



An Untapped Labour Market Pool

Economic Impact Assessment of Disability and Employment

New Brunswick, Canada

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Contact

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Executive Summary

Persons with disabilities represent a significant labour supply pool which remains unduly constrained—a fact worth noting in a landscape of emerging chronic labour supply shortages. Many persons with disabilities are able and willing to engage in competitive employment yet experience difficulties in their attempts to do so on account of sincere but inaccurate views about their work-related abilities and the restrictive structures and cultures of many disability support programs.

Across Canada, social assistance disability income expenditures are growing faster than those of any other program, suggesting a ‘welfarization of disability’. This development is concerning as labour force participation and employment are not only of benefit to regional economic development but also to a sense of self-determination among individuals. In light of this, there is growing interest across stakeholders to transition disability support programs from a framework of income-support to one of employment-support.

Earlier research has explored the personal benefits of such a transition and this current research is among the first to assess the regional economic impacts thereof. Data from the New Brunswick landscape suggest that, with proper accommodations and supports, and over time, persons with disabilities could demonstrate labour market dynamics similar to those demonstrated by persons without disabilities. This would equate to (re-)integrating 21,318 persons with disabilities into the active labour force. Doing so could bring about total annual economic impacts within the province of up-to 29,705 full-time equivalent employment positions spread across all industry sectors and regions; \$1.38 billion in total labour income; \$1.97 billion in total GDP contributions; and over \$220 million in total provincial taxation revenues.

Included herein, case summaries of individuals representing all types and severities of disabilities in New Brunswick demonstrate that such a transition is an opportunity to fulfill personal and professional aspirations and to engender substantial regional economic benefits. In the case of these 15 individuals, they could generate up-to a five-fold increase in total employment and over an eight-fold increase in total labour income, total GDP, and provincial taxation revenue as they transition from their current to their desired labour market experiences

Having assessed the anticipated economic impacts of supporting the enhanced (re-)integration of persons with disabilities into the active labour force in New Brunswick this research closes with a consideration to incrementally pursue the further development of an employment-support framework in New Brunswick concurrent to additional research and evaluation. Although the current disability support programs within New Brunswick are predominantly developed within an income-support framework, certain programs, and certain aspects of certain programs do nonetheless focus on supporting the (re-)entry and retention of persons with disabilities in the provincial labour force—and notably more so than even only five years ago.

KEY FINDINGS

Enhanced labour force participation by persons with disabilities in New Brunswick could result in up-to:

- 29,705 Full-time equivalent positions;
- \$1.38 Billion in total annual labour income;
- \$1.97 billion in total annual GDP;
- \$220 Million in annual provincial tax revenue.

This incremental development of an employment-support framework in New Brunswick could continue as more focused research is undertaken. Such development can occur in an iterative manner while nonetheless catalyzing economic benefits at every step of the way following a four-stage process through Program Modifications; New Program Development; Shifting Ideologies; and Concerted Community Development. Even completing only the first stage of the process, while additional research is completed, would nonetheless result in the additional development of up-to 5,941 full-time equivalent employment positions, \$275 million in total labour income, \$394 million in total GDP contributions, and \$44 million in total taxation revenue within New Brunswick.

Moving forward is dependent upon further research and evaluation. More specifically, the structure and culture of the desired framework and landscape of disability and employment programs must be explicitly detailed; a trajectory to transition to this desired framework and landscape must be identified; and the costs associated with pursuing this trajectory must be assessed and weighed against the anticipated benefits. With highlights from this current research, this next stage should consider current and desired disability and employment programs with a perspective addressing, although not exclusively, the following elements:

1. **Diagnostic Services:** A clear and timely identification and assessment (diagnosis) of a disability is instrumental in developing lifestyle adaptations, rehabilitations, and new skill developments.
2. **Cultural Awareness:** Support programs must focus not only on persons with disabilities but also on the broader cultural awareness of the societies these individuals are members of.
3. **Education as Precursor to Employment:** The education and disability dynamic may be as dislocated as is the employment and disability dynamic; and although the latter may be the focus of employment-support programs it nonetheless remains dependent upon the former.
4. **Awareness and Accessibility of Support Services:** Disability support programs are of little value if the potential beneficiaries are not aware of their existence or find them inaccessible.
5. **Employer Involvement and Participation:** The (re-)integration of persons with disabilities into the New Brunswick labour force will depend not only upon the work-readiness of labour supply but equally upon the understandings, perceptions, and accommodations of employers (when excluding cases of self-employment).
6. **Inter-Departmental Approach:** An individual must trust that by engaging any one government department or program they are engaging all departments and programs.
7. **Extending Support Program Timelines:** The goal of employment-support programs is not only to assist persons with disabilities in achieving employment but also in maintaining employment.
8. **Revision of Means-Testing of Benefits:** Means-testing should not penalize individuals undertaking an iterative transition into competitive employment.
9. **Ancillary Services to Employment:** Elements such as child care, transportation, health and personal care, and so on may present differently to persons with and without disabilities.

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About This Report

This report is commissioned by Ability New Brunswick and prepared by Tacit Enterprises Inc. This research project has benefited from continued and meaningful engagement with and by a group of dedicated stakeholders comprised of community organizations and provincial government departments active in the disability support landscape in New Brunswick, including:

- Ability New Brunswick
- Canadian Mental Health Association New Brunswick
- CNIB Foundation—New Brunswick
- Government of New Brunswick, Department of Social Development
- New Brunswick Deaf & Hard of Hearing Services
- Government of New Brunswick, Department of Post-Secondary Education, Training & Labour
- New Brunswick Association of Community Living
- Government of New Brunswick, Department of Finance
- Learning Disabilities Association of New Brunswick

The research presented herein is the most recent contribution in an on-going research agenda exploring the most inclusive, effective, and efficient manner to develop and support a provincial landscape of disability support programs in New Brunswick, Canada. This research is presented not as conclusive opinion and judgement but rather as a considered contribution within an evolving discussion.

This report is prepared and intended as a reference document. The framing, methodology, summary, and findings of the research process are presented herein in full detail and it is anticipated that that contributing and associated stakeholders will selectively pull elements from this report for more targeted public engagement initiatives and communications. The public availability of this report should be understood as a consideration toward transparency and inclusivity within a process of evidence-based policy development and not as an assumption that this report—in its full and present format—should be engaging at a broad public scale.

About Us

Tacit Enterprises Inc., also known by our registered brand of Tacit Elements, is a research and strategy advisory firm based in Fredericton, N.B., and incorporated under the laws of the Province of New Brunswick. Our dedicated research and engagements have taught our team that the economic and social spheres of modern life are truly inseparable. This creates a dynamic landscape of market opportunities, risks, and realities. We are a full-service firm helping established businesses, new ventures, government agencies and departments, and non-profit organizations research, develop, and implement strategies to be successful and resilient in this ever-changing market setting.

Building from theoretical economic and business models which strive to explain how markets and society should operate, we further rely on real-world data, engagements, and observations from our unique systems approach to gain insight into how markets and society actually operate. These insights provide our clients with a distinct competitive advantage in the fields of research, market intelligence, business planning and development, and public engagement.

To learn more about our unique systems-perspective methodology, please visit us at www.TacitElements.com.



Section One: Introduction

1.1 Introduction

A welfare state, of which Canada prides itself in being, builds from the fundamental principle that the well-being of any member of society should be of concern to all members of society. Programs and policies which are designed to enhance and/or ensure the well-being and financial security of individuals across Canada and which are funded collectively by members of society—and which are commonly referred to as public safety-nets—have proliferated since the Great Wars of the early twentieth century.

In this landscape of public programs, those directed toward the assistance and support of persons with disabilities remain of particular interest. Such disability support programs have shifted in form and function more frequently and more acutely than perhaps any other sub-set of programs as the understanding of disabilities and the perceived inclusion of persons with disabilities in society have evolved over time.

There are now at least eight direct and focused public disability support programs in operation across Canada and the Provinces, with more being explored as pilot projects for further research and development, and each with varying degrees of disability definitions, eligibility, and benefitsⁱ. Yet at the beginning of the 21st century, social assistance disability income expenditures were growing faster than those of any other program, suggesting a ‘welfarization of disability’ⁱⁱ. In this sense, it may be easier for a person with disabilities to receive support, albeit limited, if they renounce rather than strive for employment.

This development is concerning as labour force participation and employment are not only of concern for regional economic development but also for a sense of self-determination among persons with disabilitiesⁱⁱⁱ. In this light, there is growing interest across a variety of stakeholders in transitioning disability support programs from a framework of income-support to one of employment-support^{iv}.

Within the former, individuals who are unable (or simply presumed to be unable) to integrate and operate within a labour market setting—a setting which has notably been designed and developed by and for persons without disabilities—are provided basic material, financial, and/or personal assistance so as to achieve a lifestyle reflective of one commensurate with earning a basic and minimum income. Within the latter, in contrast, it is accepted that many persons with disabilities are able and aspiring to (re-)enter the competitive labour force and some of these individuals may require skill development, training, rehabilitation, cultural awareness, workplace accommodations, and/or other supports, however all such conditions are perceived as being achievable within a regional economy and labour market which is far more flexible and adaptable than has previously been acknowledged.

Such a transition has been proceeding slowly over the last few decades^v as empirical research supporting such a transition has been slow to be developed at a scale and scope material to public policy decision-makers. Most research to date has focused on the impacts of a transition from income-support to employment-support programs for beneficiaries of disability support programs—or, at a micro-economic scale—yet very little has yet to consider the regional economic impacts of such a transition—or, at a macro-economic scale. As with most elements of public policy, macro-economic considerations typically carry more weight than do micro-economic experiences.

