Personal Income Information for Disability Assistance Recipients (Calculator BC)

Final Report

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INTRODUCTION TO CALCULATOR BC

The Personal Income Information for Disability Assistance Recipients project (henceforth "Calculator BC") project was established to develop and evaluate a state-of-the-art income calculator website for British Columbians receiving disability assistance. The website was designed to help recipients of disability assistance and the case managers who advise them to find out about, and apply for, new sources of income including federal and provincial benefits for which they may be eligible. The site also aimed to help users understand how their income sources would be affected by changes in employment income over time. The intent was to provide users with income estimations for specific job opportunities and to include a personal account where users could keep track of their earnings and see the effect that earnings had on their disability assistance payments. In developing such a tool, the project aimed to (a) improve participants' understanding of the effect that earnings and moving in and out of work would have on their disability assistance benefits and overall income, (b) raise their confidence in the financial consequences of their employment decisions, and (c) reduce financial apprehension when moving into employment.

The three-year Calculator BC project (implemented between February 2016 and January 2019) was designed as an experimental demonstration to quantify the impact of implementation of the Calculator on disability assistance recipients' financial security, their willingness and motivation to seek employment opportunities, and improvements in their medium-to long-term employment outcomes. This final report details the design, development, and implementation of the project, as well as its impacts on its participants.

The primary objectives of the Calculator BC project were to:

- Design, develop, implement and support the optimal online income information resource for disability assistance recipients and those who advise them, including case managers employed at WorkBC ESCs;
- Train case managers to use the resource themselves with their clients who are disability assistance recipients and to encourage their clients to use it on their own;
- Increase the capacity of these managers to support their clients with questions about the income implications of their employment plans;

- Do this in a controlled implementation phase with ongoing longitudinal data collection from case managers and clients in order to obtain valid and reliable measures of the impact of the new resource;
- Generate lessons learned with practical implications for employment and assistance service providers, including better understanding of the information needs of disability assistance recipients, and an assessment of the potential for further development of benefit calculators to support different situations for other client groups (such as persons with persistent and multiple barriers benefit recipients); and thus
- Share knowledge about the role income calculators and what works with other organizations including the broader employment services sector.

The underlying hypothesis was that that the calculator intervention would work by simplifying the frame of critical information for users. Without any other disability focused income and benefit calculator in BC, the control group participants would not have the means to access a similar program. Participants in the control condition may have access to other resources that simplified their income information such as financial consultants, but these would have been available to program group participants also. Given the complex calculations required to sort out the multiple benefits and their interacting effects, the cost of financial advisors, and the characteristically low income of the target population, it is highly likely that controlling to whom the Calculator BC website was made available provided a meaningfully different service for the program group compared to the control group.

EVALUATION DESIGN

The project fieldwork was designed as a **cluster randomized trial**. The data collection and analysis involved multiple lines of evidence. SRDC implemented a research design consisting of three components:

- Developmental research to support the design of the intervention,
- Implementation Research to describe the implementation of the intervention, and
- An Impact Study to ascertain the effects of the intervention on its participants.

SRDC undertook a random draw from among engaged WorkBC offices of a “program group” and “control group.” Program group offices received access to the complete website (the intervention), and the control group offices participated in the project’s data collection only. Both groups of participants received gift card payments to thank them for their participation in the research, which included:

Baseline survey information collected in Spring 2018 on client household circumstances, income sources, nature and type of disability and health, employment and job search history, experiences using the assistance system, sources of information and advice and on scale items that measure self-efficacy, self-esteem, and life satisfaction. The data was used to describe the sample, compare program and control groups, in statistical control procedures and to define sub-group categories for later analysis.

Follow-up survey information collected in December 2018 on updated client household circumstances, income sources, changes in the nature and type of disability and health, employment and job search history, experiences using the assistance system, sources of information and advice and on scale items to measure self-efficacy, self-esteem, and life satisfaction. These data were used to derive outcome measures for use in impact analyses.

Administrative data. Participants granted permission for SRDC to receive from the Ministry of Social Development and Poverty Reduction linked assistance and employment services data, recording declared earnings, assistance amounts and other supports, receipt of training and employment-related payments, among other outcomes. These data were first received in 2022 and the final version (used for this report) in 2023.

Website system data. SRDC designed the website to track usage of each account and log the frequency and nature of transactions for each participant. It recorded the estimated entitlements, claimed and unclaimed, and usage of features, such as the logging of earnings. Together with the survey and administrative data, these data taken together enabled a fine-grained analysis of the information delivered and resulting behaviours, as well as the characteristics of participants receiving the information.

PARTNERS

To carry out the work plan over the three-year period, SRDC partnered with provincial and overseas organizations. The role of partners varied between sitting on the project's advisory committee, producing deliverables, or recruiting WorkBC clients with Persons with Disabilities ("PWD") status. SRDC hired a website development partner, Radii Productions, to produce the calculator website.

The advisory committee partners included Turn2Us, a charity that offers a benefits calculator in the UK, Disability Alliance BC (DABC) and Back in Motion, a WorkBC employment services sub-contractor. These partners provided advice to SRDC on the design, implementation, operation, and legacy of the project. The advisory committee met four times on the following dates: February 17, 2016; April 11, 2016; October 3, 2017; and November 14, 2018.

Two partners provided deliverables for the project. Radii Productions produced the final website calculator based on a prototype supplied by SRDC. Radii Productions was also responsible for technical support throughout the implementation and operation of the surveys and calculator. A videographer, William Fritzberg, produced an introductory video that accompanied access to the calculator.

Through three waves of recruitment, all 73 WorkBC Employment Services Centre (ESCs) were approached to join the study, in order to ensure the study reached its participant recruitment target of 400. By the end of the third wave of recruitment, SRDC had recruited and trained 50 WorkBC ESCs, and 39 of these recruited at least one recipient of disability assistance for the study. The project achieved its target sample size of 400 participants by the end of June 2018.

KEY RESEARCH QUESTIONS AND ANSWERS

What are the key income information needs for recipients of disability assistance? How should this information be made available to improve their well-being and assist decision-making?

To obtain information on the needs of disability assistance recipients to support the design of the calculator website, SRDC conducted exploratory fieldwork consisting of 2 focus groups with 21 disability assistance recipients and 11 interviews with WorkBC case managers from across BC. The primary purpose of the fieldwork was to learn what would make it easier for recipients to explore sources of income available to them and how their benefits might change if they took up employment. The activity also sought to gather recipients' suggestions for an online income and benefits calculator to be developed as part of the project. Overall, participants provided advice on the following: nature and position of problem; technical information/content; accessibility features; and usability.

The vast majority of **disability assistance recipients** who were focus group participants indicated they did not have the information they needed to plan and make decisions about working. Overall, they said that information was often unclear and difficult to navigate, describing it as a "very big maze" or "scavenger hunt." Focus group participants indicated there was no place to go to see all the different benefits to which they might be entitled. Overall, they expressed concern about would happen to their disability assistance benefits if they were to take up employment. Most participants indicated that at some point they had decided against applying for a job for fear it might put their disability assistance benefits at risk, and at least two had quit jobs due to the same fears. The vast majority of focus group participants indicated that when it came to figuring out how work would affect their income (including disability assistance and other benefits), they did not know where to go to find the information quickly and

easily. In particular, participants identified challenges with understanding and tracking their annual earnings exemption amounts.

When SRDC interviewed **case managers**, the vast majority pointed to significant information needs about the annual earnings exemption, eligibility for various benefits, the PWD reinstatement process, and for clarity about receipt of medical and dental benefits in and out of work. Many of them said they were themselves often unclear about how to answer their clients' questions and had difficulty finding the information, often searching multiple websites and sources.

Case managers indicated that many of their clients "don't even know they are eligible" for various benefits. Many case managers echoed the comments from the disability assistance recipients about the lack of trust people have and fear that their access to benefits and assistance will be "cut off" if they start working. Others are overwhelmed by having to navigate and understand the system and give up on employment. As one case manager said, "*I've had clients who were just like, 'it sounds too complicated, I can't handle it, I'll just be comfortable sitting on the PWD.'*"

Overall, the following key recommendations for building the Calculator website emerged from the fieldwork:

- Create a one-stop shop for information;
- Provide opportunities for questions and answers;
- Consider periodicity: month-by-month with ability to track;
- Present the same information in different formats (printability);
- Separate income comparisons for in-work and out-of-work scenarios;
- Offer "what next?" options;
- Address mistrust (tool = "a friend");
- Make it as simple as possible (app/mobile compatible website).

To what extent does providing a tool that delivers personalized income information including new earnings scenarios alter the financial well-being and labour market participation of clients of WorkBC Centres who are disability assistance recipients?

SRDC worked with its partners to develop a state-of-the-art income calculator using insights gained from the preliminary fieldwork. Although the available budget precluded incorporating all the requested features listed above, the features that could be included were consistent with input from potential users and included all elements in the original plan.

The Calculator BC website was developed over eight months. The calculator was intended to be accessible, relevant, and accurate. For accessibility, the calculator's user interface was created in consultation with a disability user experience consultant so that it could be accessible for users with different types of disabilities. It was designed to draw attention to available supports and work incentives within the existing policy system, to take into account tax credits, annualized exemptions, and treatment of earned income in assistance over specified periods, and to help clients keep track of earning and other income. Clients could enter details of hypothetical job opportunities and compare income consequences of several jobs, even if the jobs were quite different.

The website had four main functions. They were all closely interconnected, but presented to the user as stand alone components. This was intended to help the user gain familiarity with the tool and gather information in an incremental manner. The four functions included:

1. **Benefits Calculator**: helps the user find out what additional income they may be eligible for
2. **Plan Builder**: helps the user find our how their income could change if they start or stop working or change jobs
3. **Regular Updates**: allows users to sign up to receive regular monthly email reminders and tips to keep on top of their income and benefits
4. **Resources**: provides information about benefits and answers to frequently asked questions.

Between March and June 2018, 400 disability assistance recipients were recruited to the study. Half were granted access to the Calculator BC website when SRDC randomly assigned their WorkBC ESC offices to the study's program group. The other half (a statistically equivalent group of 200 disability assistance recipients) did not have access to the website as their WorkBC offices were assigned to the control group.

In general, usage of the website by the members of the program group over the following six months was disappointing. While half of all program group members used the website, repeat usage was rare and few took advantage of the more sophisticated employment scenario

features of the site. Possibly compromises in the website design to meet the allocated development budget minimized features that could have increased the utility of the tool to case managers, which in turn may have prevented them from supporting their clients in using the tool to its fullest extent. Also, several features to make the site more visually appealing and customizable had been dropped.

Several questions in the follow-up survey asked program group participants about their experiences with and use of the Calculator. Over half the program group participants indicated the Calculator website was extremely easy or very easy to use, but the majority of respondents indicated that the information provided on the site was only "somewhat" easy to understand. Ratings of the Calculator as "poor" were generally very low (under 5 per cent). In fact, over 45 per cent of respondents indicated the Calculator website was "extremely" or "very" useful to them.

The survey asked respondents to rate their agreement or disagreement with several statements, including whether they applied for any new benefits because of information they learned using Calculator BC. In general, the results were mixed: while just under a fifth "agreed" or "strongly agreed," nearly half indicated they "disagreed" or "strongly disagreed." Similarly, only about 10 per cent of respondents indicated that they "agreed" or "strongly agreed" that they received more income from benefits because of using Calculator BC.

However, program group members expressed considerable confidence in making employment decisions and a good understanding of how disability assistance worked, as indicated in positive agreement ratings by the respondents. Finally, follow-up survey respondents said they were highly likely to recommend the Calculator BC website to a friend or colleague, with well over half giving a rating of 7 or higher out of 10.

Questions on the calculator itself, answered above, could only be asked of the program group. However, the study was designed to support more rigorous analysis of the difference Calculator BC made to other outcomes like employment and income sources. The impacts of the Calculator on the program group members to whom it was offered were estimated by comparison of their outcomes to those of control group members. Since the two groups of participants were created by a random assignment of their offices, the two groups were expected to be statistically similar at the start, allowing the evaluation to rule out any factors other than the availability of the calculator as explanations for later differences between the groups. Comparison of the groups' baseline characteristics confirmed this expectation: random assignment for the most part created statistically identical groups.

Since all the study participants were recipients of BC disability assistance, one of the most reliable sources of data on the financial well-being and labour market participation of study participants is administrative data on their receipt of benefits, employment services and reported

earnings. The analysis of these data revealed that while there were no statistically significant differences in the benefits received between the program and control group, the program seems to have had a positive impact on earnings of participants two and three months following their assignment, when they earned averages of $109 and $96 more than their control group counterparts. The cumulative difference in earnings between the two groups, albeit not statistically significant, amounts to an average of $1,121 in additional earnings for each member of the program group. When the results were broken down by recruitment wave, wave 2 recorded a positive two-year impact on their earnings averaging approximately $4,700, while the differences in earnings were not statistically significant in waves 1 and 3.

The impact on employment service use was mixed. The program had 4.4 percentage point impact on the use *job search* services within 12 months and a 7.7 percentage point impact after 50 months. Program group participants, however, were also less likely to use *job sustainment* services, *skills enhancement* services through *Employment Support Services workshops* and *Short-Term Orientation and Certificate*, as well as *specialized assessments* services at various points in time.

The baseline survey (completed by 200 program group participants and 199 control group participants) and the follow-up survey (completed by 113 program group participants and 138 control group participants) also allowed for the estimation of impacts. However, it is impossible to discount that some differences between program and control groups may arise due to differences in who chose to respond to the survey.

Survey-based impact estimates on answers to questions concerning financial well-being indicated no statistically significant improvements for the program group. However, there was some indication that annual net income for program group participants increased compared to controls. At baseline program participants reported annual net incomes of $13,827 compared to $14,617 for controls. In the follow up survey, their reported annual incomes averaged $18,817 compared to $12,377 for controls. This difference was marginally statistically significant ($p < 0.10$).

Compared to control group participants, the Calculator may have encouraged program group participants to apply for the BC Fuel Tax Refund for Persons with Disabilities (impact of 7.3 percentage points). Program group participants were also more likely to report receiving the Low Income Climate Action Tax Credit (impact of 13.7 percentage points), and the BC Fuel Tax Refund for Persons with Disabilities (impact of 7.3 percentage points). The average amount of the Low Income Climate Action Tax Credit received by the program group was also higher than for controls. The differences in receipt of all other benefits were not statistically significant.

What improvements to client employment services will result from the introduction of a personalized income calculator on a permanent basis?

Program group members were more likely to report having a job since the start of the calendar year, to have used a Resource Room at WorkBC, and to have sent out their resume 'on spec' to potential employers (an impact of 15 percentage points). It is possible that the Calculator encouraged the program group participants to use more of the resources available to them at WorkBC even though there is no evidence from survey data it had impacted their employment status by the end of the period.

While the impact on employment service use is mixed, the positive effects on earnings either in the short run (i.e., overall sample) or over the two-year period in certain cases (i.e., recruitment wave 2) indicate that program participants may have a better understanding of how much money they can earn from other sources before it affects their benefits, which was one of the goals of the Calculator BC website.

What are the challenges of introducing such information tools to participants, and how can these challenges be overcome?

Although program group members had the Calculator BC website at their disposal for their own personal use, half did not use it other than to complete their baseline information and follow-up survey. Among the half who used the calculator functions, few were repeat users or used its more sophisticated features. Based on case manager, user and researcher reports and observations, the amount of use was limited by many factors. These included forgetting of passwords, not having regular access to computers or other online devices, and low computer literacy. For example, some clients who signed up did not initially have email addresses, forgot their usernames or passwords frequently, or had difficulty navigating websites. Because the calculator tool necessarily provided an online service that required an email account and a password, many clients could not use it or found it hard to use on their own.

Opening up access and sustaining the use of such information tools by overcoming such challenges requires investment in additional resources to support users. Several such investments were suggested in the project's exploratory fieldwork, but not fully implemented in this trial, namely:

- Make it as simple as possible;
- Provide opportunities for questions and answers;
- Present the same information in different formats;

- Create a one-stop shop for information;
- Address mistrust (tool = “a friend”).

Fundamentally, it is hard to keep user interfaces simple on tools that do complex tasks requiring many inputs and where different users may be interested in different outputs. Developers can design websites to be customizable to each particular user (presenting information in different preferred formats) but even in these cases, the user’s initial set up of their defaults will be daunting. Inevitably, varying degrees of training and guidance from a trusted ‘expert’ will be needed to help users get over the initial hurdle of finding out what the website can do and to help each user set it up to best match their needs as simply as possible.

SRDC provided support over the toll-free line when users called in, but likely in-person support for many or most users would be needed to ensure each had the chance to learn about, understand and test out all the functions of the calculator. Furthermore, such one-on-one support from a trusted expert could go some way to improving the level of trust the user had in the tool. Case managers and other support workers and advocates could be trained to provide such a role supporting website use, but they may also need to be paid for their time to provide such support to their clients, since most felt this was not a recognized employment service category at present.

SRDC generated a website where information was held securely, with reassurances that it would be accessible only to the project team for specified uses. This approach was intended to improve “trust” users might have that their information was safe and inaccessible to others while using the tool. Nonetheless, future consideration to overcome complexity in the data gathering exercises by allowing linkage of such tools to existing data collected on each client (e.g., information clients enter on the BC Government’s “My Self Serve” website, and information on actual benefit entitlements and payments, as well as filed tax information). Drawing in existing information would reduce the need for information tools to request multiple pieces of information and reduce the effort required to duplicate information from multiple databases. The result would better represent a “one stop shop” for information while improving the accuracy of the inputs and outputs. On the other hand, many clients did not fully trust the government with their information and might be deterred from using an online tool that promised linkage across existing government-collected information. Even though data linkage might be provided by the tool only as an option, and with various assurances as to how data would be used, users might still baulk at using the tool because such linkage was possible. Achieving a sufficient level of trust across all benefit recipients in such websites will require investment in multi-faceted approaches over extended periods of time.

What lessons can the evaluation offer those who seek to improve services to other client groups in the employment services sector through income calculator tools? What can it offer to a wider audience in the non-profit sector about what works and what does not work?

A trial of a new website that, in order to be evaluated, is built using a limited budget and only offered for a short period to a small group will generate useful evidence for evaluation and pointers to necessary improvements, but likely only provides a partial impression of the full potential of such tools. Yet, there is already evidence that exposure to the website changed several users' behaviours. Program group members were more likely to apply for and receive new benefits, and more likely to use a range of employment services. What lessons does this offer for those seeking to improve services elsewhere?

A first lesson is that design and implementation must be researched, planned and implemented carefully, with user input along the way. In delivering this project, SRDC learned a great deal about the needs of this client group. Non-profit sector organizations wishing to serve other client groups in the employment services sector should engage with their client groups and those who currently work to meet their needs to determine the full extent of their needs for calculator-type tools and the specific information and services they need to see brought together. They should assess to what extent a website can meet those needs and (if it cannot do so fully) whether partial fulfilment of client needs is a worthwhile objective. During development of any tools, considerable time should be allowed to assess and revise accessibility, layout, function and precision to maximize the utility of the resulting resource to clients and those who serve them.

A second lesson is that online approaches offer economies of scale and thus a reasonable chance of proving cost-effective. While websites can require a considerable budget to develop and maintain, they can be accessed by an almost unlimited number of clients. Given BC has at any one time more than 100,000 clients receiving disability assistance, the outlay to develop and test a site like Calculator BC represents an initial cost-per-client of a few dollars at most. Later expenditures to maintain and update such resources will average considerably less, likely under a dollar per client on an annual basis. If the availability of the tool can improve incomes or increase employment prospects for even a small fraction of those clients, as Calculator BC with all its shortcomings appears to have done, it will return more dollars to those clients than it cost to make available.

A final lesson is not to rely exclusively on such tools if the aim to reach and support a broad cross-section of the population. Wherever possible consider and support the human interaction that can be leveraged to ease clients into using the tool effectively. As a general rule, websites should be designed with the intention to be intuitive, such that training is not a requirement in order to understand how to use them. This rule should not be interpreted to mean that support and training should be left out of consideration. It is likely near to impossible to design a website

– let alone a sophisticated income information tool – that is intuitive to someone who has never or rarely used a website before. Tools require careful design, but users must also be motivated to invest time in trying them out and using them. For some potential users the motivation will be intrinsic but for others a trusted advisor will be needed to help them at first see how the various features of the tool can benefit them. Users may simply give up if they cannot see how the investment of their time in learning to use a new resource will pay off.

CONCLUSIONS

The pilot of Calculator BC achieved its objectives to create and rigorously test a website that can help persons with disabilities identify and learn about benefits they may be eligible for and take steps to apply for them. They could also learn better how earnings affect their benefits, possibly reducing their apprehension to earn more independent income once they understand how that income is exempted from consideration in benefit calculations. The statistically significant results were modest, but point in the right direction. Those persons with disabilities invited to use the website were more likely than their statistically equivalent counterparts (a) to earn income in some months, (b) to apply for and receive new benefits and (c) to report higher incomes by the end of the pilot. Considering the limitations on ease of use and website features during the pilot and the short duration of follow up, these findings are at least promising that such calculator tools can lower the information barrier to the alleviation of poverty. It seems highly plausible that online tools, when fully developed for the long term, possibly deploying artificial intelligence to improve ease of use and when publicized so users can be encouraged to engage with them more often, have a role to play in improving the future financial wellbeing of people with disabilities.

INTRODUCTION

The Personal Income Information for Disability Assistance Recipients project (henceforth "Calculator BC") project was established to develop and evaluate a state-of-the-art income calculator website for British Columbians receiving disability assistance. The website was designed to help recipients of disability assistance and the case managers who advise them to find out about, and apply for, new sources of income including federal and provincial benefits for which they may be eligible. The site also aimed to help users understand how their income sources would be affected by changes in employment income over time. The intent was to provide users with income estimations for specific job opportunities and to include a personal account where users could keep track of their earnings and see the effect that earnings had on their disability assistance payments. In developing such a tool, the project aimed to (a) improve participants' understanding of the effect that earnings and moving in and out of work would have on their disability assistance benefits and overall income, (b) raise their confidence in the financial consequences of their employment decisions, and (c) reduce financial apprehension when moving into employment.

The three-year Calculator BC project (implemented between February 2016 and January 2019) was designed as an experimental demonstration to quantify the impact of implementation of the Calculator on disability assistance recipients' financial security, their willingness and motivation to seek employment opportunities, and improvements in their medium-to long-term employment outcomes. The participating assistance recipients were to be recruited as WorkBC Employment Services Centre clients with Persons with Disabilities ("PWD") status.

This final report details the design, development, and implementation of the project, as well as its impacts on its participants.

BACKGROUND AND POLICY PROBLEM

British Columbians living with disabilities[1] are much more likely to be unemployed than those without, for reasons directly related to their disability and beyond their control. As a result, their incomes are generally much lower, and many rely on disability benefits provided through income support programs. Yet substantial numbers of British Columbians with disabilities are willing and able to work – if not full-time, then at least on an intermittent basis.

[1] SRDC recognizes that many people consider this term to be stigmatizing, and prefer the term "people with diverse abilities," as it brings attention to their strength, ability, and agency. This report uses "people with disabilities" to mean the technical term, Persons with Disabilities (PWD) designation.

Socially, people with disabilities in BC, as elsewhere, are faced with many barriers to accessing the facets of full, inclusive and independent lives. In addition to the day-to-day challenges related to their disabilities, they face reduced social and economic inclusion and have a high risk of living for extended periods on low incomes. They miss out on the several of the benefits of employment such as feeling more included in society and having improved quality of life.

Economically, helping more people with disabilities stay in the labour force will help BC deal with a predicted shortage of skilled labour. People with disabilities represent a great resource to support future provincial growth. The BC Labour Market Outlook (Government of BC, 2018) foresaw 903,000 job openings in BC between 2018 and 2028 – given population aging and skills shortages – and anticipates filling them to be a "significant challenge." The labour shortfalls are unlikely to be met by migrants and changes in education/ training priorities alone. To support the future BC economy, current non-workers will need to be drawn into the labour market.

A recent white paper laid out the BC Government's interest in finding ways to assist people with diverse abilities who can work to do so. The Accessibility 2024 report set the goal of making BC the most progressive province in Canada for people with disabilities, and for BC to have the highest labour participation rate for people with disabilities in Canada by 2024 (Government of BC, 2019).

There are many options to help persons with disabilities access employment and improve their financial security. These include improvements to employment services and supports, for those requiring assistance and accommodations, enhancements to financial supports and incentives, legal instruments such as pro-accommodation or anti-discrimination legislation, employer quotas and/or levies. While evidence points to impacts from some of these approaches on economic inclusion, the ratio of benefit to cost from their implementation can be hard to predict. Careful design – sometimes involving trial and error – is required to eliminate unwanted side effects or perverse incentives. Post-hoc adjustment can prove difficult with wide-ranging legislative changes.

A promising, lower-risk, option is to improve information and communication of existing supports. The PWD annual earnings exemption (AEE) in disability assistance is intended to support engagement in employment. Some disability assistance recipients may be able to work some or all of the time if they were aware of supports available for employment and their portability into employment. Others could raise their incomes if they were more familiar with their PWD entitlements in and out of work. Improving information flows may increase program take up and delivery of disability assistance in accordance with its intent, at relatively low cost, and without incentives or changes to the design of the current system.

BC has two main categories of disability benefit recipients who could be provided with information support: persons with persistent and multiple barriers (PPMB) and persons with disabilities. This project focused on disability assistance recipients for two reasons:

- Among BC's working age population of people with disabilities, over 104,000 were recipients of disability assistance (BC Ministry of Social Development and Poverty Reduction (MSDPR) report, 2018). The PWD caseload has increased by over 100 per cent since 2000 and is growing over five times faster than the working-age population. By contrast, there are currently just over 2,600 PPMB cases.

- BC disability assistance benefits have several design features intended to be supportive of individuals being in employment, including though retention of PWD status and medical benefits while in work, the AEE rules (e.g., the annualization of the earning exemption allows for retention of larger proportions of monthly earnings for those with intermittent employment patterns who do not work every month). The AEE and other supports should incentivize recipients who are able to experiment with taking on employment opportunities to do so without fear of losing their ability to receive assistance if their employment does not work out.

Of course, the progressive features of disability assistance benefits can only be realized if recipients are aware of them. Many commentators have suggested that this is not always the case:

- The 2014 Auditor General report on disability assistance drew attention to the difficulty individuals face navigating the program (p. 22): "*The service delivery model requires that an applicant have a high level of functioning and understanding of the eligibility rules and application process to access services*." One of the report's recommendations to MSDSI was to ensure that online information on PWD designation eligibility be clear and easy to find.

- The Minister's Council on Employment and Accessibility in its September 2012 Action Plan Framework for the Minister of Social Development identified the "*Fear of losing benefits by people with disabilities and their families*" as one of the "top" problems and causes they perceived as contributing to low rates of employment for people with disabilities in BC.

- Other research about disability assistance recipients employed by social enterprises has recommended an overarching communication and education strategy to ensure adequate information flow and communications of policies and procedures to recipients of disability assistance (Feres, 2007).

- Several BC stakeholders that SRDC consulted in the process of developing the project proposal indicated they perceive lack of awareness of benefits is a problem in BC.

- A submission in response to the Disability White Paper 2014 on behalf of the Canadian Mental Health Association (CMHA) BC Division and CMHA Vancouver-Burnaby indicated that those with the highest needs among disability assistance recipients were the most likely not to be able to navigate the system.

The Calculator BC project not only aimed to develop information tools for PWD job seekers, their advocates and advisors, but also to train WorkBC Employment Services Centre (ESC) case managers working with them to use the tools effectively. In this way, the project also aligned with the aim of the Employment Program of BC to improve the capacity of WorkBC ESCs to serve specialized populations including clients with disabilities to access employment services.

PROJECT OBJECTIVES

The primary objectives of the Calculator BC project were to:

- Design, develop, implement and support the optimal online income information resource for disability assistance recipients and those who advise them, including case managers employed at WorkBC ESCs;
- Train case managers to use the resource themselves with their clients who are disability assistance recipients and to encourage their clients to use it on their own;
- Increase the capacity of these managers to support their clients with questions about the income implications of their employment plans;
- Do this in a controlled implementation phase with ongoing longitudinal data collection from case managers and clients in order to obtain valid and reliable measures of the impact of the new resource;
- Generate lessons learned with practical implications for employment and assistance service providers, including better understanding of the information needs of disability assistance recipients, and an assessment of the potential for further development of benefit calculators to support different situations for other client groups (such as PPMB recipients); and thus
- Share knowledge about the role income calculators and what works with other organizations including the broader employment services sector.

PROJECT DESIGN

RESEARCH QUESTIONS

The main research questions of the Calculator BC project were:

- What are the key income information needs for recipients of disability assistance? How should this information be made available to improve their well-being and assist decision-making?
- To what extent does providing a tool that delivers personalized income information including new earnings scenarios alter the financial well-being and labour market participation of disability assistance recipients who are clients of WorkBC Centres?
- What improvements to client employment services will result from the introduction of a personalized income calculator on a permanent basis?

Secondary research questions included:

- What are the challenges of introducing such information tools to clients, and how can these challenges be overcome?
- What lessons can the evaluation offer to those who seek to improve services to other client groups in the employment services sector through income calculator tools? What can it offer to a wider audience in the non-profit sector about what works and what does not work?

The answers to these questions generated by the evaluation are summarized in the penultimate section of this report.

LOGIC MODEL

Table 1 displays the project's logic model. It summarizes key project elements, shows what it intends to do and its intended outcomes. The table draws on the project's objectives, research questions, and the study design described in a subsequent section.

