

# **Testing a Community-Based Jobs Strategy for the Unemployed**

## **Early Impacts of the Community Employment Innovation Project**

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**November 2006**

The Community Employment Innovation Project is funded by Human Resources and Social Development Canada (HRSDC) and the Nova Scotia Department of Community Services (NS-DCS). The findings and conclusions stated in this report do not necessarily represent the official positions or policies of HRSDC or NS-DCS.

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## Preface

Despite the addition of new social goals in recent years, the main purpose of the Employment Insurance (EI) program in Canada remains the provision of a temporary earnings replacement for unemployed workers while they are searching for another job. The system works well in areas of the country where new job openings occur on a regular basis or where economic slowdowns last only for short periods of time. However, there are regions in Canada that have seen their economic base weakened considerably as the primary local industry, most often resources-based, could not resist international competition, changes in consumer preferences, or any other type of shock affecting its profitability. In these areas, chronic unemployment sets in rapidly and the EI system is at best a partial solution to the problem.

Industrial Cape Breton is one such example. Once a thriving industrial area based on coal mining and steel making, over the last half century the region has been in decline. Despite government interventions, few new opportunities have materialized to replace the still-eroding core of the Cape Breton economy. The result has been chronic high unemployment and significant out-migration, particularly among youth.

Innovative responses are needed. In that spirit, Human Resources and Social Development Canada (HRSDC) conceived the Community Employment Innovation Project (CEIP) — a long term research and demonstration project that is testing an alternative form of income transfer payment for the unemployed in areas of chronic high unemployment. It is an active re-employment strategy, which takes the form of a “community wage” paid to unemployed individuals who volunteer to work on locally developed community-based projects. Beyond the need for immediate employment, CEIP hopes to influence participants’ longer-term employability by helping preserve and possibly improve both their human and social capital.

Although CEIP’s designers saw community-based employment as a promising approach, there was considerable uncertainty about how it would actually work. Its effectiveness was unproven, as various forms of job-creation programming had been tried, but few had been carefully evaluated. The expenditures associated with a new initiative can be justified only if the benefits they produce outweigh the costs or if it can be shown that the net benefits exceed those of the programs it would replace. Consequently, HRSDC and the Nova Scotia Department of Community Services (NS-DCS) decided to fund a test of community-based employment, under real-world operating conditions, and to evaluate it using the most rigorous evaluation methods available.

This report presents interim results from CEIP’s impact study, assessing the effects of the project on individuals who were working in community-based employment through CEIP. Although the results are preliminary, in that they cover only the first 18 months of a three-year eligibility period, the findings to date are promising. Future reports will assess the effects of CEIP on communities as well as the longer-term impacts on individuals.

Jean-Pierre Voyer  
Executive Director



## Acknowledgements

The Community Employment Innovation Project (CEIP) is the result of collaboration among a large number of organizations and individuals. We would like to acknowledge and thank those who have been instrumental to CEIP's success so far.

First and foremost, CEIP would not have been possible without the support of Human Resources and Social Development Canada (HRSDC), the principal funder of the project and the originator of the idea that eventually became CEIP. Satya Brink coordinated consultations at the provincial and local level, provided the conceptual framework for using the social economy as a source of employment, and was a significant proponent for studying the social capital aspects of the project. Most recently, she and Urvashi Dhawan-Biswal and Julie Dubois of her staff have been our key day-to-day contacts for the project. In the Applied Research Branch of the former Human Resources Development Canada (HRDC), Allen Zeesman and Louis Grignon guided CEIP through its first four years. Initially Margaret Laing and then Jean-François Bertrand provided ongoing advice and served on CEIP's Project Implementation Committee. At HRDC's Nova Scotia Regional Office, Howard Green provided advice and made HRDC resources available to meet CEIP's needs, and Paul McNeill provided information and guidance on early design issues. In Cape Breton Wayne Talbot from HRDC chaired the Project Implementation Committee (PIC), and his management team, especially Bruce Reardon, Alice Almond, and Bernadette Thériault, provided assistance throughout CEIP's start-up. Ginger Fillier was seconded from HRDC to join the Social Research and Demonstration Corporation (SRDC) for the first year of the project, and we are grateful for the substantial contribution she made to getting CEIP off the ground.

The participation of the Nova Scotia Department of Community Services (NS-DCS), CEIP's other funder, was initially directed by Ron L'Esperance. Shulamith Medjuck and Mike Townsend provided advice and coordinated NS-DCS's involvement as the project developed. Paul Conroy participated on the Project Implementation Committee and was an invaluable source of income assistance data to guide CEIP's design and for subsequent analysis. Following his departure, Adam Holmes has been responsible for data transfers and has provided related support. At the local level, Pat Drohan, Rosemary Lewis, Keith MacMillan, Elaine O'Quinn, and Robert Schella have been members of the Project Implementation Committee and have helped us understand the workings of the income assistance system.

We are grateful to many of our present and past colleagues at SRDC. First and foremost, we are grateful to the former Executive Director, John Greenwood, without whom the project would not have even been launched. Mr. Greenwood led the project through much of the design and early implementation phase and then continued to provide ongoing guidance through to his retirement in the summer of 2006. The current Executive Director, Jean-Pierre Voyer, while at the former Applied Research Branch of HRDC was an early proponent of the study and provided the initial direction. Reuben Ford was instrumental in developing the research design for the project and also led the team as project director during part of the implementation phase and has been a continuing source of support. Saul Schwartz directed



# **Executive Summary**

## **INTRODUCTION**

The Community Employment Innovation Project (CEIP) is a long-term research and demonstration project that is testing an alternative form of support for the unemployed in areas of chronic high unemployment. It aims to encourage longer-term employability of participants while supporting local community development. CEIP was implemented in the Cape Breton Regional Municipality (CBRM) in Nova Scotia beginning in 1999. The project was conceived by Human Resources and Social Development Canada (HRSDC) and is funded jointly by HRSDC and the Nova Scotia Department of Community Services (NS-DCS). The project is managed by the Social Research and Demonstration Corporation (SRDC), a non-profit social policy research organization that specializes in developing, implementing, and evaluating large-scale, long-term demonstration projects to test innovative social policies and programs.

CEIP is testing an alternative form of payment to Employment Insurance (EI) and income assistance (IA) recipients. It proposes an “active” re-employment strategy in the form of a “community wage” paid to unemployed individuals who volunteer to work on locally developed community-based projects. CEIP offered up to three years of employment on community-based projects, which provided participants with a significant period of stable earned income and an opportunity to gain varied work experience, acquire new skills, and expand their networks of contacts. In short, beyond addressing the immediate need for employment, CEIP hoped to influence participants’ longer-term employability by helping preserve and possibly improve both their human and social capital.

CEIP has been set up as a demonstration project using a multiple methods approach to evaluate its effects on both individuals and communities. This includes a random assignment evaluation design — widely accepted as the most reliable way to estimate a program’s impacts — in order to assess the effect of CEIP on individuals who take part in the program. This report presents the results of the impact analysis through 18 months of program participation. The impact of CEIP on program group members’ employment levels, earnings, transfer receipt, and overall income levels are reviewed. Beyond economic outcomes, the report also considers impacts of CEIP on social capital, volunteering, health and well-being, attitudes, and residential mobility, among others.

## **CEIP PROGRAM MODEL**

### **The Offer to Individuals**

An invitation to participate in CEIP was offered to a random sample of EI beneficiaries from the CBRM who were at least 18 years of age and had received between 10 and 13 weeks of benefits on their claim. To avoid selecting individuals who might re-enter the workforce quickly following their selection, individuals also had to have 12 or more weeks of entitlement remaining on their claim. Similarly, the CEIP offer was also made to a random sample of IA recipients who were residents of the CBRM and at least 18 years of age.

The core of the CEIP offer made to eligible individuals was the chance to exchange their entitlements to EI or IA for the opportunity to work for up to three years on projects in selected communities in the CBRM. In most respects, CEIP employment was set up to replicate a “real job.” Participants were required to work for 35 hours a week. In return, they were paid a community wage. Initially set at \$280 a week, the community wage, which was indexed to increases in the provincial minimum wage, eventually rose to \$325 a week. CEIP employment was insurable under the EI program and covered by the Nova Scotia Workers’ Compensation program and the Canada Pension Plan.

Although the principal CEIP activity for participants was working on community-based projects, a number of ancillary activities were built into the program model, including an employability assessment, basic job-readiness training, limited transferable skills training, and job-search support.

### **The Role of Communities**

A small number of communities in industrial Cape Breton were selected to take part in CEIP. These communities were as much “participants” in CEIP as the individuals who were enrolled in the project. While individual participants were given the opportunity to take part in employment, the responsibility for generating the employment opportunities rested with the communities.

The role played by the communities had two main dimensions. First, each community had to create a democratic structure to make decisions regarding the use of CEIP resources. These CEIP community boards were initially charged with developing strategic plans and setting priorities for the kinds of projects that would have access to workers supplied by CEIP. Second, the communities were responsible for organizing specific projects that would employ CEIP workers to help address the community needs that were identified. Any community organization or individual could develop a proposal to sponsor a project (although they must have had the capacity to manage the project, including providing any other resources that might have been needed, such as facilities, tools and equipment, supervisors, and workers with specialized skills). Responsibility for deciding which proposals would be approved and granted access to the pool of CEIP workers rested with the community boards. The main element of CEIP’s offer to communities was the chance to be the beneficiaries of the “free labour” provided by the project, and it was hoped that this would serve as a catalyst for community action.

## **CEIP EVALUATION DESIGN**

CEIP has been set up as a demonstration project to assess the feasibility of implementing a community-based jobs program for the long-term unemployed, to estimate the benefits generated by such a program, and to determine whether it would be socially and fiscally advantageous for governments to introduce such an intervention on a wide scale. In evaluating the benefits of the project, CEIP is considering both those that accrue to individuals who work on the community-based projects and those that are experienced by the communities where the projects take place.

How might CEIP’s program model produce beneficial effects? First, for the individual participants, the program offered a chance to re-integrate into the labour market faster than they otherwise would have, helping to avoid the erosion of skills and social networks that may result from prolonged unemployment. Working on community-based projects offers participants an

opportunity to gain work experience and acquire new skills. By providing a significant stable period of work, CEIP may help to preserve and possibly enhance participants' employability, leading to more employment and increased earnings in the future as well as reduced reliance on transfers. In addition to adding to "human capital," CEIP may also contribute to an individual's "social capital." Participants who work together may develop stronger peer support networks. Project participation also brings participants into contact with project-sponsoring organizations and with individuals and organizations that benefit from the services being provided. This gives participants a chance to develop stronger social networks in the community.

For the communities, CEIP may provide a positive contribution to community development. The products or services provided by the community projects are focused on needs identified at the local level, and can thus directly provide value to the community. The availability of the free labour provided by CEIP participants, as well as the services provided by the organizations employing them, may strengthen existing community organizations or lead to the creation of new ones. The volunteers who participate on community boards or who get involved in sponsoring projects may themselves develop new skills or stronger social networks. Over the longer run, a community's resiliency and its capacity to overcome adversity may be enhanced.

Finally, for the governments that are funding CEIP and for society as a whole, this program model may be a cost-effective alternative to traditional transfer payments. While governments may need to provide a short period of community wages for participants as well as the initial support to help communities organize themselves and develop appropriate projects, these costs may be covered through savings in EI and IA payments and increased taxes from employment over the long run.

The evaluation strategy for CEIP is designed to address all these issues and includes four main components: implementation research, an individual impact study, a community effects study, and a benefit–cost analysis. This report is concerned primarily with the second element of the research design — the individual impact study.

## **Methodology**

The goal of the individual impact analysis is to measure the changes in outcomes that CEIP produces for the individuals who take part. The difference between the observed outcome of program participants and what the outcome would have been without the program is called an "impact." The measure of what the outcome would have been in the absence of the program is called the "counterfactual." Most commonly, a counterfactual is created by identifying a "comparison group" that resembles as closely as possible the group that takes part in the program. It is generally accepted that the best method of creating a comparison group is by means of random assignment. The process of random assignment ensures that there are no systematic pre-existing differences between the program and control groups. They differ only in that one group is eligible for the program and the other is not. Therefore, any differences that are observed over time in the experiences of the two groups can be attributed with confidence to the program.

The primary data source used for this initial impact study is the *18-month follow-up survey*. Statistics Canada administered this as a telephone survey to program and control group members 18 months after their enrolment in the study. The survey covered all of the key outcomes of interest that could not be analyzed through administrative data sources,

including employment history, personal and household income, social capital, household composition, attitudes, and health and well-being.

## **Recruitment**

During the enrolment phase, 5,980 eligible EI beneficiaries and 804 eligible IA recipients were randomly selected and mailed letters of invitation to an information session where they would learn about CEIP and be given the opportunity to volunteer. The attendance rate to information sessions was 27 per cent among EI beneficiaries and 69 per cent among invitees from the IA caseload. The vast majority of those who showed up at an information session volunteered for CEIP by signing the enrolment form. Of the 1,620 EI beneficiaries who attended, 1,006 signed the enrolment form. Among IA recipients, 516 of the 557 attendees did so. Half of the enrollees from both the EI and IA samples were then randomly assigned to the program group, who were eligible for CEIP, and the other half to the control group, who were not.

The focus of this report is on the 1,363 CEIP enrollees who completed the 18-month survey: 898 EI beneficiaries (470 program group; 428 control group) and 465 IA recipients (237 program group; 228 control group). A preceding report — *The Community Employment Innovation Project: Design and Implementation* (2003) — provides a detailed review of the implementation of CEIP including the process of engaging communities, the establishment of the CEIP program office in Cape Breton, and the recruitment of study participants.

## **PARTICIPATING IN CEIP**

Following random assignment, the vast majority of program group members signed a Project Participation Agreement (PPA) and went on to participate in CEIP-related activities during the 18 months post-enrolment. On a monthly basis, participation rates peaked for the EI sample at 77 per cent, during the fourth month after enrolment, and gradually declined over the next 16 months. The highest level of participation among IA program group members was observed during the fifth month after enrolment, at 89 per cent, and declined very slowly over the remaining follow-up period.

## **CEIP Projects and Work Placements**

The primary activity that participants were engaged in during their eligibility was community-based work placements on projects that were developed by communities. A total of 292 CEIP projects were created by the five participating communities during the first three and a half years, which generated a total of 1,224 positions and 1,885 work placements for participants, allowing many to work in multiple positions. Since recruitment occurred over a two-year period, it took three and a half years for all sample members to have been in the program for at least 18 months — the period covered in this report.

The largest category of community needs targeted through CEIP projects was community services, which included community outreach programs and service clubs. The second and third largest categories of project involved churches and charities and those that provided some form of recreational services to the community. This was followed by projects in the area of arts and culture and services to seniors, youth, and the disabled. These projects generated a wide range of job opportunities for CEIP participants spanning all 10 of the



National Occupational Categorizations (NOC). The largest category was by far service positions, followed by natural and applied sciences and business, finance, and administration.

## SUMMARY OF FINDINGS

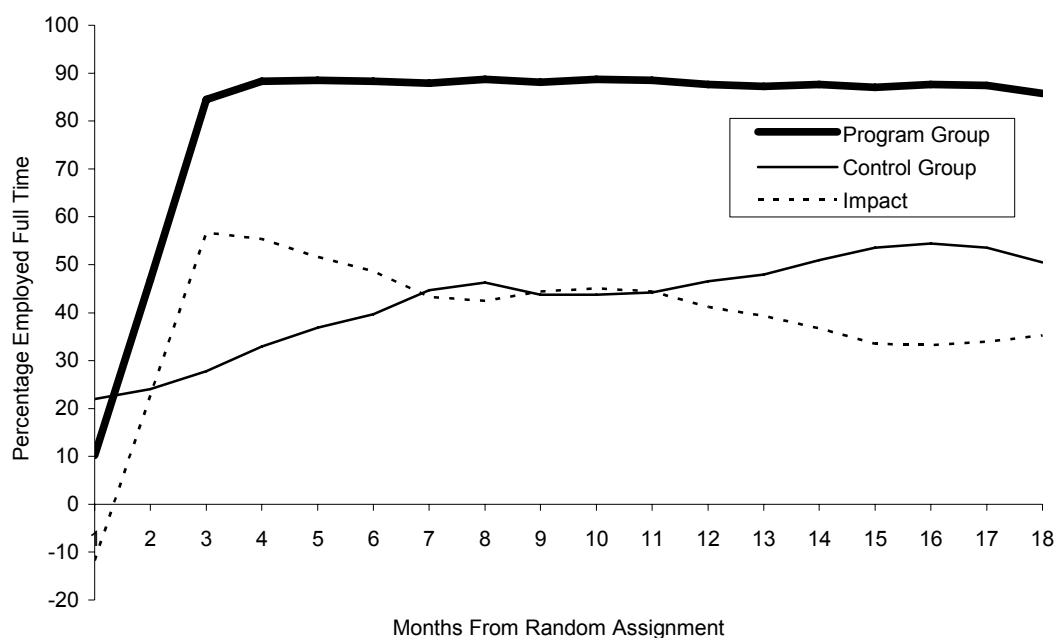
During the first year and a half of the program, CEIP provided a significant stable period of full-time employment to both EI and IA program group members, over and above what they would have achieved without the program. Impacts on earnings were substantial, as were reductions in reliance on EI and IA benefits. This translated into increased income, particularly for the IA sample, where large reductions in the incidence of low income were observed. Associated with this improved income and employment stability were some small but positive impacts on social networks, life satisfaction, and attitudes to work. These early results are encouraging as they cover a relatively short follow-up period. There was not a strong expectation that impacts would be observed, beyond employment and earnings, after only half of the eligibility period had passed.

The major findings of this report can be summarized as follows:

### **CEIP led to substantial increases in employment and earnings for both EI and IA program group members.**

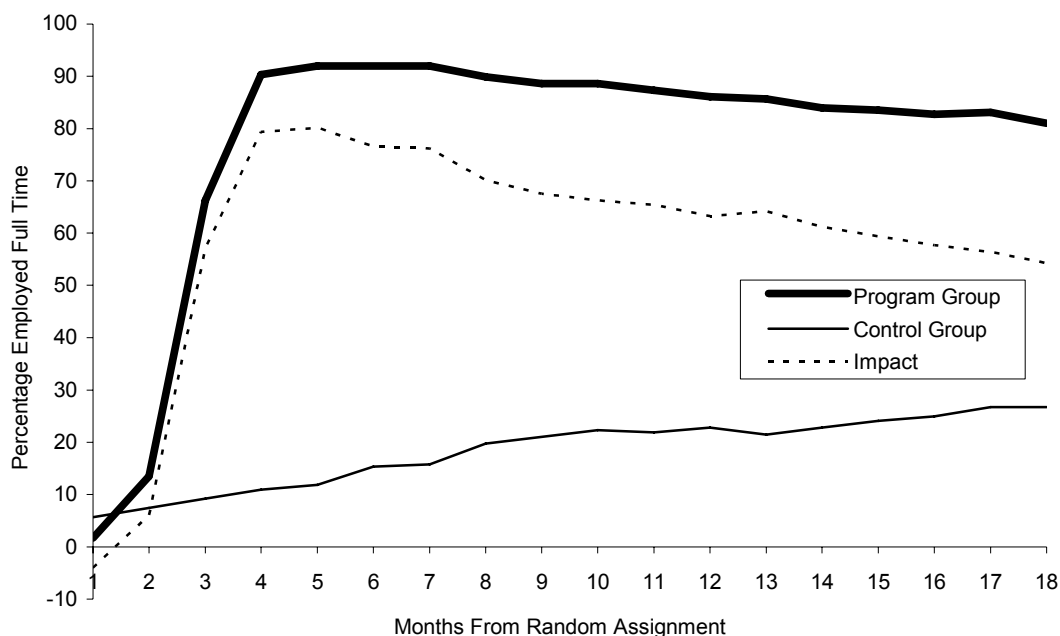
Increases in full-time employment among the program group were expected, by design, as CEIP directly offered full-time work. Nonetheless, it is important to assess employment levels, compared with the control group, in order to measure the magnitude of the incremental effect of CEIP, over and above what would have occurred in the absence of the program. At its peak, as shown in Figure ES.1, CEIP led to nearly a 60 percentage point increase in full-time employment among EI program group members compared with that experienced by the control group.

**Figure ES.1: Full-Time Employment Rates — EI Sample**



Among IA program group members, as shown in Figure ES.2, a striking 80 percentage point increase was observed. These figures illustrate the rates of full-time employment among EI and IA sample members throughout the first 18 months of CEIP eligibility. Though the impacts began to decline from their peak, they were sustained at a high level throughout 18 months, suggesting that a more significant and stable period of employment was in fact achieved through CEIP over and above what would have been experienced without the project.

**Figure ES.2: Full-Time Employment Rates — IA Sample**



CEIP also had a dramatic effect on the monthly earnings of IA program group members, who achieved average monthly earnings of over \$1,100 in the second quarter of the follow-up period, compared with only \$150 for the control group. At its peak, CEIP also doubled the earnings of program group members in the EI sample as they received on average approximately \$1,250 per month compared with nearly \$650 for the control group.

### **CEIP significantly reduced reliance on EI and IA benefits.**

CEIP's largest effect on EI receipt occurred early in the follow-up period, as the program encouraged participants to leave EI sooner than they otherwise would have. By Month 4, program group members were 61 percentage points less likely to be receiving EI than the control group. However, the impact diminished quickly as control group members also began to leave EI, as they exhausted their claim or were successful in finding a job. By Month 18, CEIP reduced EI receipt by only 15 percentage points. CEIP also had a large effect on IA receipt, approximately halving the proportion of the program group receiving IA benefits. However, unlike EI, the decrease in IA receipt was sustained throughout the 18-month follow-up. By Month 18, there was still a 32 percentage point reduction in the rate of IA receipt among the program group.

### **CEIP had a positive effect on wages for many program group members.**

CEIP led to an increase in the receipt of wages between \$2 and \$3 above the minimum wage among both the EI and IA program groups (by 51 and 63 percentage points respectively). Most of this increase arises simply from the higher levels of employment that are attributable to CEIP. More notably, CEIP led to increased wages for many who would have worked for lower pay without the program, evident from the proportion of control group members who were working at lower wages than what CEIP offered (8 per cent of the EI sample and 11 per cent of the IA sample). At the same time, CEIP also led to a lower proportion of wage earners in the EI sample receiving more than \$3.00 per hour above minimum wage (16 percentage points fewer receiving more than \$3.00 per hour above minimum wage in the program group than in the control group). No negative effect on the receipt of higher wages was observed in the IA sample.

### **CEIP significantly increased the family income of IA program group members above Statistics Canada's low income cut-offs (LICOs).**

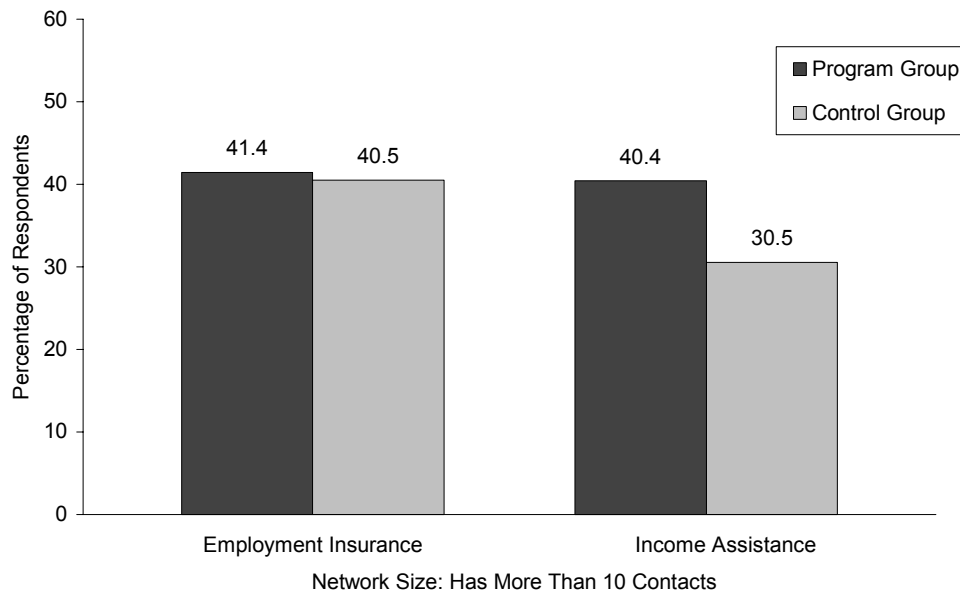
CEIP had a large and significant effect on IA program group members' household income, increasing it by over \$5,500, nearly 40 per cent higher than the household income of control group members. This translated into a significant reduction in poverty levels among IA households, which were 18 percentage points less likely to have incomes below the LICOs compared with the control group. The largest effect occurred at the lowest income range where program group members were 23 percentage points less likely than the control group to have a household income below 50 per cent of the LICOs. Among EI program group members, although CEIP had a positive effect on personal income, it appeared to reduce the amount of income received by other household members, such that CEIP's effect on total family income is unclear.

### **CEIP led to small increases in the size of program group members' social networks while reducing their density and homogeneity.**

In addition to providing quicker re-integration to the labour market and employment stability, CEIP also aimed to provide participants with opportunities for the development of social capital. Consistent with recent conceptual developments, CEIP measures social capital in terms of networks of contacts and the resources that are available within them.

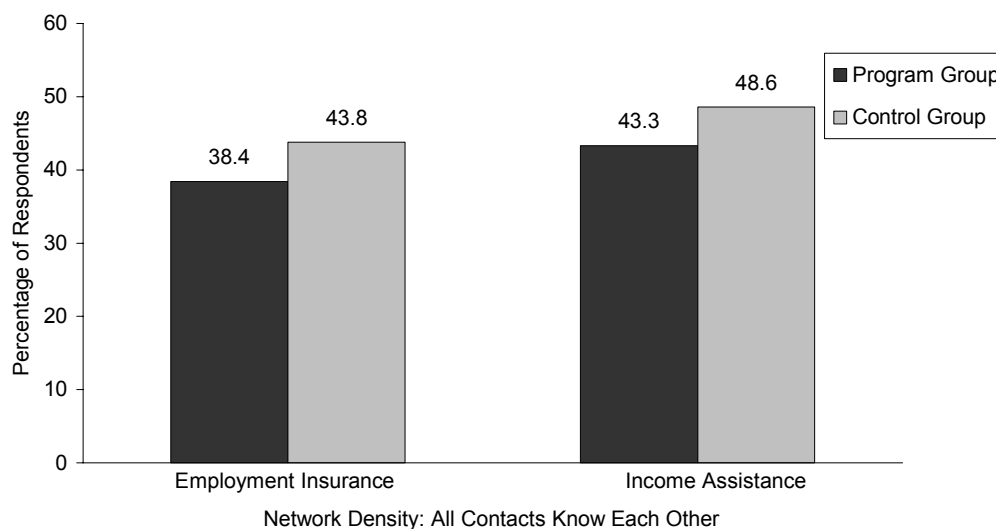
Although there was not a strong expectation that impacts would be observed after only half of the eligibility period, CEIP has led to an increase in the size of social networks, particularly among the IA program group. Figure ES.3 illustrates that although there was little effect on the size of social networks among the EI sample, IA program group members were nearly 10 percentage points more likely to have more than 10 contacts in their network when compared with the control group. Evidence suggests that this resulted from the development of linking social capital ("vertical" links to contacts in higher socio-economic strata or in positions of power or influence), as significant effects were seen only on the number of contacts who can provide specialized advice. There were no analogous effects on bonding social capital (strong ties an individual has to people similar to himself or herself who can provide social supports).

**Figure ES.3: Impacts on Social Capital — Network Size**



Beyond the size of social networks, the density and homogeneity of contacts within a network have been identified as important characteristics in the development of social capital. “Density” refers to the extent to which contacts in a network know one another, while “homogeneity” refers to the similarity between contacts on a range of demographic characteristics. Less dense and more heterogeneous networks are associated with the development of bridging and linking social capital, which CEIP aims to improve, and may help individuals better lever their contacts to develop new opportunities, including improved job prospects. Figure ES.4 illustrates that CEIP had a positive effect on network density among both EI and IA samples, where 5.4 percentage points fewer program group members reported that all of their contacts knew each other, reflecting a less dense network. There were also small decreases in the homogeneity of networks, particularly among the EI sample, with respect to their gender and place of work (not shown).

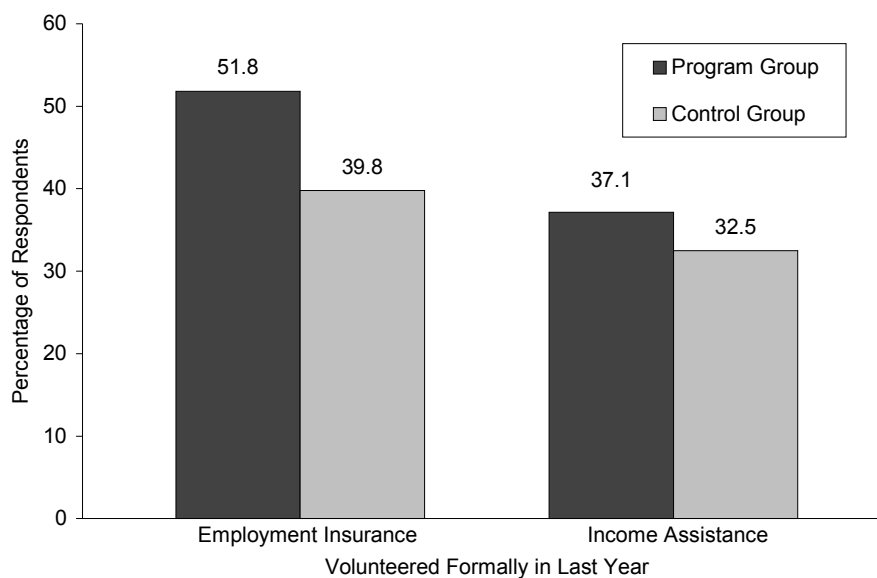
**Figure ES.4: Impacts on Social Capital — Network Density**



**A number of other small positive effects were observed on the extent of volunteering, life satisfaction, attitudes to work, and residential mobility.**

Figure ES.5 illustrates the effects of CEIP on the extent of volunteering. “Formal volunteering” refers to unpaid activities offered through an organization or community group. In contrast, “informal volunteering” refers to unpaid assistance an individual offers directly, as opposed to through an organization. The figure suggests that CEIP led to an increase in the extent of formal volunteering, particularly among the EI program group, where 12 percentage points more individuals reported volunteering compared with the control group. There was also an increase of 2.4 hours per month in the average amount of time volunteered by the EI program group (not shown).

**Figure ES.5: Impacts on Volunteering**



CEIP also had a small but favourable impact on subjective well-being and appears to have reinforced some of the existing positive beliefs of sample members on particular measures related to work (improved feelings towards work and further support from family in taking a job). With respect to mobility, CEIP did not have an impact on out-migration at the 18-month point, but it did lead to small changes in residential movement within communities and to other areas of Cape Breton.

## **SUMMARY**

The 18-month impact results demonstrate that, as hypothesized, CEIP has provided a significant stable period of full-time employment to both EI and IA program group members, over and above what they would have achieved without the program. Impacts on earnings were substantial, as were reductions in reliance on EI and IA benefits. This translated into increased income for participants, particularly for the IA sample, where large reductions in the incidence of low income were observed. Associated with this improved income and

employment stability are some small but positive impacts on social networks, volunteering, life satisfaction, and attitudes to work.

But will CEIP's impacts at 18 months translate into improvements in participants' longer-term employability and quality of life? This is one of the primary questions the project is attempting to address, but it can only be answered in later stages. The next planned report will draw on data from the 40-month follow-up survey, which is four months after the end of CEIP eligibility. Data from the final 54-month follow-up survey, administered over a year and a half after the end of the program, will be used to assess the longer-run impacts of CEIP.

# Chapter 1:

## Background and Overview

The purpose of this chapter is to provide an introduction to the Community Employment Innovation Project (CEIP), including background on the policy context and underlying theory that led to the intervention as well as a detailed description of the design in terms of both the program model and evaluation strategy. The first section reviews the contextual and theoretical basis for CEIP, including the move to more active re-employment strategies and growing policy interest in the social economy and social capital. Rationale for Cape Breton as the study area is also provided. The second section presents the CEIP program model in terms of the offer that was made to individuals and the role of communities in the study. The third section reviews the research design, with a focus on the experimental impact study, which is the subject of this report. The final section provides an overview of the report, including details on the report sample, the data sources used for the analysis, and a chapter outline.

### POLICY CONTEXT FOR CEIP

This section describes the policy context and primary motivations that led to the design of CEIP and the desire for a test of this particular intervention. First, the interest in moving towards more “active” re-employment measures is discussed, in the context of developments within two components of Canada’s income security system — the national program of Employment Insurance (EI) and provincial income assistance (IA) programs. Second, the growing interest and developments in the concepts of the social economy and social capital, and in their links to employment, are reviewed.

#### Active Labour Market Policies

Since the late 1980s, labour market policy discussions have been dominated by what is known as “active” labour market policy measures.<sup>1</sup> The idea is that transfer programs should encourage recipients to work rather than “passively” providing cash benefits *regardless* of whether they work while receiving them. This interest in active measures has affected policy developments in both the federal EI and provincial IA programs in Canada and is also relevant to the design of CEIP and the impetus for the intervention.

#### ***Employment Insurance<sup>2</sup>***

The *1996 Employment Insurance Act* specifically provides for “active” measures, known as *Employment Benefits and Support Measures* (EBSM), including earnings supplements, wage subsidies, and self-employment assistance. These measures encourage (and subsidize) EI recipients who try to leave EI for market work. For example, an earnings supplement program might “top up” the earnings of those who leave EI and take up paid employment.

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<sup>1</sup>See, for example, the discussions in Organisation for Economic Co-operation and Development (1989, 1990).

<sup>2</sup>For a more complete review on the developments within the Employment Insurance program relevant to the design of CEIP, see *The Community Employment Innovation Project: Design and Implementation* (2003).

Such payments are, in effect, an alternative mechanism of providing transfers that make work attractive relative to the receipt of cash benefits while not working. Included among the EBSM is the Research and Innovations Support Measure — the source of funds used for CEIP — that funds the testing of innovative programs that help individuals return to work.

CEIP is thus an attempt to experiment with another alternative to the so-called “passive” receipt of benefits. In this case, the transfer recipients are encouraged to take up community service work, recognizing the limited possibilities for market work in areas of high and continuing unemployment.

The goal of testing an active labour market policy alternative had several implications for the CEIP design. The program model could not provide participants with financial benefits that were substantially higher than those for which it was an alternative. Moreover, it could not provide large amounts of capital, financial or otherwise, since the provision of such capital is not a role typically assumed by a transfer program. And, although the program could, in principle, provide job training, other existing components of the EI system provide training, and the funders had other ways to learn about the effects of training and human capital accumulation.

### ***Income Assistance***

Paralleling the changes in EI have been similar, and perhaps even more dramatic, changes in IA programs. In the words of the National Council of Welfare: “All in all, the 1990s were a period of constant change in provincial and territorial welfare programs. Welfare changed more in the last few years than it had in all the years since the start of the Canada Assistance Plan in 1966” (National Council of Welfare, 1997, p. 117).

The general trend has been towards “reforming welfare through work.” Measures aimed at increasing participation in the labour market are seen as essential steps toward reducing welfare dependency and social exclusion as well as decreasing welfare caseloads and costs. Jurisdictions vary in the relative importance attached to incentives and sanctions and in the way resources are allocated to policing welfare rules and removing entitlements, on the one hand, and to providing programs and support services to facilitate a transition from welfare to work, on the other. However, overall, the notion of a means-tested entitlement (with benefits solely dependent on income) has been giving way to one of reciprocal obligation. Increasingly, the recipients of transfer payments are required to participate in some form of program designed to increase their probability of gaining employment and becoming self-supporting.

In Nova Scotia, coincident with the development of CEIP, the provincial government was also planning broader changes to the IA system. The new program, implemented on August 1, 2001, was governed by a new *Employment Support and Income Assistance Act* (replacing the *Family Benefits Act* and the *Social Assistance Act*). Changes included a modified IA rate structure and the introduction of an Integrated Child Benefit that brought together national and Nova Scotia child benefit payments. The new program also added a requirement for all IA recipients to have their employment readiness assessed and made



“enhanced employment supports” available to facilitate transitions from welfare to work.<sup>3</sup> In introducing the changes, the Nova Scotia Minister of Community Services stated:

*The new act emphasizes employment as the key to self-sufficiency. We are replacing a 30-year-old passive welfare system with one that recognizes that, with the right supports, Nova Scotians can free themselves and their families from a lifetime of dependence.* (Nova Scotia Department of Community Services, 2001, p. 1)

The CEIP program model, in providing alternative employment opportunities for IA recipients, was seen as consistent with the heightened focus on employment inherent in the program changes that the provincial government was making.

## **The Social Economy and Social Capital**

The next contextual strand underpinning CEIP is the growing interest in the concepts of the social economy and social capital and in their links to employment. As Ninacs (2002) points out, the concept of the social economy is not new, but it has been undergoing some evolution (for example, from the “old” social economy, defined in terms of the structural aspects of the organizations — co-operatives, mutual societies — that make it up, to the “new” social economy defined in terms of “relational and sociological” aspects of organizations, their activities, and the people who make them up).

CEIP hopes to explore the potential of the social economy to serve as a source of employment in places where the private and public sectors have not produced a sufficient number of jobs. Providing support for employment in the social economy may lead to some strengthening of that sector; however, the main goal is to use activities in the social economy to generate meaningful work opportunities for the long-term unemployed.

Providing temporary jobs as a mechanism for enhancing longer-term employability is also not new, but recently this approach has been gaining more support. Johnson (1997) suggests that the notion of using public funds to create wage-paying jobs in the non-profit and public sectors for those who cannot otherwise find work is attracting renewed interest in the United States and describes Vermont’s Community Service Employment Program and the New Hope project in Milwaukee as noteworthy examples of new initiatives. McGregor, Clark, Ferguson, and Scullion (1997) estimate that there are some 3,700 organizations operating in the social economy of lowland Scotland employing 42,000 people and that among the principal benefits of their activities is the creation of employment opportunities to facilitate the reintegration into society of people from disadvantaged groups. The Conference of Religious of Ireland (1998) reports on a pilot project that made paid part-time employment opportunities available to unemployed individuals on a voluntary basis doing work of “public or social value.” And Borzaga (1999) describes the widespread use in Italy of “work integration social enterprises” that produce private goods and services, public goods, and social and community care services in order to create jobs for disadvantaged workers.

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<sup>3</sup>Enhanced employment supports included extended prescription drug coverage for up to 12 months after starting a job, reimbursement of up to \$400 a month in child-care expenses and \$150 a month in transportation costs, payment of a one-time “new start” allowance of \$200 for part-time employment and \$400 for full-time employment, a disregard of 30 per cent of net earnings from the calculation of IA benefit entitlement, a covering of the costs of some work-related items (e.g. work boots, uniforms, tools, and supplies), and an increase in the coverage of costs for employment-related training courses.

In CEIP, communities were encouraged to focus on the social economy; however, no particular definition of what constitutes the social economy was imposed on them.<sup>4</sup> From the outset, project designers struggled to strike a balance between, on the one hand, establishing frameworks or guidelines to push the project in certain directions (for example, toward activities in the social economy) and, on the other hand, delegating responsibilities and decision-making authority to citizens at the local level (many of whom would prefer to direct resources to more traditional economic infrastructure building and the creation of private sector employment). In CEIP, the only benefit provided to projects was the temporary availability of “free” workers; any other resources that were needed were the responsibility of project sponsors to provide. Consequently, the projects supported by CEIP were more likely to be labour intensive and to be sponsored by organizations with a history of and interest in supporting community betterment. Moreover, among the general guidelines established for eligible projects was a requirement that any profits be used for the benefit of the community and not for the private benefit of any smaller group of individuals.<sup>5</sup> This focus on community benefit necessarily steered community projects in the direction of social economy activities.

Ultimately, however, decisions regarding the nature of community projects to be included in CEIP were, for the most part, left to representatives of the communities themselves. To do otherwise would have undermined CEIP’s ability to foster community engagement. The literature on the effects of community engagement or grassroots organization on the communities in which they occur has a long history (Fisher, 1995). Nonetheless, there have been few attempts to carefully study the link between external efforts to stimulate such engagement and community development and the effects that are observed in the community. In a literature review of the effects of community projects in the social economy, Mathieu (1996) concludes that other studies have “generally not or only poorly developed the question of community organizations’ social impact and its relationship to development” (p. 89, translation from French).

CEIP is also exploring the concept of social capital and the potential for a community-based jobs program to support its creation. There are some links between the concepts of the social economy and social capital, especially in terms of the potential role of “associational activity.” Some researchers have considered the effects of associational activity — participation in informal and semi-formal organizations and networks, such as fraternal organizations, service clubs, community associations, protest and pressure groups, the Church, and — famously, thanks to Putnam (2000) — bowling in organized leagues. For example, a study of neighbourhood associations in the United States (Berry, Portney, & Thomson, 1993) reviewed by Smock (1997) concludes that there is “a strong and positive relationship between level of participation and sense of community.” Community

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<sup>4</sup>At one point, consideration was given to requiring projects to be based on “social enterprises,” perhaps emulating those in Quebec. This would have meant that only projects that had more precisely defined characteristics (e.g. non-profit businesses producing goods and services and having democratic organizational structures based on employee ownership) would be eligible for CEIP. This approach was not adopted, since it would have placed more constraints on the choices that communities were able to make and would likely have required much more in the way of a supporting infrastructure — such as is provided by the Chantier de l’économie sociale in Quebec. Social enterprises would also have taken much more time to develop and would likely have produced significantly fewer work opportunities for participating individuals (it is unlikely that 750 social enterprise jobs could have been developed within the time frame required by CEIP).

<sup>5</sup>The project guidelines are discussed in Chapter 4 of *The Community Employment Innovation Project: Design and Implementation* (2003).

empowerment through engagement with initiatives has also been associated with positive changes in neighbourhood self-image (Eisen, 1994; quoted in same source). So some benefits to social cohesion have been associated with neighbourhood organizing.

There is also some support in the literature for the notion that associational activity can have effects on economic outcomes — principally through its effects on helping to build social capital. Putnam (1993, 2000) uses a definition of social capital that is manifested as trust and norms of civic-minded behaviour, and he argues that it is essential to a society's economic progress. He further argues that a decline in social capital may have deleterious economic consequences. Knack and Keefer (1997) also offer evidence that trust and civic norms have a significant relationship with economic performance, although here the findings suggest that this is not related to (and, therefore, not mediated by) associational activity.

An alternative, and more precise, definition of social capital describes it as being “made up of social obligations, ‘connections’, which are convertible, in certain conditions, into economic capital . . .” and as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (Bourdieu, 1986, pp. 243, 248). CEIP is using this concept of social capital, which focuses on the *networks* that individuals have (Johnson, 2003). Social capital is accessed through the social network of which the person is a part. If a person's network contains only *bonding* ties (to family and close friends) or *bridging* ties to more distant friends and associates of similar socio-economic status, then the social capital within the network is likely to be of less use in generating social and economic change than if there was a vertical dimension to the network. Vertical *linkages* in the network to people of higher status (or with broader networks) would give the person capacity to leverage resources, ideas, and information that can help change their fortunes. CEIP is intended to expand the *linking social capital* of this type that is accessible to community residents and individual participants.

The mechanism in CEIP that potentially alters the social capital accessible by participants is the succession of assignments to community-based projects. These should expand the networks participants are part of by bringing them into contact with a broad range of people (project sponsors, other participants, training organizations). The mechanisms that potentially alter the social capital accessible by community residents are the process of community organization (meetings, canvassing, volunteering for boards or project-sponsoring agencies) and the products of community projects (the delivery of new services like daycare or seniors' centres that bring diverse groups of people together).

## **CEIP PROGRAM MODEL**

### **The Offer to Individuals**

An invitation to participate in CEIP was offered to a random sample of EI beneficiaries from the Cape Breton Regional Municipality (CBRM) who were at least 18 years of age, had received at least \$1 of regular EI benefits during the selection month, and who had received between 10 and 13 weeks of benefits while also having 12 or more weeks of entitlement

remaining on their claim.<sup>6</sup> Similarly, the CEIP offer was also made to a random sample of IA recipients who were residents of the CBRM, at least 18 years of age, and received at least \$1 in benefits during the month they were selected as a potential sample member.

The core of the CEIP offer made to eligible individuals was the chance to exchange their entitlements to EI or IA for the opportunity to work for up to three years on projects in selected communities in the CBRM. In most respects, CEIP employment was set up to replicate a “real job.” Participants were required to work (or engage in other eligible activities) for 35 hours a week. In return, they were paid a community wage. Initially set at \$280 a week, the community wage, which was indexed to increases in the provincial minimum wage, eventually rose to \$325 a week. CEIP employment was insurable under the EI program and covered by the Nova Scotia Workers’ Compensation program and the Canada Pension Plan. Participants were paid for statutory holidays and accumulated an entitlement to “personal days,” which could be taken as paid vacation or sick days. They could also choose to enrol in a private health plan, with premiums shared between CEIP and the participants who opted for coverage.

An important parameter of the CEIP program model was that during the eligibility period participants were free to leave the project, for example to take a job or to enrol in a training course, and could later return if their three-year period of eligibility had not expired. However, participants who left CEIP and returned to EI or IA forfeited any further eligibility to take part in CEIP.<sup>7</sup>

Although the principal CEIP activity for participants was working on community-based projects, a number of ancillary activities were built into the program model.

### ***Employability Assessment***

The initial two weeks of CEIP participation consisted of an orientation period during which participants underwent an employability assessment to determine their level of job-readiness and to collect information on their prior experience, skills, and interests to support job-matching — the process of assigning participants to community work placements.

### ***Basic Job-Readiness and Transferable Skills Training***

Though CEIP was not a training intervention, limited training components were provided including basic job-readiness training and some transferable skills modules. Most participants received introductory job-readiness modules prior to their initial placements, while others received additional modules to help deal with identified performance issues. All participants also received a limited amount of *transferable skills training* in the form of short courses on such topics as first aid, occupational health and safety, and computer literacy.

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<sup>6</sup>By not selecting from the entire caseload, CEIP avoided selecting new applicants and individuals with only a short period on EI — those who may have been able to re-enter the workforce quickly. Furthermore, with at least 12 or more weeks remaining on their claim, there was a trade-off in participating in CEIP, such that selected individuals had to evaluate the effect of giving up future EI benefits. Chapter 2 discusses the selection and recruitment process in more detail.