This report contributes to the discussion of transitioning disability support programs from a framework of income-support to one of employment-support by explicitly investigating the regional economic impacts of undertaking such a transition within the provincial jurisdiction and economy of New Brunswick, Canada. This research is founded on a tiered premise in that:

1. Such a transition could be beneficial to persons with disabilities, as demonstrated by previous research, which is reviewed below;
2. However, the most efficient and effective trajectory to undertake such a transition cannot be suitably determined without first conducting a series of cost-benefit analyses of the numerous and various potential development trajectories and objectives;
3. Lastly, such cost-benefit analyses cannot be performed without first identifying the regional economic impacts to be anticipated should such a transition be developed.

Clearly there is an inter-dependence within the research pertinent to the development of employment-support programs for persons with disabilities. This current research seeks to introduce a discussion of the macro-economic concerns to the already established discussion of micro-economic experiences in the anticipation that both streams will subsequently be engaged to undertake appropriate cost-benefit analyses required to critically examine and potentially develop such a transition.

Accepting that employment-support programs have positive impacts for beneficiaries, of greatest interest at this time comes the question as to the nature, scope, and scale of the regional economic impacts of transitioning from an income-support to an employment-support framework for disability support programs. Today, few would argue that a greater number of persons with disabilities have the potential—that being the ability and the desire—to be employed than are currently employed. Yet, few would also be in a position to be able to discuss the potential economic impacts of the enhanced labour force participation of persons with disabilities. This current research is an effort to contribute to, and catalyze, this much needed discussion. It should also be noted, however, that this current research is also but one step in a broader research agenda exploring the most efficient manner to develop and support disability support programs and the transition toward an employment-support

framework in particular should such a transition be determined to be advisable upon consideration of this current research.

To this end, **Section Two** provides an overview of the methodology employed throughout this research engagement. The impacts of transitioning from a framework of income-support to one of employment-support are anticipated to materialize at the macro-economic scale as influenced by the micro-economic scale and hence a mixed-methods approach is employed to most efficiently assess and reflect these varied impacts. This approach engages a review and extrapolation of descriptive statistics, the development of an input-output economic modelling process to assess macro-economic impacts at a provincial scale, and the development of 15 case summaries of distinct persons with disabilities seeking to (re-)enter the New Brunswick labour force.

The analysis and extrapolation of descriptive statistics allows for the development of a more detailed input-output modelling process, the results of which are presented in **Section Three**. The input-output modelling process is premised on identifying and quantifying the interconnections and interdependencies among and between the various components and entities comprising the New Brunswick provincial economy. This modelling process demonstrates how enhancing the labour force participation of persons with disabilities could lead to impacts of up to \$1.9 billion in annual GDP for the Province of New Brunswick along with \$1.38 billion in additional total labour income and nearly \$220 million in additional taxation revenues to the provincial and municipal jurisdictions.

Building from this analysis of macro-economic impacts, **Section Four** introduces additional context by providing a series of 15 case summaries of the experiences of distinct persons with disabilities seeking to (re-)enter the New Brunswick labour force. These case summaries provide insight into the variety of labour market settings these individuals have experienced as well as the variety of settings they would prefer to experience. Not only do the individuals in these case summaries demonstrate a clear willingness and ability to work, but also a set of shared obstacles and challenges across all types and severities of disabilities to doing so.

The report provides a more detailed discussion of aggregated findings and observations in **Section Five**, along with considerations for continued research and development in **Section Six**.

1.2 Research Context

Disability support programs have long operated within a framework of income-support. In this setting, individuals who are unable (or simply presumed to be unable) to integrate and operate within a labour market setting—a setting which has notably been designed and developed by and for persons without disabilities—are provided basic material, financial, and/or personal assistance so as to achieve a lifestyle reflective of one commensurate with earning a basic and minimum income.

A landscape of disability support programs developed within an income-support framework does not necessarily exclude elements of employment-support but rather largely perceives the labour force participation of persons with disabilities as a potential secondary benefit rather than as a primary objective. Such a framework largely discounts the possibility of persons with disabilities participating in the labour force even prior to considering how this latter could perhaps be adjusted to be more inclusive of these former. In effect, this framework presupposes an immutability of the labour market and economic landscape in favour of expected mutability by those individuals not able to engage therein.

Two principal disadvantages of this income-support framework have become increasingly apparent, one relating to economic development and one to personal development. Relating to economic development, this income-support framework has constrained the expansion of regional labour forces at a time when labour demand is increasing. In Canada, as in elsewhere throughout Western market-based economies, an ageing population combined with declining birth rates, stagnant productivity rates, and increasing consumer and industrial demand create an economic landscape wherein development is now constrained by the availability of labour supply. In this setting, the income-support framework which serves to discourage individuals with the potential to work from actually joining the labour force is increasingly perceived not only as a disservice to these individuals but also to the regional economy more broadly.

Relating to personal development, this income-support framework has concomitantly served to significantly constrain individuals' rights to self-determination. At issue is the premise that persons with disabilities will be materially and financially supported at a prescribed basic level if they are determined to be unable to engage in the labour force even if they would prefer to so engage. Rather than seek flexibility within the labour market, this framework imposes the abandonment of personal ambition upon those same individuals it seeks to assist.

Compounding this scenario is the fact that most disability support programs operating under this income-support framework are means-tested. This creates a situation wherein a person with disabilities seeking to participate in the labour force could experience a substantial or absolute withdrawal of material and/or financial assistance upon engaging in even only marginal levels of competitive employment. In this sense, a person with disabilities must decide between denying their personal aspirations in their desired field of employment while accepting basic levels of prescribed

material and financial assistance on the one hand or of pursuing their employment aspirations within a labour market rife with obstacles with the assured withdrawal of most or all material and financial assistance on the other. The income-support framework, as developed to date, provides little compromise between these two contrasting trajectories and it does so at the expense of the self-determination of many persons with disabilities.

As such, and although not of original intention, disability support programs developed within an income-support framework often serve to exclude persons with disabilities from regional labour markets; such a development leads to social segregation and long-term dependence^{vi}. In light of this, what was once a ripple of advocacy has grown to a wave of change as varied interests are now converging in support of actually enhancing the labour force participation of persons with disabilities and transitioning away from an income-support framework when possible. From concern for regional economic development and labour force expansion to the desire to grow toward a more inclusive socio-economic setting with respect for self-determination for all, the position that persons with disabilities cannot or should not participate in the labour force is increasingly being vacated.

In addressing these above concerns relating to the income-support framework, stakeholders have increasingly been advocating for, and developing, disability support programs which operate within what could be called an employment-support framework. Programs operating within this framework are also popularly referred to as vocational rehabilitation, with variations of Employment First programs being the most widely recognized^{vii}. This framework operates by accepting that many persons with disabilities are able and aspiring to (re-)enter the competitive labour force. Some of these individuals may require appropriate skill development, training, rehabilitation, cultural awareness, workplace accommodations, and/or other supports, however, all such conditions are perceived by proponents of the employment-support framework as being achievable within a regional economy and labour market far more flexible and adaptable than has previously been acknowledged.

The employment-support framework is not a replacement of income-support programs altogether but rather a complement—it is not assumed that all persons with disabilities are able or willing to meaningfully participate within a regional labour force even with substantial support and accommodations but rather that many more individuals are able to do so than currently do so. In this perspective, income-support programs would remain available, although with a notable decrease in client demand, for those of whom labour force participation, even when accommodated, would simply not be possible. Employment-support programs are premised on the notion of supporting the integration of persons with disabilities within the competitive labour force first and foremost and only secondarily turning to income-support programs if and when necessary, hence the popular name of 'Employment First' programs within this framework.

The transition from disability support programs within a framework of income-support to one of employment-support is implicitly underway. Many community stakeholder organizations, state and provincial governments, and national governmental departments and agencies have initiated pilot projects and/or full-scale developments of such programs. The Federal Government of Canada, along

with the participation of national and provincial stakeholders, has recently announced a second phase of research and development support for the nation-wide Ready, Willing, and Able program which is an Employment-First program for individuals with an intellectual disability or Autism Spectrum Disorder^{viii}. It is anticipated that the continuation of this program, along with appropriate monitoring and evaluation, could lead to similarly-styled programs expanding to include all disability types as well as to potentially be emulated by provincial governments within their respective jurisdictions.

The transition from an income-support to employment-support framework, or the development of the latter to complement the former, is largely proceeding in incremental steps as evidence of the impacts of consequences of such are sought. In this frame, such a transition could have significant impacts at two principal scales; the first being the personal and professional development of individuals engaged in such disability support programs (or micro-economic scale), and the second being the regional economy wherein these individuals are increasingly integrating into the labour force (or macro-economic scale).

To date, research investigating the impacts of employment-support programs has largely remained focused on the experiences of persons with disabilities engaging with such programs, or at the micro-economic scale. Early studies suggest that persons with mental health-related disabilities participating in employment-support programs demonstrated significantly improved employment outcomes over one to two years when compared to similarly-positioned individuals in traditional income-support programs. Participants in competitive employment reported longer average employment tenure as well as improvements to self-esteem, hope, relationships, and control over substance abuse^{ix}. Other similar research investigating the success of employment-support programs for persons with physical disabilities also find that these individuals reported positive long-term labour market experiences which are estimated to exceed the cost of providing the services themselves^x.

With evidence from Norway, employment-support programs have been documented to be more effective in raising employment among persons with disabilities compared to the more traditional approach of sheltered employment. Properly designed programs—with an emphasis on being properly designed as not all programs are equally successful in their outcomes—with a rapid supported placement in a competitive employment position can lead to longer-term engagement in such employment whereas sheltered employment may actually reduce the likelihood of transitioning toward a competitive employment position^{xi}.

Comparable programs in Sweden have long demonstrated similar employment and income effects while also demonstrating positive effects on participants' long-term health status noting that, from a societal perspective, the social and health-related benefits of vocational rehabilitation programs may be more valued than the economic efficiency of such^{xii}. Within the USA landscape, employment-support programs have also demonstrated superior impacts on employment outcomes and the earnings profiles of clients; and although a full-scale cost-benefit analysis remains elusive at this point, these same programs do demonstrate positive trends in public finances through additional tax revenues and reductions in public benefits to participants^{xiii}.