Table 1 Logic model for Calculator BC project

What needs does the project address?	What goes into the project?	What goes on in the project?	What happens as a result of the project?	What are the benefits of participating in the project?
Needs →	**Program inputs** →	**Project activities** →	**Project outputs** →	**Project outcomes**
▪ Limited understanding of PWD benefits eligibility among those providing employment services in BC to disability assistance recipients ▪ Limited understanding by disability assistance recipients of eligibility and the implications of earnings for maintenance of PWD status and for overall income ▪ Client reluctance to seek advice on entitlements and on "what if?" scenarios when considering different employment options	▪ Funding to test the model ▪ Organizations in the Employment Services Sector participating in the initiative ▪ Knowledge/ technical experts at Turn2us and Disability Alliance BC ▪ Client perceptions of information needs and formats ▪ Information, resources and tools ▪ SRDC staff and website developers ▪ Facilities (onsite and virtual) ▪ Technology (e.g., website servers and databases) ▪ Evaluators ▪ Evaluation Framework	**Supports** ▪ Website design ▪ Development of website ▪ Pretest of website ▪ Training for ESC case managers ▪ Advisory Committee input **Direct Services** ▪ Engage and recruit WorkBC Centre organizations ▪ Launch and support website ▪ Engage and train WorkBC Centre case managers ▪ Recruit disability assistance recipient study participants ▪ Provide support to case managers and/or client users	**Participation** ▪ Clients using website to assess income components ▪ Clients using accounts to record information ▪ Clients using information to inform benefit decisions ▪ Clients using information to inform employment decisions ▪ Clients engage in more independent employment planning **Program Fidelity** ▪ Reliable and accessible website ▪ Up-to-date and accurate information	**Immediate** ▪ Clients report less financial anxiety ▪ Clients report increased financial security **Short-term** ▪ Clients engage in job search more frequently ▪ Clients use more employment services* ▪ Clients are more often employed **Longer-term** ▪ Clients spend more time in employment ▪ Clients experience increases in income and in specific income components, notably earnings ▪ Fewer overpayments* ▪ Clients report higher self-efficacy and self esteem ▪ Better client employment outcomes ▪ High life satisfaction

STUDY DESIGN

Overview

The Calculator BC was designed as a **cluster randomized trial**. The data collection and analysis involved multiple lines of evidence. To address the research questions listed earlier, SRDC implemented a research design consisting of three components:

- Developmental research to support the design of the intervention,
- Implementation Research to describe the implementation of the intervention, and
- Impact Study to ascertain the effects of the intervention on its participants.

SRDC undertook a random draw from among interested WorkBC offices of a "program group" and "control group." Program group offices received access to the full tool and training (the intervention), and the control group offices participated in data collection only. Both groups of participants received gift card payments to thank them for their participation in the research.

The underlying hypothesis was that that the calculator intervention would work by simplifying the frame of critical information for users. Without any other disability focused income and benefit calculator in BC, the control group participants would not have the means to access a similar program. Participants in the control condition may have access to other resources that simplified their income information such as financial consultants, but these would have been available to program group participants also. For example, the Disability Alliance of BC (DABC, a charity that advocates for people with disabilities in BC) does provide in-person services to help people maximize benefits and forecast how work would affect take home income, but this service is not available across the province. Given the complex calculations required to sort out the multiple benefits and their interacting effects, the cost of financial advisors, and the characteristically low income of the target population, it is highly likely that controlling to whom the Calculator BC website was made available provided a meaningfully different service for the program group compared to the control group.

The evaluation methodology included formative evaluation (**implementation study**) and summative evaluation (**impact study**), each described in subsequent sections. SRDC researchers were responsible for the evaluation, using a transparent methodology – a randomized trial – to produce rigorous evidence of impacts that is credible to others.

Baseline survey information was collected on client household circumstances, income sources, nature and type of disability and health, employment and job search history, experiences using the assistance system, sources of information and advice and on scale items that measure self-

efficacy, self-esteem, and life satisfaction. The data was used to describe the sample, compare program and control groups, in statistical control procedures to improve the precision of impact analysis (regression adjustment and differencing), and to define sub-group categories for later analysis.

Follow-up survey information was collected on updated client household circumstances, income sources, changes in the nature and type of disability and health, employment and job search history, experiences using the assistance system, sources of information and advice and on scale items to measure self-efficacy, self-esteem, and life satisfaction. The data were used to derive outcome measures for use in impact analyses.

Implementation study

The implementation study was designed to provide insights on the following:

- Document the situation of disability assistance recipients, their stated needs and experiences using ESC services, even in the absence of the calculator. This account of their income sources, interest in employment and changes over time allows for other insights on possible additional supports or policy changes that could be valued by this group, or worthy of future testing.
- An overall description of the income calculator approach – its genesis, philosophy, design, development and delivery of the website and training activities, introduction to clients, its reach, participation, staff utilization and response, operations and sustainability.
- Document the model as it was implemented and note implementation challenges and how they were addressed and the reasons for the changes.
- Real-time monitoring of program take-up and user experience via indicators on the website administrative dashboard, on-site observations, regular communications with the case managers delivering the program and supporting data collection, client email and telephone enquiries.
- Address questions about the number of participants reached and whether the initiative reached the intended clients.
- Document use of the calculator, functions users found useful for particular purposes or used repeatedly, and identify factors associated with success (if the program is found to have impacts as described below). Likewise, identify challenges with the approach that may explain lack of impacts, if this is the conclusion from impact analysis.

In this way, the implementation study was designed to provide a feedback loop to the project team on ways to adjust the calculator model and the employment and assistance system more generally to serve participants more effectively. It also aimed to provide insights regarding recommendations for future use of calculators and potentially for other related programs and policies.

Impact study

The impact research was designed to describe the extent to which the program was effective in improving key client outcomes goals relative to the control group and thus whether the approach holds the prospect of contributing to the achievement of the stated objectives. The following key measures, aligned with the logic model, were used to estimate impacts for participants:

- Reduced financial anxiety
- Increased financial security
- Enhanced job search
- Enhanced use of employment services
- Increased the proportion in receipt of earnings
- Reduced unemployment
- Increased income and in particular, earnings
- Reduced overpayments
- Raised higher self-efficacy and self esteem
- Improved employment outcomes
- Increased life satisfaction.

The adoption of a randomized design means that performance was judged against the progress of an equivalent group of disability assistance recipients who did not have access to the web site. Without the randomization, there is a high risk that program effects might be confused with changes that would occur normally over a six-to-eight-month period in the lives of disability assistance recipients. As a consequence of the project design, therefore, policy makers can have a high degree of confidence that the changes in the outcomes reported are entirely due to the introduction of the calculator, since it is the systematic difference between the program and control groups over the year studied.

Data sources

Data for the evaluation came from the following data sources:

- **Exploratory fieldwork** consisting of **focus groups** with disability assistance recipients and **interviews with** WorkBC case managers to establish their information needs to help guide the design and content of the calculator site.
- **Pre-test of the intervention** – with disability assistance recipients and case manager volunteers to beta test the website and locate any bugs or needs for refinement.
- **Baseline survey** – data on participant and household characteristics, income sources and labour market experience, including measures of financial literacy, financial security, attitudes to job search, disability and benefit experience. SRDC gave a thank you gift card worth $40 to participants for completing the survey.
- **Follow-up survey** – 6-8 months on from baseline updating information on participant and household characteristics, income sources and labour market experience, including measures of financial literacy, financial security, attitudes to job search, disability and benefit experience. Detailed employment, earnings and job search history. SRDC gave a thank you gift worth $30 to participants for completing the survey.
- **Administrative data** – participants were asked to complete a study consent form at the outset of the project, prior to completing the baseline survey, in which they agreed to take part in the study. They also granted permission for SRDC to receive from the Ministry of Social Development and Poverty Reduction linked assistance and employment services data, recording declared earnings, assistance amounts and other supports, receipt of training and employment-related payments, among other outcomes.
- **Website system data** – SRDC designed the website to track usage of each account and log the frequency and nature of transactions for each participant. It recorded the estimated entitlements, claimed and unclaimed, and usage of features, such as the logging of earnings. Together with the survey and administrative data, these data taken together enabled a fine-grained analysis of the information delivered and resulting behaviours, as well as the characteristics of participants receiving the information.

By comparing data collected from both program and control offices and their clients who are disability assistance recipients over time, SRDC determined the difference in financial well-being that results from making the income calculator available. Outcomes compared included participants' employment status and earnings over time, financial security recorded at the time of the follow-up survey as well as attitudinal changes in participants' willingness to try out and persist with employment (also measured in the follow-up survey).

Target population

The target population for the project comprised disability assistance recipients who were also clients of Work BC ESC case managers. SRDC recruited ESC offices first and trained case managers in project procedures. Then SRDC supported the managers in the recruitment of their disability assistance recipient clients. Following recruitment, half of the participating ESC offices were assigned at random to receive access to the calculator (termed the "program group"), and the other half of the participating ESC offices (termed the "control group") continued with regular services as normal. Program and control designations were made using a random lottery-like process. The recruitment targets for offices were determined based on the target to enroll in the study at least 400 disability assistance recipients. The plan was that following random assignment approximately 200 participants would be located in program offices and 200 participants would be in control offices.

The case managers in the ESC offices who case manage or advise disability assistance recipients were trained to recruit disability assistance recipients to the study. The recruitment was announced as a longitudinal study on disability income with survey participation (and corresponding thank you gift payments) at baseline and 6-8 months later. The case managers at program group offices were trained in the use of the calculator tool and how to introduce it to those clients they had recruited to the study and their advocates. Case managers were to encourage clients' independent use of the tool.

Details related to the recruitment of WorkBC offices and individual participants, as well as the training provided to case managers, are discussed later in the Developmental Research section.

Project work plan, partners, and roles

To carry out the work plan over the three-year period, SRDC partnered with provincial and overseas organizations. The role of partners varied between sitting on the project's advisory committee, producing deliverables, or recruiting WorkBC clients with PWD status. SRDC hired a website development partner, Radii Productions, to produce the calculator website.

The advisory committee partners included Turn2Us, a charity that offers a benefits calculator in the UK, DABC and Back in Motion, a WorkBC employment services sub-contractor. These partners provided advice to SRDC on the design, implementation, operation, and legacy of the project. The advisory committee met four times on the following dates: February 17, 2016; April 11, 2016; October 3, 2017; and November 14, 2018.

Two partners provided deliverables for the project. Radii Productions produced the final website calculator based on a prototype supplied by SRDC. Radii Productions was also responsible for technical support throughout the implementation and operation of the surveys and calculator.

A videographer, William Fritzberg, produced an introductory video that accompanied access to the calculator.

Appendix A contains the project delivery work plan and timeline for the project. Appendix B lists the WorkBC ESC contractors who supported the project as recruitment partners.

DEVELOPMENTAL RESEARCH

IMPLEMENTATION APPROACH

Implementation of the project followed seven distinct phases: calculator design, WorkBC recruitment, WorkBC staff training, participant recruitment, random assignment, program exposure, program reception, and ongoing operation. In total, nine implementation outcomes considered to determine to what extent the results of the impact analysis are a fair test of the program described:

- Fidelity – did the intervention do what it was supposed to do?
- Adaptation – did adjustments achieve what they were supposed to do?
- Program differentiation – how was the program different from the control condition?
- Statistical power – did the project recruit enough participants to detect meaningful results?
- Reach – did the project recruit the profile of participants intended?
- Contamination – did the project create and maintain separate groups?
- Dosage – how much of the intervention were participants exposed to?
- Take-up – how did stakeholders respond?
- Sustainability – could operations feasibly be maintained?

The following figure links each phase to the primary implementation outcomes concerned.

Figure 1 Implementation outcomes by project phase

Phase	Implementation outcome
Calculator design	Fidelity & adaption, program differentiation
WorkBC recruitment	Fidelity & adaptation
WorkBC staff training	Fidelity
Participant recruitment	Statistical power & reach
Random Assignment	Contamination
Exposure	Dosage
Reception	Take-up
Operation	Sustainability

EXPLORATORY FIELDWORK

To determine informational needs to support the design of the calculator website, SRDC conducted exploratory fieldwork consisting of two focus groups with 21 disability assistance recipients (in Vancouver and Coquitlam) and 11 interviews with WorkBC case managers from across BC. The primary purpose of the fieldwork was to learn what would make it easier for recipients to explore sources of income available to them and how their benefits might change if they took up employment. The activity also sought to gather recipients' suggestions for an online income and benefits calculator to be developed as part of the project. Overall, participants provided advice on the following: nature and position of problem; technical information/content; accessibility features; and usability.

The vast majority of disability assistance recipients who were focus group participants indicated they did not have the information they needed to plan and make decisions about working. Overall, they said that information was often unclear and difficult to navigate, describing it as a "very big maze" or "scavenger hunt." Focus group participants indicated there was no place to go to see all the different benefits to which one might be entitled. Overall, they expressed concern about what would happen to their disability assistance benefits if they were to take up employment. Most participants indicated that at some point they had decided against applying for a job for fear it might put their disability assistance benefits at risk, and at least two had quit jobs due to the same fears. The vast majority of focus group participants indicated that when it came to figuring out how work would affect their income (including disability assistance and other benefits), they did not know where to go to find the information quickly and easily. In particular, participants identified challenges with understanding and tracking their annual earnings exemption amounts.

> "Technically [there is information available]. Practically it's not easy to use it (…). You can go to the Ministry, take a number, stay in line, ask the question, but they always talk fast, they give you general stuff, and if you don't know exactly the things you need to ask, you don't get the right answer. There's no place where you can just click a few times and get exactly what you can get, what you're entitled to, according to your situation"

> "I do piece work, and I have my counselor asking me "Well, what are your earnings? How much is your earning exemption?"…So a very smart fellow on my behalf advocating for me went online, could not find a simple…answer."

> "You've got to keep track…like I say, I'm not good with numbers too sometimes, and sometimes I just go, "Oh, well, I missed," and then at the end they take it off and you're just like: 'What happened?'"

When SRDC interviewed **case managers,** the vast majority pointed to significant information needs about the AEE, eligibility for various benefits, the PWD reinstatement process, and for clarity about receipt of medical and dental benefits in and out of work. Many of them said they were themselves often unclear about how to answer their clients' questions and had difficulty finding the information, often searching multiple websites and sources.

> "It's more challenging because [the AEE] is not monthly any more. I have a client who all of the sudden didn't get a cheque [she went over the AEE] in October. If you're not well versed in budgeting, we can do the best we can, but if we're keeping the file open for 24 weeks, then come October (…) the file is closed."

Case managers indicated that many of their clients "don't even know they are eligible" for various benefits. Many case managers echoed the comments from the disability assistance recipients about the lack of trust people have and fear that their access to benefits and assistance will be "cut off" if they start working. Others are overwhelmed by having to navigate and understand the system and give up on employment. As one case manager said, "*I've had clients who were just like, 'it sounds too complicated, I can't handle it, I'll just be comfortable sitting on the PWD.'*"

> "I think [the site would be helpful] if I could say to everybody, 'you're looking at entering the workforce part-time and if you ever do reach this amount, here is what would happen to your benefits.' It would be great if I could just turn the computer around and say to them 'I can print this off for you so that you can see what would happen to your medical and dental. And if you work [full time] and if in 6 months you have a break down again (…) what would happen.'

> "… that piece is hard for people to connect: what's happening today and how it's going to affect [them] 60 days from now."
> "I think this calculator can really break down stigmas within the disability community. And that it can be seen not as a challenge, but a good tool to be able to access."

Overall, the following key recommendations emerged from the fieldwork:

- Create a one-stop shop for information;
- Provide opportunities for questions and answers;
- Consider periodicity: month-by-month with ability to track;
- Present the same information in different formats (printability);
- Separate income comparisons for in-work and out-of-work scenarios;
- Offer "what next?" options;
- Address mistrust (tool = "a friend");
- Make it as simple as possible (app/mobile compatible website).

CALCULATOR BC WEBSITE

Website specification and procurement

With the goal of embodying the feedback received from the fieldwork regarding the design of the website, and under the guidance of the advisory committee, SRDC developed a website specification to elicit responses from website developers through an RFP process. The specification incorporated insights from two existing calculators for people with disabilities operated by two different international groups – Turn2Us Benefit Calculator in the United Kingdom (https://benefits-calculator.turn2us.org.uk/AboutYou) and Disability Benefits 101 in the United States (https://www.db101.org/).

The website specification stated the goal of designing and implementing an income and benefit calculator website to provide information output in response to personal information entered in order to provide instant and interactive financial information to disability assistance recipients related to benefits and employment. Additional goals included providing access to accurate information on eligibility for government benefits as well as income and benefit estimations in response to user-defined job scenarios. The specification included detailed descriptions of the requirements of the project, including design, technnical and functional requirements, business requierments, data access and security, and accessibility.

The website development procurement process extended over two rounds, with the first round yielding no responses that could meet the critical project requirements within the budget ceiling of $100,000 stated in the RFP. In the second round, SRDC sought responses from a pool of interested contractors engaged from the RFP process and competent to complete the task. This process yielded two fully-fledged proposals that demonstrated completion of a functioning calculator fully meeting project requirements would require a budget of at least four times the ceiling originally made available.

SRDC therefore prepared a revised website specification with the explicit intention to generate a website developer work plan that would fall within the original budget envelope and completion date, which required some considerable scaling back of the needs and requirements emerging from early project fieldwork and advisory committee advice. In particular, it necessitated developing a website that prioritized functionality over “look-and-feel” design and several user and administrative features. The revised specification maintained the core calculator functions around PWD-related benefits, the effect of exemptions, the full range of tax credits and included consideration of key federal benefits such as Employment Insurance (EI) and Canadian Pension Plan (CPP) payments. The scaling back of the website also included a focus on more descriptive information rather than full eligibility/ entitlements for other benefits, to reduce the workload and complexity for developers.

SRDC supplied the revised specification to the website developer that SRDC evaluated as the highest-scoring bidder in the second tendering round it held in the summer of 2016: Radii Productions. SRDC and Radii further negotiated to bring the project scope within the budget envelope. Among other concessions, SRDC undertook to develop more of the materials itself and to perform quality assurance processes.

Benefit research

Concurrently, SRDC engaged in a several months-long process of researching provincial and federal benefits available to people with disabilities and other benefits related to employment. The research involved searching through hundreds of websites on government programs and policies, legislation and tax forms, and then interpreting, analysing and synthesizing the data in order to develop a table of parameters for the calculator. The data included information about eligibility for benefits, calculations of amounts, period of receipt, interacting factors related to eligibilities and amounts, benefit descriptions, and how to apply for them.

Below is an alphabetical listing of the benefits included in the Calculator:

- Attendance Allowance (Veterans Affairs)
- BC Fuel Tax Refund for PWD
- BC General supplements
- BC Health Supplements and Programs
- Canada Child Tax Benefit
- Canada Disability Savings Plan Bond
- Canada Disability Savings Plan Grant
- Canadian Forces Income Support (Veterans Affairs)
- Child Disability Benefit
- Clothing Allowance (Veterans Affairs)
- CPP Survivor's Pension
- CPP Early Retirement
- CPP Children's Benefit

- CPP Disability Benefit
- Disability Supports Deduction
- Disability Tax Credit
- Earnings Loss Benefit (Veterans Affairs)
- Education or Training Related Payments (BC and Service Canada)
- Employment Insurance Regular Benefits
- Employment Insurance Sickness Benefits
- Exceptional Incapacity Allowance (Veterans Affairs)
- GST/HST Tax Credit
- Low Income Climate Action Tax Credit
- Medical expenses tax credit
- Permanent Impairment Allowance-VA
- Persons with Disabilities (PWD) Assistance
- Refundable Medical Expenses Supplement
- Veterans Disability Award (Veterans Affairs)
- Veterans Disability Pension (Veterans Affairs)
- Working Income Tax Benefit
- Working Income Tax Benefit – Supplement
- WorkSafeBC Compensation (wage-loss) benefits
- WorkSafeBC Permanent Disability Award.

One critical component of SRDC's benefit research was determining the accuracy and timeliness of the information found online, updating legislative and program changes on an ongoing basis, and following up by phone with the relevant government program administrators. At the end of this process, SRDC had developed several complex Word and Excel documents containing both

the parameters and descriptive information to be included in the development of the Calculator website. The next phase involved translating the research and programming information into website requirements for the developer, as described below.

Translation to requirements

SRDC considered several processes for translation the research data into website requirements (including a Behaviour-Driven Development (BDD) format employed by Turn2Us). After extensive consultations with Radii, SRDC provided specifications using a combination of formats including: a complex interactive excel spreadsheet containing all inputs and outputs required for programming and verifying the output of the calculator; Word documents containing static content and website page descriptions; graphical files for documenting website structure and flow processes, as well as wireframes. Overall, SRDC provided the developer with detailed instructions on the following:

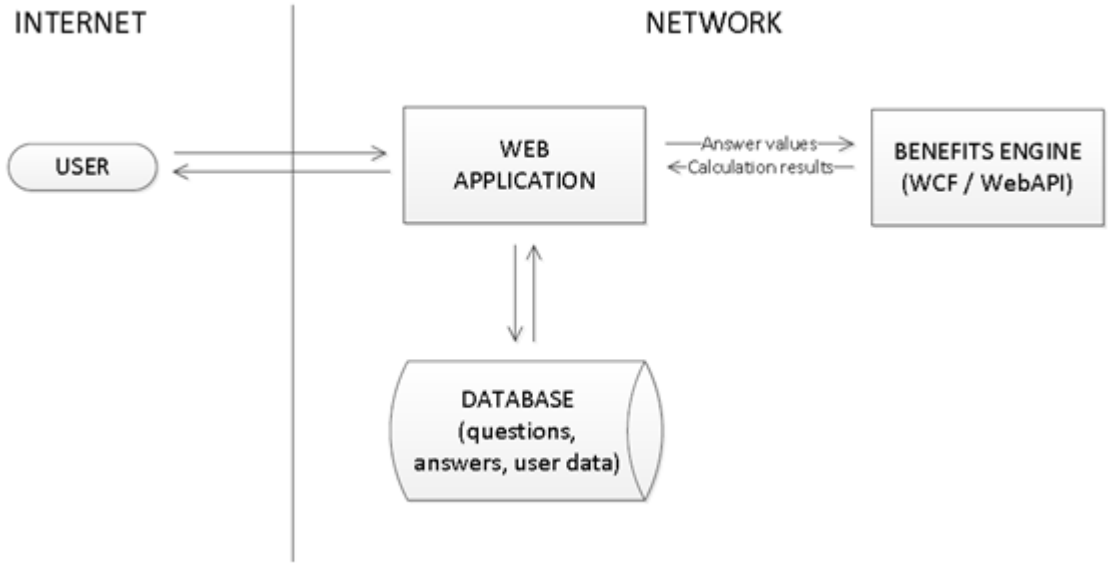
- Overview of site components
- User registration
- Baseline survey
- User database
- Data hosting, security, and management
- Accessibility
- Description of main calculator website – with wireframes
- An Excel spreadsheet with all logic for calculations, specifying inputs and outputs
- Page-by-page documents with further instructions for website look and feel, page components, and wireframes, functionality and appearance
- Descriptions of the calculator website included the following core functions:
    - **Estimate current income entitlements** based on user-entered data to calculate eligibilities. Highlight a range of potential income sources (customized to the user) from provincial, federal and tax sources and the extent to which this income would impact eligibility for disability assistance benefits;

- Provide options to enter defining **details of job opportunities** (hours, wages, pay periods);
- Be able to generate **hypothetical "what if?" scenarios** and "better-off-in-work" total income estimations for each job opportunity;
- Trigger **personalized announcements** (in terms on content and timing) that improve understanding of components of income and highlight available supports;
- Provide a real time personal account function so that clients can **tally their earnings** (as they are reported). Generate running totals applicable against their annual earnings exemption and indicate when earnings reach levels that affect eligibility for benefits;
- Display **simple illustrations** of the contributions made by income sources.

Other instructions referred to the following: cross-browser / platform support and mobile device support capabilities; a function to update key benefit parameters; and security for the application website and protection of data.

SRDC specified the main website to be designed as separate from, but interactive with, the benefit calculator "engine" such that the web application would hold the questions and turn the answers into variables. It would send the variables to the "engine" to perform the complex logic calculations. The "engine" would then return the answers to the main application, as shown in the figure below.

Figure 2 Interaction of the website components



Finally, SRDC specified five distinct groups of website users, with differening access to the site, as shown in Table 2 below:

Table 2 Groups of website users

USER GROUP	Baseline and follow-up surveys	Calculator website	Modification and troubleshooting	Monitor usage & access user data
PWD Program	√	√		
PWD Control	√			
CASE Managers		√ with limitations		
SRDC	√	√		√
ADMIN	√	√	√	√

Calculator BC website

Overview

The site was created to represent a state-of-the-art income calculator with an accessible design. Its main features were consistent with the proposal: it drew attention to available supports and work incentives within the existing policy system, it took into account tax credits, annualized exemptions, and treatment of earned income in assistance over specified periods, and it helped clients keep track of earning and other income. Clients could enter details of hypothetical job opportunities and compare income consequences of several jobs, even if the jobs were quite different. Also in line with the proposal, the calculator was accessible, relevant, and accurate. For accessibility, the calculator's user interface was created in consultation with a disability user experience consultant so that it could be accessible for users with a broader range or depth of disabilities. The site was designed to be accessible to a range of needs since the province defines PWD by a person's competencies rather than using a list of particular abilities.

Note that website maintenance occurred throughout the project at times (usually early morning) when low rates of activity were anticipated.

Beta testers and video production

Prior to launch, in February 2018, the calculator website was beta tested to assess accessibility and identify bugs to improve reliability. With the help of DABC, SRDC recruited four volunteers who were recipients of disability assistance (the recruitment flyer for beta testers can be found in Appendix C). The beta testers had diverse abilities and varied in terms of their computer literacy and familiarity with income and benefit information. SRDC ensured that all testers had access to the necessary equipment and software to test the website and introduced them to the calculator tool. The volunteers were given several days to test the website, complete the website surveys, and to gather feedback on ways to help improve it. SRDC provided the testers with a list of guiding questions to help gather their feedback. Each tester received a "thank you" gift (e.g., a $70 gift card) for their participation in the testing and providing feedback on the website. The beta testers also volunteered to appear in the introductory video produced by the hired videographer.

SRDC organized a day-long session with the volunteers at the DABC office in Vancouver. The session gathered feedback about the website and supported the video production. In the morning, the volunteers provided their comments to SRDC researchers both on-one-one and as part of a small group discussion, sharing their experiences with the site and their suggestions. The afternoon was used for filming. Overall, the beta testers provided very detailed feedback on ways to improve the site. Their feedback centered on improvements to the following:

accessibility of the website and its various components; clarifying questions and specific pages; display of calculator results; streamlining information provided; and several bugs and errors. Beta testers were given continued access to the website and were able to provide further feedback by phone and email.

The introductory video produced can be found at:
https://www.youtube.com/watch?v=xSde9W_sRHM&feature=youtu.be

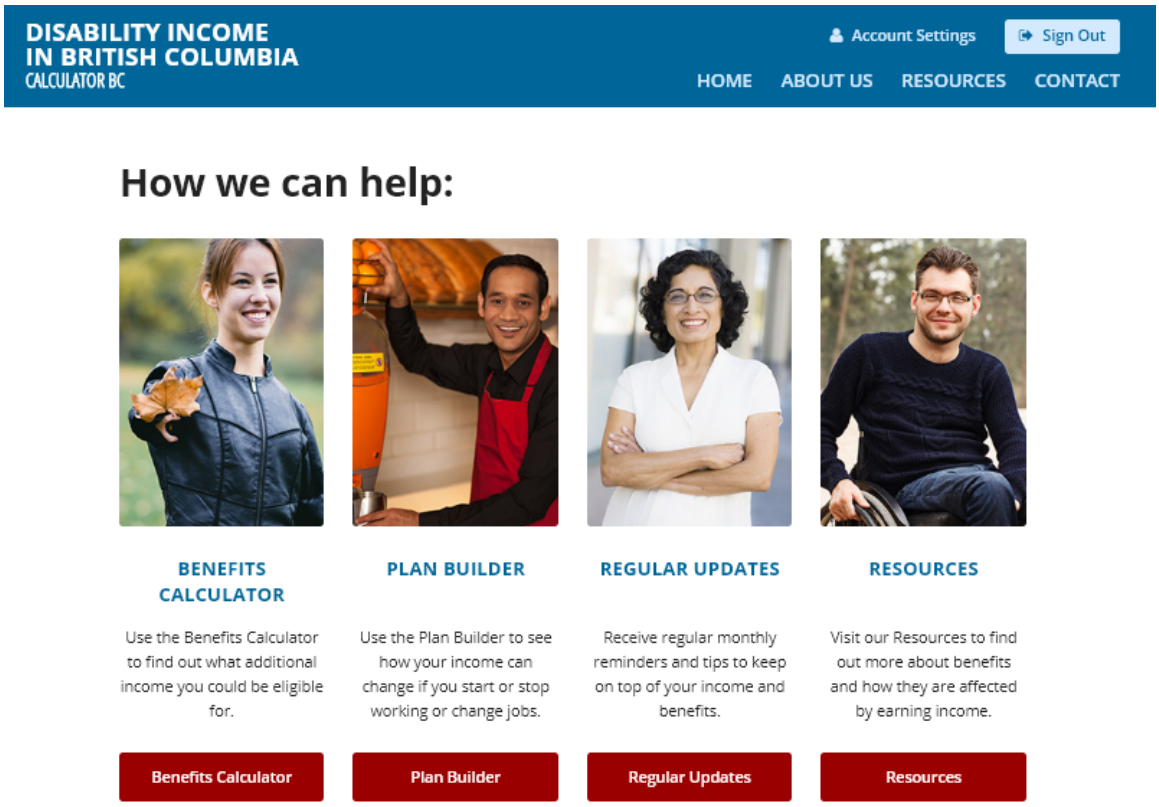
Design

The following sections describe the Calculator BC website, as seen and experienced by the user.

The Calculator BC website has four main functions. They are all closely interconnected, but are presented to the user as stand alone components. This helps the user gain familiarity with the tool and gather information in an incremental manner. The four functions are outlined in Figure 3 below showing the Calculator home page, and include:

1. **Benefits Calculator**: helps the user find out what additional income they may be eligible for
2. **Plan Builder**: helps the user find our how their income could change if they start or stop working or change jobs
3. **Regular Updates**: allows users to sign up to receive regular monthly email reminders and tips to keep on top of their income and benefits
4. **Resources**: provides information about benefits and answers to frequently asked questions.

