## **FINAL REPORT**

## INTERIM IMPACT AND INTERIM COST-BENEFIT/ COST-EFFECTIVENESS EVALUATION

## Prepared for

NB JOB CORPS EVALUATION COMMITTEE

Evaluation and Data Development Strategic Policy November 1996

### **ACKNOWLEDGEMENTS**

NB Job Corps is a joint federal-provincial Strategic Initiative being funded and managed by Human Resources Development Canada (HRDC) and the New Brunswick Departments of Advanced Education and Labour (DAEL) and Human Resources Development New Brunswick (HRDNB).

This report is one in a series of evaluation reports on NB Job Corps. Future reports will include a number of interim Impact reports, and a final Summative Evaluation report to be completed one year after the termination of NB Job Corps.

This evaluation study was conducted by Baseline Market Research under the direction of the Evaluation Committee comprised of representatives from the three partners.

The evaluation team would like to thank all those who contributed to the study, especially officials in both the federal and provincial governments who gave of their time and experience to assist the evaluation team.

We would also wish to thank the many UI and social assistance recipients and host employers who generously shared information about the impact of NB Job Corps on their lives and communities.

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#### **MANAGEMENT RESPONSE**

# NB JOB CORPS INTERIM IMPACT AND INTERIM COST-BENEFIT/ COST-EFFECTIVENESS EVALUATION

#### Introduction

NB Job Corps is one of a number of Strategic Initiatives - joint federal-provincial/territorial partnerships - that will contribute to the renewal and revitalization of Canada's social security system. As a Strategic Initiative, programs such as NB Job Corps undergo a comprehensive evaluation to provide feedback to social policy developers. The evaluation process in this case comprises three components: Baseline Data Collection, Process Evaluation and Summative Evaluation. The Baseline Data Collection and the Process Evaluation were completed prior to undertaking the Interim Impact and Interim Cost-Benefit/Cost-Effectiveness Evaluation. The Interim Impact and Interim Cost-Benefit/Cost-Effectiveness Evaluation, will serve as a valuable tool in the completion of the Summative Evaluation. The Summative Evaluation, which will provide a comprehensive assessment of program outcomes, is not expected until the final year of the current Agreement. The Interim Impact and Interim Cost-Benefit/Cost-Effectiveness Evaluation Final Report was delivered to the Federal and New Brunswick Governments in November 1996.

The Interim Impact and Interim Cost-Benefit/Cost Effectiveness Evaluation was threefold and involved the examination of the impact of the program on the individual participants, the host employers and the communities served by NB Job Corps from the establishment of NB Job Corps to the time this evaluation exercise was undertaken. Key variables which formed the basis of the assessment of impact on the individual participants included the following:

- labour market and employment related factors;
- quality of life factors; and
- economic and financial implications of program participation.

The Interim Impact and Interim Cost-Benefit/Cost Effectiveness Evaluation is intended to provide feedback to Canada in order to obtain its approval for the release of Federal funding for fiscal years 1997-98 and 1998-99. This section summarizes management's response to the results of this evaluation.

#### **Comments**

Management is very pleased with the strong positive results provided as a result of this evaluation. These results are indicative of the positive feedback federal and provincial officials have been receiving from program hosts and participants during the program's initial three years.

In developing the Job Corps initiative, both levels of government agreed to some set objectives which would assist in developing the various programming aspects of NB Job Corps. In doing so, the Federal and New Brunswick Governments had established benchmarks which would assist evaluators in determining the overall success of the initiative. In presenting the results of the Interim Impact and Interim Cost-Benefit/Cost-Effectiveness Evaluation, evaluators confirmed that the program objectives had been met. These objectives are as follows:

- to provide a positive influence on the economic activities of the province through projects which enhance the environment and support community activities, and whose implementation serves to decrease short-term and medium term demands on social support services, while providing an avenue for incremental work not accomplished by other workers;
- to improve the general physical environment of communities, and to assist in the development of infrastructure projects which would not otherwise be possible in the absence of the program;
- to enhance the quality of life of individuals who have been deemed most in need, but unable to find work or take part in retraining, by providing the opportunity to contribute actively in socially beneficial work; enhancing quality of life refers to improvements in self-esteem, self-worth, feelings of contributing to society, health status, financial selfdetermination and general life satisfaction; and
- to stimulate and engender a sense of belonging and contribution to the community, resulting in the potential for longer-term labour force or voluntary activity, community involvement and personal well being of participants and family members.

While the report is very positive, management wishes to provide comments on a couple of key elements which were highlighted by the evaluators.

## 1. Incrementality

In Chapter III "Evaluation from Host Employers and Key Informants", evaluators mentioned that some of the activities undertaken as a result of the NB Job Corps initiative would likely have been completed by volunteers in the nonprofit sectors, other government programs in the public sector, and by contract labour used on an intermittent basis by the private/public sector. Although this comment may be true for certain projects, several positive factors have not been highlighted in the evaluation document.

In all cases, each project was assessed for incrementality prior to approval and employers were required to demonstrate that NB Job Corps participants would not displace regular employees. It is important to note that, without NB Job Corps, most of these projects would have taken years to complete and in many cases would have required similar government funding. In addition, many host employers have indicated that the quality of the work performed by NB Job Corps participants went beyond their expectations and as a result the quality of the final product was much greater than anticipated. In several projects involving nonprofit organizations and volunteers, NB Job Corps participants strongly complemented the activities undertaken by the volunteers and allowed for a certain level of consistency with regards to the project's labour component.

## 2. Intangible and Other Benefits

The evaluators suggest that the core results of the evaluation indicate that NB Job Corps does not pass either the benefit-cost test or the cost-effectiveness test if no weight is attached to the intangible benefits. However, as also stated in the evaluation document, the design of the program is such that some significant weight should be attached to these benefits, and that if even a relatively small weight is attached to the intangible benefits, the program would then pass both tests. Although the evaluators have not been able to quantify these intangible benefits, management feels that several of these items should be highlighted in order to inform the reader of the enormous benefits which should be taken into consideration.

It is clear that both orders of government have invested additional program dollars to undertake the NB Job Corps initiative. However, it is important to note that this investment was minimal in comparison to the qualitative benefits which were received by both the program participants and host employers. Participating employers have been able to realize community projects which were not possible given the high costs associated with labour. In many cases, these benefits have been directly passed on to community residents. Projects such as trail development, library automation, construction of playgrounds, beach development, just to name of few, will be of benefit to community residents for many years to come. Many of these projects have a positive impact on the attractiveness of communities relative to the tourism industry, an

important growth sector in New Brunswick. Employers have also benefited from a well trained and experienced work force which has resulted in projects being completed at a higher standard than anticipated and which in many cases was not attainable through volunteers.

In addition to receiving a guaranteed annual salary, participants have received numerous "quality of life" benefits as a result of participating in NB Job Corps. Participants, in general, have increased their self-confidence and work-related abilities, feel better off as a result of the program, and have significantly reduced their need for community and government services. Several participants have been successful in finding additional work during the program's inactive phase thus resulting in additional earnings and, in other cases, individuals have continued to offer their time and services, in a volunteer role, toward community projects and activities. The majority of participants have taken advantage of the program's health plan which has given them a better sense of security with regards to health care costs. In the future, participants will also benefit from a better pension plan as a result of the program's contribution toward each individual's Canada Pension Plan.

Several other key items should be considered when estimating the benefits which were a direct result of the NB Job Corps initiative. Significant savings were realized by both orders of government as a result of placing these individuals in Job Corps. In addition to regular social assistance savings, the Department of Human Resources Development - NB saved on average an estimated \$30/month in health care costs and \$25/month on Special Items costs per client. Social assistance clients no longer have access to health care cards as a result of their participation in NB Job Corps. All Job Corps participants, however, have the option of participating in the program's Health Care Plan. Therefore if we consider that approximately 600 social assistance recipients are enrolled in NB Job Corps, annual savings to HRD-NB would total approximately \$400,000. In addition, it is estimated that by enhancing the participant's Canada Pension Plan, both orders of government would reduce administrative costs associated with the need for additional community and government support services in the future. Finally, it is necessary to add that the volunteer work being performed during the inactive phase by several participants as well as the volunteer work performed after participation in NB Job Corps would amount to tremendous programming savings to both orders of government.

#### Conclusion

The partners are very pleased with the overall Interim Impact and Interim Cost-Benefit/Cost-Effectiveness Evaluation Report. It has been demonstrated that the objectives of the Program have been met and that the benefits to participants and employers have been very significant.

NB Job Corps was designed to address the equity issues of the older displaced worker. NB Job Corps was not developed to serve as a means of saving social assistance and unemployment insurance costs and we feel that the decision to continue or to abandon this initiative should not be primarily driven by cost benefit analysis. As mentioned earlier, several intangible factors have to be taken into consideration when evaluating the success and merits of such an initiative. The evaluators have confirmed the fact that numerous intangible benefits have derived as a result of this initiative. Participants, host employers and both orders of government, as well as communities and New Brunswickers in general, have all benefited from the various successes of NB Job Corps.

As a result of the positive evaluation, the Management Committee hopes the evaluation report and the results of the project will contribute to having the government of Canada confirm its support for the release of funds for years four and five.

#### **EXECUTIVE SUMMARY**

#### **NB Job Corps Interim Evaluations**

This report presents the findings from the first Interim Impact and Cost Benefit/Effectiveness evaluations of New Brunswick Job Corps (NB Job Corps) completed by Baseline Market Research Ltd. (Baseline) and ARC- Applied Research Consultants (ARC). This report was prepared for the NB Job Corps Evaluation Committee (Evaluation Committee) which includes representatives of the New Brunswick Department of Advanced Education and Labour (DAEL), Human Resources Development Canada (HRDC) and Human Resources Development New Brunswick (HRDNB).

## New Brunswick Job Corps

NB Job Corps one of a number of Strategic Initiatives, joint federal-provincial/territorial partnerships, that will contribute to the renewal and revitalization of Canada's social security system. Program costs of up to \$80 million are to be shared equally between federal and provincial governments. Currently, a Contribution Agreement specifies a five-year period for program operation covering fiscal years (FY) 1994/95 - 1998/99. Operation over the full period is subject to the outcome from this evaluation and approval of funding by the Treasury Board of Canada.

NB Job Corps is a voluntary program designed to provide older workers, aged 50 to 65 years, with the opportunity to free themselves from passive support and to contribute to the development of their community.

The rationale for the program stems from the recognition that older workers face many difficulties in reentering the workforce, including their age, lack of mobility and the need for extensive retraining required to meet the needs of the new economy. For these workers (including long-term social assistance (SA) recipients, recipients/exhaustees of unemployment insurance (UI) and displaced workers) there exists the danger that a cycle of dependency on public assistance will be created. Many displaced from the workforce carry transferable skills and a positive work ethic which could allow them to remain as productive members of society By working with nonprofit, private and public sector hosts, it was anticipated that older, displaced workers would benefit in a number of ways from actively contributing to the community through NB Job Corps.

The objectives of NB Job Corps frame the measurable aspects of the program. The stated objectives are as follows:

- to provide a positive influence on the economic activities of the province through projects which enhance the environment and support community activities and whose implementation serves to decrease short-term and medium-term demands on social support services, while providing an avenue for incremental work not accomplished by other workers:
- ♦ to improve the general physical environment of communities, and to assist in the development of infrastructure projects which would not otherwise be possible in the absence of the program;
- to enhance the quality of life of individuals who have been deemed most in need, but unable to find work or take part in retraining, by providing the opportunity to contribute actively in socially beneficial work; enhancing quality of life refers to improvements in self-esteem, self-worth, feelings of contributing to society, health status, financial self-determination and general life satisfaction; and
- ♦ to stimulate and engender a sense of belonging and contribution to the community, resulting in the potential for longer-term labour force or voluntary activity, community involvement and personal well-being of participants and family members.

#### Program Impact

The assessment of the impact of NB Job Corps was three-fold and included the individual participants, the host employers and the communities served by NB Job Corps. Key variables which formed the basis of the assessment of impact on the individual participants included the following:

- ♦ labour market and employment-related factors;
- ◆ quality of life factors; and
- ◆ economic and financial implications of program participation.

The information which follows summarizes findings from this interim evaluation.

## Quality of Life

NB Job Corps participants have demonstrated statistically significant changes in their assessments of the overall quality of their lives. Although the changes demonstrated may not be entirely attributed to the effects of participation in NB Job Corps, it is obvious that the changes which occurred in the participant group did not occur in the comparison group.

The majority of participants (53%) also believe that they have been better off financially as a result of their participation in NB Job Corps.

The majority (87%) of participants believe that NB Job Corps makes them more confident in themselves and their abilities.

The changes in the perceived quality of life make a strong argument for active versus passive assistance: people who are actively engaged in employment and earning an income, contribute more actively to society as a whole and are able to see measurable improvements in their concepts of self and personal well-being.

## **Sense of Community/Commitment**

One indication of a sense of community is the level of volunteer activity. Overall, participants were more likely to be involved in volunteer service than the comparison group.

The overwhelming majority of participants (90%) indicated that the work being done through NB Job Corps is very important to the local community and the majority (92%) also believed that they, personally, have "a lot to offer my community".

