

Tuition Relief and Early Learning: A Benefits Analysis



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Foreword

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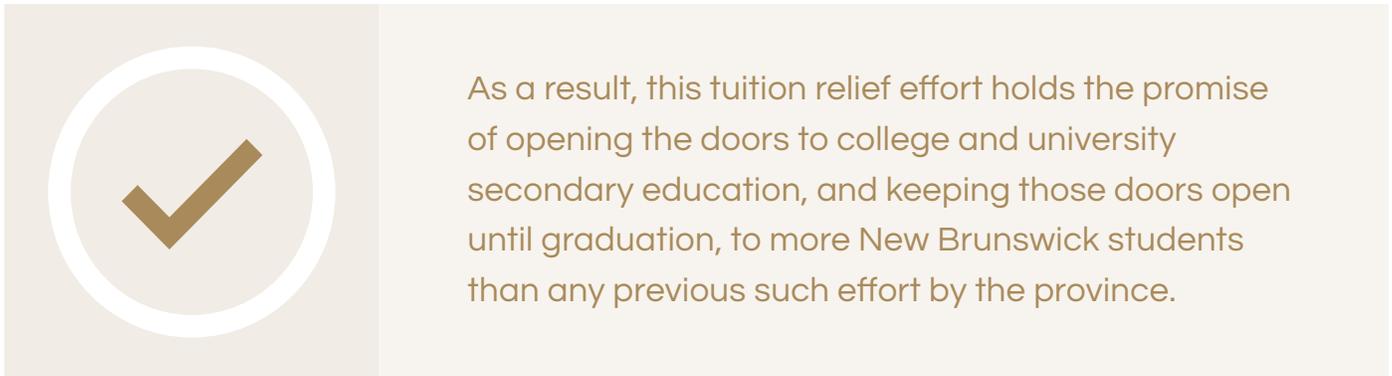
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Through the auspices of the New Brunswick Institute for Research, Data and Training (NB-IRDT), the provincial government is sponsoring a benefits study of two significant early intervention initiatives, namely the tuition relief program and early learning centre program. This longitudinal analysis by NB-IRDT to study the effectiveness of these two programs is important and noteworthy – and hopefully precedent setting – for many reasons.

First, let me comment on the two programs themselves. A necessary condition for success in the social services is good program design. In my long years in the field, I've observed that social services designed with an early intervention orientation and generous eligibility rules within an income tested regime are those most likely to improve outcomes for the targeted population.

The tuition relief program contains all of these design elements being composed of a free tuition component and a financial relief program for the middle class that is geared to income.



Likewise, the early learning centre program, with its emphasis on aggressively improving affordability while concurrently investing in the quality of the early learning environment, is also designed for success. In acknowledging the financial burden of childcare on low and middle income families, and, in fact, capping centre fees on an income-determined basis, the province will be giving record numbers of New Brunswick children the best chance of starting school ready to learn. As the research also underlines, quality early learning opportunities represent pathways to the economy for many parents and, accordingly, quality early learning centres represent one of the best poverty reduction (and poverty prevention) investments a government can make. So, like the tuition relief scheme, the early learning centre program has considerable upside from many perspectives.

However, while the design of these relatively new programs is cause for great hope, another necessary condition for success is rigorous implementation. This is easier said than done. We have seen other promising initiatives both within the province and elsewhere go off the rails when, in particular, implementation was not resourced or tracked adequately. How many times has the population been let down by programs, announced with excitement and confidence, that delivered disappointment?

This is the first reason why the Benefits Analysis being undertaken by NB-IRDT is important. It will be using de-identified administrative data from the very departments delivering the programs to assess their progress and effectiveness. In other words, the government is daring to have two of its flagship programs tracked and judged not after five or more years have elapsed and everyone has forgotten its origins and original

purposes but in real time from almost the beginning of the endeavor. Infusing the programs with this level of accountability is admirable and should frankly amount to regular practice across democratic governments everywhere.