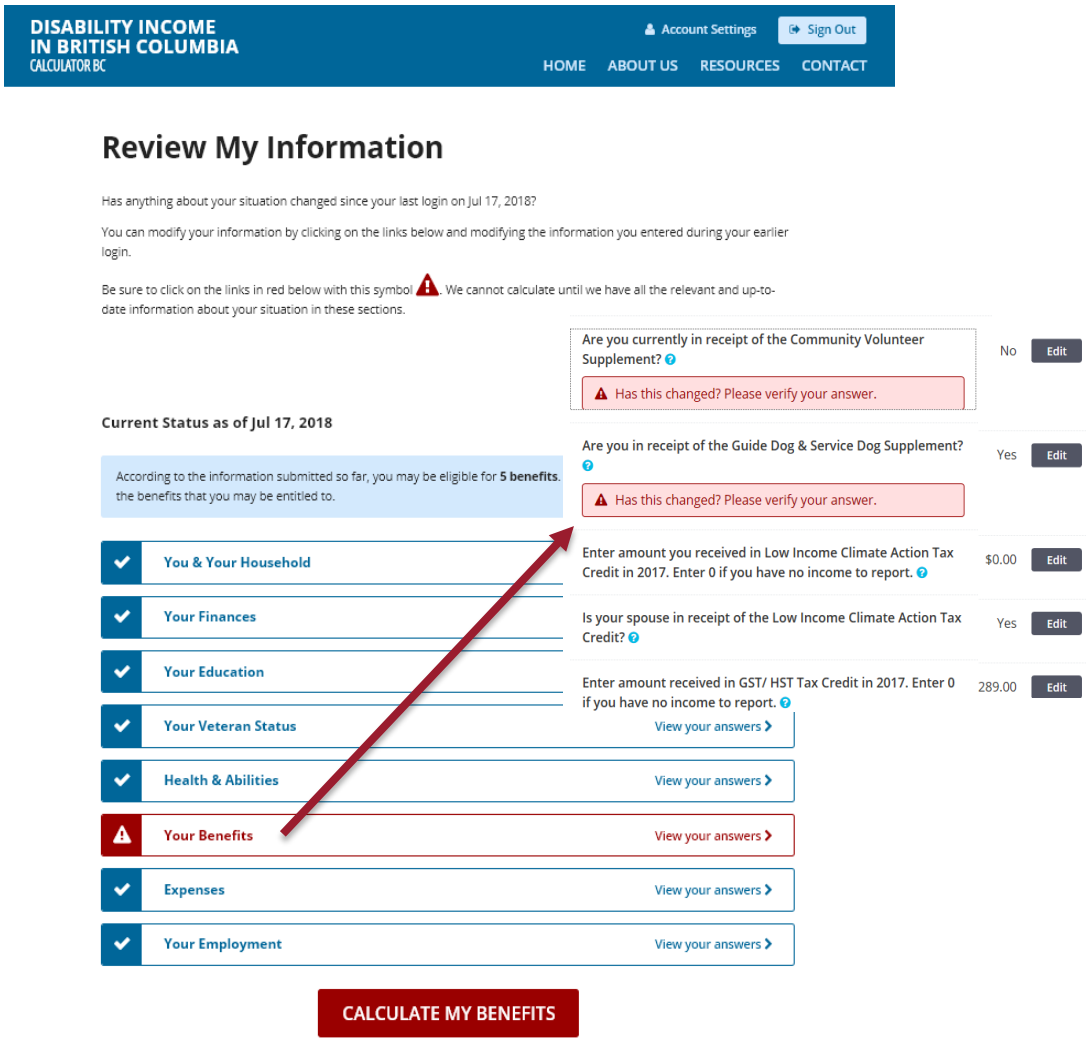
Figure 3 Home page of Calculator BC website



Benefits Calculator

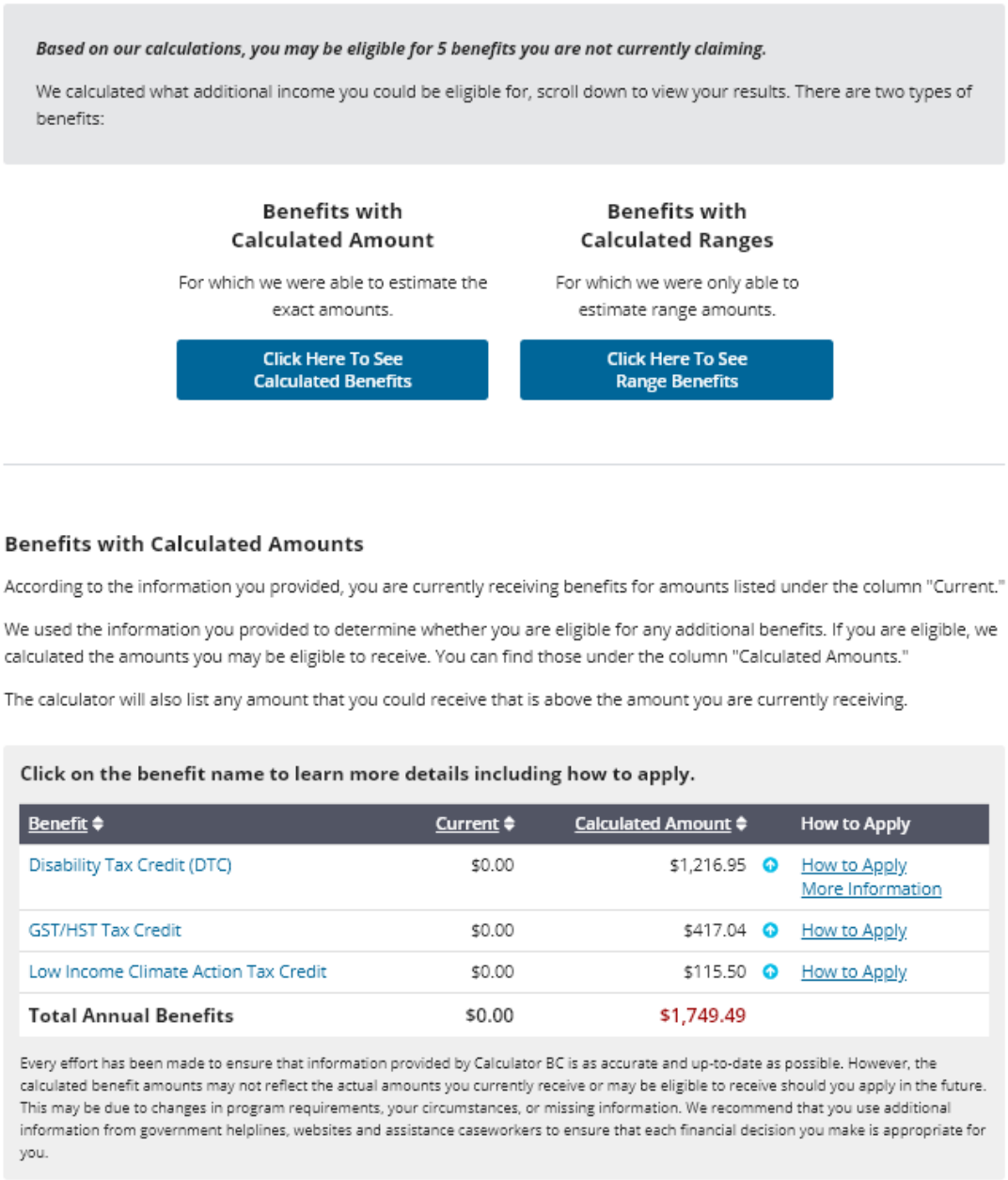
The Benefits Calculator helps the user find out what additional benefits they may be eligible for. The user answers a series of questions about their personal situation, and then is presented with results specific to their circumstances. This includes information about any additional benefits (exact amounts and amount ranges) they may be able to receive and how to apply for them. Importantly, the questions that users are asked required for the benefits calculator are asked in the initial baseline survey that all project participants complete. The Calculator is designed not to repeat requests for the same information unless it is missing, but it does require updates when the information may have changed with the passage of time. When the user logs on, they are prompted to review certain sections to update information or ensure its accuracy (see Figure 4 below). Note that by clicking on the question marks in blue in the figure below, users get access to additional help information to assist them in answering the question.

Figure 4 Review information screen for Benefits Calculator



After all the required information has been entered, users click on “calculate my benefits”. The website then displays results specific to their situation. Figure 5 below provides examples of results a user may see, with benefits and calculated amounts. Users can scroll down to view information about additional benefits for which they may be eligible, with range amounts shown. For these benefits, the Calculator is able to calculate the user’s eligibility, but not exact amounts that could be received. By clicking on the benefit name, more information is displayed about that benefit, and how to apply.

Figure 5 Benefits Calculator results screen



Based on our calculations, you may be eligible for 5 benefits you are not currently claiming.

We calculated what additional income you could be eligible for, scroll down to view your results. There are two types of benefits:

Benefits with Calculated Amount

For which we were able to estimate the exact amounts.

Click Here To See Calculated Benefits

Benefits with Calculated Ranges

For which we were only able to estimate range amounts.

Click Here To See Range Benefits

Benefits with Calculated Amounts

According to the information you provided, you are currently receiving benefits for amounts listed under the column "Current."

We used the information you provided to determine whether you are eligible for any additional benefits. If you are eligible, we calculated the amounts you may be eligible to receive. You can find those under the column "Calculated Amounts."

The calculator will also list any amount that you could receive that is above the amount you are currently receiving.

Click on the benefit name to learn more details including how to apply.

Benefit	Current	Calculated Amount	How to Apply
Disability Tax Credit (DTC)	$0.00	$1,216.95	How to Apply More Information
GST/HST Tax Credit	$0.00	$417.04	How to Apply
Low Income Climate Action Tax Credit	$0.00	$115.50	How to Apply
Total Annual Benefits	**$0.00**	**$1,749.49**	

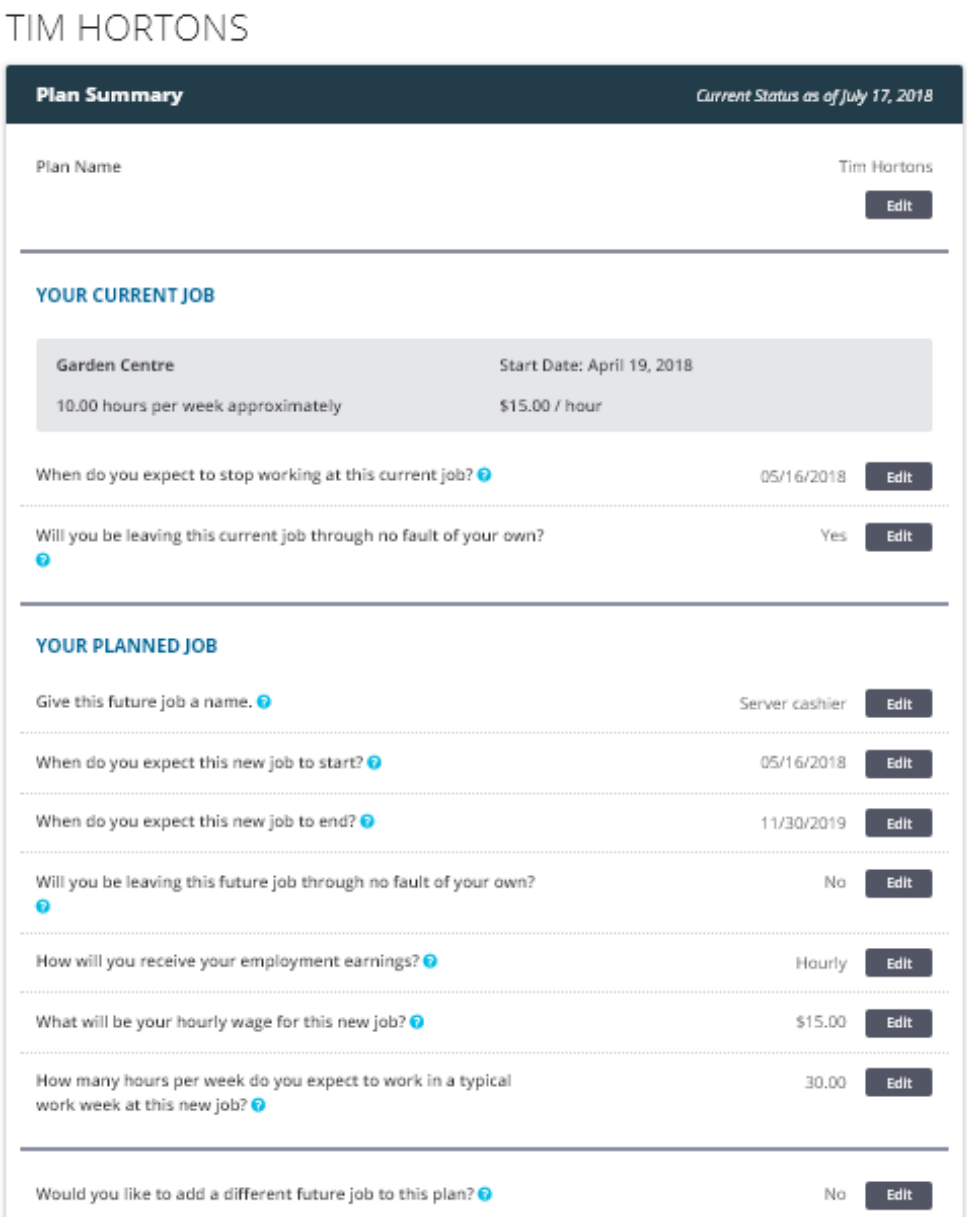
Every effort has been made to ensure that information provided by Calculator BC is as accurate and up-to-date as possible. However, the calculated benefit amounts may not reflect the actual amounts you currently receive or may be eligible to receive should you apply in the future. This may be due to changes in program requirements, your circumstances, or missing information. We recommend that you use additional information from government helplines, websites and assistance caseworkers to ensure that each financial decision you make is appropriate for you.

Plan Builder

The Plan Builder helps the user understand the effects of a change in employment earnings on their benefits, with a special focus on disability assistance benefits. Users answer a series of questions to create different plans (or employment scenarios) and compare between them to

learn the impact of their employment choices on their benefits and income. Figure 6 below shows an example of an employment plan created by a user, and the types of questions that are required for the user to provide so that the Plan Builder can estimate results.

Figure 6 Plan Builder example plan



The Users

Users have the option of comparing between different plans they create (users can create any number – the website will store their favourite three plans). They can also compare results with two plans automatically generated by the Calculator. The "Same as Now" Plan assumes a user does not make any changes to their sources of income and benefits from the previous month for the next 12 months. The "No Employment" Plan calculates the benefits the user would receive if they were not working from tomorrow onwards. Figure 7 below shows a comparison of a plan a user created with the "Same as Now" Plan. Users are alerted when they would reach their AEE under each plan.

Figure 7 Plan Builder results – compare plans

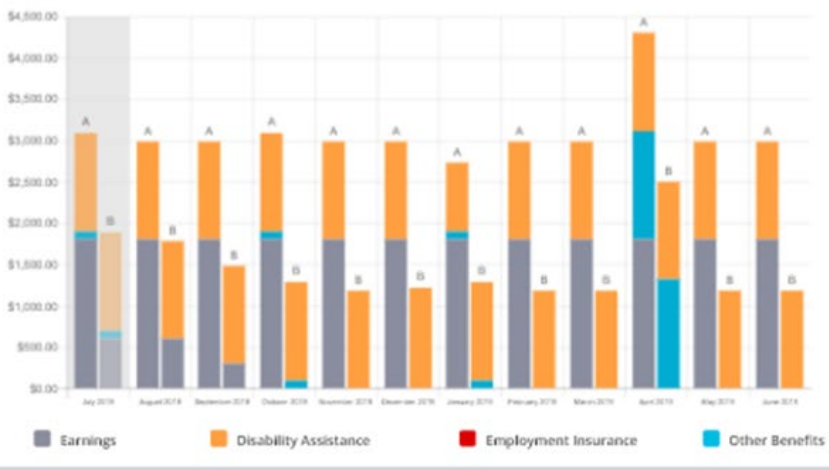
MY PLAN - TIM HORTONS VS SAME AS NOW PLAN

The chart below shows your projected income over the next 12 months based on the plan you created. You can see how the income in your plan compares to the plan you selected as a comparison.

Click on each bar to view the detailed breakdown for the month to learn what sources your income would be coming from under the different scenarios.

TOTAL INCOME: JULY 2018 - JUNE 2019

A - My Plan - Tim Hortons	B - Same as Now Plan
$37,077.26	$17,368.51
Under this plan, you reach your Annual Earnings Exemption (AEE) limit* for 2018 in December	Under this plan, you do not reach your Annual Earnings Exemption (AEE) limit*



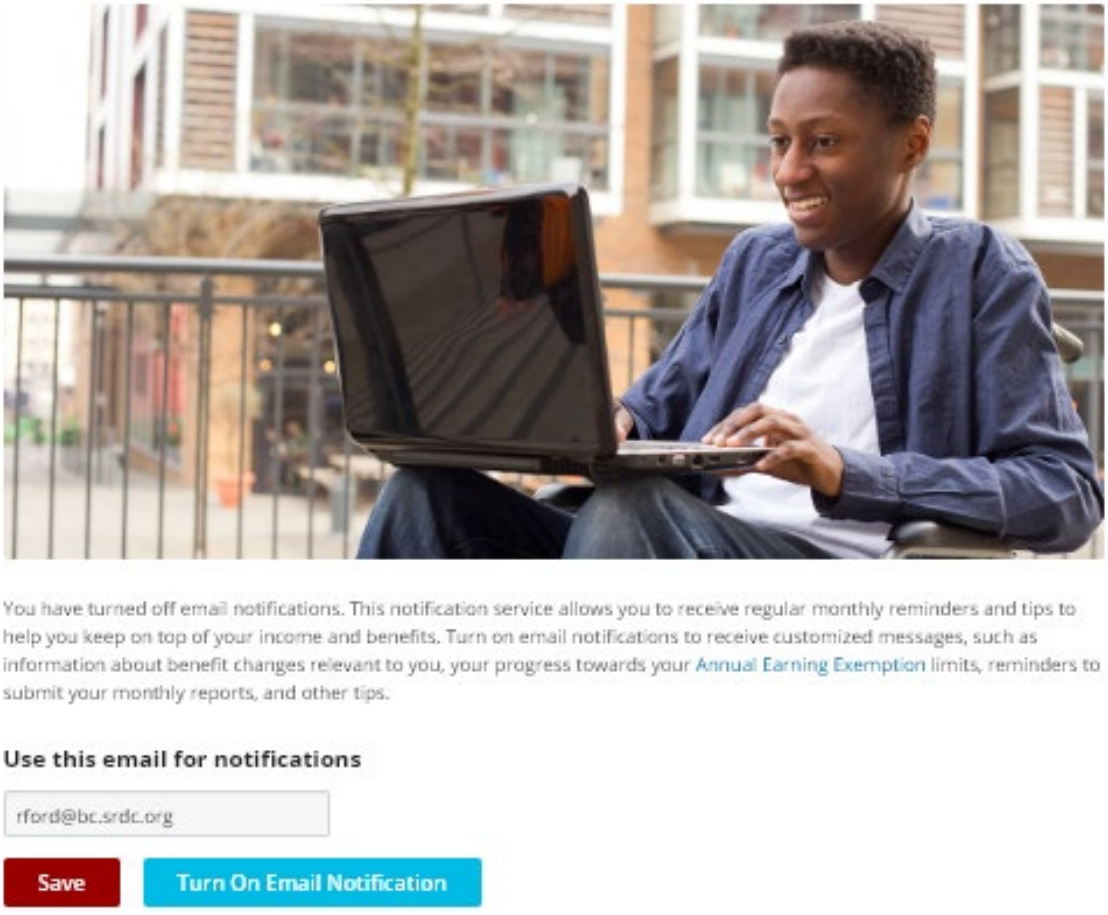
JULY 2018

Compare	A - My Plan - Tim Hortons	B - Same as Now Plan
Total	$3,083.30	$1,883.30
Earnings	$1,800.00	$600.00
Total Disability Assistance	$1,185.42	$1,185.42
Disability Assistance	$1,133.42	$1,133.42
Transportation Supplement	$52.00	$52.00
Other Benefits	$97.88	$97.88
GST/HST Tax Credit	$69.00	$69.00
Low Income Climate Action Tax Credit	$28.88	$28.88

Regular Updates

Regular Updates is a notification system that provides the user with customized monthly email updates and tips specific to their situation. This may include reminders to submit stubs, suggestions for using various sections of the Calculator, or important news about changes to benefit eligibilities or new benefits being introduced. Navigating from the main page, users can opt-in to receive these regular monthly reminders and tips to keep on top of their income and benefits. The main page for Regular Updates is shown in Figure 8 below.

Figure 8 Regular updates main page



Note that throughout the website, internal links are used that allow users to click on and receive additional information. For example, highlighted in blue in Figure 10, users can click on “Annual Earning Exemption” to learn more about the AEE. This “bank” of additional information is included in the Resources section of the calculator, as described below.

The Resources pages allow users to find out more about benefits and how they are affected by earning income. There are three tabs on the page. “Useful Links” describes and supplies link to 14 organizations that provide support to people with disabilities in BC. “Benefit Descriptions” summarizes key information on each of 36 provincial or federal benefits for which people with disabilities residing in BC could be eligible. Finally, “FAQs” provides answers to seven common yet important questions that people with disabilities have (e.g., How does the Annual Earnings Exemption work? Or – What happens to my health and general supplements if I start working?). The figures below showcase several pages that users can access in the Resources section.

Figure 9 Resources – benefit descriptions

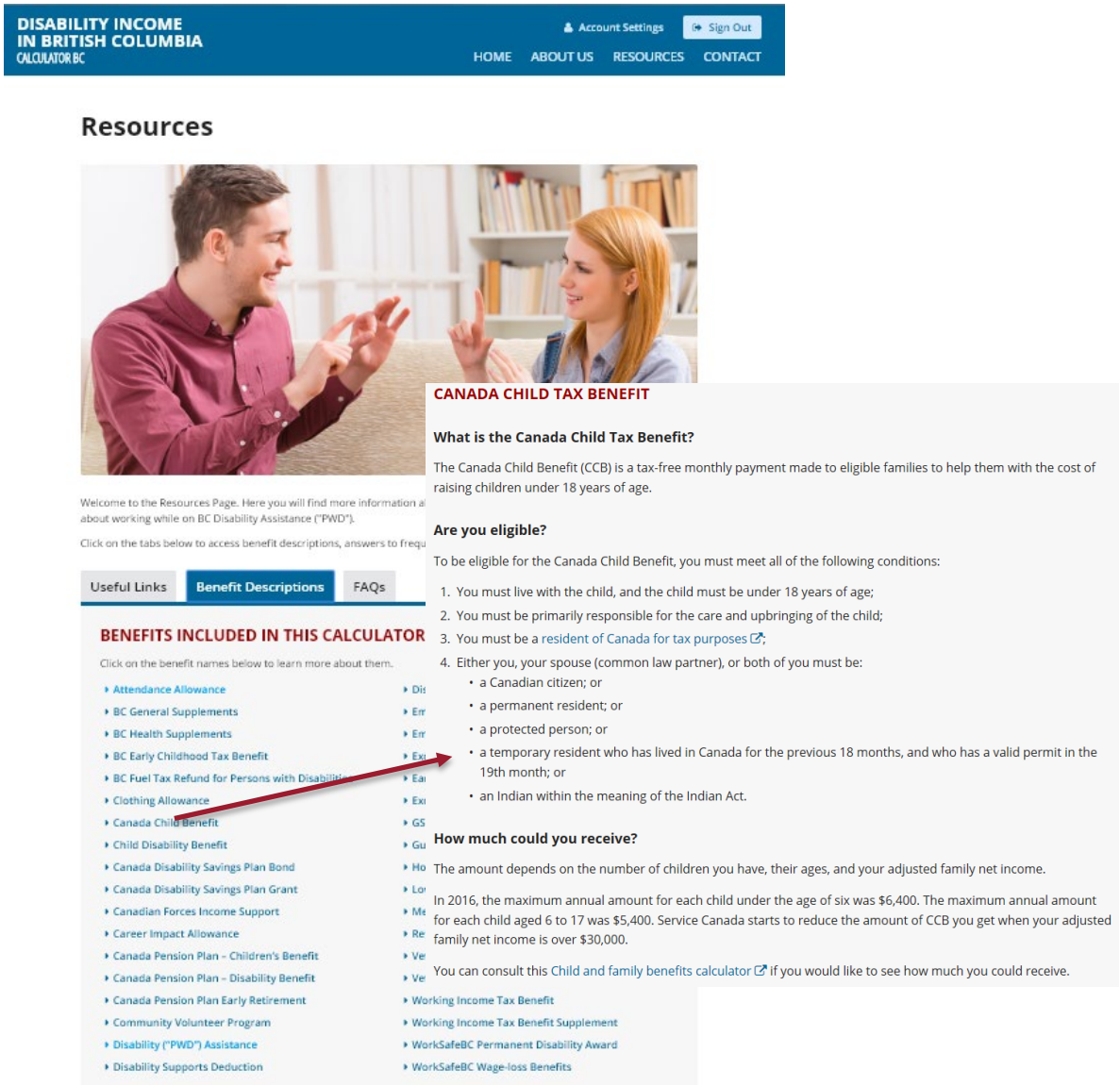
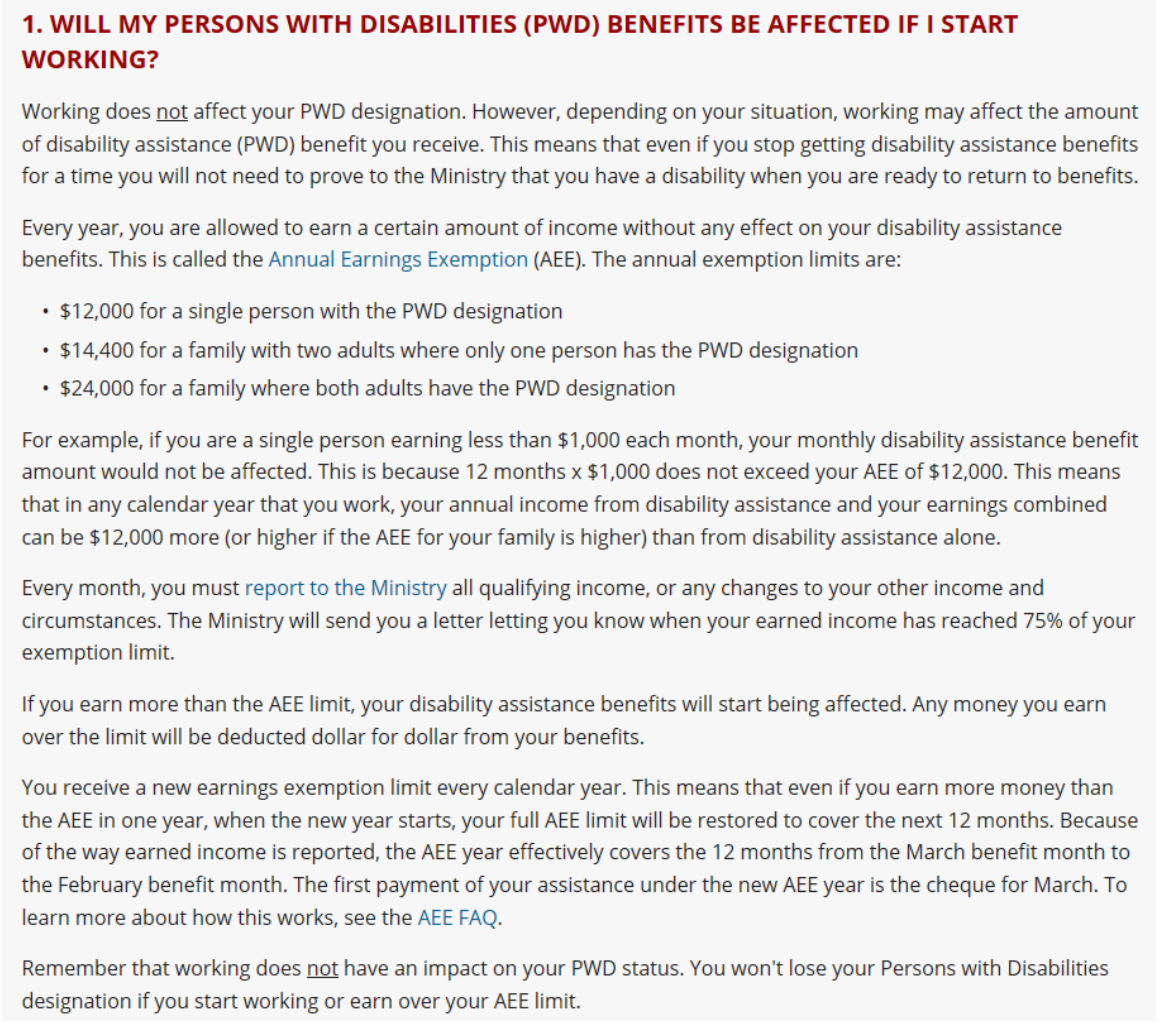


Figure 10 FAQ page example



1. WILL MY PERSONS WITH DISABILITIES (PWD) BENEFITS BE AFFECTED IF I START WORKING?

Working does not affect your PWD designation. However, depending on your situation, working may affect the amount of disability assistance (PWD) benefit you receive. This means that even if you stop getting disability assistance benefits for a time you will not need to prove to the Ministry that you have a disability when you are ready to return to benefits.

Every year, you are allowed to earn a certain amount of income without any effect on your disability assistance benefits. This is called the Annual Earnings Exemption (AEE). The annual exemption limits are:

- $12,000 for a single person with the PWD designation
- $14,400 for a family with two adults where only one person has the PWD designation
- $24,000 for a family where both adults have the PWD designation

For example, if you are a single person earning less than $1,000 each month, your monthly disability assistance benefit amount would not be affected. This is because 12 months x $1,000 does not exceed your AEE of $12,000. This means that in any calendar year that you work, your annual income from disability assistance and your earnings combined can be $12,000 more (or higher if the AEE for your family is higher) than from disability assistance alone.

Every month, you must report to the Ministry all qualifying income, or any changes to your other income and circumstances. The Ministry will send you a letter letting you know when your earned income has reached 75% of your exemption limit.

If you earn more than the AEE limit, your disability assistance benefits will start being affected. Any money you earn over the limit will be deducted dollar for dollar from your benefits.

You receive a new earnings exemption limit every calendar year. This means that even if you earn more money than the AEE in one year, when the new year starts, your full AEE limit will be restored to cover the next 12 months. Because of the way earned income is reported, the AEE year effectively covers the 12 months from the March benefit month to the February benefit month. The first payment of your assistance under the new AEE year is the cheque for March. To learn more about how this works, see the AEE FAQ.

Remember that working does not have an impact on your PWD status. You won't lose your Persons with Disabilities designation if you start working or earn over your AEE limit.

Other user features

The extent to which a user may benefit from the information provided and the relevance of the results displayed depends to a large degree on the accuracy of the information entered by the user as well as their continued interaction with the website tool. The Calculator includes multiple other features designed to help guide the users through this process, including help content that assists users in answering questions, ability to save and return, print and email results, as well as several examples and explanations.

