Program</b>	<b>Income used for calculation of benefit level</b>
Canada Child Benefit Child disability benefit B.C. Child Opportunity Benefit B.C. climate action tax credit B.C. sales tax credit B.C. Medical Service Plan premium (cancelled in 2020)	Household adjusted net family income
Canada Workers Benefit	Working income (for phase-in) and household adjusted net family income (for reduction threshold and phase-out)
GST/HST credit	Family net income (for additional credit) and household adjusted net family income (for reduction threshold and phase-out)
Guaranteed Income Supplement (Seniors) Allowance for the Survivor Allowance for Persons Ages 60–64 B.C. Senior's Supplement	Net income – OAS income – RDSP income – Social assistance payments (T5007) – Net federal supplements

delivered programs (we will look at the more precise nature of these interactions in further sections).

Table 3 provides a list of non-refundable tax credits that include social assistance (T5007) payments in the calculation of the credit. There are four: age amount, amount for spouse, amount for dependent, and medical expenses. All of these are calculated using the base amount of credit minus net income (which, as discussed, includes T5007 income). Thus, for recipients of T5007 income, these non-refundable tax credits will be lower than for a comparable tax filer with no T5007 income, all else being equal. It is important to note that no other non-refundable tax credits use net income, nor do they include T5007 income in their calculations.

**Table 3**

*Non-Refundable Tax Credits That Include Social Assistance (T5007) Income in Calculations*

<b>Program</b>	<b>Calculation of credit</b>
Age amount (federal and provincial)	Base amount – net income
Medical expenses (federal)	Base amount – min[net income, 2302]
Medical expenses (provincial)	Base amount – min[net income, 2165]
Amount for spouse (federal and provincial) Amount for eligible dependent (federal and provincial)	Base amount – spouse/dependent net income

Finally, **Table 4** provides a list of other programs (i.e., not delivered through the tax system) that use T5007 income or social assistance income to calculate their benefit levels.

**Table 4***Definitions of Income Used for Other Income Support Programs*

<b>Program</b>	<b>Income used for calculation of benefit level</b>
Disability Savings Grant/Bond	Household adjusted net family income
Old Age Security	Net income + Social benefit repayments
Rental Assistance Program	Total income + ongoing funds from non-taxable sources (i.e., spousal support payments, alimony, on-reserve income)
Shelter Aid for Elderly Renters	Total income – BC Bus Pass T5007 income

There are two takeaways from Tables 2, 3, and 4.

First, from Table 2, it is possible to exclude social assistance in the calculation for refundable tax credits and tax payments. Notably, social assistance is included in income for the calculation of all refundable tax credits and tax payments for working-age persons, but it is not included in the Guaranteed Income Supplement and the Allowances (Allowance of the Survivor and the Allowance for Persons Ages 60-64), which are programs for seniors. What is the rationale for this differential treatment of income—between seniors’ and non-seniors’ programs? More particularly, is there really a rationale for the concern that social assistance needs to be included in the calculation of refundable tax credits in order to present a so-called double subsidy for social assistance recipients? Does this not blunt the objective of these programs? We are not the first to raise these questions. MISWAA (2006) also raised concerns.

Second, T5007 social assistance income affects not just refundable tax credits and tax payments, but also non-refundable tax credits and non-tax-delivered programs. This raises similar questions to those above: Was this interaction intended? What is the rationale for the interaction? And does it blunt the objectives of the programs? These are all questions that should be raised when considering program reforms and program design.

### **The BC Bus Pass for Seniors**

The BC Bus Pass program provides a “free” bus pass to seniors aged 65 and older who have incomes below \$18,600 (singles) or \$24,575 (couples where both receive Old Age Security) and who live in communities served by BC Transit or TransLink.<sup>8, 9</sup> There is an administrative fee of \$45/year for the BC Bus Pass. For the 2018 tax year, the value of the BC Bus Pass was determined by the province to be equivalent to the price of a concession-priced monthly pass sold by TransLink in Metro Vancouver, less an administrative fee that must be paid by recipients of the BC Bus Pass. Using this formula, the BC Bus Pass was determined to be valued at \$579 (CBC News, 2019). This resulted in the issuing of a T5007 beginning in 2018

<sup>8</sup> Persons aged 60 and older are also eligible if they are receiving Income Assistance (either TA or DA), are living with a spouse receiving DA, or are receiving the federal Allowances. For these persons/families, the income thresholds are slightly different.