Employer hosts repeatedly and positively commented on the participants' sense of commitment to the program and the projects. Examples provided include both output beyond expectations and the willingness of the participant group to work on the tasks assigned.

For the majority of projects (95%) reviewed, the value of the output exceeded the value of the wages received. The majority of employer hosts, including those for whom the cost of projects exceeded the value of the output, indicated a willingness to continue with NB Job Corps because of the quality of the work accomplished. Quality of output and

commitment to the work tasks are also indicators of a sense of a commitment to the community served.

The low rate of program exits, averaging approximately 8% per year over the two years of program operations, is a further indication of the participant group's commitment to the projects and the program.

## **Labour Market Impacts**

The impact of participation in NB Job Corps on program participants was estimated. Specifically, econometric estimates of the likely earnings, unemployment insurance receipts and social assistance payments that participants would have received in the absence of the program were developed. These estimates are based on econometric models using data on participants and the comparison group.

The models generating these results have robust statistical properties. Many of the regression coefficients reach conventional levels of statistical significance.

The results indicate that in the absence of the program, participants would have had lower total incomes (earnings plus UI plus social assistance) than in the pre-program period and that a larger fraction would have been composed of passive income support.

## Value of Output

In NB Job Corps, a wide variety of specific activities are undertaken in the projects that are carried out with project hosts. Maintenance and beautification of facilities, silviculture, fish enhancement, upgrading of tourist facilities and various environmental projects are the most common types of projects undertaken.

The primary source of information on the value of NB Job Corps outputs is provided in the responses to the 1996 survey of host employers. In total, 101 responses were available from hosts who reported both the total value of output and the number of participants to which this value refers. In addition, we have the results from a smaller number of case studies that were consistent with the survey. There was a wide range in the responses to the survey question that asked respondents to estimate the dollar value of the work carried out by NB Job Corps participants. The mean response from the

employer hosts provides an estimate of the value per participant of this output of \$8,220 for the six month active period.

#### **Cost-Benefit and Cost-Effectiveness Results**

Two of the key objectives of NB Job Corps are to:

- enhance the quality of life of individuals who have been deemed most in need;
   and
- stimulate a sense of belonging and contribution to the community.

Improvements in self-esteem, self-worth and general life satisfaction are important elements of the first objective which the host interviews indicate are being achieved. The host perceptions of changes in participants are also consistent with a movement in the direction of achieving the second objective.

Particularly in the case of programs with equity or non-efficiency objectives, it is important for the evaluation methodology to be sensitive to the achievement of these objectives even when they are particularly hard to quantify. The methodology incorporates the intangible benefits in the benefit-cost framework and indicates how large these benefits must be if the program is to break even in benefit-cost terms. Note, that breaking even in benefit-cost terms may be an overly ambitious target for a program that has equity objectives in terms of helping displaced older workers. A key element of this analysis is that the transfer costs are netted out since, from a social perspective, they are a benefit for recipients and a cost for taxpayers, whatever the magnitude of the payment.

This report also looks at the program in a cost-effectiveness context in which the benefits and intangibles can be looked at as offsets relative to the transfer costs of the program. The cost-effectiveness perspective focuses on financial costs from the point of view of the governments that operate this program. Here, transfers that are not relevant from a social benefit-cost perspective are incorporated. These include the transfer costs in the form of payments to participants as well as offsetting changes in other transfers, notably UI and social assistance.

The core results indicate that the NB Job Corps program passes both the benefit-cost test or the cost-effectiveness test if weight is attached to the intangible benefits. It is argued that the design of the program is such that significant weight should be attached to these benefits. In both cases, if even a relatively small weight is attached to what we have called the intangibles, the program passes both tests. The ultimate decision regarding the value of intangible benefits rests with policy makers.

The decision to continue NB Job Corps for the balance of its test period rests with the Treasury Board of Canada and the partner agencies. The results of the interim

evaluation indicate that the program is on course, achieving its stated objectives and passing both the cost-benefit and cost-effectives tests if the intangible benefits are taken into consideration. If these are the criteria on which program continuation is determined, there is justification to continue the program over the full course of its planned test period, per the Contribution Agreement.

## CHAPTER I

This report presents the findings from the first Interim Impact and Interim Cost Benefit/ Effectiveness evaluations of New Brunswick Job Corps (NB Job Corps) completed by Baseline Market Research Ltd. (Baseline) and ARC- Applied Research Consultants (ARC). This report was prepared for the NB Job Corps Evaluation Committee (Evaluation Committee) which includes representatives of the New Brunswick Department of Advanced Education and Labour (DAEL), Human Resources Development Canada (HRDC) and Human Resources Development New Brunswick (HRDNB).

## A. The Structure of this Report

The material which follows in **Chapter I** presents a description of NB Job Corps, an overview of the scope, purpose and general approach to this evaluation.

**Chapter II** presents information related to the impact of NB Job Corps on program participants. This chapter includes a profile of participants, information about the participants' program activities, the findings from the analysis of participant and comparison group survey and administrative data, and a profile of program exits.

**Chapter III** presents the evaluation input from host employers, including a summary of the findings from the case studies. Material in the appendices contains the summary of case studies completed for the Process Evaluation along with the Case Study Updates completed for this evaluation.

**Chapter IV** presents the findings from the multivariate analysis of labour market variables including an explanation of the models of employment earnings, unemployment insurance, social assistance and models related to the probability of program exits.

**Chapter V** presents the findings from the Cost-Benefit and Cost-Effectiveness Analysis including a summary of the cost-benefit model, the role of unemployment insurance, social assistance, labour market variables and "intangibles" in the measurement of program impact. This chapter also presents the overall cost and benefit impacts.

**Chapter VI** presents the overall assessment of NB Job Corps resulting from this interim impact evaluation.

## **B.** Program Description

The material which follows is designed to provide the reader with an overview of NB Job Corps. Additional information about program operations can be found in the reports from the process evaluation.

## 1. The Concept

The concept of NB Job Corps originated in internal discussions with key ministers and management staff within various departments of the provincial government. In those initial stages, it was recognized that thousands of workers in various industries in New Brunswick had been displaced from the workforce as a result of mechanization, resource depletion, computerization and economic and structural change. At the same time, the originators of the NB Job Corps concept recognized that many of the displaced workers were older and, because of a lack of previous education and training, were unable to benefit from the type of training required to meet the demands of the new economy.

Concurrent with the development of the NB Job Corps concept, HRDC was undergoing a process of review and renewal, the desired end result of which would be the revitalization of Canada's social security system. One of the early approaches developed by HRDC was the Strategic Initiative Program, designed to create federal-provincial/territorial partnership approaches to test new options for reform.

The concept of NB Job Corps fits within the framework of a Strategic Initiative in that the concept presented by the province addressed two key policy objectives of the reform process:

- ♦ to enable working age adults who are at risk of long-term dependency to contribute at their maximum potential as productive members of society; and
  - to ensure that persons who experience barriers to employment and full participation in community living, such as older, displaced workers, can achieve equality, independence and full participation.

Through a series of negotiations between federal and provincial officials, NB Job Corps became one of the first approaches funded under the Strategic Initiative Program.

## 2. Program Design

NB Job Corps is one of a number of Strategic Initiatives (joint federal-provincial/territorial partnerships) which will contribute to the renewal and revitalization of Canada's social security system.

Program costs of up to \$80 million are to be shared equally between federal and provincial governments. Currently, a Contribution Agreement specifies a five-year period for program operation covering fiscal years (FY) 1994/95 - 1998/99. Operation over the full period is subject to the outcome from this evaluation and approval of funding by the Treasury Board of Canada.

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## 3. NB Job Corps Objectives

The objectives of NB Job Corps frame the measurable aspects of the program. The stated objectives are as follows:

♦ to provide a positive influence on the economic activities of the province through projects which enhance the environment and support community activities and whose implementation serves to decrease short-term and medium-term demands on social

support services, while providing an avenue for incremental work not accomplished by other workers;

- ♦ to improve the general physical environment of communities, and to assist in the development of infrastructure projects which would not otherwise be possible in the absence of the program;
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- ♦ to stimulate and engender a sense of belonging and contribution to the community, resulting in the potential for longer-term labour force or voluntary activity, community involvement and personal well-being of participants and family members.

## 4. NB Job Corps Project Structure

"NB Job Corps is an initiative of Canada and New Brunswick designed to test an active income support program that provides a guaranteed annual income to older, unemployed workers who volunteer for community service placements" (NB Job Corps Contribution Agreement, p.1).

The program is managed by a joint federal and provincial Management Committee and is funded under a special agreement between HRDC, HRDNB and DAEL. In addition to the Management Committee, different areas of responsibility have been assigned to various committees/working groups.

The Operations Working Group/Committee is responsible for overseeing and coordinating the day-to-day operations of NB Job Corps among the partner agencies. This Committee has maintained a schedule of bi-weekly meetings throughout the operation of the program. The Committee is made up of representatives from each of the three partner agencies. Evaluation, Finance and Communications sub-committees were also established at the onset of program activities. These sub-committees have met on an as-needed basis over the course of the program and report to the Operations Working Group as-needed. The Evaluation Committee has coordinated the program evaluation.

During the start-up stages, the following working groups were established: Systems, Legislative Change, Guidelines and Selection/Recruitment. The level of activity for these working groups decreased as their objectives were accomplished. As of September, 1995, they were no longer operational. All committees and sub-groups had representation from each of the partner agencies.

## 5. Participants

In order to be eligible for NB Job Corps, participants must meet the following criteria:

- ♦ be at least 50 years of age;
- ♦ document that their total family-unit income was under \$20,000 during the previous calendar year;
- ♦ be a social assistance recipient and/or an unemployment insurance benefits recipient/exhaustee and/or be permanently displaced from the workforce;
  - ♦ be among those for whom retraining is not a realistic goal; and
  - have low educational attainment.

Each participant in NB Job Corps may receive financial support in the form of a guaranteed annual income of approximately \$12,000. Participants receive \$46 for each day they are at work during a six month period (active period) with a host organization. For the remaining six months, during which the participant is not at work in NB Job Corps (inactive period), s/he receives a prorated amount that reflects the total income provided during the active period divided by 13 pay periods. Other characteristics of remuneration are as follows:

- ♦ the project activity during the 26-week active period is not UI insurable
- → monthly income is not affected by other employment income earned by the participant or any other member of the family unit;
- ◆ UI benefits claimed by the participant while in the program reduce NB Job Corps benefits dollar for dollar; other members of the family unit may receive up to \$8,000 in UI in any one year; however, any amount above \$8,000 is deducted from the NB Job Corps benefits dollar for dollar; and
- ◆ Canada Pension Plan (CPP) contributions are deducted from the participant's cheque at their source and the NB Job Corps project contributes an equal amount; these contributions are made twelve months per year and are credited towards the participant's CPP entitlement; if the NB Job Corps participant is in receipt of their CPP entitlement, further deductions are not made.

Participants have access to a health plan provided by Blue Cross; coverage is costshared with the participant, while the additional cost of an extended benefits package is the sole responsibility of the participant.

During the active period, some participants may earn productivity bonuses from private sector host employers based on overall performance in the work task.

Program participation is limited to one person per family unit. According to administrative reports prepared by DAEL, as of September, 1996, a total of 1,006 participants were active in the program. Over the period of program operation (March, 1994 -September, 1996) a total of 235 individuals have exited the program. The program had 22 vacancies as of September, 1996 and these positions may be filled through the program's waiting list of potential replacements. Individuals may participate for up to five years or until such time as income security programs are modified.

### 6. Comparison Group

In order to meet the demands for program evaluation, a comparison group was selected for the FY 94/95 participants. This group consists of 680 people. The comparison group was drawn from a random selection of SA and UI recipients with the following characteristics:

- ♦ at least 50 years of age;
- ♦ with a total income for the family unit under \$20,000 during 1993;
- ♦ who were recipients of social assistance (57%), and/or unemployment insurance benefits or an exhaustee of benefits and/or permanently displaced workers (43%);
  - ♦ for whom retraining was not a realistic goal; and
  - ♦ who, in general, have low educational attainment.

## 7. Employer Hosts

NB Job Corps participants work in various projects sponsored by employer hosts. In order to comply with specified criteria, employer hosts must:

- ♦ be either a private sector business, a municipality, a non-profit organization, or a provincial government department/agency;
  - be able to provide a safe and constructive work environment;
  - demonstrate that projects:
    - ♦ do not displace or replace existing employees, volunteers, employees on lay-off or employees on vacation;
    - consist of incremental tasks:
    - ★ are not already funded by other job creation or training programs;
    - ♦ will be for a 26-week duration;
    - could not be done within the host's existing budget structure; and
  - ♦ be willing to cover all overhead costs associated with the projects.

"The type of activity likely to be undertaken will include - but not be restricted to - silviculture, fish habitat enhancement, upgrading of tourist facilities, as well as projects of an environmental nature"

(NB Job Corps, Administrative Guidelines, June, 1995, p.2).

The sections which follow provide an overview of the evaluation design to measure the impact of NB Job Corps.