<sup>7</sup>CEIP did, however, permit participants to receive IA top-up payments to supplement their CEIP earnings, provided they did not resort to basic IA benefits as their principle source of income (comprising more than half of their total income).

### ***Transitional and Self-Directed Projects***

Though the central CEIP work placements were community-based — with CEIP project sponsors — some participants, who were either between assignments or who were judged to have not been job-ready, may have spent some time working in a *transitional jobs* provided by the CEIP consortium rather than by a community. Another alternative to community placements with sponsors were self-directed projects. Participants could choose to try to develop their own ideas into a *self-directed project*; CEIP would provide them with 1 week of entrepreneurship training and a further 11 weeks in which to develop a project proposal.

### ***Portfolio Development and Job-Search Supports***

Towards the end of their eligibility period, participants were eligible to receive assistance in *portfolio building* to bring together material (such as descriptions of positions held, training certificates, and letters of recommendation) accumulated over the three years of CEIP participation. Finally, during the final three months of eligibility, each participant was given paid time off — up to seven hours per week — to engage in *job-search* activities.

### **The Role of Communities**

A small number of communities in industrial Cape Breton were selected to take part in CEIP. These communities were as much “participants” in CEIP as the individuals who were enrolled in the project. Individual participants were given the opportunity to take part in employment; however, the responsibility for generating the employment opportunities rested with the communities.

The role played by the communities had two main dimensions. First, each community had to create a democratic structure to make decisions regarding the use of CEIP resources. These CEIP “community boards” were initially charged with developing strategic plans and setting priorities for the kinds of projects that would have access to workers supplied by CEIP. Second, the communities were responsible for organizing specific projects that would employ CEIP workers to help address the community needs that were identified. This was a shared responsibility. Any community organization or individual could develop a proposal to sponsor a project (although they must have had the capacity to manage the project, including providing any other resources that might have been needed, such as facilities, tools and equipment, supervisors, and workers with specialized skills). Responsibility for deciding which proposals would be approved and granted access to the pool of CEIP workers rested with the community boards.

The main element of CEIP’s offer to communities was the chance to be the beneficiaries of the “free labour” provided by the project, and it was hoped that this would serve as a catalyst for community action. However, CEIP’s design recognized that communities would vary in their capacities to undertake the tasks assigned to them. Consequently, each community board received a planning grant of up to \$30,000 to defray some of the direct costs of engaging in CEIP activities at the local level. In addition, the CEIP budget included funds to hire and make available to community boards expertise to support them in undertaking CEIP-related tasks (such as setting up and running the volunteer community boards, marketing and communications activities, community mobilizing, and strategic planning).

## CEIP EVALUATION DESIGN

CEIP is managed by the Social Research and Demonstration Corporation (SRDC), a non-profit social policy research organization that specializes in developing, implementing, and evaluating large-scale, long-term projects to test innovative social policies and programs. CEIP has been set up as a demonstration project to assess the feasibility of implementing a community-based jobs program for the long-term unemployed, to estimate the benefits generated by such a program, and to determine whether the benefits are worth the cost of producing them. In considering benefits, CEIP is considering both those that accrue to individuals who work on the community-based projects and those that are experienced by the communities where the projects take place.

Why might CEIP's program model produce beneficial effects? First, for the individual participants, the program may enhance their employability, leading to more employment and increased earnings in the future as well as reduced reliance on transfers. Working on community-based projects offers them an opportunity to gain work experience and acquire new skills. In addition to adding to "human capital," CEIP may also contribute to an individual's "social capital." Participants who work together may develop stronger peer support networks. Project participation also brings participants into contact with project-sponsoring organizations and with individuals and organizations that benefit from the services being provided. This gives participants a chance to develop stronger social networks in the community.

Second, for the communities, there may be a positive contribution to community development. The products or services provided by the community projects are focused on needs identified at the local level, and can thus directly provide value to the community. The availability of the free labour provided by CEIP participants, or the services provided by the organizations employing them, may strengthen existing community organizations or lead to the creation of new ones. The volunteers who participate on community boards or who get involved in sponsoring projects may themselves develop new skills or stronger social networks. Over the longer run, a community's resiliency and its capacity to overcome adversity may be enhanced. Finally, for the governments that are funding CEIP and for society as a whole, this program model may be a cost-effective alternative to traditional transfer payments.

The evaluation strategy for CEIP is designed to address all these issues. It includes four main components:

1. **Implementation research** to carefully document how the project was implemented, to assess how closely the program in the field matched the original design, to evaluate potential participants' understanding of the CEIP offer, and to identify delivery issues that can aid in better understanding *how* and *why* the program worked (or failed to work).
2. **An individual impact study** using a random assignment design to compare the experiences of those in CEIP's program group with the experiences of a control group who were not eligible to work on community-based projects.
3. **A community effects study** using both a "theory of change" approach and a quasi-experimental comparison community design to evaluate the effects on the communities that participated in CEIP.

4. **A benefit–cost analysis** to compare the economic benefits that accrue to both the participating individuals and the communities with the cost of producing those benefits.

## **OVERVIEW OF THE 18-MONTH IMPACT STUDY**

This report is concerned primarily with the second element of the evaluation strategy — the individual impact study. It reviews the results of the impact analysis through 18 months of program participation, and hence presents “in-program” impacts while program group members were still eligible for participation in CEIP. The impact of CEIP on program group members’ employment levels, earnings, transfer receipt, and overall income levels are reviewed. Beyond economic outcomes, the report also considers impacts of CEIP on social capital, volunteering, health and well-being, attitudes, and residential mobility, among others. Although CEIP may have led to these types of impacts after only 18 months, there was not a strong expectation that they would be observed after only half of the eligibility period had passed. Future reports will look at the longer term impacts of CEIP, after the three-year eligibility period has expired.

The remainder of this chapter briefly reviews the basic methodology in conducting impact analyses and identifies the data sources and sample used for this report. It concludes with a chapter-by-chapter outline of the report.

### **Methodology**

The goal of the individual impact analysis is to measure the changes in outcomes that CEIP produces for the individuals who take part. The methodology being used to conduct the analysis is a random assignment evaluation design. In isolation, simply looking at the outcomes of those who take part in a program, such as the one offered by CEIP, will almost always overstate the program’s achievements, because all positive developments will be attributed to the program — they do not identify the extent to which the observed outcomes simply reflect what people would have done on their own. The challenge in an impact evaluation is to determine the difference that the program makes — the changes in outcomes that result from the program.

The difference between the observed outcome of program participants and what the outcome would have been without the program is called an “impact.” The measure of what the outcome would have been in the absence of the program is called the “counterfactual.” Most commonly, a counterfactual is created by identifying a “comparison group” that resembles as closely as possible the group that takes part in the program. It is generally accepted that the best method of creating a comparison group is by means of random assignment. Starting with a group of individuals, all of whom meet selection criteria for the program to be tested, each individual is assigned at random either to a group that will be eligible to take part in the program or to a group that will not be eligible. Those assigned to the latter group provide the comparison for evaluation purposes; and when random assignment is used, the comparison group is referred to as a “control group.”

The process of random assignment ensures that there are no systematic pre-existing differences between the program and control groups.<sup>8</sup> They differ only in that one group is eligible for the program and the other is not. Therefore, any differences that are observed over time in the experiences of the two groups can be attributed with confidence to the program.

## **Data Sources**

There are six data sources being used for the impact study in this report. Each source is described in more detail below.

### ***Baseline Survey***

A baseline survey was administered to all CEIP volunteers at the point of enrolment in the study. The survey collected information on a range of demographic characteristics, household composition, income, and employment history. Beyond being useful to describe the population involved in the study, the baseline survey provides data to support the impact analysis.

First, baseline data is used to establish covariates when running adjusted impact regressions. Due to random assignment, the program and control group are expected to be similar in characteristics. Nonetheless, some differences in the two groups may be observed due to sampling variation. Such differences are a problem of precision rather than bias, and can be dealt with through regression adjustment using the baseline covariates. Although this report presents unadjusted impacts, regression-adjusted impacts have been calculated and are mentioned where adjusted impacts diverge significantly from the unadjusted. Adjusted impact tables are also included in Appendix D. Second, baseline data can be used to create subgroups to assess variations in impacts across the program group. For this report, subgroup impacts are discussed briefly, throughout each chapter, where relevant. A selection of subgroup impact tables are included in Appendix E. Future reports will present a more in-depth look at subgroup impacts when the full eligibility period for CEIP has elapsed.

### ***18-Month Survey***

The primary data source used for this impact study is the 18-month follow-up survey. Statistics Canada administered this as a telephone survey to program and control group members 18 months after their enrolment in the study. Modules covered all of the key outcomes of interest, which could not be analyzed through administrative data sources, including employment history, personal and household income, social capital, household composition, attitudes, and health and well-being.

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<sup>8</sup>Strictly speaking, the *expected values* of the averages for all pre-existing characteristics of the program group and the control group are the same, although their *actual values* may differ somewhat, especially in small samples. Random assignment ensures that the two groups will not differ systematically, but it does not guarantee that they will be identical. Random differences can still occur, and though they do not introduce systematic bias into the impact estimates, they do reduce the precision of the estimates. Data on the characteristics of the sample can be collected just prior to random assignment and can be used subsequently in regression models to adjust for these random differences and improve the precision of the estimates. See, for example, Mohr (1995) and Orr (1999).



### ***Administrative Data Files***

EI and IA administrative records are used to determine the amounts and duration of transfer receipt by sample members.

### ***PMIS***

A project management information system (PMIS) was implemented in the CEIP program office to support operations and service delivery while also collecting critical research data including participation rates in CEIP, types of community jobs, duration of work, and amounts of community wages received. This information is used in conjunction with survey and administrative data to derive the employment and earnings outcomes.

### ***Qualitative Data Sources***

In addition to survey and administrative data, qualitative interviews with CEIP participants and program delivery staff are drawn on to support the impact study. These qualitative methods were used as part of the implementation research to study program delivery issues. They can also be useful in exploring the impacts estimated from quantitative data sources. This report utilizes qualitative interviews conducted with a sample of CEIP participants six months after their enrolment.

## **THE 18-MONTH REPORT SAMPLE**

The focus of this report is on research sample members who completed the 18-month follow-up survey — referred to as the “18-month report sample.” As is expected with any longitudinal survey, not all of the enrollees who completed a baseline survey responded to the 18-month follow-up survey. In this report, the analysis is limited to the 1,363 CEIP enrollees who completed the 18-month survey, which includes 898 EI sample members (470 program group; 428 control group) and 465 IA members (237 program group; 228 control group). This represents a 90 per cent survey response rate from the original baseline sample of 1,522 enrollees.

### **Baseline Characteristics of the Report Sample**

Table 1.1 and 1.2 present baseline characteristics of EI and IA sample members, respectively, who responded to the 18-month follow-up survey. EI respondents are more likely to be male and are older with an average age of 41 compared with their IA counterparts whose average age was 36. Most EI sample members have a high school diploma and significant prior work experience. A higher proportion of IA respondents do not have a high school diploma and had significantly less prior work experience along with more reliance on transfers in the year prior to CEIP enrolment. Most EI and IA respondents have lived in Cape Breton all their life and have a strong attachment to their communities, and most have small, dense, and homogeneous social networks.

### **Random Assignment and Survey Non-response**

As illustrated in the initial CEIP implementation report (Greenwood et al., 2003), random assignment was implemented successfully without any systematic differences between program and control groups. Some differences did arise due to sampling variation but will

not result in biased impacts. However, survey non-response might exacerbate some of the differences present in the baseline sample and therefore need to be reassessed in the 18-month report sample. The differences between program and control group members in tables 1.1 and 1.2 are reflective of this sampling variation as well as the effects of survey non-response.

Table 1.1 reveals that there are a few differences between EI program and control group members, some which were not statistically significant in the baseline sample, but are in the 18-month report sample. The EI program group has fewer women than men compared with the control group (40.4 per cent versus 47.7 per cent female in the EI program and control groups respectively), are more likely to live in households without children (57.7 per cent EI program group versus 51.6 per cent EI control group), and have children 6 to 12 years of age (35.4 per cent EI program group versus 25.1 per cent EI control group). Fewer EI program group members have a household income of \$30,000 or more (32.9 per cent EI program group versus 40.6 per cent EI control group). EI program group respondents to the 18-month survey also appear to have smaller social networks than the control group (37.2 per cent versus 44.4 per cent with 10 or more contacts at baseline for EI program and control group respectively). They also appear to volunteer somewhat less than their control group counterparts (51.1 per cent versus 56.7 per cent volunteered formally in the program and control group respectively).

**Table 1.1: Characteristics of EI Sample Members — Program and Control Groups**

<b>Baseline Characteristics</b>	<b>Program Group</b>	<b>Control Group</b>	<b>Difference (Impact)</b>	<b>Standard Error</b>
<b>EI history</b>				
Average number of months of EI in last 12 months	6.2	6.2	0.0	(0.2)
Average monthly EI payment in month of random assignment (\$)	855	865	-10	(34.3)
<b>Work history</b>				
Years worked at paid job since 16 years of age	18.8	18.2	0.6	(0.7)
In paid work at baseline (%)	19.9	17.7	2.2	(2.6)
<b>Personal characteristics</b>				
Female (%)	40.4	47.7	-7.2 **	(3.3)
Age when selected	40.8	40.8	-0.1	(0.7)
Single/separated/divorced/widowed at baseline (%)	41.1	37.2	3.8	(3.3)
Activity limitations or fair/poor health at baseline (%)	30.9	26.4	4.4	(3.0)
Less than high school education (%)	31.5	29.7	1.8	(3.1)
10 or more contacts at baseline (%)	37.2	44.4	-7.2 **	(3.3)
<b>Attachment to community</b>				
Time lived in Cape Breton (%)				
Less than 10 years	4.5	4.2	0.3	(1.4)
More than 10 years	95.5	95.8	-0.3	(1.4)
All my life	75.5	78.1	-2.6	(2.8)

(continued)

**Table 1.1: Characteristics of EI Sample Members — Program and Control Groups (Cont'd)**

<b>Baseline Characteristics</b>	<b>Program Group</b>	<b>Control Group</b>	<b>Difference (Impact)</b>	<b>Standard Error</b>
Time lived at current address (%)				
Less than 1 year	10.9	11.9	-1.0	(2.1)
1 to 4 years	19.2	19.2	0.0	(2.6)
5 to 9 years	10.0	14.3	-4.2 *	(2.2)
10 or more years	59.9	54.7	5.2	(3.3)
All my life	14.3	13.1	1.2	(2.3)
<b>Household characteristics (%)</b>				
Children in household				
No children	57.7	51.6	6.0 *	(3.3)
1 to 2 children	37.2	41.6	-4.4	(3.3)
3 or more children	5.1	6.8	-1.7	(1.6)
Age of youngest child in household				
Under 3 years	15.7	15.9	-0.3	(3.6)
3 to 5 years	12.6	22.2	-9.6 **	(3.8)
6 to 12 years	35.4	25.1	10.2 **	(4.5)
13 to 17 years	34.3	35.3	-0.9	(4.7)
Number of people in household				
1 person	7.4	5.4	2.1	(1.6)
2 to 3 people	56.6	61.4	-4.9	(3.3)
4 or more people	36.0	33.2	2.8	(3.2)
Household income				
Less than \$10,000	11.1	9.9	1.3	(2.1)
\$10,000 to <\$20,000	31.2	30.3	0.9	(3.1)
\$20,000 to <\$30,000	24.8	19.2	5.5 **	(2.8)
\$30,000 or more	32.9	40.6	-7.7 **	(3.2)
<b>Attitudes towards work (%)</b>				
Will take additional training to improve job prospects	97.0	97.9	-0.9	(1.1)
Will move permanently outside Cape Breton in order to get a job	16.2	15.9	0.3	(2.5)
Will move part of each year in order to get a job	29.3	25.4	3.9	(3.0)
Will work for a lower wage in order to get a job	51.8	51.9	-0.2	(3.4)
Will work in a different occupation or industry in order to get a job	91.8	91.2	0.6	(1.9)
<b>Volunteer activities</b>				
Volunteered on behalf of group/organization	51.1	56.7	-5.6 *	(3.3)
Volunteered informally	88.3	85.0	3.3	(2.3)
<b>Sample size (total = 898)</b>	<b>470</b>	<b>428</b>		

**Sources:** Calculations from baseline survey data and Employment Insurance administrative records.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences in characteristics between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

Table 1.2 reveals that there are also a few differences between IA program and control group members, although few reach the level of statistical significance. The IA program group appears somewhat more open to moving in order to get a job (22.6 per cent versus 15.8 per cent for the IA program and control group respectively). Similar to the EI program group, they are also more likely to live in households without children (41.1 per cent IA program group versus 32.5 per cent IA control group).

**Table 1.2: Characteristics of IA Sample Members — Program and Control Groups**

<b>Baseline Characteristics</b>	<b>Program Group</b>	<b>Control Group</b>	<b>Difference (Impact)</b>	<b>Standard Error</b>
<b>IA history</b>				
Average number of months of IA in last 12 months	10.4	0.4	0.0	(0.3)
Average monthly IA payment in month of random assignment (\$)	517	518	-2	(26.6)
<b>Work history</b>				
Years worked at paid job since 16 years of age	7.5	8.2	-0.7	(0.9)
In paid work at baseline (%)	16.1	17.0	-0.9	(3.7)
<b>Personal characteristics</b>				
Female (%)	61.6	65.4	-3.7	(4.5)
Age when selected	35.8	36.2	-0.4	(0.9)
Single/separated/divorced/widowed at baseline (%)	79.1	82.8	-3.8	(3.7)
Activity limitations or fair/poor health at baseline (%)	36.7	33.8	2.9	(4.4)
Less than high school education (%)	42.5	35.7	6.8	(4.6)
10 or more contacts at baseline (%)	33.5	32.2	1.3	(4.4)
<b>Attachment to community</b>				
Time lived in Cape Breton (%)				
Less than 10 years	4.2	3.1	1.2	(1.7)
More than 10 years	95.8	96.9	-1.2	(1.7)
All my life	76.7	71.5	5.2	(4.1)
Time lived at current address (%)				
Less than 1 year	23.2	22.4	0.8	(3.9)
1 to 4 years	38.0	32.9	5.1	(4.4)
5 to 9 years	11.8	16.7	-4.9	(3.2)
10 or more years	27.0	28.1	-1.1	(4.2)
All my life	11.4	11.0	0.4	(2.9)
<b>Household characteristics (%)</b>				
Children in household				
No children	41.1	32.5	8.6 *	(4.5)
1 to 2 children	47.5	53.1	-5.6	(4.6)
3 or more children	11.4	14.5	-3.0	(3.1)
Age of youngest child in household				
Under 3 years	24.3	21.4	2.9	(4.9)
3 to 5 years	21.4	22.7	-1.3	(4.9)
6 to 12 years	31.4	33.1	-1.7	(5.5)
13 to 17 years	20.0	20.8	-0.8	(4.7)

(continued)

**Table 1.2: Characteristics of IA Sample Members — Program and Control Groups (Cont'd)**

<b>Baseline Characteristics</b>	<b>Program Group</b>	<b>Control Group</b>	<b>Difference (Impact)</b>	<b>Standard Error</b>
Number of people in household				
1 person	10.6	10.5	0.1	(2.9)
2 to 3 people	57.6	64.0	-6.4	(4.5)
4 or more people	31.8	25.4	6.3	(4.2)
Household income				
Less than \$10,000	56.5	60.8	-4.3	(4.6)
\$10,000 to <\$20,000	35.9	35.7	0.2	(4.5)
\$20,000 to <\$30,000	4.6	2.6	2.0	(1.7)
\$30,000 or more	3.0	0.9	2.1	(1.3)
<b>Attitudes towards work (%)</b>				
Will take additional training to improve job prospects	96.2	98.2	-2.1	(1.5)
Will move permanently outside Cape Breton in order to get a job	22.6	15.8	6.8 *	(3.7)
Will move part of each year in order to get a job	25.7	21.6	4.0	(4.0)
Will work for a lower wage in order to get a job	43.5	41.1	2.4	(4.8)
Will work in a different occupation or industry in order to get a job	90.4	87.1	3.3	(3.1)
<b>Volunteer activities</b>				
Volunteered on behalf of group/organization	44.9	52.4	-7.5	(4.6)
Volunteered informally	86.0	82.9	3.1	(3.4)
<b>Sample size (total = 465)</b>	<b>237</b>	<b>228</b>		

**Sources:** Calculations from baseline survey data and income assistance administrative records.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences in characteristics between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

Although, these differences are not reflective of systematic problems with random assignment or non-response bias,<sup>9</sup> regression-adjusted impacts that include a range of these baseline covariates were checked as part of the analysis, particularly when the baseline difference is also a measured follow-up outcome of interest (e.g. impacts on income, social capital, and volunteering). However, adjusted impacts are discussed only if they diverge significantly from the unadjusted findings.

## REPORT OUTLINE

Chapter 2 provides a brief review of the implementation of CEIP including the engagement of communities, the development of the CEIP office and program services, participant recruitment, and details on the types of projects and jobs that program participants had been working on. Following the background on implementation, the next two chapters present the impacts of CEIP on the central economic outcomes of interest in the study.

<sup>9</sup>An analysis of non-response bias was completed separately from the analysis of sampling variation in baseline characteristics and revealed no significant concerns. Given the high re-interview rate of over 90 per cent, sample sizes were too small among the non-respondent group to report results in many of the baseline categories. Future impact reports will conduct similar analyses later in the follow-up, when non-response is more likely to be a concern.

Chapter 3 presents impacts on employment rates, earnings, and wages. Chapter 4 reviews impacts on EI and IA transfer receipt, personal and household income, and measures of the incidence of low income. Chapter 5 moves beyond economic impacts and presents impacts of CEIP on social capital and the extent of volunteering. Chapter 6 reviews a range of other outcomes including the impact of CEIP on program group members' health and well-being, residential mobility, education, and their attitudes to work and transfer payments. Chapter 7 provides a concluding summary of the key impacts at 18 months and raises important questions about critical impacts to watch for in subsequent reports, which will cover the full CEIP eligibility period and beyond.

## Chapter 2: Implementing CEIP

This chapter provides a brief review of the implementation of the Community Employment Innovation Project (CEIP).<sup>1</sup> First it looks at the process of engaging communities and the role they play in the study. It then describes the establishment of the CEIP program office in Cape Breton — the main service delivery centre. The remainder of the chapter presents details of the recruitment of participants and their response to the offer in terms of the take-up and participation rates with various elements of the program. Details on the types of projects and jobs that participants were engaged in are also provided. The chapter concludes with a discussion of non-volunteers and their reasons for declining the offer.

### SUMMARY OF FINDINGS

- **Five of the six communities that were approached to participate in CEIP were successful in completing the process of organizing a community board, preparing a strategic plan, and mobilizing project sponsors.** The pre-amalgamation towns of Dominion, New Waterford, Sydney Mines, North Sydney, Glace Bay, and the Whitney Pier neighbourhood of the pre-amalgamation city of Sydney were selected for CEIP. All six agreed to take part in CEIP, and five of the six went on to approve projects.
- **A program office was successfully established to implement and deliver the CEIP program in the Cape Breton Regional Municipality (CBRM).** A consortium of four organizations — The Cape Breton Family YMCA, Breton Business Center, Breton Rehab Services, and Atlantic Action Program–Cape Breton — came together in December 1999 to begin planning for the opening of the CEIP office. By the end of August 2000 the CEIP office was officially opened and began recruiting participants.
- **CEIP was successful in recruiting and enrolling individuals from Employment Insurance (EI) and income assistance (IA) to participate in the project.** As planned, CEIP was able to recruit sufficient numbers of sample members over the two-year enrolment period. By the end of the enrolment period, 998 eligible EI beneficiaries and 516 IA recipients were enrolled in the project.<sup>2</sup>

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<sup>1</sup>*The Community Employment Innovation Project: Design and Implementation* (2003) provides a detailed documentation of the implementation of CEIP.

<sup>2</sup>A total of 1,006 individuals selected from the EI caseload completed an enrolment form. However, eight individuals were dropped from the evaluation. Seven of these were volunteers who resided on the Eskasoni reserve. This reserve is surrounded by the CBRM but is not officially part of the municipality. These individuals met the eligibility criteria for selection from the caseload and were permitted to enrol in CEIP. However, the nature of the transfer payments and supports from which they qualify are significantly different from those of other sample members, therefore they were removed from the research sample. The other individual was dropped because data integrity checks by Statistics Canada confirmed that the individual had not been selected to join CEIP. This individual had the same name and lived at the same address as the person invited to join CEIP and bypassed initial integrity checks.

- **CEIP projects were distributed fairly evenly across the five communities, included a diversity of activities, and required a variety of occupational skills.** The communities created projects that serviced a broad range of community sectors while providing CEIP participants with a variety of occupations. The creation of 1,224 positions for participants in the first 18 months of eligibility allowed many to work in multiple positions.
- **Reasons for not taking up the CEIP offer were different for individuals selected from the EI files compared with those from IA.** Among EI eligible individuals, the decision to decline the CEIP offer was mainly because they thought the CEIP wage was too low or because they had found a job or were expecting to return to a previous job. The most often mentioned reasons by IA non-volunteers for rejecting the CEIP offer were related to personal, family, or health problems.

## ENGAGING COMMUNITIES

Six local Cape Breton communities were offered the chance to take part in CEIP — the pre-amalgamation towns of Dominion, Glace Bay, New Waterford, North Sydney, and Sydney Mines and the Whitney Pier neighbourhood of the pre-amalgamation city of Sydney.

The selected communities had to “volunteer” to participate in CEIP by means of a show of support by the majority of those attending public meetings held in each community. All six selected communities eventually chose to take part. They then had to go through a series of steps designed to engage members of the communities in the process of planning for and operating the projects that would employ CEIP participants. This process was put in place to encourage the involvement and interaction of community members in order to encourage the development of social capital and improve social inclusion and cohesion at a community level. It would also increase the likelihood that projects would be focused on the needs perceived by members of the communities and to generate benefits in these desired areas.

Each community first had to form a CEIP community board and submit the board for acceptance by the Project Implementation Committee (a committee established by CEIP’s funders, Human Resources Development Canada [HRDC]<sup>3</sup> and NS-DCS, to oversee project implementation). In seeking acceptance, the board was required to demonstrate that it had community support and that it had formally established itself in a manner that would allow it to function effectively. Once accepted, each community board was required to prepare a strategic plan. There was no prescribed process for boards to follow; the only specific requirement was that the plans include a set of identified priorities, developed through a process of consultation with the wider community, which would be used in soliciting, reviewing, and selecting projects for approval. The strategic plans also had to be submitted for acceptance by the Project Implementation Committee. Following acceptance of its plan, a community board was authorized to begin approving projects submitted to it by organizations that wished to sponsor projects. Being “approved” meant that a sponsored community project was eligible to have CEIP participants assigned to work on it.

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<sup>3</sup>During the implementation of CEIP, this government department was called HRDC. However, it has since been renamed Human Resources and Social Development Canada.



The result of this community engagement process was that all six communities agreed to take part in CEIP and all but Dominion went on to approve projects. The first projects were approved in October 2000 (in Sydney Mines and New Waterford), and by August 2001 all five active communities were approving projects. From the time of the first project approvals in October 2000 until the end of December 2003 (the point when all participants had passed the 18-month point in their eligibility) the five communities approved a total of 292 projects, which provided for a total of 1,885 participant placements.

## **ESTABLISHING A PROGRAM OFFICE**

The successful implementation of CEIP required a program with a unique set of services and delivery partners. The process of engaging local organizations and developing a consortium of local delivery partners is described below. This section is followed by a brief description of the program services provided by the CEIP office staff, including those related to recruitment, service delivery, and program administration.

### **Establishing the Consortium Partnership**

As there was significant potential for CEIP to benefit from tapping into existing community networks, the Social Research and Demonstration Corporation (SRDC) issued a request for proposals (RFP) in September 1999. The RFP solicited proposals from local individuals and organizations interested in providing delivery services for CEIP, including skill assessments, job-search and other training services, overall management of project participants, and the provision of community development expertise for the community groups.

In order to ensure CEIP, as an entity in its own right, would have its own high profile in the community, each of the RFP finalist organizations was presented with a proposal from SRDC to participate in CEIP as a partner in the consortium that would operate the CEIP office. The CEIP office would deliver services directly to participants and act as the coordinating body that would match participants to sponsored employment opportunities that had gained the approval of the community boards. All of the organizations agreed to accept the roles proposed by SRDC, and contracts were drawn up detailing the extent of the involvement of each organization in terms of staff commitments and specific tasks.

The organizations that agreed to form the CEIP consortium are listed below with a summary of the role that they agreed to perform within the CEIP office.

- **The Cape Breton Family YMCA.** This community-based non-profit organization agreed to four key responsibilities: office management, coordinating enrolment, participant management, and the provision of training activities.
- **Breton Business Center (BBC).** A local employment placement agency, BBC agreed to undertake the “job-matching” responsibilities.
- **Breton Rehab Services (BRS).** A local business that specializes in assessing individuals in a rehabilitation setting, BRS was given a mandate to conduct employability assessments of CEIP program group members.
- **Atlantic Coastal Action Program–Cape Breton (ACAP-CB).** A non-profit organization that conducts large-scale environmental protection projects, ACAP-CB

agreed to manage the transitional project activity designed to provide participants with meaningful activities when they were between community-sponsored project assignments.

## **The CEIP Office**

The consortium partners came together in December 1999 to begin planning for the opening of the CEIP office. The partners worked on a series of initial tasks including the preparation of an office location, implementation of office policies and procedures, development of the information scripts and routines to be used in the presentation of the CEIP opportunity to recruits, and the testing of the project management information system (PMIS).

By the end of August 2000, the CEIP office was officially opened and the recruitment process was underway. The initial staff complement<sup>4</sup> consisted of five employees, including an office manager, one participant manager, an assessment coordinator, a training coordinator, and a job-placement coordinator.

## **Roles and Responsibilities**

### ***Participant Recruitment***

The CEIP office played a central role in the recruitment process alongside Statistics Canada (which conducted random selection of individuals from administrative files, managed baseline sample data, and initiated random assignment), both prior to and following random assignment. The CEIP office acted as point of first contact for potential participants following their invitation to join the study and was responsible for facilitating information sessions and obtaining informed consent from those interested in joining the study. Once participants were randomly assigned, the CEIP office advised study participants of the results and coordinated program group members' enrolment in the project through an orientation session. This recruitment process is described in more detail in the following section.

### ***Service Delivery***

For participants who completed their enrolment in the project, a two-week orientation period<sup>5</sup> was provided in which they received an employability assessment and some transferable-skills and job-readiness training. However, the majority of CEIP office services were delivered after the orientation period, when participants were eligible for CEIP work placements and other program services. The core of these services and operating procedures included those associated with the job-matching process, participant management, and the administration of disciplinary procedures, transitional projects, the job-search workshop, and

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<sup>4</sup>As the recruitment intensified during 2001, the increased pace of enrolment created demands for more space to house the participants involved in information and orientation sessions. In January 2002 the CEIP Resource Centre was opened. This facility provided additional space in support of the recruitment activities and also housed participants taking part in training sessions and a portion of the transitional work projects. By mid-year 2002 the CEIP office staff complement had grown to 10 with the addition of three participant managers, a project registrar, and a project-site monitoring officer.

<sup>5</sup>The first participants went through orientation during the week of October 2–6, 2000. Orientation was initially provided in a single week and was focused on the employability assessment. In January 2002 an additional week was added, during which elements of job-readiness and transferable-skills training were provided. Participants who had gone through orientation prior to its expansion were invited back to attend the additional week of training.

portfolio building. Refer to *The Community Employment Innovation Project: Design and Implementation* (2003) for a complete review of CEIP operations and program services.

## **RECRUITING STUDY PARTICIPANTS**

As mentioned in Chapter 1, participants for CEIP were selected from among EI beneficiaries and IA recipients residing in the CBRM. Separate selection criteria and processes were implemented for EI beneficiaries and IA recipients, which reflected the rules and regulations that govern each transfer program.

### **EI Beneficiaries**

An invitation to participate in CEIP was offered to a random sample of EI beneficiaries from the CBRM who were at least 18 years of age, had received at least \$1 of regular EI benefits during the selection month, and were not participating in any EI-sponsored training programs. Selected sample members also had to have received between 10 and 13 weeks of benefits and have 12 or more weeks of entitlement remaining on their current EI claim. Each person was included in the selection pool once.

By not selecting from the entire caseload, CEIP avoided selecting new applicants and individuals with only a short period on EI — who may have been able to re-enter the workforce quickly — and individuals with little or no EI benefits left on their claim for whom CEIP would have merely been an extension of entitlement. With at least 12 or more weeks remaining on their claim, there was a trade-off in participating in CEIP, such that selected individuals had to evaluate the effect of giving up future EI benefits.

### **IA Recipients**

The CEIP offer was made to IA recipients who were deemed employable, after completing the Nova Scotia Employability Assessment, administered by front-line staff at the Nova Scotia Department of Community Services (NS-DCS). The employability assessment was an important feature of the NS-DCS intake process for IA applicants prior to CEIP. The assessment process examined the applicant's paid and unpaid work experience, job-seeking skills, academic background, skills set, life situation, physical and mental health, and motivation to work.

As in the case of EI, individuals on IA who received the CEIP offer had to be residents of the CBRM, be at least 18 years of age, and have received at least \$1 in benefits during the month they were selected as a potential sample member. In cases with more than one eligible adult present in the household, only one person could be selected. Individuals had one chance of being selected and could be selected at any stage of their IA claim. This was because there were too few clients flowing through IA to use eligibility based on a specific length of time on IA.

## Sample Selection and Enrolment

The sample selection process for EI and IA sample members was undertaken by Statistics Canada.<sup>6</sup> EI beneficiaries were selected and enrolled from July 2000 to June 2002, while the IA selection process was from June 2001 to June 2002. EI beneficiaries were randomly selected from a monthly derivative of the HRDC Benefits and Overpayments file (BNOP), which is used for administering EI claims and payments. Eligible IA recipients were selected from among IA recipients who expressed an interest in participating in CEIP, after being notified by NS-DCS about CEIP and their eligibility to participate in the program.

Once selected, individuals were invited to attend an information session to learn about CEIP and its benefits. During these sessions, staff at the CEIP office provided potential enrollees with sufficient information to help them determine whether to join CEIP. The main messages delivered by CEIP staff to potential enrollees during the information session were as follows:

- CEIP was a research project and those who signed up had a 50-50 chance of being randomly selected for paid community-based work for up to three years.
- CEIP was a voluntary project and individuals signing up were free to withdraw at any time.
- Eligibility for EI or IA would not be affected if a person chose not to join the study.
- Relevant regulations for EI and IA would apply if individuals selected for community-based work should subsequently be terminated or quit without just cause.

The information session was the only avenue through which participants could enrol in CEIP. After being informed about the benefits of CEIP, attendees interested in participating in the study were required to complete an enrolment form consisting of an informed consent and questions that captured baseline measures on individual and socio-economic characteristics.

As shown in Table 2.1, during the enrolment phase, 5,980 eligible EI beneficiaries and 804 eligible IA recipients were randomly selected and mailed letters of invitation to an information session. The show-up rate to information sessions was 27 per cent among EI beneficiaries and 69 per cent among invitees from the IA caseload. The vast majority of those who showed up at an information session volunteered for CEIP by signing the enrolment form. Of the 1,620 EI beneficiaries who showed up, 1,006 signed the enrolment form<sup>7</sup> and 516 of the 557 attendees from the IA sample did so.

**Table 2.1: CEIP Recruitment**

	EI Sample	IA Sample
Randomly selected and sent an information session invitation	5,980	804
Attended an information session	1,620	557
Signed a consent form and was randomly assigned	998	516
Randomly assigned to program group	499	258
Attended an orientation session	444	240
Signed a program participation agreement	430	238

**Sources:** Recruitment records and data from the project management information system (PMIS).

<sup>6</sup>A detailed description of the selection process for EI beneficiaries and IA recipients is provided in Chapter 5 of *The Community Innovation Project: Design and Implementation* (2003).

<sup>7</sup>Eight sample members were dropped from the study, bringing the total to 998 EI sample members. See Footnote 2.

## **Random Assignment**

Once the enrolment form was completed, the next stage in the recruitment process for CEIP was to determine who would receive the offer of community-based work. The random assignment process was performed on SRDC's random assignment software application. The random assignment process was fully automated and was executed using anonymous files. In order to accomplish this task, completed enrolment forms were batched by staff at the CEIP office and mailed to Statistics Canada. Before launching the random assignment application, Statistics Canada was required to complete verification checks on the eligibility of enrollees, electronically capture the information provided on the completed forms, and prepare a list of unique anonymous identifiers for individuals with verified completed forms. This list was then submitted, through a secure remote connection, to the random assignment facilities of SRDC. The software application randomly assigned each individual to one of the two research groups — the program group or the control group — and generated a list of the assignments. During the two-year enrolment period, 1,006 eligible EI beneficiaries and 516 IA recipients were enrolled in CEIP. Half of the enrollees from both the EI and IA samples were randomly assigned to the program group (i.e. offered community-based work) and the other half to the control group.

## **Orientation**

Once random assignment was completed, the CEIP office was notified of the research status for each enrollee. The CEIP office then notified each enrollee, by mail, of his or her random assignment result. In order to complete the CEIP enrolment process, program group members were required to attend an orientation session and sign a project participation agreement (PPA) within five weeks of receiving the letter. Only program group members with a signed PPA could go on to receive community-based work.

The goal of the orientation session was also to educate participants about the rights and obligations of program participation and to make sure that participants fully understood the CEIP offer. In addition to a detailed review and signing of the PPA, several administrative documents were completed during the orientation session. These included documents required to administer the CEIP payroll, an optional health plan, and a criminal record search. As shown in Table 2.1, of the 757 individuals assigned to the program group (499 EI beneficiaries and 258 IA recipients), 684 attended an orientation session and 668 signed a PPA.

## **PARTICIPATING IN CEIP**

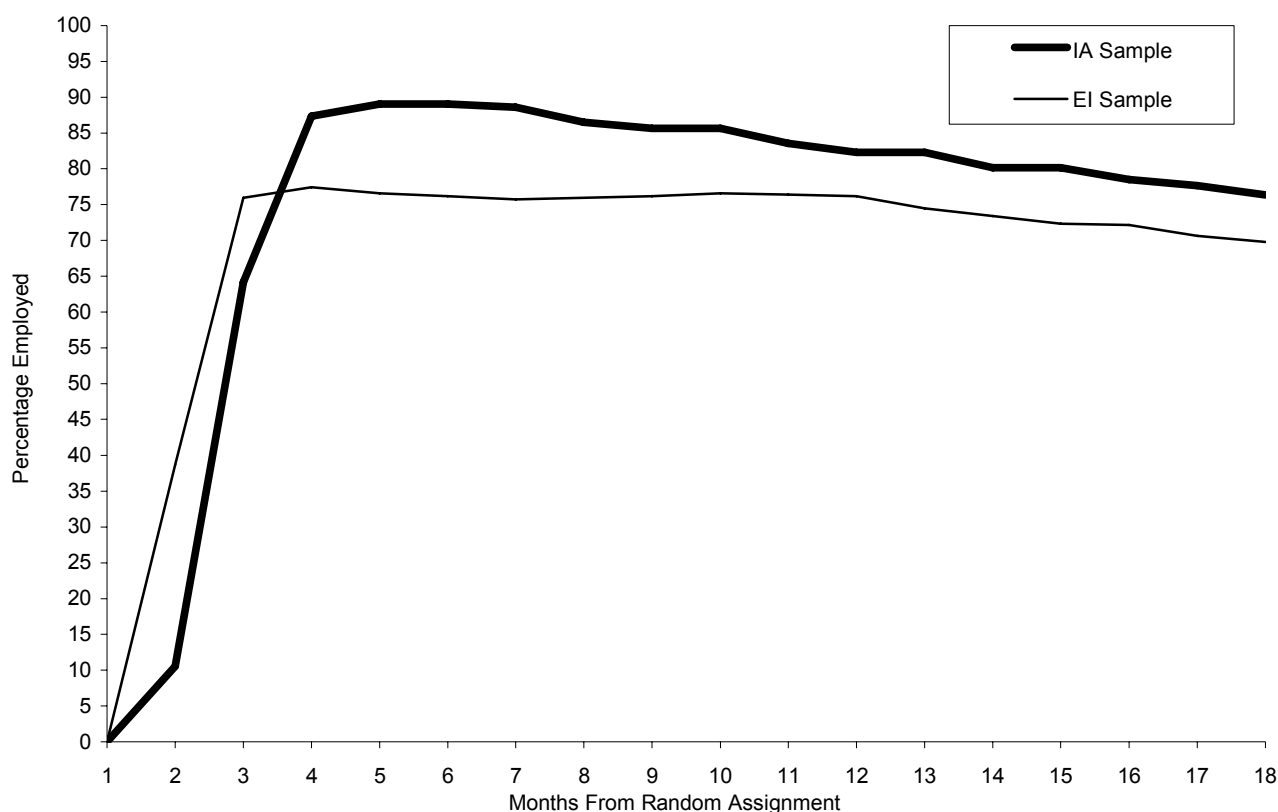
The enrolment statistics mentioned above are for the entire CEIP research sample. However, as mentioned in Chapter 1, the focus of this report is on the 1,363 CEIP enrollees who completed the 18-month survey. The breakdown by EI beneficiaries and IA recipients is 898 EI sample members (470 program group; 428 control group) and 465 IA sample members (237 program group; 228 control group).

The vast majority of program group members signed the PPA and went on to participate in one or more CEIP-related activities during the 18 months post-enrolment. Of the 470 program group members from the EI 18-month report sample, 418 attended an orientation session and 404 signed a project participation agreement. Similarly high

proportions of the 237 IA program group members in the report sample attended orientation (224 individuals) and signed the PPA (222 individuals).

Figure 2.1 shows the percentage of the program group in the report sample who participated in a CEIP-related activity during their first 18 months after signing the enrolment form. This includes participating in CEIP-based projects or other approved CEIP activities. Signing of the PPA by program group members was essential to completing the enrolment process and participating in CEIP-based projects, but not everyone who signed a PPA subsequently worked on CEIP community-based jobs. Among those who signed the PPA, 390 EI sample members and 217 IA sample members were engaged in CEIP activities over the 18-month period. CEIP offers each member of the program group up to three years of participation in community-based work, but within this eligibility period, participants are free to leave CEIP for another job or training and then return to CEIP. There was no limit on the length or frequency of such absences. Program group members may also have not participated on CEIP projects after signing the PPA for other reasons (for example, health and migration). Participation rates peaked for the EI sample at 77 per cent, during the fourth month after enrolment, and gradually declined over the next 16 months. The highest level of participation among IA program group members was observed during the fifth month after enrolment, at 89 per cent, and declined very slowly over the remaining follow-up period.

**Figure 2.1: CEIP Participation Rates, by Months From Enrolment**



**Source:** Calculations from the CEIP project management information system (PMIS).

The two months immediately following enrolment were marked by very low participation rates, because for most they were still in the process of completing enrolment. On average, there were 44 days between the signing of the enrolment form and the signing of the PPA, but in some instances it was as long as 112 days. Much of this time was taken up by day-to-day tasks required to get things done. As mentioned earlier, signing of the enrolment form was only one of the first steps in the enrolment process. The enrolment forms were then mailed to Statistics Canada to verify eligibility and electronically captured before random assignment could occur. Once random assignment was completed, individuals were notified of their assignment by mail. Program group members would then have to attend an orientation session within five weeks from date of notification of their assignment and sign a PPA in order to start participating in CEIP projects or ancillary activities.

CEIP is not a training intervention; rather it is a community employment program. However, ancillary activities such as job-readiness and transferable-skills training were made available to participants. Upon signing the PPA, participants took part in a two-week orientation period. During the two-week orientation period a detailed employability assessment was conducted and some transferable-skills and job-readiness training was provided to participants. Results of the assessment were used to decide whether a participant was required to attend one or more basic job-readiness training modules or spend time on a transitional job before being assigned to a community-based project. The collected information was also used to facilitate the matching of the participant with available community project placements. A brief description of job-readiness and transferable-skills components is provided below.

### **Job-Readiness Training**

The second week of orientation included basic job-readiness workshops. The workshops, organized around themes of “Survival in the Workplace” and “How to Be a More Effective Person,” were designed to provide information to participants to help them in both their personal and professional life. The Christopher leadership course was available on request and provided individuals with the tools and knowledge to be a more effective communicator and build self-confidence and self-esteem.

### **Transferable Skills**

During the first 18 months of CEIP, participants had access to workshops in cardiopulmonary resuscitation (CPR), occupational health and safety (OHS), and the Workplace Hazardous Materials Information System (WHMIS). Participants could also participate in customer service, entrepreneurial, and basic computer training. These training modules were open to all, except for the one-week entrepreneurial training course. Entrepreneurial training was provided only to participants interested in developing their own ideas into a CEIP project.<sup>8</sup>

Table 2.2 presents participation rates in ancillary activities during the first 18 months after enrolment for the report sample.

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<sup>8</sup>For the most part, community projects were sponsored by local organizations. However, participants or groups of participants were given the opportunity to develop their own ideas for projects. Those who wanted to pursue this option were given 12 weeks to develop their ideas. During the first week they were required to attend a one-week entrepreneurial training program. Over the next 11 weeks participants were engaged in project development at the CEIP resource centre where an additional resource person was available one day a week to provide advice and encouragement.

**Table 2.2: Participation in CEIP Ancillary Activities During the 18 Months After Enrolment, by Program Group Members (18-Month Survey Sample)**

	EI	IA
Basic job-readiness training		
Basic job-readiness	31.9	76.8
Christopher leadership	14.5	16.5
Transferable-skills training		
Cardiopulmonary resuscitation	46.2	73.0
Occupational health and safety	78.5	89.5
Workplace Hazardous Materials Information System	79.4	88.6
Customer service	6.0	2.1
Entrepreneurship training	6.0	2.5
Basic computer training	1.1	9.3
<b>Sample size</b>	<b>470</b>	<b>237</b>

Source: CEIP project management information system (PMIS).

As expected, IA participants were more likely to be assigned to basic job-readiness training; many IA participants had little or no prior work experience. Over three quarters of IA sample members completed one or more basic job-readiness training modules, while approximately one third of EI sample members did so.

Several program group members also took advantage of the various transferable-skills training sessions that were available through CEIP. As shown in Table 2.2, instructional sessions on occupational health and safety (OHS), Workplace Hazardous Materials Information System (WHMIS), and cardiopulmonary resuscitation (CPR) were the most often attended classes by CEIP participants during their first 18 months on CEIP. Entrepreneurship training, which was provided only to participants who expressed an interest in developing their own ideas for self-directed projects, was attended by six per cent of the EI sample and two per cent of the IA sample. At the 18-month milestone, few participants had completed the computer literacy training course offered by CEIP. However, since this could be scheduled anytime during the three-year eligibility, participation rates may significantly increase over the life of the project.