Benefits of employment-support accrue not only to the employed persons with disabilities but to the employers as well. A meta-analysis suggests that persons with disabilities engaged in competitive employment benefit from improved quality of life, enhanced income, enhanced self-confidence, expanded social network, and a more developed sense of community. The employer partners in these relationships also benefit in the guise of improvements to competitive advantages and profitability by means of enhanced company image and goodwill; reduced employee turnover and enhanced employee reliability, punctuality, and loyalty; customer diversification and loyalty; enhanced innovation and productivity; and improved work ethic, safety, and culture^{xiv}.

Employers who make accommodations to the workplace for employees with disabilities cite direct benefits including the ability to retain a qualified employee, increases to productivity, and the elimination of costs associated with recruiting and training a new employee; indirect benefits are cited as improved culture and interactions with coworkers and enhanced workplace morale^{xv}. Yet, even in the face of such potential benefits, many employers nonetheless harbor sincere but inaccurate views about the work-related abilities of persons with disabilities, likely building from generations of cultural misunderstanding and discrimination^{xvi}. Furthermore, most studies of workplace accommodations do not address effectiveness nor cost-effectiveness^{xvii}.

At a broader and more generalized scale, and among the very few which address a macro-economic setting, a study of the Canadian landscape has estimated that enhancing the accessibility of places of work and business for persons with physical disabilities (defined as disabilities relating to mobility, vision, and hearing in the study) could lead to a substantial increase in labour market participation and hours worked by members of this sub-population^{xviii}. Enhanced accessibility is framed as an opportunity to deepen the nation's labour pool (supply) while also enhancing the quality of life of individuals with disabilities. By 2030, it is estimated that such enhanced labour market participation could result in a \$10.8 billion increase to national GDP along with a concomitant \$10 billion increase in consumer spending and \$2.5 billion to the federal government in tax revenues.

There is an apparent desire to further develop a complement of employment-support programs and transition away from the traditional predominance of programs born from an income-support framework—and there is early research to suggest that doing so could be beneficial for persons with disabilities. This call for action is largely directed at government departments and agencies as these are the typical, and most largely resourced, proponents of public disability support programs. Yet although the beneficiaries of such programs experience them at a micro-economic scale, these proponents of the programs remain equally, if not more so, concerned with the macro-economic scale, and very little of the research to date has investigated the impacts of employment-support programs from this perspective.

Accepting that employment-support programs have positive impacts for beneficiaries, of greatest interest at this time comes the question as to the nature, scope, and scale of the regional economic impacts of transitioning from an income-support to an employment-support framework for disability support programs.

Section Two: Methodology

2.1 Overview

This section presents an overview of the methodology employed throughout this exploratory research including a discussion of data sources. In light of the scope of this research and the variety of methods employed herein, additional details pertinent to specific analyses and discussions are provided throughout this report where appropriate.

The labour market experiences of persons with disabilities in New Brunswick are anticipated to be substantially impacted by the transition of the disability and employment support frameworks from one of income-support to one of employment-support. Such impacts are anticipated to materialize at the macro- and micro-economic scales and hence a mixed-methods approach is employed to most efficiently assess and reflect these varied impacts. Herein, the nature, scope, and scale of the economic impacts are assessed by means of three principal and related methodological practices, including:

1. A review and extrapolation of descriptive statistics;
2. An input-output modelling process of macro-economic impacts;
3. The development of 15 contextualized case summaries reflecting micro-economic impacts.

These three elements are developed congruently to generate a complete and contextualized understanding of the economic impacts which could reasonably be anticipated to accrue within the Province of New Brunswick by transitioning the disability and employment support landscape from a framework of income-support to one of employment-support. Each of the principal methodological elements are discussed in turn, as follows.

2.2 Analysis of Descriptive Statistics: Understanding the Landscape

The review and extrapolation of descriptive statistics permits the development of a clear understanding of the current and anticipated landscape of labour force participation of persons with disabilities in New Brunswick. Such descriptive statistics provide insight into the demographic and socio-economic characteristics of the cohort of persons with disabilities in New Brunswick as a whole as well as of those sub-populations which do and do not actively participate within the New Brunswick labour force. Additional statistics relating to the provincial labour force, labour market, economic operations and development, and demographics more broadly can be drawn upon to develop a more thorough and contextualized understanding of current and potential labour force experiences of persons with disabilities within New Brunswick.

This review is carefully developed to only include validated sources of data. The majority of data is drawn from Statistics Canada, Canada's national statistical agency of high national and international repute. Within the universe of data available from Statistics Canada, the Canadian Survey on Disability (CSD) remains the most important within the remit of this research. The Canadian Survey on Disability is a 'national survey of Canadians aged 15 and over whose everyday activities are limited because of a long-term condition or health-related problem'^{xix}. This is a sample survey with a cross-sectional design which is administered nationally across all provinces and territories and draws on inputs from a sample of 50,000 individuals. The sample is drawn from responses to questions contained within the National Census and appropriately-identified participants are thereafter engaged for additional information. The survey is administered every five years with the most recent data collected in 2017 and released for public consideration and engagement from 2017 through 2020 as it is validated by Statistics Canada. This survey product broadly categorizes information about the experiences of Canadian persons with disabilities along the topics of: disability; equity and inclusion; health; society and community; and work, income, and spending.

The Canadian Survey on Disability categorizes disabilities along ten distinct types and four distinct degrees of severity^{xx}, noting that individuals may have one or more disabilities. Within this current research, these typologies have been aggregated into six broader disability types while the degrees of severity have remained unchanged (Table 1). This aggregation was necessary on account of the sample size of survey respondents wherein the CSD operates at a national level yet this current research remains focused on the New Brunswick provincial scale. Furthermore, this research was undertaken with the support of various community stakeholders active in the disability support landscape in New Brunswick and the aggregation of disability types allowed for greater correspondence with data provided directly from these entities.

Table 1: Typology of Disabilities Employed within the Canadian Survey on Disabilities by Statistics Canada and the Condensed Typology of Disabilities Employed within this Current Research	
Statistics Canada Typologies	Condensed Typologies Employed in this Current Research
Pain-Related	Physical & Mobility
Flexibility	
Mobility	
Dexterity	
Learning	Learning & Memory
Memory	
Developmental	Developmental
Mental Health-Related	Mental Health-Related
Seeing	Seeing
Hearing	Hearing

Beyond Statistics Canada, additional data is drawn from federal and provincial government departments and/or agencies as well as from academic institutions and market-sector entities. All public data sources are identified in Appendix One. In all cases, a priority is placed on accessing data of direct relevance to the New Brunswick provincial scale; if such data are not available, data pertaining to the national scale is engaged and corrected to New Brunswick provincial characteristics. A priority is also placed on using timely data with nearly all economic and labour market/force data drawn from the 2019 annual time period, although with certain data drawn from the 2018 annual period when necessary. Data relating to disabilities are mostly drawn from the 2017 Canadian Survey on Disability and supplemented with more recent data from additional sources when available.

The review of descriptive statistics permits for a better understanding of the current labour force experiences of New Brunswick persons with disabilities as well as the extrapolation of the potential and possible labour force experiences of these individuals. Of principal interest are the economic impacts to be experienced within the Province of New Brunswick should the landscape transition from the current to the potential labour force experiences.

2.3 Input-Output Modelling: Assessing the Impacts

Assessing the economic impacts of such a development—one which would be characterized by a significantly enhanced number of persons with disabilities participating in the New Brunswick labour force—is performed by means of a variation of input-output economic modelling (also commonly referred to as input-output analysis). The input-output modelling process is premised on identifying and quantifying the interconnections and interdependencies among and between the various components and entities comprising a regional economy, in this case the New Brunswick provincial economy. Typically, an initial exogenous shock to an industry or to an economic actor, such as novel capital investment, can thereafter be traced throughout this economic network to determine the impacts relating to employment, labour income, GDP, and associated impacts on taxation revenues.

This particular modelling engagement is a form of comparative input-output modelling (or scenario testing). The current observable data relating to the labour force experiences of persons with disabilities in New Brunswick provide insight into the existing economic impacts of current disability support programs which remain largely premised on a framework of income-support—this is understood as the current scenario. Data can be extrapolated to project the labour market developments should the disability support framework transition to, or be complemented by, one of employment-support to provide insight into how many additional persons with disabilities could be anticipated to join the labour force, how many would find employment, in which industry-sector, and at what income scale—this is understood as the potential scenario.

Knowing the economic realities of the current scenario, an input-output model is developed to project the anticipated economic impacts of the potential scenario with a focus on the scale of difference between the impacts of these two scenarios. It is important to note that this input-output modelling engagement serves to identify truly *additional* potential economic impacts of transitioning toward disability support programs within an employment-support framework; this process does not include an analysis of any cost savings to be, or not, realized by proponents of disability support programs as they transition from an income-support framework to an employment-support framework.

There is substantial variability in how an employment-support framework could be developed within a regional economy and actual cost savings would be a factor of specific details as to what types of programs are developed, how they are structured and governed, how they are funded, and how they integrate with other programs and services within the disability support landscape and beyond, to list but a few potential considerations^{xxi}. Upon completion of a comparative policy and program review and a selection of a preferred policy and program development strategy, the cost of these latter could be more accurately determined and a comprehensive cost-benefit analysis undertaken^{xxii}. To this end, this current investigation remains focused on determining the potential benefits of such a transition in order to inform the discussion as to: 1) whether or not this transition should be undertaken; and 2) to provide the foundation for the eventual cost-benefit analysis if the transition were to be undertaken.