## C. Scope and Design of the Evaluation for NB Job Corps

The overall evaluation of NB Job Corps has been designed to be a multi-faceted approach. The initial phase, a baseline data collection study with participants and comparison group members, was completed in 1994-95. The process evaluation involved an examination of the administration, management and operations of the project, including host and participant selection, orientation and monitoring.

The interim summative evaluation, for which this report has been prepared, is comprised of two components: the interim impact and the interim cost benefit/effectiveness. The interim impact assesses the continued feasibility of NB Job Corps and measures the program's incremental impacts on participants. The interim cost benefit/effectiveness evaluations provide a wide range of information. These evaluations will provide key inputs to the final, summative evaluation. The final summative evaluation will have four components: impact, cost benefit/effectiveness, policy analysis and follow-up.

The primary requirements of the interim evaluations are to determine the degree to which the specified program objectives have been achieved to date and to meet Treasury Board requirements for an interim evaluation. Table I-1 and Table I-2 present the key evaluation questions which directed the Baseline/ARC approach to the interim evaluations.

#### Table I-1 Evaluation Questions - Interim Impact Evaluation

- 1 To what extent has NB Job Corps:
  - · removed disincentives to employment; and
  - increased incentives to employment?
- 2. Has NB Job Corps brought about any changes in the participants' home/family life (e.g. relationships th spouse, children and friends, way of dealing with conflict in the home, health status, financial well-being, volvement in community activities, use of other community services, types of recreation engaged in)?
- 3. To what extent has NB Job Corps affected participants' economic self- sufficiency?
  - · How have attitudes of participants changed?
  - What are the impacts on participants' sense of self- esteem and work ethic?
  - · Has the program provided them with occupational skills?
  - · Have participants been able to increase their work experience?
  - · What impact did NB Job Corps have on participants' feelings about contributing to the

#### community?

- 4. What are the financial impacts of participating in NB Job Corps?
  - What are the impacts on participants' incomes?
- What is the impact on the ability and motivation of the participants' families to earn income over and above that which is provided by NB Job Corps?
- 5. What are the absentee rates among participants by region and type of work placement/host?
  - · What are the reasons for absenteeism?
  - What are the characteristics of participants who have a higher than average absentee rate?
  - · What is the impact on host employers of participant absenteeism?
- 6. What is the impact of active programming on the ability and desire of participants and scontinuants to find employment/volunteer placements after their first/second active period, during their st/second not active period, or after they exited NB Job Corps?
- Did NB Job Corps motivate participants to actively look for employment or volunteer work during their active and/or inactive period or after they exited the program?
- What percent of participants continued to work for their project host and/or do volunteer work for their project host; at what stage did this occur (e.g. during their first/second active period, during their first/second not active period)?
- 7. To what extent has NB Job Corps affected discontinuants economic self-sufficiency?
  - What are the reasons given for leaving NB Job Corps?
  - What are the characteristics of participants who exit in NB Job Corps?
  - What have discontinuants done since leaving NB Job Corps?
  - · How have attitudes of discontinuants changed?
  - · What are the impacts on discontinuants' sense of self-esteem and work ethic?
- Did NB Job Corps provide discontinuants with occupational skills and/or increase their work experience?
- What impact did NB Job Corps have on discontinuants' feelings about contributing to the community?

#### Table I-1 Evaluation Questions - Interim Impact Evaluation

- Are discontinuants' post-NB Job Corps activity different from what they did before their NB Job Corps involvement?
- What reasons do discontinuants in receipt of income support give for remaining unemployed after their involvement in NB Job Corps?
- 8. Has NB Job Corps provided services to the community?
  - How did communities contribute to NB Job Corps?
  - Did NB Job Corps enhance the enhance the environment and support community activities?
  - Did NB Job Corps decrease short or medium term demands for social support?
- Did NB Job Corps assist in the development of infrastructure of the community which would not have otherwise been undertaken?
- 9. What impacts has NB Job Corps had on host employers?
  - How has NB Job Corps helped or impeded host employers in achieving their work?
  - · How has having a participant in the work unit affected management of the unit?
- Are potential participants from other target groups (e.g. youth, persons with disabilities) being displaced from employment opportunities?
- Is activity under NB Job Corps incremental, that is, over and above activity which would have been undertaken in the absence of NB Job Corps funding?

#### Table I-2

#### **Evaluation Questions Cost Benefit/Effectiveness Evaluation**

- 1. Is NB Job Corps a cost-effective way of achieving project objectives?
- What impact did NB Job Corps have on assistance benefits (UI/SA) paid to participants and their families, e.g. amount, duration? How does this differ from comparison group members?
- What impact did NB Job Corps have on assistance costs (UI/SA) for participants and their families? How does this differ from comparison group members?
  - Is NB Job Corps administered in an efficient and economical manner?
- 2. Are there more cost-effective methods of achieving the same objectives?
  - Are there less costly ways of providing a similar project/program?
  - Are there other similar projects/programs which need to be examined to eliminate duplication?
- 3. How do results compare with the results of other programs with similar objectives?
- Was NB Job Corps more successful than other programs with similar objectives and target groups?
- 4. What are the benefits and costs to participants, host employers, communities and government as a ult of NB Job Corps (considering UI/SA savings, net change to income tax revenue, health costs, and other tors)
  - What does NB Job Corps cost per participant?
- 5. Is the NB Job Corps model an effective way of achieving program objectives and those of Strategic iatives overall?
- 6. Does NB Job Corps lead to a more efficient delivery of services?

## D. The Baseline/ARC Evaluation Approach

Since the two interim evaluations have intersecting points throughout the process and the outcomes from each are closely linked in rendering a final, interim evaluation, the findings are presented in this single report which incorporates all elements of the evaluations. A detailed Methodology Report, previously submitted to the Evaluation Committee, provides information on the theoretical framework and approaches for this evaluation.

Chapter II through Chapter VI present the findings from the evaluation approach implemented by Baseline/ARC.

## CHAPTER II PROGRAM IMPACT

The assessment of the impact of NB Job Corps was three-fold and included the individual participants, the host employers and the communities served by NB Job Corps. The overall summary of evaluation questions addressed are presented in Table I-1. This chapter first provides a profile of the NB Job Corps participants and their activities to date within the program to serve as a reference point. This chapter then provides an assessment of the impact of NB Job Corps in terms of the participant and comparison group differences related to labour market and attitudinal variables, and differences in relation to receipt of social assistance (SA) and unemployment insurance (UI) benefits. Key variables which formed the basis of the assessment of impact on the individual participants included the following:

- ♦ labour market and employment-related factors;
- quality of life factors; and
- ♦ economic and financial implications of program participation.

Since the program design resulted in the establishment of a comparison group, the measure of impact in relation to the key variables involved analysis of measurement at two points in time (the baseline surveys and the surveys for this evaluation) with the participant and comparison groups. The approach builds on the preliminary work completed in the process evaluation using survey data and was extended to include administrative and longitudinal file data in the analysis. This chapter concludes with a discussion of exits from NB Job Corps.

## A. Profile of Participants

A total of 1,219 participants had entered NB Job Corps as of September, 1996. The overall program retention rate through 1994-1996 (September) was 81.5%. Over the course of evaluation activity, baseline information has been collected from a total of 904 (74%) of participants. A tracking survey was completed for the Process Evaluation and a data collection exercise in 1996 updated the baseline information and collected detailed information on program activity from a random sample of 400 participants selected from

the group which completed the baseline survey. The profile of participants is based on information collected from the baseline study and the 1996 study.

#### 1. Referral Status

The criteria for program participation are specific (see Chapter I) and the participant profile matches that specified. In the first intake of participants (1994):

- ◆ 51% were in receipt of social assistance and referred through HRDNB;
- 7% were recipients of SA and had also been classified as a UI exhaustee;
- ♦ 29% were referred as UI exhaustees through HRDC; and
- ♦ 14% were other displaced workers not in receipt of financial assistance.

In 1996, 61% of the active participants were former recipients of social assistance and 39% were UI exhaustees. These percentages within the two key groups (SA recipients and UI exhaustees) are consistent with the goal of achieving a 60-40% participant ratio of SA and UI referrals.

### 2. Age

In 1994, the average age of a participant was 56 years and approximately 2% of the participant population was within two years of attaining the age of 65. Consistent with this information, approximately 2% of participants exited the program because they had reached the age of 65 years.

#### 3. Gender

More men (62%) than women (38%) chose to participate in NB Job Corps. In 1996, the gender distribution of participants remained essentially the same. Possible explanations of the differences could relate to the actual nature of the work offered and varying levels of labour force participation for this generation of older men and women; however, differences were not apparent once participants enrolled in the project. Essentially, men and women had about the same program exit rates (6-8% of those contacted in 1996) and expressed similar levels of satisfaction with the program. Both male and female participants viewed NB Job Corps as one of their few opportunities for employment with

only 20% of men and 14% of women suggesting that they would be at least somewhat likely to have found another job if NB Job Corps had not been available.

Analysis of other reactions to the program also indicate that men and women share similar perspectives on the positive aspects of the program (having the opportunity to work, enjoyment of the work, camaraderie and the learning experience). Some differences were also apparent. When dissatisfaction was expressed, both groups were likely to express dissatisfaction with the wage levels but men were more likely to do so than women. Women were more likely than men to express dissatisfaction with the difficulty of the work offered.

#### 4. Marital Status

The participant population is less likely to be married than the population as a whole (41% are married or living in common-law relationships) and the female participants are more likely to be unmarried (24% married or living in common-law relationships) than the men (48% married or living in common law relationships). Consistent with population information which suggests that women are more likely to be widowed than men, overall, 20% of female participants and 4% of male participants have been widowed. Eighteen percent (18%) of male participants have never been married compared to 10% of female participants.

#### 5. Household Income

While NB Job Corps provides an income above that which would be provided through social assistance in New Brunswick, overall, household incomes of participants are not high. For example, in the 1996 survey of participants, 87% of the sample of 400 reported a total household income of less than \$20,000 in 1995 and 93% reported incomes under \$20,000 in 1993. The median household income for New Brunswick was \$41,668 in 1993 and \$39,553 in 1994 (Source: New Brunswick Statistics Agency, 1996).

#### 6. Education Levels

The program criteria specify that participants have low educational attainment and such is documented in the information collected from participants. Overall, 78% of male and 57% of female participants did not have a high school diploma at the time of enrollment. An additional 11% of males and 19% of females had no more than a high school diploma. Given the combination of age and level of educational attainment, it is highly unlikely that those who had been displaced from the workforce would be likely candidates for training for jobs in the new economy

## 7. Pre-Program Work Experience

In the work years leading to the point of entry to NB Job Corps, participants averaged a total of 11 different employment positions. The longest time spent in any one position ranged from 3 weeks to more than 30 years. Within the total participant group 2% came to NB Job Corps after more than 30 years with a single employer. Overall, participants averaged 11.9 years with a single employer in their longest period of pre-program employment.

A review of administrative data generated from participants resulted in identification of a total of 2,495 different positions within which participants had been employed prior to the program. Participants were employed on a part-time basis in 23% of these positions, on a full-time basis in 44% of positions and on a seasonal basis in 33% of the positions. In their most recent employment position prior to the program, 29% of participants were employed in positions classified as seasonal.

Consistent with program objectives to address the needs of under-skilled workers, a review of administrative data leads to the observation that the majority of participants came to the program from positions which demanded basic skill levels. For example:

- the majority (69%) of most recent employment positions reported before NB Job Corps were at a skill level which, according to the National Occupational Classification (NOC) required one to four years of secondary school education or up to two years of on-the-job training, training courses or specific work experience (Skill Level C on the NOC matrix) or up to two years of secondary school and short work demonstration or on-the-job training (Skill Level D);
- ◆ 25% of the most recent positions before NB Job Corps were in sales (primary at Skill Level C or Skill Level D) and 28% of positions were in the trades and transport, (again at Skill Level C or Skill Level D);
- the percentage of positions at the basic skill levels, when combined with the age of the participants, suggest that while participants may have remained in a position for an extended period of time, there is no evidence of upward mobility over the lifetime work period.

Participants averaged \$357.90 per week in their most recent position prior to entry into the program and, over the course of the 24 months prior to the program averaged a total of 5.4 months of employment. Within the participant group, 38% did not work at all in the 24 months prior to entry into NB Job Corps.

In summary, one can observe that the participant population, as a whole, has a work history which is based on low-end employment in positions which often had no particular education or skill requirements. While participants may have worked for extended periods for one employer, in the two years prior to the program, only 19% worked for 12 months or more. Part-time and seasonal employment was also a more frequent experience than full-time employment in the most recent employment before NB Job Corps.

Given the types of employment positions described, the rates of pay and the temporary nature of much of the work, it was surprising to observe participants report being very (53%) or somewhat (27%) satisfied with the jobs held in the past. At the same time, participants reported that they were not very satisfied (23%) or not at all satisfied (24%) with the overall quality of their lives.

## **B.** Program Activities of Participants

This section provides an overview of the participants' activities within the program's active and inactive periods. The material in this section is drawn from the follow-up survey conducted in 1996 with a sample of 400 participants.

#### 1. Work Placements

The majority of participants, when contacted in 1996, indicated a high level of satisfaction with NB Job Corps. For most (86% - 87%) their experience in the program has involved work with one employer. Positions made available to participants in the 1995 program year were more likely to have been related (59%) than unrelated to a participant's previous work experience; however, women were less likely (54%) than men (65%) have been offered work in related positions.