## CEIP PROJECTS AND WORK PLACEMENTS

Once participants were deemed job-ready and completed the initial orientation period, they were assigned to community work placements.<sup>9</sup> The following section presents details on the types of community projects that were created by the five participating communities and the types of jobs that these projects provided to CEIP participants. A total of 292 projects were created by communities through CEIP during the first three and a half years,<sup>10</sup> which generated a total of 1,224 positions and 1,885 work placements for participants, allowing many to work in multiple positions.

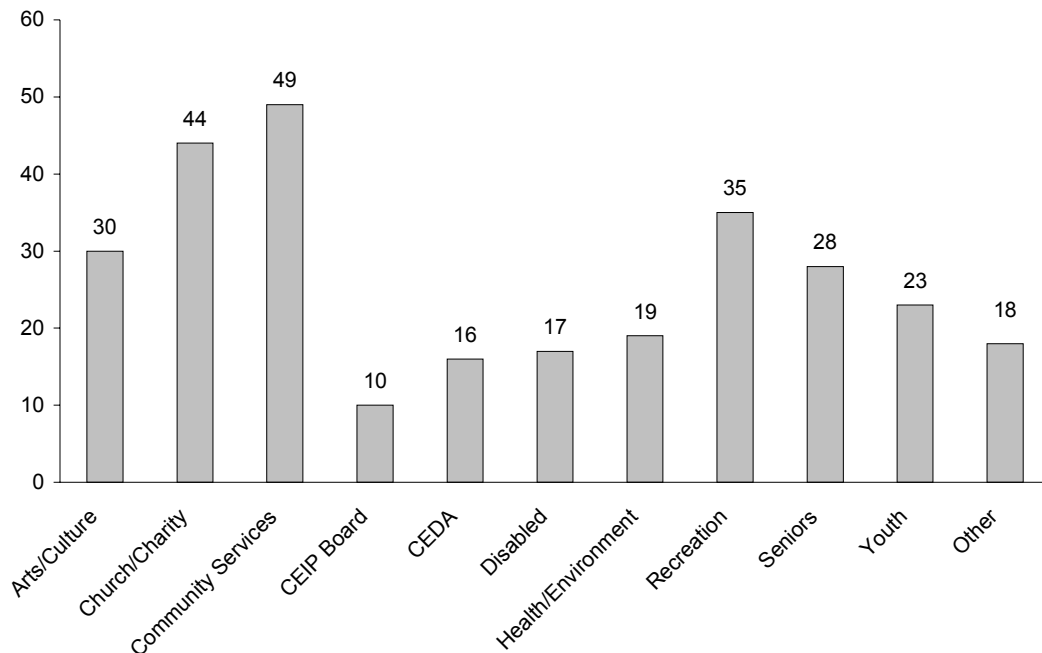
<sup>9</sup>For some, there may have been a period of work on transitional projects while they were waiting for a suitable community placement. Transitional projects were run by the CEIP office and consortium partner ACAP Cape Breton.

<sup>10</sup>Because recruitment occurred over a two-year period, it took three and a half years for all sample members to have been in the program for at least 18 months — the period covered in this report.



Figure 2.2 provides a breakdown of CEIP projects that were created based on the type of organization or the community sector being served by the project. A broad range of community needs were targeted through CEIP projects. The largest category was community services (49), which included community outreach programs and service clubs. The second and third largest category of project involved churches and charities (44) and those that provided some form of recreational services (35) to the community. This was followed by projects in the area of arts and culture (30), services to seniors (28), and services to youth (23).

**Figure 2.2: CEIP Projects, by Organization or Sector Served (2000–2003)**

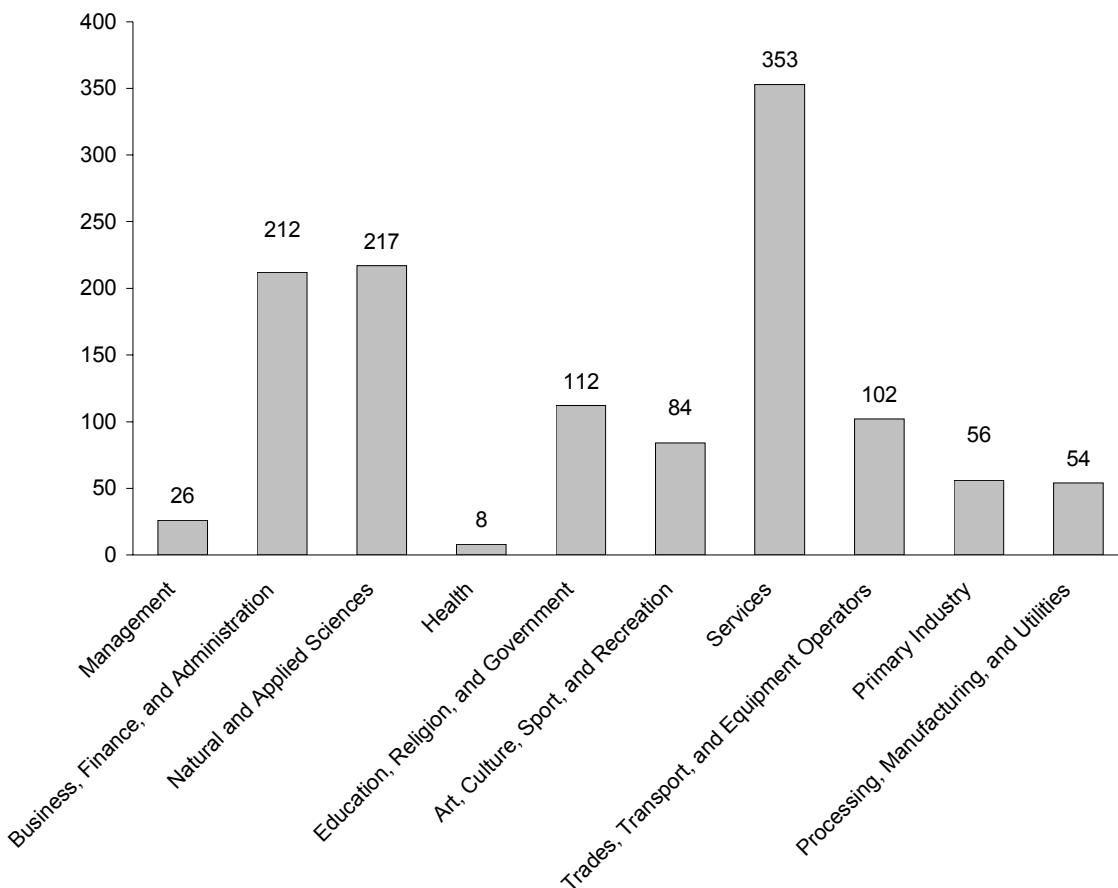


**Source:** CEIP project management information system (PMIS).

**Note:** “CEDA” stands for “Community Economic Development Agency.”

Figure 2.3 presents the total number positions that were filled by CEIP participants based on the occupation type. It illustrates that CEIP projects provided a range of occupations for participants throughout all 10 of the National Occupational Categorizations (NOC). The largest category was by far service positions (353), which included some skilled occupations (sales supervisors, cooks, firefighters; 21 positions), intermediate sales and service positions (retail/service clerks, child-care/home workers; 38 positions), and elemental positions (attendants, cleaners, and security; 294 positions). The next largest set of placements was in natural and applied sciences (217) and business, finance, and administration (212). The former included some technical occupations (general surveyors, computer programmers; 8 positions) and skilled positions (wildlife attendants, groundskeepers, landscapers; 209 positions). Business, finance, and administrative positions included some professional occupations (finance or human resources managers; 8 positions), skilled positions (financial or administrative support; 29 positions), and elemental occupations (clerical support, office equipment operators; 204 positions).

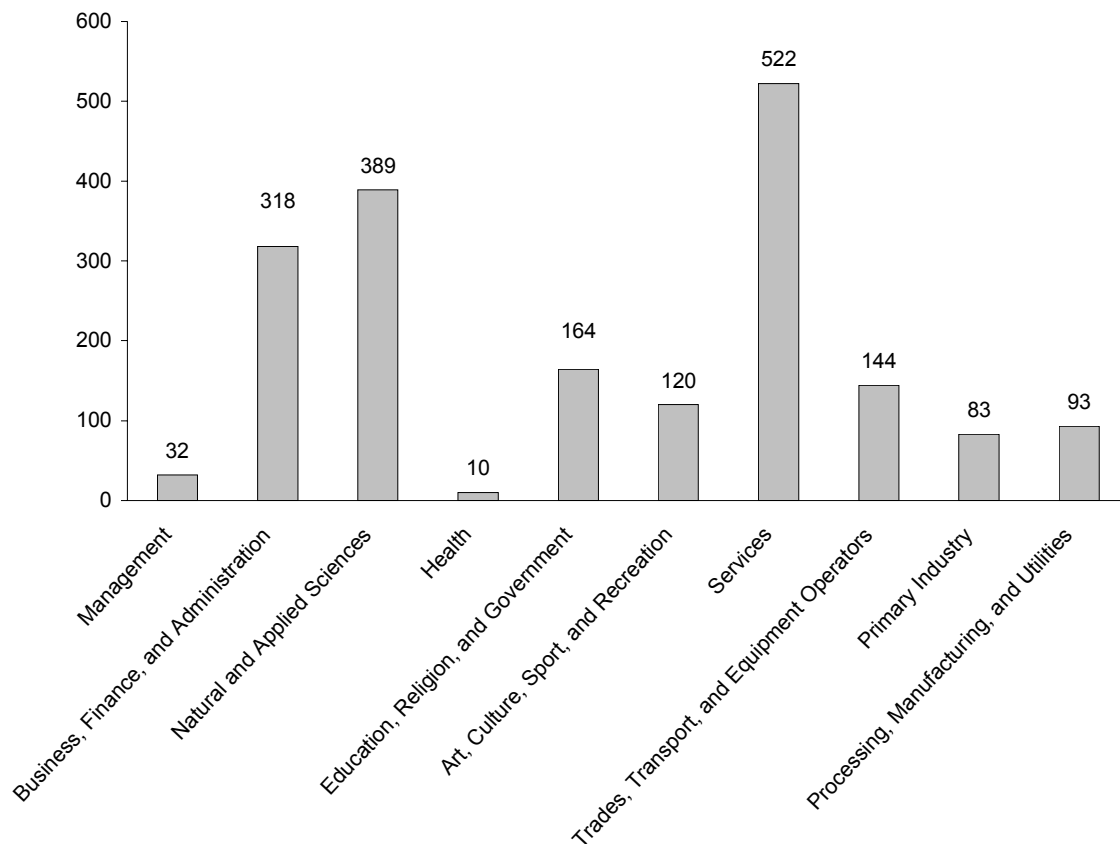
**Figure 2.3: CEIP Jobs — Total Positions Filled by Occupation**



**Source:** CEIP project management information system (PMIS).

The number of CEIP work placements is different from the number of positions, as participants can work in multiple jobs over the course of their eligibility. Several participants can fill the same job over the course of the position. There was expected to be some transitioning between work placements over the life of the project, which would give participants the opportunity to develop different kinds of skills and work experience as well as more opportunity to enhance their social networks. Figure 2.4 presents the number of CEIP placements that participants worked in, by the type of occupation. It illustrates that transitioning between placements had already begun to take place within the first 18 months of eligibility. The number of placements is larger than the number of positions in each category of job, indicating that there was some transitioning between placements throughout the range of CEIP work. A future report will provide more details on the nature of CEIP work placements, once the full eligibility period can be evaluated.

**Figure 2.4: Total Participant Placements, by Occupation**



Source: CEIP project management information system (PMIS).

## NON-VOLUNTEERS

Although the main focus of this report is CEIP volunteers and what impact CEIP had on these individuals, another measure of interest in the implementation and evaluation of CEIP is the proportion of eligible individuals who did not take up the CEIP offer and their reasons for choosing that option. As mentioned earlier, of the 6,784 individuals (5,980 EI beneficiaries; 804 IA recipients) who were invited to participate in CEIP, 1,522 (1,006 EI beneficiaries; 516 IA recipients) volunteered to join CEIP. To help establish why the remainder did not volunteer for CEIP, a non-volunteer survey was administered to a random sample of those who did not take up the offer. The target sample was 1,092 eligible EI non-volunteers and 173 eligible IA recipients who received and invitation to join CEIP but did not take up the offer. A total of 893 individuals (780 EI beneficiaries; 113 IA recipients) responded to the survey. There were two categories of non-volunteers: those who attended an information session but did not sign up for CEIP and those who did not attend an information session. Table 2.3 presents the reasons mentioned by these two groups of non-volunteers for not joining the study.

As shown in Table 2.3, the vast majority of those who did not sign up for CEIP also did not attend an information session. The most common reason reported by EI beneficiaries for not attending the information session was that they were already working or expecting to be

recalled by a previous employer (57.5 per cent). Among IA recipients, the most often mentioned reason was personal or family- or health-related.

**Table 2.3: Non-takers Reasons for Not Taking Up the CEIP Offer**

	EI	IA
<b>Reasons for not attending the information session (%)<sup>a</sup></b>		
Already working or recall expected	57.5	18.4
Taking education or training	3.2	12.6
Personal or family- or health-related	7.2	31.0
Was not interested in CEIP	8.6	5.7
Did not know about the sessions	14.3	16.1
Transportation problems	5.2	8.0
Not enough money	1.5	+++
Away or about to leave the province	2.8	+++
Retired / on pension / too old	2.5	+++
Union helping with compensation and job search	1.2	+++
Did not understand CEIP	3.1	+++
Forgot about the sessions	3.5	+++
Other	29.7	17.2
<b>Among those who received the invitation letter and attended the information session, percentage who reported not taking the offer because <sup>a</sup></b>		
Not enough money	51.7	21.7
Personal or family- or health-related	14.6	30.4
Already working or recall expected	49.4	+++
Quality of jobs offered by CEIP	6.7	+++
Retired / on pension / too old	7.9	+++
Was not interested	19.1	+++
Other	29.2	56.5
<b>Sample size</b>	<b>780</b>	<b>113</b>

**Source:** Statistics Canada calculations using data from the CEIP non-volunteer survey.

**Notes:** Respondents who failed to respond to an item were not included in the calculations.

+++ indicates that the statistic was based on a sample size of less than five. To protect the confidentiality of individuals in the study, statistics based on sample sizes of less than five are not published by SRDC.

<sup>a</sup>Response categories do not add up to 100 per cent because some individuals gave more than one reason for not attending.

Respondents to the non-volunteer survey who attended the information session provided several reasons for not joining the study. These included “not enough money,” personal or family- or health-related reasons, already working or expecting to be called back to work by previous employer, concern regarding the quality of jobs offered by CEIP, or simply no interest in CEIP.

## **SUMMARY**

As documented in this chapter, notwithstanding the relatively low take-up rate, CEIP was able to successfully enrol individuals from EI and IA rolls in the study over the two-year enrolment period. Moreover, the vast majority of individuals assigned to the program group were active participants in CEIP during the first 18 months of the project and were engaged in a diversity of CEIP community projects. Those who did not take up the offer did so for various reasons. The most often mentioned reasons by EI non-volunteers were the low CEIP wage or that they were expecting to return to a previous employer or already found a job. IA non-volunteers most often cited personal, family, and health reasons for not joining CEIP.



## **Chapter 3:**

### **Impacts on Employment, Earnings, and Wages**

This chapter examines the impacts of the Community Employment Innovation Project (CEIP) on employment by comparing the employment rates, earnings, hours, and wages of CEIP program group members with a benchmark sample, the control group — a group of Employment Insurance (EI) and income assistance (IA) recipients who are similar to CEIP program group members but who were not eligible to participate in CEIP. Since this report covers the first 18 months of participants' 36-month window for eligibility in CEIP, the results of this chapter are restricted to the impacts of CEIP on employment outcomes while program group members are eligible for CEIP jobs. Later reports will extend the analysis beyond the eligibility period, addressing the impact of CEIP on program group members' long-term employment outcomes after their program eligibility had expired.

The chapter begins by examining the employment situation in Cape Breton during the period of CEIP's operations to give a better understanding of participants' employment opportunities in the absence of CEIP. Next, CEIP's offer of employment is discussed and the extent to which program group members responded to the offer over the 18-month period is analyzed by estimating CEIP's impact on full-time employment and monthly earnings. Cumulative measures of CEIP's impact on employment and earnings are also estimated to determine the aggregate effect of CEIP on earnings and employment over the 18-month period. The chapter concludes with an examination of CEIP's impacts on hourly wages and weekly hours of work. Due to the unique characteristics and employment history of the two samples, impacts will be shown separately for the EI and IA samples.

### **SUMMARY OF FINDINGS**

- **The program groups in both the EI and IA samples achieved approximately 90 per cent employment rates by the second quarter of the project.** Both samples maintained their high employment rates throughout the 18-month follow-up period.
- **CEIP had significant impacts on employment and earnings for both the EI and IA samples that were sustained throughout the 18-month period.** Employment impacts peaked in the second quarter of the program's operations at nearly 45 percentage points for the EI sample and nearly 75 percentage points for the IA sample and gradually declined thereafter by Month 18. CEIP had an immediate impact on program group members' earnings, at its peak increasing earnings among the EI sample by approximately \$600 per month and by approximately \$950 per month among the IA sample in the second quarter of the project.
- **Most of the employment generated by CEIP occurred at the full-time level.** While full-time impacts were large in the EI sample, CEIP's biggest impacts on full-time employment occurred within the IA sample due to the low rate of full-time employment among IA control group members.

- **CEIP had an overall positive impact on hourly wages and hours worked per week.** The largest impacts on wages were observed within the range of \$2 and \$3 above minimum wage for program group members in both the EI and IA samples. There was a small decrease in the proportion of program group members in the EI sample at the highest wage rates, indicating that CEIP did reduce the hourly wages for some program group members. CEIP had a similar impact on average weekly hours of work, increasing the number of hours worked per week for most program group members, while reducing hours worked for a small proportion at the highest levels.

## CAPE BRETON LABOUR MARKET

Before examining CEIP's impact on employment, it is instructive to review the social and economic health of the Cape Breton Regional Municipality (CBRM) during the period of CEIP's operations. The state of the Cape Breton economy is well-documented, and it is widely known that the region has suffered social and economic hardship due to the collapse of the coal, steel, and fishing industries in recent years. While other industries in Cape Breton have shown promise of late, the region continues to lag behind the rest of Nova Scotia in the number of opportunities available for sustained, year-round employment.

In the 2003 CEIP Design and Implementation Report, it was reported that, while the region had suffered from the loss of heavy industry jobs in coal and steel, there was "cautious optimism" for the region's economy due to a growing demand for workers in the call centre, service, and tourism industries and offshore oil and gas developments. However, Cape Breton maintains a persistently high unemployment rate relative to the rest of the province and its population continues to decline, especially among its youth. Over the period of 2000 to 2004, the population decreased by nearly three per cent. Human Resources and Skills Development Canada's Labour Market Review (2005) for the region noted: "The region has shown slow employment growth over the last couple of decades which has kept unemployment rates the highest in the province. The Island's economy has also not generated enough employment prospects to keep its youth from leaving. The end result is a more pronounced trend to an older workforce in Cape Breton" (Human Resources and Skills Development Canada, 2005).

While finding a job in Cape Breton continued to be more difficult than elsewhere in the province of Nova Scotia while CEIP was in operation, there were, however, some tentative signs of improvement. Table 3.1 shows that over the 2000–2003 period, the unemployment rate on Cape Breton Island decreased from 17.6 per cent to 15.9 per cent and the participation rate grew from 50.7 per cent to 51.8 per cent.<sup>1</sup> However, the growth in the participation rate was hampered by a decrease of the general population in the region, and consequently the region's labour force remained roughly the same size in 2003 as it was in the year 2000. In summary, there were grounds for some optimism as an increasing proportion of workers in Cape Breton found work; however the region struggled to curb net out-migration, especially among its youth.

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<sup>1</sup>2001 Census data shows that the unemployment rate in the CEIP communities was as high or higher than the overall unemployment rate for Cape Breton Island. For instance, the unemployment rate in Sydney Mines in 2001 was 21.0 per cent (Nova Scotia Community Counts, (2004–2006)).



**Table 3.1: Labour Market Characteristics for Cape Breton, Halifax, and Nova Scotia, 2000–2003**

Region	Labour Force ('000)	Participation Rate (%)	Employment ('000)	Unemployment Rate (%)
<b>Cape Breton</b>				
2000	61.2	50.7	50.5	17.6
2001	63.4	53.1	52.5	17.2
2002	61.5	51.8	52.2	15.1
2003	61.1	51.8	51.4	15.9
<b>Halifax</b>				
2000	200.9	69.7	188.3	6.3
2001	203.9	69.6	189.4	7.1
2002	206.1	69.2	190.4	7.6
2003	210.2	69.4	196.2	6.6
<b>Nova Scotia</b>				
2000	452.4	61.2	411.1	9.1
2001	460.4	62.0	415.4	9.8
2002	467.2	62.5	422.4	9.6
2003	474.7	63.1	431.3	9.1

Source: *Nova Scotia Statistical Review* (23rd ed.), by the Nova Scotia Department of Finance, Statistics Division, 2005, Halifax: Nova Scotia Department of Finance, p. 49.

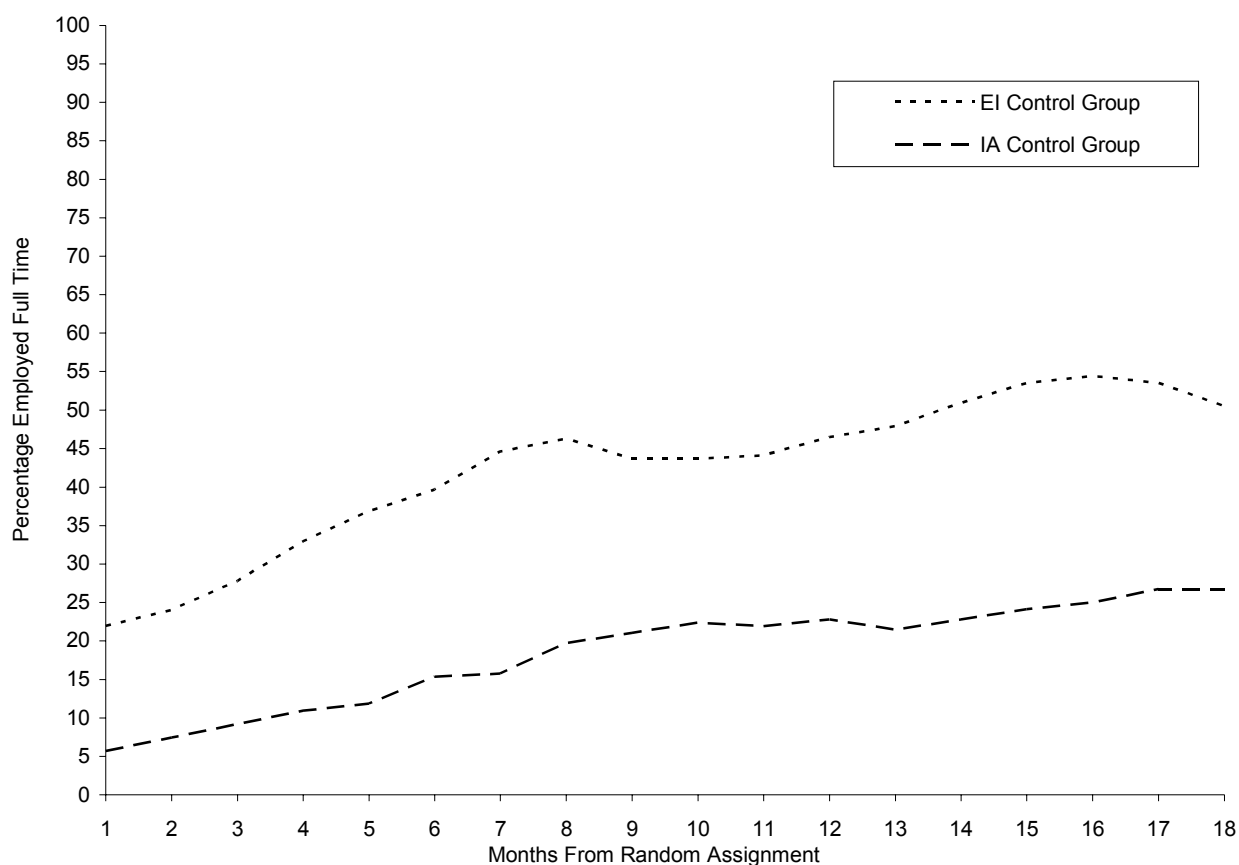
## EMPLOYMENT OF THE CEIP CONTROL GROUP

One way to observe what employment opportunities existed for people who wished to find employment in the Cape Breton Regional Municipality during CEIP's operations is to examine the employment outcomes of CEIP's control group members. The control group represents a group of individuals who were recruited from the EI and IA programs but were ineligible to participate in CEIP (but who continued to be eligible to receive all other income transfers, programs, and services for which they otherwise would have qualified). Since members of the control group on average were similar in characteristics to the program group, their employment behaviour demonstrates what would have happened to the program group in the absence of CEIP.

Figure 3.1 shows the monthly full-time employment rates of the control groups for both the EI and IA samples over the first 18 months of the follow-up period.<sup>2</sup> The difference in the employment rates between the control groups of the two samples illustrates how individuals who were recruited from EI differed from those who were recruited from IA. Since at selection for CEIP, the EI sample had more extensive work experience and had been unemployed due to a layoff, termination of a contract, or their employer having moved or closed down, it is not surprising that they had much higher rates of re-employment than the IA sample control group, who had very limited work experience and no long-term relationship with the industry in which they last worked.

<sup>2</sup>Full-time employment is defined as working in a job that is normally 30 or more hours per week or working in multiple jobs that average 30 or more hours per week during a calendar month.

**Figure 3.1: Control Group Full-Time Employment Rates, by Months From Random Assignment**



**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

The figure also shows that while employment outcomes improved for the control group within both the EI and IA samples over the 18-month period, most control group members did not find full-time employment after one and a half years of unemployment. The full-time employment rate for the control group in the EI sample increased from 22 per cent in Month 1 to 50 per cent in Month 18, while the IA sample control group increased its full-time employment rate from 6 per cent in Month 1 to 27 per cent in Month 18.<sup>3</sup> While the outcomes of both control groups improved over the period, half of the EI control group and about one quarter of the IA control group were employed full time after 18 months, indicating the difficulty that program group members would have in finding full-time employment in the absence of CEIP.

However, even without the offer of CEIP employment, the employment rates of the control group indicate that a large proportion of program group members would have been able to find full-time employment and that this proportion would be expected to rise over time. To avoid attributing these changes in employment to CEIP, the experimental design of the program allows impacts to be measured against the benchmark provided by the control

<sup>3</sup>While individuals who were selected to participate in CEIP were unemployed at the time of their selection, there could be up to an eight-week period extending from the time they were invited to participate in the program to when they had attended an information session, were randomly assigned to either the program or control group, and were interviewed for the baseline study. This lag time explains why a small proportion of control group members had already found full-time employment during the first month of the follow-up period.

group outcomes. For instance, to illustrate that CEIP increased full-time employment among the program group, it is necessary to show that the increase was over and above the increase in full-time employment among the control group.

## **CEIP EMPLOYMENT**

CEIP was designed as a test of how unemployed individuals living in a region with chronic high unemployment would respond to an offer of up to three years of stable employment. CEIP represents an alternative form of income transfer payment, whereby participants exchange their entitlements to EI or IA for full-time work on community projects in the social economy at a set “community wage.”<sup>4</sup> This section describes the community wage paid to CEIP participants and shows the impacts of the program on their employment rates.

CEIP employment was designed to replicate real market employment, and from the participants’ perspective, the community wage they received represented a real wage for the work they performed while participating in the program. From a public policy perspective, however, the CEIP community wage represented an alternate form of transfer to the participants who volunteered for the project. From this perspective, CEIP not only provided participants with a working wage instead of EI or IA benefits, but it also provided job-readiness and skills training as well as valuable work experience on projects in selected communities in the CBRM. In addition, it is anticipated that individuals who participated in the program developed stronger social networks in the community that will translate into further employment opportunities in the longer run.

Considering that only a minority of control group members worked full time during the first 18 months of the follow-up period, it is expected that CEIP’s offer of full-time employment will have contributed to large program impacts on employment and earnings over this period of time, since most program group members chose to participate and work in CEIP jobs. Since CEIP paid a fixed wage, CEIP’s offer of full-time employment would have been most attractive to those with fewer employment alternatives and who would not otherwise have been able to find comparable work. Consequently, a prior expectation is that the IA sample will experience the largest employment impacts as its control group had poorer employment outcomes than the EI sample control group.

## **CEIP’S IMPACTS ON OVERALL, FULL-TIME, AND PART-TIME EMPLOYMENT**

The control group employment rates presented above show that most program group members would not have been working full time by the 18-month interview in the absence of CEIP employment. Since CEIP provided participants with full-time jobs, it is expected that

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<sup>4</sup>The community wage offered by CEIP differed from market-based wages in that it was fixed at a set rate that increased in line with the provincial minimum wage. The wage was the same for all participants regardless of their work experience or education level and was paid for any work on CEIP projects or participation in other eligible activities, such as orientation and job-readiness training. At the beginning of the project, the wage was set at \$280 per week (or \$8 per hour for a required 35 hours a week of participation) and increased in step with the provincial minimum wage. When CEIP was designed, the community wage was set at a level that approximated the average amount of weekly EI benefits paid within the EI region from which CEIP participants were recruited. Refer to *The Community Employment Innovation Project: Design and Implementation* (2003) for a full description of the community wage.

the program would have had large impacts on program group members' full-time employment rates throughout the 18-month follow-up period. The size of the impact on full-time employment is the net result of two effects: the increase in employment among those who would not otherwise have worked at all and the increase in full-time employment among those who would otherwise have worked part time.

## **EI Sample**

Table 3.2a shows the EI sample's overall, part-time, and full-time employment rates for the program group and control groups, as well as their difference or impact in the first six quarters of the follow-up period.<sup>5</sup> As expected, CEIP produced large impacts on overall employment over the entire 18-month period. The impacts peaked at 41.1 percentage points within the second quarter of the follow-up period and gradually declined to 24.9 percentage points by Quarter 6.

**Table 3.2a: CEIP Impacts on Part-Time and Full-Time Employment — EI Sample**

<b>Outcome</b>	<b>Program Group</b>	<b>Control Group</b>	<b>Difference (Impact)</b>	<b>Standard Error</b>
<b>Employment rate (%)</b>				
Quarter 1	52.1	36.4	15.7 ***	(2.6)
Quarter 2	90.1	49.1	41.1 ***	(2.5)
Quarter 3	89.9	58.8	31.1 ***	(2.5)
Quarter 4	89.9	58.1	31.8 ***	(2.6)
Quarter 5	89.7	63.6	26.2 ***	(2.5)
Quarter 6	89.7	64.8	24.9 ***	(2.4)
<b>Full-time employment rate (%)<sup>a</sup></b>				
Quarter 1	47.2	24.6	22.6 ***	(2.3)
Quarter 2	88.4	36.5	51.8 ***	(2.5)
Quarter 3	88.2	44.9	43.4 ***	(2.6)
Quarter 4	88.3	44.8	43.5 ***	(2.6)
Quarter 5	87.3	50.8	36.5 ***	(2.6)
Quarter 6	87.0	52.8	34.1 ***	(2.6)
<b>Part-time employment rate (%)<sup>b</sup></b>				
Quarter 1	3.9	9.6	-5.7 ***	(1.5)
Quarter 2	1.3	10.5	-9.2 ***	(1.5)
Quarter 3	1.3	11.9	-10.6 ***	(1.5)
Quarter 4	1.3	11.6	-10.3 ***	(1.5)
Quarter 5	2.2	10.7	-8.5 ***	(1.5)
Quarter 6	2.5	10.4	-7.9 ***	(1.5)
<b>Sample size (total = 898)</b>	<b>470</b>	<b>428</b>		

**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

**Notes:** The estimates for each quarter are calculated by averaging the three months within a quarter.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>“Full-time employment” is defined as working in a job that is normally 30 or more hours per week or working in multiple jobs that average 30 or more hours per week during a calendar month.

<sup>b</sup>“Part-time employment” is defined as working in a job that is normally fewer than 30 hours per week and, if working in multiple jobs, jobs that average fewer than 30 hours per week during a calendar month.

<sup>5</sup>The quarterly estimates are average monthly outcomes of each of the three months in the respective quarter.

The second panel of the table provides full-time employment estimates and, as expected, it shows that most of the employment that was created by CEIP occurred at the full-time level. By the second quarter, nearly 90 per cent of the program group was working full time, and this proportion was sustained during the remaining four quarters. The largest estimated impacts on full-time employment were realized in the second quarter, in which CEIP increased full-time employment by 51.8 percentage points. By Quarter 6, the impact had decreased to 34.1 percentage points, mostly due to increasing full-time employment rates among the control group.

The bottom panel of the table shows estimated impacts on part-time employment. It appears that among the EI sample, CEIP encouraged a significant proportion of program group members who would have otherwise worked part time to increase their work hours to full-time levels, as CEIP had significant impacts on the proportion working part-time hours. For example, in Quarter 3, CEIP reduced the proportion working part time by 10.6 percentage points.

### IA Sample

Table 3.2b shows the same set of impacts for the IA sample. Compared with the EI sample, CEIP had a larger impact on overall employment of IA program group members, peaking at 70.7 percentage points in Quarter 2 and declining to 45 percentage points in Quarter 6. Similar to the EI sample, most of the employment created by CEIP among the IA sample occurred at the full-time level, as over four fifths of program group members worked full time in quarters 2 through 6. CEIP also appears to have encouraged a significant proportion of IA program group members who would otherwise have worked part time to increase their work hours to full-time levels, as there are small but significant impacts on part-time work throughout the first six quarters.

**Table 3.2b: CEIP Impacts on Part-Time and Full-Time Employment — IA Sample**

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Employment rate (%)</b>				
Quarter 1	29.7	13.5	16.2 ***	(2.7)
Quarter 2	91.4	20.8	70.7 ***	(3.1)
Quarter 3	90.7	28.1	62.6 ***	(3.3)
Quarter 4	87.9	33.0	54.9 ***	(3.5)
Quarter 5	84.8	34.1	50.7 ***	(3.7)
Quarter 6	82.6	37.6	45.0 ***	(3.8)
<b>Full-time employment rate (%)<sup>a</sup></b>				
Quarter 1	27.1	7.5	19.7 ***	(2.2)
Quarter 2	91.4	12.7	78.7 ***	(2.7)
Quarter 3	90.2	18.9	71.3 ***	(3.0)
Quarter 4	87.3	22.4	65.0 ***	(3.3)
Quarter 5	84.4	22.8	61.6 ***	(3.5)
Quarter 6	82.3	26.2	56.1 ***	(3.6)

(continued)

**Table 3.2b: CEIP Impacts on Part-Time and Full-Time Employment — IA Sample (Cont'd)**

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Part-time employment rate (%)<sup>b</sup></b>				
Quarter 1	1.5	4.4	-2.8 *	(1.5)
Quarter 2	0.0	6.0	-6.0 ***	(1.5)
Quarter 3	0.3	7.2	-6.9 ***	(1.6)
Quarter 4	0.0	8.9	-8.9 ***	(1.8)
Quarter 5	0.4	9.1	-8.6 ***	(1.9)
Quarter 6	0.3	9.2	-8.9 ***	(1.8)
<b>Sample size (total = 465)</b>	<b>237</b>	<b>228</b>		

**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

**Notes:** The estimates for each quarter are calculated by averaging the three months within a quarter.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>“Full-time employment” is defined as working in a job that is normally 30 or more hours per week; or working in multiple jobs that average 30 or more hours per week during a calendar month

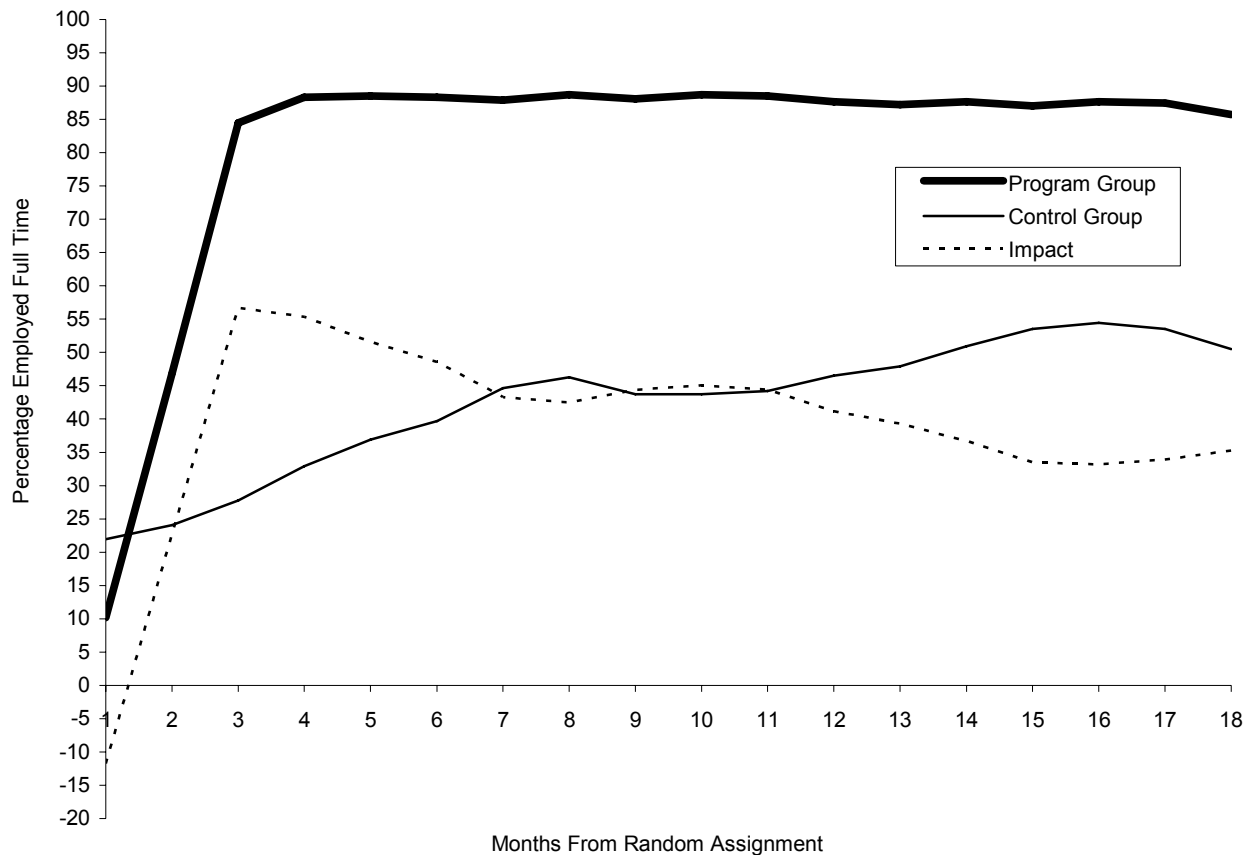
<sup>b</sup>“Part-time employment” is defined as working in a job that is normally fewer than 30 hours per week and, if working in multiple jobs, jobs that average fewer than 30 hours per week during a calendar month.

## CEIP's Impacts on Full-Time Employment

Figures 3.2a and 3.2b provide monthly estimates of program and control group members' full-time employment rates as well their difference, or impact, plotted over the first 18 months of the follow-up period. It shows that CEIP enabled program group members to achieve high full-time employment rates throughout the follow-up period for both the EI and IA samples. The full-time employment of program group members in the EI sample peaked at approximately 89 per cent and remained very stable thereafter, declining to only 86 per cent by Month 18. The full-time employment rate of the IA sample peaked at 92 per cent. However, it declined more quickly to 81 per cent by Month 18.

The figures also show that the IA sample had much higher peak full-time employment impacts than the EI sample. For the EI sample, full-time impacts peaked at 57 percentage points in Month 3 and declined to 35 percentage points by Month 18. For the IA sample, full-time employment impacts peaked at 80 percentage points in Month 5 and decreased to 54 percentage points in Month 18. While for both samples the decline in impact can be attributed to a large extent to the increasing full-time employment rates of the control group, the decline in impact within the IA sample is also due in part to the decline in the full-time employment rate of the IA program group by Month 18.

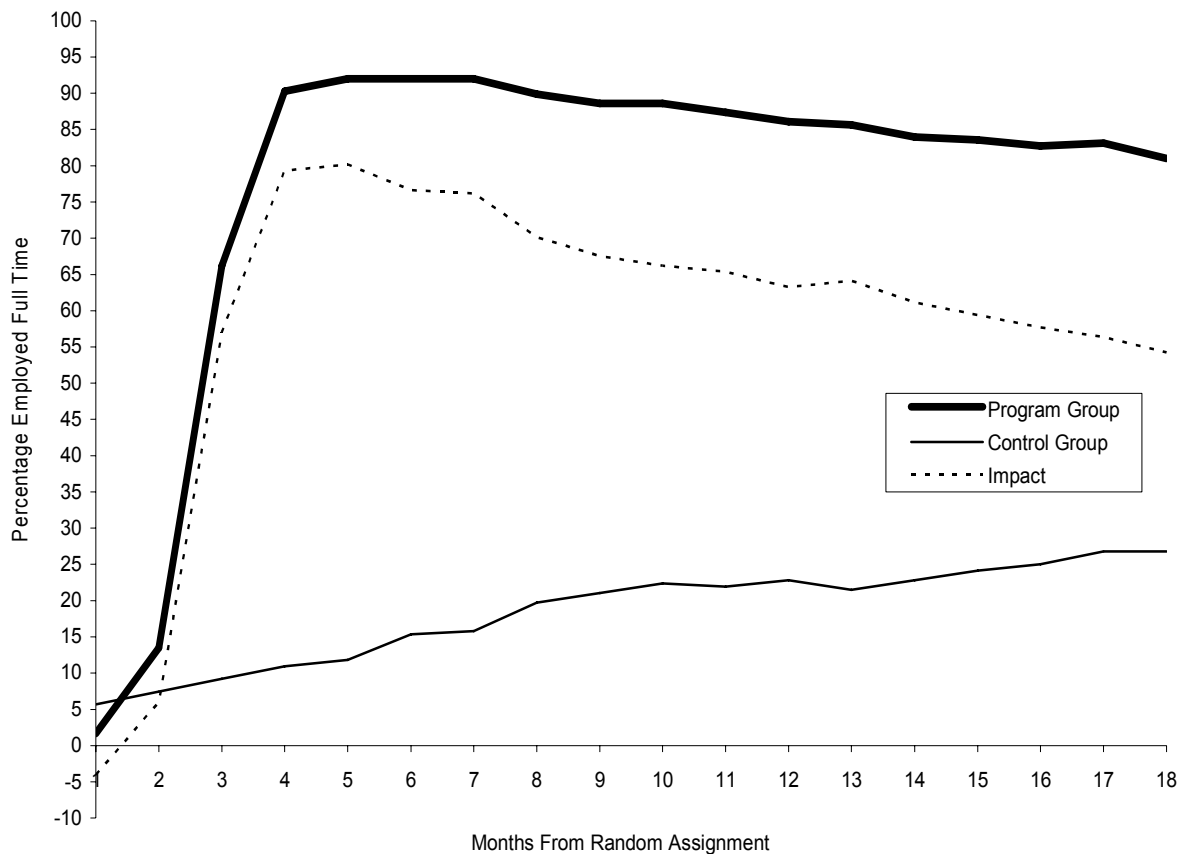
**Figure 3.2a: Full-Time Employment Rates, by Months From Random Assignment — EI Sample**



**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

CEIP appears to have been extremely effective in increasing full-time employment rates among both EI and IA program group members. However, in order to determine if the impact of CEIP varies within the EI and IA samples, an additional subgroup analysis was performed to estimate differences in impacts throughout each sample. A range of subgroups were defined based on demographic and socio-economic characteristics measured at the time of enrolment. In comparing the impact of CEIP on these various subgroups within both EI and IA samples, there appears to be little differentiation in the effectiveness of the program at increasing full employment across a variety of baseline characteristics. The only significant differences in impacts on full-time employment between subgroups was observed within the EI sample, where CEIP had a slightly larger impact on the number of months of full-time work among program group members who were 40 years of age or older, were single, and earned less than \$20,000 per year (see Appendix E for full subgroup impact estimates).

**Figure 3.2b: Full-Time Employment Rates, by Months From Random Assignment — IA Sample**



**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

### **Combining CEIP With Other Employment**

CEIP permitted participants to leave the program at any time without losing their eligibility, provided they did not return to regular EI or basic IA benefits as their primary source of income. Participants, therefore, were free to pursue other employment opportunities to complement or replace their CEIP employment earnings. This section examines the extent to which participants — program group members who received at least \$1 in CEIP earnings — pursued non-CEIP employment following a break in their CEIP employment during the first 18 months of their eligibility period. The extent to which participants combined CEIP and non-CEIP employment is an indication of the relative attractiveness of the CEIP offer compared with other employment and how intensively the program was utilized. The results of this analysis are preliminary, as it is too early in the follow-up period to determine whether participants left CEIP permanently for other employment. Subsequent reports will examine this issue in greater detail.



Among the EI sample, most participants (73.3 per cent) worked in CEIP continuously and never had a break over the 18-month period,<sup>6</sup> while 15.9 per cent of participants left CEIP for other employment and the remaining 10.8 per cent of EI participants left CEIP but did not work during their break. IA sample participants were somewhat more likely than their EI sample counterparts to work in CEIP continuously, as 76.5 per cent never had a break in their CEIP employment by Month 18. In contrast to EI participants, IA participants who did leave CEIP were less likely to work during their break (18.0 per cent compared with 5.5 per cent who did work in a non-CEIP job), indicating that a higher proportion of IA sample participants left CEIP for non-labour market activities rather than other employment. Overall, while there does appear to be some transitioning between CEIP and other employment by Month 18, most participants worked in CEIP continuously and did not leave the program for other employment or other, non-labour market activities.

## **CEIP'S IMPACTS ON MONTHLY EARNINGS**

While CEIP had large impacts on full-time employment, its impact on earnings is expected to be mitigated by the fixed nature of the “community wage” that participants were paid. For many participants, especially those with a higher education or substantial employment experience, the community wage did not take into account their skill or experience and might have been below what they could have received from a non-CEIP job if one was available. However, CEIP’s offer of full-time employment for up to three years would have increased the attractiveness of accepting the lower community wage in exchange for stable employment. Therefore, it is expected that CEIP would have large initial impacts on monthly earnings; however, the impacts would gradually decline as control group members began to find higher wage jobs and increase their work hours during the follow-up period.