RESULTS: IMPLEMENTATION STUDY

DELIVERY OF THE WEBSITE

To access the website, users enter the link https://calculatorbc.ca/ into their preferred desktop or mobile web browser. If they are registering for the first time, they are prompted to enter a six-digit PIN issued by SRDC and provided by their case manager. The user, typically with the aid of their case manager, then creates an account by entering their email as their username, and creating a personalized password. They then receive an email with a link to confirm their account.

For users who have already created their account, they access the website's functions by going to the same link (https://calculatorbc.ca), clicking on "Already have an account? Sign in here", and entering their username & password.

The first time users log in to the calculator, they are prompted to complete the baseline survey. For those in the program group, many of the answers they supply in this survey feed the website's benefit calculation engine, producing the list of benefits that the user may be eligible for, and amounts/ranges.

Each time program group members log in after completing this baseline information they will arrive at the home page, where they can navigate directly to their benefits summary, plan builder, notifications, and resources. With each new login, users are asked, via popup window, whether they would like to update the baseline information they entered. This is done so that the income information the website provides is updated to their current situation.

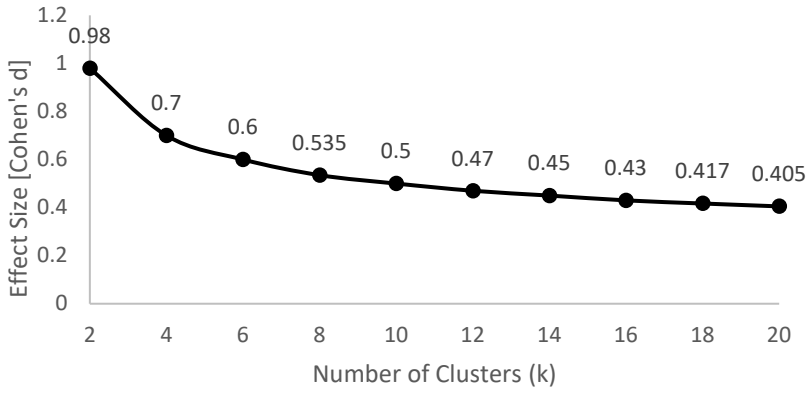
Study sites and participants

Recruitment of study sites and training activities

The project design forecast 400 participants would be recruited in order for the study's impact analysis to be able to detect an effect of 10 percentage points on primary outcomes with statistical significance (otherwise known as a Minimum Detectable Effect [MDE] of 10 percentage points) . For operational reasons, clusters of participants were to be randomized at the level of ESCs. Since participants within clusters tend to be more similar to each other than they are to participants from other clusters, randomizing clusters rather than at the individual level reduces the power of a study. To ensure the study was robust, the research team calculated

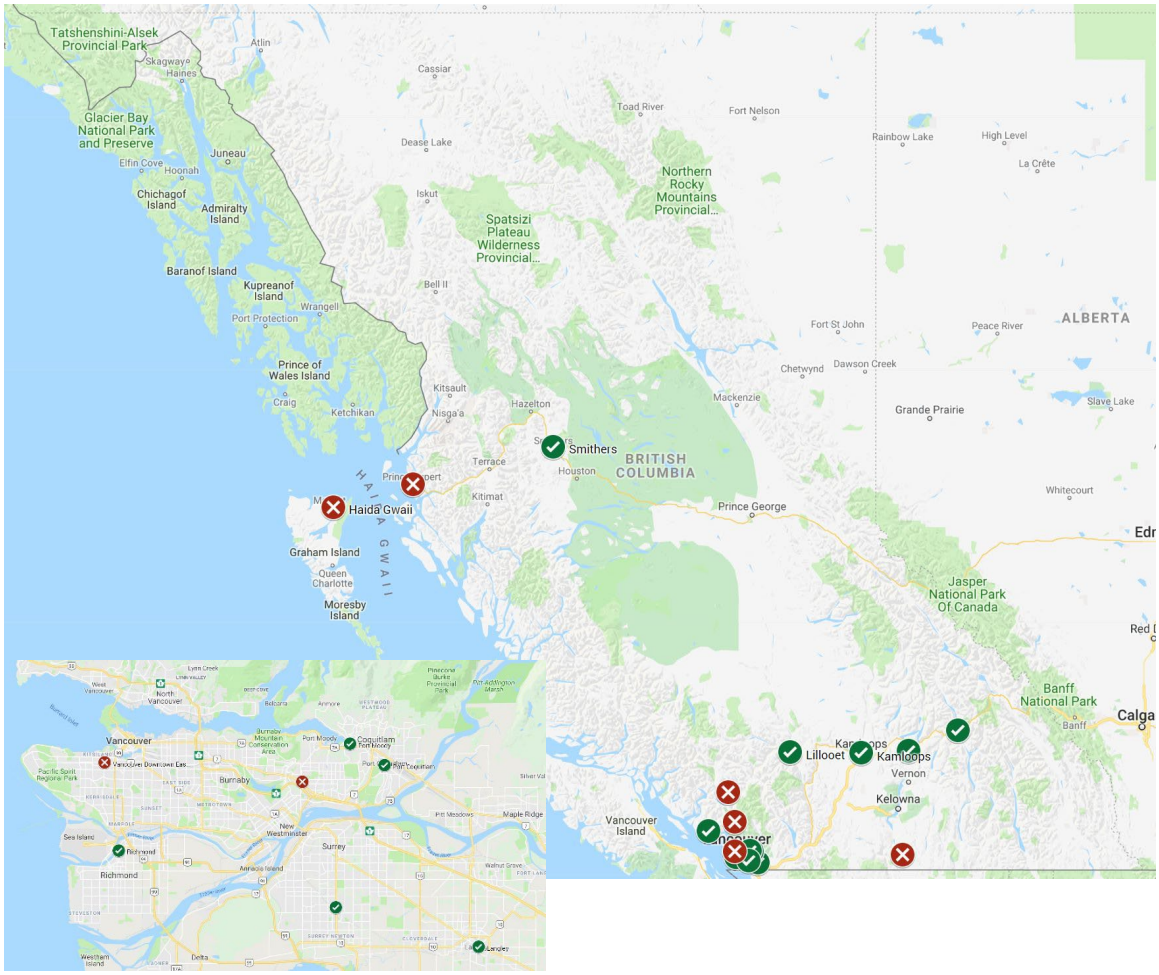
Intra-cluster Correlation Coefficients (ICCs) to determine how many participant groups would need to be recruited to meet the 10-percentage point MDE. As more groups are recruited, the effect of clustering diminishes, improving study power. The ICC was calculated using a sample of WorkBC clients from an earlier SRDC randomized trial on the effect of motivational interviewing in case management. This analysis showed that the return on increasing participating ESCs in terms of MDE leveled out between 8-12 clusters (see Figure 11). From this analysis, the research team concluded that recruiting more than 8-12 WorkBC ESCs would power the trial sufficiently, assuming that the ratio of variation in the motivational interviewing population between and within clusters was similar in the target population of the present study.

Figure 11 Number of clusters (k) vs. effect size initial



To select which ESCs to approach, researchers ordered the list of provincial ESCs by 4 criteria, and then approached the 15 ESCs at the top of the list, assuming that some would elect not to partner for this project. The ordering criteria were (1) whether the ESC catchment was urban or rural, (2) the size of the client base who are disability assistance recipients, (3) the catchment's EI Region, and (4) the contractors who ran the ESCs. The research team aimed for a balance of urban and rural, centres with many clients and centres with few clients, and representation from multiple Regional Divisions. For efficiency, contractors who operated multiple ESCs were approached to minimize the administrative overhead of collaborating with multiple partners. In this way, 10 ESCs (Figure 12) were recruited, trained, and ready for the launch of the calculator between January 1, 2018 and March 1, 2018 (wave one).

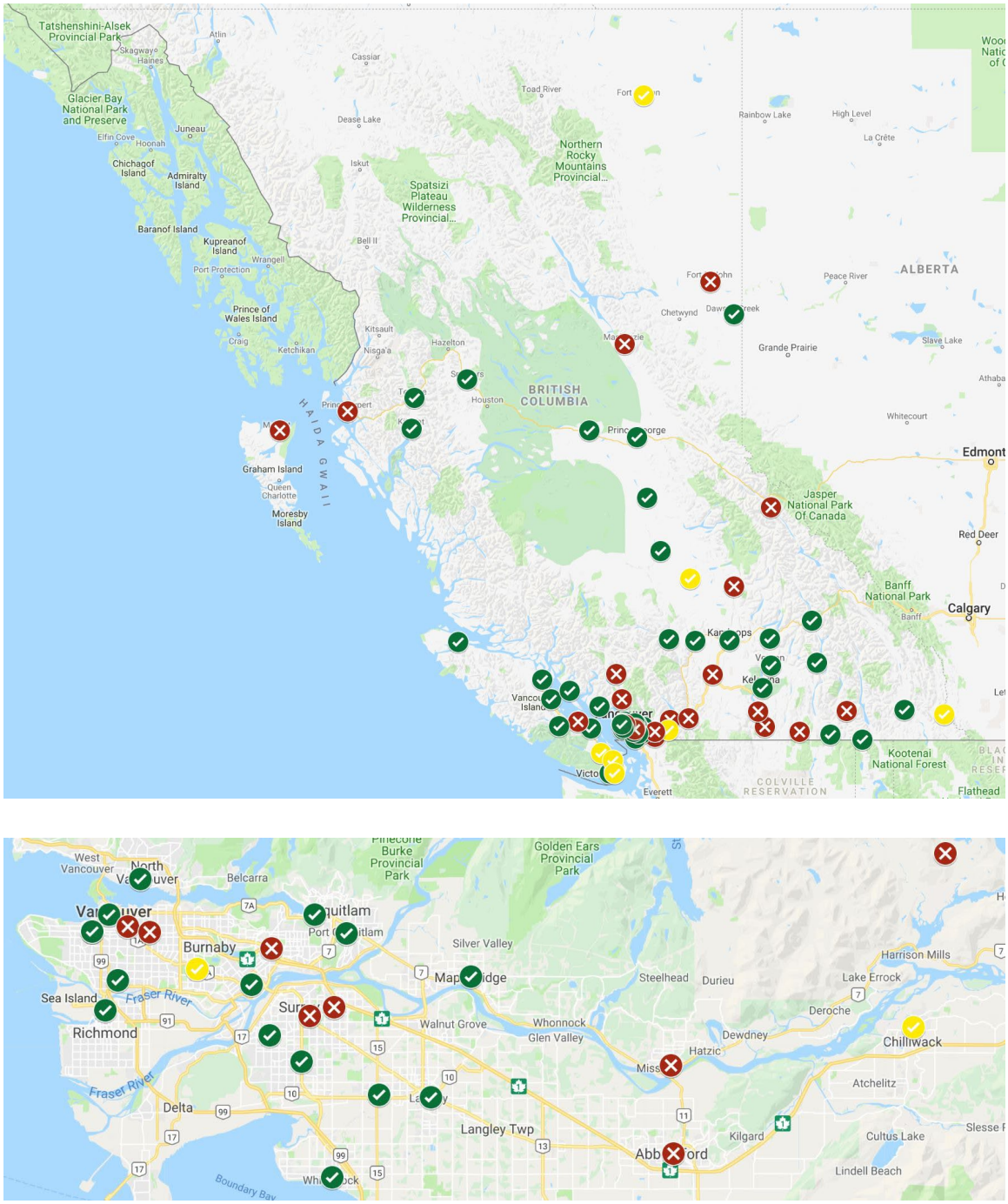
Figure 12 WorkBC Centres recruited in wave 1



Note: Green check marks are participating offices that recruited participants. Red X marks are non-participating offices.

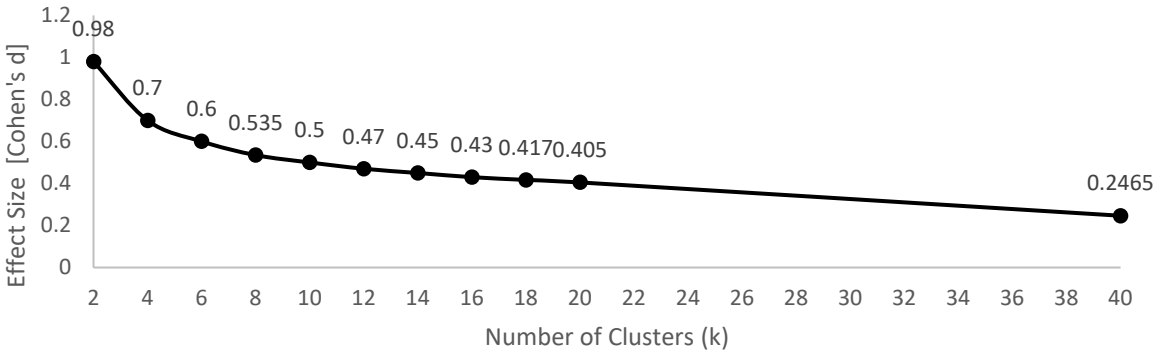
Whereas the first 10 ESCs were recruited to ensure the statistical power of the study despite cluster randomization, in the end all 73 WorkBC centres had to be approached throughout the recruitment period in order to ensure the study reached its participant recruitment target of 400. Recruitment of the remaining WorkBC ESCs took place in 2 additional waves as the research team determined that Wave 1 centres would not realize the recruitment targets on their own. By the end of the Wave 3 recruitment period, 50 WorkBC ESCs had been recruited and trained, and 39 of these recruited at least one participant. Figure 13 below shows the geographical distribution of WorkBC ESC participation in the project and Figure 14 illustrates the improvement in estimated MDE given 39 clusters.

Figure 13 All WorkBC centres recruited



Note: Green check marks are participating offices that recruited participants, yellow check marks are participating offices that could not recruit participants, red X marks are non-participating offices.

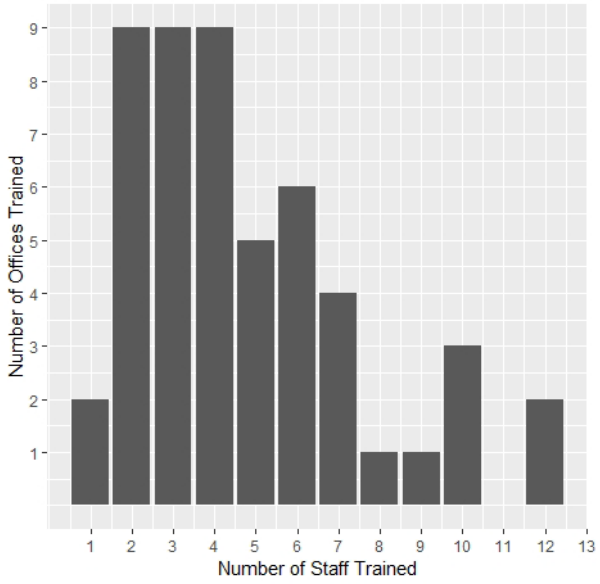
Figure 14 Number of clusters (k) vs. effect size final



WorkBC training

ESC staff at the 50 recruited centres were either trained in person or remotely by the same SRDC researcher in groups that ranged in size between 1 and 12 staff. Typical training groups comprised 3-4 ESC staff. A slide deck was used for consistency across all training sessions and training materials were distributed to each WorkBC team following training. Training covered: the problem being tackled by the project; the intent of the intervention and the evaluation design; a walk through of the logistics of registering disability assistance recipients and completing the baseline survey; as well as screenshots of the calculator functions. The graph below shows the distribution of staff attendance at ESC training sessions.

Figure 15 Counts of staff training session group sizes



While SRDC sought all case managers in the ESC offices who may manage or advise disability assistance recipients to be trained to recruit disability assistance recipients to the study, Centre managers determined which of their staff attended training. Training prioritized how to recruit clients rather than how to use the calculator or how to teach clients to use the calculator. SRDC provided instruction to WorkBC ESC staff in how to introduce the tool to clients and (if need be) their advocates, and how to create accounts for clients' future use. Further guidance was offered remotely by email and phone but, given limited researcher and ESC staff time, no separate training sessions were provided to program offices in calculator use.

Feedback collected from the training sessions included endorsements, questions, complications, concerns, and recommendations.

Among endorsements, the consensus across sessions was that the participant recruitment process was straightforward, and this process would be feasible to follow within each ESC's existing operations: "It's like you have done frontline work." Many staff recognized the value the calculator provided, from acknowledging it would help at least one client to exclaiming that this is exactly what they had wished existed. Some staff noted the calculator could reduce motivation for clients to work 'under the table', other staff appreciated that the helpline was a direct line to the research team remarking that they usually had to deal with automated responses. Finally, the plan building section of the calculator seemed flexible enough to cover the different employment examples case managers provided on how their disability assistance recipient clients earned income.

Among questions, staff asked: how long the survey would take, how much and what stores the gift cards were for, how the gift cards would be delivered, what the exact eligibility criteria for study participation was, how to support disability assistance recipients with low computer literacy, how to explain to clients in clear terms how their data would be protected, what accessibility testing the site had gone through, and what the project timeline and recruitment target for their ESC was. Staff from ESCs that were trained later in recruitment asked fewer questions than staff from ESCs that were recruited earlier. In part this may have been because SRDC modified subsequent training to include answers to frequently asked questions in prior sessions. Alternatively, later training sessions more often took place remotely, often over the phone. A lack of questions might reflect lower engagement in the training sessions by ESC staff.

Staff identified client cases where the tool would not be helpful. This was the case when clients could not read, could not use computers, did not use email, shared their email with others, forgot emails and passwords, or did not have access to computers or smart phones. Some staff also knew clients who would not trust the government, a government funded research project, or putting their information online.

Among concerns raised by some staff members: if clients learned how to maximize benefits they may have less incentive to seek employment; clients may expect case managers also to know about all the benefits listed in the calculator; clients may be upset with case managers if they obtain disappointing results from the calculator; clients may expect case managers to help them apply for benefits; ESCs might need to complete their own release of information to share client data with the research team. Most concerns relating to the workflow of the case management staff were addressed. In the case of sharing client data, case managers were reassured that clients consented data sharing as a part of their informed consent, however some ESC staff felt unsure.

> "We are here to give them employment, we want to make sure that this gives them incentives" – Case manager

Finally, staff recommended several changes to future project designs. In terms of incentives, staff asked for the list of gift cards to be available in advance so that they could warn their clients if certain gift cards were not available in their area. Several staff emphasized that extending gift card options to Walmart, Save On Foods, Safeway, and gas stations like Shell or Esso would be valuable to their clients in remote and rural areas. In terms of the calculator function, staff would have liked to have known the literacy level required for reading the website. They called for notifications sent to clients when benefits that affected those clients changed. They thought that having the survey in different languages, especially French, would help, as would allowing clients to print out the answers from their survey once they completed it. Finally, some staff wanted the service to be expanded to clients on PPMB and EI, and to non-WorkBC clients.

Participant recruitment

The target population for the pilot project comprised clients of WorkBC ESCs who were disability assistance recipients at the time of enrolment. SRDC identified this group for the first trial of the calculator for several reasons. They considered disability assistance recipients already using WorkBC services would not be drawn from those wholly prevented from working by their disability and they could benefit from improved understand of their benefit entitlements and how those entitlements operate in and out of work.

There is compelling evidence to suggest that the project successfully recruited its target population since people with PWD status were recruited through WorkBC ESCs, and the participants' provincial GA or legacy number IDs were collected during the consent process status.

Participants were recruited through ESCs by case managers. Case managers initiated conversations with disability assistance recipients during regular client sessions. If interested, clients were guided through an informed consent process, and then assisted in creating an account using an activation PIN obtained from their unique consent form. Clients could complete the baseline in the same session as registration, or they could log in at another time. Once clients completed their baseline survey, SRDC used the email from account registration to send a "thank you gift" e-gift card. After registration, case managers scanned and uploaded copies of each consent form to SRDCs secure upload cloud service. When case managers in an office had approached all the clients they felt the study would be suitable for, the hard copies of the consent forms were then picked up by courier and securely delivered to SRDC. Consent form data were screened for quality and missing signatures or contact information was sought out. Consent forms also asked for a GA or legacy number, which is the government-issued number used to track the benefits of people with PWD status. By providing the government with the study sample's list of GA numbers, the research team would be able to access a dataset including disability assistance receipt, employment service use and earnings of each participant. Through linking this dataset to the survey responses, the research team could determine how exposure to the calculator affected participants' applications for and receipt of benefits.

In many instances the GA or legacy number was initially missing from consent forms. To resolve the issue, the research team prepared a guide for case managers on navigating client's records on the ICM. Following these steps, the remaining ESC staff were able to provide the GA or legacy numbers of participants. In some cases, ESC staff expressed reservations about accessing the GA number if the participant was a walk-in registration and was not a formal client of the ESC. ESCs determined their course of action in these circumstances on a centre-by-centre basis.

The PIN to activate each account had six digits: four randomly generated letters, followed by two numbers (e.g., MDAH37). The two numbers represented the office that the PIN was associated with. Research team accounts started with the letter "S", ESC staff accounts started with the letter "C", and user accounts started with any letter other than "S", "C", or "O". Each user account was linked to a single ESC case manager account, and each staff account was linked to 100 user PINs, though not all of these PINs were used to activate accounts. PINs were distributed to offices as requested and each office could request up to 1,000 PINs in total.

There were several advantages to this PIN system. This setup allowed each case manager to recruit and monitor up to 100 disability assistance recipients. It limited contamination by making it easy to track how many access codes were distributed and to whom. It allowed the research team to assess recruitment rates by office. Finally, it made it easy to identify the office associated with user or staff accounts. This last feature facilitated troubleshooting since research staff and ESC staff could communicate about clients without exchanging identifying or confidential information.

The PIN system produced several difficulties for case managers and disability assistance recipients. Some case managers used their own PIN to create an account for a client. To resolve this, the research team contacted the web development team, set the email associated with the case manager's PIN to the case manager's email, and then the case manager followed the password reset directions on the website's main page.

Slow build-up of sample

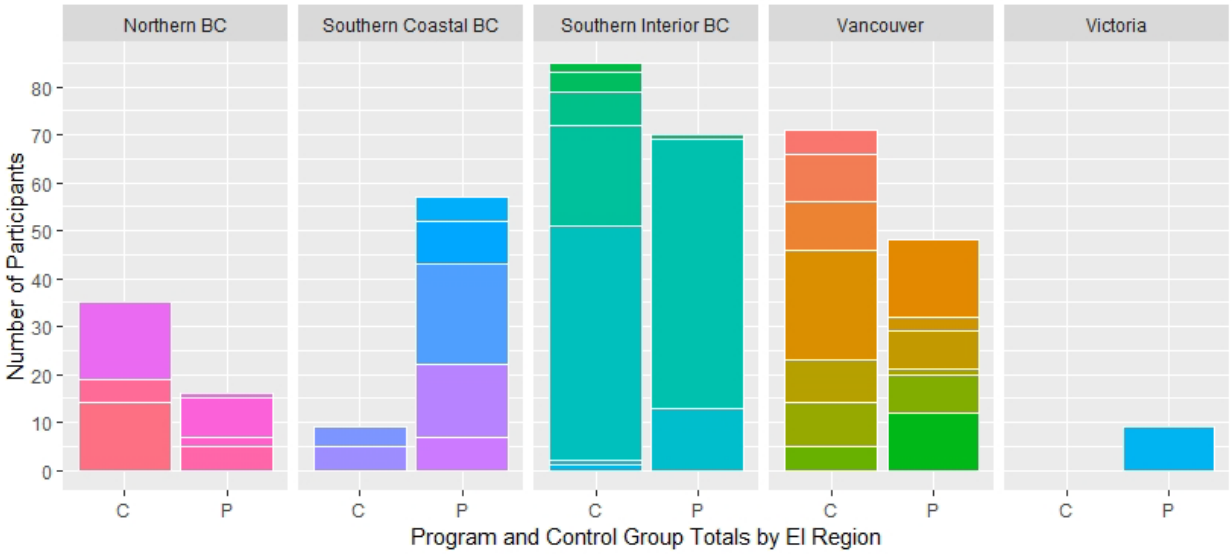
To recruit 400 clients, the 10 Wave 1 offices had to recruit 40 clients each. SRDC judged this a feasible target since the 10 offices recruited had more than 100 disability assistance recipients each and in prior studies seven in ten WorkBC clients who were approached chose to participate. In addition, at the time of training, each office confirmed that recruiting 40 clients in the four-week recruitment window was a feasible target. However, at the end of the planned four-week recruitment period, the study had 40 participants.

The research team reviewed the baseline dataset and contacted case managers to understand the factors contributing to low recruitment. At several offices, only some of the trained case managers were actively recruiting, while other offices had not started recruitment, and a few offices had all staff approaching clients but many of those clients were not interested. ESC staff reported a combination of reasons for low recruitment. Case managers frequently cited that they wanted to help but their work on their support for the project was unpaid and had to take a lower priority. SRDC found that the number of disability assistance recipients who regularly visited each WorkBC centre was a fraction of the disability assistance recipients registered for that centre, and that clients that did not visit their centre were difficult to get in touch with to invite to the centre. This meant that number of disability assistance recipients each centre could approach was generally one quarter to one tenth of their full list. Of clients approached about the study, as few as 10 per cent enrolled, compared to the 70 per cent estimate assumed from prior studies. According to case managers, clients often declined because of the financial information they were asked to provide, or because the study was associated with the government and clients wanted to minimize their contact with the government. Finally, it is likely that disability status itself precluded participation. Registering for a research study and using an online calculator could be two activities that present additional barriers to participation for the target group.

In response to low recruitment, the research team opted to increase the total number of WorkBC ESCs. Another 10 WorkBC ESCs were recruited in Wave 2 following a similar train-the-recruiter model to Wave 1, but this time without prioritizing which ESCs were approached. After these centres began approaching clients, the research team reviewed the baseline data and again found only a modest increase in recruitment. SRDC decided to approach all the remaining ESCs in the province. Among these 70+ ESCs, a total of 50 were trained. To ensure the target of 400 participants was reached, recruitment continued for five months, from early March – early July 2018. 400 clients were enrolled formally into the study. Of the 50 recruiting centres,

39 were able to recruit at least one participant. Coverage of EI regions in program and control groups is provided in Figure 16 below.

Figure 16 Program and control coverage by EI region



Random assignment

WorkBC centres and the recruited disability assistance recipients associated with them were assigned to program and control groups in a digitized, random-lottery like process.

Since centres began and ended recruitment at different times than each other, researchers randomized offices in three waves, when a sufficiently large batch of centres was ready. The research team determined that an office was ready to be randomized when (1) their staff had approached all of the disability assistance recipients they considered suitable for the study, (2) each disability assistance recipient had completed their baseline survey and submitted their consent form, and (3) their consent form was reviewed and found complete. In a few instances the consent forms scans were missing client name, client signature, or the WorkBC staff witness signature. When this was the case, the research team was able to contact the ESC team or specific case manager to complete the missing fields.

The research team sent separate notification emails to members of program and control groups. Offices were notified before participants so they had time to prepare for participants who wanted to discuss their control or program status. Control group members were told that they would not have access to the calculator but that they remained valuable members of the study of disability incomes and would be contacted in late fall of 2018 to complete a second survey.

Program group members were told they did have access to the calculator. They were provided with a link to the website, instruction for logging in and troubleshooting username and passwords, and a link to the introductory video featuring people with PWD status who had tested and reviewed the calculator. Following notification, a few participants or staff contacted the research team with concerns about their status or issues accessing the benefits calculator.

A final group of disability assistance recipients at program group offices who had not registered for the study were able to create accounts following the third random assignment and use the calculator. Their results are kept separate from the main study sample. Three disability assistance recipients created such accounts.

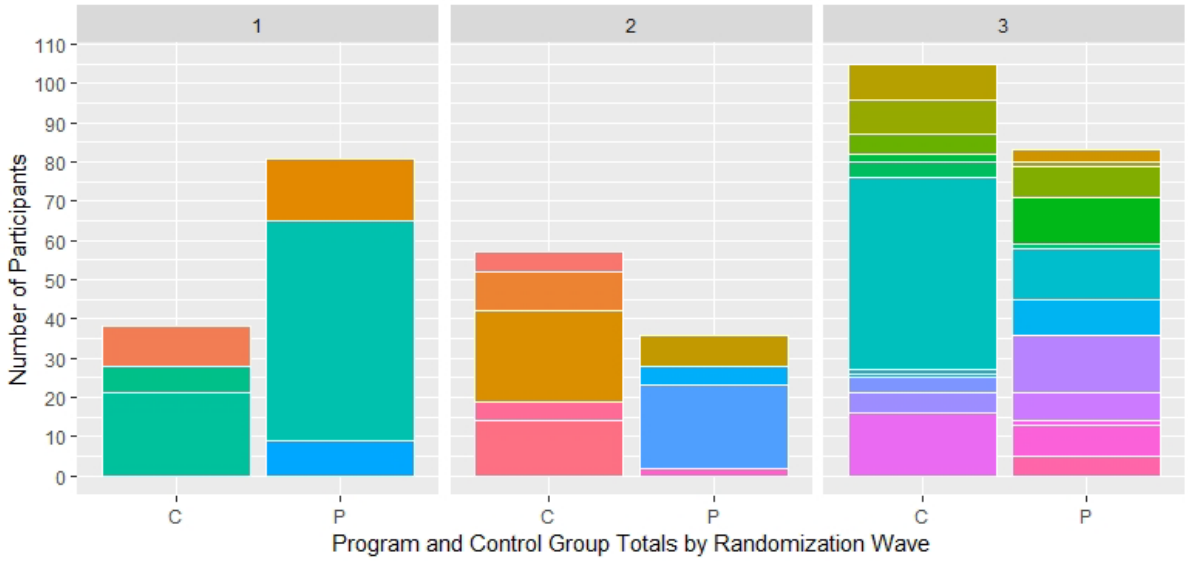
The offices were randomized in the following groups shown in Table 3. Randomization produced a balanced number of intervention and control participants.

Table 3 Program and control participants and offices by randomization date

Wave	Date	Program participants	Program offices	Control participants	Control offices
1	May 18, 2018	81	3	38	3
2	June 29, 2018	36	5	57	5
3	July 19, 2018	83	12	105	11
	TOTAL	**200**	**20**	**200**	**19**

Offices varied considerably in the number of participants they were able to recruit, and offices were randomized in waves. This means that there were few possible combinations of office assignments that would create an equal number of program and control participants in each wave. Figure 17 illustrates the “lumpy” assignment of differently sized clusters producing more program group members early on, and more control group members later.

Figure 17 Number of participants in each randomization wave by each ESC



While randomization was uneven, the fact that only chance determined which office received the calculator meant *in expectation* program and control groups should not be systematically biased. The Results section documents how the samples compared in practice.