In this particular case, the enhanced labour force participation of persons with disabilities is not necessarily an exogenous shock in the typical sense of input-output modelling. Nonetheless, the analysis and extrapolation of descriptive statistics, as discussed above, does permit for a forecast of enhanced labour force participation including all elements of anticipated employment and labour incomes by industry-sector. These measures can be combined with observed and anticipated provincial gross domestic product (GDP) contributions by industry sector to provide insight into the anticipated direct employment, labour income, and GDP contributions of enhancing the labour force participation of persons with disabilities in New Brunswick. Ultimately, an input-output model—replete with relative measures of employment, income, and GDP by industry sector and with identified interconnections therebetween—can be relied upon to expound on these direct measures of economic impacts and introduce an assessment of indirect and induced economic impacts.

The anticipated direct impacts by industry sector—including direct labour income and direct provincial GDP contributions—associated with the enhanced labour force participation by persons with disabilities in New Brunswick serve as a starting point in assessing total economic impacts within the input-output modelling process. Throughout the process, industry-specific economic multipliers are engaged to link direct impacts to anticipated indirect and induced impacts. In all cases, economic multipliers validated by Statistics Canada and specific to the New Brunswick provincial economy are employed. These initial direct industry-specific impacts are largely developed according to the descriptive data analysis as discussed above.

Anticipated levels of labour force participation, labour income, and GDP contributions are projected according to trends in observed actual labour force participation. For such forecasts, growth dynamics for each metric across the past ten years were identified. These dynamics were subsequently extended for a forward-looking five-year timeline and the respective median values of these future timelines were initially employed within the modelling process.

It is important to note, however, that this research commenced before, and continued throughout, the development of the COVID-19 pandemic (2020). Due to these circumstances, these forecasted median values have been adjusted accordingly. The direct impacts of employment, labour income, and GDP contributions anticipated to develop over the next five-years have been adjusted wherein the first two-years of the projected timeline are instead constructed from combined estimates provided by the Bank of Canada and commercial banks across Canada. The last three-years of the projected timeline assume a relative return to normalcy and are constructed according to the extrapolation of past growth dynamics as originally intended. The median values of these metrics over the projected five-year timeline are thereafter employed within the input-output modelling process. The most significant source of uncertainty within this modelling process rests within the uncertain outcomes and consequences of the COVID-19 pandemic.

Within this modelling process, all economic measures are reported in 2019 real values unless otherwise noted and anticipated impacts are not discounted in relation to the timeline by which they are expected to accrue. This economic impact assessment is effectively developing a scenario-testing

model—in this sense, the current labour market and economic impacts which exist in 2019 and which have developed under a disability and employment support framework of income-support are able to be directly compared to the labour market and economic impacts which could reasonably be expected to have accrued had the province instead operated under a disability and employment support framework of employment-support. This contrast in scenarios is facilitated by reporting the direct, indirect, and induced economic impacts in the anticipated change in employment therein.

Direct economic impacts are those impacts which result from the enhanced and/or changed operations of the organization experiencing the initial shock, or in this case, each industry sector experiencing a respective increase in employment. These may include, but are not necessarily limited to, employment by the industry sector, spending and investment by organizations, changing production levels by industry sector, and associated changes in taxation. These direct impacts are predominantly, if not wholly, expressed at the level of the organizations and industry sectors.

Indirect economic impacts arise as a function of the direct economic impacts. These are those impacts which result from increased activity throughout a regional, or provincial, economy on account of the changes exhibited by the organizations experiencing the direct impacts. These indirect impacts are effectively the changes in employment, savings and investments, production and distribution, and taxation throughout the supply and consumer chains within which the organizations experiencing the initial impacts are networked. These indirect impacts are predominantly, if not wholly, expressed at the level of the regional economy.

Induced economic impacts arise as a function of direct and indirect economic impacts. These are those impacts which result from changes in labour income within a regional economy. Direct and indirect economic impacts measure changes to employment levels and labour income and this income is further re-circulated throughout the regional economy on account of consumer spending patterns which in turn lead to continued impacts throughout the economy. These induced impacts are predominantly, if not wholly, expressed at the level of the household.

Direct, indirect, and induced economic impacts are assessed and reported individually. Total economic impacts are calculated as an aggregation of all direct, indirect, and induced impacts. In all cases, economic impacts are calculated as accruing at an annual basis. Lastly, it should be noted that such measures are projections of possible rather than certain economic impacts which could be reasonably anticipated to develop over time as the transition from a framework of income-support to one of employment-support develops and as an increasing number of persons with disabilities (re-)enter the active labour force in New Brunswick over time.

2.4 Case Summaries: Developing Context

The above input-output modelling approach to economic impact assessment is designed for a macro-economic perspective—that is, the consideration of the provincial economy—and omits the more contextualized details of individuals' own experiences and anticipations of such impacts—or the micro-economic perspective—out of methodological necessity. The consideration of individual experiences and contextualization of the micro-economic perspective is fundamentally important to this assessment; it is important to note that what is discussed as a labour market dynamic by some is experienced as a job capable of supporting a family by another. To this end, the input-output modelling is complemented by the development of 15 case summaries of distinct persons with disabilities currently attempting to, or having very recently succeeded in, (re-)entering the labour force.

These case summaries have been identified by a committee of community organizations and provincial government departments active in the disability and employment support landscape across New Brunswick. Each case summary relates three elements. The first is a discussion of the current and the desired labour market experiences of each of the distinct persons with disabilities in New Brunswick. The second is a consideration of measures to be explored in assisting each respective individual transition from their current to their desired experiences. The third and final element includes an assessment of the economic impacts to accrue to the individual and to the provincial economy should they be successful in transitioning from their current to their desired labour market experiences.

All case summaries reflect the experiences and desires of persons with disabilities currently navigating their (re-)entry to the New Brunswick labour force and these have been anonymized out of consideration for the privacy of all individuals. This set of 15 case summaries is not intended to be statistically representative of the broader population of persons with disabilities, as this is accomplished through the input-output modelling process discussed above, but rather to introduce a degree of contextualized detail to the discussion.

Section Three: Provincial Economic Impact Assessment

3.1 Overview

The enhanced participation of New Brunswick persons with disabilities within the provincial labour force is reasonably anticipated to be an iterative process including three principal elements. Assessing the economic impacts of such enhanced labour force participation requires an assessment of each of the iterative elements, noting that each of these are respectively developed according to distinct assumptions and perspectives.

The first, and most significant, element to be addressed includes the assessment of the economic impacts to be catalyzed should New Brunswick persons with disabilities participate within the labour force at levels equivalent to persons without disabilities. In such a case, it is anticipated that an additional 21,318 New Brunswick persons with disabilities aged 25 to 64 years would (re-)enter the labour force with 20,011 being employed and 1,307 nonetheless remaining unemployed.

In this case, and as addressed in greater detail in what follows, it is assumed that there is a sufficiently large cohort of persons with disabilities who are willing and able to (re-)enter the labour force to provide such a scale of labour supply. It is equally assumed that there are sufficient employment vacancies and anticipated employment development to integrate (demand) such a scale of labour supply. Lastly, it is further assumed that the newly participating persons with disabilities who should find employment would earn median labour incomes equivalent to the median levels earned by persons with disabilities who are already employed within the New Brunswick labour market, which is notably less than the median labour income earned by persons without disabilities.

This first development, and under these assumptions, is assessed to demonstrate that the Province of New Brunswick could experience total economic impacts including the addition of 27,502 full-time equivalent employment positions, nearly \$799 million in annual labour income, and over \$1.19 billion in annual GDP contributions. These total economic impacts are an aggregate of the direct impacts sustained by the enhanced labour market participation of persons with disabilities combined with the indirect and induced impacts catalyzed by such enhanced economic activity.

The second element to be addressed builds from the first in that it holds the same enhanced degree of labour force participation by persons with disabilities yet assumes that these newly participating individuals could earn median labour incomes equivalent to employed persons without disabilities rather than equivalent to the lower median labour incomes currently earned by employed persons with disabilities. The discrepancy in median labour incomes between persons with and without disabilities in New Brunswick, as addressed in greater detail in what follows, is not an objective reality but rather

a development due to structural and cultural barriers—most of which could be expected to be overcome through concerted action over time.

Under these assumptions, the same enhanced labour force participation of 21,318 New Brunswick persons with disabilities aged 25 to 64 years, as above, yet at higher and more equitable median labour incomes, would instead result in total economic impacts including the addition of 27,502 full-time equivalent employment positions, nearly \$1.26 billion in annual labour income, and over \$1.88 billion in annual GDP contributions.

The third and final element to be addressed concerns the enhancement of a disability and employment support sector which would develop in efforts to catalyze and sustain the enhanced participation of persons with disabilities in the labour force at this scale. The disability and employment support sector would include positions in the fields of case management, employment counselling, job coaching, rehabilitation/adaptive skill training, and attendant/support care-giving, as examples. These responsibilities, it is further assumed, would be provided by public sector agencies and programs, community non-profit organizations, and private sector enterprises. This disability and employment sector already operates in New Brunswick, yet it is assumed that it would be enhanced by an additional 1,066 to 1,777 full-time equivalent employment positions supporting the enhanced labour force participation of an additional 21,318 New Brunswick persons with disabilities aged 25 to 64 years.

Under these assumptions, this scale of direct employment within the enhanced disability and employment support sector, would result in total economic impacts including the addition of 1,322 to 2,203 full-time equivalent employment positions, from \$73.4 to \$122.4 million in annual labour income, and from \$56 to \$93 million in annual GDP contributions. These ranges are predicated according to a degree of uncertainty in determining how much of these increased responsibilities can adequately be addressed by existing employment therein and how much additional employment will be developed within the enhanced sector.

As is discussed in greater detail in what follows, these three elements can be combined to present an aggregated understanding of the economic impacts of enhancing the labour force participation of New Brunswick persons with disabilities. At the lowest degree of development, these aggregated total economic impacts include the addition of 28,824 full-time equivalent employment positions, nearly \$872 million in annual labour income, and nearly \$1.25 billion in annual GDP contributions. At the highest degree of development, these aggregated total economic impacts, in contrast, include the addition of 29,705 full-time equivalent employment positions, nearly \$1.38 billion in annual labour income, and over \$1.97 billion in annual GDP contributions. Such economic activity entails notable developments to taxation revenues with over \$247 million in total taxation revenues to all government jurisdictions being remitted each year under the low-development scenario and over \$390 million under the high-development scenario.