Overall, men and women were both very satisfied with their program experiences; however, women were somewhat more likely (7%) than men (4%) to express dissatisfaction with the program.

#### 2. Absenteeism Rates

In 1994, a total of 173 participants missed at least one day of work in the active period as did 154 participants in 1995.

Of those who worked at least 13 weeks in 1994 and missed at least one day from work, the average amount of time missed was 1.25 weeks. Among those who worked at least 13 weeks in 1995 and missed at least one day of work, the average time missed was 1.87 weeks. The data do suggest a slight increase in the amount of time missed in the second year of the program for individuals, but the overall absenteeism rate actually declined between 1994 and 1995: more participants worked for a longer period in 1995 than in 1994.

The low level of absenteeism is confirmed through the information collected in the survey of host employers (see Chapter III).

## 3. Health Insurance Coverage

NB Job Corps provides participants with the opportunity to buy into a health insurance program which can provide limited or extended coverage (based on the participant's preference). In 1995, 79% of the participants contacted indicated that they elected to participate in the health plan. In 1996, 82% of the participants were participating in the health care plan. Slightly more than half (51%) of those who did not elect coverage were married. Thirty-four percent of married participants who did not elect coverage reported that they were covered by another health care plan.

## 4. Employment in the Inactive Period

Each participant has the opportunity to find additional employment in the program's 26week inactive period. While subject to normal taxation, inactive period revenue has no affect on program-related income.

In the first inactive period in 1994, 15% of participants found work in the inactive period, as did 15% again, in 1995. The Table II-1 profiles the work found in each inactive period.

Table II-1 Inactive Period Employment		
	1994/95	1995/96
Participants Employed Worked Related to NB Job Corps Employment (Yes) Average hours per week Average Rate per hour Part-Time Work Seasonal Work Option to continue	15% 25% 24.92 \$7.54 64% 86% 22%	15% 34% 26.1 \$7.16 32% 88% 0%

The patterns of employment for both inactive periods are very similar as were the types of positions in which participants were employed. Women who found work in the inactive period were likely to be employed as personal aides, clerks or child care workers. Men who found work were most likely to be employed as labourers in various seasonal industries.

Inactive period employment did not differ significantly for the UI and SA referrals. Given this, one can also infer that there was not a relationship between pre-program employment and employment in the inactive period.

In 1994, approximately 40% who would work in the inactive period suggested that the position paid more than was paid in the program. In 1995, 30% of the participants who found work in the inactive period suggested that such employment paid more than was paid in the program. Apparently, as confirmed by the decrease in the average wage rates and the potential for employment over the course of the year, the quality of work available to those willing to work in the inactive period is on the decline.

Approximately 35% of participants engaged in volunteer work in the inactive period, averaging 11 hours per week. Participants who volunteered did so for an average of 16 weeks in the inactive period. More than half (57%) who were involved with volunteer work in the inactive period continued this work in the active period and 91% plan to continue volunteer work following their next active employment period.

Approximately 5% of the participant group was involved with *both* paid and volunteer work in the inactive period. This group of participants represented approximately one-third of the volunteer group and was likely to be female, unmarried and have a higher than average level of educational attainment. Overall, approximately 45% of the participant population was involved with either paid or volunteer employment in the most recent (1996) inactive period.

## 5. Program Outcomes for Participants

The majority of participants indicated that the program provided them with opportunities which they could not have had otherwise as well as with other personal benefits. The material which follows summarizes the participants' perspectives on NB Job Corps.

- The majority (90%) of participants believe that the work being done through NB Job Corps is important to the community being served.
- ♦ Approximately 85% believe that NB Job Corps contributes to an increase in both selfconfidence and confidence in work-related abilities.
- According to participants, the program is making good use of the skills of the participants (85%) while providing an opportunity for participants to learn (81%).
- ♦ For the majority of participants (77%), NB Job Corps provided the alternative to social assistance.

The participants' perspectives on the outcomes from program participation are consistent with the stated objectives for NB Job Corps.

## C. Participant and Comparison Group Differences

The sections which follow present the evaluations' findings in relation to differences between the participant and comparison groups. The focus of the analysis of differences centred on labour market and attitudinal variables and on patterns related to the receipt of financial assistance through social assistance and unemployment insurance.

## 1. Labour Market Variables

Table II-2 presents a profile of the labour market experience of participants and members of the comparison group for the time period prior to the NB Job Corps program.

This table shows that the labour market experience of participants and the comparison group have common elements but that the experiences are not identical. Members of the comparison group had more months of work prior to the start of NB Job Corps, earned higher wages when working and had higher total incomes. In each of the years (1993 and 1994) taken separately, comparison group members had more weeks employed and fewer weeks unemployed.

TABLE II-2 LABOUR MARKET VARIABLES FOR PARTICIPANTS AND THE COMPARISON GROUP (*)			
	Participants	Comparison Group	
Employment in two years prior to the program (months) Weekly earnings in last job (1994) Employment income in 1993 Employment income in 1994 Total income in 1993 Total income in 1994 Weeks employed in 1993 Weeks employed in 1994 Weeks unemployed in 1993 (**) Weeks unemployed in 1994 Total Observations	5.3 \$336 \$2,375 \$5,525 \$8,325 \$9,902 6 7.8 22.8 24.6 398	7.7 \$363 \$7,480 \$5,477 \$13,943 \$13,775 12.5 9.7 11.6 14.9 410	

<sup>(\*)</sup> Source: Longitudinal file of HRDC. \*\* Unemployed refers to those periods in which a respondent was not working in a paid position.

#### 2. Attitudinal Variables

In order to test the impact of NB Job Corps on the participant group, information was developed to assess perceptions of self and satisfaction with life, attitudes about work, personal health conditions and use of community and government services by participants and comparison group members.

The baseline and 1996 surveys provide two measures on a common set of 26 different variables for participants and the comparison group. Respondents were asked to use a five-point scale to indicate their level of agreement, satisfaction or the perceived importance with the statements presented. On all measures, the levels were indicated by a score of 1-5 with the low scoring indicating minimal agreement, perceived importance or satisfaction. To measure use of services, respondents were asked to provide an estimate of the number of times a particular service was used in a given time period.

Index measures were constructed for each grouping of variables which addressed one of the five constructs measured: perceptions of self, perceptions of work, level of satisfaction, personal health assessments and use of services. The specific wording of each measure can be found in the technical appendix. The tables which follow present a summary of the measures for both groups at the two measurement points.

#### Table II-3 Perceptions of Self Measures

	MEAN SCALE SCORES Scale - 1-5, Low to High			
	Partici	pants	Compariso	on Groups
1	Baseline Follow- 1994 Up 1996		Baseline	Follow- Up
PERCEPTIONS OF SELF	n=904	n=400	n=680	n=410
More skills today than 10 years ago (1) Lots to offer the community Have as much to offer as anyone else (1) Have lots of good qualities Have a positive attitude about self (1) Solve my own problems (1) Government should take care of me (1)	3.66 4.49 4.01 3.97 3.74 4.44 2.39	3.93 4.36 4.18 4.15 4.08 4.39 2.50	3.16 3.83 3.82 3.78 3.78 4.34 2.68	3.08 3.87 3.63 3.77 3.77 4.26 2.72
INDEX SCORE SELF	2.63	25.57	27.70	25.21

- (1) (2)
- Statistically different differences in participant measures Statistically different differences in comparison group measures.

Table II-4 Perceptions of Work Measures				
	MEAN SCALE SCORES Scale - 1-5, Low to High			
	Partic	ipants	Comparis	son Groups
	Baseline 1994	Follow-Up 1996	Baseline	Follow-Up
PERCEPTIONS OF WORK				
There are not many jobs for people in this age group	4.26	4.32	4.29	4.19
Work should be challenging	4.63	4.54	4.36	4.38
Work provides the opportunity to learn new things	4.69	4.69	4.56	4.57
Work gives opportunity to be with others	4.63	4.54	4.37	4.46
Really want to work full-time, full-year (2)	4.50	4.39	3.69	3.36
I'd be better off on welfare(1)	1.40	1.60	2.16	2.13
Ashamed to tell others I am not working (1)	2.97	3.21	2.38	2.34
Being unemployed is one of the worst things	4.29	4.29	3.64	3.49
INDEX SCORE WORK	31.46	31.64	29.56	28.98

	MEAN SCALE SCORES Scale - 1-5, Low to High			
	Participants Comparison Group			son Groups
	Baseline 1994	Follow-Up 1996	Baseline	Follow-Up
LEVEL OF PERSONAL SATISFACTION				
Satisfaction with social life (1) Satisfaction with family life (1) Satisfaction with past jobs (1) Satisfaction with life in general (1)	3.38 3.42 4.07 2.88	4.43 4.49 4.43 4.45	4.25 4.22 4.24 3.82	4.23 4.24 4.19 3.85
INDEX SCORE - SATISFACTION	13.75	17.84	16.62	16.57

- (1) Statistically different differences in participant measures
- (2) Statistically different differences in comparison group measures

Table II-6 presents a summary of the utilization of medical and social services by participants and comparison group members along with the ratings of personal health.

Table II-6 Health Assessment and Utilization of Services				
	MEAN SCALE SCORES Scale - 1-5, Low to High			
	-		mparison Groups	
	Baseline 1994	Follow-Up 1996	Bas eline	Follow-Up
HEALTH ASSESSMENT				
Overall rating of personal health (1) Total medical visits (in specified period 1,2) Total overnights in hospital	3.72 2.72 .319	3.71 4.04 .325	3.07 4.27 .320	3.06 6.41 .480
INDEX SCORE - HEALTH	6.54	7.95	7.54	9.91
	1			
USE OF SERVICES		•	1	
Total visits to a social workers (1) Total visits to a Canada Employment Centre (1) Total counselling visits	2.42 8.39 .280 .764	.422 3.04 .435 .148	.643 1.53 .264 .332	.689 1.23 .214 .561

Table II-6 Health Assessment and Utilization of Services					
		MEAN SCALE cale - 1-5, Lo			
	Participants Comparison Groups			•	
	Baseline 1994	Follow-Up 1996	Bas eline	Follow-Up	
Total visits to a soup kitchen (1,2)					
INDEX SCORE - USE OF SERVICES	11.83	2.71	2.75	2.76	

The findings in the process evaluation indicated that there were differences in the overall attitudes between participant and comparison groups. The objective of the analysis for this evaluation was to determine if changes had occurred within groups, if those changes were statistically significant and if the patterns of change were different between groups.

Testing of the information in these tables was based on those respondents who provided responses for two measurement periods. The observations which follow result from this analysis.

- ◆ Participants have enhanced their perceptions of self over the two years since the start of NB Job Corps by developing more positive assessments of what they have to offer relative to others, a more positive attitude about themselves and more positive perceptions of their problem-solving ability (personal control). On the other hand, while participants were not more likely than comparison group members to indicate agreement with the idea that "government should take care of me", the increased level of agreement with this statement among participants was statistically significant while the comparison group perceptions remained relatively constant.
- ◆ Participants appear to feel more strongly about being ashamed to tell others that they are unemployed while the comparison group appears to have become less interested in attaining full-time, full-year employment.
- Participants have an enhanced sense of being better off in NB Job Corps than they would have been on social assistance. The opinions of the comparison group remained the same over the two measurement points: more comparison group members than participants believe that they would be better off on social assistance than working.
- The major change in attitudes over the two measurement periods relates to the expressed levels of personal satisfaction. In the baseline measure, participants expressed lower levels of satisfaction than the comparison group on the measures employed. Two years later, the levels of satisfaction expressed by the participant group have changed significantly while the levels of satisfaction expressed by the comparison group have remained relatively constant.

- ♦ Both groups have increased their usage of the health care system over the 1994-1996 period at about the same level. This should not be unexpected given the ages of the two populations.
- Participants have significantly reduced their use of community and government services over the course of their involvement with NB Job Corps while the overall use of services by the comparison group have remained relatively constant.

Based on the attitude measures employed for this evaluation, it is apparent that changes have taken place in the participant group and those changes have occurred on more measures and more frequently at a statistically significant level than changes in the comparison group.

#### 3. UI and Social Assistance

A central objective of the NB Job Corps program is to remove the dependence of participants on passive income support programs, namely UI and social assistance. This section provides data on the UI experience of participants and the comparison group prior to and during the time period of program participation. It also shows the social assistance experience of participants prior to and during the time period of program participation.

Data on the UI experience of participants and the comparison group are shown in Table II-7. This table shows both the dollar amount of UI benefits for the two groups and the number of weeks in which UI benefits are collected. Both of these series are subject to a substantial degree of variation. As a result, it may be more useful to consider the data in terms of averages for the pre-program and for the year in which participants entered the program. These data are shown in Table II-8.