<sup>9</sup> Income can be established by proving receipt of the OAS and GIS.

for seniors receiving a BC Bus Pass,<sup>10</sup> as the Canada Revenue Agency (CRA) requires that everyone who receives more than \$500 in provincial social assistance, whether in cash or in-kind, be issued a T5007.

Since a T5007 is issued for the BC Bus Pass, the amount of other tax-delivered benefits could be lower than tax-delivered benefits for seniors who do not receive the bus pass. In particular, it could impact tax-delivered benefits that use net income as an input in calculating benefit levels listed in Table 2 and Table 3.

Given that there is a potential for interaction, we sought to quantify the impact of the interaction between the T5007 for the BC Bus Pass and the tax-delivered programs. This is a difficult exercise, as there are many permutations of how much in Canada Pension Plan (CPP) benefits, RRSPs, and private pension plan payments are available to an individual, and the best timing as to what should be drawn when (which is based on individual circumstances not observable with tax data). We made some simplifying assumptions. First, all recipients and their spouses are 67 years old, so there are no rules around how much of an RRSP must be paid out in a year.<sup>11</sup> Although we assume that seniors withdraw some of the RRSP, we do not make an assumption about how much is in their RRSP, nor do we impose a rule as to how much they have to withdraw. Second, Old Age Security/Guaranteed Income Supplement (OAS/GIS), CPP, and RRSP payments are collected at the same time and no private pension payments are collected. RRSPs and private pensions are taxed slightly differently, but they are both included in the same way in the calculation of benefits that use the “net income” definition of income. Third, only one spouse (the tax filer) has an RRSP payment. Their spouse (if applicable) collects no RRSP payments. Fourth, recipients meet the residency requirements for OAS, meaning they receive the maximum OAS benefit. Since we examine low-income seniors, the claw-back provisions of the OAS do not apply. Fifth, we assume that the income used to calculate GIS payments did not change between years. Since the calculation of GIS does not depend on OAS payments or T5007 social assistance payments, this amounts to assuming that the amount of CPP and RRSP payments do not change between years.

After making these assumptions, we then altered the amount of CPP (maximum amount, average amount, and zero) and the RRSP payments to observe, over different combinations of CPP and RRSP, whether and by how much the T5007 from the BC Bus Pass affected benefits from other tax-delivered programs. Figure 3 and Figure 4 show how taxes and tax-delivered benefits differ between seniors who receive the BC Bus Pass (orange line) and seniors who do not receive the BC Bus Pass (green line) over taxable income for a senior tax filer with a spouse and a single senior respectively. The black dotted lines in the figures indicate the taxable income over which a senior is no longer eligible for the BC Bus Pass. In Figure 3, the x-axis is

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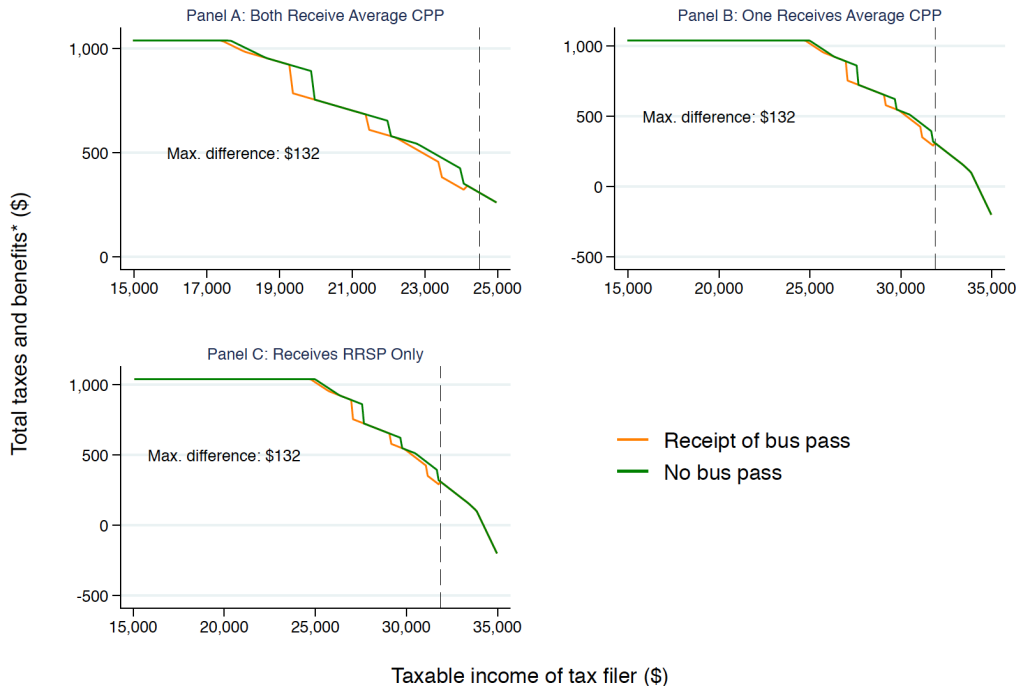
<sup>10</sup> The CRA has always required the issuance of the T5007 for provincial social assistance benefits that exceed \$500; however, the B.C. government only began issuing the T5007 for the BC Bus Pass in 2018. This may have been the result of an oversight by the province or it may have been due to the value of the bus pass only exceeding the \$500 threshold in that year. We were unable to determine the reason based on public documents related to this program.