The remainder of this section explores the iterative and the aggregated economic impacts of the enhanced labour force participation of New Brunswick persons with disabilities in further detail.

3.2 Enhancing Labour Force Participation

The first stage of the modelling process involves assessing the economic impacts which could be catalyzed by enhancing the labour force participation of persons with disabilities to a point wherein the dynamics of these match those of persons without disabilities. At the completion of the most recent Canadian Survey of Disabilities in 2017, persons with disabilities in New Brunswick aged 25 to 64 years—the traditional and still predominant working-age cohort in Canada—reported labour force participation of slightly over 62 percent in contrast to slightly over 84 percent as reported by the similar cohort of persons without disabilities in New Brunswick. Notably, the employment/unemployment division of persons within the labour force remained relatively similar across the two sub-populations, and notably less significant than the contrast in the dynamic of labour force participation itself. Notably, once integrated within the labour force, it would appear that persons with and without disabilities demonstrate little difference in employment status.

Table 2: Labour Force Dynamics of New Brunswick Persons With and Without Disabilities, Age 25-64 Years

	NB Persons with Disabilities	NB Persons without Disabilities
Not in the labour Force	37.9%	15.5%
In Labour Force	62.1%	84.5%
Unemployed in Labour Force	6.7%	8%

Within an employment and disability support framework premised on employment-support, it is reasonable to anticipate that the labour force dynamics of New Brunswick persons with disabilities could be enhanced to match those of New Brunswick persons without disabilities. In such a framework, the obstacles to employment would be those structural and functional economic and geo-political issues applicable to all New Brunswick persons rather than the presence of disabilities within a sub-set of persons. In this setting, such an enhancement would be equivalent to introducing an additional 21,318 individuals aged 25-64 years to the New Brunswick labour force, of which 20,011 would be employed and 1,307 would be unemployed, representing a significant difference between the current and the potential labour force dynamics in New Brunswick.

Table 3: Current and Potential Labour Force Dynamics of New Brunswick Persons with Disabilities, Aged 25-64 years

	Current Labour Force Dynamics of NB Persons with Disabilities	Potential Labour Force Dynamics of NB Persons with Disabilities	Absolute Change from Current to Potential Labour Force Dynamics of NB Persons with Disabilities
Total Sub-Population	95,370	95,370	---
Not in Labour Force	36,100	14,782	(21,318)
In Labour Force	59,270	80,588	21,318
Employed	52,870	72,881	20,011
Unemployed	6,410	7,717	1,307

The ability to enhance the labour market experiences of New Brunswick persons with disabilities by integrating an additional 21,318 individuals aged 25 to 64 years into the provincial active labour force rests on the fulfillment of two critical assumptions. The first is the labour supply assumption which holds that there are sufficient New Brunswick persons with disabilities able and willing to integrate into the active labour force. The second is the labour demand assumption which holds that there is, and will be, sufficient activity within the provincial economy to justify the integration of such labour supply.

The first assumption is addressed by a consideration of the number of New Brunswick persons with disabilities who have a 'potential to work'—as defined by Statistics Canada as a person with disabilities who is not currently employed but who might be likely to enter paid-employment under a best-case scenario, being an inclusive labour market without discrimination, with full accessibility and accommodation^{xxiii}. The concept of potential to work, as employed by Statistics Canada, is further applied to any person with disabilities who was officially unemployed or not in the labour force but who stated they would be looking for work in the next 12 months, excluding those identified as students, housebound, completely retired, and/or those believing no adequate workplace accommodation existed.

Statistics Canada has determined that 15,270 additional New Brunswick persons with disabilities aged 25-64 years have the potential to work; yet this number should be considered as a conservative baseline estimate for four principal reasons. First, and by definition, this number does not include persons with disabilities who may be housebound, even though many people—with and without disabilities—are increasingly able to work from home largely, although not exclusively, intermediated from advances in digital technologies. The ability to commute to, and engage in, a physical work environment is no longer a determinant in employment status.

Second, this number excludes post-secondary students even though many such students have demonstrated a willingness and/or necessity to prematurely depart their studies in pursuit of paid employment. Across Atlantic Canada, 28.4 percent of males and 21.9 percent of females will have left their studies at university level by the end of their second year while 33.1 percent of males and 33.6 percent of females will have left college studies by the end of their second year, and these numbers increase substantially with the age of the student^{xxiv}. In general, approximately 60 percent of Canadians who initiate post-secondary education can be expected to complete their programs^{xxv}. Post-secondary students may not state an intention to seek employment within the next 12 months, as per the definition of 'potential to work', yet many nonetheless happen to do so.

Third, the notion of an adequate accommodation must be understood in relation to the employment and disability support programs in existence when the individual was considering employment. Most public disability support programs operating within an income-support framework provide assistance in accessing what are commonly considered to be basic necessities. In this sense, an individual with a mobility disability may be assisted in purchasing a wheelchair as this is a basic necessity yet not be granted assistance in purchasing a standing wheelchair as this is considered to be beyond a basic necessity. Although this latter may be a reasonable and attainable accommodation for employment, this particular individual may not perceive it as such as it does not fit within the guidelines of existing disability support programs, or the individual is not fully informed of the guidelines of existing disability support programs, and hence this individual may self-identify as not having the potential to work due to a perceived lack of adequate workplace accommodations. As the disability and employment support framework shifts from one of income-support to one of employment-support so too will the conceptualization and understanding of attainable and adequate workplace accommodations, and hence the number of individuals with potential to work.

Fourth, and lastly, the figure is a static estimate in contrast to the more dynamic realities of demographics and labour force developments. A static snapshot in time can serve as a general indicator, yet is not representative of the dynamism to be experienced over a period of months or years as people age into and out of the statistical working-age cohort of 25 to 64 years; as disabilities develop; as rehabilitations services and technologies emerge; as new work-place accommodations are developed; and as the labour market and economic landscape evolve. Even if all 15,318 individuals with the potential to work were to be immediately integrated into the labour force today, more such individuals would be present tomorrow.

Although we are not in a position to calculate a revised and distinct number of such persons with potential to work, we can operate under the reasonable assumption that there is adequate potential labour supply to sustain the introduction of an additional 21,318 individuals drawn from the sub-population of New Brunswick persons with disabilities to the labour force over time. Although uncertainty may remain as to the definite scale, ultimately, the potential labour supply should not be perceived as a constraint within this modelling exercise^{xxvi}.

Turning to the assumption of labour demand, it should also be clear that such need not be perceived as a constraint within this modelling exercise. The mean employment vacancy rate across the previous four economic reporting quarters and across all industry sectors currently active in New Brunswick would suggest there are approximately 8,600 unfilled immediate employment vacancies. These are employment positions which already exist yet which remain unfilled due to a lack of appropriate labour supply. Such would suggest a shortage of labour supply rather than one of labour demand.

The Province of New Brunswick forecasts^{xxvii} approximately 12,000 job openings each year from 2018 through 2027, inclusively, due in part to new job openings but mostly an account of replacement employment due to ageing of the labour force. Of the anticipated 120,046 job openings forecast throughout this period, new entrants to the labour force are expected to fill 55 percent of these while out-of-province workers are expected to fill nearly 11 percent; the remaining 34 percent are expected to be filled by reduced unemployment levels, increased labour force participation, and increased productivity and/or automation. Even so, it is possible that a shortage of labour supply will result in not all job openings being filled throughout this period. In this perspective, it is clear that the New Brunswick economy not only has room but equally has necessity to enhance the labour market participation of persons with disabilities—and doing so in no way displaces youth and/or newcomer labour market entrants, noting also that many persons with disabilities also jointly hold identities as youth and newcomers as well.

The assumptions relating to labour supply and demand are reasonable. There are sufficient New Brunswick persons with disabilities with the potential to work and sufficient labour demand for this work to enhance the labour market dynamics—and the labour force participation rate in particular—of persons with disabilities to match those of persons without disabilities. With the assumptions satisfied, this first stage of modelling assesses the economic impacts of enhancing the labour market dynamics of New Brunswick persons with disabilities to match those of persons without disabilities while maintaining the scale of remuneration of such additional labour supply consistent with the observed median scale of remuneration of New Brunswick persons with disabilities who are already active within the provincial labour force.

Most notably, and as expressed above, enhancing the labour market dynamics of New Brunswick persons with disabilities is largely accomplished by increasing the labour force participation rate of this cohort from 62.1 percent to 84.5 percent, which equates to the introduction of an additional 21,318 individuals aged 25 to 64 years into the labour force. Of these new entrants, it is anticipated that 20,011 would be employed and 1,307 would be unemployed, following observed dynamics of the New Brunswick labour market.