Table II-7	UI EXPERIENCE (PARTICIPANTS AND COMPARISON GROUP - LONG FILE DATA)					
UI BENEFITS (	PARTICIPANT	ΓS)				
VARIABLE	UIBEN91	UIBEN92	UIBEN93	UIBEN94	UIBEN95	
Mean 1403.847		2568.156	1177.382	23.27638		
Median	0.000000	0.000000	0.000000	0.000000	0.000000	
Maximum	12160.00	14602.00	17892.00	13565.00	3836.000	
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000	
Observations	398	398	398	398	398	
WEEKS OF UI	BENEFITS (P.	ARTICIPANTS)				
VARIABLE	UIBWKS91	UIBWKS92	UIBWKS93	UIBWKS94	UIBWKS95	
Mean 6.399497	12.62060	11.64322	5.701005	0.095477		
Median	0.000000	0.000000	0.000000	0.000000	0.000000	
Maximum	44.00000	46.00000	46.00000	41.00000	14.00000	
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000	
Observations	398	398	398	398	398	
UI BENEFITS (	COMPARISO	N GROUP)				
VARIABLE `	UIBEN91	UIBEN92	UIBEN93	UIBEN94	UIBEN95	
Mean 1119.402	2096.590	2145.729	2786.522	1786.161		
Median	0.000000	0.000000	0.000000	0.000000	0.000000	
Maximum	12858.00	18400.00	14595.00	19550.00	14770.00	
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000	
Observations	410	410	410	410	410	
WEEKS OF UI	BENEFITS(C	OMPARISON GR	OUP)			
VARIABLE	UIBWKS91	UIBWKS92	UIŚWKS93	UIBWKS94	UIBWKS95	
Mean 4.448780	8.485366	8.390244	11.09512	7.175610		
Median	0.000000	0.000000	0.000000	0.000000	0.000000	
Maximum	38.00000	46.00000	41.00000	46.00000	41.00000	
Minimum	0.000000	0.000000	0.000000	0.000000	0.000000	
Observations	410	410	410	410	410	

TABLE II-8 UI SUMMARY FOR PARTICIPANTS AND COMPARISON GROUP (VARIABLE MEANS)					
Weeks on UI UI Payments					
	Pre	Post	Pre	Post	
Participants	10.2	2.9	\$2,242.66.	\$ 600.33	
Comparison Group	7.1	9.2	\$1,787.24	\$2,286.34	

<sup>(\*)</sup> Note: "Pre" refers to the mean for 1991 to 1993. Post refers to the mean for 1994 to 1995.

The data in Tables II-7 and II-8 clearly show a major change in UI dependency for the participants relative to the comparison group. Prior to the program, participants registered more weeks on UI and had larger claims. In the year of program entry, weeks on UI declined significantly for participants while they increased for the comparison group. The same pattern is evident for the dollar amount of UI claims. Prior to the program, participants claimed nearly 50% more than the comparison group but after the program began, the claim rate for participants fell to less than one third of the claim rate of the comparison group.

Table II-9 shows that the amount of social assistance received by program participants declined substantially after the program began. It is assumed that receipt of social assistance in 1994 reflects the fact that not all participants started the program and left social assistance at the beginning of the year. By 1995, however, social assistance payments to participants declined to nearly negligible levels. The median of zero shows that at least 50% of participants received no social assistance.

TABLE II-9	RECEIPT OF SOCIAL ASSISTANCE BY NB JOB CORPS PARTICIPANTS				
VARIABLE	SA93	SA94	SA95		
Mean	2829.55	1869.11	70.62873		
Median	986.240	514.000	0.000000		
Maximum	10740.0	10740.0	5635.00		
Minimum	0.00000	0.000000	0.000000		
Observations	386	381	369		

Source: Program documentation from self-reports.

#### D. Profile of Exits

The rate of exit from NB Job Corps is relatively low. This analysis of program exits is based primarily on the survey carried out in August of 1996. At that time, members of the participant sample were asked whether they were still in NB Job Corps. Of the sample of 400 participants, only 30, or 7.5% reported that they were no longer in the program.

The stated reasons for leaving the program are shown in Table II-10. As this table shows, reaching the age of 65, at which time participants must exit, was the largest single category of exits, accounting for more than 25% of the total. Another group of exits, accounting for nearly another 25% of the total left the program due to illness. Illness of other family members, inability to meet the physical demands of the work and finding either a full-time or part-time job were also mentioned. Only three of the participants exited because they disliked the work provided by the program or because they experienced some kind of conflict with their employer.

TABLE II-10 REASONS FOR PROGRAM EXIT(*)				
	Number	%		
Full-time job	5	17		
Part-time job	1	3		
Physically unable to do work	4	13		
Disliked work	1	3		
Conflict with host employer	2	7		
Personal Illness	7	23		
Family Illness	2	7		
Disqualified - age 65	8	27		
Total	30	100		

<sup>(\*)</sup> Note: These data record the first reason mentioned for leaving the program. Only two respondents provided a second mention and both reported the physical aspect of the work as a contributing factor.

The time pattern of program exits is as follows:

- ★ Exited during the active period in 1994: 4
- Exited prior to the active period in 1995: 9
- ♦ Exited prior to the active period in 1996:
- ♦ Exited during the active period in 1996:

A number of differences between continuing participants and individuals who exited the program are shown in Table II-11. In terms of these data, exits are more likely to be:

- older persons:
- persons with a mother tongue other than English;
- more educated:
- persons with a lower self-rating of both health and life satisfaction.
- not married; and
- those with a lower satisfaction rating for NB Job Corps.

Most of these differences appear reasonable in terms of expectations about why people would choose to exit the NB Job Corps program.

TABLE II-11 COMPARISON OF CONTINUING PARTICIPANTS AND EXITS					
	Exits	Participants			
Gender (% Male) Age in 1994	39 58.0	33 56.1			
Mother tongue English (%) Years of education	44.4 12.7	59.2 12.2			
Health rating Life satisfaction rating	3.5 4.1	3.7 4.5			
Marital status (% married) Satisfaction with NB Job Corps(rating) Observations	40.7 3.3 30	44.7 3.7 360			

Although the reasons for exit in this table appear reasonable, it is important to realize that some of these variables may be correlated with each other. Older participants may also have more health problems, for example. As a result, it is appropriate to draw conclusions from the multivariate results that hold these factors constant. These results are provided in Chapter IV of this report.

# E. Post Program Experience of Exits

Among the 30 program exits, only nine reported working since leaving NB Job Corps. The incidence of not looking for work among program exits was relatively high. Twenty-two of the 30 exits reported that they had not been actively looking for work for much of the interval since leaving the program. The reasons for not looking for work are instructive for this group. As Table II-12 shows, most of the reasons relate to either age or health as the main factor in not actively looking for work.

TABLE II-12 REASONS FOR NOT SEEKING EMPLOYMENT -EXITS				
	Number	%		
No job available-no point looking	1	5		
Illness/disability 11 50				
Age-too old to look for work	7	32		
In hospital or other medical facility	1	5		
Family or personal reasons 2 9				
Total	22	100		

Participants who exited the program were also asked about their labour market status at the time of the interview in August, 1996. As Table II-13 shows, only 20% reported that they were working at the time of the interview. This is in contrast to the findings of many other evaluations of labour market programs. The most common reason for exiting a program is to accept a job and program exits frequently have better labour market prospects and experiences than continuing participants. The unique characteristics of NB Job Corps participants, however, mean that this pattern is different. Only a minority leave and appear to work regularly - most leave for reasons associated with inability to work.

TABLE II-13 EMPLOYMENT STATUS AT TIME OF INTERVIEW-AUGUST, 1996				
	Number	%		
Employed Unemployed Disabled At home Retired Total	6 10 7 2 5 30	20 33 23 7 17 100%		

Among the program exits who were employed, five of the six were employed full time and one was employed part-time. Four of the exits were employed full-time year round while the fifth was employed full time at the time of the survey but in an occupation described as seasonal. Four of the six respondents said that this employment was unrelated to the type of work they did with NB Job Corps while the other two said that the work was directly related to their NB Job Corps experience.

# CHAPTER III EVALUATION FROM HOST EMPLOYERS AND KEY INFORMANTS

This chapter presents an overview of the approaches employed and the key findings which resulted from contacts with host employers and key informants.

# A. Role of the Case Studies, Host Survey and Key Informant Interviews

The case studies were designed to provide updated information on project activities. The sites selected for the 10 case studies were initially visited for the process evaluation. The updates completed for this evaluation and the original case studies have been included in an appendix to this report.

The key informant interviews were completed to provide program administrators with an opportunity for input to this evaluation.

The survey of host employers was designed to provide employers with an opportunity to assess NB Job Corps and the participants as well as to provide quantitative input to the cost-benefit/cost effectiveness assessment of NB Job Corps.

#### **B.** Case Study Findings

Ten host employers were contacted for the case studies. These host employers represented the private sector, government agencies and the nonprofit organizations involved in NB Job Corps. The majority of findings were consistent across the different sectors and are summarized in the material which follows.

#### 1. The Nature of the Work

Prior to NB Job Corps, projects undertaken by participants were most likely to have been completed by volunteers in the nonprofit sectors, other government programs in the public sector, and by contract labour used on an intermittent basis by the private/public sector. In all instances, case study employer hosts indicated that the work would not have been done as extensively or in as organized a manner without NB Job Corps. The major advantage which the program affords the host is the opportunity to a commitment of staff for a 3-5 year period. This provides an opportunity for training and improved performance by the participants. The improvements which have resulted from continued employment with a single host employer are also documented in the survey of host employers.

The projects represented in the case studies included environmental improvement and beautification projects, computerization of a regional library's card system, construction of infrastructure/ improvements at a provincial park and fundraising projects in the nonprofit sector. The work completed within NB Job Corps is similar to the work experience of participants prior to the program - primarily physical labour and clerical positions.

In all the case studies, it was clear that the extent of work performed by participants would not have been done without the program. In some instances, the work would have been done more slowly over a longer period of time; in other instances, only essential elements of the work would have been completed. Work of participants enhanced the on-going efforts to meet environmental requirements, to improve highway safety, to improve the natural resources of the province and to complete infrastructure improvements which, without NB Job Corps, could have been delayed for many years.

### 2. Host Employers' Perspectives on Participants

The host employers contacted in the case studies had considerable praise for the participants. Key positive attributes included a strong work ethic, an ability to improve over the course of employment and an ability to accept additional responsibility. Several host employers noted positive change in self-esteem and general work habits over the course of their involvement with the program. Employer hosts see participants as being able to take a more active role in operations and as people who have gained a considerable amount of confidence in their abilities over the two periods of active employment.

Absenteeism has not been a problem for the host employers involved with the case studies and the demand on supervisors have decreased over the course of employment.

Host employers suggest that participants are among the best referrals from workplace employment programs. They bring experience and a strong work orientation to the workplace and, after the initial period when more supervision was required as participants learned the job tasks, participants required less supervision than placements from other programs.

In summary, case study host employers suggest that NB Job Corps participants represent a willing workforce which is capable of learning job tasks and making a commitment to host employers as well as making a commitment to self-improvement and personal growth.

#### 3. Value of the Work Performed

Host employers contacted in the case studies had a difficult time placing a specific value on the work performed. In general, there was a tendency to estimate the value in terms of the actual wages paid to participants; however, such difficulty is not to be interpreted as a perceived lack of value for the output. In the nonprofit sector, for example, while one host valued the output at three full-time equivalents at \$6.00/hr over the course of employment, at the same time this host described the work accomplished as "invaluable, it seems like a \$100,000 contribution to the organization when the actual "cost" is \$37,440." Another host, who also placed the value of the work at \$6.00 per hour, noted that the reduction of stress on other staff as a result of the additional labour was valued at far more than the actual pay out.

In the private sector, the estimated value of the participants' output was assessed at the total annual pay out by the program (\$12,000) plus added payroll taxes. As with the nonprofit sector, at least one private sector host also suggested that the monetary value did not provide a good indicator of the total value of the project. For example, in the case cited, the work performed was better than what had been done by private sector contractors in the past and more work was accomplished than could have been accomplished by those same contractors, given the budgets allocated.

In summary, hosts contacted for the case studies were very positive about the program and the participants. Host employers see added benefits in having the personnel resources of NB Job Corps available over a 3-5 year period and have seen significant improvements in the work performance of participants as well as personal growth and development of participants over the first two active periods of employment

# C. Findings: Survey of Host employers

Host employers were initially surveyed following completion of the first active period. The 1996 survey sought the input from host employers on the active period in 1995 as well as their overall perspective on the program. A total of 163 host employers were contacted in this survey, 94% of whom had been involved with NB Job Corps through a two period of active employment.

The table which follows provides a summary of the type of work which has been offered in host organizations.

Table III-1 Work Activities of Offered by Host Employers		
Description	Percentage of Mentions (*)	
Facilities Maintenance/Beautification	47%	
Office and Secretarial work	16%	
Beach/Park Restoration	10%	
Personal Care Services	8%	
Fundraising Activities	6%	
Kitchen Workers	5%	
Library/Research	5%	
Tourism-Related Activities	3%	
Retail/Crafts	2%	

<sup>(\*)</sup> More than one activity was described by a host employer so column may sum to more than 100%.

The majority of host employers (67%) found supervision of participants no more or less difficult than supervision of other employees. If host employers found supervision easier (18%), it was because s/he found the participants to be more mature, more experienced and better able to meet the demands of the work place. If participants were more difficult to supervise (15%), the primary reasons cited included personality or personal problems or an inability to understand the instructions provided.