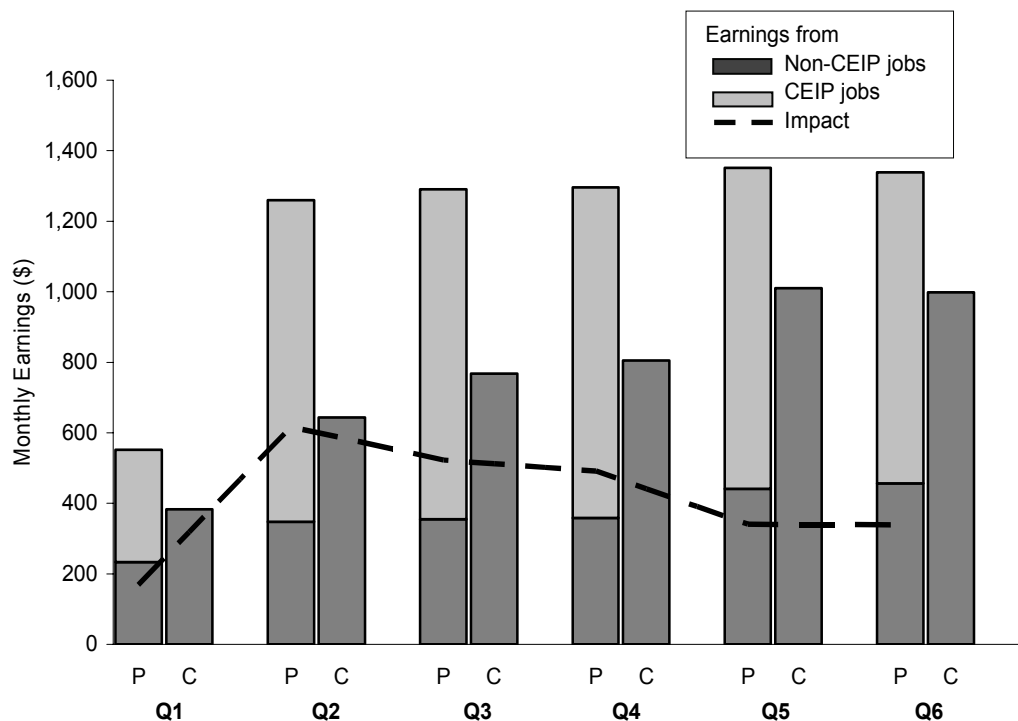
Figures 3.3a and 3.3b show earnings for CEIP program and control group members in each of the six quarters following their baseline enrolment. For program group members, their earnings are divided into earnings they received from CEIP and earnings they reported receiving from market employment (non-CEIP) jobs. Control group members’ earnings are based on (non-CEIP) jobs they reported holding over the 18-month period.

For both the IA and EI samples, CEIP significantly increased program group members’ monthly earnings by the second quarter of the follow-up period. At its peak impact, CEIP doubled earnings for program group members in the EI sample by the second quarter, as they received on average approximately \$1,250 per month in the quarter compared with nearly \$650 per month for the control group. After the second quarter, the CEIP earnings of the program group stabilized around \$900 per month, and the average earnings of the control group began to catch up as their market-based employment increased more quickly than the non-CEIP employment of the program group.

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<sup>6</sup>For the purposes of this analysis, continuous CEIP participation is defined as having received at least \$1 in CEIP earnings in each month from the start of their CEIP participation to Month 18.

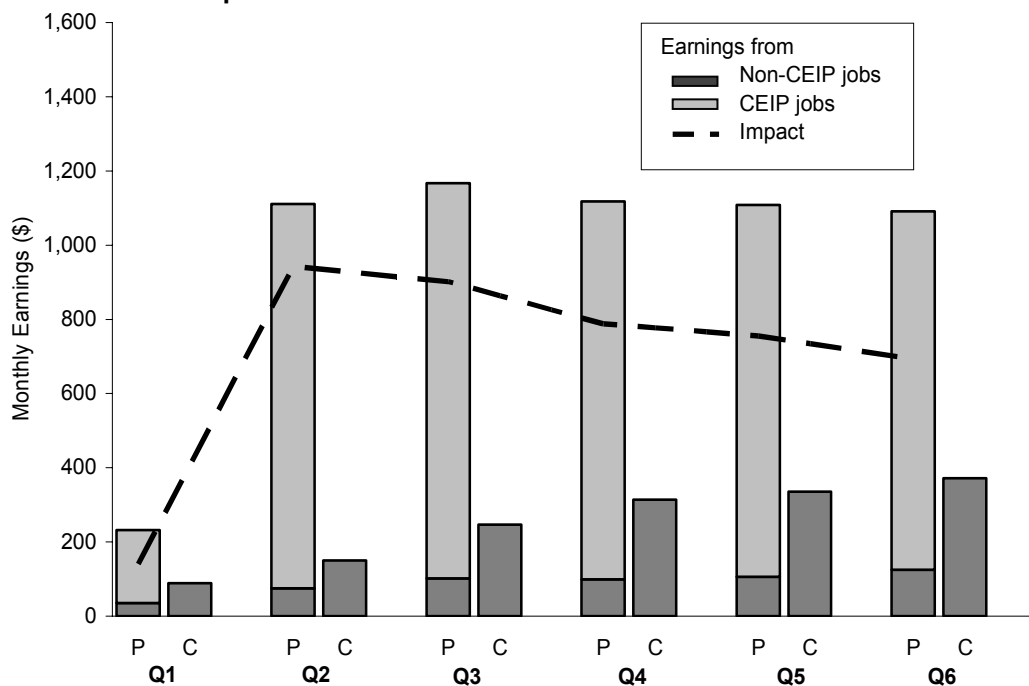
**Figure 3.3a: Average Monthly Earnings for CEIP and Non-CEIP Employment, by Quarter — EI Sample**



**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

**Note:** P = program group; C = control group; Q = Quarter.

**Figure 3.3b: Average Monthly Earnings for CEIP and Non-CEIP Employment, by Quarter — IA Sample**



**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

**Note:** P = program group; C = control group; Q = Quarter.

Among IA sample members, CEIP had a dramatic impact on their earnings as program group members achieved average monthly earnings of approximately \$1,100 in the second quarter of the follow-up period compared with \$150 for the control group. IA program members' combined earnings peaked much earlier than the EI sample in the third quarter, declining somewhat over the next three quarters due to small reductions in their CEIP earnings. As well, the earnings of control group members, while relatively small, increased substantially over the period. By the sixth quarter, CEIP's impacts on IA program group members' combined earnings declined to \$693 from their peak of \$943 in Quarter 2.

One interesting comparison between the two samples is that while EI sample's combined earnings (CEIP and non-CEIP) were higher than that of the IA sample, IA program group members received on average more earnings from CEIP. For instance, by Quarter 3, program group members in the IA sample received on average \$1,065 per month in CEIP earnings, while EI program group members earned \$935 on average. The lower average earnings among the EI sample was mostly due to their lower levels of participation, as noted in the previous chapter of this report.

The earnings impact figures provide an indication that CEIP participation displaced some market employment that the program group would otherwise have pursued, as their average monthly earnings from non-CEIP employment did not grow nearly as quickly as the market-based earnings of the control group over the 18-month period. This result is not surprising, since CEIP employment is full time and participants would have been less inclined to pursue market employment while engaged in the project. By the end of the project, however, they may have experienced a transition period with lower earnings when their eligibility for CEIP employment ended and they looked for other employment that provided similar hours or earnings to CEIP. It is anticipated, however, that the increased skills, experience, and employment contacts that participants received through CEIP will lead to better jobs and thus improved employment outcomes in the longer term.

## **CUMULATIVE MEASURES OF CEIP'S IMPACT OVER 18 MONTHS**

An alternative way to look at CEIP's impact on employment and earnings is to examine its cumulative impacts over the entire 18-month period rather than its impact at one particular point in time. As seen above, CEIP's provision of full-time employment led to substantial full-time employment and earnings impacts soon after enrolment that were sustained through the initial 18 months of the follow-up period. However, as the program comes to an end at 36 months, the point-in-time impacts might diminish as some participants who leave CEIP may not have been able to find immediate full-time employment. As a counterpoint to the point-in-time estimates, the cumulative impact estimates will account for the additional financial resources and work experience that CEIP provided participants throughout its operational phase. CEIP's cumulative impacts on employment and earnings over the first 18 months are shown in Table 3.3. Impacts are first shown for CEIP earnings only, second for market employment (or non-CEIP) earnings, and finally for combined earnings from both CEIP and non-CEIP employment.

**Table 3.3: CEIP Cumulative Impacts on Earnings, Hours, and Months With Employment at 18 Months**

Cumulative Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Cumulative earnings (\$)</b>								
CEIP earnings	14,681	0	14,681 ***	(381.5)	15,855	0	15,855 ***	(436.4)
Non-CEIP earnings	6,634	14,209	-7,576 ***	(1,015.8)	1,674	4,731	-3,057 ***	(691.6)
Total earnings	21,312	14,209	7,103 ***	(951.2)	17,527	4,731	12,796 ***	(744.0)
<b>Cumulative hours</b>								
CEIP hours	1,755	0	1,755 ***	(45.6)	1,862	0	1,862 ***	(51.1)
Non-CEIP hours	590	1,443	-852 ***	(74.3)	175	654	-479 ***	(74.4)
Total hours	2,342	1,443	900 ***	(69.6)	2,037	654	1,383 ***	(82.7)
<b>Cumulative months with employment</b>								
Months with CEIP employment	12.4	0.0	12.4 ***	(0.3)	13.3	0.0	13.3 ***	(0.3)
Months with non-CEIP employment	4.4	9.9	-5.5 ***	(0.4)	1.5	5.0	-3.5 ***	(0.5)
Total months with any employment	15.0	9.9	5.1 ***	(0.4)	14.0	5.0	9.0 ***	(0.5)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Sources:** Calculations from the 18-month survey and administrative data.

**Notes:** The outcome “Total months with any employment” is less than the sum of “Months with CEIP employment” and “Months with non-CEIP employment,” since participants could be receiving earnings from both CEIP and non-CEIP employment in some months.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

## EI Sample

The cumulative outcomes for both samples show that CEIP had large, significant impacts on program group members’ earnings, hours, and months with employment. Among the EI sample, CEIP paid program group members on average a total of \$14,681 in earnings (average of \$816 per month) from 1,755 hours of employment (or 98 hours per month) in CEIP projects over 18 months, leading to a cumulative impact of \$7,103 in earnings (\$395 per month) from 900 additional hours of employment (50 hours per month) over the 18-month period.

The bottom panel of outcomes estimates CEIP’s impact on the number of months in which the individual had at least one dollar in earnings. Program group members on average had 12.4 months where they reported at least one dollar in earnings from CEIP and 5.5 fewer months in which they worked in a non-CEIP job. Overall, CEIP increased employment over the 18-month period on average by 5.1 months.

## IA Sample

Among the IA sample, the extent to which IA sample members had greater levels of participation in the CEIP project than EI sample members is evident in their cumulative impacts, as CEIP paid on average \$15,855 in earnings (or \$881 per month) over the 18-

month period. Since the control group in the IA sample worked fewer hours than their EI counterparts, CEIP displaced less market-based employment for IA program group members. CEIP's cumulative impact on program group members' earnings was \$12,796 or \$711 per month, while its cumulative impact on hours was 1,383, or 77 additional hours of employment per month over the period. Overall, CEIP increased IA sample members' total months with employment on average by nine months over the first 18 months of the follow-up period.

## **CEIP'S IMPACTS ON WAGES AND HOURS IN MONTH 16**

This section compares the impact of CEIP on average wages and weekly hours of work. Since the "community wage" paid by CEIP was fixed at a set rate for all participants, regardless of skill or experience, and participants were expected to partake in CEIP work or other approved projects for 35 hours per week, one expectation is that CEIP would lower average wages for more employable participants while increasing wages and hours for participants with a lesser degree of attachment to the labour market.

Table 3.4 shows the estimated impact of CEIP on the overall distribution of hourly wages and hours worked per week from both CEIP and non-CEIP employment. Overall, CEIP's fixed community wage and mandatory full-time working schedule led to increased wages and hours worked. However, it did reduce a significant proportion who would otherwise have received higher wages or worked more hours per week.

For both the EI and IA samples, CEIP's largest wage impact was on the proportion who did not work and who received between \$2.00 and \$3.00 above minimum wage, which is consistent with the community wage paid to CEIP project participants. Among the EI sample, the 51.1 percentage point increase in the proportion receiving between \$2.00 and \$3.00 above minimum wage was in large part due to the 23.6 percentage point reduction in the proportion of program group members who were not working. It also decreased by 7.7 percentage points the proportion within the EI sample who received wages within the \$2-above-minimum-wage-and-lower range. One important impact worth noting is that CEIP reduced a significant proportion of high wage earners in the EI sample, as it decreased by 16.1 percentage points the proportion whose wages were higher than \$3 above the minimum wage. This finding suggests that for some of the more employable EI participants, CEIP paid them a wage that was lower than what they would have otherwise received.

Among the IA sample, CEIP had an even larger impact on the proportion receiving wages in the range of \$2.00 to \$3.00 above minimum wage, increasing the proportion by 62.7 percentage points. Most of this increase was due to CEIP's 48 percentage point reduction in proportion who did not work. As well, it decreased by 11.1 percentage points the proportion who received wages within the \$2-above-minimum-wage-and-lower range. Since the CEIP community wage was typically higher than the wage paid to the control group in the IA sample, CEIP had no significant impact on the proportion of IA program group members working in higher wage jobs.

**Table 3.4: CEIP Impacts on Distribution of Wages and Hours (Month 16)**

Cumulative Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Hourly wage rate (% in each category)</b>								
Not working	10.0	33.6	-23.6 ***	(2.6)	16.9	64.9	-48.0 ***	(4.0)
Wage unreported	1.1	4.0	-2.9 ***	(1.0)	0.0	3.5	-3.5 ***	(1.2)
Less than minimum wage	0.0	0.7	-0.7 *	(0.4)	0.8	0.9	0.0	(0.9)
Minimum to \$0.99 above minimum	1.3	6.5	-5.3 ***	(1.3)	0.4	6.6	-6.2 ***	(1.7)
\$1.00 to <\$2.00 above minimum	3.4	5.8	-2.4 *	(1.4)	2.5	7.5	-4.9 **	(2.0)
\$2.00 to <\$3.00 above minimum	62.6	11.5	51.1 ***	(2.8)	68.4	5.7	62.7 ***	(3.4)
\$3.00 to <\$6.00 above minimum	11.9	21.0	-9.1 ***	(2.5)	10.6	9.7	0.9	(2.8)
\$6.00 or more above minimum	9.8	16.8	-7.0 ***	(2.3)	0.4	1.3	-0.9	(0.9)
<b>Hours worked per week (% in each category)</b>								
Not working	10.0	33.6	-23.6 ***	(2.6)	16.9	64.9	-48.0 ***	(4.0)
Hours per week unreported	0.6	1.6	-1.0	(0.7)	0.0	1.8	-1.8 **	(0.9)
Fewer than 30	5.3	14.7	-9.4 ***	(2.0)	4.6	10.5	-5.9 **	(2.4)
30	0.4	2.6	-2.1 ***	(0.8)	0.4	2.2	-1.8 *	(1.0)
31 to 34	4.7	2.8	1.9	(1.3)	5.1	1.8	3.3 *	(1.7)
35	44.0	4.2	39.8 ***	(2.6)	48.5	2.6	45.9 ***	(3.5)
36 to 39	1.3	4.9	-3.6 ***	(1.1)	0.0	2.2	-2.2 **	(1.0)
40 to 44	7.7	21.5	-13.8 ***	(2.3)	2.1	9.7	-7.5 ***	(2.1)
45 or more	12.8	13.1	-0.3	(2.2)	5.1	4.4	0.7	(2.0)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Sources:** Calculations from the 18-month survey and administrative data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

Examining CEIP's impact on average hours worked per week, it is not surprising that CEIP increased the proportion of EI sample members working 35 hours per week by 39.8 percentage points, since all participants were required to work this schedule while in the program. Among the IA sample, CEIP increased the proportion of program group members who worked 35 hours per week by 45.9 percentage points. CEIP did supplant jobs with greater hours per week however, in particular those that provided 36 to 44 hours of work per week. Among the EI sample, CEIP reduced the proportion who would otherwise have worked 36 to 44 hours by 17.4 percentage points while among the IA sample, it reduced the proportion by 9.7 percentage points. For both groups, CEIP had no significant impact on the proportion who worked 45 or more hours per week.

Among participants who would otherwise have received a wage that is comparable to CEIP's community wage, the negative impact on higher weekly hours may represent a reduction in the weekly earnings they would otherwise have received. However, for many participants, a reduction in the proportion who worked more hours per week may indicate that some needed to work fewer hours as a consequence of CEIP's relatively higher

community wage. Therefore, it is not clear whether this impact should be interpreted as a negative outcome of CEIP at this time.

## **SUMMARY**

CEIP appeared to have been effective in increasing the employment rates, full-time employment rates, and average monthly earnings of both EI and IA program group members throughout the first 18 months of the program's operations. It also appeared to have an overall positive effect on program group members' wages and weekly hours, in large part due to its large impact on the reduced proportion of program group members who were not working or were working but at reduced hours or lower wages. The next chapter examines how CEIP's positive impact on employment affected the living conditions of program group members and their families, focusing on their EI and IA receipt, their personal and family income, and their overall well-being compared with Statistic Canada's low income cut-off measure.





## Chapter 4:

### Impacts on EI, IA, and Personal and Household Income

Chapter 3 showed that the Community Employment Innovation Project (CEIP) significantly increased program group members' employment and earnings, suggesting that for many participants the offer of full-time employment in CEIP was more attractive than other alternatives, such as remaining on Employment Insurance (EI) or income assistance (IA). In order to determine whether CEIP's effect on individual earnings led to higher total incomes for program group members, it is important to examine whether their CEIP earnings made up for their loss in payments from EI or IA. The added income from CEIP would also most likely have had an effect on participants' other income sources as well as their total household income. For instance, CEIP's offer of up to three years of full-time employment may have relieved pressure on participants' family members to work. Therefore, in addition to estimating the impact of CEIP on personal and household income, this chapter will also estimate the effects of CEIP on the labour market decisions of program group members' spouses.

This chapter begins with an examination of CEIP's impact on an important source of income for participants, regular EI and basic IA benefits. It then estimates the impacts of CEIP on a broader range of income sources for program group members and their household income. Finally, it attempts to address how CEIP's extra income affected the living conditions of individuals and their families by measuring their household income against a well-established indicator of low-income status, Statistic Canada's low income cut-offs (LICOs). In all cases, impacts are shown separately for CEIP's EI and IA sample groups.

### SUMMARY OF FINDINGS

- **CEIP significantly reduced reliance on EI and IA benefits.** Among EI sample members, CEIP's largest impact on EI reliance occurred early in the follow-up period, when program group members were 61 percentage points less likely to be receiving EI than the control group. However, the impact diminished quickly as control group members also began to leave EI, suggesting that the program encouraged participants to leave EI sooner than they otherwise would have. CEIP also had a large impact on IA receipt, approximately halving the proportion of program group members in the IA sample receiving IA benefits. Unlike its impact on EI receipt, CEIP's impact on IA benefit receipt was sustained throughout the 18-month follow-up period.
- **There are significant impacts on personal income for both the EI and IA samples and a positive net effect on IA sample members' total household income.** CEIP increased the annual personal income for EI program group members by nearly \$2,800 and for IA program group members by nearly \$3,700 at 18 months. However, CEIP had a negative effect on the annual income of other household members in the EI sample, leading to an indeterminate net effect on total household income. Among IA sample members, CEIP had a positive effect on other household members'

incomes, leading to a net positive impact on total household income of \$5,500 over a 12-month period.

- **Especially among EI sample members' households, CEIP reduced reliance on other sources of income such as EI or IA.** When asked about their sources of household income over the past year at 18 months, the households of program group members in the EI sample were half as likely as the control group to have received income from either EI or IA in the past 12 months and less likely to have received income from workers' compensation or other disability insurance. Among the IA sample, CEIP's impact on other sources of income within the household was restricted to IA receipt. Program group households were a little more than half as likely as the control group to have received IA in the past year.
- **CEIP had a significant impact on raising the family income of IA sample members above Statistics Canada's low income cut-offs (LICOs).** CEIP had virtually no impact on reducing the incidence of low income among EI sample members' households as measured by the LICOs. However, CEIP had a large and significant impact on the LICO status of IA households. In the IA sample, the biggest impact occurred at the lowest income range, where program group members were 23 percentage points less likely than the control group to have a household income below 50 per cent of the LICOs.

## IMPACTS ON EI AND IA RECEIPT

Due to CEIP's selection criteria, a key component of sample members' income at the time of their enrolment was their receipt of regular Employment Insurance and basic income assistance benefits.<sup>1</sup> In order to be selected for CEIP, both the EI and IA samples had to have received benefits in the month of their sample selection, and EI sample members had to have entitlement left on their claim (benefit weeks remaining that they could potentially receive should they remain unemployed). For IA beneficiaries, benefits are determined by household composition and are paid at a consistent rate for as long as the recipient remains eligible to receive benefits. Regular EI benefit entitlement, however, is determined by the applicant's work history and rate of unemployment in the region in which he or she lives. Both IA and EI benefits are affected by any earnings received by the beneficiary. Consequently, in making the decision to take up the CEIP offer, participants would have been making a real choice between CEIP employment and receiving further benefits.<sup>2</sup> Given the high participation rates of the program group, especially among the IA sample, it is expected that CEIP will have had a substantial impact on EI and IA receipt during the first 18 months of the follow-up period.

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<sup>1</sup>Once notified of their eligibility, potential sample members had up to eight weeks to enrol in the study. Due to the time lag, some sample members were no longer in receipt of EI or IA at enrolment.

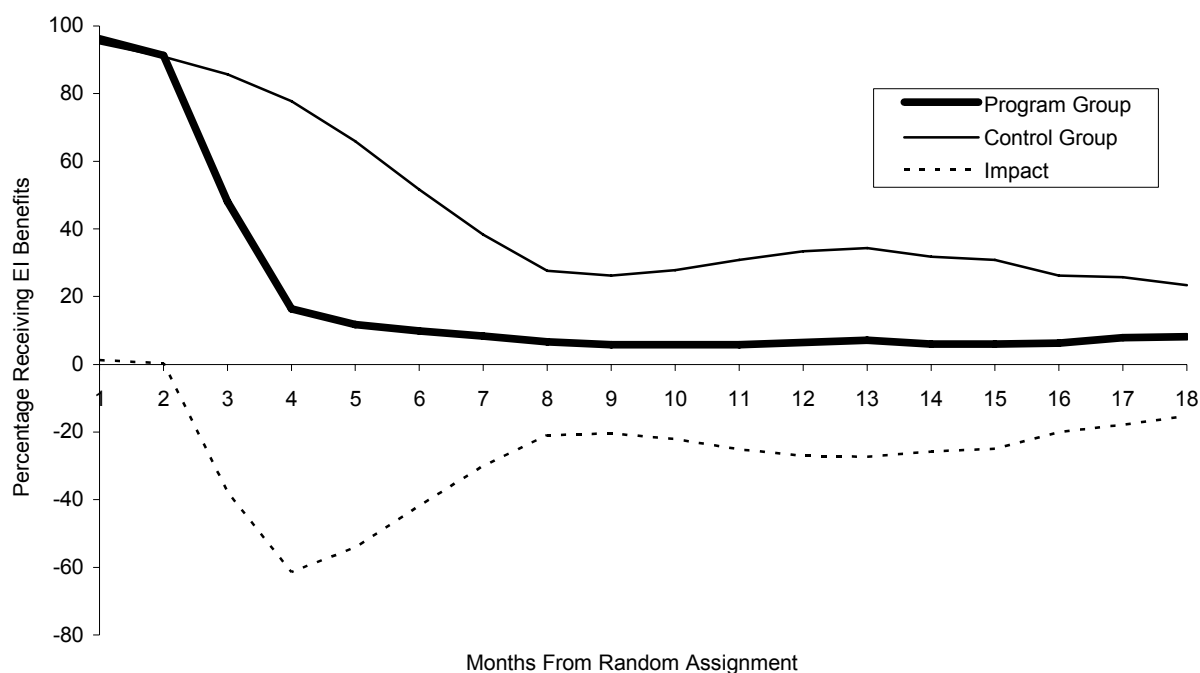
<sup>2</sup>Participants were informed that if they returned to either regular EI benefits or basic IA benefits, they would no longer be eligible for participation in CEIP. CEIP did, however, permit participants in the IA sample to receive IA top-up payments to supplement their CEIP earnings, provided they did not resort to basic IA benefits as their principle source of income (comprising more than half of their total income). Please see appendices A and B for a more thorough description of the EI and IA programs.

## Receipt of EI Benefits Among the EI Sample

Participants in the EI sample were recipients who had already received benefits for 10 to 13 weeks and had at least 12 weeks of benefit entitlement left on their claim. As such, they represented unemployed workers who had not become re-employed quickly after losing their job and who faced the prospect of remaining unemployed for some time yet. Since CEIP employment is insurable employment under the EI program, participation in the program represented a low-risk proposition for these participants as they would not immediately lose their remaining entitlement<sup>3</sup> and any employment hours in CEIP counted as insurable employment towards a future EI claim. Consequently, it is expected that CEIP's impact on EI receipt will have been largest following baseline enrolment, but the impact will have declined over time as participants left CEIP (and potentially returned to EI benefits) while control group members' claims ended and they potentially returned to employment.

Figure 4.1 shows that CEIP encouraged participants to leave EI sooner than they otherwise would have. The largest impact on EI receipt for the EI sample occurs in Month 4 at 61 percentage points, as only 16 per cent of program group members received benefits in the month compared with 78 per cent of control group members. After this point, the impact decreases as the control group's receipt of EI continued to decline. It should be noted that in every month a small proportion of the program group was in receipt of EI benefits, due to the fact that some program group members did not take up the CEIP offer of employment and remained on EI benefits and that a small group of participants left CEIP during the follow-up period and returned to EI receipt (either by resuming an old claim or establishing a new one).

**Figure 4.1: Percentage Receiving Regular EI Benefits — EI Sample**



**Source:** Calculations from Employment Insurance administrative data.

<sup>3</sup>EI rules stipulate that a claimant remains entitled to any remaining benefits if he or she returns to full-time employment during the course of the claim. However, all benefits must be claimed within a year of starting the claim.

EI receipt among the control group declined at a steady rate until Month 8, most likely due to those control group members who exhausted their initial EI entitlement and were no longer eligible to receive benefits. At the time of enrolment, the maximum number of weeks that claimants were eligible to receive EI in the Cape Breton region was 45 weeks, provided they worked sufficient hours to qualify for maximum entitlement. Since EI sample members were enrolled at the point where they had already received at least 10 to 13 weeks on their claim, claimants with maximum entitlement would have approximately 32 weeks or eight months of benefits remaining at enrolment, explaining the significant decline in benefit receipt among the control group by Month 8 of the follow-up period. The increase in EI receipt among control group members beyond Month 8 would therefore be mostly due to the establishment of any new EI claims.

Table 4.1 provides the estimated impact of CEIP on average monthly EI and IA receipt during quarters 1 to 6 of the follow-up period among the EI sample. In the first quarter, both the program and control groups received substantial amounts of EI benefits, with the program group receiving on average \$584 per month and the control group receiving on average \$790 in benefits per month, for an estimated impact of \$205. Similar to CEIP's impact on the incidence of EI receipt, the largest impact occurred early in Quarter 2 at \$365 and then declined over the follow-up period. The table shows that both program and control group members experienced a dip in benefit receipt in Quarter 3, reflecting benefit entitlement exhaustion among members of both groups who remained on EI benefits.

**Table 4.1: CEIP Impacts on EI and IA Monthly Benefits — EI Sample**

<b>Outcome</b>	<b>Program Group</b>	<b>Control Group</b>	<b>Difference (Impact)</b>	<b>Standard Error</b>
<b>Average monthly EI benefits (\$)</b>				
Quarter 1	584	790	-205 ***	(30)
Quarter 2	95	460	-365 ***	(25)
Quarter 3	49	172	-123 ***	(16)
Quarter 4	52	247	-195 ***	(23)
Quarter 5	42	248	-206 ***	(21)
Quarter 6	56	171	-115 ***	(19)
<b>Average monthly IA benefits (\$)</b>				
Quarter 1	4	4	0	(2)
Quarter 2	1	13	-12 ***	(3)
Quarter 3	0	28	-27 ***	(5)
Quarter 4	4	27	-24 ***	(6)
Quarter 5	2	24	-23 ***	(5)
Quarter 6	3	30	-27 ***	(6)
<b>Sample size</b>	<b>428</b>	<b>470</b>		

**Sources:** Calculations from Employment Insurance and income assistance administrative data.

**Notes:** The estimates for each quarter are calculated by averaging the three months within a quarter.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

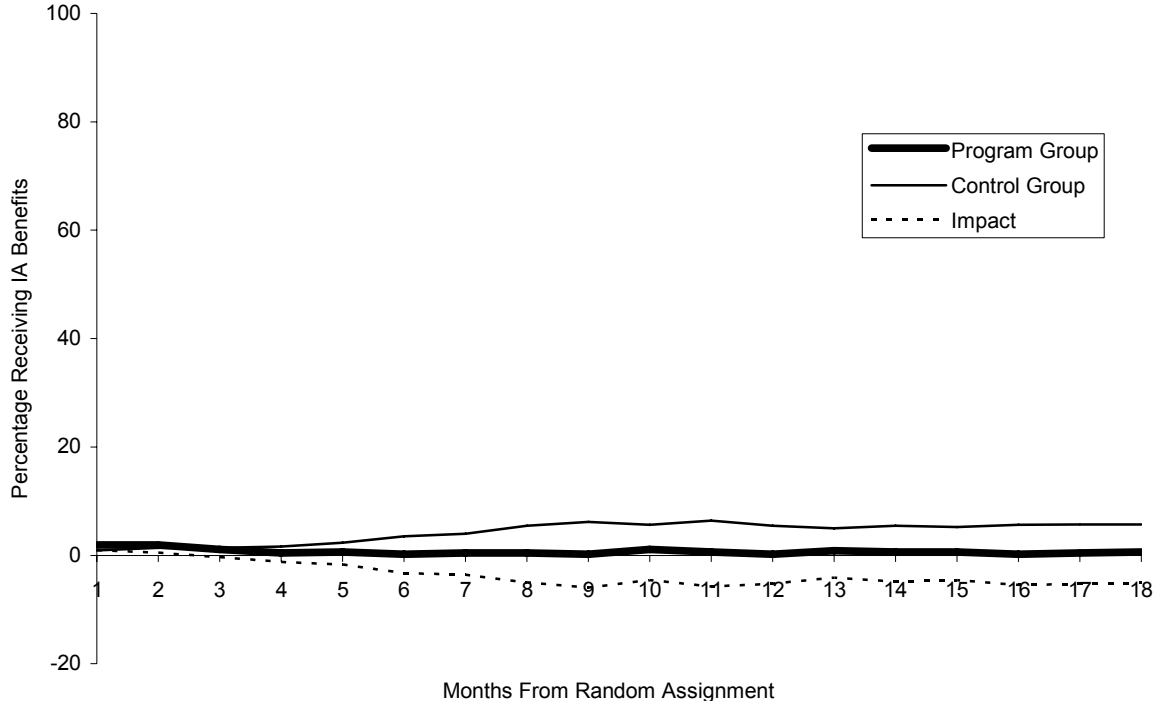
Beyond looking at the average impacts among the EI and IA samples, additional subgroup analysis was performed to estimate differences in impacts within each sample. A range of subgroups were defined based on demographic and socio-economic characteristics

measured at the time of enrolment. Results of this subgroup analysis for impacts on total EI benefit payments in months 1 to 18 reveal that CEIP was most effective in reducing EI amounts for program group members who were older, male, and had 10 or more years of labour market experience. Reductions in total EI payments, when compared with the control group, were more than double among EI program group members who were 40 years of age and older compared with their younger counterparts who were under 30 years of age (reductions in total EI payments of \$4,622 versus \$1,810 respectively). They were also nearly twice as large for men than women (\$4,722 versus \$2,517) and for those with more than 10 years of work experience (\$3,979 versus \$2,032). See Appendix E for complete subgroup impact estimates.

### Receipt of IA Benefits Among the EI Sample

Income assistance may be an important financial support for EI claimants who exhaust their benefits and are unable to find re-employment. In the bottom panel of Table 4.1, EI control group members appear to have received a small but increasing amount of IA benefits during the first 6 quarters. Figure 4.2 shows the incidence of IA receipt among EI sample members in each month during the follow-up period. The chart confirms that there was a small proportion of control group members who received IA benefits, while virtually no program group members received IA during the follow-up period, leading to a small but significant negative impact on IA receipt by Month 4 that continued to Month 18.

**Figure 4.2: Percentage Receiving IA Benefits — EI Sample**



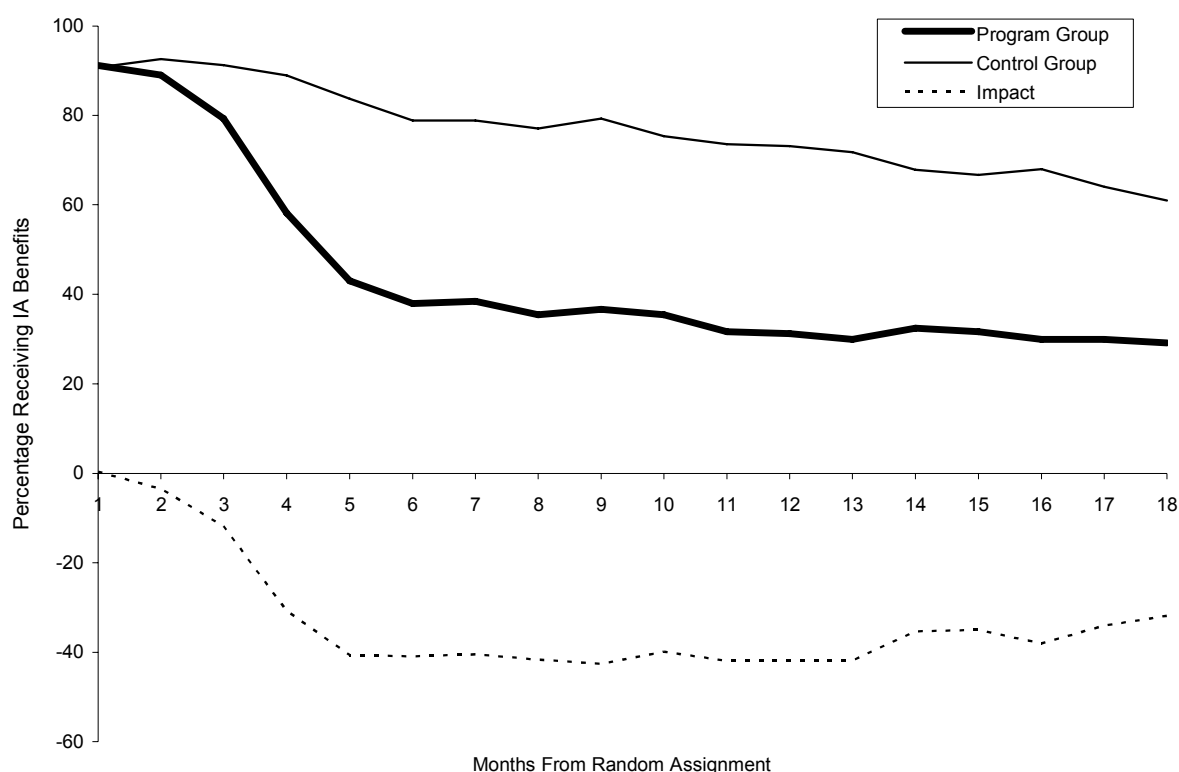
**Source:** Calculations from 18-month administrative data.

## Receipt of IA Benefits Among the IA Sample

Since CEIP appears to have been more attractive to IA recipients, it is expected that it will have had a more substantial impact on IA benefit receipt as IA recipients opted to leave IA in order to participate in the CEIP. However, the program's impact on IA receipt will have been mitigated somewhat by CEIP's rules that allow for some receipt of IA benefits while participating in CEIP (i.e. monthly IA benefits that do not exceed 50 per cent of total income). Thus it is expected that while few participants in the IA sample will have returned to basic IA benefits as their primary source of income, there will be a significant proportion who will have received IA benefits while participating in CEIP.

Figure 4.3 provides the estimated impact of CEIP on monthly basic IA receipt for the IA sample. The table shows that by Month 5, CEIP reduced the proportion of IA sample members receiving benefits in each month by half. In that month, 43 per cent of program group members were receiving IA benefits compared with 84 per cent of control group members, for an estimated impact of 41 percentage points. The impact remains fairly steady until the end of the follow-up period, where it declined to 32 percentage points in Month 18.

**Figure 4.3: Percentage Receiving IA Benefits — IA Sample**



Source: Calculations from 18-month administrative data.

Since CEIP permitted participants to supplement their CEIP earnings with IA benefits as long as IA was not their principle source of income, it is expected that CEIP will have had a larger impact on total IA benefits received than on the percentage who received any benefits in a given month. In Table 4.2, CEIP's impact on average monthly IA and EI receipt for the IA sample is shown for quarters 1 to 6. In the top panel, CEIP's impact on IA receipt increased dramatically after the first quarter, peaking at \$353 per month in Quarter 2, or nearly three times the average amount of benefits received by the program group. After this point the amount of benefits received by the control group declined from its high of \$525 in Quarter 1 to \$348 in Quarter 6, while the program group's average monthly receipt hovered around \$100 in the last four quarters.

**Table 4.2: CEIP Impacts on EI and IA Monthly Benefits — IA Sample**

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Average monthly IA benefits (\$)</b>				
Quarter 1	461	525	-64 ***	(24)
Quarter 2	125	478	-353 ***	(23)
Quarter 3	96	428	-332 ***	(23)
Quarter 4	89	399	-309 ***	(23)
Quarter 5	103	382	-278 ***	(24)
Quarter 6	99	348	-249 ***	(24)
<b>Average monthly EI benefits (\$)</b>				
Quarter 1	9	18	-9	(9)
Quarter 2	3	27	-24 **	(10)
Quarter 3	3	23	-21 ***	(7)
Quarter 4	5	36	-31 ***	(11)
Quarter 5	4	59	-55 ***	(14)
Quarter 6	2	66	-64 ***	(15)
<b>Sample size</b>	<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month administrative data.

**Notes:** The estimates for each quarter are calculated by averaging the three months within a quarter.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

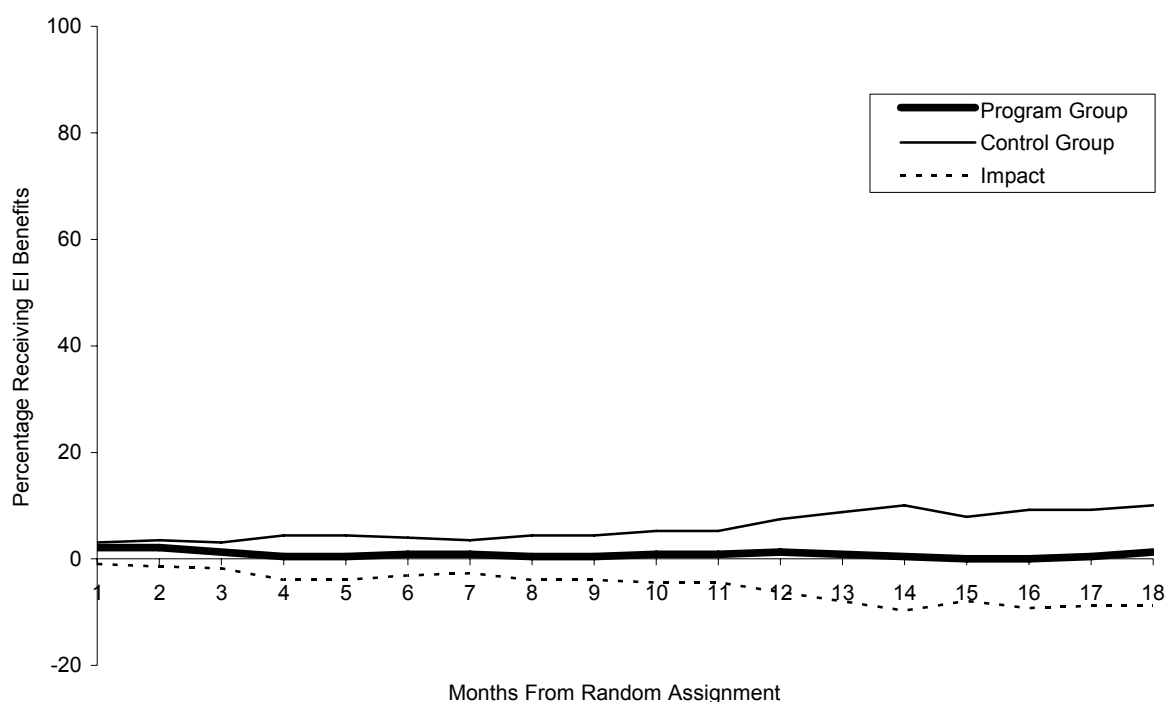
When comparing CEIP's impact on total IA benefit payments across a variety of baseline characteristics, few subgroup differences emerge within the IA sample. As one might expect, IA program group members with less work experience had somewhat larger reductions in total IA payments when compared with those with a longer work history (for complete subgroup impact estimates, see Appendix E).

### Receipt of EI Benefits Among the IA Sample

In the bottom panel of Table 4.2 it is evident that few IA sample members received EI benefits during the period. Program group members received very few EI benefits, and the amount that they did receive declined by Quarter 6. Control group members also received few EI benefits in the first quarter; however, the amount of benefits they received more than tripled by Quarter 6 leading to a significant and growing impact on EI receipt among this sample throughout the period.

The incidence of EI receipt among the IA sample is examined in Figure 4.4. The figure shows that by Month 14, 10 per cent of control group members received EI benefits compared with virtually no program group members, leading to a large and negative impact on EI receipt. Since CEIP employment was insurable for EI purposes, one research topic for future reports will be the extent to which participants in the IA sample were able to qualify for EI benefits following their participation in the CEIP project.

**Figure 4.4: Percentage Receiving Regular EI Benefits — IA Sample**



Source: Calculations from 18-month administrative data.

## IMPACTS ON PERSONAL AND HOUSEHOLD INCOME

Moving beyond CEIP's impact on EI and IA transfers to individuals, this section examines CEIP's impact on overall personal and family income. CEIP provided participants with up to three years of stable income at a fixed level of earnings. It is important to examine how participation in the program impacted upon participants' sources of other income, as well as its role in influencing overall household income decisions, as CEIP participants left EI and IA benefits and began working full time.

### Personal and Household Income of the EI Sample

Table 4.3 provides estimates of CEIP's impact on personal and household income, labour force participation of program group members' spouses, and sources of other household income in the 12 months prior to the 18-month survey. Turning first to CEIP's impact on personal and household income for the EI sample, CEIP had a large and significant impact on personal income as it increased EI program group members' income by nearly \$2,800 from \$16,754. For CEIP participants, CEIP's full-time employment earnings provided them with



substantially more income than what they would have received in EI benefits or labour market earnings.

**Table 4.3: CEIP Impacts on Personal and Household Income Prior to the 18-Month Follow-Up Interview**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Personal and family income (\$)</b>								
Individual income	19,520	16,754	2,766 ***	(701)	14,408	10,720	3,688 ***	(490)
Other household income	15,278	17,682	-2,404 **	(1,137)	5,732	3,856	1,876 **	(951)
Total household income <sup>a</sup>	35,121	34,450	670	(1,328)	20,244	14,739	5,504 ***	(1,066)
<b>Employment of spouse in past 12 months</b>								
Had a spouse who worked (%)	43.6	46.0	-2.4	(3.3)	14.4	6.6	7.8 ***	(2.8)
Number of months spouse worked	4.2	4.7	-0.4	(0.4)	1.3	0.6	0.7 **	(0.3)
Had spouse who worked full time (%)	36.8	40.4	-3.6	(3.3)	12.2	6.1	6.1 **	(2.7)
Had spouse who worked part time (%)	6.2	5.4	0.8	(1.6)	1.7	0.4	1.3	(1.0)
<b>Sources of household income (%)</b>								
CPP/Old Age Pension/GIS	21.7	19.4	2.3	(2.7)	16.9	12.0	4.9	(3.3)
Workers' compensation or disability insurance	8.2	13.4	-5.3 **	(2.1)	5.9	4.4	1.5	(2.1)
Investment income (interest, RRSPs, etc.)	12.5	14.2	-1.7	(2.3)	3.4	2.2	1.2	(1.5)
IA income	4.3	9.1	-4.8 ***	(1.7)	37.6	80.5	-43.0 ***	(4.1)
EI income	29.7	61.2	-31.5 ***	(3.2)	20.7	22.6	-1.9	(3.8)
Tax credits (HST, child tax, etc.)	66.2	68.4	-2.1	(3.2)	90.3	88.5	1.8	(2.9)
Other sources	5.4	8.9	-3.5 **	(1.7)	16.0	22.6	-6.5 *	(3.7)
No income from above sources	14.6	7.0	7.7 ***	(2.1)	3.8	2.2	1.6	(1.6)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>Household income is measured as the sum of the sample member's income and the income of all other members in that person's household.

Among the EI sample, CEIP appeared to impact the amount of income received by other household members, as it decreased other household income by \$2,404 compared with the control group. This decrease in other household members' income counterbalanced the increase in personal income such that CEIP's impact on total family income is insignificant. However, CEIP's offsetting impact on total household income did not appear to be directly related to the employment behaviour of program group members' spouses. While data on other household members' earnings is not available, Table 4.3 shows that CEIP did not significantly decrease the extent to which program group members' spouses worked in the past 12 months, both in terms of the proportion with spouses who were employed and the total number of hours worked by program group members' spouses.

Examining CEIP's impact on the various sources of household income of EI sample members reveals that the increased income provided by CEIP appears to have had an effect on the propensity of other household members to claim income from other sources, most notably workers' compensation or other disability insurance and other income sources such as child or spousal support, scholarships, or grants. The households of program group members were also less likely to receive income from income assistance, most likely due to the fact that eligibility is based on household income, which would be affected by participants' increased earnings from CEIP. Program group members were also less likely to have received income from any of the above sources, suggesting that participants and other members of their household were less likely to find other sources of income to complement their CEIP earnings.