The second reason is related to the first. In bringing NB-IRDT into the process at this relatively early stage, the provincial government has given itself a mechanism to adjust the two programs within a few years if its articulated expectations for everything from accessibility to financial impact on students or parents are not being met in whole or in part. Rarely in the social services are we able to make any adjustments mid-stream. As such, this Benefits Analysis initiative breaks that mold.

A further reason to appreciate this approach is that it is being conducted by a third party institute (NB-IRDT) and given the license to manage and report on the data in an “academic” way. Delegating programmatic assessment to an arms-length agency and inviting it to act in an independent manner will mean that the published results are reliable and free of political spin. This, in turn, will result in programmatic changes being driven by objective results and not partisan agendas.

While there are other reasons to be optimistic about the Benefits Analysis, I’ll suggest just one other. The metrics that will be used to determine success have both micro significance for students, parents and families and macro significance for the province. The former include actual program participation, performance of participants and their parents in labour market and completion of high school and post-secondary education of program participants and their parents. The latter envisage impacts of programs on population retention and on economic growth. In gathering and reporting on both the forest and the trees, the province is giving itself the right framework to evaluate the true returns on investment of the two programs.



I would add, in proposing a five year renewable mandate to examine program results, the province is bestowing upon itself a gift that may keep on giving for a long time.

I would add that the data generated by the Benefits Analysis, while extremely valuable on its own, would be complemented and deepened by the evidence generated by the commissioning of one or more randomized control studies that focus on efficacy of the two programs against a “services as usual” cohort.

My last point is this. In time, when NB-IRDT progress reports on the two programs are studied by the advocacy groups, professional organizations, watchdogs, parent and student associations, media, and the population at large, there may be an inclination to focus on the flaws. And, of course, the groups would be right to do so. However, they should not forget the developmental nature of the Benefits Analysis that has intentionally coded into its DNA the kind of feedback loop that will architect the pathway to program improvement. No program is perfect at its outset and we need mechanisms to course correct in the manner the Benefits Analysis is setting out to do. In other words, we need to encourage governments of every colour to put such mechanisms into place because it is the straightest route to improve population level outcomes and professionally manage precious tax dollars.



*James Hughes is the Executive Lead, Government and Partner Relations at the McConnell Foundation. He is the former Deputy Minister of Social Development for the Province of New Brunswick. His book, **Early Intervention** (James Lorimer & Company), on “How Canada’s social programs can work better, save lives and often save money” was published in May 2015.*

Our Rationale for this Study

With the right support, families, children and youth can build a strong and prosperous New Brunswick. Removing barriers to child care and education can empower parents and young people to build careers that allow them to invest in themselves and their communities. Creating pathways to early learning and post-secondary education will strengthen our society, expanding work opportunities for women and youth, enabling families and our province to thrive.

Canada's economy is growing. With our recent growth in real GDP, it's clear that New Brunswick is starting to follow this trend. Many companies are operating near capacity and are contemplating new investment and new hires to increase their bottom line. To nurture this growth, our economy needs a fresh supply of skilled workers from all sectors and all walks of life.

Bank of Canada Governor Stephen Poloz recently spoke of this opportunity at Queen's University's annual lecture in public finance in March 2018. He told students that clearing a path to work for women, youth and newcomers will fuel Canada's economic growth, pointing to provincial subsidies to child care as essential tools to encourage more people to join the workforce. Poloz estimated that tapping this supply of workers has the potential to boost Canada's output by 1.5 per cent, or about \$30 billion annually. Clearly, he said, this is a prize worth pursuing.

It is on this premise that the Government of New Brunswick has committed significant investments to early learning and post-secondary education. It's believed that increased accessibility to improved programs for infants and pre-school children, along with financial relief for post-secondary students, will lead to more

people in the workforce, with greater earning potential and less debt, supporting healthier families and children and an improved quality of life for all New Brunswickers.

The New Brunswick Institute for Research, Data and Training (NB-IRDT) is supporting efforts to gain a better understanding of the benefits of these investments. NB-IRDT is a research institute at the University of New Brunswick that carries out evidence-based research to provide government, academics and researchers with reliable information to inform decisions that affect New Brunswickers.