<sup>11</sup> At age 71, all RRs must be converted to a RIF, and there are regulations governing how much of the RIF must be paid out: we ignore this complication in our example

the taxable income for only the tax filer (excluding the taxable income of their spouse). In both figures, taxable income does not start at zero because of the assumptions we made: taxable income includes their CPP, OAS, and RRSPs. Since we assumed that all seniors receive OAS, taxable income is at minimum the OAS amount.

**Figure 3**

*Taxes and Benefits for Senior With Spouse, Bus Pass Versus No Bus Pass*



\*Only include taxes owing and tax-delivered benefits from Table 2. Excludes value of bus pass

From Figures 3 and 4 we see that there is an interaction effect between receiving the BC Bus Pass and tax-delivered benefits. For a senior with a spouse, the maximum difference between a recipient of the BC Bus Pass and a senior with no BC Bus Pass (all else being equal) was the loss of \$132/year in tax-delivered benefits. This difference occurred for those with a taxable income between about \$19,372 and \$19,972 and is due to the payment of Medical Services Plan premiums, which were abolished in 2020. There are a number of smaller differences between the tax-delivered benefits of seniors with a spouse receiving a bus pass and those not receiving a bus pass over other income ranges. For instance, for a senior with a spouse where both the tax filer and the spouse receive the average CPP, those receiving a bus pass receive about \$20 less in non-refundable tax credits than a senior not receiving a bus pass between a taxable income of \$17,472 and \$18,672. Similarly, there is a difference of \$69 due to a higher MSP payment for a bus pass recipient between a taxable income of \$21,472 and \$22,072. Lastly, the GST/HST benefit for a senior receiving a bus pass starts to phase out at a taxable income of \$22,272 and is less than the GST/HST benefit for a senior with no bus pass until a taxable income of \$24,172, at which point neither senior is eligible for the bus pass.