### **Personal and Household Income of the IA Sample**

Similar to the EI sample, CEIP had a large and significant impact on IA sample members' personal income, increasing the program group's personal income by nearly \$3,700, or approximately one third of control group members' income of \$10,720. Unlike the EI sample, however, CEIP also had a positive impact on IA sample member's other household income, such that CEIP increased the household income of IA sample members by \$5,504 compared with control group members' total household income of \$14,739.

CEIP also had a positive impact on the extent to which IA sample members' spouses worked. In the 12 months prior to the 18-month survey, the proportion of program group members who had a spouse working more than doubled as 14.4 per cent of program group members' spouses worked over this period, compared with 6.6 per cent of control group members. Similarly, the number of months that spouses worked over the 12-month period increased by 0.7, compared with 0.6 for the control group. Most of this increase in employment occurred at the full-time level, since the proportion of spouses working full time increased by 6.1 percentage points, or twice that of the control group.

CEIP did not appear to have a significant influence on the mix of sources of income for IA program group members. As expected, the largest and most significant impact of CEIP was on household IA benefit receipt, as program group members' households were 43 percentage points less likely to receive IA benefits than the control group (81 per cent). To some extent, CEIP decreased reliance on other sources, such as child or spousal support, scholarships, or grants, but this impact of 6.5 percentage points is significant only at the 10 per cent level. Since participation in the program did not have a significant impact on other household income sources apart from IA receipt, CEIP's positive impact on "other household income" observed above appears to be mostly attributable to the increased labour market participation of program group members' spouses.

### **LOW-INCOME STATUS**

The fact that CEIP had a larger impact on IA sample members' income when compared with EI sample members, both in relative and absolute terms, is in large part due to the large difference in incomes of their respective control groups. Since the total household income of control group members in the IA sample was less than half that of program group members

(\$34,500 versus \$14,700), it stands to reason that the offer of full-time earnings at a fixed wage will have a much larger impact on the IA sample's overall income situation. One method to measure CEIP's impact on household income is to examine its impact on low-income status using Statistics Canada's low income cut-off (LICO) thresholds.

Table 4.4 shows CEIP's impact on household low-income status according to the LICOs. The table illustrates the disparity in average household income between the two samples, as 69.5 per cent of the EI control group had household incomes above the LICOs compared with only 10.5 per cent of the IA control group. Among the EI sample, CEIP had very little effect on the LICO status of their households, decreasing somewhat the proportion below the LICOs, although this difference is insignificant. Understandably, CEIP had a much larger impact on the low-income status of IA sample members' households, especially at the lowest income levels. While the proportion below the LICOs decreased by 18.2 percentage points,<sup>4</sup> CEIP decreased the proportion whose household income was below 50 per cent of LICO by 23.1 percentage points. It appears that program group members with household income at the lowest levels achieved increases through CEIP that resulted in household incomes close to the level of the LICOs rather than well above it, as the proportion in the 75 to less than 100 per cent of LICO threshold increased by 10.6 percentage points and the proportion in the 100 to less than 150 per cent of LICO threshold increased by 14.9 percentage points.

**Table 4.4: CEIP Impacts on Household Low-Income (LICO) Status Prior to the 18-Month Follow-Up Interview**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
Household income below LICO (%) <sup>a</sup>	27.2	30.5	-3.3	(3.3)	71.4	89.5	-18.2 ***	(3.8)
Below 50% of LICO	5.2	7.8	-2.7	(1.8)	15.0	38.1	-23.1 ***	(4.2)
50 to less than 75% of LICO	7.4	11.2	-3.8 *	(2.1)	29.1	34.8	-5.7	(4.5)
75 to less than 100% of LICO	14.6	11.5	3.1	(2.5)	27.2	16.7	10.6 ***	(4.0)
Household income above LICO (%)	72.8	69.5	3.3	(3.3)	28.6	10.5	18.2 ***	(3.8)
100 to less than 150 % of LICO	28.7	23.8	4.9	(3.2)	21.1	6.2	14.9 ***	(3.3)
150 to less than 175% of LICO	10.4	13.2	-2.8	(2.3)	3.8	1.0	2.8 *	(1.5)
175 to less than 200% of LICO	7.9	10.6	-2.7	(2.1)	0.9	1.9	-1.0	(1.2)
200% of LICO or more	25.7	21.9	3.9	(3.1)	2.8	1.4	1.4	(1.4)
<b>Sample size</b>	<b>404</b>	<b>357</b>			<b>213</b>	<b>210</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>Calculated by comparing annualized family income with the low income cut-off (LICO) defined by Statistics Canada for the sample member's location and family size.

<sup>4</sup>When the CEIP impacts on LICO status are adjusted for a series of sample members' baseline characteristics, the impact on decreasing the incidence of low income among IA sample members is lower than the unadjusted impact. The adjusted impact of CEIP on household income below the LICOs is 10.4 percentage points, significant at the 5 per cent level (see Appendix D for more detail on adjusted impacts).

Subgroup analysis was also performed to estimate differences in impacts on low-income status on a series of groups defined by their characteristics at enrolment. According to this analysis, only a few differences in subgroup impacts were identified. Among EI sample members, CEIP had a larger impact on reducing the incidence of low incomes among single program group members (by 11.6 percentage points compared with an insignificant impact among married program group members) and among those with less than 10 years of work experience (CEIP reduced incidence of low income by 15.6 percentage points but had an insignificant impact among program group members with 10 or more years of experience). Among IA sample members, the only significant difference in subgroup impacts was between program group members who lived with children and those who did not, as those without children in the household had a 28.7 percentage point reduction (relative to the control group) in the proportion with family income below LICO compared with an only 10.4 percentage point reduction for those who had children (for full subgroup impact estimates see Appendix E).

## **SUMMARY**

CEIP had a positive impact on reducing reliance on EI and IA benefits as well as increasing personal and total household income for program group members. It also significantly reduced the incidence of low income, as measured by the LICOs, for individuals in the IA sample, especially at the lowest income levels. While CEIP appeared to reduce the incidence of low income among EI sample members, the impacts were not found to be significant. The next chapter examines CEIP's influence on participants' social capital development and volunteering activities.

## Chapter 5: Impacts on Social Capital and Volunteering

In an effort to improve the longer-term employability of participants, the Community Employment Innovation Project (CEIP) aimed to provide opportunities for both skill development through work experience and an enhancement of social capital in terms of improved social networks and the extent of resources that are available within them. Earlier chapters have shown that CEIP has in fact led to large employment impacts, providing a significant stable period of varied work experience for most program group members. But is this associated with the development of social capital as well?

One of the central outcomes of interest in the CEIP study is this notion of social capital and the potential that a community-based jobs program, like CEIP, has to support its creation. Interest in social capital has increased dramatically in recent years, particularly since the implementation of CEIP, with many theoretical and methodological developments that support its measurement. This chapter explores some of these developments in more detail, particularly on the network-based measures of social capital used in CEIP. It distinguishes them from related outcomes on volunteering and associational activity, which have been linked with social capital in some areas of the literature. Though this distinction is made, the chapter emphasizes the importance of volunteering both in terms of its relationship to social capital and its broader importance to individuals and communities. Following a brief overview, the chapter focuses on the impacts of CEIP on social networks and the extent of volunteering among the program group. Similar to earlier chapters, these are “in-program” impacts utilizing data from the first follow-up survey, administered only 18 months after enrolment in the study.

The first section provides an introduction to the concept of social capital, including a discussion of definitions and measures; its relevance to improving other outcomes like employment, income, and life satisfaction; and a review of the possible mechanisms by which CEIP may affect social capital. The section concludes with a discussion of the expectations participants held regarding the possibility of developing social capital through CEIP, which were gleaned from qualitative interviews at only six months after their enrolment. The second section presents the impacts of CEIP at 18 months on network size, resource types available, network density, tie strength, and network heterogeneity. The third section considers impacts on the extent of formal and informal volunteering among program group members.

### SUMMARY OF FINDINGS

- **There are no statistically significant impacts on the average size of social networks at 18 months. However, there are positive distributional effects, particularly among the income assistance (IA) sample**, where the program group is nearly 10 percentage points more likely to have more than 10 contacts relative to the control group. Among the Employment Insurance (EI) sample, a small positive impact is found on those with the smallest networks, where 2.1 percentage points

fewer program group members had fewer than three contacts relative to the control group.

- **Evidence suggests that these impacts, particularly for the IA sub-sample, may result from the development of linking social capital**, as significant distributional effects are seen only on the contacts who can provide specialized advice. There are no significant impacts on bonding social capital, as measured by the number of contacts who can provide household or emotional support.
- **A positive impact on network density was found in the full sample, where 5.5 percentage points fewer program group members reported that ALL of their contacts knew each other, reflecting a less dense network for some.** Although this reduction was observed in both the EI and IA sub-samples (5.4 percentage points in each), it did not reach statistical significance given the reduced power in the smaller samples.
- **There are small changes in the heterogeneity of network contacts with respect to their gender, age, place of work, and area of residence.** Impacts on the proportion of contacts who are male and who work in the same place (as the respondent) are suggestive of increasing heterogeneity. However, impacts on the proportion of contacts who are within 10 years of the respondent's age are suggestive of increasing homogeneity.
- **A positive impact on the extent of formal volunteering was observed among EI program group members** with 12 percentage points fewer reporting that they never volunteered in the last 12 months relative to the control group. This was accompanied by a positive impact on the frequency of formal volunteering with an increase in average hours volunteered per month of 2.4 hours relative to the control group. There was little impact on the extent or frequency of formal or informal volunteering among the IA sample.

## OVERVIEW: SOCIAL CAPITAL

### A Network-Based Measurement Approach

Of the recent developments in the conceptualization of social capital, the most significant is likely the movement towards the use of well-defined network-based measures. Although networks of connected individuals have been acknowledged in many definitions of social capital, including Côté (2001), Putnam (2000), and Stone (2001), some have still tended to lack distinctions between what constitutes social capital and what is affected by or influences it. For example, the concepts of trust and reciprocity have been used as indicators of social capital, while for others, including Woolcock (2001), they are consequences of social capital. A measure of social networks characterized by norms of trust is different from the collective actions that may result from those networks. For example, community volunteering or participation in organized recreational activities may arise out of an individual's social networks, but this may be only one such outcome. Therefore, examining the number of voluntary organizations or extent of volunteering and equating that to social capital confuses the concept with its outcomes.

To resolve this ambiguity, CEIP adopts a definition of social capital that draws on a micro-level explanation, which emphasizes the role of resources within social networks and social ties, and distinguishes this from other outcomes or consequences of social capital. More specifically, CEIP follow-up surveys with participants are designed to measure the total size of participants' networks, the different resources that are accessible within those networks, and their structural characteristics.<sup>1</sup> These are measured independently from the extent of volunteering or associational activities as well as from other outcomes of interest including employment and income, health and well-being, and life satisfaction.

## Resources in Networks and Their Structural Characteristics

The type of resources that one can access from their network of contacts, the strength of the ties in that network, and their structural characteristics, define the orientation or type of social capital being measured. For CEIP, the types of resources that are measured are those potentially influenced by the intervention and are related to outcomes of interest including help finding a job, availability of specialized advice, emotional support, and help with household activities. The number of contacts an individual has who can provide emotional support or help with household chores are measures likely associated with *bonding social capital*: resources and supports that are largely obtained from family members and close friends. The number of contacts one has who can provide help finding a job or provide specialized advice (e.g. legal, medical) are measures more likely associated with *bridging social capital*, which is generally comprised of *weaker ties*,<sup>2</sup> possibly to more distant friends and acquaintances. A related measure of tie strength in the network is the relative proportion of contacts who are family members, friends, or acquaintances.

An important subset of bridging ties relate to what is known as *linking social capital* — contacts in a person's network who have a higher socio-economic status. These *vertical linkages* tend to give individuals the capacity to lever resources, ideas, and information into economic gain. CEIP is intended to provide opportunities to increase the number of weaker ties associated with bridging social capital, and in particular, expand linking social capital. The number of network contacts giving access to specialized advice, for example, from lawyers and doctors, is one such indicator of these vertical linkages, as the CEIP research sample would generally be in a lower socio-economic bracket.

In addition to quantifying the size of the network and the type of resources accessible, the structural characteristics of the networks themselves are measured in CEIP. In particular, the density and homogeneity of contacts within a network have been identified as important characteristics in the development of social capital. According to Woolcock and Narayan (2000), "less dense and less homogenous networks should help individuals confront poverty, vulnerability, resolve disputes, and/or take advantage of new opportunities." Johnson (2003) formalized elements of this theory in a model of social capital formation. The model explores how the characteristics of networks — including the

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<sup>1</sup>Van der Gaag, Snijders, and Flap (2004) discuss three generally accepted ways to measure "individual" or network-based social capital: (1) the position generator — which measures potential resource availability according to the status or "occupational prestige" of network members, (2) the name generator — which measures resource availability according to whom people talk with about various personal matters, and (3) the resource generator — which measures access to concrete social resources with networks.

<sup>2</sup>The benefits of weak ties were first suggested by Mark Granovetter in "The Strength of Weak Ties" (*American Journal of Sociology*, Vol. 78, No. 6., May 1973).

size, homogeneity, and density — evolve and are influenced by the factors described in the model. Size, homogeneity, and density are clearly definable aspects of social networks that can be measured separately from related outcomes. In CEIP, homogeneity is measured with survey questions that assess the similarity of contacts in the network on a range of demographic characteristics with that of the respondent. The density of the network is assessed through questions that elicit the nature and interconnectedness of these relationships. The textbox below summarizes the specific questions that are used in CEIP follow-up surveys to measure size, density, and homogeneity.

### **Measuring Network Size, Density, and Homogeneity**

#### **Measuring Network Size:**

##### **Number of Contacts Who Give Access to Specific Resources**

*“Write down the names of your relatives, close friends, and acquaintances whom you could easily get help from with . . .*

*. . . Finding a job, such as telling you about job leads, writing a reference letter, or putting in a word with a potential employer*

*. . . Household activities such as child care, household maintenance, household chores, or personal care?*

*. . . Specialized advice such as financial, medical, or legal advice?*

*. . . Emotional support such as encouragement, reassurance, or confidential advice?”*

#### **Measuring Network Density: Interconnectedness of Contacts**

*“Now, for the <number> different people that you listed, I would like to ask a few general questions . . .*

*. . . How many of these people would you say know each other?*

*. . . How many are members of your family, your relatives, or your in-laws?*

*. . . How many are your close friends or people you consider to be close friends?”*

#### **Measuring Network Homogeneity: Similarity in Characteristics of Contacts**

*“. . . How many are male?*

*. . . How many are within 10 years of your age?*

*. . . How many live in the same community as you?*

*. . . How many have about the same level of education as you do?*

*. . . How many have you worked with?”*



## **How Might CEIP Affect the Creation of Social Capital Among Participants?**

The primary mechanism through which CEIP participants may enhance their social capital is through the succession of work placements they are involved in over the course of their three years of eligibility. Many participants have worked on multiple projects and have been actively encouraged to consider new assignments. These varying placements provide significant opportunities to develop new contacts, with a broad range of community actors — those directly involved in CEIP (other participants, project sponsors, training organizations), but also members of the community at large — through the output of the projects themselves. This could involve individual members of the community who use the service and products of the projects or other organizations involved in the process.

From a relational perspective, CEIP may be best at improving bridging social capital, and in particular, linking social capital. Although participants were randomly selected from communities throughout the Cape Breton Regional Municipality (CBRM), there were only five participating CEIP communities that developed projects and received CEIP workers. As a result, many participants were placed in communities throughout industrial Cape Breton, outside of their hometown, giving them the opportunity to increase more distant contacts and enhance bridging social capital. Furthermore, participants may have developed linking social capital by meeting individuals, potentially project sponsors, who possessed extensive social networks and may have been in higher socio-economic strata or in positions of power or influence.

Before receiving CEIP participant workers, project sponsors were required to demonstrate to community boards that they have had adequate resources, both financial and otherwise, for a successful project. In many cases, it was prominent members of the communities and those with greater access to community resources and existing networks who came forward to sponsor projects. This gave participants the opportunity to expand their networks and gain access to resources previously unavailable, beyond what they would have been in a position to develop without CEIP.

## **Participant Expectations of Network Enhancement Through CEIP**

Qualitative interviews were conducted with participants about six months after their enrolment in the program in order to explore, among other things, their expectations for what CEIP had to offer in terms of future employment and social network development. These interviews reveal that many participants appeared to grasp the importance of social capital and had an eagerness to develop it. They understood the value of particular types of social capital, including bridging social capital, articulating it in many cases as a bridge or link to employment. Many also appreciated the potential that CEIP held for them to develop it due to, for example, professional links through CEIP work placements, which in many cases are outside of their community. As one EI participant stated,

*A lot of people, they get jobs because of who they know. I'm from the Pier, and basically all my people I know or contacts professionally would be from the Pier, and I want to venture out . . . . If I have to drive to Glace Bay that's fine . . . . I don't care where I go as long as I make professional contacts. I don't want to be limited.*

Surprisingly, there were also little apparent differences between the IA and EI populations in this regard, as participants from both groups recognized the opportunity CEIP held to acquire bridging social capital. One IA participant put it plainly when he stated,

*The different jobs I have been at, you get around the neighbourhood and you are meeting new people. The more people you know, the better chance you have [of obtaining a job]. [CEIP] is good like that.*

## **IMPACTS OF CEIP ON SOCIAL CAPITAL AT 18 MONTHS**

This section presents the impacts of CEIP on social capital at 18 months following enrolment in the study. Given that the eligibility period for CEIP is three years, these are only “in-program” impacts. Although CEIP may have led to some enhanced social capital after only 18 months, there was not a strong expectation that impacts would be observed after only half of the eligibility period. Impacts can be expected to grow over time, as participants have more opportunities to expand their contacts through all of the mechanisms described above. As one IA participant stated in the six-month interview, “The contacts are a benefit . . . and I still have a long time to go in the program, so I am just getting started [on building contacts].”

### **Network Size, Available Resources**

Table 5.1 presents the impacts of CEIP on the size of the program group members’ social networks. A breakdown of the type of resources that are available through these contacts is presented in the second panel, which allows for an initial distinction to be made between the development of bonding, bridging, or linking social capital. Impacts are provided on both the average number contacts and the distribution over a range of categories. Looking at the distribution of contacts can be important, as mean impacts can mask relevant program and control group differences when there is a lot of variation throughout the sample.

#### **EI Sample**

The first four columns of Table 5.1 present results for the EI sample. The first panel shows that there is no impact on the average size of social networks for the EI sample as both program and control group members have approximately 12 contacts on average (11.7 and 12.1 contacts for EI program and control group respectively). Furthermore, there is only a small positive impact on the proportion of EI program group members with the smallest social networks, where 2.1 percentage points fewer program group members had less than three contacts relative to the control group. The second panel also reveals that there is no significant impact among EI sample members on the number of contacts for specific types of resources. Both EI program and control group members have about seven contacts who can provide emotional support and help with household chores, six contacts who can help find a job, and four contacts who can provide specialized advice.

**Table 5.1: Distribution of Total Contacts and Resource Types**

Percentage With Given # of Contacts	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Network Size</b>								
Less than 3 contacts	1.9	4.0	-2.1 *	(1.1)	4.3	3.5	0.7	(1.8)
3 to 5 contacts	15.9	19.3	-3.4	(2.6)	17.0	22.1	-5.1	(3.7)
6 to 10 contacts	40.8	36.2	4.6	(3.3)	38.3	43.8	-5.5	(4.6)
More than 10 contacts	41.4	40.5	0.9	(3.3)	40.4	30.5	9.9 **	(4.4)
Mean	11.7	12.1	-0.4	(0.7)	12.0	11.3	0.7	(1.1)
<b>Resource types</b>								
Associated with bonding social capital								
Help with household chores								
Less than 3 contacts	13.7	14.1	-0.4	(2.3)	19.9	20.3	-0.3	(3.7)
3 to 5 contacts	34.1	38.3	-4.2	(3.2)	42.8	44.5	-1.7	(4.6)
6 to 10 contacts	35.8	33.0	2.8	(3.2)	27.5	28.2	-0.7	(4.2)
More than 10 contacts	16.3	14.6	1.7	(2.4)	9.7	7.0	2.7	(2.6)
Mean	7.4	7.0	0.4	(0.4)	6.0	5.8	0.2	(0.5)
Provide emotional support								
Less than 3 contacts	14.6	17.5	-2.9	(2.5)	16.2	19.8	-3.7	(3.6)
3 to 5 contacts	36.4	35.0	1.4	(3.2)	35.3	38.3	-3.0	(4.5)
6 to 10 contacts	33.0	31.4	1.6	(3.2)	34.0	28.2	5.8	(4.3)
More than 10 contacts	16.1	16.1	0.0	(2.5)	14.5	13.7	0.8	(3.2)
Mean	7.3	7.3	0.0	(0.5)	7.6	7.0	0.6	(0.8)
Associated with bridging and linking social capital								
Provide specialized advice								
Less than 3 contacts	37.3	38.1	-0.9	(3.3)	41.5	42.5	-1.0	(4.6)
3 to 5 contacts	39.4	39.8	-0.4	(3.3)	33.5	41.2	-7.7 *	(4.5)
6 to 10 contacts	20.3	17.0	3.3	(2.6)	19.5	12.4	7.1 **	(3.4)
More than 10 contacts	3.0	5.0	-2.0	(1.3)	5.5	4.0	1.5	(2.0)
Mean	3.9	4.2	-0.3	(0.2)	4.0	3.9	0.2	(0.4)
Help with finding a job								
Less than 3 contacts	26.3	27.3	-0.9	(3.0)	28.0	33.2	-5.2	(4.3)
3 to 5 contacts	36.2	37.6	-1.4	(3.3)	38.6	38.1	0.4	(4.6)
6 to 10 contacts	25.1	23.9	1.1	(2.9)	25.4	19.7	5.7	(3.9)
More than 10 contacts	12.4	11.2	1.2	(2.2)	8.1	9.0	-0.9	(2.6)
Mean	5.9	5.9	0.0	(0.4)	5.5	5.5	0.0	(0.7)
<b>Sample size</b>	<b>470</b>	<b>428</b>	<b>898</b>		<b>237</b>	<b>228</b>	<b>465</b>	

**Source:** Calculations from 18-month follow-up survey data.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

## IA Sample

The last four columns of Table 5.1 present results for the IA sample. Similar to results for EI sample members, the first panel shows that there is no significant impact on the average size of social networks among the IA sample (12.0 and 11.3 total contacts for IA program and control group members respectively). However, there is a positive significant impact on the distribution of contacts, with IA program group members being 10 percentage points more likely to have 10 or more contacts relative to the control group (40.4 per cent of IA program group members have 10 or more contacts, while only 30.5 per cent of the control group have 10 or more contacts).<sup>3</sup> Results in the second panel suggest that this is the result of the development of linking social capital, as significant impacts are seen only on the number of contacts who can provide specialized advice. The proportion of the IA sample that has 6 to 10 contacts is about seven percentage points higher in the program group relative to the control group (while an equal but opposite impact is seen in the 3 to 5 contacts category, suggesting slight movement up the distribution). There were no analogous impacts on bonding social capital, as measured by the number of contacts giving access to household or emotional supports.

## Structural Characteristics of Networks

Table 5.2 presents the impacts of CEIP on some of the structural characteristics of program group members' social networks. The first panel presents impacts on network density as measured by the proportion of respondents' contacts who know each other. The second panel presents impacts on the strength of ties in the network as measured by the proportion of respondents' contacts who are relatives, friends, or acquaintances. The third panel presents impacts on several demographic characteristics of respondents' contacts.

## EI Sample

The first four columns of Table 5.2 present results for the EI sample. The first panel shows that although there is a 5.4 percentage point difference between EI program and control group members in the proportion who reported all their contacts as knowing each other, evidence of less dense networks, it does not reach the level of statistical significance.<sup>4</sup> Similarly, in the second panel, the small difference in the proportion of contacts who are acquaintances, evidence of weaker ties, is also not statistically significant. The third panel does show some evidence of changes in characteristics of network contacts in the EI sample, with respect to their age and place of work. EI program group members are six percentage points more likely to report working with their contacts and three percentage points more likely to report that their contacts are within 10 years of their age. These impacts are suggestive of possible effects on network heterogeneity and are explored further in Table 5.3.

## IA Sample

The last four columns of Table 5.2 present results for the IA sample. The first panel reveals a 5.4 percentage point difference between IA program and control group members in those who reported all their contacts as knowing each other. This is accompanied by an

<sup>3</sup>When adjusted for baseline characteristics, the magnitude of this impact within the IA sample was smaller (7 percentage points) than observed with unadjusted impacts (10 percentage points) and no longer statistically significant. See Appendix D for further details on adjusted impacts.

<sup>4</sup>Although, this difference is not statistically significant in either the EI or IA sub-sample, given the reduced power of the smaller samples, a 5.4 percentage point difference is also observed in the full sample and is statistically significant at the five percent level (not shown in the table).

increase in the percentage of program group members who reported that only some of their contacts know each other (20.3 versus 14.0 per cent of program and control group members respectively, significant at the 10 per cent level).<sup>5</sup> This would indicate that networks are becoming less dense for some, with fewer program group members in the densest category. Similar to the EI sample, the second panel shows no impacts on tie strength that reach the level of statistical significance in the IA sample. The third panel reveals some evidence of changes in characteristics of network contacts in the IA sample, with respect to their place of work (with a 4.8 percentage point impact on the percentage of the IA program group who work with their contacts), which are explored in further detail below.

**Table 5.2: Structural Characteristics of Social Networks**

	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Network density</b>								
<i>% of contacts who know each other</i>								
All	38.4	43.8	-5.4	(3.3)	43.3	48.6	-5.4	(4.7)
Most	36.7	32.3	4.4	(3.2)	31.6	31.5	0.1	(4.4)
Some	20.4	18.6	1.8	(2.7)	20.3	14.0	6.4 *	(3.5)
Few	3.3	3.9	-0.7	(1.3)	4.3	4.1	0.3	(1.9)
None	1.3	1.5	-0.2	(0.8)	0.4	1.8	-1.4	(1.0)
<b>Tie strength</b>								
<i>% of contacts who are</i>								
Relatives	51.7	50.9	0.8	(1.7)	48.7	49.1	-0.4	(2.6)
Friends	33.9	35.6	-1.7	(1.5)	36.5	38.0	-1.5	(2.3)
Acquaintances	10.5	9.1	1.4	(1.1)	12.7	12.2	0.5	(1.8)
<b>Network heterogeneity</b>								
<i>% of contacts who are</i>								
The same gender as you	59.8	62.4	-2.6	(1.6)	63.2	65.6	-2.4	(2.2)
Within 10 years of your age	62.0	58.7	3.3 *	(2.0)	56.9	55.1	1.8	(2.7)
At the same level of education as you	45.7	44.8	1.0	(2.3)	42.7	40.2	2.5	(3.1)
Working with you	27.1	21.1	6.0 ***	(1.7)	26.5	21.7	4.8 *	(2.5)
Living within your community	65.9	63.7	2.2	(2.3)	70.1	72.8	-2.7	(3.1)
Living somewhere else in Cape Breton	23.9	23.7	0.2	(2.1)	22.1	20.8	1.4	(2.8)
Living outside Cape Breton	6.2	7.5	-1.3	(1.0)	5.1	4.5	0.6	(1.3)
<b>Sample size</b>	<b>470</b>	<b>428</b>	<b>898</b>		<b>237</b>	<b>228</b>	<b>465</b>	

Source: Calculations from 18-month follow-up survey data.

Notes: Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>5</sup>When adjusted for baseline characteristics, the magnitude of this impact within the IA sample was larger (11.3 percentage points) than observed with unadjusted impacts (6.4 percentage points) and significant at the five per cent level. See Appendix D for further details on adjusted impacts.

## Network Heterogeneity: Distribution of Characteristics

The previous table presented impacts on the average percentage of sample members' contacts who had various demographic characteristics. Though these are indicative of changes in the characteristics of contacts of program group members as a result of CEIP, they do not imply increasing or decreasing heterogeneity in and of themselves.<sup>6</sup> Table 5.3 presents impacts on the distribution of the sample over the range of proportions, which provides a better picture of effects on heterogeneity due to CEIP. Impacts reflective of movement away from the extremes of the distribution can be interpreted as increasing heterogeneity, for example, more sample members in the middle categories and fewer in the extreme categories.

**Table 5.3: Network Heterogeneity: Distribution of Contact Characteristics**

Characteristics of Contacts	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Proportion of contacts who are</b>								
<i>Same gender as you</i>								
Less than a quarter	6.1	7.0	-0.9	(1.7)	5.6	4.9	0.6	(2.1)
A quarter to less than half	19.3	14.7	4.7 *	(2.5)	21.0	12.6	8.5 **	(3.5)
Half to less than three quarters	47.2	43.0	4.1	(3.4)	35.2	39.9	-4.7	(4.5)
More than three quarters	27.4	35.3	-7.9 **	(3.1)	38.2	42.6	-4.4	(4.6)
Mean	59.8	62.4	-2.6	(1.6)	63.2	65.6	-2.4	(2.2)
<i>Within 10 years of your age</i>								
Less than a quarter	9.6	12.4	-2.8	(2.1)	13.4	11.5	1.8	(3.1)
A quarter to less than half	22.9	22.3	0.5	(2.8)	25.9	25.3	0.5	(4.1)
Half to less than three quarters	29.4	30.6	-1.2	(3.1)	29.7	35.5	-5.7	(4.4)
More than three quarters	38.1	34.7	3.4	(3.3)	31.0	27.6	3.4	(4.3)
Mean	62.0	58.7	3.3 *	(2.0)	56.9	55.1	1.8	(2.7)
<i>Same level of education as you</i>								
Less than a quarter	29.2	30.6	-1.4	(3.2)	32.6	31.8	0.8	(4.5)
A quarter to less than half	21.5	24.6	-3.1	(2.9)	25.2	29.5	-4.3	(4.3)
Half to less than three quarters	25.8	21.5	4.3	(2.9)	21.6	22.1	-0.6	(4.0)
More than three quarters	23.5	23.3	0.2	(2.9)	20.6	16.6	4.1	(3.7)
Mean	45.7	44.8	1.0	(2.3)	42.7	40.2	2.5	(3.1)
<i>Working with you</i>								
Less than a quarter	52.9	64.7	-11.7 ***	(3.3)	53.6	64.9	-11.2 **	(4.6)
A quarter to less than half	28.7	21.9	6.9 **	(2.9)	27.5	19.4	8.1 **	(4.0)
Half to less than three quarters	10.6	9.6	1.0	(2.0)	11.2	9.0	2.1	(2.8)
More than three quarters	7.8	3.8	3.9 **	(1.6)	7.7	6.8	1.0	(2.4)
Mean	27.1	21.1	6.0 ***	(1.7)	26.5	21.7	4.8 *	(2.5)
<b>Sample size</b>	<b>470</b>	<b>428</b>	<b>898</b>		<b>237</b>	<b>228</b>	<b>465</b>	

**Source:** Calculations from 18-month follow-up survey data.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>6</sup>For example, if the mean proportion of the sample that has contacts who are male is 0.4, it can move towards 0.5, possibly reflecting more heterogeneity, if sample members with a low proportion increase towards 0.5 or when sample members with a high proportion decrease towards 0.5 at 18 months. However, the overall mean could rise from 0.4 to 0.5 if sample members with a high proportion get even higher, which would in fact be evidence of more homogeneity for some.

## **EI Sample**

Impacts in the first four columns of Table 5.3 confirm that there is evidence of increases in network heterogeneity of EI program group members' contacts, with respect to their gender and their place of work. Approximately eight percentage points fewer EI program group members have more than three quarters of contacts of the same gender when compared with the control group. Similarly, with respect to the place of work of network contacts, 12 percentage points fewer program group members are in the low end of the distribution (with less than a quarter of contacts working with the respondent). Both of these impacts are reflective of small increases in network heterogeneity for some, as there are no offsetting impacts in the opposite end of the distribution, which would be reflective of more homogeneity.

## **IA Sample**

Impacts in the last four columns of Table 5.3 are similarly suggestive of increases in network heterogeneity of IA program group members' contacts, with respect to their gender and place of work. Approximately nine percentage points fewer program group members have more than half of their contacts of the same gender when compared with the control group. Also, about 11 percentage points fewer IA program group members are in the most homogeneous category (with less than a quarter of contacts) when compared with the control group.

## **Heterogeneity Indicator**

Rather than look at the overall mean or distribution of each contact characteristic, an indicator of increasing heterogeneity can be constructed for each sample member. It is derived by looking at the change in the proportion of contacts who share a given characteristic with the respondent on the baseline survey with the proportion at 18 months. If the proportion has decreased, this indicates the respondent is becoming more differentiated from his or her network. This can signal increasing heterogeneity, when sample members were very similar to their contacts to begin with (e.g. contacts were mostly from the same community as the respondent at baseline but are less so at 18 months). However, being overly differentiated from his or her network can be a sign of decreasing heterogeneity if those groups are under-represented (e.g. having too few contacts of the same gender or age). In this respect, the threshold for a balanced network would vary by characteristic and can be set at a level that reflects a common-sense notion of balance or a reasonable distribution for that characteristic.<sup>7</sup> If the proportion is below a given threshold at baseline and increases towards the threshold at 18 months, or is above the threshold and decreases towards it at 18 months, the indicator is assigned to one reflecting increasing heterogeneity. The indicator would be assigned to zero in either of the opposing cases, reflecting increasing homogeneity. These can then be represented in aggregate, with an indicator of an increase in heterogeneity on *any* individual characteristic (i.e. at least one characteristic is more heterogeneous).

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<sup>7</sup>The threshold is set at 0.5 for gender, as the most heterogeneous point is when an individual has an equal number of males and females in their network. For other characteristics, more differentiation from the respondent (a lower proportion of contacts with the same characteristic) would generally imply more heterogeneity but only up to a point. The threshold is set at 0.25, though results do not vary substantially with thresholds between 0.2 and 0.33 (which are the median proportions among those working in the baseline research sample for each characteristic). For each respondent, changes in his or her proportions from baseline to 18 months moving towards 0.50 for gender and 0.25 for other characteristics, are indicators of increasing heterogeneity. Changes of less than 0.05 are not counted.

Impacts run on these indicators confirm that, for the EI sample, there are significant impacts reflecting increasing heterogeneity on the characteristic of *gender*. Program group members are eight percentage points more likely to experience an increase in network heterogeneity (39 per cent), with respect to gender, relative to the control group (31 per cent). However, program group members are four percentage points more likely to experience decreasing heterogeneity with respect to the education of their contacts (13 and 17 per cent for the program and control group respectively). There were no statistically significant impacts on this heterogeneity indicator for the IA sample.

### **Subgroup Differences in Impacts on Social Capital**

In addition to the EI and IA sub-samples, impacts for a number of additional subgroups were assessed based a range of baseline demographic characteristics of the sample. A small number of significant differences in subgroup impacts were found on the size of social networks (as measured by the percentage with more than 10 contacts) and network density (as measured by the percentage reporting all their contacts knowing each other). No significant subgroup impacts on heterogeneity were found. Only the highlights are summarized below. Complete subgroup impact tables are included in Appendix E.

Although little impact on network size was observed for the EI sample as a whole, a significant increase in the percentage with more than 10 contacts was observed among low income EI program group members (less than \$20,000 per year at baseline). The lower income group had a nine percentage point impact (significantly different from the higher income group at the five per cent level). This was in fact the largest and only significant impact on network size for all EI subgroups. Among the IA sample, the largest percentage point increase in those with more than 10 contacts was observed for those with extremely dense networks at baseline (those reporting that all their contacts knew each other). IA program group members with more dense networks at baseline experienced an 18 percentage point increase in those having more than 10 contacts (significantly different at the 10 per cent level from the zero impact observed for the less dense subgroup). There were no other significant differences in impacts on network size, with most other subgroups experiencing the increase seen in the full IA sample.

Differences in impacts on network density were found between men and women in both the EI and IA samples. Among the EI sample, male program group members experienced the reduction in network density, with a 14 percentage point decrease in those reporting that all their contacts know one another, relative to the control group (statistically different at the one per cent level from the insignificant impact observed for women in the EI sample). Among the IA sample, the opposite is true, with women largely experiencing the reduction in network density. A 12 percentage point impact is observed, statistically different from the insignificant impact on men in the IA sample.

### **IMPACTS OF CEIP ON VOLUNTEERING AT 18 MONTHS**

Although a distinction was made between social capital and volunteering, the latter is important nonetheless, not just in its relationship with social capital, but more broadly to the CEIP study. Volunteering benefits both the individual and communities at large. For example, some individuals volunteer for altruistic reasons, gaining personal satisfaction from



making a contribution, while others aim for career advancement by increasing skills, work experience, and opportunities to develop work-related contacts. At the same time, communities benefit, as volunteers contribute substantial resources to the objectives of community organizations and groups. Increased volunteering may also reduce social exclusion, which in turn has been linked with benefits on health and well-being (Crawford, 2003).

Volunteering can be defined as freely performing a job or providing service without pay. However, this is not limited to formal volunteering activities, which are provided to organizations or groups. Informal volunteering refers to unpaid activities offered to individuals, *on their own*, as opposed to activities provided through an organization or group. This could include a range of support provided to close friends or acquaintances.

CEIP may influence the extent of both formal and informal volunteering among program group members. It is possible that with increased employment due to CEIP, the reduction in the time available for volunteering, including informal supports provided to family or friends, may lessen the frequency of these activities among the program group. On the other hand, opportunities and interest in volunteering could increase given that CEIP employment is in the social economy, and largely, in voluntary sector organizations. Bringing program group members into contact with project sponsors in the voluntary sector may result in an increased awareness and even commitment to the same organizational objectives as those sponsors.

## Formal Volunteering

Table 5.4 presents impacts of CEIP on the extent of formal volunteering with groups or organizations. The first panel presents impacts on the frequency of volunteering in terms of the proportion of the sample who volunteer on a daily, weekly, monthly, or less frequent basis. The second panel presents impacts on the types of formal volunteering activities that respondents are engaged in when they volunteer. The third panel shows impacts on the actual hours of volunteering. The final panel includes impacts on the number of organizations served by those volunteering.

### EI Sample

The first panel of Table 5.4 shows that CEIP had a positive impact on the extent of formal volunteering among EI program group members, with a 12 percentage point decrease compared with the control group in those reporting that they had *never* volunteered in last 12 months (48 per cent for the program group versus 60 per cent for the control group).<sup>8</sup> This was accompanied by a positive impact on the frequency of formal volunteering among EI program group members with an average increase of 2.4 hours per month relative to the control group. Also, the percentage of the EI program group who reported volunteering about once a week rose by about five percentage points relative to the control group, as did the percentage who volunteered more than 15 hours per month.

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<sup>8</sup>When adjusted for baseline characteristics, the magnitude of the impact on volunteering within the EI sample was larger than observed with unadjusted impacts. For example, the adjusted impact on the proportion reporting that they never volunteered was a 17 percentage point reduction in the EI program group relative to the control group (compared with a 12 percentage point unadjusted impact). See Appendix D for further details on adjusted impacts.

**Table 5.4: Impacts on Formal Volunteering With Groups or Organizations**

	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Frequency of formal volunteering</b>								
<i>How often did you volunteer in last 12 months?</i>								
Everyday	3.2	1.9	1.3	(1.1)	0.4	1.3	-0.9	(0.9)
A few times a week	9.2	8.9	0.2	(1.9)	5.9	6.1	-0.2	(2.2)
About once a week	11.1	6.6	4.5**	(1.9)	12.7	8.8	3.9	(2.9)
About once a month	14.9	11.8	3.2	(2.3)	9.3	8.3	0.9	(2.6)
Less than once a month	13.4	10.6	2.8	(2.2)	8.9	7.9	1.0	(2.6)
Never	48.2	60.2	-12.0***	(3.3)	62.9	67.5	-4.7	(4.4)
<b>Types of unpaid formal volunteering</b>								
<i>Assisted a group or organization</i>								
With canvassing, campaigning, fundraising	29.3	20.6	8.7***	(2.9)	20.5	15.8	4.7	(3.6)
As a member of board or committee	16.9	11.8	5.1**	(2.4)	14.1	10.1	4.0	(3.0)
With providing info or helping educate the public	16.5	9.5	7.0***	(2.3)	10.7	11.4	-0.7	(2.9)
With organizing or supervising activities	32.5	21.7	10.7***	(3.0)	25.2	17.1	8.1**	(3.8)
With teaching or coaching for an organization	15.4	9.9	5.5**	(2.2)	12.4	6.6	5.8**	(2.7)
With office or administrative work	15.2	11.6	3.6	(2.3)	6.8	9.2	-2.4	(2.5)
With providing care, support, or counselling	14.5	10.4	4.1*	(2.2)	10.3	9.6	0.6	(2.8)
With collecting, serving, or delivering food	19.4	12.5	6.9***	(2.5)	15.0	12.3	2.7	(3.2)
As a volunteer driver for an organization	16.0	12.1	4.0*	(2.3)	7.3	5.3	2.0	(2.3)
Other	17.3	13.9	3.4	(2.4)	12.8	14.5	-1.7	(3.2)
<b>Hours of formal volunteering</b>								
Average hours per month	8.8	6.4	2.4**	(1.1)	6.7	6.4	0.4	(1.4)
<i>% of sample who volunteered</i>								
>0 to 5 hours per month	15.5	11.7	3.8*	(2.3)	7.6	6.6	1.0	(2.4)
>5 to 15 hours per month	17.0	13.3	3.7	(2.4)	11.8	11.4	0.4	(3.0)
>15 hours per month	18.1	12.6	5.5**	(2.4)	13.5	12.7	0.8	(3.1)
Did not volunteer	48.5	61.4	-12.9***	(3.3)	64.6	67.5	-3.0	(4.4)
<i>Change in hours volunteered in last 12 months</i>								
Increased	12.4	6.3	6.1***	(1.9)	11.4	7.9	3.5	(2.7)
Stayed the same	77.2	86.0	-8.8***	(2.6)	82.2	82.5	-0.3	(3.5)
Decreased	10.4	7.7	2.7	(1.9)	6.4	9.6	-3.3	(2.5)
<b>Number of organizations</b>								
Average # of organizations volunteered for	1.0	0.7	0.3***	(0.1)	0.7	0.6	0.0	(0.1)
<i>% of sample who volunteered for</i>								
1 organization	23.4	20.3	3.1	(2.8)	19.8	15.8	4.0	(3.6)
2 to 3 organizations	22.8	13.8	9.0***	(2.6)	13.5	13.6	-0.1	(3.2)
4 or more organizations	5.1	4.2	0.9	(1.4)	2.5	3.1	-0.5	(1.5)
Did not volunteer	48.7	61.7	-13.0***	(3.3)	64.1	67.5	-3.4	(4.4)
<b>Sample size</b>	<b>470</b>	<b>428</b>	<b>898</b>		<b>237</b>	<b>228</b>	<b>465</b>	

**Source:** Calculations from 18-month follow-up survey data.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

The second panel of Table 5.4 shows that there were impacts on various types of formal volunteering among EI program group members, including organizational or supervisory activities, canvassing or fundraising, teaching or coaching, providing care or support services, and serving as committee or board members for an organization. The final panel shows that more than one organization benefited from this increased volunteer activity, as an impact of nine percentage points was observed on those reporting that they volunteered for two to three organizations.

### IA Sample

The last four columns of Table 5.4 show that there were no statistically significant impacts on the extent or frequency of formal volunteering among the IA sample. However, the second panel shows statistically significant positive impacts on particular types of formal volunteer activities, including an increase among the program group in those volunteering to do organizational or supervisory activities and coaching or teaching.

### Informal Volunteering

Table 5.5 presents impacts of CEIP on the extent of informal volunteering provided on an individual's own rather than through an organization or group.

**Table 5.5: Impacts on Informal Volunteering**

	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Frequency of informal volunteering</b>								
<i>How often did you volunteer in last 12 months?</i>								
Everyday	6.8	5.2	1.7	(1.6)	7.2	7.0	0.1	(2.4)
A few times a week	19.2	20.0	-0.8	(2.7)	22.4	24.2	-1.9	(3.9)
About once a week	18.6	18.4	0.2	(2.6)	15.2	14.5	0.7	(3.3)
About once a month	20.3	18.1	2.2	(2.6)	13.5	15.9	-2.4	(3.3)
Less than once a month	11.5	9.6	1.9	(2.1)	4.2	5.3	-1.1	(2.0)
Never	23.5	28.7	-5.2 *	(2.9)	37.6	33.0	4.5	(4.4)
<b>Types of unpaid informal volunteering</b>								
<i>Provided help to someone on your own with</i>								
Housework such as cooking or cleaning	38.0	35.6	2.4	(3.2)	39.7	44.3	-4.6	(4.6)
Yardwork such as gardening or painting	57.3	50.4	6.9 **	(3.3)	46.0	50.9	-4.9	(4.6)
Shopping or driving	54.1	48.7	5.3	(3.3)	40.5	43.4	-2.9	(4.6)
Babysitting without being paid	33.1	34.0	-0.8	(3.2)	34.6	42.1	-7.5 *	(4.5)
Care or support to sick or elderly	30.1	27.2	3.0	(3.0)	30.4	28.5	1.9	(4.2)
Writing letters or filling out forms	31.8	28.1	3.7	(3.1)	30.0	32.0	-2.1	(4.3)
Unpaid teaching or coaching	18.6	15.2	3.4	(2.5)	13.1	12.7	0.4	(3.1)
Other	8.9	10.0	-1.1	(2.0)	7.2	7.0	0.2	(2.4)
<b>Hours of informal volunteering</b>								
Average hours per month	11.2	11.7	-0.5	(1.1)	12.6	11.8	0.7	(1.7)
<i>% of sample who volunteered</i>								
>0 to 10 hours per month	41.3	35.1	6.2 *	(3.3)	26.1	28.6	-2.5	(4.3)
>10 to 20 hours per month	20.2	17.5	2.6	(2.7)	15.0	19.0	-4.0	(3.6)
>20 hours per month	13.2	16.5	-3.3	(2.4)	19.5	16.7	2.8	(3.7)
Did not volunteer	25.3	30.9	-5.5 *	(3.1)	39.4	35.7	3.7	(4.7)

(continued)

**Table 5.5: Impacts on Informal Volunteering (Cont'd)**

	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<i>Change in hours volunteered in last 12 months</i>								
Increased	13.9	14.1	-0.2	(2.3)	17.0	13.2	3.8	(3.3)
Stayed the same	75.2	76.0	-0.8	(2.9)	74.0	74.0	0.0	(4.1)
Decreased	10.9	9.9	1.0	(2.1)	8.9	12.8	-3.8	(2.9)
<b>Sample size</b>	<b>470</b>	<b>428</b>	<b>898</b>		<b>237</b>	<b>228</b>	<b>465</b>	

**Source:** Calculations from 18-month follow-up survey data.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent

Rounding may cause slight discrepancies in sums and differences.