The study design yielded a relatively low risk of contamination. The calculator required a password to access, and information was customized to individuals, so even if a control participant used a program participant's account, the results of the calculator would not be applicable to the control participant unless they updated all of the baseline information. Given the project design, it would be very difficult for control group participants to be exposed to the full intervention.

There are still plausible routes for contamination to take place. WorkBC centres have geographical catchment areas, so if a participant moved their residence, they could switch from using a control ESC to a program ESC. While plausible, this is not likely very likely over the time period. A second avenue for contamination is from the baseline survey. This survey asks participants about their current knowledge and receipt of each benefit programmed into the calculator, so all participants are briefly exposed to the existence of these benefits. While conducting recruitment at one site, a member of the research team noted that one participant stopped their survey and began searching the web for more information on each of the benefits they were asked about, so it is possible this occurred with other participants. Finally, case managers could read about benefits, create fake program group accounts, unknown to SRDC, or

move offices themselves.[2] These actions could supply a control group member with some of the benefits of the calculator and contaminate the sample.

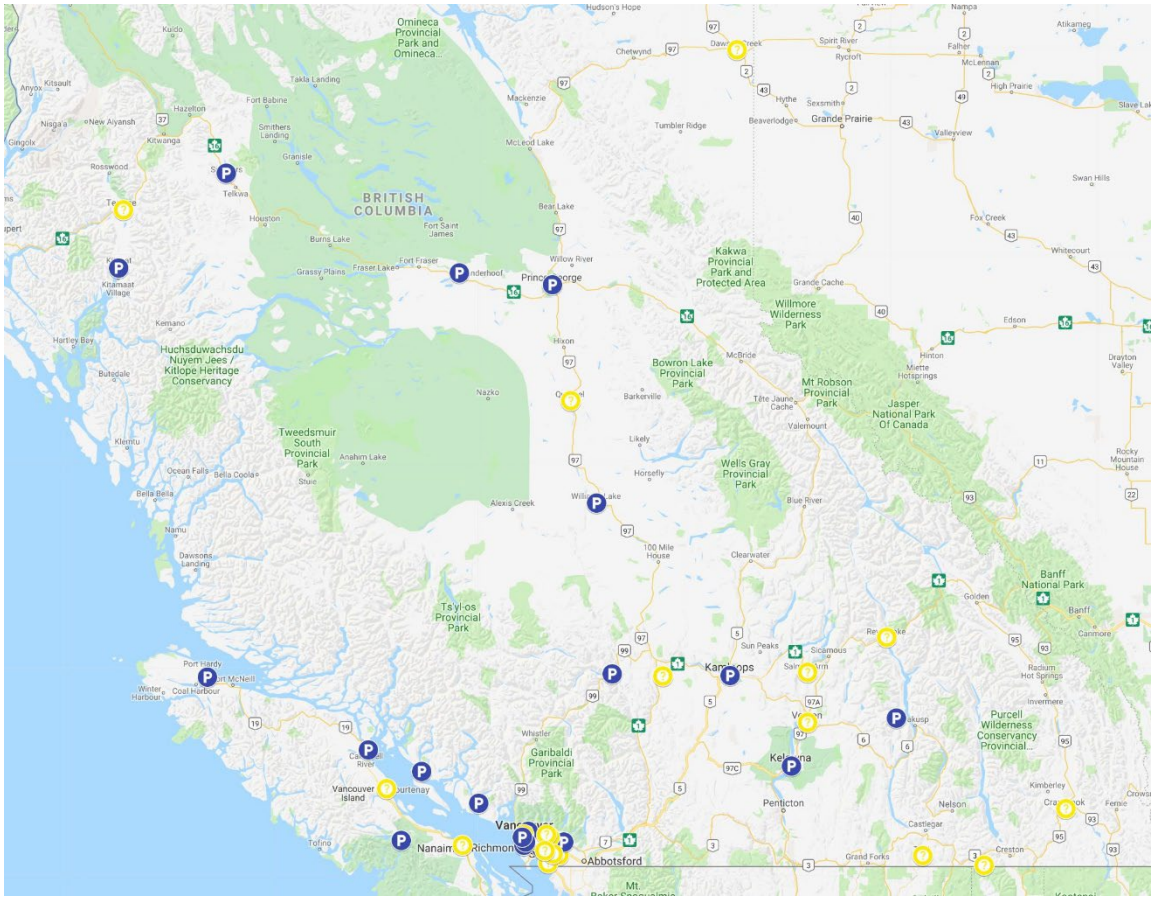
Randomizing at the level of centres protected against many likely sources of contamination because staff were not required to treat their clients differently based on their assignment status. However, each WorkBC has a lead contractor organization that subcontracts other employment service agencies. Some subcontractors are the lead contractors for other ESCs. This structure creates organizational channels between the ESCs. Such collaboration between ESCs may be beneficial to service delivery. However, it also creates incentives for staff at control office and program offices to share access to PINs, log in credentials, or clients. This potential for crossover means that clustering the program and control groups may not entirely rule out the possibility for contamination. There is no evidence that such crossover occurred or lead to contamination. Recall only three of the new PINs issued following random assignment resulted in new program group accounts being created, even though this would have been one of the easiest ways for control group members to acquire Calculator access.

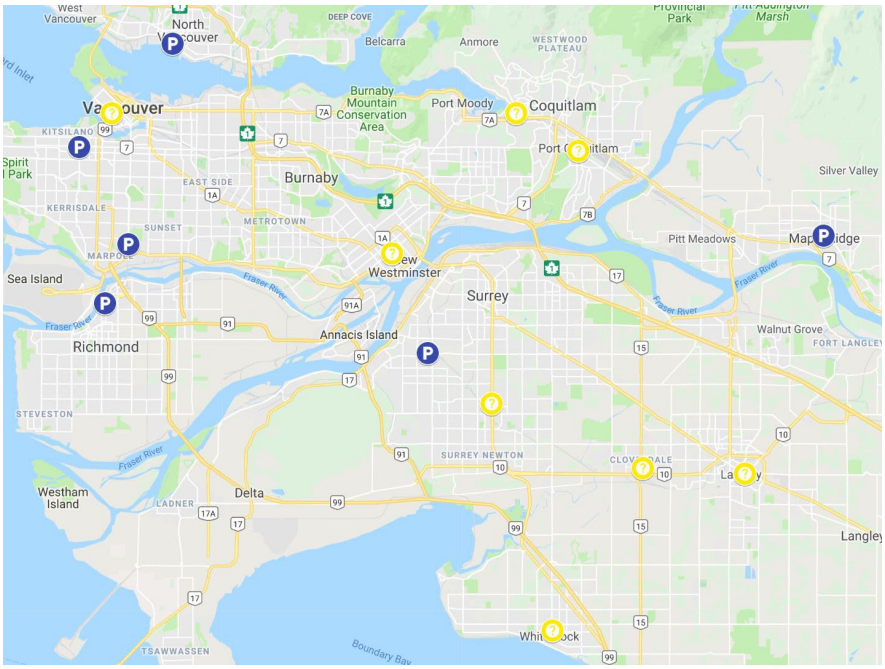
Summary profile of study sites

All 73 WorkBC ESCs were approached for participation in the study. 51 of these partnered with SRDC and at least some staff at each were trained, representing 70 per cent of BC ESCs. The mean number of staff trained per office, rounded to whole numbers, was 5 (standard deviation = 3, total number = 38). Figure 18 below shows the distribution of program and control sites across BC. The mean number of participants at each office was 10.5 (standard deviation = 11.6, total number = 38).

[2] When the research team was planning random assignment, they checked with their WorkBC partners to ask how often staff moved between ESCs and were told that staff switching offices was infrequent.

Figure 18 Program and control offices





Exposure

In the original design of the project, each program participant was set to have one year with the benefits calculator in order to capture their annual financial cycle, including application for and receipt of benefits. Due to delays in the procurement of a web development firm, the development of the calculator itself, and extended participant recruitment, the weighted mean dosage of calculator access was 225 days or 62 per cent of the intended dosage, assuming a program end date of January 31, 2019. Given that the primary effect of the calculator is expected to come in the form of annual benefit receipt, and the dosage period does not cover the period of the year when annual benefits are disbursed, it is likely that the recorded effect of the calculator will underestimate the true effect. The dose for participants is detailed in the Table 4 below, organized by office and randomization wave.

Table 4 Program dosage by randomization date

Wave	Date	Program participants	Exposure (days)	Exposure (%)
1	May 18, 2018	81	258	71
2	June 29, 2018	36	216	59
3	July 19, 2018	83	196	54
	TOTAL	**200**	**225**	**62**

Note: Exposure percentage is calculated as a fraction of a 365-day year.

PARTICIPANT CHARACTERISTICS

The baseline survey (completed by 200 program group participants and 199 control group participants) and the follow-up survey (completed by 113 program group participants and 138 control group participants) included a range of questions, covering the following domains: demographic characteristics, finances and sources of information about finances, health and abilities, receipt of benefits including amounts, employment and job search, and use of computers. The follow-up survey included additional questions about job search activities, information seeking, and the program group's experiences and use of the calculator website.

From the baseline survey, it appears that the random assignment was successful in creating statistically equivalent groups. Analyses of distributions across the study variables for program and control groups found only a handful of statistically significant differences, and none for the key demographic characteristics.

In this section, we provide an overview of participant characteristics at baseline, with Table 5 below summarizing participants' demographic characteristics. Note that the full results from the baseline and follow-up surveys are included in a subsequent section of this report containing findings from the impact study. However, several highlights of participant characteristics at baseline are summarized here.

The average age of the study participants was about 40 years. The overwhelming majority (90 per cent) stated that they did not have a spouse or common law partner, and more than three quarters had no children. In terms of highest-level education, just under 40 per cent of study participants had completed high school, and a substantial minority (just over 20 per cent) indicated they had not attained a high school diploma or equivalent. However, more than 30 per cent of participants attained either a certificate or diploma at a college or university level or had completed a bachelor's degree or above. Just over 10 per cent of participants were attending school on a part- or full-time basis at the time of completing the baseline survey. Finally, over 60 per cent indicated they did not own a vehicle.

Reported levels of financial knowledge, measured using several subscales, were fairly low. Notably, related to finances, fully half of respondents indicated it was "very difficult" for them to live on their current income, and another quarter said it was "somewhat difficult," pointing to the economic challenges experienced by the group. Furthermore, the health of the study participants was generally poor, with over half rating their health, and their mental health, as fair or poor. At the same time, a substantial proportion – over 40 per cent – indicated they earned income from employment in the most recent tax year. While the majority of participants were searching for suitable gainful employment at the time of the survey, as many as 90 per cent reported experiencing at least 1 barrier to employment. The most commonly reported barriers were not having the training or experience adequate for the current job market, unsuccessful past attempts to find work, and having experienced discrimination in the past.

Regarding the handful of differences observed between the program and control groups, control group participants were less likely to report having a prolonged disability, and more likely to be in the 35-44 age group, rate themselves as "fairly good" in terms of keeping track of money and have significantly higher expected earnings from their future job.

Table 5 Participant demographic characteristics at baseline by program group

	Program group	Control group	Difference		(S.E.)
Average age (year)	40.4	39.1	1.4		(1.4)
Age Group (%)					
16 to 24	16.0	17.6	-1.6		(3.8)
25 to 34	22.5	22.1	0.4		(4.2)
35 to 44	12.5	20.6	-8.1	**	(3.7)
45 to 54	27.5	23.6	3.9		(4.4)
55 to 64	20.0	14.1	5.9		(3.8)
missing	1.5	2.0	-0.5		(1.3)
Marital status (%)					
Has a spouse or common law partner	8.5	6.0	2.5		(2.6)
Does not have a spouse or common law partner	90.0	91.0	-1.0		(2.9)
Marital status missing	1.5	3.0	-1.5		(1.5)
Spouse's age					
Average (among those reported)	41.8	36.0	5.8		(5.0)
By Age Group (%)					
16 to 24	1.5	1.5	0.0		(1.2)
25 to 34	1.0	1.0	0.0		(1.0)
35 to 44	2.0	2.0	0.0		(1.4)
45 to 54	2.5	1.5	1.0		(1.4)
55 and over	1.5	0.0	1.5	*	(0.9)
Missing spouse's age	0.0	0.0	0.0		.
Does not reported having a spouse	91.5	94.0	-2.5		(2.6)
Spouse's PWD status (%)					
Spouse is qualified for PWD status	3.5	2.5	1.0		(1.7)
Spouse is not qualified for PWD status	5.0	3.5	1.5		(2.0)
Spouse's PWD status not reported	0.5	0.0	0.5		(0.5)
Does not reported having a spouse	91.5	94.0	-2.5		(2.6)

	Program group	Control group	Difference		(S.E.)
Participant (or spouse) a citizen/PR/Protected person/temporary resident/Indian (%)					
Yes	99.5	100.0	-0.5		(0.5)
No	0.5	0.0	0.5		(0.5)
Dependants (%)					
Number					
None	76.0	74.4	1.6		(4.3)
1	12.0	6.5	5.5	*	(2.9)
2 or more	5.5	7.0	-1.5		(2.4)
Not reported	6.5	12.1	-5.6	*	(2.9)
Sharing Custody?					
Yes	7.8	8.0	-0.2		(2.8)
No (or not applicable)	92.2	92.0	0.2		(2.8)
Presence of dependent(s) under 18	16.0	10.1	5.9	*	(3.4)
Claimed Disability Tax Credit for a dependant	2.0	3.0	-1.0		(1.6)
A dependant is a full-time student	10.0	6.5	3.5		(2.8)
Presence of dependent(s) between 18 and 25 who are currently in school (%)	9.0	7.5	1.5		(2.8)
The highest level of education completed (%)					
Less than high school diploma or its equivalent	20.2	23.6	-3.4		(4.2)
High school diploma or a high school equivalency certificate	40.4	38.5	1.9		(4.9)
Trade certificate or diploma	7.6	5.6	1.9		(2.5)
College, CEGEP or other non-university certificate or diploma (other than trades certificates or diplomas)	18.7	21.5	-2.9		(4.1)
University certificate or diploma below the bachelor's level	6.1	5.6	0.4		(2.4)
Bachelor's degree (e.g., B.A., B.Sc., LL.B.) University certificate, diploma or degree above the bachelor's level	7.1	5.1	1.9		(2.4)

	Program group	Control group	Difference	(S.E.)
Student Status				
Not a student (%)	86.2	88.8	-2.6	(3.4)
A full-time student (%)	4.6	4.3	0.3	(2.1)
A part-time student (%)	9.2	6.9	2.3	(2.8)
Average number of weeks in the most recent tax year attended school (weeks, among students)	23.4	18.3	5.2	(4.6)
Scholarship income ($ among students)	1,523.1	206.7	1,316.4	(903.7)
Spouse's Student Status				
Not a student (%)	7.0	5.5	1.5	(2.4)
A full-time student (%)	0.5	0.0	0.5	(0.5)
A part-time student (%)	0.5	0.5	0.0	(0.7)
Scholarship income ($ among students)	0.0	0.0	0.0	.
Does not reported having a spouse	91.5	94.0	-2.5	(2.6)
Ownership of vehicle (%)				
Yes	39.1	32.7	6.4	(4.8)
No	60.9	67.3	-6.4	(4.8)

Notes: There were 200 program group and 199 control group members in the analysis file. Differences between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%.
S.E. = Standard Error – an indicator of the variability of the estimate of difference.

WEBSITE UTILIZATION AND RECEPTION

As planned, program group members had the Calculator BC website at their disposal for their own personal use. This use was limited only by forgetting their password, not having access to computer or other online device, or, as case managers reported, low computer literacy. For example, some clients who signed up did not initially have email addresses, forgot their usernames or passwords frequently, or had difficulty navigating websites. Because the calculator was an online service that required an email and a password, many clients could not use it or found it hard to use on their own. While supporting recruitment at one office, a member of the research team noted that clients had difficulty going to the website (https://www.calculatorbc.ca) using the URL was printed on their orientation page.

Utilization measures

Downloadable data from the website provided limited measures of use. Downloadable data consisted of five types: login data, current job entry, plan creation, page likes, and page comments.

Login data provided the date of last login for each user. This value was updated each time the user logged in, so it was not possible to track how many times any particular user accessed the calculator. Instead, researchers downloaded login data at the end of each month. This allowed the research team to be able to track the number of logins in each month. The team was also able to track the total number of users who logged in throughout the exposure period. Since completing the baseline and follow-up surveys required logging in, this analysis is careful to disentangle logins for usage compared to logins for survey completion. Login usage is reported for June – November 2018, since participants were notified at the beginning of December that they could complete the second survey. Some initial use following Wave 1 random assignment during May 2018 may be overlooked.

Current job entry data provided the PIN, email, job name, job status, start date, end date, reason for ending, wage, and creation date for each job a user entered into the calculator.

Plan creation data provided the PIN, email, plan name, plan status, creation date, update date, job name, job type, job end, reason for ending, and wage for each plan a user entered into the calculator.

Page likes data identified whether a user liked or disliked a page on the calculator, and the specific page. The page comments data contains all written comments users had about the calculator, with a character cap of 200.

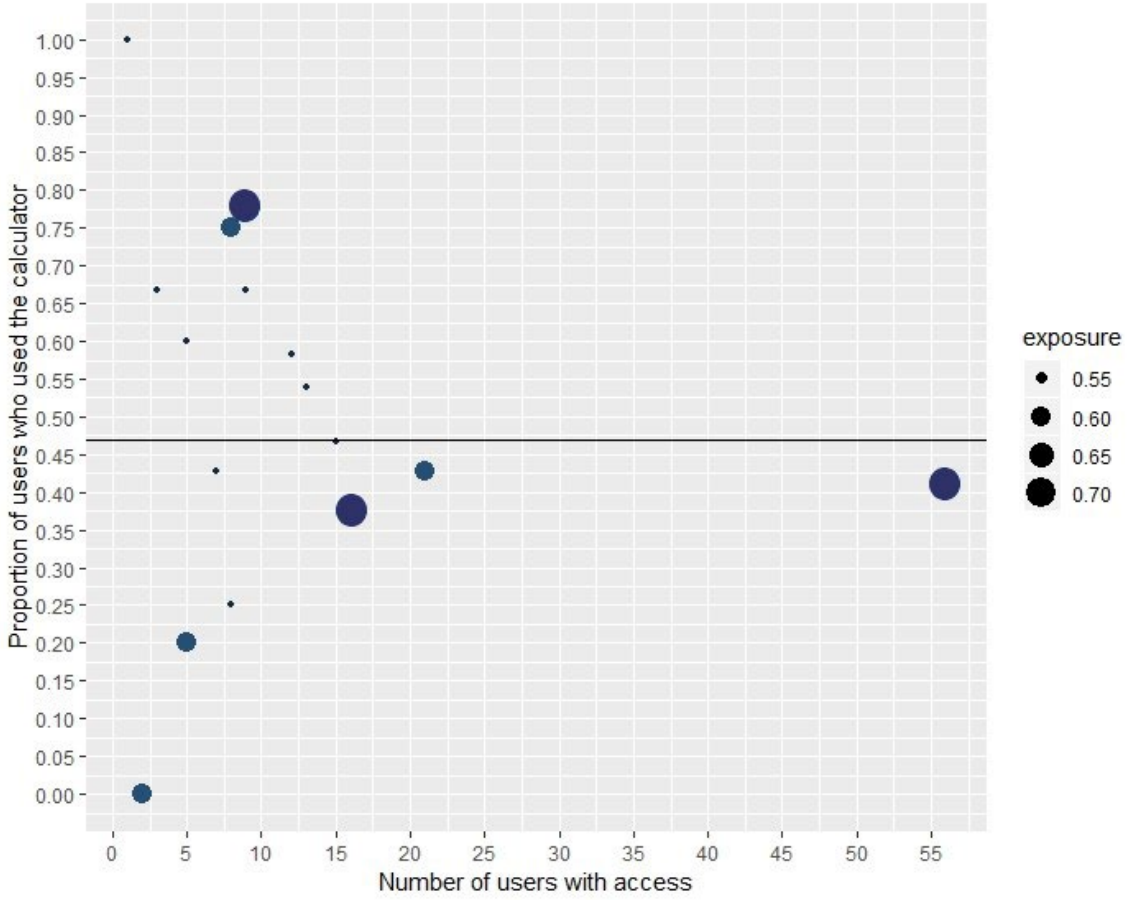
Participant logins

Table 6 presents how many clients logged in to use the calculator each month. This only includes clients who logged in after completing their baseline survey and after being notified of their access status. Usage is relatively consistent across months (mean = 10.5 per cent, standard deviation = 3.1%, number of months = 6). Usage over the whole period is less than the sum of usage across months, suggesting some users logged in several times. However, whole period usage and month aggregate usage are close (47 per cent and 63 per cent, respectively), suggesting that few users logged in more than once.

Table 6 Number of calculator users by month

Month	Program users	Proportional use (%)
June	15/200	7.5
July	25/200	12.5
August	15/200	7.5
September	18/200	9.0
October	31/200	15.5
November	22/200	11.0
WHOLE PERIOD	94/200	47

Figure 19 Proportion of users who used the calculator vs users with access, by office



Notes: Horizontal line represents the mean proportion weighted by the number of users with access. The size of each point represents the number of days that each user had to log in, as a fraction 365 days, the estimated minimum dosage for the calculator to show full effect.

The Figure 19 scatterplot of the proportion of users who logged into the calculator at least once for use vs the number of users with access suggests that as the number of users with access increases, proportional use approaches a mean of 47 per cent (standard deviation = 17%, total number = 19). A likely explanation for this funnel shape is that as sample sizes increase, random variance decreases, and the mean converges on the true usage rate. Usage rates for each office are detailed in Table 7 below.

Table 7 Number of users who used the calculator by office

Office	Program users	Proportional use (%)	Exposure (%)
15	6/16	37.5	71
18	2/3	66.7	54
19	6/8	75.0	59
22	1/1	100	54
24	2/8	25.0	54
27	7/12	58.3	54
39	1/1	100	54
43	23/56	41.1	71
45	7/13	53.8	54
53	6/9	66.7	54
69	1/5	20.0	59
71	7/9	77.8	71
72	9/21	42.9	59
76	7/15	46.7	54
77	3/7	42.9	54
88	1/1	100	54
89	2/8	25.0	54
92	0/2	0	59
95	3/5	60.0	54

Note: Each office was randomly assigned a number.

Figure 20 Proportion of users who used the calculator vs users with access, by EI region

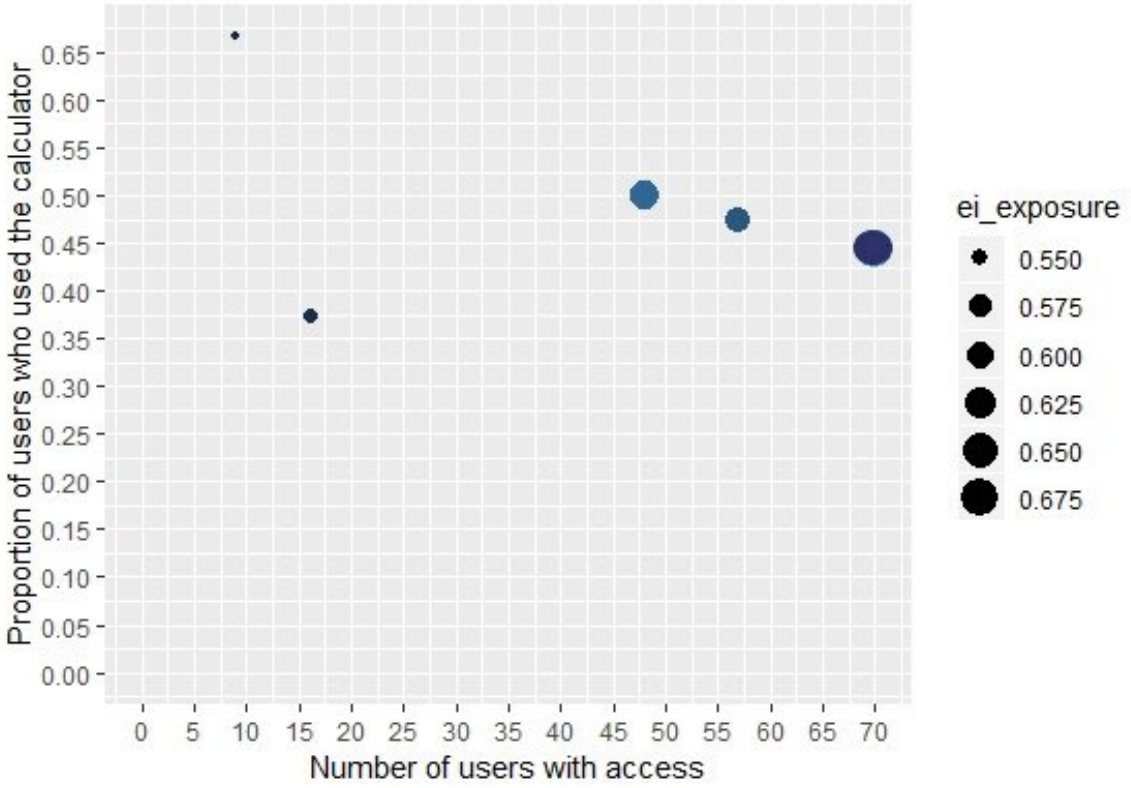


Figure 20 shows that, similar to individual offices, usage rate by EI region approaches the 40-50 per cent range as the number of users with access increases. The table below provides exact usage by EI region.

Table 8 Number of users who used the calculator by EI region

EI region	Program users	Proportional use (%)
Northern BC	6/16	37.5
Southern Coastal BC	27/57	47.4
Southern Interior BC	31/70	44.4
Vancouver	24/48	50.0
Victoria	6/9	66.7

Participant additional activities

A total of 15 participants entered information about their current jobs. Of these, 13 users entered one current job, three of whom updated that job and one archived the job. Two users included two current jobs, and neither updated nor archived it.

Seven participants created a plan on the website for either a current job (2) or a future job (5), but no plan included both. Three of the plans, all future jobs, were missing job start, wage, hours, and start date. The remaining four plans were complete. No participants updated plans after creating them. Two participants entered their current job into the benefits calculator as well as the plan builder.

Case manager activity

It was not possible to collect login and activity information on case managers from the calculator. In lieu, the research team reached out to case managers requesting feedback. Case managers were not able to provide feedback on their use of the tool.

Feedback

There was real-time monitoring of program take up and user experience, via indicators on the web site administrative dashboard, regular communications with the case managers delivering the program and supporting data collection, client email and telephone enquiries.

Clients

Four users provided feedback via page comments. One ‘advocate’ was completing the information for their son and said that their son could not have completed the information on their own. A second said that the website was very easy to navigate. A third felt frustrated that they had to enter their tax return information before calculating benefits. The character limit for comments was 200, and two comments were cut off.

Three users provided feedback that certain pages were helpful: the BC Health Supplements page in Resources, the Calculated Benefits page in Benefits Calculator, and the Useful Links page in Resources.

Case managers

It was not possible to collect page likes and comments from the calculator that case managers provided. In lieu, the research team reached out to case managers requesting feedback. Unfortunately, case managers were not able to provide feedback.

EXPERIENCE USING CALCULATOR BC

Several questions in the follow-up survey asked program group participants about their experiences with and usage of the Calculator. Because these questions could be asked only of program group members, they are not analyzed as impacts (which appear in the next section). Table 9 below presents the participants' responses, with a number of interesting insights emerging. Note, however, that only 113 program group participants responded to the follow-up survey. When interpreting these results, it is important to remember that it is likely those who chose to complete the follow-up survey were also more likely to be users of the Calculator.

While over half the program group participants indicated the Calculator website was extremely easy or very easy to use, the majority of respondents indicated that the information provided on the site was only "somewhat" easy to understand. Poor ratings of the Calculator were generally very low (under 5 per cent). In fact, over 45 per cent of respondents indicated the Calculator website was "extremely" or "very" useful to them.

The survey asked respondents to rate their agreement or disagreement with several statements, including whether they applied for any new benefits because of information they learned using Calculator BC. In general, the results were mixed: while just under a fifth "agreed" or "strongly agreed," nearly half indicated they "disagreed" or "strongly agreed." Similarly, only about 10 per cent of respondents indicated that they "agreed" or "strongly agreed" that they received more income from benefits because of using Calculator BC.

However, program group members expressed considerable confidence in making employment decisions and a good understanding of how disability assistance works, as indicated in positive agreement ratings by the respondents. Finally, follow-up survey respondent said they were highly likely to recommend the Calculator BC website to a friend or colleague, with well over half giving a rating of 7 or higher.

Table 9 Experiences and usage of Calculator BC

	Program group	n (program)
Calculator BC Usage		
How easy is it to use the Calculator website?		
Average Score (1-5 – from "extremely easy" to "not at all easy")	2.4	93
By Category (%)		
1. Extremely easy	21.5	93
2. Very easy	31.2	93
3. Somewhat easy	38.7	93
4. Not so easy	3.2	93
5. Not at all easy	5.4	93
How easy is it to understand the information on the website?		
Average Score (1-5 – from "extremely easy" to "not at all easy")	2.6	95
By Category (%)		
1. Extremely easy	14.7	95
2. Very easy	26.3	95
3. Somewhat easy	49.5	95
4. Not so easy	7.4	95
5. Not at all easy,	2.1	95
Overall, how useful is the information on the Calculator website to you?		
Average Score (1-5 – from "extremely useful" to "not at all useful")	2.5	90
By Category (%)		
1. Extremely useful	15.6	90
2. Very useful	30.0	90
3. Somewhat useful	46.7	90
4. Not so useful	5.6	90
5. Not at all useful	2.2	90

	Program group	n (program)
How much do you trust the information on the website?		
Average Score (1-5 – from "completely trust" to "completely distrust")	4.0	90
By Category (%)		
1. Completely trust	3.3	90
2. Somewhat trust	2.2	90
3. Neither trust nor distrust	22.2	90
4. Somewhat distrust	38.9	90
5. Completely distrust	33.3	90
I applied for new benefits because of information I learned using Calculator BC		
Average Score (1-5 – from "strongly agree" to "strongly disagree")	3.3	87
By Category (%)		
1. Strongly agree	4.6	87
2. Agree	13.8	87
3. Neither agree not disagree	34.5	87
4. Disagree	36.8	87
5. Strongly disagree	10.3	87
I received more income from benefits because of using Calculator BC		
Average Score (1-5 – from "strongly agree" to "strongly disagree")	3.6	90
By Category (%)		
1. Strongly agree	3.3	90
2. Agree	6.7	90
3. Neither agree not disagree	28.9	90
4. Disagree	45.6	90
5. Strongly disagree	15.6	90
I am more confident in making employment decisions because of information I learned using Calculator BC		
Average Score (1-5 – from "strongly agree" to "strongly disagree")	3.1	92
By Category (%)		
1. Strongly agree	8.7	92
2. Agree	18.5	92
3. Neither agree not disagree	34.8	92
4. Disagree	29.3	92
5. Strongly disagree	8.7	92

	Program group	n (program)
I have a better understanding of how disability assistance works because of using Calculator BC		
Average Score (1-5 – from "strongly agree" to "strongly disagree")	2.9	96
By Category (%)		
1. Strongly agree	9.4	96
2. Agree	30.2	96
3. Neither agree not disagree	29.2	96
4. Disagree	22.9	96
5. Strongly disagree	8.3	96
How likely is it that you would recommend the website to a friend or colleague?		
Average Score (0-10 – from "totally unlikely" to "totally likely")	6.8	93
By Category (%)		
0 to 2	7.5	93
3 to 4	2.2	93
5 to 6	32.3	93
7 to 8	26.9	93
9 to 10	31.2	93

Note: There were 113 program group members in the analysis file.