As new entrants to the labour force, this cohort of persons with disabilities can be anticipated to engage in the labour force according to the established distribution of employment by industry sector combined with medium-term forecasts of employment growth by industry sector. In this light, these 20,011 additional employed labour force participants could reasonably be expected to distribute among the active industry sectors of the New Brunswick economy as follows:

Table 4: Anticipated Industry Sector Distribution of 20,011 Newly Employed Persons with Disabilities		
Goods-Producing Sectors (Sub-Total)		4,217
	Agriculture, Forestry, Mining, Oil and Gas	940
	Utilities	162
	Construction	1,311
	Manufacturing	1,804
Services-Producing Sectors (Sub-Total)		15,794
	Wholesale and Retail Trade	2,550
	Transportation and Warehousing	905
	Finance, Insurance, Real Estate, and Leasing	1,067
	Professional, Scientific, and Technical Services	968
	Business, Building, and Support Services	689
	Educational Services	1,458
	Health Care and Social Assistance	4,185
	Information, Culture, and Recreation	703
	Accommodation and Food Services	1,066
	Other Services (except public administration)	663
	Public Administration	1,540

This industry-sector distribution of additional employment can be considered in light of the median labour income of persons with disabilities already employed throughout the New Brunswick economy to demonstrate the scale and distribution of anticipated additional direct annual labour income associated with the employment of these 20,011 persons with disabilities. These newly employed individuals are anticipated to collectively earn annual direct labour income of \$562,640,806, distributed by industry sector as follows:

Table 5: Anticipated Direct Labour Income of 20,011 Newly Employed Persons with Disabilities, Aggregated by Industry Sector		
Goods-Producing Sectors (Sub-Total)		\$118,612,104
	Agriculture, Forestry, Mining, Oil and Gas	\$26,454,619
	Utilities	\$4,615,619
	Construction	\$36,893,971
	Manufacturing	\$50,740,827
Services-Producing Sectors (Sub-Total)		\$444,028,702
	Wholesale and Retail Trade	\$71,712,463
	Transportation and Warehousing	\$25,463,345
	Finance, Insurance, Real Estate, and Leasing	\$30,017,009
	Professional, Scientific, and Technical Services	\$27,229,052
	Business, Building, and Support Services	\$19,391,793
	Educational Services	\$40,982,976
	Health Care and Social Assistance	\$117,620,830
	Information, Culture, and Recreation	\$19,794,498
	Accommodation and Food Services	\$29,986,032
	Other Services (except public administration)	\$18,617,361
	Public Administration	\$43,306,274
Total		\$562,640,806

With direct labour income correlated to direct industry-sector productivity, as discussed in **Section Two**, the addition of 20,011 employed individuals—achieved through the enhanced labour force participation of persons with disabilities thereby filling existing and anticipated labour market vacancies—would result in a substantial increase to provincial gross domestic product. The \$562.2 million in direct labour income earned by these individuals would reflect developments throughout the broader provincial economy equal to nearly \$734.2 million in additional direct GDP per year.

Table 6: Anticipated Direct GDP Distribution of 20,011 Newly Employed Persons with Disabilities, Aggregated by Industry Sector		
Goods-Producing Sectors (Sub-Total)		\$156,313,789
	Agriculture, Forestry, Mining, Oil and Gas	\$35,669,397
	Utilities	\$7,774,974
	Construction	\$49,488,525
	Manufacturing	\$63,380,894
Services-Producing Sectors (Sub-Total)		\$577,928,338
	Wholesale and Retail Trade	\$101,447,189
	Transportation and Warehousing	\$35,676,285
	Finance, Insurance, Real Estate, and Leasing	\$105,603,104
	Professional, Scientific, and Technical Services	\$22,352,940
	Business, Building, and Support Services	\$35,439,697
	Educational Services	\$42,730,359
	Health Care and Social Assistance	\$78,032,207
	Information, Culture, and Recreation	\$17,201,223
	Accommodation and Food Services	\$51,153,366
	Other Services (except public administration)	\$18,838,330
	Public Administration	\$69,453,635
Total		\$734,242,127

The integration of 21,318 additional New Brunswick persons with disabilities into the labour force leads to direct additional employment of 20,011 throughout the provincial economy. This enhanced employment would be responsible for additional direct labour income of \$562.6 million and provincial GDP of \$734.2 million per year. Such economic activity, as catalyzed by an expanded labour force, necessarily leads to additional indirect and induced impacts. By means of consumer spending patterns, business supply chain dynamics, business re-investment and growth, new business development, and adapted government spending, among other channels, this initially enhanced economic activity cascades into additional developments throughout the province.

For the sake of assessing the indirect and induced economic impacts associated with these direct impacts, it is beneficial to adjust all employment positions to be recorded as full-time-equivalent employment positions. Of the initial direct employment positions, 17,663 can be anticipated to be full-time while 2,348 can be anticipated to be part-time, according to the distribution of full- and part-time employment in New Brunswick in 2019. For the purposes of economic modelling, we assume this scale and scope of employment is reflected as 18,837 full-time-equivalent (FTE) positions^{xxviii}. With this adjustment, the total economic impacts of the enhanced labour force participation are as follows.

Table 7: Direct and Total Economic Impacts of Enhanced Labour Force Participation of Persons with Disabilities in New Brunswick

	Direct	Indirect and Induced	Total
Employment	18,837 (FTE)	8,665 (FTE)	27,502 (FTE)
Labour Income	\$562,640,806	\$236,309,139	\$798,949,945
Provincial GDP	\$734,242,127	\$459,099,847	\$1,193,341,974

In sum, transitioning the employment and disability support programs from a framework of income-support to one of employment-support could encourage additional New Brunswick persons with disabilities to participate in the provincial labour force. With enhanced levels of participation matching those of persons without disabilities such a development would effectively integrate an additional 21,318 individuals into the New Brunswick labour force. Of these, 20,011 could be anticipated to be employed in full- or part-time positions—collectively resulting in 18,837 full-time-employment positions. Assuming these additional individuals earned median labour income equivalent to persons with disabilities already employed within the New Brunswick labour market, which is notably less than median income earned by persons without disabilities, this scale of economic development would nonetheless cascade throughout the provincial economy and can be anticipated to generate total economic impacts amounting to 27,502 additional FTE employment positions, \$798.9 million in annual labour income, and nearly \$1.2 billion in annual GDP contributions.

3.3 Enhancing Labour Force Participation and Median Labour Income

The economic assessment to this point has proceeded with the assumption that the additional New Brunswick persons with disabilities entering the labour force and eventually being employed would earn a median labour income equivalent to that earned by persons with disabilities already employed within New Brunswick. The current median annual labour income of employed persons with disabilities within New Brunswick is \$28,098 in contrast to the \$44,200 median annual labour income of a person without disabilities. This next stage of assessment, in turn, seeks to measure the economic impacts to be catalyzed should these additionally employed persons with disabilities receive a median scale of remuneration equivalent to that of persons without disabilities.

This stage of modelling does assume that the reasons of this discrepancy in labour incomes between persons with and without disabilities can be overcome. Broadly, there are two probable reasons for this discrepancy in labour income discrepancy. The first is that a person's disability presents an obstacle to full-time employment and hence the relatively lower labour income is reflective of fewer hours worked. The second is that persons with disabilities occupy a disproportionate share of entry-level employment positions on account of the obstacles to post-secondary education and/or the need to re-enter employment—and often in a different sector and/or role—following the development/acquisition of a disability.

A review of typical hours worked by New Brunswick persons with and without disabilities would suggest that the relatively lower income earned by persons with disabilities is not likely due to a constraint on hours worked. Employed persons without disabilities are slightly more likely to be engaged in part-time employment, measured as fewer than 30 hours/week, than are employed persons with disabilities. A strong majority of employed persons with disabilities are engaged in full-time work (30-40 hours/week), although relatively fewer are employed in supra-time work (more than 41 hours/week) when compared to employed persons without disabilities. The contrast in hours worked, or lack thereof, does not appear sufficient to explain the discrepancy in annual median labour income of New Brunswick persons with and without disabilities.



Figure 1: Actual hours worked per week by employed persons with and without disabilities in New Brunswick. Data from 2017 for individuals aged 25 to 64 years

A contrast in highest educational attainment, on the other hand, is much clearer. Relying on national-scale data^{xxix}, persons with disabilities are most likely to end their educational trajectory with a secondary diploma, a college diploma, or a university degree, in that order. Persons without disabilities, in contrast, are most likely to end their educational trajectory with a university degree, a secondary diploma, or a college diploma, in that order. A far greater share of persons without disabilities are anticipated to complete a university degree than are persons with disabilities, and a far greater share of persons with disabilities are anticipated to not complete secondary education than are persons without disabilities.

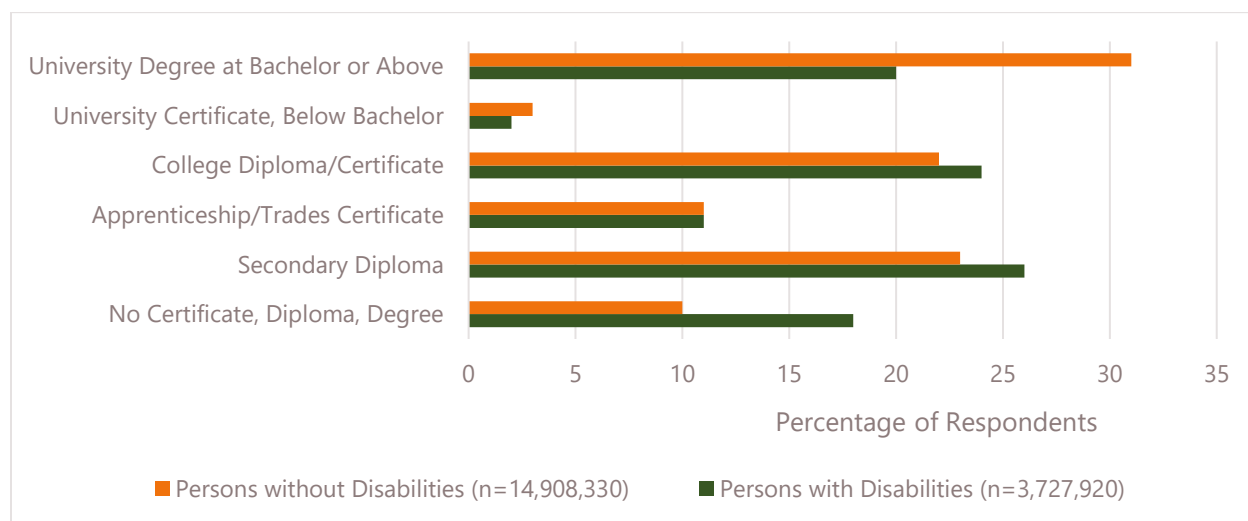


Figure 2: Highest educational attainment of persons with and without disabilities in Canada, 2017

This discrepancy in educational attainment may be correlated to the discrepancy in median labour income as individuals without more advanced post-secondary educations are less likely to advance to higher responsibility, and more highly remunerated, employment positions in general.