The first panel reveals only a small positive impact on the extent of informal volunteering among EI program group members, with a 5.2 percentage point decrease relative to the control group in those reporting that they *never* volunteered in last 12 months (23.5 per cent for the EI program group and 28.7 per cent for the EI control group). However, there was little difference in the frequency of volunteering in terms of the number of hours volunteered per month by EI program group members (11.2 per cent versus 11.7 per cent for EI control group members). There were increases in various types of informal volunteering among EI program group members, however only the 6.9 percentage point impact on yard work or maintenance reached the level of statistical significance.

There were no statistically significant impacts on the extent or frequency of informal volunteering among the IA sample. However, when asked about the type of activities volunteers were engaged in, the second panel reveals a negative impact where 7.5 percentage points fewer IA program group members reported volunteering to babysit without being paid relative to the control group.

## SUMMARY

Expectations were low regarding the extent of “in-program” impacts that would be observed on social capital after only 18 months. Results from future follow-up surveys will reveal whether these impacts grow in the second half of program group members’ eligibility period (months 19 to 36) and whether or not they deteriorated following the end of CEIP. Nonetheless, this chapter has illustrated that CEIP has led to small impacts on social capital after only half the eligibility period, including some improvements in network size, density, and heterogeneity. The extent of volunteering, particularly among EI program members, has also increased even though program group members were dedicating more of their time to employment.

Although these impacts are small, might they be associated with improvements in other areas, including health and life satisfaction, as has been theorized (Putnam, 2001; Helliwell, 2001)? The next chapter presents a range of additional CEIP impacts, including those on health and well-being, residential mobility, education, and attitudes to work and family.

## Chapter 6: Other Impacts

Although the central impacts that the Community Employment Innovation Project (CEIP) is expected to have produced for individuals are related to employment, income, and the amounts and duration of receipt of Employment Insurance (EI) and income assistance (IA) benefits, the CEIP evaluation is not limited to just economic circumstances. For example, the previous chapter illustrated that CEIP had small impacts on social networks and the extent of volunteering. CEIP could have analogous impacts on a range of other areas of program group members' lives. This chapter examines the impact of CEIP on program group members' health and well-being, residential mobility, education, working skills, and attitudes to work and transfer payments.

Each section begins with a summary of the possible ways in which CEIP could influence these outcomes. However, there was no strong prior expectation that these areas of program group members' lives would be affected after only 18 months in the program. Rather, the chapter is meant to provide a quick glance at a range of outcomes that may prove interesting in future reports, which will cover the full CEIP eligibility period.

### SUMMARY OF FINDINGS

- **CEIP had no effect on the self-assessed physical health of the program group, but had a small favourable impact on their subjective well-being.** Among EI sample members, there was a decrease in the proportion of program group members who reported being dissatisfied with life and an increase in the average life satisfaction score. IA program group members also experienced an increase in their life satisfaction score compared with the control group.
- **CEIP did not have an effect on out-migration of CEIP participants, but caused changes in movements within the community and to other areas of Cape Breton.** There was an increase in residential mobility among EI program group members in their community and a decrease in movement to other communities in Cape Breton. On the other hand, IA program group members were more likely to move to another community within Cape Breton compared with their control group counterparts.
- **Program group members were less likely to enrol in non-CEIP provided training during their first 18 months on CEIP.** CEIP also had a negative impact on courses taken towards a trade or vocational certificate or a college diploma or certificate.
- **CEIP had mixed effects on the measures of working skills.** Only a few of the nine measures on working skills yielded statistically significant differences between program and control group, and there is evidence of both negative and positive impacts on non-traditional skills as measured in the survey.
- **CEIP appears to have reinforced some of the existing positive beliefs of program group members on particular measures related to work and transfer payments.**

Program group members tended to shift from “agree” to “strongly agree” on three of the questions that measure attitudes towards work and receipt of transfer payments.

## HEALTH AND SUBJECTIVE WELL-BEING

Why might CEIP have affected the physical and psychological well-being of program group members? CEIP provides a stable three-year period of employment and income to individuals who, in an area of chronic high unemployment, have had a tenuous attachment to work. There is an extensive volume of research linking health outcomes to income levels (see Feinstein, 1993, for a review of the literature). Though there is some debate whether the association between income and health is causal, reverse-causal, or measuring something else, the relationship between employment and health, over and above the effects of income, is argued to be one of the most important determinants of health:

*Besides giving one the capacity to earn an income, employment serves important functions. Employment provides time structures, the opportunity to share experiences with other people and to link with goals and purposes that transcend one's own, as well as giving one a sense of status and identity. When a household is without employment, dependence on social transfers is unavoidable. This dependence increases the stresses associated with a lower income, a loss of social respect and heightened anxiety about the future. (National Forum on Health, 2004)*

The positive relationship between health and employment may work through a number of critical outcomes including improvements in social capital (Putnam, 2001; Helliwell, 2001) and social inclusion (Crawford, 2003). The previous chapters have shown that CEIP has had large impacts on employment and income, as well as smaller effects on social networks and the extent of volunteering among the program group (both measures relevant to social capital and reductions in social isolation). Could these impacts, or other aspects of CEIP, contribute to effects for health and well-being?

The CEIP evaluation is measuring “subjective” well-being with the extensively used Satisfaction With Life Scale (SWLS) (Pavot & Diener, 1993; Diener, 2000).<sup>1</sup> Although it has been shown to be associated with income, its intent is to measure life as a whole, using the respondent's own norms. As a result, individuals may implicitly include stable employment and income from CEIP, as well as any related positive impacts, as factors in weighing what makes them happy.

As shown in Table 6.1, at 18 months from enrolment CEIP showed no impact on self-assessed physical health and activity limitations of program group members. However, CEIP

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<sup>1</sup>The Satisfaction With Life Scale (SWLS) consists of five statements, to which respondents can answer using the following five-point scale: strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree. The statements are

- 1) In most ways my life is close to ideal.
- 2) The conditions of my life are excellent.
- 3) I am satisfied with my life.
- 4) So far I have gotten the important things in my life.
- 5) If I could live my life over, I would change almost nothing.

A confirmatory factor analysis was conducted with the five questions that identified a single dimension. A SWLS score was then calculated by summing across the five items. A score of 15 is the neutral point — indicative of an individual that is equally satisfied and dissatisfied, while scores ranging from 5 to 9 indicate a person that is extremely dissatisfied, 10 to 14 dissatisfied, 16 to 20 satisfied, and 21 to 25 extremely satisfied with life.

led to a decrease in dissatisfaction with life.<sup>2</sup> Although there were no impacts on the physical health measures collected at the 18-month interview, it is noteworthy that, in general, a relatively high proportion of CEIP sample members reported to be in good health or better, suggesting there may have been little room for improvement. The following paragraphs present results on self-assessed health rating, functional limitations, and subjective well-being for EI and IA sample members at the 18-month milestone.

**Table 6.1: CEIP Impacts on Health and Subjective Well-Being, at the 18-Month Follow-Up Interview**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Health</b>								
Any health limitation	31.9	30.4	1.5	(3.1)	33.8	33.8	0.0	(4.4)
In general, health is								
Excellent	28.4	30.8	-2.3	(3.1)	20.3	26.3	-6.0	(3.9)
Very good	44.7	41.5	3.1	(3.3)	41.5	37.3	4.2	(4.5)
Good	20.9	21.4	-0.4	(2.7)	26.7	23.7	3.0	(4.0)
Fair	4.1	4.9	-0.9	(1.4)	8.1	11.4	-3.4	(2.7)
Poor	1.9	1.4	0.5	(0.9)	3.4	1.3	2.1	(1.4)
Difficulty with hearing, seeing, communicating walking, etc.								
Yes, sometimes	16.5	14.8	1.7	(2.4)	13.9	14.0	-0.1	(3.2)
Yes, often	9.4	9.2	0.2	(1.9)	8.9	9.6	-0.8	(2.7)
No	74.1	76.1	-1.9	(2.9)	77.2	76.3	0.9	(3.9)
A physical or mental condition or health problem reduces activity at home								
Yes, sometimes	9.4	10.3	-0.9	(2.0)	10.1	10.5	-0.4	(2.8)
Yes, often	4.3	4.7	-0.4	(1.4)	5.5	7.0	-1.5	(2.2)
No	86.3	85.0	1.3	(2.3)	84.4	82.5	1.9	(3.5)
A physical or mental condition or health problem reduces activity at work or school								
Yes, sometimes	10.7	10.8	-0.1	(2.1)	11.0	10.5	0.5	(2.9)
Yes, often	3.8	4.7	-0.8	(1.4)	8.5	7.0	1.5	(2.5)
No	85.5	84.5	1.0	(2.4)	80.5	82.5	-1.9	(3.6)
A physical or mental condition or health problem reduces other activity								
Yes, sometimes	7.7	8.7	-1.0	(1.8)	8.9	9.2	-0.3	(2.7)
Yes, often	3.2	4.7	-1.5	(1.3)	6.8	5.3	1.5	(2.2)
No	89.1	86.6	2.5	(2.2)	84.4	85.5	-1.1	(3.3)
Satisfaction with life								
Extremely satisfied	15.7	12.4	3.4	(2.3)	10.5	7.0	3.5	(2.6)
Satisfied	57.2	52.3	4.9	(3.3)	45.1	39.9	5.2	(4.6)
Equally satisfied/dissatisfied	5.7	6.1	-0.3	(1.6)	2.5	4.8	-2.3	(1.7)
Dissatisfied	18.5	24.3	-5.8 **	(2.7)	36.7	42.1	-5.4	(4.5)
Extremely dissatisfied	1.7	3.3	-1.6	(1.0)	5.1	5.7	-0.6	(2.1)
Average score	17.5	16.9	0.6 **	(0.3)	15.8	14.9	0.8 **	(0.4)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>2</sup>When the CEIP impacts on life satisfaction are adjusted for a series of sample members' baseline characteristics, the impacts fail to reach the level of statistical significance (see Appendix D for adjusted impact estimates).

## **EI Sample**

Among the EI sample, the overwhelming majority of program and control group members rated their health condition as good or better. For both program and control group members, about one fifth said their health was good, while a little over 70 per cent indicated it was very good or excellent.

Functional limitations of the EI sample were also relatively low. Seventy-four per cent of program group members and seventy-six per cent of control group members said they had no difficulty, hearing, seeing, communicating, or walking. Approximately 85 per cent of both program and control group members said they had no activity limitations at home, work, school, or other activities. Less than 5 per cent reported having to frequently reduce activities at home, work, school, or leisure due to physical or mental health problems.

The majority of program and control group members said they were satisfied or extremely satisfied with their life (72.9 per cent of the program group; 64.7 per cent of the control group). Moreover, CEIP caused a 5.8 per cent decrease in the proportion of program group members who were dissatisfied with life. On average, program group members had a higher Satisfaction With Life score (17.5 per cent versus 16.9 per cent) than control group members, which was statistically significant at the five per cent level.

## **IA Sample**

Looking at the last four columns of Table 6.1, the results for IA sample members show no statistically significant differences on the collected measures of physical health. Reports of general health were positive for both program and control group members. For example, only 11.5 per cent of program group members and 12.7 per cent of control group members rated their health as fair or poor. For all measures on activity limitations, individuals in both the program and control group seemed to be faring very well. Few reported this as being a problem they often had to deal with in environments such as at home or work.

CEIP appears to have had a small, but favourable impact on program group members reported satisfaction with life at the 18-month milestone. For example, on average, program group members had a higher average Satisfaction With Life score (15.8 per cent for program group members versus 14.9 per cent for control group members), which was statistically significant at the 5 per cent level of significance. Further findings, although not statistically significant, show that compared with the control group, a higher proportion of program group members reported being satisfied or extremely satisfied, while fewer reported being dissatisfied or extremely dissatisfied.

An additional subgroup analysis was also performed, within the EI and IA samples, to estimate differences in impacts on the extent of life satisfaction across a range of baseline characteristics at the time of enrolment. This analysis revealed only a few differences in subgroup impacts within the EI sample. CEIP had a larger impact on life satisfaction of EI program group members who earned less than \$20,000 per year at baseline or who had very dense social networks (these groups were about 17 percentage points more likely to satisfied with life than the control group; while there was no significant impact among those who earned more \$20,000 per year or who had less dense networks at enrolment). See Appendix E for complete subgroup impact results.



## **MOBILITY**

The population of the Cape Breton Regional Municipality (CBRM) is on a downward trend with a decrease in the total population of 7.6 per cent from 1996 to 2001 (Statistics Canada, 2006). One of the main reasons for this decline is the high rate of out-migration by people in their twenties and thirties, possibly due to the lack of economic opportunities. To what extent does CEIP increase or decrease the migration rate of CEIP participants?

On the one hand, program group members who, prior to CEIP, may have considered moving out of Cape Breton in search of a job, might have been less likely to do so during the three years in which they were guaranteed stable employment with CEIP. Also, on average, CEIP program group members are not among the age group that typically engages in out-migration at a high rate. On the other hand, CEIP is temporary, and in order to continue working after their eligibility, the only alternative for participants may be to look beyond Cape Breton. Moreover, with newly acquired skills and social networks from CEIP, there may be a stronger impetus to seek employment elsewhere.

Although program group members may not have as great an incentive to leave Cape Breton while active in CEIP, they may consider moving residences within their community or to another Cape Breton community (and maintain their eligibility). With a steady job and income from CEIP, program group members may move for reasons such as better accommodations and/or closer proximity to CEIP community placements.

The results in Table 6.2 present early findings on the mobility of CEIP participants during the first 18 months on CEIP.

### **EI Sample**

Looking at the EI sample results, CEIP had no effect on out-migration, but had small impacts on movement within and between Cape Breton communities. Compared with the control group, a higher proportion of program group members took up residence at new locations within their community (9.4 per cent of program group members; 6.1 per cent of control group members). The result for movement between communities was the opposite — a smaller proportion of program group members moved to another community within Cape Breton than control group members.

Program and control group members mentioned various reasons for moving. This included to look for a job or to start a new job, to be closer to work, because of a partner's new job, because of separation or divorce, for cheaper or better housing, to purchase a home, and to go to school. The reasons most often mentioned by EI program group members were related to housing. This measure yielded a 3.3 percentage point difference between program and control group members and was statistically significant at the 5 per cent level of significance.

### **IA Sample**

CEIP also appears to have influenced changes in residence of IA sample members. Program group members were nearly 10 percentage points more likely to move relative to the control group (32.9 per cent of program group members; 24.1 per cent of control group members). Although the majority of movers in both the program and control groups stayed in the community in which they resided at enrolment, CEIP did encourage more movement

among the program group to other communities within Cape Breton (11.9 per cent of program group members; 5.8 per cent of control group members) for a difference of 6.2 percentage points significant at the 5 per cent level of significance. CEIP does not appear to have had an effect on out-migration among IA sample members.

IA sample members stated several reasons for changing residence after enrolling in CEIP. For example, some moved because they wanted to be closer to work, were seeking cheaper housing or better housing, or had purchased a home. Noteworthy was the small positive impact that CEIP had on IA program group members who were three percentage points more likely to report having purchased a home compared with the control group (not shown).<sup>3</sup>

**Table 6.2: CEIP Impacts on Mobility, at the 18-Month Follow-Up Interview**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
Percentage of respondents who moved	15.7	15.7	0.1	(2.4)	32.9	24.1	8.8 **	(4.2)
Within community	9.4	6.1	3.3 *	(1.8)	19.0	16.2	2.8	(3.5)
To another community in Cape Breton	4.5	7.3	-2.8 *	(1.6)	11.9	5.8	6.2 **	(2.6)
Outside of Cape Breton	1.9	2.3	-0.4	(1.0)	2.1	2.2	-0.1	(1.4)
Reasons for moving								
Work-related (own or partner's)	2.4	3.5	-1.2	(1.1)	2.6	1.8	0.8	(1.4)
Family reason	3.8	5.2	-1.3	(1.4)	5.2	4.0	1.2	(2.0)
Housing	7.1	3.8	3.3 **	(1.5)	18.1	13.8	4.3	(3.4)
Other	2.6	2.8	-0.3	(1.1)	6.5	4.4	2.0	(2.1)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

## EDUCATION

According to CEIP rules, program group members were free to take a leave of absence from CEIP (without pay) for educational pursuits without losing their CEIP eligibility. Like many working adults, CEIP program group members may also choose to combine full-time work with education and training. The findings in Table 6.3 indicate that during the first year and a half of CEIP, several participants were enrolled in education and training. However, control group members were more likely to have taken a course (33.6 per cent of the EI sample; 31.6 per cent of the IA sample) than program group members (27.7 per cent of the EI sample; 21.5 per cent of the IA sample).

<sup>3</sup>Because of small sample sizes for some of the stated reasons, they were grouped by the themes of work-related, family, housing, and other. The analysis on the separate categories, prior to grouping, showed a small positive impact on “to purchase a home” among the IA sample (3.9 per cent of program group members; 0.9 per cent of control group members).

These results may arise because of time constraints placed on program group members who are required to work 35 hours per week on CEIP community placements. While control group members may have been able to negotiate more flexible schedules and hours, including part-time hours, with their employers in order to meet their educational pursuits while working, this option was not open to CEIP participants. In addition to the strict requirement of being available 35 hours per week, program group members may have no longer qualified for education and training programs provided to EI beneficiaries and or IA recipients. Impacts on the types of courses taken are presented below for EI and IA sample members.

**Table 6.3: CEIP Impacts on Non-CEIP Training, at the 18-Month Follow-Up Interview**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
Non-CEIP-provided training since enrolment	27.7	33.6	-5.9 *	(3.1)	21.5	31.6	-10.1 **	(4.1)
Courses taken towards								
Improving job skills	20.0	20.4	-0.4	(2.7)	13.5	15.4	-1.8	(3.3)
High school diploma	2.6	2.3	0.2	(1.0)	5.9	7.5	-1.5	(2.3)
Apprenticeship diploma/certificate	1.3	1.4	-0.1	(0.8)	1.3	0.9	0.4	(1.0)
Trade/vocational diploma or certificate	3.4	8.9	-5.5 ***	(1.6)	3.0	5.3	-2.3	(1.8)
College diploma or certificate	2.1	4.9	-2.8 **	(1.2)	1.7	6.6	-4.9 ***	(1.8)
University degree	1.9	1.6	0.3	(0.9)	0.8	1.8	-0.9	(1.0)
Personal interest or life skills	14.0	11.3	2.8	(2.2)	10.1	14.0	-3.9	(3.0)
Job requirement	3.2	3.5	-0.3	(1.2)	1.3	1.3	-0.1	(1.0)
Other	1.9	2.6	-0.7	(1.0)	0.4	0.9	-0.5	(0.7)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

## EI Sample

Among EI sample members, CEIP led to a decrease in classes taken by program group members towards a vocational certificate or college diploma. Only 3.4 per cent of program group members reported that they had taken any courses towards a trade or vocational certificate, while 8.9 per cent of control group members were enrolled in such classes. About 2 per cent of program group members and 4.9 per cent of control group members took classes towards a college diploma or certificate, for a negative impact of about 3 percentage points.

Most classes taken by sample members were taken towards improving job skills or personal interest and life skills, and at similar rates for both program and control group members. For example, approximately 20 per cent of program and control group members said they took courses to improve their job skills, a little more than half that amount

(14.0 per cent of program group; 11.3 per cent of the control group) took classes of personal interest, while much smaller proportions took classes towards a certificate, diploma, or degree.

### **IA Sample**

Results for the IA sample indicate that CEIP led to a decrease among program group members in enrolment of courses towards a college diploma or certificate by about five percentage points relative to the control group. Similar to the EI sample, IA sample members were more likely to enrol in classes to improve their job skills or classes of personal interest.

## **WORKING SKILLS**

CEIP placed participants in a wide range of community job assignments from which they were expected to acquire a broad range of skills. This included the skill components required for a specific job; traditional skills such as literacy, numeracy, and communications; and more all-purpose skills such as being able to work in a team, problem solving, and adapting to change. In order to measure some of these general skills, the CEIP evaluation used a subset of nine questions from *Working: Assessing, Skills, Habits, and Style*,<sup>4</sup> which taps into dimensions such as responsibility, teamwork, persistence, sense of quality, lifelong learning, adapting to change, problem solving, information processing, and system thinking. Each dimension was scored on a scale of 1 (almost always like me) to 5 (almost never like me).

Table 6.4 presents the results for each of these skill dimensions for the EI and IA sample, revealing both positive and negative impacts. Since the expectation was that CEIP would increase participants' range of soft skills due to the diversity of projects, the reasons for negative impacts on any of these measures is somewhat surprising and unclear.

### **EI Sample**

Looking at the results for the EI sample in Table 6.4 (first four columns), CEIP had an impact on three of the general skills being measured — responsibility, lifelong learning, and adapting to change. CEIP appears to have caused a decrease in the level of discontentment regarding problems that no one is trying to solve. This is revealed in the 6.1 percentage point decrease among program group members, relative to the control group, who said the statement “It really bugs me to see a problem that nobody is trying to solve” is almost always or quite a bit like them.

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<sup>4</sup>*Working: Assessing Skills, Habits, and Style* (Miles & Grummon, 1996) is a 50-item questionnaire that measures the presence of nine dimensions of working — responsibility, teamwork, persistence, sense of quality, lifelong learning, adapting to change, problem solving, information processing, and systems thinking. The authors report that it is a statistically valid and tested instrument. CEIP program group members completed the 50 questions during assessment week. The Social Research and Demonstration Corporation (SRDC) performed exploratory factor analysis on a sub-sample of the data collected during assessment week to confirm the nine dimensions and identify one item that best captures each of them. These nine questions were used in subsequent CEIP telephone surveys. This shortened version of the questionnaire was necessary to reduce time constraints on survey respondents and yet capture the nine dimensions in the long version of the questionnaire.

CEIP yielded more favourable results on measures for lifelong learning and adapting to change. For example, program group members were more likely to exhibit traits of a lifelong learner. Compared with control group members, fewer program group members (11.1 percentage point difference) said they had to know what was in it for them before learning something new. At the same time, more program group members said this was only occasionally or almost never like them (38.0 per cent of program group; 30.3 per cent of control group). When read the statement “I usually do something I enjoy rather than try something different,” 5.3 percentage points fewer members in the program than in the control group said that this was almost always or quite a bit like them, possibly indicating more openness to change among these program group members.

### **IA Sample**

As shown in the last four columns of Table 6.4, among IA sample members CEIP appears to have had a positive impact on lifelong learning and adapting to change, but a negative impact on problem solving and system thinking.<sup>5</sup>

With respect to lifelong learning, 10.1 percentage points fewer program than control group members said they “prefer to know what’s in it for them” before learning something new. When queried about adapting to change, a higher proportion of program group members said the statement “I usually do something I enjoy rather than try something different” was occasionally or almost never like them. There was a difference of 8 percentage points between the two groups, which was statistically significant at the 10 per cent significance level.

The answers to questions that are expected to capture the traits of problem solvers and system thinkers show a decline in the proportion of program group members from the IA sample who see themselves as adept in these areas. While about half of program group members (49.8 per cent) said they almost always made a detailed plan before tackling a complex problem, a little over three fifths of control group members (61.5 per cent) would do the same — over a 10 percentage point negative impact. This was coupled with an 8 percentage point increase in the proportion of program group members who said this was occasionally or almost never like them compared with the control group.

The vast majority of IA program and control group members said they knew how to get things done in a system or organization. However, a comparison of the responses shows a decline of 7.9 percentage points in the proportion of program group members who said they had the know-how. Whereas 79.3 per cent of program group members said it was almost always or quite a bit like them to know how to get things done in a system or organization, 87.2 per cent of control group members tended to describe themselves in this way.

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<sup>5</sup>When the impacts on working skills are adjusted for a series of sample members’ baseline characteristics, the negative impacts on the dimensions of responsibility, problem solving, and systems thinking fail to reach the level of statistical significance. However, the impacts on the dimensions of adapting to change and lifelong learning remain positive and statistically significant. (See Appendix D for adjusted impact estimates.)

**Table 6.4: CEIP Impacts on Working Skills, at the 18-Month Follow-Up Interview**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>It really bugs me to see a problem that nobody is trying to solve</b>								
Almost always / quite a bit like me	78.1	84.2	-6.1 **	(2.6)	75.9	78.8	-2.8	(3.9)
Moderately like me	14.7	8.7	6.0 ***	(2.2)	13.1	12.4	0.7	(3.1)
Occasionally/almost never like me	7.2	7.1	0.2	(1.7)	11.0	8.8	2.1	(2.8)
<b>I prefer to learn with other people</b>								
Almost always / quite a bit like me	74.6	74.6	0.0	(2.9)	74.6	73.9	0.7	(4.1)
Moderately like me	17.1	15.1	2.0	(2.5)	12.7	15.0	-2.3	(3.2)
Occasionally / almost never like me	8.3	10.4	-2.0	(1.9)	12.7	11.1	1.6	(3.0)
<b>I follow through on things no matter what it takes</b>								
Almost always / quite a bit like me	88.5	88.2	0.3	(2.1)	83.1	87.7	-4.5	(3.3)
Moderately like me	9.4	8.7	0.6	(1.9)	10.1	7.9	2.2	(2.7)
Occasionally / almost never like me	2.1	3.1	-0.9	(1.1)	6.8	4.4	2.3	(2.1)
<b>I can't quit thinking about something until I am sure that I have done it very well</b>								
Almost always / quite a bit like me	91.1	92.7	-1.7	(1.8)	90.7	89.0	1.7	(2.8)
Moderately like me	7.7	5.6	2.0	(1.7)	4.7	8.4	-3.7	(2.3)
Occasionally / almost never like me	1.3	1.6	-0.4	(0.8)	4.7	2.6	2.0	(1.7)
<b>I prefer to know what's in it for me before I spend a lot of effort learning something</b>								
Almost always / quite a bit like me	37.8	48.9	-11.1 ***	(3.3)	39.2	49.3	-10.1 **	(4.6)
Moderately like me	24.1	20.8	3.3	(2.8)	17.7	18.5	-0.8	(3.6)
Occasionally / almost never like me	38.0	30.3	7.8 **	(3.2)	43.0	32.2	10.9 **	(4.5)
<b>I usually do something I enjoy rather than try something different</b>								
Almost always / quite a bit like me	31.0	36.3	-5.3 *	(3.2)	33.9	38.8	-4.9	(4.5)
Moderately like me	25.4	26.2	-0.8	(2.9)	23.3	26.4	-3.1	(4.0)
Occasionally / almost never like me	43.6	37.5	6.1 *	(3.3)	42.8	34.8	8.0 *	(4.5)
<b>I make a detailed plan before I tackle a complex problem</b>								
Almost always / quite a bit like me	62.3	62.1	0.1	(3.3)	49.8	61.5	-11.7 **	(4.6)
Moderately like me	17.7	18.4	-0.7	(2.6)	24.1	20.4	3.7	(3.9)
Occasionally / almost never like me	20.0	19.5	0.5	(2.7)	26.2	18.1	8.0 **	(3.9)
<b>I understand new things by seeing how they fit with what I already know</b>								
Almost always / quite a bit like me	85.3	85.6	-0.3	(2.4)	79.3	83.9	-4.5	(3.6)
Moderately like me	11.1	9.2	1.8	(2.0)	15.2	13.0	2.2	(3.3)
Occasionally / almost never like me	3.6	5.2	-1.6	(1.4)	5.5	3.1	2.3	(1.9)
<b>I know how to get things done in a system or an organization</b>								
Almost always / quite a bit like me	86.2	84.7	1.5	(2.4)	79.3	87.2	-7.9 **	(3.5)
Moderately like me	11.7	11.6	0.1	(2.1)	14.3	9.7	4.7	(3.0)
Occasionally / almost never like me	2.1	3.8	-1.6	(1.1)	6.3	3.1	3.2	(2.0)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences. All analyses were only for those who responded to the 18-month survey. Two-tailed t-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent. Rounding may cause slight discrepancies in sums and differences.

## **BELIEFS ABOUT WORK AND TRANSFER PAYMENTS**

Because many IA sample members had a very tenuous attachment to the labour force, their attitude to work might have been influenced by having stable full-time employment for up to three years. EI sample members had also been away from work for between 10 to 13 weeks when selected for CEIP, and thus they too may have changed their feelings about work by re-entering the workforce. However, although individuals were randomly selected to participate in CEIP, CEIP is a voluntary program, and those who volunteered may have done so because they already had strong positive feelings about work.

The 18-month survey included five questions that might reveal whether CEIP caused changes in attitudes related to work and welfare. Table 6.5 presents findings on these questions. The results show that there were impacts on some personal beliefs that can be attributed to CEIP. The discussion below highlights these changes for EI and IA sample members.

### **EI Sample**

CEIP appears to have influenced the strength of the belief of program group members on three attitudinal measures related to work. The first is the response to whether they “like going to work,” the second is how they feel about having a job, and the third is about family support for taking a job. The overwhelming majority of both program and control group members either agreed or agreed strongly with each of the three questions.

Examinations of the results show a decline in the proportion of program group members who said they “agreed” with these statements, while the proportion who “strongly agreed” increased. This suggests that the strength of the conviction had increased. Looking at each statement and those who responded “strongly agree,” there was a difference of 11.1 percentage points between the two groups in response to “I like going to work,” 10.6 percentage point difference to “When I have a job, I am a happier person,” and an 8.1 percentage point difference to “My family supports me taking a job.” There were corresponding decreases in the proportions that indicated they agreed and or disagreed with these statements.

### **IA Sample**

The beliefs expressed by IA sample members were quite similar to that of EI sample members. The vast majority voiced agreement with the statements read to them. CEIP also appears to have positively influenced the strength of their beliefs about work and feelings about welfare. In addition to the increase in individuals who said they strongly agreed with the statements “I like going to work,” “When I have a job, I am a happier person,” and “My family supports me taking a job,” CEIP led to a decrease in the proportion of program group members who said they disagreed with the statement “It is wrong to stay on welfare if you are offered a job, even one you don’t like.” While 15.1 per cent of control group members said they disagreed with this statement, only 9.9 per cent of program group members said likewise, a difference of 5.2 percentage points that is significant at the 10 per cent level.

**Table 6.5: CEIP Impacts on Attitudes to Work and Transfer Payments, at the 18-Month Follow-Up Interview**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>I like going to work</b>								
Agree strongly	44.4	33.3	11.1 ***	(3.3)	36.7	21.9	14.8 ***	(4.2)
Agree	54.1	62.6	-8.6 ***	(3.3)	59.1	76.3	-17.2 ***	(4.3)
Disagree	1.1	3.8	-2.7 ***	(1.0)	3.4	1.8	1.6	(1.5)
Disagree strongly	0.4	0.2	0.2	(0.4)	0.8	0.0	0.8	(0.6)
<b>When I have a job, I am a happier person</b>								
Agree strongly	51.1	40.4	10.6 ***	(3.3)	42.1	32.4	9.7 **	(4.5)
Agree	47.9	56.7	-8.9 ***	(3.3)	56.2	64.9	-8.7 *	(4.6)
Disagree	1.1	2.8	-1.8 *	(0.9)	1.3	2.7	-1.4	(1.3)
Disagree strongly	0.0	0.0	0.0		0.4	0.0	0.4	(0.4)
<b>My family supports me taking a job</b>								
Agree strongly	50.3	42.2	8.1 **	(3.3)	44.7	34.5	10.2 **	(4.5)
Agree	48.2	56.8	-8.7 ***	(3.3)	53.2	63.7	-10.5 **	(4.6)
Disagree	1.5	0.9	0.6	(0.7)	2.1	1.8	0.4	(1.3)
Disagree strongly	0.0	0.0	0.0		0.0	0.0	0.0	
<b>It's wrong to stay on welfare if you are offered a job, even one you don't like</b>								
Agree strongly	43.4	44.6	-1.1	(3.4)	34.8	32.4	2.3	(4.4)
Agree	48.0	47.9	0.1	(3.4)	52.4	51.1	1.2	(4.7)
Disagree	7.0	7.0	0.0	(1.7)	9.9	15.1	-5.2 *	(3.1)
Disagree strongly	1.5	0.5	1.0	(0.7)	3.0	1.3	1.7	(1.4)
<b>It's wrong to take Employment Insurance if you are offered a job, even one you don't like</b>								
Agree strongly	31.3	34.9	-3.5	(3.2)	26.0	26.2	-0.2	(4.1)
Agree	50.2	51.1	-0.9	(3.4)	55.8	56.0	-0.2	(4.7)
Disagree	16.9	13.6	3.3	(2.5)	16.0	16.4	-0.4	(3.5)
Disagree strongly	1.6	0.5	1.1	(0.7)	2.2	1.3	0.8	(1.2)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.



## **SUMMARY**

A clearer picture of the outcomes presented in this chapter should emerge when the longer-term effects of CEIP are examined. For example, somewhat different impacts may be revealed on out-migration once the CEIP eligibility had expired and individuals wanted to continue working. Three years of steady employment on various community placements may also have led to a growing network and portfolio of traditional and non-traditional skills. This may have affected their decisions about work and receipt of transfer payments. Analysis of the 40-month survey, which was administered shortly after CEIP eligibility ended, will provide further evidence of longer-term effects of CEIP on these outcomes.



## Chapter 7: Conclusions

This chapter provides a brief summary of the key impacts of the Community Employment Innovation Project (CEIP) on program group members that have been observed through the first 18 months of the project. Though these are only preliminary findings through the first half of the CEIP eligibility period, it is informative to contextualize them relative to the original hypotheses for the study. Therefore, the next section revisits the central hypotheses that are being tested through the individual impact study and summarizes the key findings that relate to these hypotheses. The chapter then concludes by raising some key questions about these early findings, in terms of what we might expect to see in the longer run, once participants have been through their full period of CEIP eligibility and beyond.

### RESEARCH HYPOTHESES AND KEY FINDINGS

The CEIP study has one overarching research question:

**Is there a cost-effective way of providing transfer payments to unemployed workers that is linked to both employment and to desirable community outcomes?**

This broad question has several others embedded within it, which have been restated as research hypotheses for the study and divided into those concerned with individual outcomes, with community outcomes, and with the cost-effectiveness of the program.<sup>1</sup> This report is concerned with the hypotheses associated with the outcomes of individuals in the study:

- An offer of a significant period of stable employment on a series of community-based projects will be accepted by a significant number of unemployed workers.
- Taking part will provide a stable period of work experience that allows individuals to develop skills and enhance social networks, which will lead to improved post-program labour market outcomes and quality of life.

The results presented in this report confirm the first of these hypotheses and can begin to address the second.

#### Hypothesis 1

**The CEIP offer will be accepted by a significant number of unemployed workers.**

This hypothesis is tested by observing the reaction of the eligible individuals to the offer of CEIP both at the point the offer is made and during the first 18 months of their eligibility. Any of the following observations provide support for the hypothesis:

- A significant number of the eligible individuals leave Employment Insurance (EI) or income assistance (IA) in order to accept the offer of CEIP.

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<sup>1</sup>See *The Community Employment Innovation Project: Design and Implementation* (2003).

- Those who join CEIP remain active in the project for a large proportion of their initial 18-months of eligibility; and among those who left CEIP, most left for other employment.
- A high level of job satisfaction is observed among participants.

### **Recruitment was successful, response to the offer was positive.**

With respect to the take-up of the offer, results in Chapter 2 confirm that there was sufficient interest in the offer among those who received it to allow the project to proceed: CEIP was successful in recruiting and enrolling individuals from EI and IA to participate in the project. Although the show-up rate to information sessions was low (27 per cent among EI beneficiaries and 69 per cent among invitees from the IA caseload), the vast majority of those who came to an information session signed an enrolment form. Of the 1,620 EI beneficiaries who attended an information session, 1,006 signed the enrolment form and 516 of the 557 attendees from the IA sample did so. By the end of the enrolment period, 998 eligible EI beneficiaries and 516 IA recipients were enrolled in the project.

### **Participation rates in CEIP were high.**

Beyond the initial acceptance of the offer, an important indicator of whether the intervention was in fact being utilized is the extent to which participants were *active* in the project. Results from Chapter 3 confirm that the large majority of both EI and IA participants remained active throughout the first 18 months of their eligibility. At its peak, over 80 per cent of participants were active in the project (77 per cent of EI sample members; 89 per cent of IA sample members). Nearly three quarters were active continuously, without a break from CEIP. Among those who were not active, many left CEIP for other employment, and only a very small proportion returned to regular EI or basic IA benefits.

### **Program satisfaction was high.**

Another direct indicator of how participants felt about the CEIP offer is in their reported satisfaction with the program. The 18-month survey included a module that asked program group member respondents about their satisfaction with various elements of the project. Results show that the overwhelming majority of respondents were satisfied with CEIP (93 per cent of EI respondents; 92 per cent of IA respondents). When asked, “what do you like about CEIP,” the most common responses were “having a paid job” — 47 per cent of EI respondents and 53 per cent of IA respondents. Sizable proportions of individuals mentioned “meeting people at work” (38 per cent of EI respondents; 31 per cent of IA respondents), “gaining new skills” (41 per cent of EI respondents; 37 per cent of IA respondents), and “gaining work experience” (34 per cent of EI respondents; 35 per cent of IA respondents) as things they liked about CEIP. Appendix C provides complete results on program satisfaction.

Results on program take-up, participation rates throughout the 18 months, and program satisfaction all tend to confirm the hypothesis that the CEIP offer was in fact of interest to many in the eligible group of unemployed workers. Nonetheless, there were some who did not find CEIP of interest. Among EI eligible individuals, the decision to decline the CEIP offer was mainly because they thought the CEIP wage was too low or because they had found a job or were expecting to return to a previous job. The most often mentioned reason

by IA non-volunteers for rejecting the CEIP offer was related to personal, family, or health problems.

## **Hypothesis 2**

**Taking part will provide a stable period of work experience that will allow individuals to develop skills and enhance social networks, which in turn will lead to improved post-program labour market outcomes and quality of life.**

The second research hypothesis is tested through the impact results. Though post-program outcomes can not be assessed until additional follow-up surveys are complete (at 40 and 54 months) impacts at 18 months are important in their own right and can give an indication of the possible long-term impacts. This section summarizes six central findings that were presented earlier in this report as they relate to this hypothesis.

**There were substantial positive impacts on employment and earnings for both the EI and IA program groups.**

Employment impacts peaked at nearly 45 percentage points for the EI sub-sample and 75 percentage points for the IA sub-sample. Though impacts began to decline from their peak, they were sustained at a high level throughout 18 months, suggesting that a more significant and stable period of employment was in fact achieved through CEIP. Most of this employment was full time, with a peak impact on the rate of full-time employment in Month 5 at 57 percentage points for the EI sample and 80 percentage points for the IA sample. CEIP also had a dramatic impact on the monthly earnings of IA program group members, who achieved average monthly earnings of over \$1,100 in the second quarter of the follow-up period, compared with \$150 for the control group. At its peak impact, CEIP doubled the earnings of program group members in the EI sample.

**CEIP significantly reduced reliance on EI and IA benefits.**

CEIP's largest impact on EI receipt occurred early in the follow-up period, suggesting that the program encouraged participants to leave EI sooner than they otherwise would have. By Month 4, program group members were 61 percentage points less likely to be receiving EI than the control group. However, the impact diminished quickly as control group members also began to leave EI, and by Month 18 CEIP reduced EI receipt by only 15 percentage points. CEIP also had a large impact on IA receipt, approximately halving the proportion of the program group receiving IA benefits. However, unlike EI, the impact on IA receipt was sustained throughout the 18-month follow-up. By Month 18, there was still a 32 percentage point reduction in the rate of IA receipt among the program group.

**CEIP had a positive impact on wages for many EI and IA program group members.**

CEIP increased the proportion of EI and IA sample members receiving wages between \$2 and \$3 above the minimum wage by 51 and 63 percentage points respectively. Most of this increase is attributable to a decrease in the proportion who otherwise would not have worked (24 per cent of the EI sample; 48 per cent of the IA sample) but, more notably, also for some who would have received lower wages (8 per cent of the EI sample; 11 per cent of the IA sample).

However, CEIP did reduce the proportion of participants in the EI sample who received more than \$3.00 per hour above the minimum wage by 16 percentage points, effectively narrowing their range of hourly wages received during the follow-up period. No negative impact on the receipt of high wages was observed in the IA sample.

**CEIP had a significant impact on raising the family income of IA sample members above Statistics Canada's low income cut-offs (LICOs).**

CEIP had a large and significant impact on IA program group members' household income, increasing it by over \$5,500, nearly 40 per cent higher than the household income of control group members. This translated into a significant impact on the incidence of low incomes among IA households, that were 18 percentage points less likely to have incomes below the LICOs compared with the control group. The biggest impact occurred at the lowest income range, where program group members were 23 percentage points less likely than the control group to have a household income below 50 per cent of the LICOs. Among EI participants, although CEIP had a positive effect on personal income, it appeared to reduce the amount of income received by other household members, such that CEIP's impact on total family income, while positive, is insignificant at the 10 per cent significance level.

**There were some small but statistically significant impacts on the size, density, and heterogeneity of program group members' social networks.**

Among the IA sample, the program group is nearly 10 percentage points more likely than the control group to have more than 10 contacts. Evidence suggests that these impacts may result from the development of linking social capital, as significant effects are seen only on the contacts who can provide specialized advice. A positive impact on network density was found in the full sample, where 5.5 percentage points fewer program group members reported that all of their contacts knew each other, reflecting a less dense network for some. There are small increases in the heterogeneity of networks, particularly among the EI sample, with respect to gender and place of work.

**A number of other small positive impacts were observed, for example, on the extent of formal volunteering, life satisfaction, attitudes to work, and residential mobility.**

A positive impact on the extent of formal volunteering was observed among EI program group members; 12 percentage points fewer reported that they never volunteered in the last 12 months compared with the control group. There was also an increase of 2.4 hours per month in the amount of time volunteered by EI program group members. CEIP also had a small but favourable impact on subjective well-being and satisfaction with life. Among EI sample members there was a decrease in the proportion of the program group who reported being dissatisfied with life and an increase in their average life satisfaction score compared with the control group. On average, IA program group members also experienced an increase in their satisfaction score. CEIP also appears to have reinforced some of the existing positive beliefs of sample members on particular measures related to work and transfer payments. With respect to mobility, CEIP did not have an impact on out-migration at the 18-month point, but it did lead to small changes in residential movement of program group members within communities and to other areas of Cape Breton.

## POST-PROGRAM FOLLOW-UP

The 18-month impact results demonstrate that, as hypothesized, CEIP has provided a significant stable period of full-time employment to both EI and IA program group members, over and above what they would have achieved without the program. Impacts on earnings were substantial, as were reductions in reliance on EI and IA benefits. This translated into increased income, particularly for the IA sample, where large reductions in the incidence of low income were observed. Associated with this improved income and employment stability are some small but positive impacts on social networks, life satisfaction, and attitudes to work.

But will CEIP's impacts at 18 months translate into improvements in longer term employability and quality of life? Questions regarding the post-program labour market experience of program group members can be addressed only in the longer run. The following textbox outlines several critical outcomes that will be closely watched in follow-up reports at 40 and 54 months after random assignment.

### **Selected Outcomes of Interest at the 40- and 54-Month Follow-Up**

#### **Job-Search Activities**

During the final three months of eligibility, participants were provided job-search and portfolio-development assistance. They were also encouraged to actively engage in a search for market employment during this period. How do program group members' job-search behaviours change in light of these supports and the approaching end of CEIP? How intensely do they look for work? Are they successful?

#### **Employment, Earnings, and Wages**

Will many in the program group move into market employment quickly following the end of their CEIP eligibility at 36 months? If not, employment impacts may appear negative shortly after the end of their eligibility (40 months), given that control group employment rates continue to improve. How long will it take program group members to transition into market employment? Will their employment rates be higher than the control group, in the longer run, at the final follow-up (54 months)? Will the added work experience they received through CEIP translate into higher long-run earnings or wages?

#### **Income, Poverty, and Hardship**

Many program group members, particularly in the IA sample, had come to rely heavily on CEIP as their primary source of income. With the end of CEIP eligibility at 36 months, what will this have meant in terms of the experience of hardship among program group members and their families? To answer this question, more extensive modules on hardship have been added to the subsequent follow-up survey instruments.

#### **Social Capital and Well-Being**

Impacts on social capital were present but quite small at 18 months. Will another year and a half of program eligibility have brought additional opportunities for network enhancement? Will this have translated into more pronounced impacts on social capital in future follow-ups? Will this in turn have led to improvements in both long-run employability as well as well-being and life satisfaction as has been theorized?

These and other questions related to the post-program labour market experience of program group members will be addressed in future reports. The next planned report will draw on data from the 40-month follow-up survey, which is four months after the end of CEIP eligibility. Data from the final 54-month follow-up survey, administered over a year and a half after the end of the program, will be used to assess the longer-run impacts of CEIP.



## **Appendix A: The EI Program**

The Employment Insurance (EI) program provides income support to those who are attached to the workforce and is governed by the *Employment Insurance Act*, which came into force on July 1, 1996, replacing the *Unemployment Insurance Act*.

People who have paid EI premiums, most often through payroll deductions, and who have had an interruption of earnings can apply to receive EI benefits. The type of EI benefits for which a person may apply is determined by the cause of the applicant's loss of, or inability to participate in, employment. Regular benefits are available to those who lost their job through no fault of their own — for example due to shortage of work or seasonal or mass layoffs. People who are pregnant, caring for a newborn or adopted child, or sick can access maternity, parental, and/or sickness benefits. Additionally, fishing benefits are available to those who worked as fishers.

Eligibility criteria vary by type of benefit. Since CEIP participants are drawn from the population of regular EI beneficiaries, this description focuses on the eligibility requirements, application process, and the entitlement and benefit rates associated with regular EI. Statistics regarding the use of EI and the unemployment rates in industrial Cape Breton and Nova Scotia are included in the final section of this appendix.

### **ELIGIBILITY**

Regular benefits can be paid to individuals who lose their jobs through no fault of their own (for example due to shortage of work, seasonal or mass layoffs, or voluntary leave with just cause) and who are available for, able, and searching for work.

To qualify for regular benefits, an applicant must show that

- he or she has been without work and without pay for at least seven consecutive days, and
- he or she has worked for the required number of insurable hours during the qualifying period.