SUMMARY OF UTILIZATION AND PARTICIPANTS' REPORTED EXPERIENCE

In general, the levels of website usage were disappointing. While half of all program group members used the website, ongoing usage was rare, and few took advantage of the more complex employment scenario features of the site. Compromises in the website design to meet the allocated development budget minimized features that could have increased the utility of the tool to case managers, which in turn may have prevented them from supporting their clients in using the tool to its fullest extent. Also, several "nice to have" features to make the site more visually appealing and customizable, such as "layering" information had to be dropped. No attempt was made to customize questions asked and features offered for different types of users – depending on either their financial competencies or their knowledge needs.

In general, program group members who responded to the follow-up survey reflected positively on its utility, although nearly half found the information it contained only 'somewhat easy' to use. Importantly, these relatively positive ratings may be due to the follow up survey being

completed by more digitally engaged participants. Of course, it is rare for any website to be accessed by all those who could benefit from using it, and impacts may still result from the intervention due to the exposure that half of the program group had to potentially new and useful information about benefit eligibilities and descriptions of various benefits and how they interact with employment. These impacts are reported in the following sections.

RESULTS: IMPACT STUDY

Impact analysis estimates the extent to which the intervention was effective in improving key client outcomes relative to the control group and thus whether the approach holds the prospect of contributing to the achievement of policy objectives with respect to disability assistance recipients. The following outcomes were studied:

- Reduced financial anxiety
- Increased financial security
- Reduced unemployment
- Reduced overpayments
- Increase in the proportion in receipt of earnings
- Increased income and in particular, earnings
- Enhanced job search
- Enhanced use of employment services
- Improved employment outcomes
- Increased life satisfaction
- Self-Efficacy
- Self-Esteem.

IMPACTS ON PARTICIPANT OUTCOMES (ADMINISTRATIVE RECORDS)

Each participant's survey data was linked to their Ministry of Social Development and Poverty Reduction linked assistance and employment services data, recording declared earnings, assistance amounts and other supports, receipt of training and employment-related payments, among other outcomes. These data provide a reliable source of information for measuring participant outcomes.

The Ministry provided information on participants' monthly program benefits and monthly earnings from January 2018 to December 2020. In total, 374 participants were linked to their benefits and earnings records: 182 from the program group and 192 from the control group. In addition, the Ministry also shared data on the monthly usage of employment services from May 2018 to September 2022. More specifically, the data contains 20 employment services offered at different points in time during the project, 15 of which were used at some point by the participants.[3]

- Job Sustainment
- Job Search
- Work Experience
- Client Needs Assessment
- Self-Serve Services
- External Referrals
- Skills Enhancement – ESS Workshops
- Skills Enhancement – STOC
- Self-Employment
- Specialized Assessments
- Job Development Client
- Skills Enhancement – Training Services
- Employment Support Services Client
- Assistive Technology

Overall, 213 participants were linked to employment service records: 108 program group participants and 105 control group participants (corresponding to at least one service use over the observed period). The remaining of the 172 participants were assumed not to have used any services.

Impact on program payments and earnings

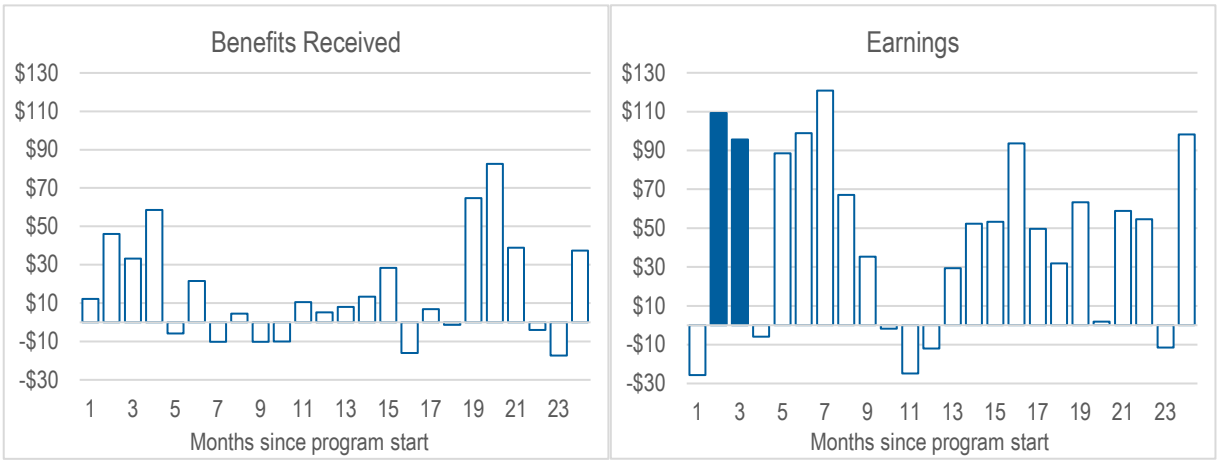
Figure 21 presents the differential in benefits received and earnings of the program group relative to the control group on a monthly basis. The months are relative to the recruitment wave date[4] and the shaded bars correspond to differences that are statistically significant at the 10 per cent level or less. Program group participants received, on average, more benefits than

[3] The 6 employment services that had no take-up are Occupational Skills Training Client, Short Term Orientation and Certificate Training Client, Self-Employment Orientation Client, Customized Employment Client, Unpaid Work Experience Client.

[4] Month 1 corresponds to June 2018 for wave 1 participants, July 2018 for wave 2 participants, and August 2018 for wave 3 participants.

their control group counterparts in 16 of the 24 months observed; however, none of the differences are large (ranging between $4 and $83) and they are not statistically significant. The two-year cumulative difference between the program and control group benefits amounts to $397, in favour of program participants but is also not statistically significant (see Table 10).

Figure 21 Impact on monthly program payments and earnings (all waves)



On the other hand, program group participants reported, on average, higher earnings than those from the control group in 17 of the 24 months and the differences are significant in two of those instances. Two months after recruitment, program group participants earned $109 more than their control group counterparts and $96 more the following month. Over 24 months, these differences amount to a cumulative impact of $1,121, although difference is not statistically significant.

Table 10 Impact on cumulative and monthly program payments and earnings

	Average program payments				Average earnings			
	Program group	Control group	Impact	SE	Program group	Control group	Impact	SE
Average cumulative program payments and earnings								
w/in 6 months	6961	6,795	166	222.18	1,539	1,178	361	265.7
w/in 12 months	13,764	13,608	156	430.09	3,224	2,678	545	544.8
w/in 18 months	20,557	20,362	195	659.64	4,885	4,030	855	780.3
w/in 24 months	27,978	27,581	397	910.82	6,328	5,207	1,121	995.2

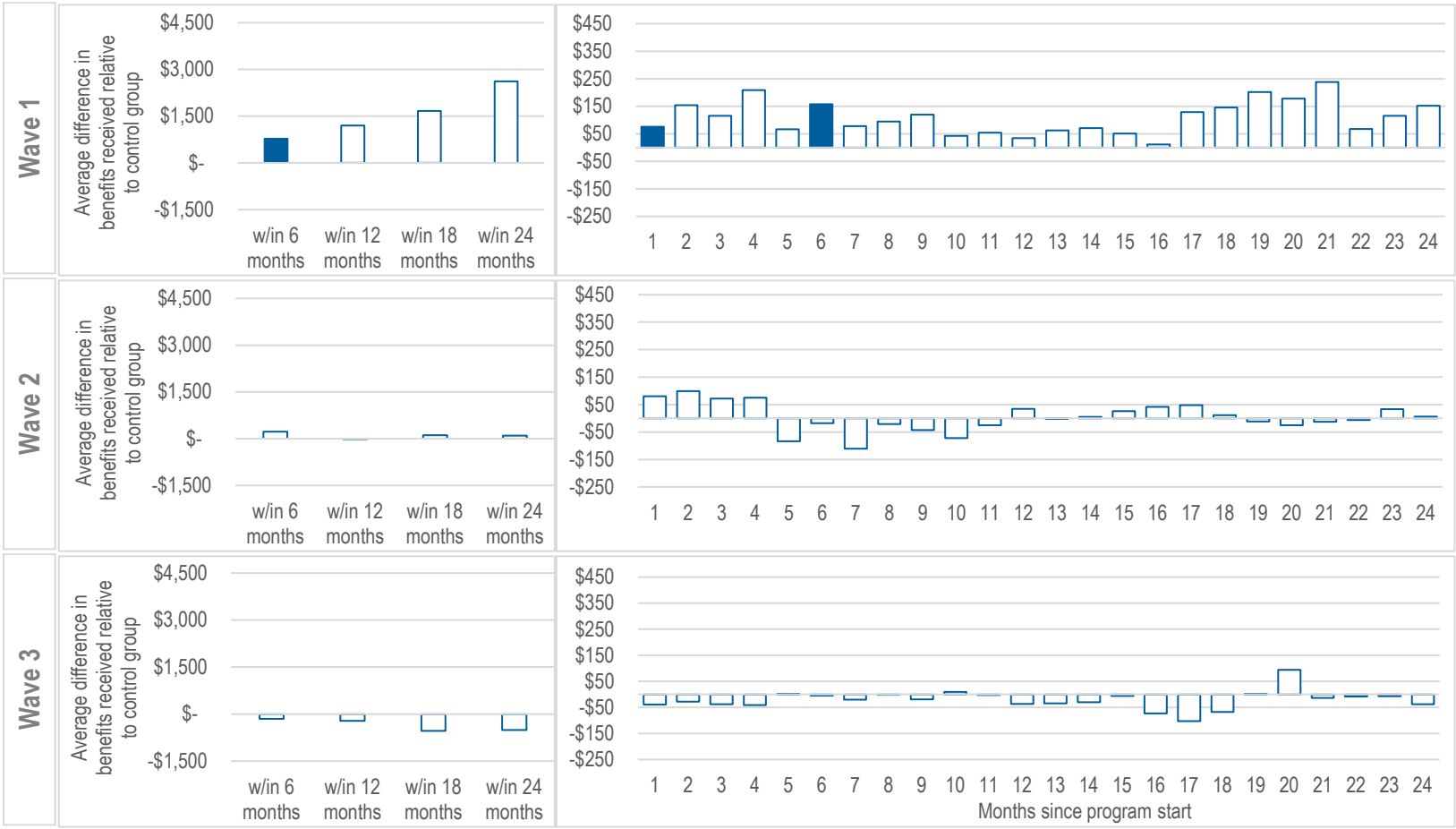
	Average program payments				Average earnings			
	Program group	Control group	Impact	SE	Program group	Control group	Impact	SE
Average program payments and earnings in relative month since program start								
Month 1	1,159	1,147	12	38.92	163	189	-26	48.6
Month 2	1,170	1,124	46	40.18	262	153	109 *	56.4
Month 3	1,160	1,126	33	38.97	282	186	96 *	57.6
Month 4	1,184	1,126	59	54.70	200	206	-6	50.8
Month 5	1,138	1,144	-6	42.94	299	210	89	59.7
Month 6	1,150	1,128	21	42.18	333	234	99	89.6
Month 7	1,100	1,110	-10	42.33	339	219	121	92.2
Month 8	1,108	1,104	4	41.79	298	231	67	81.9
Month 9	1,121	1,131	-10	42.84	269	233	35	54.8
Month 10	1,152	1,162	-10	42.27	286	288	-2	67.5
Month 11	1,172	1,161	11	44.76	233	258	-25	58.5
Month 12	1,149	1,144	5	42.17	259	271	-12	63.6
Month 13	1,148	1,140	8	45.03	288	259	29	60.1
Month 14	1,146	1,133	13	49.27	258	205	52	56.7
Month 15	1,162	1,133	28	47.12	271	218	53	55.4
Month 16	1,116	1,132	-16	46.85	295	202	94	61.3
Month 17	1,123	1,116	7	51.51	280	230	50	56.0
Month 18	1,097	1,098	-1	53.71	269	237	32	63.9
Month 19	1,113	1,048	65	53.77	249	185	63	54.4
Month 20	1,151	1,068	83	56.00	214	213	2	56.1
Month 21	1,119	1,080	39	50.81	284	225	59	58.6
Month 22	1,282	1,286	-4	54.66	232	177	55	54.4
Month 23	1,334	1,351	-17	57.39	203	215	-11	61.4
Month 24	1,424	1,387	37	57.33	261	162	98	66.6

Notes: There were 182 program group and 192 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%.

While controlling for other participant characteristics does not significantly affect the results, running the analysis by recruitment wave does. Wave 1 program group participants were the only ones to record statistically significant impacts at any point during the observed period (positive impacts of $75 and $157 in the first and sixth months) (see figure 22). The cumulative impact over the first six months is $777 and is statistically significant. While the magnitude of the impact continues to increase over time, it is not statistically significant later. Interestingly, Wave 1 participants are the only ones to also record statistically significant lower earnings than control group participants, albeit in the first and fourth months ($187 and $227 less, respectively) (see figure 23).

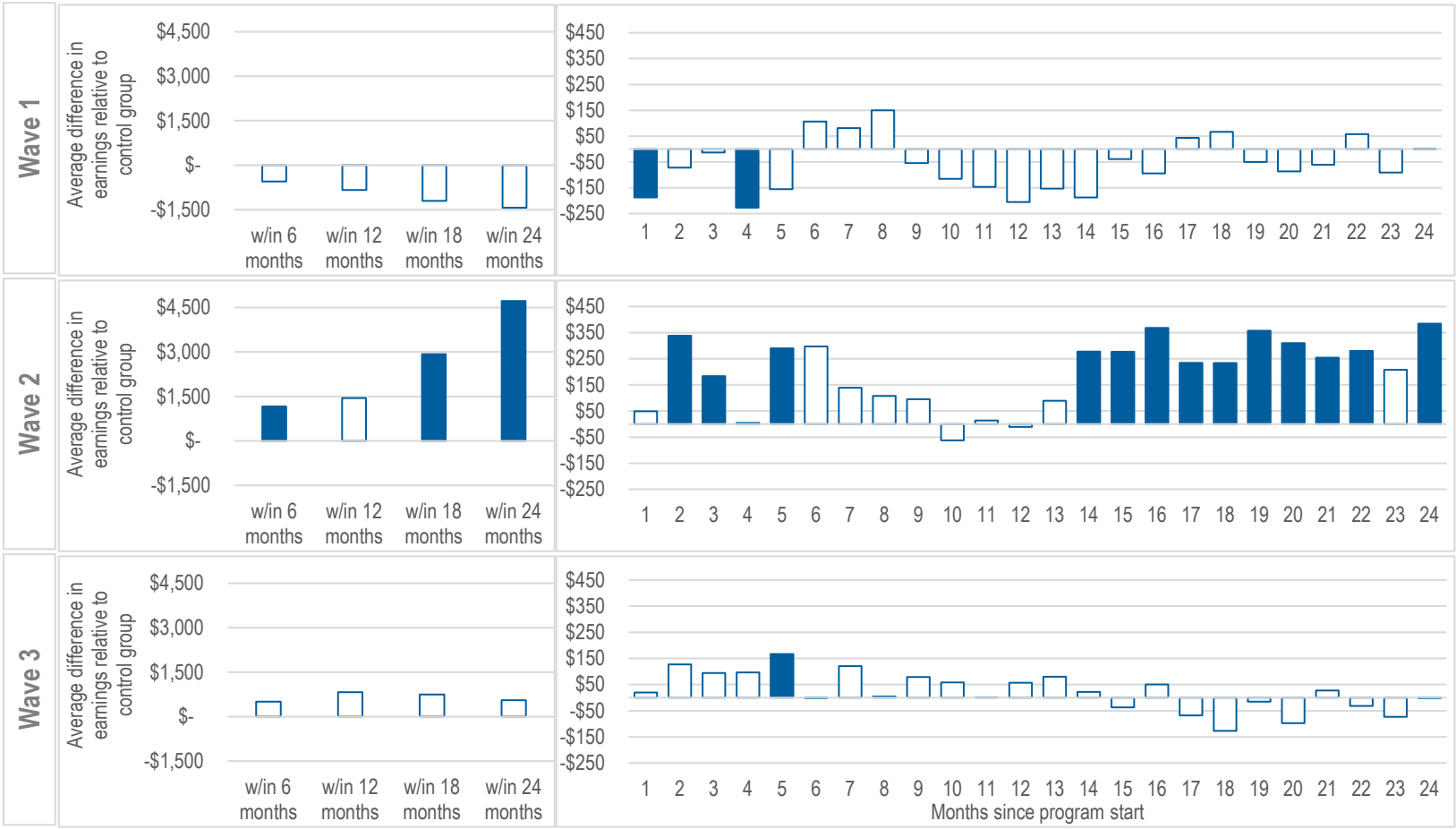
Wave 2 participants from the treatment group recorded higher monthly earnings than control group participants in 22 of the 24 months observed and over half of these differences are statistically significant (see figure 23). Over two years, these higher earnings yielded, on average, $4,700 in added income to program group participants without affecting their program benefits which are not statistically different from those of control group participants.

Figure 22 Impact on benefits received by wave, six-month cumulative benefits (left) and monthly benefits (right)



Notes: In the analysis file, there were 71 program group and 38 control group members in wave 1 (month 1 = June 2018), 31 program group and 56 control group members in wave 2 (month 1 = July 2018), and 80 program group and 98 control group members in wave 3 (month 1 = August 2018). Impacts between program and control groups are tested with Student t-tests. Shaded bars indicate significance at < 10%.

Figure 23 Impact on earnings by wave, six-month cumulative earnings (left) and monthly earnings (right)



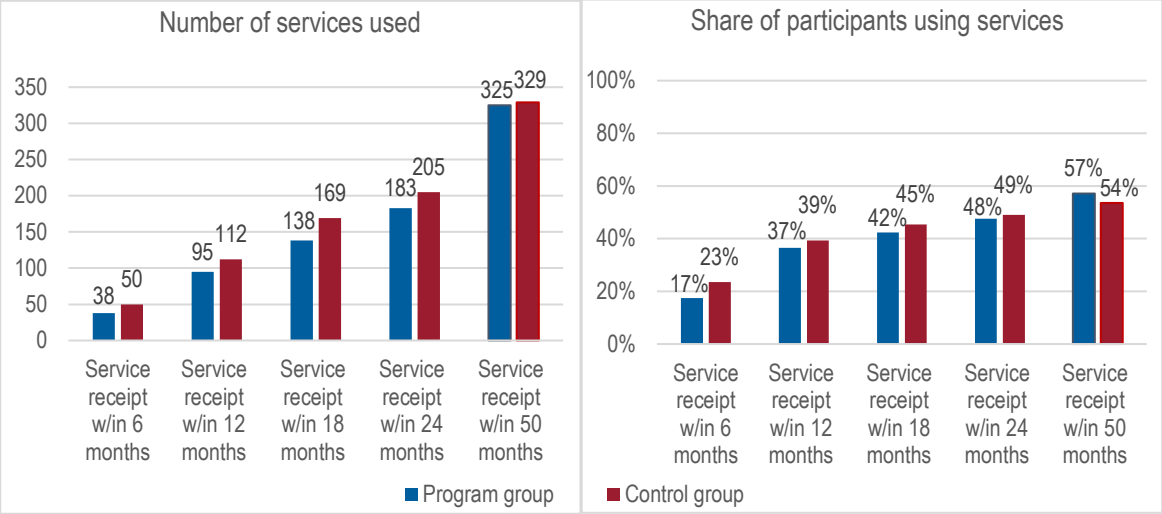
Notes: In the analysis file, there were 71 program group and 38 control group members in wave 1 (month 1 = June 2018), 31 program group and 56 control group members in wave 2 (month 1 = July 2018), and 80 program group and 98 control group members in wave 3 (month 1 = August 2018). Impacts between program and control groups are tested with Student t-tests. Shaded bars indicate significance at < 10%.

Impact on employment service use

According to Ministry data, over the 24-month period observed, participants from the program group used employment services 183 times (at times using the same service multiple times) while participants from the control group used them 205 times (see figure 24). Half of participants from each group (49 per cent of the program group and 50 per cent of the control group) used at least one employment service within 24 months of recruitment.[5]

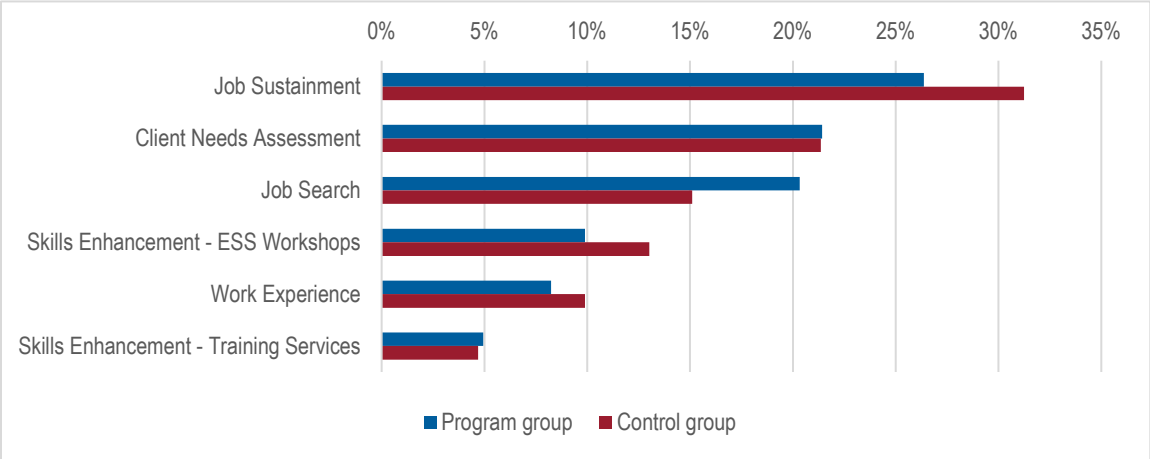
Figure 25 breaks down the employment service usage over the same period by service and assignment group. For instance, within two years, approximately 25 per cent of program group participants used job sustainment services at least once, while 30 per cent of control group participants did. The most common services were, in order, job sustainment, client needs assessment, job search, skills enhancement employment support services workshops, and work experience.

Figure 24 Employment service take up, counts and number of participants



[5] Employment service use data covers a longer period than the benefits and earnings file. Therefore, the analysis also captures results up to 50 months following each recruitment wave. Employment services continued to be used following the initial two-year window and almost doubled by the 50-month mark (325 and 329 services used by the program and control group participants, respectively). At that point, the share of program participants using services surpassed that of the control group participants (57 vs 54 per cent).

Figure 25 Proportion of participants using employment services within 24 months of recruitment by service and assignment group



As per table 11, none of the cumulative differences observed in service take up within 6, 12, 18, 24, or 50 months across the two assignment groups are statistically significant. That said, certain differences are significant during certain time intervals. Indeed, the program had 4.4 percentage point impact on the use *job search* services within 12 months and a 7.7 percentage point impact after 50 months, but they also recorded negative impacts on the use of *job sustainment* services within 6 months (-6.8 percentage points), and the use of *specialized assessments* within 18 months (-2.0 percentage points).

Figure 26 Statistically significant impacts on employment service and period

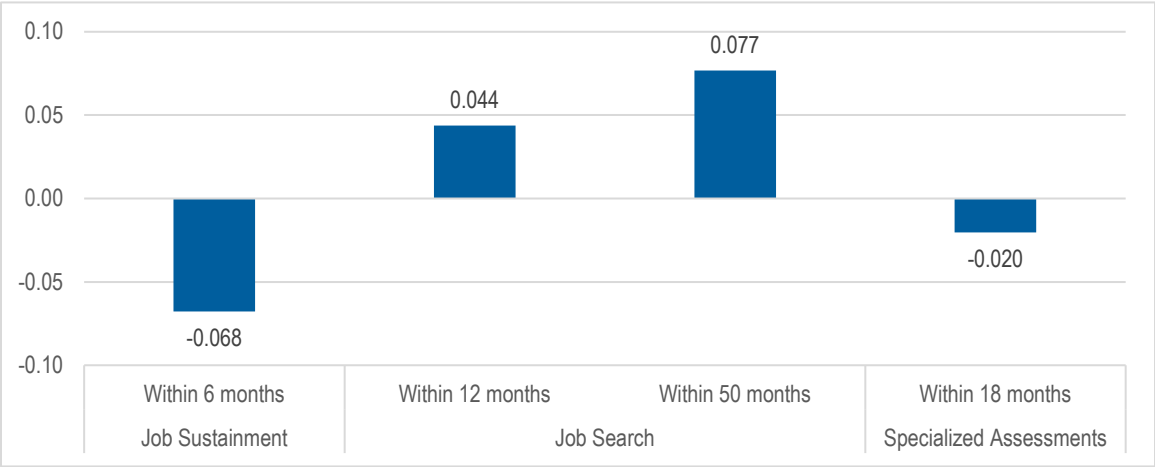


Table 11 Impact on the proportion of participants using employment services

	Program group	Control group	Impact		SE
Any service					
Service receipt w/in 6 months	0.175	0.235	-0.060		0.0411634
Service receipt w/in 12 months	0.365	0.393	-0.028		0.0495723
Service receipt w/in 18 months	0.423	0.454	-0.031		0.0506994
Service receipt w/in 24 months	0.476	0.490	-0.014		0.0510722
Service receipt w/in 50 months	0.571	0.536	0.036		0.0507827
Within 6 months					
Job Sustainment	0.106	0.173	-0.068	*	0.035
Within 12 months					
Job Sustainment	0.196	0.250	-0.054		0.042
Job Search	0.085	0.041	0.044	*	0.025
Work Experience	0.037	0.041	-0.004		0.020
Client Needs Assessment	0.090	0.097	-0.007		0.030
Skills Enhancement – Training Services	0.026	0.041	-0.014		0.018
Within 18 months					
Job Sustainment	0.212	0.281	-0.069		0.044
Job Search	0.127	0.112	0.015		0.033
Work Experience	0.048	0.046	0.002		0.022
Client Needs Assessment	0.159	0.163	-0.005		0.038
Skills Enhancement – ESS Workshops	0.042	0.082	-0.039		0.025
Specialized Assessments	0.000	0.020	-0.020	**	0.010
Skills Enhancement – Training Services	0.042	0.046	-0.004		0.021

	Program group	Control group	Impact		SE
Within 24 months					
Job Sustainment	0.243	0.296	-0.053		0.045
Job Search	0.185	0.148	0.037		0.038
Work Experience	0.063	0.061	0.002		0.025
Client Needs Assessment	0.206	0.204	0.002		0.041
Skills Enhancement – ESS Workshops	0.085	0.128	-0.043		0.031
Skills Enhancement – Training Services	0.048	0.046	0.002		0.022
Within 50 months					
Job Sustainment	0.317	0.347	-0.029		0.048
Job Search	0.291	0.214	0.077	*	0.044
Work Experience	0.095	0.107	-0.012		0.031
Client Needs Assessment	0.312	0.270	0.042		0.046
Self-Serve Services	0.058	0.031	0.028		0.021
External Referrals	0.053	0.056	-0.003		0.023
Skills Enhancement – ESS Workshops	0.153	0.204	-0.051		0.039
Skills Enhancement – STOC	0.042	0.056	-0.014		0.022
Skills Enhancement – Training Services	0.053	0.056	-0.003		0.023

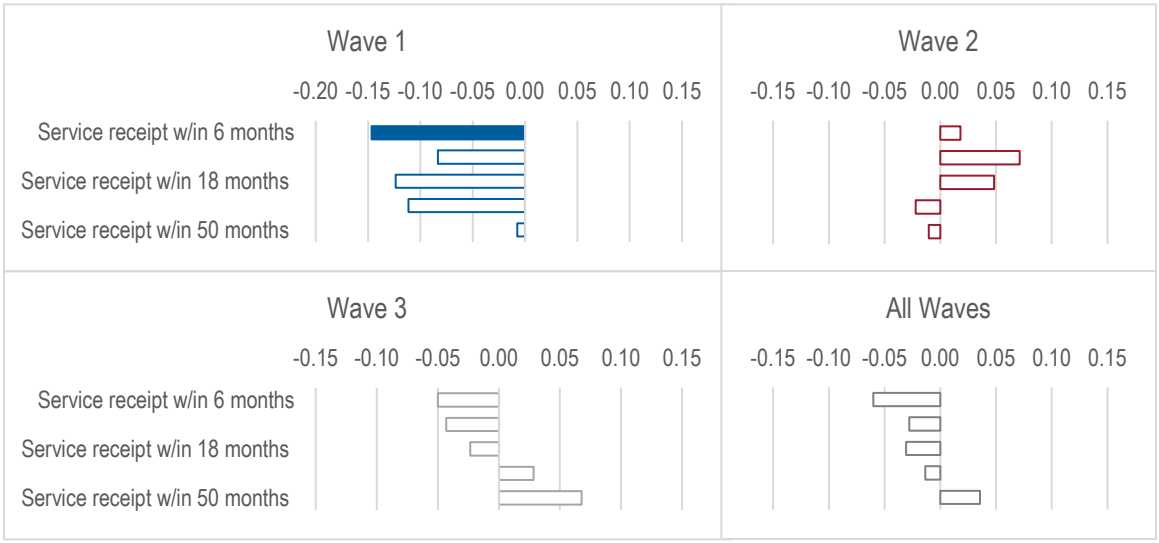
Notes: Breakdown by employment service use with at least 5 contributing participants. There were 189 program group and 196 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%.