Furthermore, individuals who develop and/or acquire a disability later in life may need to re-enter the labour force in an industry different from that which they had previously trained for, or fulfilling responsibilities different from those they previously fulfilled. The later-life development/acquisition of a disability often necessitates a true re-entry to the labour force within an economic system where years of applicable experience are typically indicative of anticipated remuneration. Re-entry, in this sense means not only re-entering the labour force but also doing so at an entry-level position.

The assumption that the median labour income of persons with disabilities could be enhanced over time to match that of persons without disabilities is reasonable. The currently observed discrepancy has likely developed due to barriers to education, training, and re-training, and perhaps cultural awareness and understanding, rather than to some structural element of disability. A reframing of education, training, and re-training within employment and disability support programs could readily contribute to enhancing the labour income of employed persons with disabilities.

In this case, and assuming the median labour income of employed persons with disabilities was to approach and equal that of employed persons without disabilities, the direct labour income of these additional labour force entrants would be distributed by industry-sector as follows.

Table 8: Anticipated Direct Labour Income of 20,011 Newly Employed Persons with Disabilities, Assuming Enhanced Median Labour Income Equal to that of Persons without Disabilities		
Goods-Producing Sectors (Sub-Total)		\$186,568,200
	Agriculture, Forestry, Mining, Oil and Gas	\$41,636,400
	Utilities	\$7,248,800
	Construction	\$58,034,600
	Manufacturing	\$79,825,200
Services-Producing Sectors (Sub-Total)		\$698,492,600
	Wholesale and Retail Trade	\$112,798,400
	Transportation and Warehousing	\$40,045,200
	Finance, Insurance, Real Estate, and Leasing	\$47,205,600
	Professional, Scientific, and Technical Services	\$42,829,800
	Business, Building, and Support Services	\$30,498,000
	Educational Services	\$64,487,800
	Health Care and Social Assistance	\$185,021,200
	Information, Culture, and Recreation	\$31,116,800
	Accommodation and Food Services	\$47,161,400
	Other Services (except public administration)	\$29,304,600
	Public Administration	\$68,112,200
Total		\$885,060,800

Similar to the previous analyses above, this scale of enhanced economic activity as reflected by this direct labour income is associated with enhanced direct GDP contributions by each respective industry-sector.

Table 9: Anticipated Direct GDP Distribution of 20,011 Newly Employed Persons with Disabilities, Assuming Enhanced Median Labour Income Equal to that of Persons without Disabilities		
Goods-Producing Sectors (Sub-Total)		\$246,446,608
	Agriculture, Forestry, Mining, Oil and Gas	\$56,139,356
	Utilities	\$12,750,802
	Construction	\$77,845,965
	Manufacturing	\$99,710,485
Services-Producing Sectors (Sub-Total)		\$909,013,770
	Wholesale and Retail Trade	\$159,568,925
	Transportation and Warehousing	\$56,106,689
	Finance, Insurance, Real Estate, and Leasing	\$166,074,438
	Professional, Scientific, and Technical Services	\$35,159,945
	Business, Building, and Support Services	\$55,736,354
	Educational Services	\$67,237,354
	Health Care and Social Assistance	\$122,747,073
	Information, Culture, and Recreation	\$27,040,192
	Accommodation and Food Services	\$80,452,937
	Other Services (except public administration)	\$29,652,417
	Public Administration	\$109,236,825
Total		\$1,155,460,378

The integration of 21,318 New Brunswick persons with disabilities into the labour force leads to direct additional employment of 20,011 throughout the provincial economy. Assuming these individuals could, in time and with adjustments to disability support programs relating to education, training, and re-training, earn median labour incomes equivalent to median levels earned by persons without disabilities, this enhanced employment would be responsible for additional direct labour income of \$885 million and provincial GDP of \$1.15 billion per year. Such economic activity, as catalyzed by an expanded labour force, necessarily leads to additional indirect and induced impacts. By means of consumer spending patterns, business supply chain dynamics, business re-investment and growth, new business development, and adapted government spending, among other channels, this initially enhanced economic activity cascades into additional developments throughout the province.

As above, the initial direct employment positions can be anticipated as 17,663 full-time and 2,348 part-time positions. For the purposes of economic modelling, we assume this scale and scope of employment is reflected as 18,837 full-time-equivalent (FTE) positions. With this adjustment, the total

economic impacts of the enhanced labour force participation along with enhanced labour income dynamics are as follows.

Table 10: Direct and Total Economic Impacts of Enhanced Labour Force Participation of Persons with Disabilities in New Brunswick, Assuming Enhanced Median Labour Income of Persons with Disabilities			
	Direct	Indirect and Induced	Total
Employment	18,837 (FTE)	8,665 (FTE)	27,502 (FTE)
Labour Income	\$885,060,800	\$371,725,536	\$1,256,786,663
Provincial GDP	\$1,155,460,378	\$721,721,368	\$1,877,181,746

By enhancing the labour force participation of New Brunswick persons with disabilities to match the relative scale of persons without disabilities and by enhancing the labour income dynamics of these former to match those of these latter, the New Brunswick provincial economy would experience an additional 27,502 permanent full-time equivalent employment positions resulting in over \$1.25 billion in total labour income and over \$1.87 billion in GDP contributions each year. Note, that this assumption holds only to enhancing the labour income of the persons with disabilities newly entering the labour market and does not adjust the labour income of persons with disabilities already employed and/or participating in the provincial labour force. Enhancing the median labour income of these already-employed individuals, perhaps by means of a return to education, training, and up-skilling, could result in even more substantial economic impacts to accrue within the New Brunswick economy; yet such considerations are beyond the remit of this current investigation.

3.4 Enhancing the Employment and Disability Support Sector

The assessment to this point has focused on the economic impacts resulting from the direct enhancement of the labour force participation of New Brunswick persons with disabilities, yet such an enhancement is not likely to materialize independently nor directly. Much of the enhanced labour force participation by New Brunswick persons with disabilities can be anticipated to occur as intermediated by employment-support programs. These programs will represent an additional employment development in the forms of case managers, employment counsellors, job coaches, rehabilitation/adaptive skill training, and attendant/support care-givers, as examples.

These support positions are truly additional as they form part of what could reasonably be identified as a growing industry-sector in New Brunswick should disability and employment support programs be transitioned from a framework of income-support to one of employment-support. Not all employment within this support sector would be novel, as some responsibilities are already being performed by employees present in a variety of sub-sectors and some employees operating within an income-support framework would be re-positioned within an employment-support framework. Yet, given the scale of enhancing the labour force participation of 21,318 persons with disabilities, additional support positions would nonetheless be required.

It should be noted that forecasting the scale of the additional employment development in this support sub-sector entails significant uncertainty. The necessity of case managers, employment counsellors, job coaches, attendant care, and rehabilitation/adaptive skill training varies not only by disability type and severity of disability, but also, and perhaps more importantly, by the characteristics of each individual's personal and professional situation. A review of existing support positions, discussions with disability support organizations, and an analysis of 15 distinct case summaries of persons with disabilities seeking employment (see **Section Four**) lends support to the assumption that one additional full-time equivalent employment position in this employment-support sector would likely be created for every 12 to 20 persons with disabilities newly participating in the labour force. In this sense, it is anticipated that the employment support sub-sector could generate from 1,066 to 1,777 new full-time equivalent employment positions to support the enhanced integration of persons with disabilities into the New Brunswick labour force.

These employment positions would be additional to those which currently exist and perform such similar responsibilities. A share of this employment would be within public sector programs, agencies, and departments, another share within community stakeholder organizations, and a third share within private sector enterprises. The direct and total economic impacts of this scale of sector development across New Brunswick would be as follows.

Table 11: Direct and Total Economic Impacts of Additional Development in Employment and Disability Support Sector, Assuming One Additional FTE Support Position for Every 12 (high-end) or 20 (low-end) Persons with Disabilities Entering Provincial Labour Force

	Low-End (1:20)		High-End (1:12)	
	Direct	Total	Direct	Total
Employment	1,066 (FTE)	1,322 (FTE)	1,777 (FTE)	2,203 (FTE)
Labour Income	\$55,223,800	\$73,447,654	\$92,056,934	\$122,435,722
GDP Contributions	\$36,636,665	\$56,054,098	\$61,072,565	\$93,441,024

As the disability and support program framework transitions from one of income-support to one of employment-support, many individuals currently employed within this sub-sector and providing support and services therein may witness a shift in their responsibilities while many other individuals may also be newly employed to satisfy the increased demand for such support and services. This additional demand in the support services market could result in additional direct employment from 1,066 to 1,777 full-time-equivalent employment positions in the fields of case management, employment counselling, job coaching, rehabilitation/adaptive skill training, and attendant/support care-giving, as examples. This scale of direct employment growth can reasonably be anticipated to lead to total employment from 1,322 to 2,203 FTE positions earning from \$73.4 million to \$122.4 million in total labour income and representing from \$56 million to \$93 million in provincial GDP contributions each year.

3.5 Aggregating Impacts

The complete economic impacts of enhancing the labour force participation of New Brunswick persons with disabilities can be aggregated as the impacts catalyzed by the labour force participation of persons with disabilities, the impacts catalyzed by the additional employment of persons to support the integration of persons with disabilities into the labour force, and the impacts derived from taxation upon these previous streams of economic activity. These aggregated metrics can be provided for four scenarios according to the anticipated median labour income of persons with disabilities and the scale of the disability and employment support sub-sector, as follows:

- **Scenario 1—Low Income/Low Support:** Newly participating persons with disabilities are anticipated to earn median labour incomes equivalent to scales demonstrated by currently employed persons with disabilities (low income) and the disability and employment support sector is anticipated to be only moderately enhanced (low support).
- **Scenario 2—Low Income/High Support:** Newly participating persons with disabilities are anticipated to earn median labour incomes equivalent to scales demonstrated by currently employed persons with disabilities (low income) and the disability and employment support sector is anticipated to be significantly enhanced (high support).
- **Scenario 3—High Income/Low Support:** Newly participating persons with disabilities are anticipated to earn median labour incomes equivalent to scales demonstrated by currently employed persons without disabilities (high income) and the disability and employment support sector is anticipated to be only moderately enhanced (low support).
- **Scenario 4—High Income/High Support:** Newly participating persons with disabilities are anticipated to earn median labour incomes equivalent to scales demonstrated by currently employed persons without disabilities (high income) and the disability and employment support sector is anticipated to be significantly enhanced (high support).