The qualifying period is the shorter of either the 52-week period immediately before the start date of a claim or the period since the start of a previous EI claim if benefits have been received within the last 52 weeks. Under certain circumstances, the qualifying period may be extended for up to 104 weeks. Only the insurable hours that fall within the qualifying period are used to determine eligibility for benefits.

Most people need between 420 and 700 insurable hours of work in their qualifying period to qualify for regular EI benefits. The required number of hours is based on the unemployment rate in the economic region where the claimant resides at the time the benefit

period begins (see Table A.1). However, 910 hours of insurable employment in the qualifying period is needed to qualify when the claimant is

- a new entrant to the labour force or
- a re-entrant to the labour force (after an absence of two years or more).<sup>1</sup>

Penalties associated with a previous EI claim may also increase the number of hours required to qualify for EI benefits.

**Table A.1: Insurable Hours Required**

<b>Regional Rate of Unemployment</b>	<b>Required Number of Hours of Insurable Employment in the Last 52 Weeks</b>
0% to 6%	700
6.1% to 7%	665
7.1% to 8%	630
8.1% to 9%	595
9.1% to 10%	560
10.1% to 11%	525
11.1% to 12%	490
12.1% to 13%	455
13.1% and over	420

## APPLICATION PROCESS

To receive regular benefits, a claimant must submit an EI application on-line or in person at their local office of the Human Resources Centres of Canada (HRCC). Along with the application, the claimant is required to submit a Record of Employment (ROE) provided by the employer. If the claimant has not received the ROE in a timely fashion, the HRCC will assist in obtaining it from the employer. In the absence of an ROE, claimants must submit other proof of employment such as pay stubs, cancelled pay cheques, or a T4 slip.

The information required to complete an application for EI benefits includes the following:

- Social Insurance Number (SIN)
- ROE from each job held over the last 52 weeks<sup>2</sup>
- Personal identification, such as a driver's license, birth certificate, or passport, if applying in person
- Complete bank information, as shown on a cheque, bank statement, or a voided personalized blank cheque from a current account (to have the payment of benefits made by direct deposit to a bank account)

<sup>1</sup>Specifically, a claimant is considered a new entrant or re-entrant (NERE) to the labour force when he or she does not have at least 490 hours of labour force attachment (LFA) in the 52-week period that precedes his or her qualifying period. A number of employment-related activities are considered LFA, the more common being hours of insurable work and weeks of paid EI benefits (the latter counting as 35 LFA hours per week). A two-year period without labour force attachment will generally (but not always) mean that the claimant will be a NERE and will require 910 hours to qualify for EI benefits.

<sup>2</sup>Claimants are asked to submit ROEs for each job held over the last 104 weeks if they need to demonstrate they have adequate labour force attachment to avoid being identified as a new entrant or re-entrant.

- A detailed account of the circumstances surrounding each resignation or dismissal if the claimant resigned or was dismissed from any job in the last 52 weeks
- Details regarding the most recent employment, including gross earnings (total earnings before deductions, including tips and commissions) during the last 26 weeks, gross earnings for the last week of work, and any amounts received or to be received as a result of termination (for example, vacation pay, severance pay, pension payments, and pay in lieu of notice)

If the HRCC receives all the required information and the person qualifies for benefits, the first payment will be issued within 28 days of the start date of the claim. Claimants must serve a two-week unpaid waiting period before EI benefits begin to be paid. Generally, this period is the first two weeks of a claim. If a client reopens a previous claim for benefits for which a waiting period has already been served, another waiting period is not necessary.

## CALCULATION OF BENEFITS

Regular benefits are paid for a period that can vary from 14 to 45 weeks. The number of weeks to be paid is determined at the start date of a benefit period, and it is based on the unemployment rate in the claimant's economic region and the number of insurable hours the claimant accumulated during the qualifying period.

The basic benefit rate is 55 per cent of average insured earnings up to a maximum amount of \$413 per week. EI benefits are taxable income; consequently, provincial (if applicable) and federal taxes are deducted. Claimants are eligible to receive a higher benefit rate if they are in a low-income family (currently an income of less than \$25,921 a year) with children, and if the claimant or the claimant's spouse qualifies to receive the Canada Child Tax Benefit.

The amount of the weekly benefit payment depends on the client's total earnings in the previous 26 weeks, the number of weeks worked during that time period, the unemployment rate in the economic region, and the minimum divisor that applies at that unemployment rate. Average weekly insured earnings is determined by dividing total earnings in the last 26 weeks by the greater of the number of weeks worked in the last 26 weeks or the minimum divisor number (see Table A.2). The result is multiplied by 55 per cent to determine the weekly benefit.

**Table A.2: Minimum Divisor by Unemployment Rate**

Unemployment Rate in Region	Minimum Divisor
0% to 6%	22
6.1% to 7%	21
7.1% to 8%	20
8.1% to 9%	19
9.1% to 10%	18
10.1% to 11%	17
11.1% to 12%	16
12.1% to 13%	15
13.1% and over	14



## **Appendix B:**

### **The Income Assistance Program in Nova Scotia**

#### **EMPLOYMENT SUPPORT AND INCOME ASSISTANCE**

Nova Scotia's Employment Support and Income Assistance Program provides assistance to adults who are in financial need, depending on their personal circumstances and family size. Since August 2001 income assistance (IA) in Nova Scotia has been governed under the *Employment Support and Income Assistance (ESIA) Act* with the stated objectives of assisting people in need while promoting independence and self-sufficiency.<sup>1</sup>

**Nova Scotia Child Benefit.** The ESIA no longer included benefits for children in the income assistance program. Assistance to children is instead provided through the Nova Scotia Child Benefit (NSCB), a non-taxable amount that is fully integrated with the National Child Benefit to establish a single, non-taxable, monthly payment for all low-income families.

**Employment supports.** These supports include extended prescription drug coverage for up to 12 months after entering the workforce. There is also a contribution towards child-care expenses — up to \$400 per month based on actual expenses incurred. The costs of transportation related to employment are also covered up to \$150 per month (again based on actual incurred expenses). IA recipients have access to training courses, including literacy and educational upgrading programs. The Training Allowance Incentive allows clients to keep up to \$150 of any training allowances they receive, after consideration of allowable expenses such as transportation and child care.

**Earnings incentive.** IA recipients can keep 30 per cent of any net earnings received while on income assistance. Recipients working in supported employment are allowed to exempt the first \$150 per month from their net wages. The IA benefit amount, including amounts paid for child care, transportation, and other employment-related special needs is reduced by 70 per cent of the net amount of earnings received.

**Payments for work-related items.** An IA recipient may receive payments for work-related items subject to approval by the caseworker or casework supervisor. These items may include the following (the amounts shown in brackets can be approved by the caseworker over a 12-month period; higher amounts can be approved in exceptional circumstances by a casework supervisor):

- Work-related clothing, for example uniforms, workboots, rain gear, coveralls, and office appropriate attire (up to \$200)
- Safety equipment and gear, for example hard hats, ear protectors, eye protectors, safety harnesses, safety gloves, masks, helmets, and face shields (up to \$300)
- Tools, including chain saws, mechanics tools, carpentry tools, electronic tools, ladders, and tool belts (up to \$500)

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<sup>1</sup>The rates of income assistance and employment supports cited in this appendix reflect the policies and regulations of the Nova Scotia IA program when the ESIA Act came into effect in August 2001.

- Payments of fees directly related to a return to employment, for example driver's license fees, the cost of obtaining a criminal records check or child abuse registry check, and medical examinations (up to \$200)
- Association/professional/licensing dues, including union dues, professional membership dues, and professional license application and renewal fees (up to \$500)
- Work-related training courses, including first aid, Workplace Hazardous Materials Information System (WHMIS), cardiopulmonary resuscitation (CPR), traffic control, and non-violent crisis intervention training (up to \$200)
- Specific short-term skills training may be eligible for support, for example consideration may be given to computer literacy, General Education Diploma courses, academic upgrading, professional refresher programs, continuing education programs, and seat confirmation fees (up to \$500)
- The purchase of personal hygiene and grooming supplies (up to \$50)
- Books and supplies required for an approved educational program (up to \$700)
- Approved personal development supports, including assertiveness training, self-esteem programs, anger management, career development, and individual counselling not available through provincial health services (up to \$300 per activity to a maximum of \$600)
- Any equipment and supports related to a disability, if the client is not eligible to receive the supports through other programs and if the supports are required to return to employment, including job coaching, tutoring, ergonomic supports, special chairs, and medical aids (up to \$500)
- Psycho-educational assessments (up to \$1,000)
- Other employment-related costs associated with participation in employability-enhancing activities that are not covered elsewhere on this list or by other policies and programs (up to \$500)

**Employment readiness assessment.** All clients are required to have their employment-readiness assessed. For some clients, this means that they will not be considered able to participate in the regular labour market. In such cases, the program will provide ongoing support to those individuals, with a focus on providing supports to enhance their quality of life.

**Rates of assistance.** The rate structure includes the following:

- a personal allowance paid at a rate of \$180 per month for each adult in the household
- a shelter allowance paid at a rate of
  - \$235 for one person
  - \$550 for a two-person household
  - \$600 for households of three or more people

- for single people, an additional amount not exceeding \$300 may be paid in addition to the shelter allowance if the single person
  - has a disability
  - is fleeing an abusive situation
  - has a chronic physical or mental condition that limits participation in employability activities
  - is over 55 years of age
  - is between 16 and 19 years of age

**Eligibility for special needs benefits.** Special needs benefits are available to all program recipients who meet the eligibility criteria.

In addition to administering IA payments to clients and assessment for appropriate services, the ESIA division through the Employment Support Services (ESS) section is responsible for the development of employment-related initiatives for individuals in receipt of income assistance. The objective of ESS programming is to support IA recipients in moving from welfare to work by promoting self-sufficiency and enabling access to upgrading, training programs, and job opportunities. ESS provides services to the extent necessary to enable recipients to gain entry-level employment in the shortest possible time through the least expensive means (Nova Scotia Department of Community Services, Income and Employment Support Services, 2002).

The guiding principle of the ESIA program is self-reliance achieved by providing support, information, and opportunities. The services offered by ESS include career counselling, vocational assessment, a variety of short-term courses (including job clubs, resumé writing, and labour market information), promotion of life-long learning, Prior Learning Assessment and Recognition, a portfolio-development program, specialized programs for youth and potential entrepreneurs, job-development services, services offered by the job-search centres, employment services for disabled people, and information and assistance in locating information on training and academic upgrading programs. Those services are available to all IA recipients who are job-ready or who may require some help in becoming job-ready.

The ESS staff include employment counsellors (sometimes referred to as “career counsellors” or “vocational rehabilitation counsellors”). Their major function is to provide information and advice to participants in the ESS program as well as to offer referrals to vocational assessment, a variety of workshops, and job-development services. The role of the employment counsellor is to empower people to market themselves and to assist in addressing barriers to employment. It is the participant’s responsibility to define a goal and pursue it on his or her own or with the assistance of a job developer. There are also assessment technicians on staff who provide a variety of vocational assessments to participants (including measures of aptitude, academic interests, values, vocabulary, and employment-readiness) and job developers who work with both employers and job-ready participants to try to arrange placements into employment (Nova Scotia Department of Community Services, 2001).

After completing the Nova Scotia Employability Assessment (NSEA), clients are categorized according to an Employability Participation (EP) scale:

EP Code 1 — Clients awaiting assessment. The total waiting time from issuance of the first IA cheque to completion of an employability assessment should not exceed eight weeks.

EP Code 2 — Individuals who are required to participate in ESS. They have completed an employability assessment and an employment plan is being created.

EP Code 3 — Clients who are temporarily excused from participating in ESS. An employability assessment was completed and, based on the results, it has been determined that there will not be a requirement for the client to participate at this time. The situation will be reviewed after six months.

EP Code 4 — Clients who are excused and not required to take part in ESS. The employability assessment has been completed and, based on the results, there is no requirement now, nor is there likely to be a requirement in the future, for the client to participate in employment-related activities.

EP Code 5 — Individuals who did not report for their employability assessment appointment.

EP Code 6 — A temporary code used to identify individuals who were approved as long-term Family Benefit clients prior to the introduction of the ESIA Act in August 2001 and who have never been assessed for employability.

For the Community Employment Innovation Project (CEIP), IA recipients who were identified as EP Code 2 were given the opportunity to be selected for participation in the project.



## **Appendix C: Program Satisfaction**

This appendix presents results from the program satisfaction module of the 18-month follow-up survey. This module asked eligible program group members<sup>1</sup> about their level of satisfaction with the Community Employment Innovation Project (CEIP), including what particular aspects of the program they liked and disliked and how they felt the program could be improved. Results are presented separately for Employment Insurance (EI) and income assistance (IA) recipients.

Table C.1 illustrates that the overwhelming majority of respondents were satisfied, very satisfied, or completely satisfied with CEIP (93.3 per cent of EI respondents; 91.5 per cent of IA respondents). When asked “What do you like about CEIP,” the most common response was having a paid job — 47.0 per cent of EI respondents and 53.1 per cent of IA respondents. Sizable proportions of individuals also mentioned meeting people at work (37.6 per cent of EI respondents; 30.8 per cent of IA respondents), gaining new skills (41.1 per cent of EI respondents; 37.4 per cent of IA respondents), and gaining work experience (34.1 per cent of EI respondents; 35.1 per cent of IA respondents) as things they liked about CEIP.

Responses to the question “What do you dislike the MOST about CEIP” showed that there was no single facet of CEIP that stood out as being universally disliked by a large proportion of participants. Among EI respondents, the features that most often got mentioned were the low CEIP wage (19.1 per cent) and not learning new skills (12.1 per cent). IA respondents most frequently mentioned not learning new skills in response to this question (11.9 per cent).

When asked “What would you like to see in CEIP that is not there now,” the most frequent response among EI respondents was more training (28.0 per cent). IA respondents would have preferred more permanent work (23.6 per cent). Approximately 19 per cent of EI respondents would have also liked CEIP to provide more permanent work. Not surprisingly, given that CEIP projects were almost all with voluntary sector organizations that serve local communities, only about 3 percent of respondents (3.0 per cent of EI respondents; 3.9 per cent of IA respondents) would have liked CEIP to have more work that helps the community.

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<sup>1</sup>The program satisfaction module on the 18-month survey was administered only to program group members who had signed a Project Participation Agreement (PPA), since only they could participate in community-based projects and/or CEIP ancillary activities.

**Table C.1: Program Satisfaction at 18 Months After Enrolment, Among Program Group Members Who Signed a Participation Agreement**

	EI	IA
<b>Level of satisfaction with participation in CEIP (%)</b>		
Completely satisfied	25.9	33.0
Very satisfied	39.6	27.8
Satisfied	27.8	30.7
Not very satisfied	3.2	4.3
Unsatisfied	3.5	4.3
<b>What respondents liked about CEIP (%)</b>		
Having a paid job	47.0	53.1
Contributing to the community	13.4	7.1
Meeting people at work	37.6	30.8
Doing interesting work	17.7	15.6
Making new friends	22.3	13.7
Gaining new skills	41.1	37.4
Gaining work experience	34.1	35.1
Other	32.3	26.1
Do not like any part of CEIP	2.7	5.2
<b>What respondents liked MOST about CEIP (%)</b>		
Having a paid job	27.4	40.5
Contributing to the community	4.2	+++
Meeting people at work	13.0	11.0
Doing interesting work	5.0	3.5
Making new friends	4.4	+++
Gaining new skills	10.5	11.0
Gaining work experience	8.0	8.5
Other	27.4	21.5
<b>What respondents disliked about CEIP (%)</b>		
Low wage job	13.7	5.7
Not contributing to the community	1.6	0.0
Not gaining work experience	4.0	6.2
Not learning new skills	8.1	8.5
Not doing interesting work	4.3	6.6
New and not permanent	7.5	9.0
Rules and procedures	10.8	10.9
Like everything	39.3	38.4
Other	26.9	27.0
<b>What respondents disliked MOST about CEIP (%)</b>		
Low wage job	19.1	6.4
Not gaining work experience	2.8	4.0
Not learning new skills	12.1	11.9
Not doing interesting work	3.3	7.9
Other	62.8	69.8
<b>What respondents would like to see in CEIP (%)</b>		
Increased supervision	4.1	2.4
More training	28.0	21.2
More work experience	8.2	7.7
More work to do	3.3	8.2
More challenging work	8.2	9.6
More permanent work	18.5	23.6
More work that helps the community	3.0	3.9
Better benefits	4.9	5.3
More pay	8.2	6.3
Other	23.9	21.2
Nothing	22.0	25.5
<b>Sample size<sup>a</sup></b>	<b>373</b>	<b>212</b>

**Source:** Calculations from 18-month follow-up survey data.

**Notes:** Sample sizes vary for individual measures because of missing values.

+++ indicates that the statistic was based on a sample size of less than five. To protect the confidentiality of individuals in the study, statistics based on sample sizes of less than five are not published by the Social Research and Demonstration Corporation (SRDC).

<sup>a</sup>These questions were to be asked only of program group members who had completed a project participation agreement (PPA).

Due to administrative error by Statistics Canada, 41 of the 626 persons who signed a PPA and completed the 18-month survey were not asked these questions.

## **Appendix D: Regression-Adjusted Impact Estimates**

This appendix presents regression-adjusted impact estimates for a range of outcomes discussed in this report. The first section reviews the basic approach and rationale for using regression-adjusted impacts and compares their value with unadjusted impacts. The second section summarizes some of the key differences between the two estimates for outcomes in this report and presents a range of regression-adjusted impact tables that correspond to the unadjusted estimates presented in earlier chapters.

### **Unadjusted Versus Adjusted Impact Estimates**

This report presents “unadjusted” impacts of the Community Employment Innovation Project (CEIP) that were estimated by calculating the difference between the mean outcome levels of the program and control group. However, an alternative method is to estimate a regression in which the outcome is modeled as a linear function of the respondents’ research group and a range of socio-economic and demographic characteristics measured before random assignment. Though random assignment ensures that there are no systematic differences between program and control groups, small differences can arise by chance, particularly in smaller samples. The regression “adjusts” the impact estimate to account for these baseline differences between program and control group members.

In a random assignment study, both approaches yield valid estimates of the impacts. Nonetheless, there are advantages to using regression-adjusted estimates:

- Given that any observed baseline differences between program and control group members can be accounted for, the regression-adjusted impact estimates are potentially more accurate than the unadjusted mean differences in outcomes.
- Even in the absence of statistically significant program–control group differences at baseline, regression-adjustment can improve the statistical precision of impact estimates. Standard errors of the regression-adjusted impact estimates of the treatment may be lower (when correlation between the characteristics and the outcome is accounted for in the regression), which results in improved statistical power.

However, there are also some disadvantages to using regression adjustment, which make the unadjusted impact estimates more preferable:

- Unadjusted impact estimates are more widely understood.
- Adjusted impact estimates may be dependent on the functional form and regression method that is chosen. Generally, the outcome is modeled as a linear function of the treatment group status and baseline characteristics using Ordinary Least Squares (OLS). However, for “dummy” dependent variables, a logit or probit specification

may be preferred, particularly when the outcome variable is highly skewed.<sup>1</sup> This makes the interpretation of adjusted impacts more difficult compared with the straightforward unadjusted estimates, which are differences in mean outcomes between the program and control group.

- For many outcomes, the improvement in statistical precision that is achieved through regression adjustment is typically quite small (Meyer, 1995).

## **Adjusted Impact Estimates of CEIP**

As discussed in Chapter 1, random assignment was implemented successfully for CEIP without giving rise to any systematic differences between program and control groups. However, some small differences did arise, by chance, which justify the consideration of regression-adjusted impacts. Tables 1.1 and 1.2 of Chapter 1 presented baseline characteristics of Employment Insurance (EI) and income assistance (IA) sample members, respectively, who responded to the 18-month follow-up survey. This analysis revealed that EI program group members are more likely to be women than men, are more likely to live in households without children, and are less likely to have a household income of \$30,000 or more compared with the control group. EI program group members also appear to have smaller social networks and volunteer somewhat less than their control group counterparts. Among IA sample members, there were fewer significant differences, though program group members appear somewhat more open to moving in order to get a job and are also more likely to live in households without children compared with control group members.

To account for these differences, adjusted impacts were estimated by regressing each outcome of interest on a treatment group variable and a range of socio-economic and demographic characteristics that were measured before random assignment. In addition to those characteristics where differences were observed, a range of other baseline variables were included in the regressions. In total, 18 characteristics (the independent variables) were regressed on each outcome observed at 18 months (the dependent variable), with both continuous and binary variables included, all of which were measured through the baseline survey administered before random assignment:

- treatment group
- gender
- age
- marital status
- no children in household

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<sup>1</sup>For example, if a very large (or very small) proportion of the sample has a dependent variable equal to one, the predicted probabilities from OLS can be greater than one (or negative) resulting in biased estimates, which is not the case with the probit or logit models. However, for the purpose of calculating regression-adjusted impacts in the context of a large scale random assignment design, OLS is a reasonable approximation for most adjusted impacts. Given the large sample and fact that the covariates in the adjusted-regression have very limited explanatory power over and above the treatment group variable (due to random assignment), there is little bias with a linear specification for most outcomes. Nonetheless, the adjusted impacts of CEIP were also estimated with logit and probit models for selected outcomes having dummy dependent variables in order to confirm that the linear estimates were reasonable. In most cases, there is little difference between adjusted impact estimates using OLS, probit, or logit models. Furthermore, when they do differ, the probit and logit models result in impacts that are often closer to the unadjusted impact estimates. Only the linear regression-adjusted impact estimates are presented in this appendix.

- youngest child in the household is under 5 years of age
- total size of the household
- respondent has less than a high school diploma
- activity limitations or fair/poor health were reported
- in paid work at baseline
- number of years worked at a paid job since 16 years of age
- has 10 or more contacts (social networks)
- engaged in some formal volunteering
- engaged in some informal volunteering
- lived in Cape Breton all of life
- lived at current residence for more than five years
- will move for work
- will accept lower wage or work in different occupation or industry
- household income less than \$30,000 (EI), or less than \$10,000 (IA)

Tables D.1 through D.12 present the resulting adjusted impact estimates for selected outcomes, with each corresponding to an earlier table of unadjusted impacts presented in chapters 3 through 6.

For the most part, there are few differences between the adjusted and unadjusted impact estimates. The signs of the adjusted impacts always correspond to the unadjusted estimates. Their magnitude occasionally differs as do the standard errors. In most cases, the difference is small and the level of statistical significance is the same. However, for a few outcomes, which have been footnoted throughout the text, the magnitude of the difference in impact between the adjusted and unadjusted estimates is nontrivial. Similarly, there are some differences in the level of significance of the impact estimate, with some impacts gaining significance and others losing it following regression adjustment.

With respect to employment-related outcomes reported in Chapter 3, there are few differences between adjusted and unadjusted impact estimates. Impacts on employment rates and earnings are similar, though the adjusted impacts on wages are somewhat smaller in magnitude among the IA sample than the unadjusted estimates. Also, the negative impacts on hours of work above 35 per week among the EI sample are no longer statistically significant following regression adjustment. With respect to the impacts on transfers and income reported in Chapter 4, there are also few differences. Adjusted impacts on both EI and IA transfer receipt among both samples are similar to the unadjusted estimates. However, the adjusted impacts on the incidence of low income among the IA sample are smaller in magnitude than the unadjusted estimates (the adjusted impact of CEIP on household income below Statistics Canada's low income cut-offs is 10.4 percentage points, while the unadjusted impact is 18.2 percentage points, significant at the five per cent level and one per cent level respectively).

Not surprisingly, some of the outcomes with program–control group differences at baseline are the ones most affected by regression adjustment including impacts on social capital and volunteering discussed in Chapter 5. With respect to social networks, the small positive impact observed among the IA sample on the proportion with more than 10 contacts was smaller at 6.1 percentage points and no longer statistically significant following regression adjustment (compared with a 9.9 percentage point unadjusted impact estimate significant at the five percent level). However, the small decreases observed among the EI sample on the proportion of program group members with fewer than three contacts and three to five contacts were larger following regression adjustment, at 3.4 and 6.1 percentage points respectively (compared with only a 2.1 and a 3.4 percentage point unadjusted impact respectively). With respect to volunteering, the impacts observed among the EI sample were also larger following regression adjustment where 17.4 percentage points fewer program group members reported never volunteering for a group or organization (compared with a 12 percentage point unadjusted impact).

Regarding the other outcomes discussed in Chapter 6, there are also a couple of differences in the magnitude of adjusted and unadjusted impacts and their level of statistical significance. Although the adjusted impacts on life satisfaction and the average score on the satisfaction scale are similar in magnitude to the unadjusted estimates, they fail to reach the level of statistical significance. Also, with respect to the measures of working skills, the negative impacts on the dimensions of responsibility, problem solving, and systems thinking fail to reach the level of statistical significance following regression adjustment. However, the impacts on the dimensions of adapting to change and life-long learning remain positive and statistically significant.

Tables D.1 through D.12 present adjusted impact estimates for a selection of the outcomes discussed in earlier chapters.

**Table D.1: CEIP Impacts on Part-Time and Full-Time Employment — EI Sample (Table 3.2a, Adjusted Impacts)**

<b>Outcome</b>	<b>Program Group</b>	<b>Control Group</b>	<b>Difference (Impact)</b>	<b>Standard Error</b>
<b>Employment rate (%)</b>				
Quarter 1	52.5	38.7	13.8 ***	(4.2)
Quarter 2	89.1	53.8	35.3 ***	(4.1)
Quarter 3	89.1	62.3	26.8 ***	(4.1)
Quarter 4	89.8	62.2	27.7 ***	(4.0)
Quarter 5	90.3	66.0	24.3 ***	(4.0)
Quarter 6	89.7	65.1	24.6 ***	(4.0)
<b>Full-time employment rate (%)<sup>a</sup></b>				
Quarter 1	46.3	22.5	23.9 ***	(3.7)
Quarter 2	87.9	37.0	50.8 ***	(4.1)
Quarter 3	88.0	44.5	43.5 ***	(4.3)
Quarter 4	87.9	45.8	42.1 ***	(4.3)
Quarter 5	87.6	50.8	36.7 ***	(4.3)
Quarter 6	87.0	52.0	35.0 ***	(4.3)
<b>Part-time employment rate (%)<sup>b</sup></b>				
Quarter 1	5.3	13.2	-7.9 ***	(2.8)
Quarter 2	1.4	13.8	-12.4 ***	(2.7)
Quarter 3	1.3	15.2	-13.9 ***	(2.8)
Quarter 4	1.9	14.1	-12.2 ***	(2.8)
Quarter 5	2.7	12.5	-9.9 ***	(2.7)
Quarter 6	2.6	10.5	-7.9 ***	(2.5)
<b>Sample size (total = 898)</b>	<b>470</b>	<b>428</b>		

**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

**Notes:** The estimates for each quarter are calculated by averaging the three months within a quarter.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>“Full-time employment” is defined as working in a job that is normally 30 or more hours per week or working in multiple jobs that average 30 or more hours per week during a calendar month.

<sup>b</sup>“Part-time employment” is defined as working in a job that is normally fewer than 30 hours per week and, if working in multiple jobs, jobs that average fewer than 30 hours per week during a calendar month.

**Table D.2: CEIP Impacts on Part-Time and Full-Time Employment — IA Sample (Table 3.2b, Adjusted Impacts)**

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Employment rate (%)</b>				
Quarter 1	29.7	15.4	14.3 ***	(3.6)
Quarter 2	90.4	24.0	66.4 ***	(4.3)
Quarter 3	90.9	35.2	55.6 ***	(4.8)
Quarter 4	87.4	40.9	46.6 ***	(5.1)
Quarter 5	83.6	42.1	41.5 ***	(5.6)
Quarter 6	80.7	44.6	36.1 ***	(5.8)
<b>Full-time employment rate (%)<sup>a</sup></b>				
Quarter 1	27.7	8.7	19.0 ***	(3.2)
Quarter 2	90.6	15.4	75.2 ***	(3.8)
Quarter 3	90.6	24.1	66.5 ***	(4.5)
Quarter 4	87.9	27.8	60.1 ***	(4.8)
Quarter 5	83.7	28.7	55.0 ***	(5.2)
Quarter 6	80.7	31.4	49.3 ***	(5.5)
<b>Part-time employment rate (%)<sup>b</sup></b>				
Quarter 1	1.5	5.8	-4.3 *	(2.4)
Quarter 2	-0.1	7.2	-7.3 ***	(2.5)
Quarter 3	0.5	9.1	-8.6 ***	(2.8)
Quarter 4	-0.3	11.6	-11.9 ***	(3.0)
Quarter 5	0.0	11.7	-11.7 ***	(3.2)
Quarter 6	0.1	10.8	-10.7 ***	(3.0)
<b>Sample size (total = 465)</b>	<b>237</b>	<b>228</b>		

**Sources:** Calculations from 18-month follow-up survey and CEIP project management information system (PMIS) data.

**Notes:** The estimates for each quarter are calculated by averaging the three months within a quarter.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>“Full-time employment” is defined as working in a job that is normally 30 or more hours per week or working in multiple jobs that average 30 or more hours per week during a calendar month.

<sup>b</sup>“Part-time employment” is defined as working in a job that is normally fewer than 30 hours per week and, if working in multiple jobs, jobs that average fewer than 30 hours per week during a calendar month.



**Table D.3: CEIP Impacts on Distribution of Wages and Hours (Month 16) (Table 3.4, Adjusted Impacts)**

Cumulative Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Hourly wage rate (% in each category)</b>								
Not working	9.6	34.2	-24.6 ***	(4.3)	19.1	56.4	-37.3 ***	(6.0)
Wage unreported	0.0	4.7	-4.7 ***	(1.6)	-0.1	4.0	-4.1 **	(2.0)
Less than minimum wage	0.0	0.0	0.0		2.3	1.2	1.1	(1.7)
Minimum to \$0.99 above minimum	2.0	7.1	-5.1 **	(2.3)	-0.5	7.6	-8.1 ***	(2.6)
\$1.00 to <\$2.00 above minimum	4.5	5.3	-0.8	(2.3)	3.2	7.5	-4.3	(3.1)
\$2.00 to <\$3.00 above minimum	58.2	11.7	46.5 ***	(4.4)	63.7	7.9	55.9 ***	(5.2)
\$3.00 to <\$6.00 above minimum	15.3	21.2	-5.9	(4.2)	12.6	13.6	-1.1	(4.6)
\$6.00 or more above minimum	10.3	15.8	-5.5	(3.6)	-0.3	1.8	-2.1 *	(1.2)
<b>Hours worked per week (% in each category)</b>								
Not working	9.6	34.2	-24.6 ***	(4.3)	19.1	56.4	-37.3 ***	(6.0)
Hours per week unreported	0.0	2.6	-2.6 **	(1.2)	-0.1	1.7	-1.8	(1.3)
Fewer than 30	5.2	14.6	-9.4 ***	(3.2)	5.5	12.7	-7.2 *	(4.0)
30	0.8	1.9	-1.1	(1.3)	-0.1	4.0	-4.1 **	(1.9)
31 to 34	5.5	4.5	1.1	(2.4)	3.4	3.4	-0.1	(2.5)
35	40.1	4.9	35.2 ***	(4.0)	43.7	2.3	41.4 ***	(4.9)
36 to 39	1.9	5.1	-3.3	(2.0)	-0.4	2.7	-3.1 **	(1.5)
40 to 44	10.2	23.2	-13.0 ***	(4.1)	2.8	13.4	-10.6 ***	(3.7)
45 or more	14.8	8.7	6.1 *	(3.4)	6.2	3.4	2.8	(2.9)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Sources:** Calculations from 18-month survey and administrative data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

**Table D.4: CEIP Impacts on EI and IA Monthly Benefits — EI Sample (Table 4.1, Adjusted Impacts)**

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Average monthly EI benefits (\$)</b>				
Quarter 1	600	728	-128 ***	(40)
Quarter 2	90	417	-327 ***	(36)
Quarter 3	30	179	-149 ***	(25)
Quarter 4	31	238	-208 ***	(36)
Quarter 5	42	237	-195 ***	(35)
Quarter 6	61	159	-98 ***	(31)
<b>Average monthly IA benefits (\$)</b>				
Quarter 1	7	6	1	(4)
Quarter 2	1	20	-18 **	(7)
Quarter 3	4	39	-36 ***	(11)
Quarter 4	13	38	-26 **	(13)
Quarter 5	3	39	-35 ***	(11)
Quarter 6	3	35	-31 ***	(11)
<b>Sample size</b>	<b>428</b>	<b>470</b>		

**Sources:** Calculations from Employment Insurance and income assistance administrative data.

**Notes:** The estimates for each quarter are calculated by averaging the three months within a quarter.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

**Table D.5: CEIP Impacts on EI and IA Monthly Benefits — IA Sample (Table 4.2, Adjusted Impacts)**

Outcome	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Average monthly IA benefits (\$)</b>				
Quarter 1	526	560	-34	(35)
Quarter 2	170	526	-356 ***	(34)
Quarter 3	128	461	-333 ***	(35)
Quarter 4	107	424	-317 ***	(35)
Quarter 5	122	411	-289 ***	(36)
Quarter 6	116	377	-261 ***	(36)
<b>Average monthly EI benefits (\$)</b>				
Quarter 1	4	19	-15	(11)
Quarter 2	2	32	-30 **	(15)
Quarter 3	2	27	-25 *	(13)
Quarter 4	7	31	-25 *	(13)
Quarter 5	3	46	-43 **	(17)
Quarter 6	9	65	-56 **	(23)
<b>Sample size</b>	<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month administrative data.

**Notes:** The estimates for each quarter are calculated by averaging the three months within a quarter.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

**Table D.6: CEIP Impacts on Personal and Household Income (Table 4.3, Adjusted Impacts)**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Personal and family income (\$)</b>								
Individual income	18,170	17,052	1,118	(972)	15,183	12,253	2,930 ***	(696)
Other household income	16,744	18,448	-1,704	(1,664)	4,708	3,038	1,671	(1,134)
Total household income <sup>a</sup>	34,659	35,510	-851	(1,832)	20,002	15,305	4,697 ***	(1,297)
<b>Employment of spouse in past 12 months</b>								
Had a spouse who worked (%)	58.1	54.0	4.1	(4.5)	20.1	9.4	10.7 **	(4.5)
Number of months spouse worked	5.6	5.6	0.0	(0.5)	1.8	0.8	1.0 **	(0.4)
Had spouse who worked full time (%)	53.6	48.1	5.6	(4.6)	17.8	9.0	8.8 **	(4.2)
Had spouse who worked part time (%)	3.9	5.9	-2.0	(2.3)	2.3	0.4	1.9	(1.5)
<b>Sources of household income (%)</b>								
CPP / Old Age Pension / GIS	10.4	12.6	-2.2	(3.5)	7.1	5.8	1.3	(3.4)
Workers' compensation or disability insurance	8.4	12.8	-4.4	(3.4)	5.7	3.0	2.7	(2.8)
Investment income (interest, RRSPs, etc.)	7.4	11.6	-4.2	(3.2)	3.6	0.9	2.7	(1.9)
IA income	4.5	12.0	-7.5 **	(2.9)	46.2	79.3	-33.1 ***	(6.1)
EI income	29.9	66.4	-36.6 ***	(5.2)	26.9	26.0	0.9	(6.1)
Tax credits (HST, child tax, etc.)	74.3	78.8	-4.5	(4.5)	91.8	94.5	-2.7	(3.4)
Other sources	11.4	14.4	-3.0	(3.6)	24.1	30.8	-6.7	(6.0)
No income from above sources	15.4	3.3	12.1 ***	(3.1)	4.1	0.4	3.6 *	(2.0)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>Household income is measured as the sum of the sample member's income and the income of all other members in that person's household.

**Table D.7: CEIP Impacts on Household Low-Income (LICO) Status Prior to the 18-Month Follow-Up Interview (Table 4.4, Adjusted Impacts)**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Household income below LICO (%)<sup>a</sup></b>	33.7	37.8	-4.1	(5.3)	80.6	91.0	-10.4 **	(4.7)
Below 50% of LICO	7.8	7.9	-0.1	(3.2)	18.4	33.2	-14.8 **	(5.9)
50% to less than 75% of LICO	8.9	13.8	-4.8	(3.6)	38.7	40.7	-2.0	(6.9)
75% to less than 100% of LICO	17.0	16.2	0.8	(4.4)	23.5	17.1	6.4	(5.5)
<b>Household income above LICO (%)</b>	66.3	62.2	4.1	(5.3)	19.4	9.0	10.4 **	(4.7)
100% to less than 150 % of LICO	33.9	22.4	11.6 **	(5.4)	14.8	6.3	8.5 **	(4.2)
150% to less than 175% of LICO	11.8	11.0	0.8	(3.7)	1.5	1.2	0.2	(1.6)
175% to less than 200% of LICO	4.9	8.7	-3.9	(2.9)	2.0	1.6	0.4	(1.9)
200% of LICO or more	15.7	20.1	-4.4	(4.3)	1.1	-0.1	1.3	(0.9)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>Calculated by comparing annualized family income with the low income cut-off (LICO) defined by Statistics Canada for the sample member's location and family size.

**Table D.8: Distribution of Total Contacts and Resource Types (Table 5.1, Adjusted Impacts)**

Percentage With Given # of Contacts	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Network size</b>								
Less than 3 contacts	0.5	3.9	-3.4 **	(1.6)	5.1	2.7	2.4	(2.6)
3 to 5 contacts	9.5	15.6	-6.1 *	(3.6)	16.9	17.2	-0.3	(5.2)
6 to 10 contacts	46.0	40.1	5.9	(5.4)	40.1	48.3	-8.2	(6.8)
More than 10 contacts	44.0	40.4	3.6	(5.3)	37.9	31.8	6.1	(6.4)
Mean	12.4	12.1	0.3	(1.0)	11.6	10.6	1.0	(1.4)
<b>Resource types</b>								
Associated with bonding social capital								
Help with household chores								
Less than 3 contacts	11.7	12.6	-0.9	(3.5)	21.2	17.3	3.9	(5.3)
3 to 5 contacts	28.6	35.7	-7.1	(5.1)	46.1	45.8	0.3	(6.7)
6 to 10 contacts	41.3	36.5	4.8	(5.4)	25.3	30.6	-5.3	(5.9)
More than 10 contacts	18.4	15.2	3.2	(3.9)	7.4	6.3	1.1	(3.4)
Mean	7.9	7.3	0.6	(0.7)	5.7	5.8	-0.1	(0.7)
Provide emotional support								
Less than 3 contacts	11.0	13.3	-2.4	(3.5)	15.0	16.5	-1.5	(5.0)
3 to 5 contacts	38.1	37.3	0.7	(5.3)	40.8	38.8	2.0	(6.7)
6 to 10 contacts	34.1	36.1	-2.1	(5.2)	31.5	30.9	0.5	(6.3)
More than 10 contacts	16.9	13.3	3.7	(3.9)	12.7	13.8	-1.1	(4.5)
Mean	7.6	7.2	0.4	(0.7)	7.2	6.7	0.6	(1.1)
Associated with bridging and linking social capital								
Provide specialized advice								
Less than 3 contacts	33.3	35.9	-2.7	(5.3)	48.1	42.0	6.0	(6.5)
3 to 5 contacts	42.3	43.5	-1.2	(5.5)	30.3	40.8	-10.5 *	(6.3)
6 to 10 contacts	21.1	16.0	5.1	(4.2)	16.2	13.9	2.3	(4.7)
More than 10 contacts	3.3	4.6	-1.3	(2.1)	5.4	3.2	2.2	(2.8)
Mean	4.0	4.0	0.0	(0.3)	3.7	3.8	-0.1	(0.5)
Help with finding a job								
Less than 3 contacts	22.3	27.2	-4.9	(4.6)	33.7	28.6	5.1	(6.1)
3 to 5 contacts	34.9	36.2	-1.3	(5.2)	36.5	38.4	-2.0	(6.7)
6 to 10 contacts	30.9	24.8	6.1	(4.9)	23.8	24.4	-0.6	(5.7)
More than 10 contacts	11.9	11.8	0.1	(3.6)	6.0	8.5	-2.5	(3.5)
Mean	6.0	5.9	0.1	(0.6)	5.1	5.1	-0.1	(0.6)
<b>Sample size</b>	<b>470</b>	<b>428</b>	<b>898</b>		<b>237</b>	<b>228</b>	<b>465</b>	

**Source:** Calculations from 18-month follow-up survey data.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

**Table D.9: Structural Characteristics of Social Networks (Table 5.2, Adjusted Impacts)**

	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Network density</b>								
<i>% of contacts who know each other</i>								
All	37.5	41.6	-4.1	(5.4)	40.8	51.4	-10.6	(6.9)
Most	36.6	31.4	5.2	(5.2)	32.0	35.5	-3.5	(6.5)
Some	19.7	21.6	-1.8	(4.5)	19.6	8.3	11.3 **	(4.7)
Few	4.3	3.8	0.5	(2.2)	7.5	2.5	5.0 *	(3.0)
None	1.8	1.6	0.2	(1.5)	0.1	2.3	-2.2	(1.6)
<b>Tie strength</b>								
<i>% of contacts who are</i>								
Relatives	52.8	50.6	2.2	(2.8)	45.7	49.4	-3.7	(3.6)
Friends	31.0	35.4	-4.4 *	(2.4)	38.9	38.1	0.7	(3.3)
Acquaintances	11.3	9.4	1.9	(1.8)	14.4	12.2	2.2	(2.7)
<b>Network heterogeneity</b>								
<i>% of contacts who are</i>								
The same gender as you	62.8	61.3	1.5	(2.2)	63.8	67.2	-3.4	(2.6)
Within 10 years of your age	60.5	61.0	-0.5	(2.9)	58.5	54.8	3.7	(3.7)
At the same level of education as you	44.8	43.5	1.3	(3.4)	44.1	39.6	4.5	(4.4)
Working with you	25.0	20.4	4.6 *	(2.6)	24.9	22.9	2.0	(3.6)
Living within your community	65.2	65.1	0.1	(3.7)	71.5	73.2	-1.8	(4.4)
Living somewhere else in Cape Breton	25.8	24.8	1.0	(3.5)	22.0	20.4	1.5	(4.0)
Living outside Cape Breton	5.0	5.8	-0.7	(1.2)	5.3	4.0	1.3	(1.9)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month follow-up survey data.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

**Table D.10: Impacts on Formal Volunteering With Groups or Organizations (Table 5.4, Adjusted Impacts)**

	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Frequency of formal volunteering</b>								
<i>How often did you volunteer in last 12 months?</i>								
Everyday	3.0	0.5	2.5 *	(1.4)	1.1	1.4	-0.3	(1.5)
A few times a week	10.9	10.3	0.7	(3.3)	6.7	6.8	-0.1	(3.5)
About once a week	15.1	7.6	7.5 **	(3.4)	13.2	9.1	4.0	(4.3)
About once a month	16.1	14.1	2.0	(3.8)	12.4	9.0	3.5	(4.3)
Less than once a month	14.4	9.8	4.7	(3.5)	10.6	9.0	1.7	(4.1)
Never	40.4	57.8	-17.4 ***	(4.9)	55.9	64.7	-8.8	(6.6)
<b>Types of unpaid formal volunteering</b>								
<i>Assisted a group or organization</i>								
With canvassing, campaigning, fund-raising	34.4	22.9	11.5 **	(4.7)	29.2	18.4	10.7 *	(5.7)
As a member of board or committee	19.2	12.8	6.4 *	(3.8)	21.9	10.4	11.5 **	(4.8)
With providing info or helping educate public	18.3	8.9	9.4 ***	(3.6)	16.7	13.3	3.4	(4.9)
With organizing or supervising activities	40.0	25.7	14.3 ***	(4.7)	32.7	17.7	15.0 **	(5.8)
With teaching or coaching for an organization	19.8	9.7	10.1 ***	(3.7)	16.4	7.3	9.1 **	(4.3)
With office or administrative work	20.0	12.6	7.5 *	(3.9)	13.9	10.2	3.6	(4.5)
With providing care, support, or counselling	15.8	10.1	5.8	(3.5)	14.7	10.3	4.4	(4.4)
With collecting, serving, or delivering food	19.7	12.4	7.3 *	(3.9)	19.2	13.6	5.6	(4.8)
As a volunteer driver for an organization	19.7	15.0	4.6	(4.0)	12.0	4.7	7.2 *	(3.8)
Other	21.6	18.1	3.5	(4.3)	17.6	14.1	3.5	(5.0)
<b>Hours of formal volunteering</b>								
Average hours per month	9.7	6.2	3.5 **	(1.5)	8.8	6.1	2.8	(2.4)
<i>% of sample who volunteered</i>								
>0 to 5 hours per month	16.1	13.0	3.1	(3.8)	13.3	9.6	3.7	(4.4)
>5 to 15 hours per month	20.8	16.2	4.6	(4.1)	10.9	14.1	-3.1	(4.6)
>15 hours per month	21.6	11.3	10.3 ***	(3.8)	16.1	10.3	5.8	(4.5)
Did not volunteer	41.4	59.5	-18.0 ***	(4.9)	59.6	66.0	-6.4	(6.7)
<i>Change hours volunteered in last 12 months</i>								
Increased	16.0	6.6	9.5 ***	(3.3)	14.2	9.1	5.1	(4.4)
Stayed the same	72.7	83.1	-10.4 **	(4.2)	74.8	80.5	-5.7	(5.7)
Decreased	11.2	10.3	0.9	(3.3)	11.0	10.4	0.6	(4.3)
<b>Number of organizations</b>								
Average # of organizations volunteered for	1.3	0.8	0.4 ***	(0.1)	0.9	0.8	0.1	(0.2)
<i>% of sample who volunteered for</i>								
1 organization	20.7	20.1	0.6	(4.4)	21.1	14.1	7.0	(5.2)
2 to 3 organizations	30.7	14.8	15.9 ***	(4.3)	17.8	17.8	0.1	(5.3)
4 or more organizations	6.6	6.1	0.4	(2.6)	4.2	3.5	0.6	(2.6)
Did not volunteer	42.0	59.0	-17.0 ***	(4.9)	56.9	64.6	-7.7	(6.6)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month follow-up survey data.