Turning to wave-specific results, wave 1 program participants recorded a statistically significant drop in their use of employment services within the first six months of recruitment of 13.5 percentage points. This result is driven by the higher use of *job sustainment* and *skills enhancement – training services* by the control group during that period.

Patterns of use of individual employment services by wave largely reflect the overall results but reveal that results tend to be driven by a single wave as opposed to generalized across waves, e.g., the negative impact on *job sustainment* services is driven by wave 3, the positive impact on *job search* services is also driven by wave 3, and the negative impact on *specialized assessment* is

driven by wave 1. The wave analysis also reveals a positive impact on self-serve services for wave 2 and 3 participants. This difference across participant waves could reflect the preferences of contractors for, or availability of, specific employment services.

Figure 27 Proportion of participants using employment services by wave



Notes: In the analysis file, there were 77 program group and 38 control group members in wave 1, 31 program group and 57 control group members in wave 2, and 81 program group and 101 control group members in wave 3. Impacts between program and control groups are tested with Student t-tests. Bars that are filled in indicate significance at < 10%.

IMPACTS ON PARTICIPANT OUTCOMES (SURVEY DATA)

Financial impacts

The results from analyses of survey data presented in Table 12 below indicate no statistically significant impact on expected financial outcomes. A couple of significant differences were found, but in the opposite direction than expected – control group participants reported higher ratings of satisfaction with their present financial situation compared to the program group. Control group participants were also more likely to rate themselves as "very good" in keeping track of money although this significant difference was present at baseline as well. Likely, it reflects differences between the two groups prior to exposure to the intervention, which the intervention did not change. Finally, control group participants were also more likely to state they are "good at making ends meet" (24 per cent compared to 13 per cent for program group).

Although no other statistically significant differences in financial impacts were obtained for program and control groups, there is some indication that annual net income for program group participants increased compared to controls. In fact, at baseline program participants reported annual net incomes of $13,827 compared to $14,617 for controls. In the follow up survey, however, the reported annual incomes were $18,817 compared to $12,377 for controls. This difference was marginally statistically significant ($p < 0.10$).

Table 12 Financial impacts from survey data

	Program group	Control group	Impact		(S.E.)
Finances					
How difficult is it for you to live on your current income right now?					
Average Score (1-4 – level of difficulty)	3.3	3.3	0.0		(0.1)
By Category (%)					
Not at all difficult	2.7	5.1	-2.3		(2.5)
A little difficult	17.3	15.2	2.1		(4.7)
Somewhat difficult	29.1	27.5	1.6		(5.8)
Very Difficult	50.9	52.2	-1.3		(6.4)
What is level of financial stress do you feel today?					
Average Score (0 to 10 "0" means "no stress at all" and 10 means "overwhelming stress")	7.1	7.3	-0.2		(0.3)
By Category (%)					
0 to 2	2.7	7.6	-4.9	*	(2.9)
3 to 4	9.8	3.8	6.0	*	(3.2)
5 to 6	21.4	18.2	3.2		(5.1)
7 to 8	38.4	34.1	4.3		(6.2)
9 to 10	27.7	36.4	-8.7		(6.0)

	Program group	Control group	Impact		(S.E.)
How satisfied are you with your present financial situation?					
Average Score (0 to 10 "0" means "complete dissatisfaction" and 10 means "complete satisfaction")	3.5	3.9	-0.3		(0.4)
By Category (%)					
0 to 1	27.5	31.3	-3.8		(5.9)
2 to 3	23.9	17.9	5.9		(5.2)
4 to 5	24.8	21.6	3.1		(5.5)
6 to 7	16.5	13.4	3.1		(4.6)
8 to 10	7.3	15.7	-8.3	**	(4.2)
How often do you worry about being able to meet normal monthly living expenses?					
Average Score (0 to 10 "0" means "never worry" and 10 means "worry all the time")	7.3	7.5	-0.2		(0.4)
By Category (%)					
0 to 2	6.3	9.0	-2.6		(3.4)
3 to 4	9.0	5.2	3.8		(3.3)
5 to 6	16.2	14.2	2.0		(4.6)
7 to 8	25.2	23.1	2.1		(5.5)
9 to 10	43.2	48.5	-5.3		(6.4)
How would you rate your level of financial knowledge?					
Average Score (1 to 4 – level of ignorance)	2.6	2.8	-0.1		(0.1)
By Category (%)					
Very knowledgeable	16.2	10.3	5.9		(4.3)
Knowledgeable	25.2	28.7	-3.5		(5.7)
Fairly knowledgeable	36.9	36.8	0.2		(6.2)
Not very knowledgeable	21.6	24.3	-2.6		(5.4)

	Program group	Control group	Impact		(S.E.)
How would you rate yourself on keeping track of money?					
Average Score (1 to 4 – level of inability)	2.4	2.6	-0.2		(0.1)
By Category (%)					
Very good	28.4	16.8	11.7	**	(5.3)
Good	22.0	28.5	-6.4		(5.6)
Fairly Good	31.2	35.0	-3.8		(6.1)
Not Very Good	18.3	19.7	-1.4		(5.1)
How would you rate yourself on making ends meet?					
Average Score (1 to 4 – level of inability)	2.7	2.7	0.0		(0.1)
By Category (%)					
Very good	21.3	14.9	6.4		(4.9)
Good	13.0	23.9	-10.9	**	(5.0)
Fairly Good	38.9	41.0	-2.2		(6.4)
Not Very Good	26.9	20.1	6.7		(5.5)
How would you rate yourself on shopping around to get the best financial products, such as loans or insurance rates?					
Average Score (1 to 4 – level of inability)	2.6	2.8	-0.2		(0.2)
By Category (%)					
Very good	24.4	20.5	3.9		(5.9)
Good	22.2	17.9	4.4		(5.7)
Fairly Good	21.1	23.2	-2.1		(5.9)
Not Very Good	32.2	38.4	-6.2		(6.8)

	Program group	Control group	Impact		(S.E.)
How would you rate yourself on staying informed on financial issues?					
Average Score (1 to 4 – level of inability)	2.9	2.9	0.0		(0.1)
By Category (%)					
Very good	10.7	10.3	0.4		(4.1)
Good	23.3	21.4	1.9		(5.5)
Fairly Good	30.1	31.7	-1.6		(6.2)
Not Very Good	35.9	36.5	-0.6		(6.4)
Average Income in the most recent tax year (unit:$ unless stated)					
Per cent earned income from employment (%)	45.8	40.0	5.8		(6.5)
Employment income from employment ($ among those who were employed)	5,358.6	6,486.3	-1,127.7		(1887.8)
Annual earned income from employment (All)	1,461.4	1,522.9	-61.4		(598.5)
Annual net income of user entered in line 236 of tax return (All)	18,817.3	12,377.6	6,439.7	*	(3795.9)
Annual earned income from employment (spouse)	1,079.3	586.4	492.9		(720.0)
Annual net income of spouse entered in line 236 of tax return	346.4	410.9	-64.5		(399.9)
Net income of dependent child or children	0.0	123.5	-123.5		(128.1)

	Program group	Control group	Impact		(S.E.)
Registered Disability Savings Plan					
Have a RDSP (%)	14.3	22.8	-8.5	*	(5.2)
Average RDSP payments received ($, among those with RDSP)	460.0	300.0	160.0		(411.6)
Average RDSP payments received ($, All)	42.6	25.2	17.4		(37.6)
Average RDSP re-payments paid ($, among those with RDSP)	1,500.0	0.0	1,500.0		(745.4)
Average RDSP re-payments paid ($, All)	39.8	0.0	39.8	*	(23.5)

Notes: There were 113 program group and 138 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%. S.E. = Standard Error – an indicator of the variability of the impact estimate.

Benefits received and benefit applications

The results from the analyses of survey data presented in Table 13 below indicate a couple of statistically significant impacts on the receipt of benefits. Compared to control group participants, program group participants were more likely to report receiving the Low Income Climate Action Tax Credit (impact of 13.7 percentage points), and the BC Fuel Tax Refund for Persons with Disabilities (impact of 7.3 percentage points). The average amount of the Low Income Climate Action Tax Credit Received by the program group was also higher for program group participants than for controls. The differences in receipt of all other benefits were not statistically significant. It is important to note that these results likely reflect the low overall rates of receipt of various benefits among the study participants, with counts of less than 5 for most of the benefit categories.

Control and program group participants were also asked about applications to various benefit programs in the time after the introduction of the intervention. These results are presented in Table 14 below and generally show no impacts, with one exception: the results suggest that the Calculator may have encouraged program group participants to apply for the BC Fuel Tax Refund for Persons with Disabilities (impact of 7.3 percentage points). This finding is supported by the results on receipt of this benefit mentioned above.

Overall, however, the number of participants who applied to new benefits during the course of the study were very low, as seen in low counts (under 5) for the majority of the benefit categories. In other words, the lack of statistically significant findings reflects the low cell sizes in the impact analyses, precluding us from making more definitive conclusions about the impact of the Calculator intervention on study participants.

Table 13 Impacts on benefits

	Program group	Control group	Impact		(S.E.)
Disability Related Benefits					
Receipt of various benefits (%)					
CPP Disability Benefit	12.4	21.6	-9.2	*	(5.5)
CPP Early Retirement	2.2	3.8	-1.6		(2.5)
CPP Survivor's Pension	3.3	1.8	1.4		(2.2)
Disability Tax Credit (DTC)	34.2	33.6	0.6		(7.1)
Working Income Tax Benefit	3.2	0.0	3.2		(2.0)
Working Income Tax Benefit Supplement	0.0	0.0	0.0		
Employment Insurance Regular Benefits	1.0	0.9	0.1		(1.4)
Employment Insurance Sickness Benefits	2.1	0.0	2.1		(1.4)
BC Fuel Tax Refund for Persons with Disabilities	4.8	4.0	0.8		(3.0)
Federal Excise Gasoline Tax Refund	1.1	0.0	1.1		(1.0)
Disability Supports Deduction	3.8	0.0	3.8	*	(2.0)
Medical Expenses Tax Credit	3.7	4.3	-0.6		(3.0)
Refundable Medical Expenses Supplement	0.0	0.0	0.0		
WorkSafeBC Permanent Disability Award	0.0	0.0	0.0		
WorkSafeBC Compensation Wage-Loss Benefits	0.0	0.0	0.0		
Community Volunteer Supplement	5.4	5.3	0.1		(2.9)
Guide Dog & Service Dog Supplement	0.0	1.5	-1.5		(1.1)
Amount you received in Low Income Climate Action Tax Credit	16.4	2.7	13.7	***	(4.9)
Spouse in receipt of the LICATC	14.3	9.1	5.2		(16.1)
GST/ HST Tax Credit	77.6	74.1	3.4		(8.4)

	Program group	Control group	Impact		(S.E.)
Average amount of benefits ($)					
CPP Disability Benefit	125.1	177.9	-52.8		(51.5)
CPP Early Retirement	2.0	19.3	-17.3		(10.7)
CPP Survivor's Pension	10.8	5.1	5.7		(7.5)
Working Income Tax Benefit	16.0	0.0	16.0		(12.6)
Working Income Tax Benefit Supplement	0.0	0.0	0.0		
Employment Insurance Regular Benefits	3.5	6.1	-2.6		(7.3)
Employment Insurance Sickness Benefits	2.2	0.0	2.2		(1.9)
BC Fuel Tax Refund for Persons with Disabilities	8.2	8.1	0.1		(7.6)
Federal Excise Gasoline Tax Refund	0.5	0.0	0.5		(0.5)
Disability Supports Deduction	184.2	0.0	184.2		(152.7)
Medical Expenses Tax Credit	27.5	11.5	16.0		(21.6)
Refundable Medical Expenses Supplement	0.0	0.0	0.0		
WorkSafeBC Permanent Disability Award	0.0	0.0	0.0		
WorkSafeBC Compensation Wage-Loss Benefits	0.0	0.0	0.0		
Low Income Climate Action Tax Credit	21.6	4.2	17.4	**	(7.7)
GST/ HST Tax Credit	317.1	235.2	81.9		(54.0)
Child Benefits					
Receipt of various benefits (%)					
School Start-up Supplement	9.0	3.7	5.3	*	(3.1)
Child Disability Benefit	1.0	0.8	0.2		(1.2)
Canada Child Benefit	11.3	5.9	5.4		(3.6)
BC Early Childhood Tax Benefit	0.0	0.0	0.0		
CPP Children's Benefit	0.0	0.0	0.0		

	Program group	Control group	Impact		(S.E.)
Average amount of benefits ($, among recipients)					
Child Disability Benefit	25.4	13.1	12.3		(29.7)
Canada Child Benefit	637.4	288.0	349.5		(310.4)
BC Early Childhood Tax Benefit	0.0	0.0	0.0		
CPP Children's Benefit	0.0	0.0	0.0		
Average amount of benefits ($, all)					
Child Disability Benefit	4.4	1.6	2.8		(4.3)
Canada Child Benefit	114.3	36.3	78.0		(51.0)
BC Early Childhood Tax Benefit	0.0	0.0	0.0		
CPP Children's Benefit	0.0	0.0	0.0		

Notes: There were 113 program group and 138 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%. S.E. = Standard Error – an indicator of the variability of the impact estimate.

Table 14 Impacts on benefit applications

	Program group	Control group	Impact		(S.E.)
Disability and Child Benefits					
Applications to various benefits (%)					
CPP Disability Benefit	8.2	5.7	2.4		(3.4)
CPP Early Retirement	1.0	1.6	-0.6		(1.6)
CPP Survivor's Pension	1.0	0.0	1.0		(0.9)
Disability Tax Credit (DTC)	8.2	2.5	5.7	*	(2.9)
Working Income Tax Benefit	2.0	1.6	0.4		(1.8)

	Program group	Control group	Impact		(S.E.)
Working Income Tax Benefit Supplement	2.0	1.6	0.4		(1.8)
Employment Insurance Regular Benefits	2.0	1.6	0.4		(1.8)
Employment Insurance Sickness Benefits	3.1	0.0	3.1	*	(1.6)
BC Fuel Tax Refund for Persons with Disabilities	8.2	0.8	7.3	***	(2.7)
Federal Excise Gasoline Tax Refund	2.0	0.0	2.0		(1.3)
Disability Supports Deduction	1.0	0.8	0.2		(1.3)
Medical Expenses Tax Credit	1.0	0.0	1.0		(0.9)
Refundable Medical Expenses Supplement	1.0	0.0	1.0		(0.9)
WorkSafeBC Permanent Disability Award	1.0	0.8	0.2		(1.3)
WorkSafeBC Compensation Wage-Loss Benefits	2.0	0.8	1.2		(1.6)
Community Volunteer Supplement	0.0	0.0	0.0		
Guide Dog & Service Dog Supplement	1.0	0.0	1.0		(0.9)
Amount you received in Low Income Climate Action Tax Credit	2.0	1.6	0.4		(1.8)
Spousal LICATC	0.0	0.0	0.0		
GST/ HST Tax Credit	4.1	5.7	-1.7		(3.0)
School Start-up Supplement	2.0	0.0	2.0		(1.3)
Child Disability Benefit	1.0	0.0	1.0		(0.9)
Canada Child Benefit	1.0	0.0	1.0		(0.9)
BC Early Childhood Tax Benefit	0.0	0.0	0.0		
CPP Children's Benefit	1.0	0.8	0.2		(1.3)
Others	1.0	1.6	-0.6		(1.6)

Notes: There were 113 program group and 138 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%. S.E. = Standard Error – an indicator of the variability of the impact estimate.

Employment and job search

The results from the analyses of survey data presented in the table below generally showed minimal statistically significant impacts on employment and job search. In one case, the difference observed was in the opposite direction than expected: program group participants were less likely than controls to have searched for work in the past 8 months. However, they were more likely to report having one job since the start of the calendar year, to have used a Resource Room at WorkBC, and to have sent out their resume 'on spec' to potential employers (a full 15 percentage point difference). It is possible that the Calculator encouraged the program group participants to use more of the resources available to them at WorkBC even though there is no evidence from survey data it had impacted their employment status during the period. More complete evidence will follow when analysis of administrative records can reveal impacts on reported employment and earnings.

Table 15 Impacts on employment and job search

	Program group	Control group	Impact		(S.E.)
Employment					
How many different jobs have your worked since the start of the calendar year?					
Average	0.9	1.0	-0.1		(0.1)
By Number (%)					
None	38.1	39.8	-1.8		(6.3)
1	40.7	28.6	12.1	**	(6.0)
2 or more	21.2	31.6	-10.3	*	(5.7)
Status					
Currently employed (%)	38.2	34.8	3.4		(6.2)
Not currently employed (%)	61.8	65.2	-3.4		(6.2)
Average weeks since last job (current job = 0)	412.4	423.8	-11.4		(59.3)

	Program group	Control group	Impact		(S.E.)
Last job end reason (%)					
Not at fault	40.8	34.8	6.0		(6.7)
At fault	16.3	23.5	-7.2		(5.5)
Not applicable	42.9	41.7	1.1		(6.8)
Average weekly earnings of last job ($)					
Job Search and Barriers					
Searching for suitable gainful employment (%)					
Yes	33.0	43.4	-10.4		(6.3)
No	29.4	19.4	10.0	*	(5.5)
Have searched for work in the past 8 months (%)					
Yes	57.7	72.1	-14.4	**	(6.1)
No	42.3	27.9	14.4	**	(6.1)
Have 1 or more barriers to employment (%)					
Yes	89.1	87.1	2.0		(4.4)
No	10.9	12.9	-2.0		(4.4)
List of barriers (%)					
Nothing discourages you from working or seeking work	20.8	17.7	3.1		(5.3)
You don't want to work if your expected income would be less than your current income	11.9	11.3	0.6		(4.3)
You thought you would lose additional supports such as your drug plan or housing	10.9	7.3	3.6		(3.8)
Lack of specialized transportation	13.9	8.1	5.8		(4.1)
Your family responsibilities prevent you from working	7.9	9.7	-1.8		(3.8)

	Program group	Control group	Impact	(S.E.)
Your past attempts to find work have been unsuccessful	40.6	35.5	5.1	(6.5)
Your family or friends discourage you from working	4.0	2.4	1.5	(2.3)
You have experienced discrimination in the past	33.7	27.4	6.2	(6.2)
You feel your training or experience is not adequate for the current job market	39.6	37.1	2.5	(6.5)
There are few jobs available in your local area	22.8	17.7	5.0	(5.4)
You experienced accessibility issues when applying for work	18.8	12.1	6.7	(4.8)
Other reason	41.6	40.3	1.3	(6.6)
Considered work in the future (%)				
Part-time work	33.0	31.4	1.6	(6.4)
Full-time work	12.8	13.2	-0.5	(4.6)
Not applicable	54.3	55.4	-1.1	(6.9)
Regarding the future job				
Expected average hours per week	23.1	23.4	-0.2	(2.1)
Expected lowest earnings per month	1,514.6	959.1	555.4	(390.3)
Expected highest earnings per month	10,427.9	13,733.4	-3,305.4	(8101.4)
Maximum amount of employment income before PWD Assistance and Supplements are reduced				
$0	1.9	2.5	-0.6	(2.0)
$200 in a month	1.9	0.8	1.1	(1.6)
$400 in a month	2.9	4.2	-1.3	(2.5)
$800 in a month	18.3	19.3	-1.1	(5.3)
$1,000 in a month	22.1	28.6	-6.5	(5.9)
$1,600 in a month	1.9	2.5	-0.6	(2.0)
$4,000 per quarter	0.0	0.0	0.0	.

	Program group	Control group	Impact		(S.E.)
$9,600 in a calendar year	8.7	6.7	1.9		(3.6)
$12,000 in a calendar year (correct answer)	36.5	30.3	6.3		(6.3)
$19,200 in a calendar year	1.9	2.5	-0.6		(2.0)
No limit	1.0	0.0	1.0		(0.9)
None of the above	2.9	2.5	0.4		(2.2)
Correct Answers (%)	36.5	30.3	6.3		(6.3)
Incorrect Answers (%)	63.5	69.7	-6.3		(6.3)
Job Search Activities					
Non-zero Frequency (%)					
Composite Index	61.6	59.6	2.0		(6.8)
By Items					
Visited my WorkBC Employment Services Centre	79.0	70.4	8.6		(6.0)
Used a Resource Room at my WorkBC ESC	55.1	47.1	8.0		(7.1)
Met with a Case Manager at my WorkBC ESC	65.7	66.7	-1.0		(6.6)
Applied for a job	51.5	57.1	-5.6		(6.9)
Went to a job interview	35.4	46.1	-10.7		(6.7)
Worked on my resume	54.5	62.9	-8.4		(6.7)
Went to a job related workshop (for example, Interview Skills, Resume Writing)	32.4	27.0	5.3		(6.3)
Registered for a training program	18.8	20.4	-1.5		(5.5)
Read books or articles about finding a job or changing jobs	29.7	28.4	1.3		(6.3)
Sent out your resume 'on spec' to potential employers	40.2	25.2	15.0	**	(6.7)

	Program group	Control group	Impact	(S.E.)
Spoke with previous employers or business acquaintances about potential job leads	33.7	41.4	-7.8	(6.7)
Used current or past company resources (e.g., colleagues) to generate potential job leads	24.7	20.6	4.2	(5.9)
Listed yourself as a job applicant in a newspaper, journal, job website or professional association	9.4	12.0	-2.7	(4.4)
Used the Internet or other computer services to locate job openings	62.7	60.4	2.4	(6.7)

Notes: There were 113 program group and 138 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%. S.E. = Standard Error – an indicator of the variability of the impact estimate.

Sources of information

The follow-up survey included several questions about sources for income-related information, with a couple of differences observed for the two groups of participants, as shown in Table 16 below. Overall, participants reported infrequently searching for information about income or finances; however, program group participants were significantly more likely to search a few times a year or less compared to control group participants. They were also more likely to report "Other" (e.g., banks and financial institutions, or friends and family) as the top source of financial information. Note that the counts across several response categories were low likely impacting the study's ability to detect statistically significant differences between groups.

Table 16 Impacts on sources of information for financial decisions

	Program group	Control group	Impact		(S.E.)
Source of Information					
How often do you look for information about income and finances?					
Average frequency (0-6)	2.1	2.2	-0.1		(0.3)
By Category (%)					
0. Never	18.2	28.3	-10.2	*	(5.8)
1. A few times a year or less	33.3	17.5	15.8	***	(5.8)
2. Once a month or less					
3. A few times a month	17.2	15.0	2.2		(5.0)
4. Once a week					
5. A few times a week	11.1	12.5	-1.4		(4.4)
6. Every day	4.0	5.8	-1.8		(3.0)
Collapsed Categories (%)					
Never	18.2	28.3	-10.2	*	(5.8)
A few times a year or less	33.3	17.5	15.8	***	(5.8)
Once a month or less					
A few times a month to once a week	22.2	21.7	0.6		(5.6)
A few times a week to every day	15.2	18.3	-3.2		(5.1)
What are your top sources of information about income and finances? (%)					
Newspapers	14.4	18.3	-3.9		(4.9)
Radio or television	17.3	19.1	-1.8		(5.1)
Internet	55.8	49.6	6.2		(6.6)
Financial Advisor	13.5	10.7	2.8		(4.3)

	Program group	Control group	Impact		(S.E.)
Advocate	16.3	11.5	4.9		(4.5)
Others	14.4	3.8	10.6	***	(3.6)
Others recoded:					
Banks and Financial Institutions	3.8	0.8	3.1		(1.9)
Friends or Family	4.8	0.8	4.0	*	(2.1)
Misc.	5.8	2.3	3.5		(2.5)
Overall, who is mainly responsible for making financial investment & planning decisions on behalf of the family? (%)					
1. Mainly me	81.7	74.2	7.6		(5.6)
2. My partner	1.0	0.0	1.0		(0.9)
3. Shared between me and my partner, -99 Don't know, -999 Prefer not to answer	4.8	6.7	-1.9		(3.1)
4. Someone else	6.7	12.5	-5.8		(4.0)
5. Nobody in particular	5.8	4.2	1.6		(2.9)
6. Someone outside of the household,	0.0	2.5	-2.5		(1.5)
I tend to trust professional financial advisers and accept what they recommend (%)					
Agree	67.6	75.7	-8.1		(7.5)
Disagree	32.4	24.3	8.1		(7.5)

Notes: There were 113 program group and 138 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%. S.E. = Standard Error – an indicator of the variability of the impact estimate.

Use of computers

No statistically significant impacts were found for several questions related to the use of computers. These results are presented in the table below.

Table 17 Impacts on use of computers

	Program group	Control group	Impact	(S.E.)
Computer				
In everyday life, do you use a computer or a digital device? (%)				
Yes	96.5	94.9	1.6	(2.6)
No	3.5	5.1	-1.6	(2.6)
How often do you usually use email? (%)				
Average Score (1-5)	4.5	4.3	0.2	(0.1)
Categories (%)				
Less than once a month	3.6	6.7	-3.1	(2.9)
Never	1.8	3.0	-1.2	(2.0)
Less than once a month	3.6	6.7	-3.1	(2.9)
Less than once a week but at least once a month	3.6	3.0	0.6	(2.3)
At least once a week but not every day	25.9	31.9	-6.0	(5.8)
Everyday	65.2	55.6	9.6	(6.3)
Collapsed Categories (%)				
Less than once a week	8.9	12.6	-3.7	(4.0)
At least once a week but not every day	25.9	31.9	-6.0	(5.8)
Everyday	65.2	55.6	9.6	(6.3)

	Program group	Control group	Impact		(S.E.)
How often do you usually use the Internet in order to better understand issues related to, for example, your health or illnesses, financial matters, or environmental issues? (%)					
Average Score (1-5)	3.9	3.7	0.1		(0.2)
Categories (%)					
Never	8.8	13.1	-4.2		(4.0)
Less than once a month	9.7	7.7	2.0		(3.6)
Less than once a week but at least once a month	12.4	10.0	2.4		(4.1)
At least once a week but not every day	23.9	30.0	-6.1		(5.7)
Everyday	45.1	39.2	5.9		(6.4)
Collapsed Categories (%)					
Less than once a week	31.0	30.8	0.2		(6.0)
At least once a week but not every day	23.9	30.0	-6.1		(5.7)
Everyday	45.1	39.2	5.9		(6.4)
How often do you usually conduct transactions on the Internet, for example including using BC Government's "My Self Serve" website, buying or selling products or services, or banking? (%)					
Average Score (1-5)	3.1	3.3	-0.2		(0.2)
Categories (%)					
Never	24.1	18.8	5.3		(5.3)
Less than once a month	11.6	6.8	4.8		(3.7)
Less than once a week but at least once a month	17.9	22.6	-4.7		(5.2)
At least once a week but not every day	24.1	33.8	-9.7	*	(5.8)
Everyday	22.3	18.0	4.3		(5.1)

	Program group	Control group	Impact		(S.E.)
Collapsed Categories (%)					
Less than once a week	53.6	48.1	5.5		(6.4)
At least once a week but not every day	24.1	33.8	-9.7	*	(5.8)
Everyday	22.3	18.0	4.3		(5.1)

Notes: There were 113 program group and 138 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%. S.E. = Standard Error – an indicator of the variability of the impact estimate.

Health and abilities

The results from analyses of survey data presented in the table below showed no statistically significant impacts on several indicators of health and abilities. One statistically significant difference observed was in the opposite direction than expected: control group participants reported higher life satisfaction ratings (3.7 per cent of program group participants gave the highest ratings of 9 to 10 compared to 11.9 per cent of control group participants). This difference all but disappears if ratings from 7 through 10 are considered instead.

Table 18 Impacts on health and abilities

	Program group	Control group	Impact	(S.E.)
Health and Abilities				
In general, would you say your health is...?				
Average Score (1-5 – from excellent to poor)	3.6	3.6	0.0	(0.1)
By Category (%)				
Excellent	2.7	3.7	-1.0	(2.3)
Very good	9.9	13.2	-3.3	(4.1)
Good	34.2	25.7	8.5	(5.8)
Fair	30.6	36.0	-5.4	(6.1)
Poor	22.5	21.3	1.2	(5.3)

	Program group	Control group	Impact		(S.E.)
How do you feel about your life as a whole right now?					
Average Score (0 to 10 "0" means "very dissatisfied" and 10 means "very satisfied")	4.7	5.1	-0.4		(0.3)
By Category (%)					
0 to 2	20.2	17.9	2.3		(5.1)
3 to 4	20.2	19.4	0.8		(5.2)
5 to 6	32.1	34.3	-2.2		(6.1)
7 to 8	23.9	16.4	7.4		(5.1)
9 to 10	3.7	11.9	-8.3	**	(3.5)
In general, would you say your mental health is...?					
Average Score (1-5 – from excellent to poor)	3.6	3.5	0.0		(0.1)
By Category (%)					
Excellent	5.4	7.5	-2.1		(3.2)
Very good	12.6	11.9	0.7		(4.2)
Good	23.4	25.4	-1.9		(5.5)
Fair	36.9	30.6	6.3		(6.1)
Poor	21.6	24.6	-3.0		(5.4)

Notes: There were 113 program group and 138 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%. S.E. = Standard Error – an indicator of the variability of the impact estimate.

Self-esteem and self-efficacy

The survey included scales to measure changes in participants' self-esteem and self-efficacy. Overall, no statistically significant impacts were observed with the exception of one subscale, and in the opposite direction than expected. Compared to controls, program group participants were more likely to report they "disagree" that they take a positive attitude towards themselves.