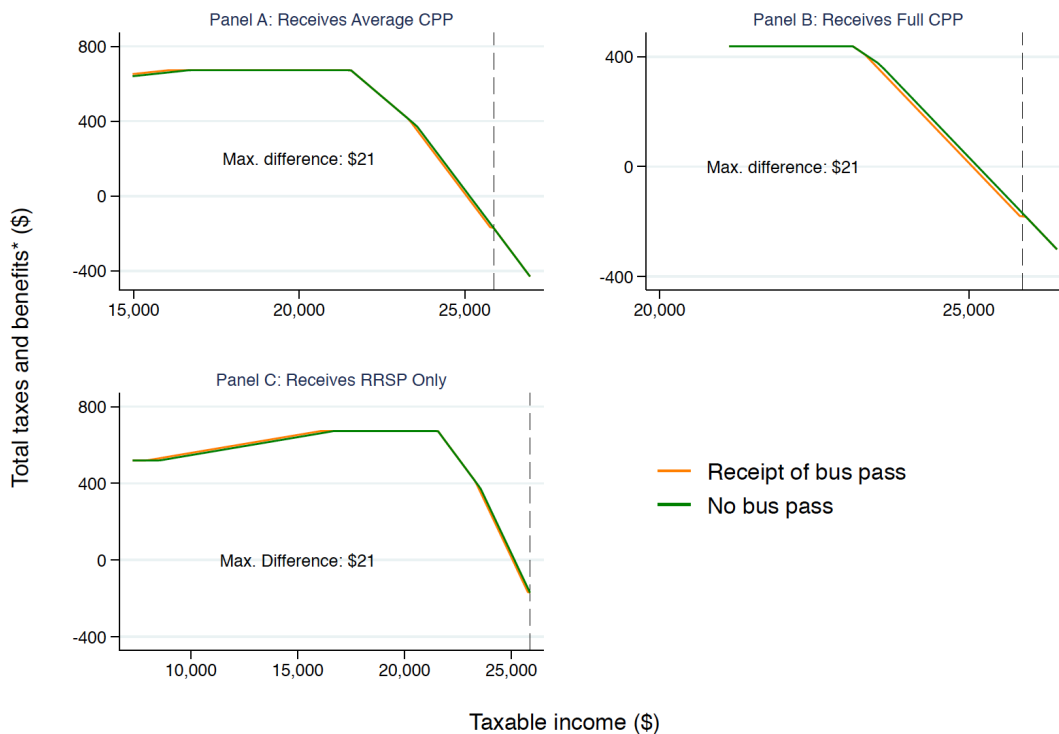


Similar patterns are seen for seniors with a spouse who receive no CPP, and where only one spouse (the tax filer) receives the CPP.

Figure 4 shows how the amount of tax-delivered benefits differs between a single senior receiving a bus pass and a single senior not receiving a bus pass. There is a much smaller difference in tax-delivered benefits than for a senior with a spouse. For senior singles collecting the bus pass, they receive a maximum of \$21/year less in tax-delivered benefits when compared to a senior single not receiving the bus pass with the same taxable income, all else being equal. This can be attributed to the non-refundable tax credits.

**Figure 4**

*Taxes and Benefits for Single Senior, Bus Pass Versus No Bus Pass*



\*Only include taxes owing and tax-delivered benefits from Table 2. Excludes value of bus pass

With the abolition of the MSP premium, senior couples will likely see very small if any difference in their tax-delivered benefits if they receive a BC Bus Pass (compared to if they do not receive the bus pass). However, this analysis still serves to highlight the point that there are interactions between programs. Receiving the BC Bus Pass and the issuing of the T5007 caused some senior couples to have to pay the MSP premium who were not required to pay before. For low-income persons, this can represent a significant financial cost. Additionally, these interactions are confusing. Many seniors in B.C. were upset about the issuing of the T5007 for the BC Bus Pass. For many seniors, the T5007 likely did not significantly affect their

tax-delivered benefits, but the perception that it could remain and heightens the complexity of the income and social support system.

It is interesting to note two additional points. First, had the B.C. government instead used the concession price of a monthly pass in pretty much any jurisdiction in B.C. other than Vancouver, including even an average of concession prices, the \$500 threshold would not have been exceeded and the amount would not have to be included on the T5007. Second, the issuing of a T5007 for transit passes is not consistent across the provinces. Because the BC Bus Pass is issued by the province (as opposed to a municipality) and because it has been valued at over \$500, recipients are issued a T5007. In comparison, in Alberta, each municipality issues its own low-income transit pass (if they so choose). For residents of Calgary who receive the low-income transit pass, the value of which is well over \$1,200, they are *not* issued a T5007; thus receiving a subsidized transit pass does not affect any of their benefits.

### **Income Assistance and the Canada Workers Benefit**

Next, we consider how the Canada Workers Benefit (CWB) received by an IA recipient is affected by the issuing of a T5007 and the use of net income in calculating the reduction threshold.<sup>12</sup> The CWB is “a refundable tax credit that is intended to supplement the earnings of low-income workers and improves work incentives for low-income Canadians” (Government of Canada, 2019). Provinces can elect to modify the design of the CWB, including income thresholds and phase-in/phase-out rates, to better align with their social assistance programs. B.C. had chosen to modify the Workers Income Tax Benefit (the CWB’s predecessor) to align with IA, but it has chosen to not modify the federal CWB design.

To be eligible for the CWB, a household (either a single person or a couple) must be making at least \$3,000 of working income. The CWB is then phased in over the household’s working income at a rate of 26% up to a maximum of \$1,355 for singles (no children) and \$2,355 for families (single parents and couples). At an adjusted family net income (AFNI) of \$12,820 (single with no children) or \$17,025 (single parent or couple), CWB is then phased out at a rate of 12%. AFNI is net income, as discussed above, combined for the tax filer and their spouse or common-law partner (if applicable) and then adjusted for the Universal Child Care Benefit (which is no longer available) and amounts received or repaid to an RDSP.