The *Tuition Relief and Early Learning: A Benefits Analysis* study will harness data to provide provincial decision-makers with evidence-based research that tracks both program performance and the benefits they provide to children and families in terms of health and wealth, as well as gains to New Brunswick as a whole.

The two flagship initiatives identified for this study include programs launched since 2016 that provide tuition relief for post-secondary education students and early learning supports for preschool-aged children and their parents.

For post-secondary students, New Brunswick's Free Tuition program offers just that: free public university and community college tuition for students with household earnings of less than \$60,000. Through the Tuition Relief for the Middle Class, bursaries are offered to students with household earnings above \$60,000. The programs are designed to encourage lower income students to acquire the skills they need for higher-paying jobs, and to ease the tuition burden.

TUITION RELIEF PROGRAMS HAVE THE POTENTIAL TO SUPPORT STUDENTS IN LARGE NUMBERS.



The provincial government estimates that approximately 77 percent of student financial assistance recipients attending publicly funded universities or colleges in New Brunswick in the 2017-2018 academic year **qualified for the Free Tuition Program or Tuition Relief for the Middle Class**



That amounts to 6283 **students qualifying for the Free Tuition Program**



and 1424 **students who were eligible for the Tuition Relief for the Middle Class** in the 2017-2018 school year

The New Brunswick Early Learning Centre designation, launched in 2017, is part of New Brunswick's 10-year education plan that includes school readiness as an objective, ensuring that all preschool-aged children develop the skills they need to succeed in school and life. This program will improve the quality and accessibility of affordable child care with investments in training and learning environments, additional spaces for infants and preschool children, and most significantly, subsidies for parents.



The program ensures that families with an annual gross income under \$37,500 will have access to free child care. Additionally, the program offers subsidies to middle income earners on a sliding scale and ensures that no family in New Brunswick will pay more than 20 per cent of their gross income to cover child care costs while their child is attending a designated New Brunswick Early Learning Centre. These investments will support parents attending work and school while ensuring their children are in nurturing, responsive, high-quality learning environments. These programs are being rolled out as pilots in Saint John and Edmundston, with full provincial implementation planned for 2019.

Since launching in March 2018, the pilot programs are experiencing good participation. In Edmundston and Saint John, 51 daycares have been designated as New Brunswick Early Learning Centres (NB-ELC), with 185 parents taking advantage of free child care and 290 parents benefiting from improved subsidies.

As government continues to collect and share qualitative and anecdotal evidence to better understand benefits of these programs, the NB-IRDT study will supply data-based evaluation tracking the overall success of participants over a long period of time using a number of indicators. This research will provide decision makers with a unique view of program benefits and help focus future investments in areas demonstrated to provide the greatest gains for children and New Brunswick as a whole.

STARTING THIS YEAR, NB-IRDT RESEARCHERS WILL USE DATA THAT HAS BEEN STRIPPED OF ALL DIRECT IDENTIFIERS TO MEASURE THE FOLLOWING INDICATORS AND OUTCOMES OVER THE NEXT FIVE YEARS AND BEYOND:

- Actual program participation in tuition relief and early learning programs
 - Performance of program participants and/or their parents in the New Brunswick labour market
 - Completion of high school and post-secondary education of program participants and/or their parents
 - Social assistance receipt of program participants and/or their parents
 - Mental and physical health of program participants and/or their parents
 - Earnings and employment trajectory of program participants and/or their parents
 - Impacts of programs on population retention and mobility
 - Impacts of programs on economic growth
-

NB-IRDT will look for patterns and make connections that help forecast future benefits and support government in improving programs to achieve specific objectives.

Among other things, this research will answer fundamental questions. What is the effect of affordable and quality childcare on a parent’s ability to leave social assistance, work and be healthy? How does tuition relief influence a university graduate’s future earnings and impact their ability to stay in New Brunswick and work? What is the effect of these programs on the mental and physical health of participants? In the long, long-term, this research will build a body of evidence supporting and directing policies that support lifelong learning, improved productivity, health, wealth and employment for all New Brunswickers.