**Notes:** Sample sizes vary for individual measures because of missing values.

Two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

**Table D.11: CEIP Impacts on Health and Subjective Well-Being, at the 18-Month Follow-Up Interview (Table 6.1, Adjusted Impacts)**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>Health</b>								
Any health limitation	32.2	25.5	6.7	(4.5)	32.4	28.9	3.5	(6.1)
In general, health is								
Excellent	31.2	30.7	0.5	(5.0)	22.6	27.3	-4.6	(5.7)
Very good	49.7	44.7	5.0	(5.5)	40.1	42.3	-2.2	(6.8)
Good	14.7	19.1	-4.4	(4.1)	29.2	20.8	8.4	(5.9)
Fair	3.3	5.0	-1.7	(2.2)	5.7	8.5	-2.8	(3.5)
Poor	1.2	0.5	0.7	(1.0)	2.4	1.1	1.3	(1.7)
Difficulty with hearing, seeing, communicating, walking, etc.								
Yes, sometimes	16.1	13.5	2.6	(3.7)	13.5	12.0	1.4	(4.5)
Yes, often	8.2	9.5	-1.3	(3.1)	7.8	5.9	2.0	(3.5)
No	75.7	76.9	-1.3	(4.4)	78.7	82.1	-3.4	(5.3)
A physical or mental condition or health problem reduces activity at home								
Yes, sometimes	7.7	10.5	-2.8	(3.1)	11.6	8.1	3.5	(3.9)
Yes, often	5.0	3.4	1.6	(2.1)	3.6	5.6	-2.0	(2.8)
No	87.3	86.0	1.3	(3.6)	84.8	86.3	-1.5	(4.5)
A physical or mental condition or health problem reduces activity at work or school								
Yes, sometimes	7.1	8.4	-1.3	(2.9)	10.5	10.7	-0.1	(4.2)
Yes, often	5.4	4.1	1.3	(2.3)	6.3	5.6	0.6	(3.2)
No	87.5	87.5	0.0	(3.5)	83.2	83.7	-0.5	(4.9)
A physical or mental condition or health problem reduces other activity								
Yes, sometimes	5.8	8.5	-2.7	(2.8)	10.6	9.8	0.8	(4.0)
Yes, often	4.4	3.4	1.0	(2.1)	6.6	3.0	3.7	(2.8)
No	89.8	88.1	1.7	(3.3)	82.8	87.3	-4.5	(4.6)
Satisfaction with life								
Extremely satisfied	18.7	12.5	6.2	(3.9)	10.5	6.7	3.8	(3.8)
Satisfied	51.4	50.0	1.4	(5.4)	47.7	44.8	2.9	(6.9)
Equally satisfied/dissatisfied	5.7	6.9	-1.2	(2.6)	3.8	4.6	-0.8	(2.7)
Dissatisfied	20.7	24.8	-4.1	(4.5)	36.2	38.3	-2.1	(6.7)
Extremely dissatisfied	1.9	4.6	-2.7	(1.9)	1.9	4.7	-2.8	(2.5)
Average score	17.5	16.8	0.7	(0.4)	15.9	15.3	0.6	(0.5)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

**Source:** Calculations from 18-month survey data.

**Notes:** Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.



**Table D.12: CEIP Impacts on Working Skills, at the 18-Month Follow-Up Interview (Table 6.4, Adjusted Impacts)**

Outcome	EI Sample				IA Sample			
	Program Group	Control Group	Difference (Impact)	Standard Error	Program Group	Control Group	Difference (Impact)	Standard Error
<b>It really bugs me to see a problem that nobody is trying to solve</b>								
Almost always / quite a bit like me	80.5	85.6	-5.1	(4.1)	84.1	82.1	2.0	(5.2)
Moderately like me	11.5	7.5	4.0	(3.2)	6.9	11.5	-4.6	(4.0)
Occasionally / almost never like me	8.0	7.0	1.1	(2.9)	9.0	6.4	2.6	(3.6)
<b>I prefer to learn with other people</b>								
Almost always / quite a bit like me	76.1	72.5	3.6	(4.7)	72.3	74.0	-1.7	(6.1)
Moderately like me	17.3	17.7	-0.4	(4.1)	14.6	12.8	1.8	(4.8)
Occasionally / almost never like me	6.7	9.8	-3.2	(3.0)	13.2	13.2	0.0	(4.6)
<b>I follow through on things no matter what it takes</b>								
Almost always / quite a bit like me	92.2	88.2	4.0	(3.2)	85.4	91.3	-6.0	(4.3)
Moderately like me	7.3	9.7	-2.3	(3.0)	10.4	6.0	4.3	(3.6)
Occasionally / almost never like me	0.5	2.2	-1.7	(1.3)	4.3	2.6	1.7	(2.4)
<b>I can't quit thinking about something until I am sure I have done it very well</b>								
Almost always / quite a bit like me	92.3	93.8	-1.6	(2.8)	94.7	90.3	4.4	(3.5)
Moderately like me	7.0	3.7	3.4	(2.4)	4.1	8.3	-4.2	(3.3)
Occasionally / almost never like me	0.7	2.5	-1.8	(1.4)	1.2	1.3	-0.2	(1.6)
<b>I prefer to know what's in it for me before I spend a lot of effort learning something</b>								
Almost always / quite a bit like me	37.8	40.2	-2.3	(5.3)	28.2	42.1	-13.9 **	(6.5)
Moderately like me	21.8	24.6	-2.9	(4.6)	25.6	19.0	6.6	(5.7)
Occasionally / almost never like me	40.4	35.2	5.2	(5.2)	46.3	39.0	7.3	(6.9)
<b>I usually do something I enjoy rather than try something different</b>								
Almost always / quite a bit like me	22.0	34.4	-12.3 **	(4.9)	27.8	37.6	-9.7	(6.3)
Moderately like me	33.9	26.3	7.6	(5.0)	22.4	28.1	-5.7	(6.0)
Occasionally / almost never like me	44.1	39.3	4.8	(5.3)	49.8	34.3	15.4 **	(6.6)
<b>I make a detailed plan before I tackle a complex problem</b>								
Almost always / quite a bit like me	68.6	59.6	9.0 *	(5.1)	46.5	55.1	-8.6	(6.9)
Moderately like me	17.3	19.6	-2.3	(4.1)	27.3	24.7	2.6	(6.0)
Occasionally / almost never like me	14.2	20.8	-6.7	(4.1)	26.2	20.2	6.0	(5.7)
<b>I understand new things by seeing how they fit with what I already know</b>								
Almost always / quite a bit like me	85.9	84.4	1.5	(3.9)	82.3	84.4	-2.2	(5.2)
Moderately like me	8.8	10.9	-2.1	(3.3)	12.0	13.4	-1.4	(4.6)
Occasionally / almost never like me	5.3	4.7	0.6	(2.4)	5.7	2.1	3.6	(2.6)
<b>I know how to get things done in a system or an organization</b>								
Almost always / quite a bit like me	87.0	88.6	-1.6	(3.5)	82.6	89.8	-7.2	(4.6)
Moderately like me	11.2	7.8	3.4	(3.1)	12.6	8.0	4.6	(4.1)
Occasionally / almost never like me	1.8	3.6	-1.8	(1.8)	4.8	2.2	2.5	(2.5)
<b>Sample size</b>	<b>470</b>	<b>428</b>			<b>237</b>	<b>228</b>		

Source: Calculations from 18-month survey data.

Notes: Sample sizes vary for individual measures because of missing values. This may cause slight discrepancies in sums and differences.

All analyses were only for those who responded to the 18-month survey.

Two-tailed t-tests were applied to differences in outcomes between the program and control groups.

Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.



## **Appendix E: Subgroup Impacts**

The 18-month impact results presented in this report have illustrated that the Community Employment Innovation Project (CEIP) provided a significant stable period of full-time employment to both Employment Insurance (EI) and income assistance (IA) program group members over and above what they would have achieved without participating in the program. Associated with this increased employment were large impacts on earnings and significant reductions in the receipt of EI and IA benefits. Program group members also reported higher household income, particularly for the IA sample where large reductions in the incidence of low income were observed compared with the control group. Positive impacts were also observed on a number of other outcomes, including social networks, volunteering, life satisfaction, and attitudes to work.

These impacts demonstrate the average effects of CEIP on EI and IA sample members. The question naturally arises whether these impacts were distributed evenly across each research sample or whether they tended to be concentrated among certain subgroups. A related question is whether any lack of significant impacts on other outcomes is characteristic of all individuals within each sample or whether certain subgroups were affected even when, on average, most program group members were not. In order to answer these questions, differences in impacts across a series of subgroups have been evaluated.

### **SUBGROUP ANALYSIS**

In order to maintain the experimental nature of the analysis, subgroups must be defined based on characteristics that were measured before random assignment. Several categories of subgroups have been defined based on measures from the baseline survey including demographic characteristics (gender and age), family structure (marital status, children in the household), education (high school diploma or equivalent), employment and income (work experience since the age of 16, annual income at baseline), barriers to employment (physical or emotional problems restricting activity), and social networks (size and density of baseline networks). Two subgroups were created within each of the above categories (with the exception of the age of respondents, which has three subgroups). The choice and number of subgroups within each category was constrained by the size of the 18-month research sample particularly among IA respondents.<sup>1</sup>

Tables E.1 through E.8 present differences in the impacts of CEIP on selected outcomes across the subgroups described above. The impact on each subgroup is calculated as the difference in mean outcome between program and control group members who have that characteristic at the time of enrolment. For brevity, the program group member mean outcomes are not presented in the tables. The control group mean is presented in the second

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<sup>1</sup>With the smaller IA sample size, the analysis was limited in its ability to define subgroups in order to ensure that no one group would have too few sample members, which would lead to higher standard errors and very little statistical power. Among the IA research sample, the smallest subgroup results from the category based on marital status, where just under a hundred respondents to the 18-month survey were married or in a common-law union at the time of enrolment in the study.

column along with the impact (program–control group difference) in the third column. Similar to the full sample results, two-tailed t-tests were applied to differences between the outcomes for the program and control groups.

However, in order to determine whether these impacts were larger for certain subgroups than for others, an additional statistical test is required as random differences could occur. Q-tests were applied to differences among subgroups in the estimated impacts. For each outcome, the results of the test are shown in the columns next to the standard errors. The abbreviation “n.s.” (not significant) indicates that the variation in estimated impacts across the subgroups is not statistically significant (i.e. the observed subgroup differences could easily be due to chance and should not be regarded as evidence that impacts actually differed between the subgroups). Daggers indicate that the variation is statistically significant, meaning that the conclusion that there was a real difference between subgroups in the impact of CEIP can be made with reasonable confidence. Statistical significance levels are indicated as † = 10 per cent; †† = 5 per cent; ††† = 1 per cent.

## **DIFFERENCES IN THE IMPACTS OF CEIP ACROSS SUBGROUPS**

Tables E.1 through E.8 present only a preliminary look at differences across various subgroups in the impacts of CEIP at 18 months after random assignment. Future reports will consider differences in subgroup impacts in more detail over the full three years of CEIP eligibility.

### **Employment and Earnings**

With respect to the impacts of CEIP on employment-related outcomes, there appears to be little differentiation in the effectiveness of the program at increasing employment and earnings through the first 18 months of the study across subgroups based on a variety of baseline characteristics. The only significant differences in impacts between subgroups were on full-time employment observed within the EI sample, where CEIP had a slightly larger impact on the number of months of full-time work among program group members who were 40 years of age or older, single, and who earned less than \$20,000 per year.

### **Transfer Receipt**

With respect to the receipt of transfers, there were small differences in the impacts among the EI sample, such that CEIP appears to have been most effective in reducing EI amounts for program group members who were older, male, and had 10 or more years of labour market experience. Reductions in total EI payments were more than double among EI program group members who were 40 years of age and older compared with their younger counterparts who were under 30 years of age (reductions in total EI payments of \$4,622 versus \$1,810 respectively). They were also nearly twice as large for men than women (\$4,722 versus \$2,517) and for those with more than 10 years work experience (\$3,979 versus \$2,032 for those with fewer than 10 years of experience).

### **Income**

Impacts on the incidence of low income, as measured by Statistics Canada’s low income cut-offs (LICOs), were observed in the full IA sample but not in the full EI sample. Among

the IA sample, these impacts appear fairly evenly distributed with no differences in subgroup impacts. However, although there were no significant impacts among the EI sample as a whole, there are significant differences between subgroups where particular groups in the EI sample experienced reductions in the incidence of low income similar to their IA counterparts. In particular, those EI program group members who were single (single, separated, or divorced) or who had limited work experience at the time of enrolment (fewer than 10 years of work experience) had statistically significant reductions in the proportion with incomes below the LICOs (11.6 and 15.6 percentage points, compared with their respective control groups).

## **Social Capital**

With respect to social networks, although little impact on network size was observed for the EI sample as whole, a significant increase in the percentage with more than 10 contacts was observed among low-income EI program group members (less than \$20,000 per year at baseline). The lower income group had a nine percentage point impact (significantly different from the higher income group at the five per cent level). This was in fact the largest and only significant impact on network size for all EI subgroups. Among the IA sample, the largest percentage point increase (18 percentage points) in the proportion who had more than 10 contacts was observed for those with extremely dense networks at baseline (those reporting that all their contacts knew each other), which is significantly different at the 10 per cent level from the zero impact observed for the less dense subgroup. There were no other significant differences in impacts on network size, with most other subgroups experiencing increases similar to the full IA sample.

Differences in impacts on network density were found between men and women in both the EI and IA samples. Among the EI sample, male program group members experienced the largest reduction in network density, with a 14 percentage point decrease in those reporting that all their contacts know one another, relative to the control group (statistically different at the 1 per cent level from the insignificant impact observed for women in the EI sample). Among the IA sample, the opposite is true, with women experiencing the largest reduction in network density at 12 percentage points, statistically different from the insignificant impact among men in the IA sample.

## **Well-Being, Attitudes**

Differences in subgroup impacts on life satisfaction were found within the EI sample. CEIP had a larger impact on life satisfaction among EI program group members who earned less than \$20,000 per year at baseline or who had very dense social networks (these groups were about 17 percentage points more likely to satisfied with life than the control group; while there were no significant impacts among those who earned more \$20,000 per year or who had less dense networks at enrolment). There were also significant differences in subgroup impacts on some of the measures of attitudes towards working. Among the EI sample, the positive impact on the proportion who reported that they strongly agree with the statement “I like going to work” was largely driven by women, those who were over 40 years of age, those who had one or more children, and those who reported at least one health limitation that restricted activity at the time of enrolment.

**Table E.1: CEIP Impacts on Full-Time Employment, by Subgroup**

Subgroup	Total # of Months From 1–18 Employed Full Time							
	EI Sample				IA Sample			
	Sample Size	Control Group	Difference (Impact)	Standard Error	Sample Size	Control Group	Difference (Impact)	Standard Error
<b>Gender and age</b>								
Gender of respondent				n.s.				n.s.
Male	504	7.4	7.4 ***	(0.5)	170	3.4	11.0 ***	(0.7)
Female	394	7.9	6.5 ***	(0.6)	295	3.3	10.3 ***	(0.6)
Age of respondent at baseline				†				n.s.
Less than 30	167	8.1	6.1 ***	(0.8)	142	2.9	10.6 ***	(0.8)
30 to 39	215	8.3	6.0 ***	(0.8)	149	4.0	10.4 ***	(0.8)
40 and older	516	7.2	7.7 ***	(0.5)	174	3.1	10.8 ***	(0.8)
<b>Family structure</b>								
Marital status at baseline				†				n.s.
Married or common law	545	7.9	6.5 ***	(0.5)	88	3.5	10.9 ***	(1.0)
Single, separated, or divorced	352	7.2	7.8 ***	(0.6)	373	3.3	10.5 ***	(0.5)
Children in the household at baseline				n.s.				n.s.
1 or more children	406	7.7	7.0 ***	(0.5)	293	3.5	10.4 ***	(0.6)
No children	492	7.6	7.0 ***	(0.5)	171	2.9	10.9 ***	(0.7)
<b>Education</b>								
Had high school diploma or equivalent				n.s.				n.s.
Yes	617	7.2	7.3 ***	(0.4)	280	3.5	10.1 ***	(0.6)
No	273	8.6	6.3 ***	(0.7)	180	3.0	11.3 ***	(0.7)
<b>Employment and income</b>								
Work experience since the age of 16				n.s.				n.s.
Employed 0 to 9 years (0 to 5 years for IA)	179	6.8	7.9 ***	(0.8)	158	2.7	10.7 ***	(0.8)
Employed 10 or more years (6 or more for IA)	687	7.9	6.7 ***	(0.4)	292	3.7	10.5 ***	(0.5)
Annual income at baseline				†				n.s.
Less than \$20,000 (less than \$10,000 for IA)	369	7.5	7.7 ***	(0.5)	272	3.0	10.5 ***	(0.6)
\$20,000 or more (\$10,000 or more for IA)	525	7.8	6.4 ***	(0.5)	192	3.8	10.5 ***	(0.7)
<b>Barriers to employment</b>								
Reported at least one health limitation that restricts activity				n.s.				n.s.
Yes	258	7.8	6.4 ***	(0.7)	164	3.4	10.8 ***	(0.7)
No	640	7.6	7.2 ***	(0.4)	301	3.3	10.5 ***	(0.6)
<b>Social networks</b>								
Number of contacts				n.s.				n.s.
Less than 10 contacts at baseline	532	7.3	7.3 ***	(0.5)	311	2.7	10.9 ***	(0.5)
10 or more contacts at baseline	364	8.1	6.5 ***	(0.6)	152	4.6	9.9 ***	(0.8)
Network density				†				n.s.
All contacts know each other	325	7.1	7.8 ***	(0.6)	230	3.3	10.6 ***	(0.7)
Some contacts do not know each other	567	8.0	6.5 ***	(0.5)	229	3.4	10.7 ***	(0.6)

**Sources:** Calculations from baseline survey data and 18-month follow-up survey data.

**Notes:** The subgroups are defined according to characteristics at the time of enrolment in the study. Individuals answering “don’t know” to a particular question that contributed to defining a subgroup are excluded from the analysis of that subgroup.  
A two-tailed t-test was applied to differences between the outcomes for the program and control groups.  
Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.  
q-tests were applied to differences among subgroups in estimated impacts. Statistical significance levels are indicated as † = 10 per cent; †† = 5 per cent; ††† = 1 per cent.  
The abbreviation “n.s.” indicates that the variation in impacts among the subgroups is not statistically significant.  
Rounding may cause slight discrepancies in sums and differences.

**Table E.2: CEIP Impacts on Total EI Payments, by Subgroup**

Subgroup	Total EI Payments From Months 1–18 (\$)							
	EI Sample				IA Sample			
	Sample Size	Control Group	Difference (Impact)	Standard Error	Sample Size	Control Group	Difference (Impact)	Standard Error
<b>Gender and age</b>								
Gender of respondent				†††				n.s.
Male	504	7,817.5	-4,777.2 ***	(373.1)	170	788.0	-706.0 ***	(223.0)
Female	394	4,551.7	-2,516.9 ***	(284.0)	295	632.5	-558.1 ***	(158.2)
Age of respondent at baseline				†††				n.s.
Less than 30	167	4,188.2	-1,809.9 ***	(433.7)	142	394.7	-371.0 *	(188.4)
30 to 39	215	5,500.2	-2,627.0 ***	(539.2)	149	489.7	-415.3 **	(176.3)
40 and older	516	7,236.3	-4,622.2 ***	(343.4)	174	1,076.2	-949.0 ***	(265.7)
<b>Family structure</b>								
Marital status at baseline				n.s.				n.s.
Married or common law	545	6,410.7	-3,493.7 ***	(338.0)	88	851.5	-827.0 ***	(302.5)
Single, separated, or divorced	352	5,992.8	-3,765.2 ***	(385.4)	373	655.8	-567.4 ***	(144.5)
Children in the household at baseline				n.s.				n.s.
1 or more children	406	5,961.8	-3,365.7 ***	(372.3)	293	667.0	-626.6 ***	(163.0)
No children	492	6,541.1	-3,879.5 ***	(350.9)	171	726.7	-595.8 ***	(215.7)
<b>Education</b>								
Had high school diploma or equivalent				n.s.				n.s.
Yes	617	5,925.8	-3,406.6 ***	(290.8)	280	790.3	-680.5 ***	(193.6)
No	273	6,976.5	-4,118.3 ***	(511.6)	180	507.5	-478.9 ***	(142.9)
<b>Employment and income</b>								
Work experience since the age of 16				†††				n.s.
Employed 0 to 9 years (0 to 5 years for IA)	179	4,092.6	-2,031.5 ***	(382.6)	158	336.4	-322.0 **	(143.0)
Employed 10 or more years (6 or more for IA)	687	6,772.9	-3,978.6 ***	(307.5)	292	790.0	-670.7 ***	(176.1)
Annual income at baseline				n.s.				†
Less than \$20,000 (less than \$10,000 for IA)	369	5,398.9	-3,429.3 ***	(313.7)	272	481.4	-430.6 ***	(133.7)
\$20,000 or more (\$10,000 or more for IA)	525	6,866.1	-3,763.6 ***	(368.8)	192	1,011.9	-900.2 ***	(246.6)
<b>Barriers to employment</b>								
Reported at least one health limitation that restricts activity				n.s.				n.s.
Yes	258	6,625.3	-4,005.6 ***	(517.7)	164	832.7	-806.0 ***	(234.1)
No	640	6,130.2	-3,490.1 ***	(291.7)	301	611.8	-505.1 ***	(153.5)
<b>Social networks</b>								
Number of contacts				n.s.				n.s.
Less than 10 contacts at baseline	532	6,466.0	-3,741.2 ***	(336.1)	311	798.8	-704.0 ***	(176.9)
10 or more contacts at baseline	364	6,004.0	-3,499.7 ***	(395.8)	152	458.6	-415.1 ***	(155.5)
Network density				†				n.s.
All contacts know each other	325	6,864.1	-4,249.3 ***	(427.7)	230	560.3	-439.4 **	(182.2)
Some contacts do not know each other	567	5,923.7	-3,279.9 ***	(318.9)	229	829.4	-804.9 ***	(186.9)

**Sources:** Calculations from baseline survey data and 18-month follow-up survey data.

**Notes:** The subgroups are defined according to characteristics at the time of enrolment in the study. Individuals answering “don’t know” to a particular question that contributed to defining a subgroup are excluded from the analysis of that subgroup.

A two-tailed t-test was applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

q-tests were applied to differences among subgroups in estimated impacts. Statistical significance levels are indicated as † = 10 per cent; †† = 5 per cent; ††† = 1 per cent.

The abbreviation “n.s.” indicates that the variation in impacts among the subgroups is not statistically significant.

Rounding may cause slight discrepancies in sums and differences.

**Table E.3: CEIP Impacts on Total IA Payments, by Subgroup**

Subgroup	Total IA Payments From Months 1–18 (\$)							
	EI Sample				IA Sample			
	Sample Size	Control Group	Difference (Impact)	Standard Error	Sample Size	Control Group	Difference (Impact)	Standard Error
<b>Gender and age</b>								
Gender of respondent				n.s.				n.s.
Male	504	286.5	-243.6 ***	(75.1)	170	6,694.6	-4,518.9 ***	(565.2)
Female	394	475.3	-438.5 ***	(122.1)	295	8,195.4	-4,809.7 ***	(442.8)
Age of respondent at baseline				††				n.s.
Less than 30	167	726.5	-656.5 ***	(232.8)	142	8,303.8	-5,362.0 ***	(621.7)
30 to 39	215	614.8	-524.9 ***	(168.1)	149	8,154.3	-5,007.0 ***	(626.7)
40 and older	516	167.4	-157.9 ***	(56.3)	174	6,787.6	-4,074.5 ***	(581.3)
<b>Family structure</b>								
Marital status at baseline				†††				n.s.
Married or common law	545	93.9	-55.2	(51.9)	88	8,675.3	-5,133.1 ***	(990.0)
Single, separated, or divorced	352	855.0	-812.2 ***	(148.7)	373	7,454.1	-4,704.5 ***	(372.0)
Children in the household at baseline				††				n.s.
1 or more children	406	578.0	-516.0 ***	(131.5)	293	8,491.3	-4,889.6 ***	(466.1)
No children	492	187.7	-163.1 ***	(58.8)	171	5,977.5	-4,033.0 ***	(476.8)
<b>Education</b>								
Had high school diploma or equivalent				n.s.				n.s.
Yes	617	309.2	-291.1 ***	(74.4)	280	7,344.3	-4,398.3 ***	(451.6)
No	273	547.4	-457.5 ***	(147.6)	180	8,214.4	-5,327.7 ***	(580.9)
<b>Employment and income</b>								
Work experience since the age of 16				n.s.				†
Employed 0 to 9 years (0 to 5 years for IA)	179	385.4	-316.0 *	(162.2)	158	9,382.0	-5,763.4 ***	(617.0)
Employed 10 or more years (6 or more for IA)	687	370.2	-343.3 ***	(76.8)	292	6,874.4	-4,364.8 ***	(425.2)
Annual income at baseline				†††				n.s.
Less than \$20,000 (less than \$10,000 for IA)	369	643.5	-592.4 ***	(128.7)	272	7,555.5	-4,725.9 ***	(430.6)
\$20,000 or more (\$10,000 or more for IA)	525	200.3	-167.5 **	(71.8)	192	7,801.3	-4,761.1 ***	(600.0)
<b>Barriers to employment</b>								
Reported at least one health limitation that restricts activity				n.s.				n.s.
Yes	258	332.9	-288.7 **	(128.8)	164	7,343.0	-4,663.2 ***	(564.0)
No	640	392.1	-353.4 ***	(80.5)	301	7,844.9	-4,783.8 ***	(451.1)
<b>Social networks</b>								
Number of contacts				†				n.s.
Less than 10 contacts at baseline	532	503.8	-443.7 ***	(103.7)	311	7,741.2	-4,712.0 ***	(429.8)
10 or more contacts at baseline	364	216.9	-209.3 ***	(72.6)	152	7,542.3	-4,958.3 ***	(616.2)
Network density				n.s.				††
All contacts know each other	325	575.7	-497.1 ***	(143.8)	230	8,226.5	-5,460.0 ***	(503.6)
Some contacts do not know each other	567	257.5	-240.7 ***	(66.6)	229	7,054.8	-4,058.0 ***	(493.9)

**Sources:** Calculations from baseline survey data and 18-month follow-up survey data.

**Notes:** The subgroups are defined according to characteristics at the time of enrolment in the study. Individuals answering “don’t know” to a particular question that contributed to defining a subgroup are excluded from the analysis of that subgroup.

A two-tailed t-test was applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

q-tests were applied to differences among subgroups in estimated impacts. Statistical significance levels are indicated as † = 10 per cent; †† = 5 per cent; ††† = 1 per cent.

The abbreviation “n.s.” indicates that the variation in impacts among the subgroups is not statistically significant.

Rounding may cause slight discrepancies in sums and differences.



**Table E.4: CEIP Impacts on Low-Income Status, by Subgroup**

Subgroup	Percentage With Household Income Below the Low Income Cut-Off (%)							
	EI Sample				IA Sample			
	Sample Size	Control Group	Difference (Impact)	Standard Error	Sample Size	Control Group	Difference (Impact)	Standard Error
<b>Gender and age</b>								
Gender of respondent				n.s.				n.s.
Male	427	25.1	0.3	(4.2)	147	81.7	-22.5 ***	(7.4)
Female	334	36.8	-7.0	(5.2)	276	93.5	-15.4 ***	(4.1)
Age of respondent at baseline				n.s.				n.s.
Less than 30	138	44.8	-11.0	(8.3)	122	87.5	-13.3 *	(7.2)
30 to 39	191	36.0	-3.6	(6.9)	143	93.2	-15.0 ***	(5.7)
40 and older	432	23.4	-0.4	(4.1)	158	87.5	-24.7 ***	(6.6)
<b>Family structure</b>								
Marital status at baseline				††				n.s.
Married or common law	469	20.6	2.3	(3.8)	78	91.7	-22.6 **	(8.9)
Single, separated, or divorced	291	46.0	-11.6 **	(5.7)	341	89.0	-17.6 ***	(4.2)
Children in the household at baseline				n.s.				††
1 or more children	344	38.0	-4.5	(5.2)	276	91.8	-10.4 **	(4.0)
No children	417	23.7	-1.2	(4.2)	146	84.1	-28.7 ***	(7.5)
<b>Education</b>								
Had high school diploma or equivalent				n.s.				n.s.
Yes	515	28.9	-1.7	(4.0)	254	90.2	-17.2 ***	(4.7)
No	239	35.5	-8.2	(6.0)	165	88.3	-20.1 ***	(6.4)
<b>Employment and income</b>								
Work experience since the age of 16				†				n.s.
Employed 0 to 9 years (0 to 5 years for IA)	148	48.5	-15.6 *	(8.1)	146	90.8	-13.0 **	(6.1)
Employed 10 or more years (6 or more for IA)	586	25.5	0.5	(3.6)	262	88.2	-22.4 ***	(5.0)
Annual income at baseline				n.s.				n.s.
Less than \$20,000 (less than \$10,000 for IA)	316	52.7	-7.5	(5.6)	245	90.6	-19.4 ***	(4.9)
\$20,000 or more (\$10,000 or more for IA)	445	15.2	-1.1	(3.4)	177	87.8	-16.2 ***	(6.0)
<b>Barriers to employment</b>								
Reported at least one health limitation that restricts activity				n.s.				n.s.
Yes	222	28.1	-0.4	(6.1)	140	86.4	-14.7 **	(6.9)
No	539	31.4	-4.4	(3.9)	283	91.0	-19.8 ***	(4.5)
<b>Social networks</b>								
Number of contacts				n.s.				n.s.
Less than 10 contacts at baseline	456	36.8	-7.8 *	(4.4)	284	91.5	-18.8 ***	(4.4)
10 or more contacts at baseline	304	22.4	1.2	(4.9)	139	85.5	-16.9 **	(7.1)
Network density				n.s.				n.s.
All contacts know each other	277	33.9	-3.1	(5.7)	208	89.4	-18.3 ***	(5.4)
Some contacts do not know each other	478	28.5	-3.7	(4.1)	212	89.5	-18.5 ***	(5.4)

**Sources:** Calculations from baseline survey data and 18-month follow-up survey data.

**Notes:** The subgroups are defined according to characteristics at the time of enrolment in the study. Individuals answering “don’t know” to a particular question that contributed to defining a subgroup are excluded from the analysis of that subgroup.

A two-tailed t-test was applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

q-tests were applied to differences among subgroups in estimated impacts. Statistical significance levels are indicated as † = 10 per cent; †† = 5 per cent; ††† = 1 per cent.

The abbreviation “n.s.” indicates that the variation in impacts among the subgroups is not statistically significant.

Rounding may cause slight discrepancies in sums and differences.

**Table E.5: CEIP Impacts on Social Networks, by Subgroup**

Subgroup	Percentage With More Than 10 Contacts							
	EI Sample				IA Sample			
	Sample Size	Control Group	Difference (Impact)	Standard Error	Sample Size	Control Group	Difference (Impact)	Standard Error
<b>Gender and age</b>								
Gender of respondent				n.s.				n.s.
Male	494	39.0	2.0	(4.5)	166	36.4	3.0	(7.6)
Female	392	42.1	0.0	(5.0)	295	27.5	13.6 **	(5.5)
Age of respondent at baseline				n.s.				n.s.
Less than 30	164	46.2	0.4	(7.8)	141	32.3	13.7 *	(8.2)
30 to 39	211	44.9	-1.5	(6.9)	149	30.3	2.6	(7.7)
40 and older	511	36.9	2.1	(4.3)	171	29.4	12.5 *	(7.3)
<b>Family structure</b>								
Marital status at baseline				n.s.				n.s.
Married or common law	535	42.5	-1.7	(4.3)	85	36.8	7.8	(10.8)
Single, separated, or divorced	350	37.3	4.9	(5.3)	372	29.4	9.5 *	(4.9)
Children in the household at baseline				n.s.				n.s.
1 or more children	396	40.0	4.9	(5.0)	290	29.4	8.5	(5.5)
No children	490	40.9	-2.0	(4.5)	170	32.9	11.5	(7.6)
<b>Education</b>								
Had high school diploma or equivalent				n.s.				n.s.
Yes	608	40.9	2.6	(4.0)	277	30.6	8.5	(5.7)
No	270	39.2	-2.0	(6.0)	179	30.9	13.0 *	(7.3)
<b>Employment and income</b>								
Work experience since the age of 16				n.s.				n.s.
Employed 0 to 9 years (0 to 5 years for IA)	177	46.3	-4.0	(7.5)	158	31.4	3.8	(7.6)
Employed 10 or more years (6 or more for IA)	678	39.1	3.4	(3.8)	288	31.3	12.7 **	(5.7)
Annual income at baseline				††				n.s.
Less than \$20,000 (less than \$10,000 for IA)	366	31.8	9.1 *	(5.0)	269	32.4	9.8 *	(5.9)
\$20,000 or more (\$10,000 or more for IA)	516	46.0	-4.6	(4.4)	191	28.1	10.2	(6.8)
<b>Barriers to employment</b>								
Reported at least one health limitation that restricts activity				n.s.				n.s.
Yes	254	44.0	2.2	(6.3)	162	29.0	8.3	(7.4)
No	632	39.2	0.0	(3.9)	299	31.3	11.0 **	(5.6)
<b>Social networks</b>								
Number of contacts				n.s.				n.s.
Less than 10 contacts at baseline	525	27.8	5.2	(4.1)	311	22.7	8.5 *	(5.0)
10 or more contacts at baseline	359	56.5	-0.4	(5.3)	150	47.2	11.8	(8.2)
Network density				n.s.				†
All contacts know each other	318	40.7	-4.8	(5.5)	229	27.2	18.0 ***	(6.3)
Some contacts do not know each other	562	40.9	3.8	(4.2)	228	34.2	1.7	(6.4)

**Sources:** Calculations from baseline survey data and 18-month follow-up survey data.

**Notes:** The subgroups are defined according to characteristics at the time of enrolment in the study. Individuals answering “don’t know” to a particular question that contributed to defining a subgroup are excluded from the analysis of that subgroup.

A two-tailed t-test was applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

q-tests were applied to differences among subgroups in estimated impacts. Statistical significance levels are indicated as † = 10 per cent; †† = 5 per cent; ††† = 1 per cent.

The abbreviation “n.s.” indicates that the variation in impacts among the subgroups is not statistically significant.

Rounding may cause slight discrepancies in sums and differences.

**Table E.6: CEIP Impacts on Social Network Density, by Subgroup**

Subgroup	Percentage Who Reported That All Their Contacts Know Each Other							
	EI Sample				IA Sample			
	Sample Size	Control Group	Difference (Impact)	Standard Error	Sample Size	Control Group	Difference (Impact)	Standard Error
<b>Gender and age</b>								
Gender of respondent				†††				†
Male	488	51.4	-14.2 ***	(4.5)	163	42.7	6.2	(7.9)
Female	383	35.2	4.9	(5.0)	290	51.7	-11.8 **	(5.8)
Age of respondent at baseline				n.s.				†
Less than 30	165	43.0	-4.7	(7.7)	140	43.1	8.9	(8.5)
30 to 39	205	36.6	2.7	(6.8)	146	55.4	-16.5 **	(8.2)
40 and older	501	46.6	-8.6 *	(4.4)	167	47.0	-7.7	(7.7)
<b>Family structure</b>								
Marital status at baseline				n.s.				n.s.
Married or common law	526	44.1	-1.5	(4.3)	84	51.4	-2.4	(11.1)
Single, separated, or divorced	344	43.2	-11.0 **	(5.2)	365	47.8	-5.3	(5.2)
Children in the household at baseline				n.s.				n.s.
1 or more children	390	42.1	-4.8	(5.0)	286	51.3	-8.0	(5.9)
No children	481	45.1	-5.9	(4.5)	166	42.9	-0.2	(7.8)
<b>Education</b>								
Had high school diploma or equivalent				n.s.				n.s.
Yes	603	41.0	-6.4	(4.0)	274	46.5	-2.5	(6.0)
No	260	51.7	-4.5	(6.3)	174	53.2	-9.0	(7.6)
<b>Employment and income</b>								
Work experience since the age of 16				n.s.				n.s.
Employed 0 to 9 years (0 to 5 years for IA)	175	39.7	-3.7	(7.4)	155	53.6	-8.3	(8.1)
Employed 10 or more years (6 or more for IA)	669	43.8	-3.8	(3.8)	283	45.8	-4.1	(5.9)
Annual income at baseline				n.s.				n.s.
Less than \$20,000 (less than \$10,000 for IA)	357	47.0	-10.2 *	(5.2)	261	49.2	-6.6	(6.2)
\$20,000 or more (\$10,000 or more for IA)	510	41.4	-1.5	(4.4)	191	47.2	-3.1	(7.3)
<b>Barriers to employment</b>								
Reported at least one health limitation that restricts activity				n.s.				n.s.
Yes	252	43.9	-5.3	(6.3)	160	46.7	-5.5	(7.9)
No	619	43.6	-5.3	(4.0)	293	49.7	-5.1	(5.8)
<b>Social networks</b>								
Number of contacts				n.s.				n.s.
Less than 10 contacts at baseline	513	45.8	-4.8	(4.4)	304	51.0	-5.2	(5.7)
10 or more contacts at baseline	356	41.1	-7.2	(5.1)	149	43.7	-5.2	(8.1)
Network density				n.s.				n.s.
All contacts know each other	315	56.1	0.1	(5.7)	226	55.8	0.9	(6.6)
Some contacts do not know each other	551	36.9	-10.1 **	(4.0)	223	41.7	-10.4	(6.4)

**Sources:** Calculations from baseline survey data and 18-month follow-up survey data.

**Notes:** The subgroups are defined according to characteristics at the time of enrolment in the study. Individuals answering “don’t know” to a particular question that contributed to defining a subgroup are excluded from the analysis of that subgroup.

A two-tailed t-test was applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

q-tests were applied to differences among subgroups in estimated impacts. Statistical significance levels are indicated as † = 10 per cent; †† = 5 per cent; ††† = 1 per cent.

The abbreviation “n.s.” indicates that the variation in impacts among the subgroups is not statistically significant.

Rounding may cause slight discrepancies in sums and differences.

**Table E.7: CEIP Impacts on Life Satisfaction, by Subgroup**

Subgroup	Percentage Satisfied or Extremely Satisfied Based on Life Satisfaction Scale (%)							
	EI Sample				IA Sample			
	Sample Size	Control Group	Difference (Impact)	Standard Error	Sample Size	Control Group	Difference (Impact)	Standard Error
<b>Gender and age</b>								
Gender of respondent				n.s.				n.s.
Male	495	61.6	12.3 ***	(4.2)	170	46.8	0.4	(7.7)
Female	391	70.3	3.3	(4.6)	294	47.3	13.7 **	(5.8)
Age of respondent at baseline				n.s.				
Less than 30	166	76.0	1.1	(6.6)	142	60.0	-2.9	(8.4)
30 to 39	211	69.4	5.8	(6.2)	148	45.3	16.3 **	(8.2)
40 and older	509	61.1	11.0 ***	(4.2)	174	39.1	10.3	(7.5)
<b>Family structure</b>								
Marital status at baseline				n.s.				n.s.
Married or common law	537	71.6	7.5 **	(3.7)	88	59.0	-3.9	(10.7)
Single, separated, or divorced	348	56.4	9.7 *	(5.2)	372	44.9	10.2 **	(5.2)
Children in the household at baseline				n.s.				n.s.
1 or more children	401	65.4	7.1	(4.6)	292	52.9	6.8	(5.8)
No children	485	66.2	8.5 **	(4.1)	171	35.1	15.4 **	(7.6)
<b>Education</b>								
Had high school diploma or equivalent				n.s.				n.s.
Yes	608	67.0	7.2 *	(3.7)	280	47.3	12.4 **	(5.9)
No	270	62.6	9.5 *	(5.7)	179	47.5	4.0	(7.6)
<b>Employment and income</b>								
Work experience since the age of 16				n.s.				n.s.
Employed 0 to 9 years (0 to 5 years for IA)	178	68.8	1.7	(7.0)	158	52.9	7.4	(8.0)
Employed 10 or more years (6 or more for IA)	677	64.7	10.8 ***	(3.5)	291	43.9	9.2	(5.9)
Annual income at baseline				††				n.s.
Less than \$20,000 (less than \$10,000 for IA)	366	52.7	17.4 ***	(5.0)	272	47.1	11.1 *	(6.0)
\$20,000 or more (\$10,000 or more for IA)	516	74.4	1.9	(3.8)	191	47.7	4.7	(7.3)
<b>Barriers to employment</b>								
Reported at least one health limitation that restricts activity				n.s.				n.s.
Yes	257	66.1	2.2	(5.9)	163	38.2	13.6 *	(7.8)
No	629	65.7	10.6 ***	(3.6)	301	51.7	6.3	(5.7)
<b>Social networks</b>								
Number of contacts				n.s.				n.s.
Less than 10 contacts at baseline	524	60.1	10.7 **	(4.2)	310	48.4	3.9	(5.7)
10 or more contacts at baseline	360	72.9	5.6	(4.5)	152	45.2	18.1 **	(8.0)
Network density				††				n.s.
All contacts know each other	320	58.2	17.3 ***	(5.2)	229	52.6	6.5	(6.6)
Some contacts do not know each other	560	69.9	3.0	(3.8)	229	42.3	11.1 *	(6.6)

**Sources:** Calculations from baseline survey data and 18-month follow-up survey data.

**Notes:** The subgroups are defined according to characteristics at the time of enrolment in the study. Individuals answering “don’t know” to a particular question that contributed to defining a subgroup are excluded from the analysis of that subgroup.

A two-tailed t-test was applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

q-tests were applied to differences among subgroups in estimated impacts. Statistical significance levels are indicated as † = 10 per cent; †† = 5 per cent; ††† = 1 per cent.

The abbreviation “n.s.” indicates that the variation in impacts among the subgroups is not statistically significant.

Rounding may cause slight discrepancies in sums and differences.

**Table E.8: CEIP Impacts on Attitudes to Work, by Subgroup**

Subgroup	Percentage Who Strongly Agree With the Statement That They Like Going to Work (%)							
	EI Sample				IA Sample			
	Sample Size	Control Group	Difference (Impact)	Standard Error	Sample Size	Control Group	Difference (Impact)	Standard Error
<b>Gender and age</b>								
Gender of respondent				†				n.s.
Male	499	32.6	6.6	(4.3)	170	19.0	8.5	(6.5)
Female	392	34.2	18.0 ***	(4.9)	295	23.5	19.0 ***	(5.4)
Age of respondent at baseline				n.s.				
Less than 30	166	30.4	5.3	(7.4)	142	21.5	4.4	(7.2)
30 to 39	213	36.0	9.1	(6.8)	149	21.1	26.9 ***	(7.5)
40 and older	512	33.2	13.8 ***	(4.3)	174	23.0	13.8 **	(6.9)
<b>Family structure</b>								
Marital status at baseline				†††				n.s.
Married or common law	539	29.2	21.0 ***	(4.1)	88	28.2	2.4	(9.9)
Single, separated, or divorced	351	39.9	-3.6	(5.2)	373	20.7	17.1 ***	(4.6)
Children in the household at baseline				††				n.s.
1 or more children	401	31.4	19.4 ***	(4.8)	293	22.1	20.4 ***	(5.3)
No children	490	35.2	4.7	(4.4)	171	21.6	7.2	(6.8)
<b>Education</b>								
Had high school diploma or equivalent				n.s.				n.s.
Yes	612	34.2	13.4 ***	(4.0)	280	24.0	17.8 ***	(5.5)
No	271	32.3	5.2	(5.8)	180	18.5	11.8 *	(6.5)
<b>Employment and income</b>								
Work experience since the age of 16				n.s.				†
Employed 0 to 9 years (0 to 5 years for IA)	177	32.9	10.0	(7.4)	158	17.1	26.0 ***	(7.2)
Employed 10 or more years (6 or more for IA)	682	33.5	10.4 ***	(3.7)	292	24.2	8.7 *	(5.3)
Annual income at baseline				†††				n.s.
Less than \$20,000 (less than \$10,000 for IA)	368	41.5	0.6	(5.2)	272	20.3	12.6 **	(5.3)
\$20,000 or more (\$10,000 or more for IA)	519	27.2	18.5 ***	(4.2)	192	23.6	18.2 ***	(6.7)
<b>Barriers to employment</b>								
Reported at least one health limitation that restricts activity				††				n.s.
Yes	257	26.8	22.2 ***	(6.0)	164	19.5	19.6 ***	(7.0)
No	634	35.7	6.7 *	(3.9)	301	23.2	12.2 **	(5.2)
<b>Social networks</b>								
Number of contacts				n.s.				n.s.
Less than 10 contacts at baseline	527	32.5	9.2 **	(4.2)	311	17.5	16.2 ***	(4.9)
10 or more contacts at baseline	362	34.4	14.7 ***	(5.1)	152	31.5	10.3	(7.8)
Network density				n.s.				n.s.
All contacts know each other	321	32.4	7.3	(5.4)	230	21.7	11.3 *	(5.9)
Some contacts do not know each other	564	33.9	13.1 ***	(4.1)	229	22.5	16.5 ***	(6.0)

**Sources:** Calculations from baseline survey data and 18-month follow-up survey data.

**Notes:** The subgroups are defined according to characteristics at the time of enrolment in the study. Individuals answering “don’t know” to a particular question that contributed to defining a subgroup are excluded from the analysis of that subgroup.

A two-tailed t-test was applied to differences between the outcomes for the program and control groups. Statistical significance levels are indicated as \* = 10 per cent; \*\* = 5 per cent; \*\*\* = 1 per cent.

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## Publications on SRDC Projects

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### Self-Sufficiency Project (SSP)

*Making Work Pay* Symposium (March 2006).

*Human Capital and Search Behaviour* (working paper 06-10 published in English only), by Audra Bowlus, Lance Lochner, Christopher Robinson, and Yahong Zhang (March 2006).

*The Effect of the Self-Sufficiency Project on Children* (working paper 06-09 published in English only), by Piotr Wilk, Michael H. Boyle, Martin D. Dooley, and Ellen Lipman (March 2006).

*Educational Upgrading and its Consequences Among Welfare Recipients: Empirical Evidence From the Self-Sufficiency Project* (working paper 06-08 published in English only), by Chris Riddell and W. Craig Riddell (March 2006).

*An Analysis of the Impact of SSP on Wages* (working paper 06-07 published in English only), by Jeffrey Zabel, Saul Schwartz, and Stephen Donald (March 2006).

*An Econometric Analysis of the Incremental Impact of SSP Plus* (working paper 06-06 published in English only), by Jeffrey Zabel, Saul Schwartz, and Stephen Donald (March 2006).

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*An Econometric Analysis of the Impact of the Self-Sufficiency Project on Unemployment and Employment Durations* (working paper 04-05 published in English only), by Jeffrey Zabel, Saul Schwartz, and Stephen Donald (July 2004).

*Sustaining: Making the Transition From Welfare to Work* (working paper 04-03 published in English only), by Wendy Bancroft (July 2004).

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- Assessing the Impact of Non-response on the Treatment Effect in the Canadian Self-Sufficiency Project* (working paper 03-05 published in English only), by Thierry Kamionka and Guy Lacroix (October 2003).
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