There is also a CWB disability supplement (CWB-D), which provides a top-up to the CWB. To be eligible for the CWB-D, a tax filer must be receiving the disability tax credit. The CWB-D works in much the same manner as the CWB: to be eligible for the CWB-D, a household (either a single person or a couple) must be making at least \$1,150 of working income. The CWB-D is then phased in over the household’s working income at a rate of 26%, up to a maximum of \$700. At an AFNI of \$24,111 (single with no children) or \$35,483 (single parent or couple), CWB-D is then phased out at a rate of 12%. Thus, the CWB-D has a lower phase-in threshold, a lower maximum, and a higher reduction threshold than the CWB.

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<sup>12</sup> See Petit and Tedds (2020c) for detailed descriptions of the CWB and IA.

It is the use of AFNI for the phase-out threshold that creates an interaction effect with IA. AFNI includes social assistance payments plus working income. Thus, the higher the social assistance payment, the lower the CWB benefit, particularly if social assistance plus working income combine to make an AFNI that is higher than the reduction threshold of the CWB. For example, a single parent who is not an IA recipient, has no disabilities, and has a working income of \$15,350/year will have an AFNI of \$15,350/year. At this working income and AFNI, not only are they eligible to receive the CWB but they are also eligible for the maximum CWB of \$2,335/year, as their AFNI is less than the reduction threshold for CWB. Comparatively, a single parent who is an IA recipient and has no disabilities, with a working income of \$15,350/year, may be receiving up to \$5,000/year in IA. This adds up to an AFNI of \$20,350/year. At this level of AFNI, they are eligible to receive the CWB, but they are above the reduction threshold of \$17,025/year, and thus their CWB is reduced: they receive a CWB amount of around \$1,940/year.

Figure 5 compares the CWB for IA recipients and non-IA recipients with working income for single adults and single parents. Panel A compares Temporary Assistance (TA) recipients to non-TA recipients and Panel B compares Disability Assistance (DA) recipients to non-DA recipients (all else being equal). From Panel A, we observe that during the phase-in range and the “plateau” area of the CWB, TA recipients receive somewhat less CWB, as their working income plus social assistance combine to create an AFNI that is high enough that the CWB is reduced. From Panel B we see that DA recipients receive significantly less CWB than non-DA recipients over comparative levels of working income. Single adults receive over \$1,000 less and single parents receive over \$2,000 less.

This effect of social assistance on the benefit level of CWB reduces the CWB’s ability to achieve its stated goal of improving work incentives for low-income Canadians. As outlined in Petit and Tedds (2020c), social assistance in B.C. creates barriers to work through an aggressive 100% phase-out rate after the earnings exemption. Couple this aggressive phase-out rate with a reduction in the amount of CWB social assistance recipients are eligible for, and it is compounding the barriers to employment for social assistance recipients.