In this way, government is developing better decision-making to support families, children and youth in building a more prosperous and successful New Brunswick.

About the New Brunswick Institute for Research, Data and Training

NB-IRDT was established in early 2015 through the collaboration of many New Brunswick government departments including the Department of Health; the Executive Council Office; Post-secondary Education, Training and Labour; Education and Early Childhood Development; and Social Development. Its creation was funded by the Canada Foundation for Innovation and the Province of New Brunswick, and its continued operation will be supported by the Province of New Brunswick as well as by awards from CIHR, NBHRF, and other organizations.

NB-IRDT WAS CREATED TO:

- Effectively provide researchers with access to prepared administrative data from which all direct identifiers have been stripped in a secure, controlled environment, to ensure the protection of personal privacy of New Brunswickers
 - Conduct policy relevant research to support informed and effective government decision-making
 - Expand and support data stewardship and preservation
 - Support and contribute to effective knowledge dissemination
 - Develop research capacity through training
 - Be an integral part of the research infrastructure for the Province of New Brunswick
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The institute uses safeguards to ensure privacy protection and the security of data of New Brunswick citizens. To protect this privacy, the data received has all direct identifiers — names, Medicare numbers and addresses – removed. Instead, each file is given a unique number that allows NB-IRDT to link data originating from departments, which serves to expand the scope of research. Privacy is further protected by restricting access to this information. The information is held in a highly secure facility, and the information cannot be accessed from outside the NB-IRDT lab. Each researcher who wishes to access these data goes through a thorough application process to ensure every New Brunswicker’s privacy is protected.



The institute is led by Dr. Ted McDonald and staffed by approximately 16 researchers, privacy experts and data analysts.

Dr. McDonald is a Professor of Economics at the University of New Brunswick in Fredericton. He holds a Ph.D. and a Master of Commerce in Economics from the University of Melbourne. He is the Academic Director of the NB Research Data Centre, the Director of the NB Institute for Research, Data and Training and the New Brunswick lead for the Maritime SPOR SUPPORT Unit. His main areas of research and expertise include the health status and health services use of immigrants, rural residents, minority groups and other subpopulations, as well as an ongoing program of research on the socioeconomic and demographic determinants of cancer. He has also researched extensively on immigrant labour market issues. He has published his work in a broad range of academic journals including Social Science and Medicine, Canadian Journal of Economics, Canadian Public Policy, Oral Oncology, Thyroid, and the Canadian Journal on Aging.

Five-Year NB-IRDT and GNB Benefits Analysis Work Plan

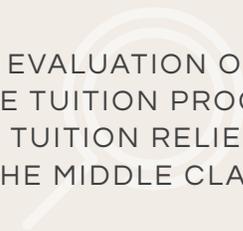
The Government of New Brunswick and the New Brunswick Institute for Research, Data, and Training (NB-IRDT) have agreed to a 5-year partnership to conduct research on topics relevant to Free Tuition and Tuition Relief for the Middle Class programs of the Department of Post-Secondary Education, Training and Labour, along with research on Education and Early Childhood Development (EECD) department programs related to Early Learning Centres and child care assistance for families.

In each of the five years, the Government of New Brunswick and NB-IRDT will come to an agreement on research priorities for the year including possible initiation of new projects.

THE PARTIES HAVE AGREED THAT RESEARCH WILL FOCUS ON TWO AREAS:



SHORT- AND LONG-
TERM IMPACTS OF EARLY
LEARNING CENTRES



EVALUATION OF
FREE TUITION PROGRAM
AND TUITION RELIEF FOR
THE MIDDLE CLASS

NB-IRDT currently houses several datasets of relevance to these projects including several datasets from the Department of Health. However, in some cases, data will need to be obtained from government departments including EECD, Post-Secondary Education, Training and Labour (PETL), and Social Development (SD).