Table 19 Impacts on self-esteem and self-efficacy

	Program group	Control group	Impact		(S.E.)
Self-esteem					
High self-esteem composite					
Average Score (1-4 – from strongly agree to strongly disagree)	2.4	2.3	0.1		(0.1)
By Category (%)					
Strongly agree	20.4	23.7	-3.3		(5.4)
Agree	43.5	48.9	-5.3		(6.5)
Disagree	27.8	19.1	8.7		(5.5)
Strongly disagree	8.3	8.4	-0.1		(3.6)
I take a positive attitude towards myself					
Average Score (1-4 – from strongly agree to strongly disagree)	2.1	2.0	0.1		(0.1)
By Category (%)					
Strongly agree	20.0	24.8	-4.8		(5.5)
Agree	54.3	57.1	-2.9		(6.5)
Disagree	21.9	10.5	11.4	**	(4.7)
Strongly disagree	3.8	7.5	-3.7		(3.1)
I certainly feel useless at times.					
Average Score (1-4 – from strongly agree to strongly disagree)	2.2	2.2	0.0		(0.1)
By Category (%)					
Strongly agree	21.7	20.9	0.8		(5.4)
Agree	48.1	47.3	0.8		(6.6)
Disagree	20.8	20.2	0.6		(5.3)
Strongly disagree	9.4	11.6	-2.2		(4.1)

	Program group	Control group	Impact		(S.E.)
I feel I do not have much to be proud of					
Average Score (1-4 – from strongly agree to strongly disagree)	2.6	2.6	0.0		(0.1)
By Category (%)					
Strongly agree	11.4	9.4	2.1		(4.0)
Agree	32.4	37.5	-5.1		(6.3)
Disagree	37.1	36.7	0.4		(6.4)
Strongly disagree	19.0	16.4	2.6		(5.0)
I feel I am a person of worth, at least on an equal plane with others					
Average Score (1-4 – from strongly agree to strongly disagree)	2.2	2.1	0.1		(0.1)
By Category (%)					
Strongly agree	21.0	25.8	-4.9		(5.6)
Agree	44.8	49.2	-4.4		(6.6)
Disagree	29.5	18.5	11.0	*	(5.6)
Strongly disagree	4.8	6.5	-1.7		(3.1)
Self-efficacy					
High self-efficacy composite					
Average Score (1-4 – from 'not at all true' to 'exactly true')	2.9	2.9	-0.1		(0.1)
By Category (%)					
Not at all true	6.7	0.8	5.9	**	(2.4)
Hardly true	19.2	24.6	-5.4		(5.5)
Moderately true	50.0	49.2	0.8		(6.7)
Exactly true	24.0	25.4	-1.4		(5.7)

	Program group	Control group	Impact	(S.E.)
If someone opposes me, I can find means and ways to get what I want				
Average Score (1-4 – from 'not at all true' to 'exactly true')	2.7	2.7	-0.1	(0.1)
By Category (%)				
Not at all true	11.8	14.7	-2.9	(4.8)
Hardly true	20.4	16.5	3.9	(5.5)
Moderately true	58.1	51.4	6.7	(7.0)
Exactly true	9.7	17.4	-7.8	(4.9)
It is easy for me to stick to my aims and goals				
Average Score (1-4 – from 'not at all true' to 'exactly true')	3.0	3.1	-0.1	(0.1)
By Category (%)				
Not at all true	2.9	4.6	-1.7	(2.6)
Hardly true	17.5	10.8	6.7	(4.5)
Moderately true	61.2	57.7	3.5	(6.5)
Exactly true	18.4	26.9	-8.5	(5.6)
I am confident that I could deal efficiently with unexpected events				
Average Score (1-4 – from 'not at all true' to 'exactly true')	2.9	2.8	0.1	(0.1)
By Category (%)				
Not at all true	5.9	8.7	-2.8	(3.5)
Hardly true	17.8	17.5	0.4	(5.1)
Moderately true	55.4	54.0	1.5	(6.7)
Exactly true	20.8	19.8	1.0	(5.4)

	Program group	Control group	Impact	(S.E.)
Thanks to my resourcefulness, I know how to handle unforeseen situations				
Average Score (1-4 – from 'not at all true' to 'exactly true')	3.0	3.0	0.0	(0.1)
By Category (%)				
Not at all true	7.8	4.1	3.7	(3.1)
Hardly true	14.6	18.0	-3.5	(5.0)
Moderately true	52.4	51.6	0.8	(6.7)
Exactly true	25.2	26.2	-1.0	(5.9)
I can remain calm when facing difficulties because I can rely on my coping abilities				
Average Score (1-4 – from 'not at all true' to 'exactly true')	2.9	2.9	0.0	(0.1)
By Category (%)				
Not at all true	7.5	8.0	-0.5	(3.6)
Hardly true	21.7	22.4	-0.7	(5.5)
Moderately true	48.1	44.8	3.3	(6.6)
Exactly true	22.6	24.8	-2.2	(5.6)
No matter what comes my way, I'm usually able to handle it				
Average Score (1-4 – from 'not at all true' to 'exactly true')	3.0	3.0	-0.1	(0.1)
By Category (%)				
Not at all true	7.6	4.9	2.7	(3.2)
Hardly true	13.3	13.0	0.3	(4.5)
Moderately true	54.3	54.5	-0.2	(6.6)
Exactly true	24.8	27.6	-2.9	(5.9)

Notes: There were 113 program group and 138 control group members in the analysis file. Impacts between program and control groups are tested with Student t-tests. Level of significance is denoted by asterisk: *** < 1%, ** < 5%, and * < 10%. S.E. = Standard Error – an indicator of the variability of the impact estimate.

SYNTHESIS OF RESULTS

What are the key income information needs for recipients of disability assistance? How should this information be made available to improve their well-being and assist decision-making?

To obtain information on the needs of disability assistance recipients to support the design of the calculator website, SRDC conducted exploratory fieldwork consisting of 2 focus groups with 21 disability assistance recipients and 11 interviews with WorkBC case managers from across BC. The primary purpose of the fieldwork was to learn what would make it easier for recipients to explore sources of income available to them and how their benefits might change if they took up employment. The activity also sought to gather recipients' suggestions for an online income and benefits calculator to be developed as part of the project. Overall, participants provided advice on the following: nature and position of problem; technical information/content; accessibility features; and usability.

The vast majority of **disability assistance recipients** who were focus group participants indicated they did not have the information they needed to plan and make decisions about working. Overall, they said that information was often unclear and difficult to navigate, describing it as a "very big maze" or "scavenger hunt." Focus group participants indicated there was no place to go to see all the different benefits to which one might be entitled. Overall, they expressed concern about would happen to their disability assistance benefits if they were to take up employment. Most participants indicated that at some point they had decided against applying for a job for fear it might put their disability assistance benefits at risk, and at least two had quit jobs due to the same fears. The vast majority of focus group participants indicated that when it came to figuring out how work would affect their income (including disability assistance and other benefits), they did not know where to go to find the information quickly and easily. In particular, participants identified challenges with understanding and tracking their annual earnings exemption amounts.

When SRDC interviewed **case managers**, the vast majority pointed to significant information needs about the AEE, eligibility for various benefits, the PWD reinstatement process, and for clarity about receipt of medical and dental benefits in and out of work. Many of them said they were themselves often unclear about how to answer their clients' questions and had difficulty finding the information, often searching multiple websites and sources.

Case managers indicated that many of their clients "don't even know they are eligible" for various benefits. Many case managers echoed the comments from the disability assistance

recipients about the lack of trust people have and fear that their access to benefits and assistance will be "cut off" if they start working. Others are overwhelmed by having to navigate and understand the system and give up on employment. As one case manager said, "*I've had clients who were just like, 'it sounds too complicated, I can't handle it, I'll just be comfortable sitting on the PWD.'*"

Overall, the following key recommendations for building the Calculator website emerged from the fieldwork:

- Create a one-stop shop for information;
- Provide opportunities for questions and answers;
- Consider periodicity: month-by-month with ability to track;
- Present the same information in different formats (printability);
- Separate income comparisons for in-work and out-of-work scenarios;
- Offer "what next?" options;
- Address mistrust (tool = "a friend");
- Make it as simple as possible (app/mobile compatible website).

To what extent does providing a tool that delivers personalized income information including new earnings scenarios alter the financial well-being and labour market participation of clients of WorkBC Centres who are disability assistance recipients?

SRDC worked with its partners to develop a state-of-the-art income calculator using insights gained from the preliminary fieldwork. Although the available budget precluded incorporating all the requested features listed above, the features that could be included were consistent with input from potential users and included all elements in the original plan.

The Calculator BC website was developed over eight months. The calculator was intended to be accessible, relevant, and accurate. For accessibility, the calculator's user interface was created in consultation with a disability user experience consultant so that it could be accessible for users with different types of disabilities. It was designed to draw attention to available supports and work incentives within the existing policy system, to take into account tax credits, annualized exemptions, and treatment of earned income in assistance over specified periods, and to help clients keep track of earning and other income. Clients could enter details of hypothetical job

opportunities and compare income consequences of several jobs, even if the jobs were quite different.

The website had four main functions. They were all closely interconnected, but presented to the user as stand alone components. This was intended to help the user gain familiarity with the tool and gather information in an incremental manner. The four functions included:

1. **Benefits Calculator**: helps the user find out what additional income they may be eligible for
2. **Plan Builder**: helps the user find our how their income could change if they start or stop working or change jobs
3. **Regular Updates**: allows users to sign up to receive regular monthly email reminders and tips to keep on top of their income and benefits
4. **Resources**: provides information about benefits and answers to frequently asked questions.

Between March and June 2018, 400 disability assistance recipients were recruited to the study. Half were granted access to the Calculator BC website when SRDC randomly assigned their WorkBC Employment Services Centre offices to the study's program group. The other half (a statistically equivalent group of 200 disability assistance recipients) did not have access to the website as their WorkBC offices were assigned to the control group.

In general, usage of the website by the members of the program group over the following six months was disappointing. While half of all program group members used the website, repeat usage was rare and few took advantage of the more sophisticated employment scenario features of the site. Possibly compromises in the website design to meet the allocated development budget minimized features that could have increased the utility of the tool to case managers, which in turn may have prevented them from supporting their clients in using the tool to its fullest extent. Also, several features to make the site more visually appealing and customizable had been dropped.

Several questions in the follow-up survey asked program group participants about their experiences with and use of the Calculator. Over half the program group participants indicated the Calculator website was extremely easy or very easy to use, but the majority of respondents indicated that the information provided on the site was only "somewhat" easy to understand. Ratings of the Calculator as "poor" were generally very low (under 5 per cent). In fact, over 45 per cent of respondents indicated the Calculator website was "extremely" or "very" useful to them.

The survey asked respondents to rate their agreement or disagreement with several statements, including whether they applied for any new benefits because of information they learned using

Calculator BC. In general, the results were mixed: while just under a fifth "agreed" or "strongly agreed," nearly half indicated they "disagreed" or "strongly disagreed." Similarly, only about 10 per cent of respondents indicated that they "agreed" or "strongly agreed" that they received more income from benefits because of using Calculator BC.

However, program group members expressed considerable confidence in making employment decisions and a good understanding of how disability assistance worked, as indicated in positive agreement ratings by the respondents. Finally, follow-up survey respondents said they were highly likely to recommend the Calculator BC website to a friend or colleague, with well over half giving a rating of 7 or higher out of 10.

Questions on the calculator itself, answered above, could only be asked of the program group. However, the study was designed to support more rigorous analysis of the difference Calculator BC made to other outcomes like employment and income sources. The impacts of the Calculator on the program group members to whom it was offered were estimated by comparison of their outcomes to those of control group members. Since the two groups of participants were created by a random assignment of their offices, the two groups were expected to be statistically similar at the start, allowing the evaluation to rule out any factors other than the availability of the calculator as explanations for later differences between the groups. Comparison of the groups' baseline characteristics confirmed this expectation: random assignment for the most part created statistically identical groups.

Since all the study participants were recipients of BC disability assistance, one of the most reliable sources of data on the financial well-being and labour market participation of study participants is administrative data on their receipt of benefits, employment services and reported earnings. The analysis of these data revealed that while there were no statistically significant differences in the benefits received between the program and control groups, the program seems to have had a positive impact on earnings of participants two and three months following their assignment, when they earned $109 and $96 more than their control group counterparts. The cumulative difference in earnings between the two groups, albeit not statistically significant, amounted to $1,121 in additional earnings for the program group. When the results were broken down by recruitment wave, wave 2 recorded a positive two-year impact on their earnings of approximately $4,700, while the differences in earnings were not statistically significant in waves 1 and 3.

The impact on employment service use was mixed. The program had a 4.4 percentage point impact on the use *job search* services within 12 months and a 7.7 percentage point impact after 50 months. Program group participants, however, were also less likely to use *job sustainment* services, *skills enhancement* services through *ESS workshops* and *Short-Term Orientation and Certificate,* as well as *specialized assessments* services at various points in time.

The baseline survey (completed by 200 program group participants and 199 control group participants) and the follow-up survey (completed by 113 program group participants and 138 control group participants) also allowed for the estimation of impacts. However, it is impossible to discount that some differences between program and control groups may arise due to differences in who chose to respond to the survey.

Survey-based impact estimates on answers to questions concerning financial well-being indicated no statistically significant improvements for the program group. However, there was some indication that annual net income for program group participants increased compared to controls. At baseline program participants reported annual net incomes of $13,827 compared to $14,617 for controls. In the follow up survey, their reported annual incomes averaged $18,817 compared to $12,377 for controls. This difference was marginally statistically significant ($p < 0.10$).

Compared to control group participants, the Calculator may have encouraged program group participants to apply for the BC Fuel Tax Refund for Persons with Disabilities (impact of 7.3 percentage points). Program group participants were also more likely to report receiving the Low Income Climate Action Tax Credit (impact of 13.7 percentage points), and the BC Fuel Tax Refund for Persons with Disabilities (impact of 7.3 percentage points). The average amount of the Low Income Climate Action Tax Credit received by the program group was also higher than for controls. The differences in receipt of all other benefits were not statistically significant.

What improvements to client employment services will result from the introduction of a personalized income calculator on a permanent basis?

Program group members were more likely to report having a job since the start of the calendar year, to have used a Resource Room at WorkBC, and to have sent out their resume 'on spec' to potential employers (an impact of 15 percentage points). It is possible that the Calculator encouraged the program group participants to use more of the resources available to them at WorkBC even though there is no evidence from survey data it had impacted their employment status by the end of the period.

While the impact on employment service use was mixed, the positive effects on earnings either in the short run (i.e., overall sample) or over the two-year period in certain cases (i.e., recruitment wave 2) indicates that program participants may have had a better understanding of how much money they could earn from other sources before it affected their benefits, which was one of the goals of the Calculator BC website.

What are the challenges of introducing such information tools to participants, and how can these challenges be overcome?

Although program group members had the Calculator BC website at their disposal for their own personal use, half did not use it other than to complete their baseline information and follow-up survey. Among the half who used the calculator functions, few were repeat users or used its more sophisticated features. Based on case manager, user and researcher reports and observations, the amount of use was limited by many factors. These included forgetting of passwords, not having regular access to computers or other online devices, and low computer literacy. For example, some clients who signed up did not initially have email addresses, forgot their usernames or passwords frequently, or had difficulty navigating websites. Because the calculator tool necessarily provided an online service that required an email account and a password, many clients could not use it or found it hard to use on their own.

Opening up access and sustaining the use of such information tools by overcoming such challenges requires investment in additional resources to support users. Several such investments were suggested in the project's exploratory fieldwork, but not fully implemented in this trial, namely:

- Make it as simple as possible;
- Provide opportunities for questions and answers;
- Present the same information in different formats;
- Create a one-stop shop for information;
- Address mistrust (tool = "a friend").

Fundamentally, it is hard to keep user interfaces simple on tools that do complex tasks requiring many inputs and where different users may be interested in different outputs. Developers can design websites to be customizable to each particular user (presenting information in different preferred formats) but even in these cases, the user's initial set up of their defaults will be daunting. Inevitably, varying degrees of training and guidance from a trusted 'expert' will be needed to help users get over the initial hurdle of finding out what the website can do and to help each user set it up to best match their needs as simply as possible.

SRDC provided support over the toll-free line when users called in, but likely in-person support for many or most users would be needed to ensure each had the chance to learn about, understand and test out all the functions of the calculator. Furthermore, such one-on-one support from a trusted expert could go some way to improving the level of trust the user had in the tool. Case managers and other support workers and advocates could be trained to provide

such a role supporting website use, but they may also need to be paid for their time to provide such support to their clients, since most felt this was not a recognized employment service category at present.

SRDC generated a website where information was held securely, with reassurances that it would be accessible only to the project team for specified uses. This approach was intended to improve "trust" users might have that their information was safe and inaccessible to others while using the tool. Nonetheless, future consideration to overcome complexity in the data gathering exercises by allowing linkage of such tools to existing data collected on each client (e.g., information clients enter on the BC Government's "My Self Serve" website, and information on actual benefit entitlements and payments, as well as filed tax information). Drawing in existing information would reduce the need for information tools to request multiple pieces of information and reduce the effort required to duplicate information from multiple databases. The result would better represent a "one stop shop" for information while improving the accuracy of the inputs and outputs. On the other hand, many clients did not fully trust the government with their information and might be deterred from using an online tool that promised linkage across existing government-collected information. Even though data linkage might be provided by the tool only as an option, and with various assurances as to how data would be used, users might still baulk at using the tool because such linkage was possible. Achieving a sufficient level of trust across all benefit recipients in such websites will require investment in multi-faceted approaches over extended periods of time.

What lessons can the evaluation offer those who seek to improve services to other client groups in the employment services sector through income calculator tools? What can it offer to a wider audience in the non-profit sector about what works and what does not work?

A trial of a new website that, in order to be evaluated, is built using a limited budget and only offered for a short period to a small group will generate useful evidence for evaluation and pointers to necessary improvements, but likely only provides a partial impression of the full potential of such tools. Calculator BC usage fell short of expectations and key data is required before the evaluation can be completed. Yet, there is already evidence that exposure to the website changed several users' behaviours. Program group members were more likely to apply for and receive new benefits, and more likely to use a range of employment services. What lessons does this offer for those seeking to improve services elsewhere?

A first lesson is that design and implementation must be researched, planned and implemented carefully, with user input along the way. In delivering this project, SRDC learned a great deal about the needs of this client group. Non-profit sector organizations wishing to serve other client groups in the employment services sector should engage with their client groups and those who

currently work to meet their needs to determine the full extent of their needs for calculator-type tools and the specific information and services they need to see brought together. They should assess to what extent a website can meet those needs and (if it cannot do so fully) whether partial fulfilment of client needs is a worthwhile objective. During development of any tools, considerable time should be allowed to assess and revise accessibility, layout, function and precision to maximize the utility of the resulting resource to clients and those who serve them.

A second lesson is that online approaches offer economies of scale and thus a reasonable chance of proving cost-effective. While websites can require a considerable budget to develop and maintain, they can be accessed by an almost unlimited number of clients. Given BC has at any one time more than 100,000 clients receiving disability assistance, the outlay to develop and test a site like Calculator BC represents an initial cost-per-client of a few dollars at most. Later expenditures to maintain and update such resources will average considerably less, likely under a dollar per client on an annual basis. If the availability of the tool can improve incomes or increase employment prospects for even a small fraction of those clients, as Calculator BC with all its shortcomings appears to have done, it will return more dollars to those clients than it cost to make available.

A final lesson is not to rely exclusively on such tools if the aim to reach and support a broad cross-section of the population. Wherever possible consider and support the human interaction that can be leveraged to ease clients into using the tool effectively. As a general rule, websites should be designed with the intention to be intuitive, such that training is not a requirement in order to understand how to use them. This rule should not be interpreted to mean that support and training should be left out of consideration. It is likely near to impossible to design a website – let alone a sophisticated income information tool – that is intuitive to someone who has never or rarely used a website before. Tools require careful design, but users must also be motivated to invest time in trying them out and using them. For some potential users the motivation will be intrinsic but for others a trusted advisor will be needed to help them at first see how the various features of the tool can benefit them. Users may simply give up if they cannot see how the investment of their time in learning to use a new resource will pay off.

CONCLUSIONS

The pilot of Calculator BC achieved its objectives to create and rigorously test a website that can help persons with disabilities identify and learn about benefits they may be eligible for and take steps to apply for them. They could also learn better how earnings affect their benefits, possibly reducing their apprehension to earn more independent income once they understand how that income is exempted from consideration in benefit calculations. The statistically significant results were modest, but point in the right direction. Those persons with disabilities invited to use the website were more likely than their statistically equivalent counterparts (a) to earn income in some months, (b) to apply for and receive new benefits and (c) to report higher incomes by the end of the pilot. Considering the limitations on ease of use and website features during the pilot and the short duration of follow up, these findings are at least promising that such calculator tools can lower the information barrier to the alleviation of poverty. It seems highly plausible that online tools, when fully developed for the long term, possibly deploying artificial intelligence to improve ease of use and when publicized so users can be encouraged to engage with them more often, have a role to play in improving the future financial wellbeing of people with disabilities.

REFERENCES

Auditor General of British Columbia (2014). Disability Assistance: An Audit of Program Access, Integrity and Results: Accessed online on January 31, 2019 at http://www.bcauditor.com/pubs/2014/report2/disability-assistance-audit-program-access-integrity-and-

BC Ministry of Social Development and Poverty Reduction (2018). BC Employment and Assistance Cases by Program – December 2018. Accessed online on January 31, 2019 at https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/organizational-structure/ministries-organizations/social-development-poverty-reduction/bcea-caseload-6page.pdf

Canadian Mental Health Association (CMHA) BC Division and CHMA Vancouver-Burnaby (2014). Disability White Paper Consultation 2014 – Ensuring mental health and addictions are part of the conversation. Accessed online on January 31, 2019 at https://cmha.bc.ca/wp-content/uploads/2016/07/Disability-notes-Mar2014.pdf

Feres, K. (2005). Earnings Exemption for Disability Assistance in BC: Effects on Social Enterprises and their Employees. Accessed online on January 31, 2019 at https://core.ac.uk/download/pdf/56366907.pdf

Government of British Columbia (2018). BC Labour Market Outlook. Accessed online on January 31, 2019 at https://www.workbc.ca/getmedia/1dce90f9-f2f9-4eca-b9e5-c19de9598f32/BC_Labour_Market_Outlook_2018_English.pdf.aspx

Government of British Columbia (2019). Accessibility 2024: Making B.C. the most progressive province in Canada for people with disabilities by 2024. Accessed online on January 31, 2019 at https://www2.gov.bc.ca/assets/gov/government/about-the-bc-government/accessible-bc/accessibility-2024/docs/accessibility2024_update_web.pdf

Minister's Council on Employment and Accessibility (2012). Action Plan Framework for the Minister of Social Development and Social Innovation. Accessed online on January 31, 2019 at https://www2.gov.bc.ca/assets/gov/government/about-the-bc-government/accessible-bc/accessibility-2024/docs/action-plan-framework.pdf

APPENDIX A: PROJECT WORK PLAN AND TIMELINES

Time	Activity, inputs, and outputs	Partners
Planning/Design Phase – months 1 to 3		
Month 1	Initial project start-up meetings and set up Advisory panel: ▪ Calls and meetings with additional WorkBC ESCs potential partners ▪ Advisory panel to include Turn2us, DABC, ESC director(s) or nominees	Project team, T2U, DABC, ESCs
Months 2-3	Site visits – interviews with case managers and client focus groups – and finalize research design: ▪ Key informant interviews with case managers on disability assistance recipients case management typical activities and interactions ▪ Two focus groups with disability assistance recipients to identify disability income awareness, information needs and IT access	Project team, ESCs
Months 2-3	Draw up business process customer flow, presentation options and accessibility in consultation with advisors: ▪ Detailed design stage building on advice and inputs to produce a set of requirements for the web site content, functions, interface, flow and format ▪ Map out programming for income calculations and interactions	Project team, T2U, DABC
Months 4-17	Develop web site specification in order to tender for appropriate web site developer: ▪ Generate specification for web site design ▪ Circulate design to 3-4 website development companies for quotes. Interview proponents and select website development partner	Project team, T2U, DABC, ESCs
Calculator Development Phase		
Month 17	Hire Web site development firm: ▪ Review proposal and revise specification in accordance with the selected proponent's capacity	Project team
Month 18	Discovery & Requirements: ▪ Support the WSD process as they build the web site design	Project team, WSD

Time	Activity, inputs, and outputs	Partners
Months 5-18	Content Development: ▪ Update and revise programming to compatible software ▪ Review program calculations with relevant sources (MSDSI, Canada Revenue Agency, etc.) ▪ Review coding to ensure accuracy of calculations	Project Team, DABC, WSD
Months 19-23	Creative Design: ▪ Finalize look and feel, prioritizing site accessibility	Project Team, T2U, WSD
Month 23	Technology and Hosting: ▪ Finalize list of likely settings for web site use and most appropriate secure servers and modes of access for different users	WSD
Month 24	Implementation and Integration: ▪ Finalized website	Project Team, DABC, WSD
Month 25	Quality Assurance: ▪ Pre-tests of site with challenge users from multiple organizations and with volunteer disability assistance recipients ▪ Revise and re-program as required	Project Team, DABC, WSD, ESCs
Calculator Implementation Phase		
Months 24-26	Training and Support: ▪ Develop recruitment and website training modules and manual ▪ Design accessible brochure for disability assistance recipients to assist in encouraging them to use the site ▪ Finalize case manager recruitment with participating ESC offices	Project team, ESCs, DABC, T2U
Months 25-26	Production Launch Activities: ▪ Website shifts from testing environment to live site ▪ Login IDs generated and issued	Project team, WSD
Months 26-35	Post Implementation: ▪ Randomly assign offices: stratified to ensure each contractor has roughly equivalent numbers of program and control offices ▪ Trouble shooting and updating of features as required ▪ Management of client database ▪ Monitoring reports	Project Team, DABC, WSD

Time	Activity, inputs, and outputs	Partners
Coordination		
Months 1-35	General coordination, management of agreements, monitoring activities	Project Team
Months 1-33	Update meetings: ▪ Advisory Committee ▪ Project team ▪ Sub-contractors	Project Team, WSD, T2U, DABC
Ongoing	IT/admin support: ▪ Support for site users by phone and email	Project Team, WSD
Research and Evaluation		
Months 2-36	Privacy Impact Assessments and consent form design	Project Team
Months 19-23	Build assignment & data collection tools into Web site: ▪ Template baseline and follow up surveys for program and control group developed early for inclusion in web site specification, updated over time to ensure they are up to date when launched ▪ Surveys are the only web site feature accessed for control group members	Project Team, WSD, DABC, T2U
Months 26-34	Process/Implementation Research: ▪ Ongoing quality assurance – on-site observations – and monitoring	Project Team, WSD, ESCs
Months 26-29	Baseline survey of participants in program and control sites: ▪ Support for online survey deployment	Project Team, WSD, ESCs
Months 34-36	Follow-up survey of participants in program and control sites: ▪ Support for online survey deployment	Project Team, WSD, ESCs
Months 30-36+	Administrative data acquisition, analysis file creation: ▪ Request for file with records for participants who have given consent ▪ Transfer of file and checks ▪ Conversion to analysis variables and linked to other client data	Project team

Time	Activity, inputs, and outputs	Partners
Months 3-36+	Coding and analysis: ▪ Coding of open-ended survey questions and key informant interviews ▪ Qualitative and quantitative analysis of baseline data as its collection is completed, including monitoring and website usage ▪ Qualitative and quantitative analysis of follow-up and administrative data as its collection is completed, including website usage data	Project team
Months 6-36+	Deliverables: ▪ Update reports to funder (as required by funder) ▪ Final project/evaluation report (month 36) ▪ Updated report and PowerPoint Presentation including administrative data (after month 36) ▪ Introductory video (delivered in March 2018)	Project team, Video producer

APPENDIX B: WORKBC ESC RECRUITMENT PARTNERS

WorkBC catchment	Contractor
100 Mile House	Horton Ventures Inc.
Ashcroft	Horton Ventures Inc.
Burnaby	GT Hiring Solutions
Campbell River	North Island Employment Foundations Society
Chilliwack	GT Hiring Solutions
Courtenay	Creative Employment Access Society
Cranbrook	Canadian Mental Health Association for the Kootenays
Creston	Kootenay Employment Services Society
Dawson Creek	Dawson Creek Catholic Social Services Society
Delta	Boys and Girls Club of South Coast BC
Duncan	Global Vocational Services Inc.
Fernie	Canadian Mental Health Association for the Kootenays
Fort Nelson	Fort Nelson Employment Services
Kamloops	Open Door Group
Kelowna	MAXIMUS Canada Employment Services Inc.
Kitimat	The Kitimat Community Services Society
Langford	WorkLink Employment Society
Langley	Avia / Back In Motion
Lillooet	Open Door Group
Maple Ridge	Douglas College
Nakusp	Arrow & Slocan Lakes Community Services
Nanaimo	GT Hiring Solutions

WorkBC catchment	Contractor
New Westminster	Fraser Works Co-operative
North Vancouver	YWCA
Port Alberni	Island Work Transitions, Inc. d.b.a. Alberni Valley Employment Centre
Port Coquitlam	Avia / Back In Motion
Port Hardy	North Island Employment Foundations Society
Port Moody	Avia / Back In Motion
Powell River	Powell River Employment Program Society d.b.a. Career Link
Prince George	Kopar Administration Ltd.
Quesnel	Quesnel Employment Services
Revelstoke	WCG
Richmond	Avia / Back In Motion
Saanich	GT Hiring Solutions
Salmon Arm	WCG
Sechelt	Open Door Group
Sidney	Beacon Community Services
Smithers	WCG
South Surrey	Sources Community Resources Society
Surrey Cloverdale	Sources Community Resources Society
Surrey Newton	Avia / Back In Motion
Terrace	Northwest Training Ltd.
Trail	Greater Trail Community Skills Centre Society
Vancouver City Centre	Family Services of Greater Vancouver
Vancouver South	YWCA
Vancouver Westside	YWCA
Vanderhoof	Progressive Employment Services Limited

WorkBC catchment	Contractor
Vernon	Community Futures Development Corporation – North Okanagan
Victoria	GT Hiring Solutions
Williams Lake	Horton Ventures Inc.

Note: WorkBC ESC recruitment partners are ordered alphabetically by catchment.

APPENDIX C: RECRUITMENT FLYER FOR BETA TESTERS

Would you like to help improve financial security for recipients of Disability ("PWD") Assistance in BC?

We are looking for up to 5 volunteers to test and provide feedback on a brand new website that estimates money people could receive from government now or in the future.

What does it involve?

- You will be given necessary equipment or software (e.g., iPad; Jaws Screenreader) and asked to test a website. The website includes a survey, and offers customized information about income and benefits for people who receive Disability Assistance.
- You will be asked to provide feedback on the website to help improve it.
- You will be asked to participate in a short video about your experiences. The video will become part of the website.

How long will it take?

Approximately 20-25 hours of your time, spread over several days in 2018. On-site testing and video filming will take place during one day in February at the Disability Alliance BC (DABC) office. We may contact you later in the year for additional feedback.

Where?

On-site testing and filming will take place at the DABC office at #204 – 456 West Broadway in Vancouver. Additional testing can be done from the comfort of your home.

What are the benefits?

You will be able to keep the equipment (e.g., iPad or another type of assistive technology). If required, a data plan will be covered for the time of the testing. Your feedback is vital to improving the website to help people with disabilities improve their financial security.

Interested? Contact Basia Pakula at 778 588 6650 or bpakula@srdc.org

Because the number of spots is limited, not everyone will be selected. We are looking for volunteers with a diversity of experiences, who express an interest in the project, available for at least a day during February and who are able to commit to providing feedback later in the year as well.

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