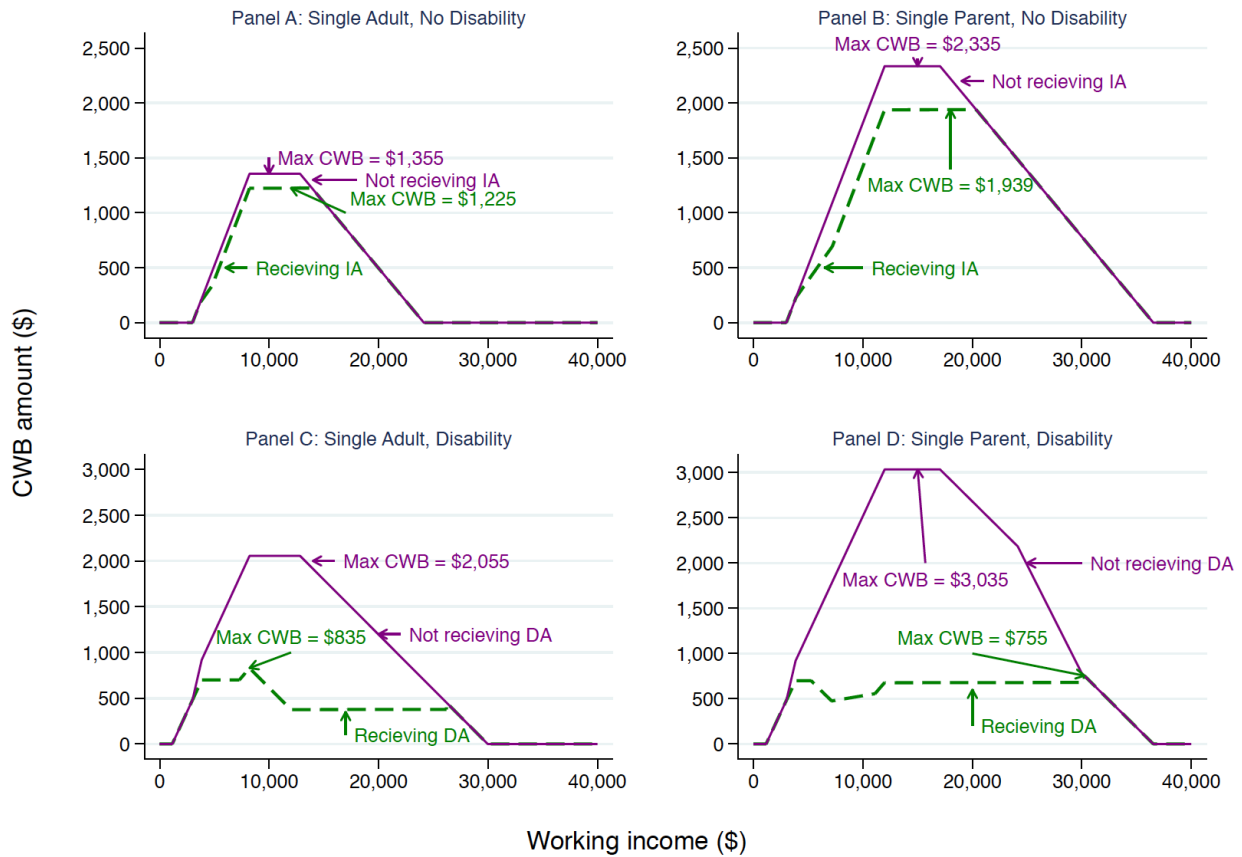
We do note that there are multiple dimensions to this issue, looking at the CWB for IA recipients versus non-IA recipients. Only a small portion of those living in poverty are accessing IA: in 2017, about 40% of all persons living in poverty were accessing IA.<sup>13</sup> Those who are both accessing IA and working are better off financially than those who are working but not accessing IA, even with these interaction effects for IA recipients. Some may argue, therefore, that it is “fair” to include social assistance income when calculating the CWB to avoid delivering “too much” benefit to IA recipients. But here, we are choosing not to delve into these complicated issues of “fairness.” Rather, we are pointing out the interaction effects between programs to highlight the complexity of the income and social support system and how these interactions can mitigate the effectiveness of programs. However, as raised above, the question remains:

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<sup>13</sup> Using the MBM threshold, in 2017, about 481,000 persons in B.C. were living in poverty (Statistics Canada, 2019), and in June 2017, there were just over 191,000 recipients of IA (either TA or DA) (Government of British Columbia, 2020).

**Figure 5**

*Canada Workers Benefit, Interaction With Income Assistance*



What is the rationale for including social assistance income in the calculation of refundable tax credits for working-age persons, like the CWB, but not in the calculation of tax payments for seniors, such as GIS?