The purpose of this section is to provide a preliminary work plan for the five years of work on these two projects. This section provides a brief description of each project along with its key indicators and data requirements, as well as proposed timelines for accomplishing key milestones. Naturally, analysis of specific data series depends on having access to the data.

Annual reports to record findings to date would be prepared in each year of the agreement. As described below, some indicators will be available immediately (e.g. program participation, parent's labour force attachment), while other longer-term indicators (e.g. children's attendance at post-secondary education, PSE) may not be available until several years have elapsed. The annual report will contain information on all available indicators. These statistics may evolve over time. Thus, findings will not be finalized until the final report at the end of the fifth year of research. The possibility also exists of extending the research partnership beyond the initial five years, as some of the longer-term measures of program success will continue to become available over this longer period.

NB-IRDT will provide quarterly progress reports in meetings with a project steering committee. This will include updates of work completed to date, as well as updates to the plan of work going forward.

NB-IRDT will organize and host a knowledge transfer event for the relevant government departments that will involve presentation of results from projects commissioned during the fiscal year plus presentations from selected keynote speakers who have conducted research on topics related to the commissioned projects.

IMPACTS OF EARLY LEARNING CENTRES



New Brunswick's early learning and child care system is being transformed to offer higher quality services that are universally accessible and affordable to all families and children.

Between March 2018 to April 2019, the Government of New Brunswick will rolling out the new designation of New Brunswick Early Learning Centres (NBELC's). The designated centres will offer services to preschool children aged five and under with the aim of offering equitable and affordable access to high-quality early learning and child care services by removing barriers linked to family income, children's abilities and needs, language and minority settings.

Improved parent subsidies within the New Brunswick Early Learning Centres will help make quality child care more affordable and accessible for low to middle income families who are either working or attending school. As such, families with an annual gross income under \$37,500 will have access to free child care. Families with annual gross incomes of over \$37,500 will have access to improved subsidies on a sliding scale. No family in New Brunswick will pay more than 20 per cent of their gross annual family income to cover child care costs while their child is attending a New Brunswick Early Learning Centre.

The research project is aimed at evaluating the impact of these new interventions by measuring a series of indicators over the next five or more years. The tables below lay out the indicators that NB-IRDT will track. These are loosely categorized by the expected amount of time before the indicators will be measurable.

KEY INDICATORS AND REQUIRED DATA

	INDICATOR	PRIMARY DATA SOURCE
SHORT TERM (program years 1-3 and ongoing)	Program Participation	Participation data from the Department of Education and Early Childhood Development (EECD)
	Labour market participation of parent(s)	Labour force survey data from Statistics Canada
	Parental participation in Post-secondary Education	Participation data from Maritime Provinces Higher Education Commission (MPHEC)
	Fertility	Birth records from Vital Statistics
	Population retention/mobility	Medicare registration status from the Citizen Database
MEDIUM TERM (program years 3-5 and ongoing)	School literacy, numeracy and other academic measures	Standardized testing scores from EECD
	Social assistance receipt of parent(s)	Program data from the Department of Social Development (SD)
	Earnings and employment of parent(s)	Income data from Statistics Canada's Secure Data Linkage Environment
LONGER TERM (program years 5 and ongoing)	High school completion of children	Student data from EECD
	Transition into and completion of post-secondary education	Student data from EECD and Post-secondary Education, Training and Labour (PETL)
	Earnings trajectories and earnings mobility of parent(s)	Income data from Statistics Canada's Secure Data Linkage Environment
	Mental and physical health of children and parent(s)	Hospital and other health records from the Department of Health (DH)
	Population mobility	Medicare registration status from the Citizen Database
	Economic growth	Measures of economic activity from Statistics Canada
	Earnings and employment outcomes of children once they reach adulthood	Income data from Statistics Canada's Secure Data Linkage Environment
	Cost benefit analysis of the investment	Combination of above measures