Most host employers indicated that participants' overall attendance was about the same as most employees (66%) or better than other employees (24%). Only a few (10%) had problems with the participants' attendance. This perception is consistent with absenteeism rates for the program.

When asked to rate the overall contribution which their project made to improving the quality of the environment in the community in which it was taking place:

- → 72% suggested that the projects made a very significant contribution to improvement;
- ♦ 16% indicated that the contribution was significant; and
- ♦ 12% suggested the contribution was not significant.

Projets such as computerization of library records and museum research were, logically, not seen as making a contribution to improving the environmental quality.

When asked about the overall contribution to improvement in the quality of life of program participants employers were in near-total agreement:

- ♦ 81% suggested that the projects had made a very significant contribution to improvements in the quality of life of participants;
- ♦ 17% suggested the contribution had been somewhat significant; and
- ♦ 2% suggested that the contribution had been insignificant.

The majority of host employers (66%) had observed significant changes in participants over the course of employment. Some of the improvements cited included:

- → more self-confidence/pride (40% of mentions);
- → improvements in work performance (11%) or reliability (7%);
- → improved skills (4%);
- more satisfied/happy (10%);
- ♦ more "comfortable" (9%);
- ◆ greater sense of belonging (8%); and
- ♦ more interested in work (5%).

When asked for their overall level of satisfaction with the participants:

- → 74% of host employers reported that they had been very satisfied with the employees provided through NB Job Corps;
- ♦ 24% were somewhat satisfied; and
- ♦ 2% were not satisfied.

An additional indication of satisfaction with participants is evidenced by the fact that 18 of the 163 firms contacted hired participants to work for the host organization in the inactive period. Within this group, 17 continued to be involved with work that was similar to the active period employment. Three of the host employers offered employment in place of a

return to active employment within NB Job Corps. Two of the three employees continued to work for the host and did not return to the program while the other one exited the program and terminated employment.

While not all host employers may have offered employment at the end of the 1995 active period, 86% of the host employers indicated that had funds been available, they would have been very likely to hire participants for the inactive period.

When asked to assess the overall value of the work completed by participants, the amount estimated ranged from \$1,600 to \$1,000,000. Based on the information reported, the average reported was \$31,529. The estimated cost of having participants ranged from \$0 - \$240,000, averaging \$5,435. The data supplied by host employers indicates that 5% of the host organizations believe that the cost of having a project was greater than the value of the work received; however, 49% of the organizations/firms in this group also indicated that they would be very likely to continue with future projects. If a firm estimated that the value of a project was greater than the cost, the perceived net value per project (for the host employer) was \$27,590. The median amount was \$10,120.

The majority of host employers (83%) have previous experience with work placement programs other than NB Job Corps. When asked to compare NB Job Corps to other programs which provided a host employer with personnel resources:

- ♦ 50% suggested that NB Job Corps was more efficient in overall operations than others:
- ♦ 44% suggested that the program was about as efficient as others; and
- ♦ 6% suggested that it was less efficient than others.

When asked to compare the quality of personnel provided through NB Job Corps with personnel provided through other programs:

- ♦ 37% of employer hosts suggested that the overall quality of personnel was better than they would expect from other programs;
- ♦ 50% suggested that the quality was about the same; and
- ♦ 13% suggested that the quality was lower than they would expect from other programs.

Few employer hosts (10%) perceive NB Job Corps to require more support costs than other employment programs and most suggested that program support costs are about the same (67%) or less (22%).

When asked if the work completed by participants would have been completed if NB Job Corps had not been available:

- ♦ 25% of employer hosts suggested that it would not have been at all likely;
- 28% suggested that it would not have been very likely;
- ♦ 32% suggested that it would have been somewhat likely; and
- ♦ 15% suggested that the work would very likely have been completed.

It should be noted, as indicated in the summary of the case studies, that while the work may have been completed, it is unlikely that it would have been completed to the same extent or within the same time period.

When asked if they would be willing to continue to sponsor another project in 1997, should funds be available, 90% of host employers expressed a high degree of interest in continuing their involvement with NB Job Corps.

When asked to provide comments about NB Job Corps at the end of the survey, 85% of host employers chose to provide a comment and the majority were very positive. A comment which reflects many of those received is as follows:

The program is an outstanding program that provides an opportunity for an individual to do something for their community that gives them self-respect and a feeling of being worthwhile. The program brought this individual from a feeling of despair and despondency to a positive, well-motivated individual that has a feeling of self-worth and self-esteem.

In summary, the findings from the host survey clearly indicate that host organizations have received positive benefits from NB Job Corps as have the participants employed. The majority of host employers believe that the project should be continued and the majority are also interested in continuing to offer employment for program participants.

# D. Key Informant Interviews

The primary purpose of the key informant interviews was to provide administrative staff with the opportunity for input to this interim evaluation. The conclusions drawn from the interviews completed are straightforward:

♦ NB Job Corps is efficient, runs smoothly and has been implemented better/more efficiently than most programs;

- the program is meeting the needs of the target group, a group for whom there is little alternative employment possibility;
- the program is more effective than some of the previous efforts since it provides an employment opportunity in place of passive forms of social assistance;
- compared to other programs, it demands little administrative time (other than for those staff specifically assigned to manage the program on a day-to-day basis);
- ♦ it has a high level of support in the employer/host community as well as within the
  participant group and the communities served;
- while it may be more expensive than other programs, and more expensive than passive forms of income support, it offers both the opportunity for improvements in individuals today, including a greater sense of self-esteem and control, and it ensures a higher probability of a better financial basis for life after retirement; and
- the program is a test of the benefits of an active form of assistance to individuals and, in the final analysis, the determination of the future of the program will rest with the value placed on active versus passive forms of assistance.

Clearly, key informants recognize that NB Job Corps costs more, on average, than some forms of training and passive assistance; however, the program also provides the opportunity for enhancing the current quality of life for participants as well as the quality of life in the future while providing value to host organizations.

# CHAPTER IV MULTIVARIATE ANALYSIS OF LABOUR MARKET VARIABLES

#### A. Introduction

This chapter describes the results of the multivariate assessment of the impact of the New Brunswick Job Corps program. The models estimated included data for participants and members of the comparison group. Full details on the models are presented in the Appendix to this report.

In this chapter, the key analytical issue is to develop estimates of the probable labour market and related experience of NB Job corps participants in the absence of the program. These estimates are developed from regression models using observations on the participants and the comparison group.

The estimation of program impacts on participants is guided by the recent literature in applied econometrics on minimizing the extent of bias from estimates based on data from a sample of participants and a matched comparison group. The major issue here is to identify the independent impact of program participation. To the extent that all differences between members of the participant and comparison group were observable, regression analysis was adjusted for these different characteristics. If there were unobservable differences that correlated with outcomes, selection bias could have arisen. The estimation procedures in this chapter incorporate statistical techniques which dealt with this potential bias. Full details of the econometric approach to selection bias are presented in the Methodology Report.

The core results in this chapter consist of estimates of the earnings, UI benefits and social assistance receipts of participants in the absence of the program. The impact of the program uses the difference between the estimated values of these variables in the absence of the program and the actual values as key parameters in both the cost-benefit and cost-effectiveness calculations.

#### **B.** Earnings Models

The models developed for the wage income (earnings) of participants were based on the standard earnings functions in the labour market literature. For participants in 1993 (before the program), a regression model was estimated in which earnings were a function of a series of independent variables including gender, education, marital status, mother tongue and self-reported health status. A model of this form was also estimated for the comparison group in 1993 (before the program). The education variable was included in the models to capture the effect of human capital on earnings. An age variable was also initially included in the models but was omitted from the final specification as it was not statistically significant.

For the comparison group in 1995 (during the program for participants), a similar model was estimated that included gender education, marital status, mother tongue and self-reported health status. In addition, this model included a time trend variable to allow for changes over time in the earnings function.

To increase the efficiency of the estimation process, the coefficients of the independent variables in the models were restricted to be the same across the equations for the three different groups. The models allowed, however, possible differences in earnings between the participant and comparison groups in the pre-program period by introducing different intercept terms. The models also allowed possible differences in earnings between the before and during program periods for the comparison group by introducing the variable for the passage of time between the pre-program and during program periods.

The three equations in the model were jointly estimated by applying ordinary least squares (OLS) to the equations subject to the restriction that the coefficients of any independent variable be identical across the equations. As an alternative to OLS, Heckman's two-step method is also applied. If decisions on program participation are correlated with the error terms in the earnings equations, the OLS estimates of the model parameters would be biased and inconsistent. To obtain consistent estimates of the parameters a two-step strategy was adopted: first, the participation decision was modelled and the Inverse Mills ratios (IMR) computed; and next, the IMR variable was added as an additional regressor in the three equation model and least squares was applied subject to the cross-equation restrictions on the coefficients.

The Heckman procedure is designed to eliminate the effect of selection bias from the estimated results. In fact, we determined that the coefficient on the Inverse Mills terms was statistically significant, implying the existence of selection bias. As a result, we used

the estimates from the Heckman two-step procedure rather than the ordinary least squares results in our analysis.

Once the estimates of the model parameters were given, the average annual earnings that the participants would have received in the absence of the New Brunswick Job Corps Job Corps program were calculated from the equation estimated for the comparison group in the during program period. All required dependent variables to carry out this procedure were known from the survey data.

Using the earnings equation developed to show the earnings of participants if they had, in fact, not entered the program, it is estimated that the annual employment earnings of NB Job Corps participants in the absence of the program would have been \$2,554.

# C. Unemployment Insurance Models

The models developed for the receipt of UI benefits were of the same form as the models described above for earnings. For the participants in 1993 (before the program), an equation was estimated explaining the receipt of UI benefits that includes gender, mother tongue, previous wage level and previous employment as explanatory variables.

Similarly, for the comparison group in 1993 (before the program), a model was estimated with the same structure as the participant model. For the comparison group in 1995 (during the program), comparable model, but one which allows a time shift relative to the earlier period, was estimated.

The previous wage and employment variables were included in the models to capture the effect of insured earnings and weeks of UI entitlement on the size of the UI benefits. Other variables such as education and marital status were included in the initial specification of the models but were omitted from the final models as they were statistically insignificant.

The model used assumed that the coefficients of the independent variables were common across the equations for the three different groups (participants in 1993 and the comparison group in 1993 and 1995). However, the models allowed possible differences in the receipt of UI benefits between the participant and comparison groups in 1993 and also between 1993 and 1995 for the comparison group by introducing different intercept terms, between the participants and the comparison group. The model also allowed parallel shifts in the regression equations from 1993 to 1995 using the time trend variable.

As in the earnings equation, the three equations in the model were jointly estimated by applying ordinary least squares (OLS) to the equations subject to the restrictions that the coefficients of any independent variable be identical across the equations. As an alternative to OLS, Heckman's two-step method was also applied. If the decisions on program participation are correlated with the error terms in the UI benefit equations, (that is, if there were selection bias), the OLS estimates of the model parameters would have been biased and inconsistent. To obtain consistent estimates of the parameters a two-step strategy was adopted: first, the participation decision was modelled and the inverse Mills ratios (IMR) was computed; and next, the IMR variable was added as an additional regressor in the three equation model and least squares was applied subject to the across-equation restrictions on the coefficients. The inverse Mills term was significant so that we use the result from the two step procedure.

Once the estimates of the model parameters were given, the average annual UI benefits that the participants would have received in the absence of the Job Corps program are estimated from the equation that predicts UI benefits.

Using this equation, it is estimated that NB Job Corps participants would have received \$946 in UI benefits in the absence of the program.

#### D. Social Assistance Models

The model developed for the receipt of social assistance was of the same general form as the earnings and UI models. For the participants in 1993 (before the program), social assistance received was estimated using family income, marital status, gender and mother tongue as independent variables. Other variables such as education and marital status were included in the initial specification of the models but were omitted from the final models as they were statistically insignificant.

No data were available for the comparison group in 1993 (before the program) or in 1995 (during the program), and no models are estimated for the comparison group.

The assumption of the model was that the model parameters would remain the same between 1993 and 1995 for the participants. The average social assistance that the participants would have received in 1995 in the absence of the Job Corps program was estimated from the equation estimated for the pre-program period with during program data substituted into it. The model for social assistance received by participants before the program is estimated by applying ordinary least squares (OLS).

The results of the model gave a predicted level of social assistance for NB Job Corps participants of \$5083 in the absence of the program.

#### E. Determinants of Exit from NB Job Corps

In order to provide a clearer picture of the factors associated with the decision to leave NB job Corps, a multivariate analysis of the factors that were related to this decision was conducted. In the participant sample, individuals were coded as either 1 if they exited or 0 if they were continuing participants. This was the basis for the tabulations presented earlier but simple tabulations do not show the strength of the statistical relationship and do not take interactions among causal variables into account.

The probit regression model estimated highlights the factors that are associated with the probability of exit. The probit model was used in preference to the standard least squares model because the dependent variable was a series of 0s and 1s, violating the assumptions of the least squares model.

The probit model shown in the Appendix provides the best overall explanation of the determinants of exit from NB Job Corps of the various alternative models estimated. Other variables tried, including education and gender, were not significant and led to a model with a lower degree of explanatory power.