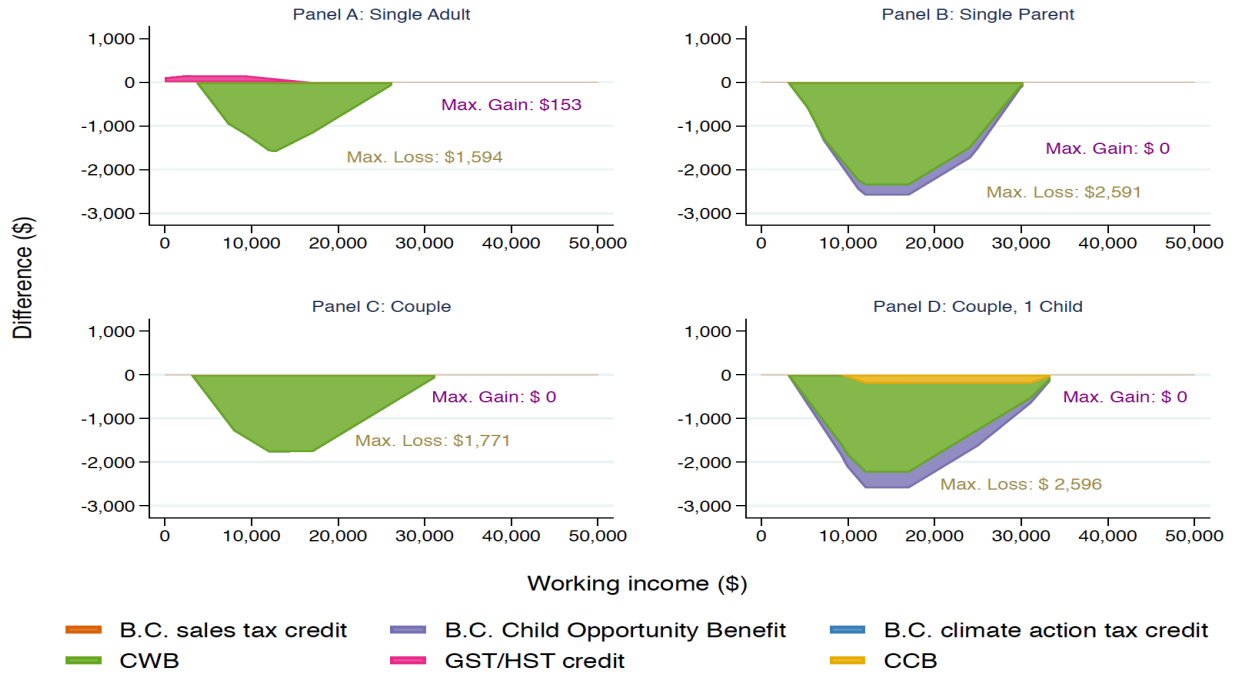
**Overall Impact of T5007 for DA/IA Recipients on Total Benefits**

Overall, the social assistance benefits reported on a T5007 for IA recipients have the potential to affect the level of tax-delivered benefits for IA recipients. Figure 6 is a stacked area graph that plots the difference between tax-delivered benefits received by a recipient of DA and tax-delivered benefits received by a person with disabilities not receiving DA over working income.<sup>14</sup> Figure 7 does the same thing for TA recipients. Tax-delivered benefits include the Canada Child Benefit (CCB), the GST/HST credit, the CWB, the B.C. climate action tax credit (CATC), the B.C. Child Opportunity Benefit (COB), and the B.C. sales tax credit.

<sup>14</sup> This excludes DA benefits. It compares the receipt of the CWB, the CCB, the COB, the B.C. sales tax credit, the B.C. climate action tax credit, and the GST/HST credit for a person receiving DA and a person otherwise the same but not receiving DA.