MAJOR MILESTONES AND TIMELINES

	2018/19	2019/20	2020/21	2021/22	2022/23
DATA DEVELOPMENT					
Support EECD in: - crosswalk process - privacy review (PIA)	X				
Development of data sharing agreements between the University of New Brunswick (UNB) and EECD for transfer of daycare and other relevant datasets	X				
Transfer of EECD data to NB-IRDT	X	X			
Development of data documentation for EECD program data	X	X	X		

RESEARCH					
Literature review of subsidized daycare programs	X				
Analysis of Short-term indicators	X	X	X	X	X
Analysis of Medium-term indicators			X	X	X
Analysis of Long-term indicators				X	X
Annual report with research findings to date	X	X	X	X	X

EVALUATION OF FREE TUITION PROGRAM AND TUITION RELIEF FOR THE MIDDLE CLASS

The Free Tuition Program (FTP) is designed to help post-secondary education students by providing more upfront bursary funding to students from families with the greatest financial need. The Free Tuition Program, which began Aug. 1, 2016, is targeted at full-time students at publicly funded New Brunswick universities and colleges, whose family incomes are below \$60,000. It provides bursaries up to the full cost of tuition. Similarly, Tuition Relief for the Middle Class (TRMC), which began the following year (Aug. 1, 2017) provides upfront financial assistance to full-time students whose family incomes are above \$60,000. The amount received is based on family income and family size.

The research project will seek to evaluate the combined programs by tracking a series of indicators. The intention is to measure the overall value of government's investment in these programs. Thus, NB-IRDT will track program participants from the moment they enter the new programs for multiple years, as some of their outcomes (e.g. employment and labour market income) will not be observable until the program participants have graduated and entered the labour force. The table below shows the timelines for when the programs were implemented and when graduates will likely be completing their degrees and entering the labour force.

	FTP	TRMC
Program Inception	Aug 2016	Aug 2017
Earliest College graduates	Aug 2018	Aug 2019
Earliest University graduates	May 2020	May 2021

The indicators to be measured are listed below and are roughly grouped according to the length of time before they will be possible to measure.

KEY INDICATORS AND REQUIRED DATA

	INDICATOR	PRIMARY DATA SOURCE
SHORT TERM (program years 1-3 and ongoing)	Program participation	Participation data from PETL
	Field of study or training	Program of study from PETL
	Labour market participation and unemployment of high school graduates	Labour force survey and Census data from Statistics Canada
	Retention in higher education	Higher education participation data from MPHEC
MEDIUM TERM (program years 3-5 and ongoing)	Higher education completion	Higher education participation and completion data from MPHEC
	Social assistance receipt after graduation	Program data from SD
	Earnings and employment outcomes after graduation	Income data from Statistics Canada's Secure Data Linkage Environment
	Population retention	Medicare registration status from the Citizen Database
LONGER TERM (program years 5 and ongoing)	Earnings trajectories and earnings mobility	Income data from Statistics Canada's Secure Data Linkage Environment
	Mental and physical health	Hospital and other health records from the Department of Health (DH)
	Population mobility	Medicare registration status from the Citizen Database
	Economic growth	Publicly available measures of economic activity from Statistics Canada

MAJOR MILESTONES AND TIMELINES

	2018/19	2019/20	2020/21	2021/22	2022/23
DATA DEVELOPMENT					
Support PETL and SD in: - crosswalk process - privacy review (PIA)	X				
Development of data sharing agreements between UNB, PETL and SD for transfer of FTP, TRMC, and SA and other relevant datasets	X				
Development of data sharing agreements between UNB and SD for transfer of SA data and other relevant datasets	X				
Transfer of PETL data to NB-IRDT Transfer of SD data to NB-IRDT	X				
Development of data documentation for PETL program data	X				
Development of data documentation for SD data	X				
RESEARCH					
Literature review on PSE “free tuition” programs and tuition tax credits	X				
Analysis of Short-term indicators	X	X	X	X	X
Analysis of Medium-term indicators			X	X	X
Analysis of Long-term indicators				X	X
Annual report with research findings to date	X	X	X	X	X