The regression results show that the only variables that are related to the decision to exit, at conventional levels of statistical significance, are age and self-reported satisfaction with the NB Job Corps program. Self-reported overall life satisfaction nearly reaches this level of statistical significance. Program exits appear, therefore, to be related almost entirely to the eligibility age constraint and to problems with the program encountered by only a small fraction of participants.

# CHAPTER V COST-BENEFIT AND COST-EFFECTIVENESS RESULTS

#### A. Introduction

This chapter presents the results of the cost-effectiveness and cost-benefit assessment of NB Job Corps. A brief overview of the framework used in this analysis is followed by a description of the results for the various components and an overall assessment.

### B. Summary of Cost-Benefit Framework

This section provides a summary of the framework for carrying out the cost-benefit components of this evaluation. In general, cost-benefit analysis is the most comprehensive form of analysis to determine the overall economic impacts of a program. As usually defined, cost-effectiveness analysis is simply a special case of cost-benefit analysis in which only costs and not benefits can be measured directly.

In the case of NB Job Corps, a mixed form of analysis was most appropriate given the objectives of the program and the range of benefits subject to quantification. From the perspective of society, the net benefits associated with NB Job Corps were calculated by measuring the stream of social benefits generated by, and accruing to participants, and subtracting from this the stream of benefits that would have been observed in the absence of the program and all of the social costs of the program.

For NB Job Corps, measurable benefits consist of the additional output associated with the incentive effects of the program (output produced in the inactive period) plus the value of the output produced by participants while in the active component. In this analysis, program costs included all administrative and other costs associated with the operation of the program and the estimated opportunity cost of participants. This opportunity cost was estimated in terms of the pre-program earnings stream.

The analysis, covering a typical year, divided the activities of participants into the active and inactive components. In the active component, the value of output consisted of project outputs and the estimate of what participants would have produced in the same

period represented its social cost. In the inactive component, the gain corresponded to earnings in this time period.

The core analytical issue in dealing with NB Job Corps, from a cost-benefit perspective, is that the program is, in large part, a transfer program. Recipients are better off, but there is a corresponding tax payment from other members of society to fund these transfers. In addition, there are costs of administering the program and of generating the transfers. To the extent that the transfer and the administrative rules for dealing with other forms of income affect incentives, there are allocative impacts as outlined earlier in this section. These effects are relevant in a cost-benefit assessment; however, these effects are not necessarily central in terms of overall program objectives. These objectives are considered to be primarily "equity" or "fairness" objectives in assisting older workers facing various labour market barriers.

Following this perspective, the focus of the analysis was on cost-effectiveness. The key question was whether or not there are better ways of achieving the equity objectives of assisting program participants. Specifically, the focus is on the following:

- ♦ How do the costs of NB Job Corps compare with other approaches to helping this client group?
- ♦ How cost-effective is the NB Job Corps approach relative to the usual UI or social assistance mechanism of regular support payments from government?
- Does the program achieve its objectives at a reasonable level of administrative cost?
- ◆ Does the program work in the direction of efficiency in terms, for example, of work incentives?
- ◆ Is the program targeted effectively in terms of helping those who are most in need?
- Is the program adaptable and responsive to changing needs and circumstances?
- ◆ Does the program provide benefits that are not seen as attaching a stigma to participants?

The following sections of this chapter provide the assessment of these questions.

# C. Role of Earnings and Social Assistance Impacts

The central role of the econometric analysis in this project was to generate predicted values of earnings, UI and social assistance for participants in the absence of the

program. The models described in Chapter IV of this report and which are contained in the Appendix generated estimates of earnings, social assistance receipts and UI benefits for participants in the absence of the program. These impacts are summarized in the technical appendix (Table 8).

#### D. Program Costs

The NB Job Corps program incurs a number of costs associated with providing participants an alternative to passive income support programs. The largest cost component of the program consists of the payments to participants that include wages in the active period and a prorated amount in the inactive period corresponding to the amount earned in the active period. Additional direct costs are incurred for the portion of Blue Cross coverage carried by the program and contributions to the Canada Pension Plan. In addition, there are in-kind costs that are covered by employer hosts and program administration costs.

Table V-1 provides a summary of these costs for 1994 and 1995. This table also shows the number of participants in these two years and an average cost per participant of \$16,720 in 1994 and \$16,635 in 1995.

COST COMPONENT	FY 94/95	FY 95/96
Payments to participants	\$12,096,909	\$11,603,559
Blue Cross	113,945	106,122
Canada Pension	203,780	198,174
In kind contributions of hosts	5,478,356	5,400,998
Administrative costs	115,000	91,675
Total	\$18,007,990	\$17,400,528
Number of participants	1077	1046
Cost per participant	\$16720.	\$16635

### E. Valuing NB Job Corps Outputs and Intangibles

# 1. Program Impacts

In the NB Job Corps program, participants work on projects with employer hosts. A wide variety of specific activities are undertaken in the projects carried out. There was a general expectation that silviculture, fish enhancement, upgrading of tourist facilities and various environmental projects would be the most common types of projects undertaken. The survey of employer hosts confirmed that the actual pattern of projects fit with this expectation. The major categories of responses to the employer host question on the specific work activities of participants were as follows:

<b>*</b>	Maintenance/beautification of facilities	60%
<b>*</b>	Clerical and related	16%
<b>*</b>	Personal services	6%
<b>*</b>	Charitable services	6%
<b>*</b>	Craft-related activities	4%
<b>*</b>	Other	8%

The primary source of information on the value of NB Job Corps outputs was provided in these responses to the 1996 survey of employer hosts. A total of 163 interviews were completed with employer hosts, 153 of whom had been hosts in both 1994 and 1995. In this survey, a number of elements of the experience of the employer hosts with the program were explored. In this subsection, the focus is on the responses as they relate to the value of output produced by participants.

In total, there were 101 responses from employer hosts who reported both the total value of output and the number of participant to which this value refers. In addition, the results from a smaller number of case studies were reviewed to determine their consistency with the survey responses. Based on a relatively high degree of agreement between the two sources, the estimates from the more broadly based survey have been used.

There was a wide range in the responses to the survey question that asked respondents to estimate the dollar value of the work carried out by NB Job Corps participants. The mean response from each employer host was used to develop an estimate of the value per participant of this output of \$8,220 for the six month active period. This estimate formed part of the benefit-cost assessment that is shown in the next section of this chapter.

#### 2. Intangible Benefits

The survey of host employers provided information on the less tangible benefits of the program in terms of changes that host employers had noticed in the participants during the program. Among the 163 survey completions, 100 respondents noted that there had been positive changes in the Job Corps participants while they were working with the host employers. The types of changes noted by respondents were as follows:

- more confidence (39%);
- ♦ more pride (13%);
- better worker (11%);
- ♦ happier (7%);
- ♦ more reliable (7%);
- more comfortable (8%);
- more interested (7%);
- ♦ more skills (4%).; and
- ♦ a sense of belonging (4%).

These positive changes in participants indicated that the following program objectives were being met:

- ◆ to enhance the quality of life of individuals who have been deemed most in need; improvements in self-esteem, self worth and general life satisfaction are important elements of this objective that the host interviews indicate are being achieved; and
- to stimulate a sense of belonging and contribution to the community; the host employers' perceptions of changes in participants are also consistent with a movement in the direction of achieving this objective.

Particularly in the case of programs with equity or non-efficiency objectives, it is important for the evaluation methodology to be sensitive to the achievement of these objectives even when they are particularly hard to measure. In this case, two independent sources of information have been used to provide the basis for the assessment of objectives achievement in this important area for NB Job Corps.

These qualitative observations on the intangible benefits do not establish a range for the dollar values of these benefits. The observations from both the participants and the host employers do, however, establish that these benefits are non-trivial.

The next section of this chapter incorporates the intangible benefits in the benefit-cost framework and indicates how large these benefits must be if the program is to break even in benefit-cost terms. Note, that breaking even in benefit-cost terms may be an

overly ambitious target for a program that has equity objectives in terms of helping displaced older workers. For this reason, the program was also viewed in a cost-effectiveness context in which the benefits and intangibles can be looked at as offsets relative to the transfer costs of the program.

#### F. Overall Cost and Benefit Impacts

This section of the report integrates information from a number of sources in the interim evaluation. The overall assessment of cost and benefit impacts uses data from the host employer survey, the case studies, key informants, and the surveys of participants and the members of the comparison group.

The analysis in this section is contained in two sub-sections. The first sub-section deals with the program from a cost-benefit perspective. This perspective traditionally focuses on the efficiency issues although the intangible non-efficiency gains from the program have been incorporated as well. A key element of this analysis is that the transfer costs are netted out since, from a social perspective, they are a benefit for recipients and a cost for taxpayers, whatever the magnitude of the payment.

In the second sub-section, the program is explored from a cost-effectiveness perspective focusing on financial costs from the point of view of the governments that operate this program. Here, transfers that are not relevant from a social benefit-cost perspective are incorporated. These include the transfer costs in the form of payments to participants as well as offsetting changes in other transfers, notably UI and social assistance.

# 1. Cost-Benefit Results

The framework for the cost-benefit assessment of the NB Job Corps program is summarized in Section B of this chapter and is presented in detail in the Methodology Report. The results of implementing this framework are shown in Table V-2.

TABLE V-2 SUMMARY OF BENEFIT AND COST IMPACTS (Average, per participant)				
	Benefits	Costs		
V estimated as 40% of after-tax earnings				
Value of output	\$8220	Participant opportunity cost	\$7328	
Earnings in inactive	193	Program administration cost	88	
Value of leisure	2734	Blue Cross	101	
Full Income	\$11147	Host cost	5163	
Intangible benefits	X	Total costs	\$12680	
Total benefits \$11147+X				
Break-even value of X is \$1533				

Note: The calculations for the value of non-market time (V) produced a negative number because annual UI and social assistance are so large relative to annual earned income prior to the program. As a result, V is calculated as 40% of after-tax pre-program earnings. The value of 40% reflects our estimate of the mean value for this variable in other studies

The cost-benefit results shown in Table V-2 indicate that the intangible benefits play an important role in the overall assessment of the program. In this table, per participant costs, calculated on an annual basis exceed per participant benefits, implying a benefit-cost ratio of slightly less than one if the intangible benefits are not included.

The NB Job Corps program was designed with equity objectives as an important component. There is, however, no generally accepted economic methodology for calculating those benefits. As a result, X, the value of the unmeasured intangible benefits, is shown as a residual in the calculations. This allowed for computation of the break-even value of X so that the required magnitude of these benefits is clear to decision-makers. If the benefits to participants in terms of self esteem and related variables are valued at more than \$1,533 per participant per year, then the program passes the benefit-cost test. Assigning this value, however, is the responsibility of policy-makers.

#### 2. Cost-Effectiveness Results

This section describes the results in the cost-effectiveness component of the evaluation of NB Job Corps. The cost-effectiveness perspective highlights the fact that the NB Job Corps program is primarily a transfer program. Recipients are better off but there is a corresponding payment from the rest of society to fund these transfers.

In contrast to social benefit-cost analysis that nets out transfers among taxpayers, costeffectiveness analysis is generally focused on government expenditures which, in the case of NB Job Corps, consist primarily of transfers to participants. The distinction here is that in cost-benefit terms, the real benefits in terms of resource use are independent of the actual transfer amounts paid to participants. The transfers could be made arbitrarily large but this would not affect either the participant opportunity cost or the value of the outputs that participants produce.

The cost-effectiveness results are shown in Table V-3. The Methodology Report describes the framework for this analysis in detail. The essential difference between the cost-benefit results and the cost-effectiveness results is the perspective from which the calculations took place. The cost-benefit framework was inclusive and looks at all gains and losses from the point of view of society. The cost-effectiveness results, on the other hand, focused on dollar gains and losses from the point of view of the public sector.

The results in Table V-3 indicate that UI and social assistance savings are substantial as a result of the program. However, these savings are just slightly more than half of government costs. Cost-effectiveness, defined more broadly to take the value of output into account, brings the results closer to a break-even point. If the intangible elements of the program are taken into account in this component of the analysis, they would have to be in the order of \$2,500 per participant to bring the analysis into balance from this perspective.

TABLE V-3 COST-EFFECTIVENESS OF NB JOB CORPS		
Average government costs per participant*	\$11553	
Estimated savings in UI per participant	946	
Estimated savings in social assistance per participant	5083	
TOTAL SAVINGS	\$6029	
	(5524)	
Net government cost-effectiveness	8220	
Value of project output per participant	5163	
Subtract average host costs	3057	
Net value of project output		

To provide an additional perspective on the cost-effectiveness results, a comparative approach has been taken with regard to the costs of alternative ways of providing assistance to the participants in NB Job Corps. In this comparative analysis, program cost data for two other HRDC programs were reviewed to develop a perspective on the scale of expenditure that is frequently observed in programs for client groups other than those in NB Job Corps. In addition, some of the key features of an HRDC program that is geared to a client group that is comparable to the one that is served by NB Job Corps have been reviewed.