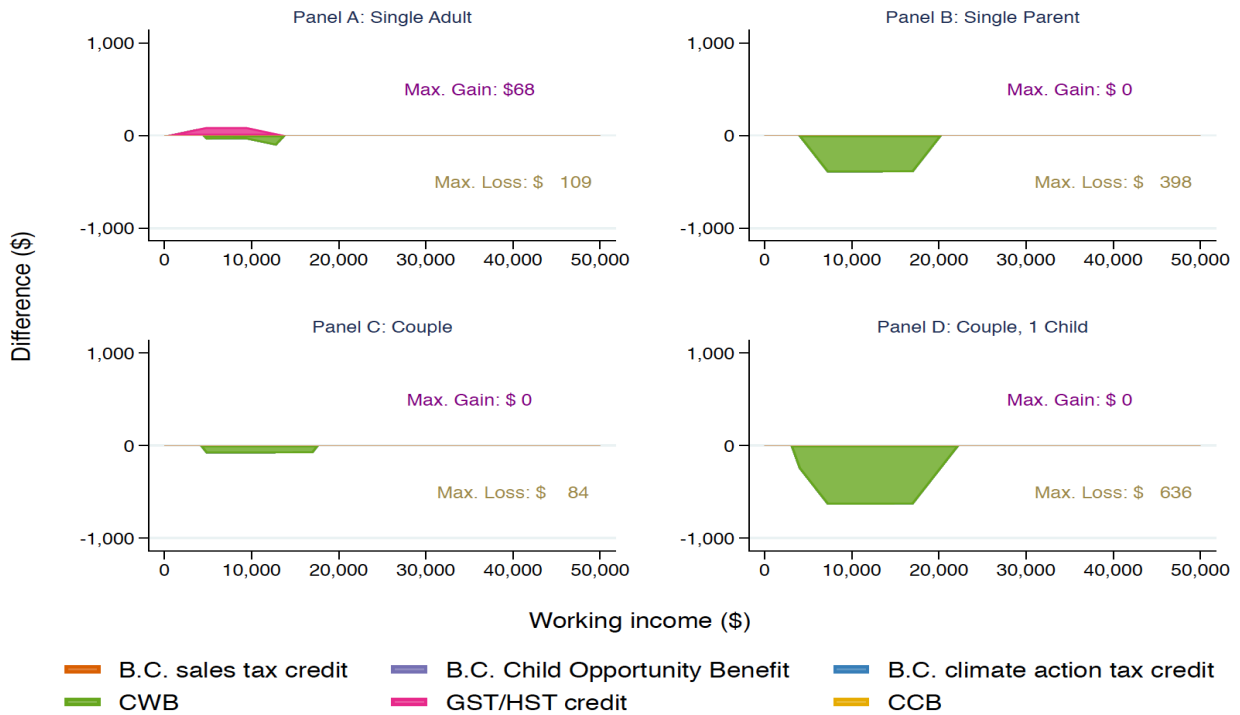
**Figure 6**

*Differences in Tax-Delivered Benefits, DA Recipients Versus Non-DA Recipients*



**Figure 7**

*Differences in Tax-Delivered Benefits, TA Versus Non-TA Recipients*



From Figures 7 and 8, we observe that most of the difference in tax-delivered benefits comes from the CWB: IA recipients receive less CWB than non-IA recipients, as shown in the previous section. However, we also see that the B.C. Child Opportunity Benefit and the Canada Child Benefit levels are both smaller for DA recipients than for non-DA recipients. None of the other tax-delivered benefits are negatively affected by the receipt of IA (either DA or TA). The GST/HST credit is higher for both TA and DA recipients because the phase-*in* rate of the GST/HST credit depends on AFNI (as opposed to the phase-*out* rate, as for the CWB).

In the previous section, we discussed the implications of this interaction between social assistance and the CWB for the incentive effects of the CWB for IA recipients: it reduces the incentive to work. The interaction between DA and child benefits is also interesting: one of the goals of child benefits is to reduce child poverty, but recipients of DA who may be living in poverty are having their child benefits scaled back, thereby reducing the effect of child benefits on poverty.

Interestingly, single persons who are recipients of either TA or DA receive a higher level of the GST/HST credit than non-recipients of IA (the pink area in Figures 6 and 7). This is because there is an “additional credit” for single persons, which increases as a person’s net income increases. Since net income includes T5007 income, the higher an IA recipient’s T5007 income, the higher their GST/HST credit. This is the sole example of social assistance benefits actually increasing the benefits received from another program.

These interactions have implications for reforms. In particular, when designing income support programs, it is important to keep in mind that they are experienced as a system, and within that system the various programs interact. Considering these interactions, how they affect different groups of recipients, and what the ultimate goal of a program is should inform program design. For instance, if the goal of a program is to reduce child poverty, clearly thinking about which definition of income to use for phase-in and phase-out rates when setting thresholds, and how this definition affects other programs, is important for designing an effective program.

## **Conclusion**

The income and social support system in B.C. is large and complex. Many programs have been added in a piecemeal fashion and “tweaked” without regard for how the system works together as a whole. We have shown that this has the potential to undermine program effectiveness, adds to the complexity of the system, and creates a source of confusion and frustration for potential recipients. Eligibility interactions, such as through gateway programs, create access issues: if access to the gateway program is complicated, access to all programs relying on the gateway program is reduced. Furthermore, programs that specifically exclude recipients of other programs require potential recipients to have knowledge of the entire income and social supports system and the time to find out what works best for them.

Additionally, the level of benefits received from one program may be affected by the level of benefits from another program. These benefit interactions are largely due to the

definition of income used by income support programs. Because of these benefit interactions, programs are less effective. In particular, the incentive to work fostered by the CWB may be reduced for recipients of social assistance by the inclusion of social assistance in the calculation of income for the purposes of the CWB benefit level. Whether or not this is “fair” is a question left to policy-makers. However, policy design and policy reforms should carefully consider the rationale for using particular definitions of income and the inclusion/exclusion of specific types of income, particularly T5007 income, how it fits with the broader objective of the program, and how it contributes to the overall working and complexity of the system of income and social supports.

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