In the case of alternative HRDC programs, we have reviewed program expenditure per participant for training social assistance recipients (SARs) in one of the components of the Canadian Jobs Strategy in 1990-91 and per participant costs for participants in the Project Based Training component of the Employability Improvement Program. These costs are as follows:

- ♦ 1990/91 SARs in CJS: \$9350 per participant.
- ♦ 1994/95 Project Based Training participants in EIP: \$11,601 per participant.

It is clear that the comparison of these two programs with NB Job Corps is not very direct because the objectives of the programs are not the same. However, it does provide a perspective on the scale of expenditure in other labour market programs relative to NB Job Corps.

The other program that is relevant in a cost-effectiveness comparison with NB Job Corps is the Program for Older Worker Adjustment (POWA). Like NB Job Corps, POWA focuses on the labour market adjustment problems of older workers. Funded 70% by the federal government and 30% by provincial governments, POWA provides benefits to laid-off workers between the ages of 55 and 64. The program is tied to layoffs in which there is a permanent loss of jobs, there are no prospects for re-employing older workers and there is little prospect of training to lead to new job opportunities.

The 1994-95 budget of POWA in terms of federal contributions was \$50 million, supported by 27.5 full-time equivalents and an operating budget of \$2 million. As of August 1995, the basic benefit under POWA in Atlantic Canada was 70% of UI with a monthly minimum of \$760 and a maximum of \$1000. POWA, like NB Job Corps, generates savings in UI and social assistance but provides no outputs with social values comparable to those generated under NB Job Corps. With the range of payment to participants of between \$760 and \$1000 per month, POWA has per participant costs to government that appear only slightly lower than NB Job Corps which averages close to \$1000 per month.

# CHAPTER VI OVERALL ASSESSMENT

This chapter summarizes the findings which provide the basis for an overall assessment of NB Job Corps.

#### A. Quality of Life

NB Job Corps participants have demonstrated statistically significant changes in their assessments of the overall quality of their lives. Although the changes demonstrated may not be entirely attributed to the effects of participation in NB Job Corps, it is obvious that the changes which occurred in the participant group did not occur in the comparison group.

The majority of participants (53%) also believe that they have been better off financially as a result of their participation in NB Job Corps.

The majority (87%) of participants believe that NB Job Corps makes them more confident in themselves and their abilities.

The changes in the perceived quality of life make a strong argument for active versus passive assistance: people who are actively engaged in employment and earning an income, contribute more actively to society as a whole and are able to see measurable improvements in their concepts of self and personal well-being.

# B. Sense of Community/Commitment

One indication of a sense of community is the level of volunteer activity. Overall, participants were more likely to be involved in volunteer service than the comparison group.

The overwhelming majority of participants (90%) indicated that the work being done through NB Job Corps is very important to the local community and the majority (92%) also believed that they, personally, have "a lot to offer my community."

Host organizations repeatedly and positively commented on the participants' sense of commitment to the program and the projects. Examples provided include both output beyond expectations and the willingness of the participant group to work on the tasks assigned.

For the majority of projects reviewed (95%), the value of the output exceeded the value of the wages received. The majority of host organizations, including those who perceived that the cost of projects exceeded the value of the output, indicated a willingness to continue with NB Job Corps because of the quality of the work accomplished. Quality of output and commitment to the work tasks are also indicators of a sense of a commitment to the community served.

The low rate of program exits serves as another example of the participants' commitment to the program and the projects being completed.

#### C. Labour Market Impacts

The impact of participation in NB Job Corps on program participants was estimated. Specifically, econometric estimates of the likely earnings, unemployment insurance receipts and social assistance payments that participants would have received in the absence of the program were developed. These estimates are based on econometric models using data on participants and the comparison group.

The models generating these results have robust statistical properties. Many of the regression coefficients reach conventional levels of statistical significance.

The results indicate that in the absence of the program, participants would have had lower total incomes (earnings plus UI plus social assistance) than in the pre-program period and that a larger fraction would have been composed of passive income support.

# D. Value of Output

In NB Job Corps, a wide variety of specific activities are undertaken in the projects that are carried out with host employers. Maintenance and beautification of facilities, silviculture, fish enhancement, upgrading of tourist facilities and various environmental projects are the most common types of projects undertaken.

The primary source of information on the value of NB Job Corps outputs is provided in the responses to the 1996 survey of host employers. In total, 101 responses were available from hosts who reported both the total value of output and the number of participants to which this value refers. In addition, we have the results from a smaller number of case studies that were consistent with the survey. There was a wide range in the responses to the survey question that asked respondents to estimate the dollar value of the work carried out by NB Job Corps participants. The mean response from the employer hosts provides an estimate of the value per participant of this output of \$8,220 for the six month active period.

#### E. Cost-Benefit and Cost-Effectiveness Results

Two of the key objectives of NB Job Corps are to:

- enhance the quality of life of individuals who have been deemed most in need;
   and
- stimulate a sense of belonging and contribution to the community.

Improvements in self-esteem, self-worth and general life satisfaction are important elements of the first objective which the host interviews indicate are being achieved. The host perceptions of changes in participants are also consistent with a movement in the direction of achieving the second objective.

Particularly in the case of programs with equity or non-efficiency objectives, it is important for the evaluation methodology to be sensitive to the achievement of these objectives even when they are particularly hard to quantify. The methodology incorporates the intangible benefits in the benefit-cost framework and indicates how large these benefits must be if the program is to break even in benefit-cost terms. Note, that breaking even in benefit-cost terms may be an overly ambitious target for a program that has equity objectives in terms of helping displaced older workers. A key element of this analysis is that the transfer costs are netted out since, from a social perspective, they are a benefit for recipients and a cost for taxpayers, whatever the magnitude of the payment.

This report also looks at the program in a cost-effectiveness context in which the benefits and intangibles can be looked at as offsets relative to the transfer costs of the program. The cost-effectiveness perspective focuses on financial costs from the point of view of the governments that operate this program. Here, transfers that are not relevant from a social benefit-cost perspective are incorporated. These include the transfer costs in the

form of payments to participants as well as offsetting changes in other transfers, notably UI and social assistance.

The core results indicate that the NB Job Corps program does not pass either the benefit-cost test or the cost-effectiveness test if no weight is attached to the intangible benefits. It is argued that the design of the program is such that some significant weight should be attached to these benefits. In both cases, if even a relatively small weight is attached to what we have called the intangibles, the program then passes both tests. We cannot put this in more quantitative terms because these are essentially equity issues for which there are no analytical valuation methodologies.

# F. Cost-Benefit and Cost-Effectiveness Evaluation Questions

In developing answers to the evaluation questions dealing with benefit-cost and cost-effectiveness issues, program expenditures have been reviewed, in total and on a per participant basis. A brief overview of other Canadian programs directed to this target group have been reviewed. Based on a model that includes both participants and members of the comparison group, estimates of the impact of the program on the receipt of UI and social assistance by participants were developed. Key informant interviews, the case studies and the results of the survey of employer hosts also provided input to the analysis of the cost-effectiveness and cost-benefit issues.

In addition to the specific evaluation questions in the Terms of Reference, the proposal and Methodology Report referred to a series of more generic evaluation questions that are of particular relevance in assessing NB Job Corps. These questions reflect the view that the guaranteed annual income approach of NB Job Corps, implemented on the basis of income transfers, implies the requirement for a broader definition of program effectiveness. These questions are:

- 1) Is the program targeted efficiently in terms of helping those who are most in need?
- 2) Is the program adaptable and responsive to changing needs and circumstances?
- 3) Does the program work in the direction of efficiency, for example, in terms of work incentives?
- 4) Does the program provide benefits that are not seen as attaching a stigma to participants?

# G.P Overall and Comparative Cost-Effectiveness

In an assessment of cost-benefit and cost-effectiveness, the core issue is to determine effectiveness in meeting program objectives. These objectives, described in detail elsewhere in this report, focus on improving the environment, including local amenities and enhancing the quality of life. The results of this evaluation indicate the program appears to be succeeding against these objectives if any substantial weight is given to the sub-objective of improving the quality of life of participants. The program passes a cost-benefit and a cost-effectiveness test when relatively small value is assigned to this "equity" objective of the program. The final assessment is that the program objectives imply that the weight attached to the equity objective should be substantial. This reporting approach, however, is to highlight the equity role and its required contribution if the program is to pass tests of cost-effectiveness. Readers can then use their own values for these parameters to determine if the equity benefits are being achieved at a reasonable cost. From a comparative perspective, it does not appear that these *same* benefits could be achieved more cheaply through another type of program.

#### H. Measurement of Benefits and Costs

The standard tools of benefit-cost analysis have been applied to the assessment of NB Job Corps. Program benefits consist of the value of outputs produced during the active period plus the value of output from working in the inactive period. The value of non-market time is computed in the analysis to estimate "full income" which is the accepted benefit measure in this literature. Intangible benefits from program participation are discussed and calculated as the residual required to break even in cost-benefit terms.

In measuring program costs, the opportunity cost of participants, program administration costs, Blue Cross payments and host costs have been included. The transfer cost of payments to participants and CPP contributions are not included here because they represent transfers rather than real resource costs. The cost-effectiveness analysis that views this program from the point of view of government outlays does include these latter two cost items. The cost-effectiveness analysis also takes into account government savings in UI and social assistance.

The specific cost and benefit estimates calculated are shown in Chapter V of this report. Attention is called to the value of project output that is estimated to be an average of \$8,220 per participant. This estimate indicates that participants produce outputs of substantial value and as such, it plays an important role in the analysis. This estimate is derived from the employer host survey and verified through the case study results. In this regard, the program appears to have been successful in producing outputs of substantial value and this contributes importantly to overall achievement of program objectives.

In the cost-effectiveness and cost-benefit components of the analysis, per capita program administration costs of less than \$100 per participant were estimated. This is a relatively low cost even for a program for which the continuing administration primarily involves record-keeping and ensuring that payments are made.

With regard to the more generic evaluation questions, the findings which follow have resulted from this evaluation.

- 1) The program is operated at a reasonable level of administrative cost.
- 2) The program appears to be targeted effectively in terms of those who are most in need. The participants have a relatively low degree of pre-program employability and it is estimated that this would have declined even farther if participants had not been in the program.
- 3) The program appears to be adaptable and flexible in the dimensions that are relevant for its operation. In the case of NB Job Corps, this consists primarily of dealing with and replacing program exits.
- 4) The program does not have an explicit tax rate on earnings in the inactive period, subject only to some overall constraints on earnings. In spite of this low tax rate on earnings in the inactive period, there is little paid employment in the inactive period. This finding is in contrast to initial expectations about the incentive aspect of this feature of program design.
- 5) The program does produce benefits in a non-demeaning way while allowing participants to carry out meaningful and valuable work. This is a major component of objectives achievement.

#### I. Conclusions

The material which follows presents the conclusions from this interim evaluation of NB Job Corps within the context of the primary objectives for the program.

Objective #1: to provide a positive influence on the economic activities of the province through projects which enhance the environment and support community activities, and whose implementation serves to decrease short-term and medium-term demands on social support services, while providing an avenue for incremental work not accomplished by other workers.

The New Brunswick Job Corps program has had a positive economic impact on the province. The results of this evaluation show that outputs of substantial value were produced by participants. The report also documents that the program has been responsible for reduced demands on passive forms of income support. The increased

entitlement to CPP that the program generates will also be responsible for reduced future dependency on passive support programs.

In terms of the balance of benefits and costs, the program passes both the benefit-cost test and the cost-effectiveness test if relatively small values are attached to the benefits associated with greater self-esteem for participants. These benefits cannot be quantified directly and it is ultimately a policy decision to determine whether they are sufficiently large to justify continued expenditure in this area.

**Objective # 2:**to improve the general physical environment of communities, and to assist in the development of infrastructure projects which would not otherwise be possible in the absence of the program.

Information generated from the case studies and the survey of employer hosts, at two different points over the course of the program, has demonstrated that the work completed by participants has made a contribution to improving the general physical environment and has assisted in the development of projects which could not have been completed in the absence of program resources.

Objective # 3:to enhance the quality of life of individuals who have been deemed most in need, but unable to find work or take part in retraining, by providing the opportunity to contribute actively in socially beneficial work; enhancing quality of life refers to improvements in self-esteem, self-worth, feelings of contributing to society, health status, financial self-determination and general life satisfaction.

The analysis of data from a variety of sources has demonstrated that the program reached the specified target group, resulted in work which is perceived by all involved to be socially beneficial and demonstrated appreciable changes in the participant group which did not take place in the comparison group.

**Objective # 4:**to stimulate and engender a sense of belonging and contribution to the community, resulting in the potential for longer-term labour force or voluntary activity, community involvement and personal well-being of participants and family members.

NB Job Corps participants evidenced a sense of commitment to the community, participation in volunteer work, improvements in self-esteem and improvements in a general sense of well being over the course of their involvement with NB Job Corps.

The decision to continue NB Job Corps for the balance of its test period rests with the Treasury Board of Canada and the partner agencies. The results of the interim evaluation indicate that the program is on course, achieving its stated objectives and passing both the cost benefit and cost effectives tests. If these are the criteria on which program continuation is determined, NB Job Corps, there is justification to continue the program over the full course of its planned test period, per the Contribution Agreement.