	Scenario 1: Low Income/Low Support	Scenario 2: Low Income/High Support	Scenario 3: High Income/Low Support	Scenario 4: High Income/High Support
Total Employment	28,824 (FTE)	29,705 (FTE)	28,824 (FTE)	29,705 (FTE)
Total Labour Income	\$872,397,599	\$921,385,667	\$1,330,234,317	\$1,379,222,385
Total GDP	\$1,249,396,072	\$1,286,782,998	\$1,933,235,844	\$1,970,622,770

Holding these two broad assumptions—about median income levels and the scale to which the support sector is developed—it is clear that the aggregate economic impacts to be catalyzed by enhancing the labour force participation of New Brunswick persons with disabilities would include new employment in the range of 28,824 to 29,705 full-time equivalent employment positions with annual labour income ranging from \$872 million to \$1.38 billion, and annual GDP contributions ranging from \$1.25 billion to \$1.97 billion.

To add some degree of context to these macro-economic impacts, consider that a total annual labour income of \$1.38 billion can be anticipated to result in more than \$1.1 billion in consumer spending along the following patterns:

Total Consumer Spending		\$1,107,509,683
	Food Expenditures	\$173,340,493
	Shelter, operations, furnishings and equipment	\$381,443,740
	Clothing and Accessories	\$51,043,747
	Transportation	\$285,792,920
	Health and Personal Care,	\$83,132,444
	Recreation	\$52,368,944
	Education and Reading	\$11,690,130
	Materials	
	Miscellaneous and Other Spending	\$68,673,599
Non-Consumer Remittances		
	Personal Insurance Payments and Pension Contributions	\$60,731,276
	Charitable Contributions	\$10,584,268

It is important to note that the fundamental elements are present to ensure that economic impacts within these above ranges actually materialize—there is sufficient potential labour supply, sufficient labour demand, and an initial structure of labour market support to coordinate the two. A less concerted approach to enhancing the labour force participation of New Brunswick persons with disabilities would more likely result in total economic impacts toward the low-end of this range while a more concerted and purposeful approach would more likely result in total economic impacts toward the higher-end of this range; yet any and all development within this range are plausible and feasible with the ultimate impacts to materialize predominantly dependent upon the effort invested in the process.

Such aggregated economic impacts, measured in employment, income, and GDP, would also result in a series of taxation revenues accruing to various government jurisdictions, including municipal, provincial, and federal.

Table 14: Consideration of Taxation Revenues Associated with Enhanced Labour Force Participation by Persons with Disabilities in New Brunswick

	Total		New Brunswick (Municipal and Provincial)		Federal	
	Low End	High End	Low End	High End	Low End	High End
HST	\$74,153,796	\$117,233,903	\$48,941,505	\$77,374,376	\$25,212,291	\$39,859,527
Income Tax	\$121,263,266	\$191,711,912	\$54,568,470	\$86,270,360	\$66,694,796	\$105,441,551
Property Tax	\$15,703,157	\$24,826,003	\$15,703,157	\$24,826,003	N/A	N/A
Indirect Taxes	\$36,214,379	\$57,119,501	\$19,917,908	\$31,415,725	\$16,296,471	\$25,703,775
Total	\$247,334,598	\$390,891,319	\$139,131,040	\$219,886,464	\$108,203,558	\$171,004,853

In aggregate, the total economic impacts to be catalyzed by the enhanced participation of persons with disabilities within the New Brunswick labour force are substantial. The low-end projections assume newly employed persons with disabilities earn median incomes lower than do persons without disabilities and that the employment support sector is less developed; the high-end projections assume newly employed persons with disabilities earn median incomes equal to those earned by persons without disabilities and that the employment support sector is more developed. Such aggregated total impacts are anticipated to remain within New Brunswick and fall within a range as presented below.

Table 15: Range of Aggregated Total Annual Economic Impacts Accruing within New Brunswick as Associated with Enhanced Labour Force Participation by Persons with Disabilities in New Brunswick

	Low-End Projections	High-End Projections
Total Employment	28,824 (FTE)	29,705 (FTE)
Total Labour Income	\$872,397,599	\$1,379,222,385
Total GDP Contribution	\$1,249,396,072	\$1,970,622,770
Total Taxation Revenues	\$139,131,040	\$219,886,464

Although presented as a range, both the low-end and the high-end projections nonetheless present notable and substantial economic impacts. Recall that such impacts are presented as accruing annually, meaning that these impacts can be continuously experienced as long as the enhanced labour force participation of New Brunswick persons with disabilities remains supported.

Enhancing the labour force participation of persons with disabilities would catalyze substantial macro-economic impacts across New Brunswick. Although notable in scale, this assessment of economic impacts which has proceeded at a macro-economic scale to this point does nonetheless obscure some of the details and context of enhanced labour force participation by persons with disabilities themselves. As impressive as the aggregated labour income number is, for example, the impacts that one distinct person with disabilities may experience as they are supported in their transition into full and meaningful employment are equally worthy of consideration and discussion. With an assessment of macro-economic impacts of enhancing the labour force participation of persons with disabilities in New Brunswick in place, the following section turns to a consideration of the more contextualized micro-economic impacts and personal experiences of these individuals.

Section Four: Case Summaries—A Real-World Perspective

4.1 Overview

This section provides a discussion of the actual and the desired labour market experiences of 15 distinct persons with disabilities in New Brunswick. The discussion and analyses herein are provided in efforts to introduce finer detail and context to the previous section which provided an analysis of the economic impacts of enhancing the labour market experiences of persons with disabilities at an aggregate provincial scale. It should be noted that the experiences of these 15 individuals are not herein presented as being statistically representative of the population of New Brunswick persons with disabilities but rather as providing context to the previous population-wide analysis drawn from aggregated economic and demographic data.

The case summaries of these 15 individuals are provided by stakeholder organizations active in the support of persons with disabilities in New Brunswick. The distribution of case summaries includes insight into experiences of persons with disabilities from each of the six principal types of disabilities and all degrees of severity as discussed in previous sections. Each case summary refers to an individual who is currently engaged with one or more stakeholder organization(s) as they navigate their respective disability, education, and/or employment trajectory. Identifying information has been anonymized, yet details relating to the individuals' experiences with disability and employment have not been adjusted or corrected.

All individual case summaries are presented in **Section 4.2**. Each case summary provides a brief background concerning the respective individual's disability and labour market experiences, or lack thereof, to date—collectively, these form the *current* labour market experiences. The case summaries proceed to explore how each individual would prefer to engage in the New Brunswick labour market—collectively, these are the *desired* labour market experiences. Each case summary provides a discussion, where appropriate, of what would be required to support each individual in their transition from current to desired labour market experiences as well as a brief overview of the impacts such a transition would have on each individual's earned labour income and consumer spending patterns within the New Brunswick economy.

This analysis is predominantly concerned with earned labour income and excludes government transfers for reasons explored in more detail in the previous sections (e.g. the economic impacts associated with government transfers are not additional within the provincial economy), however two case summaries do include an identification of these government transfers for illustrative purposes. The labour income associated with each individual's current experiences within the labour market is identified as it has been reported by the respective individual to each respective stakeholder organization. The anticipated labour income associated with each individual's desired position within

the labour market is identified in relation to actual earnings reported by New Brunswick residents working in similar respective sectors, according to the North American Industry Classification System (NAICS) and the Canadian Census (2016), as well as in relation to actual employment offers in select cases wherein such offers have been received.

As discussed in the previous section, the total economic impacts associated with the development of enhanced employment for persons with disabilities stem largely from the enhanced productivity of the places of employment and the enhanced consumer spending throughout the provincial economy. Enhanced productivity is most noticeable at an aggregate level, as previously presented, yet consumer spending patterns can be observed and analyzed at the scale of the individual, and it is these patterns which are largely responsible for elements of indirect and induced economic impacts. As such, the consumer spending patterns associated with the current and the desired labour incomes of these 15 individuals are presented in each case summary and are dis-integrated into principal constituent elements to facilitate comparisons and contextualizations.

Following in **Section 4.3**, the direct, indirect, and induced economic impacts of the labour market experiences are assessed for these 15 individuals as a group. This discussion includes a comparison and contrast of the economic impacts of current and desired labour market experiences and provides insights into total earned labour income, employment creation, provincial GDP, and various types of tax revenues accruing to all scales of government jurisdiction. Enhancing the labour market experiences of these 15 individuals by assisting in the transition from current to desired states would result in total annual economic impacts including the generation and support of over 26 full-time equivalent jobs, \$1.2 million in labour income, \$647,819 in provincial GDP contributions, and \$203,783 in additional tax revenues remitted to New Brunswick jurisdictions (Provincial and Municipal). These figures represent a 4X increase in total employment and above 8X increases in all other metrics compared to the economic impacts associated with the current labour market experiences of these 15 individuals.

Lastly, in **Section 4.4**, broad-level observations relating to all 15 case summaries are drawn and discussed. Issues relating to the identification and assessment (diagnosis) of disabilities; workplace awareness, accessibility, and culture; awareness of, and access to, support services; and financial considerations are experienced by all 15 individuals regardless of disability type and/or severity. These observations are herein presented to inform discussion and are returned to later in **Section Five** to contribute to the development of actionable recommendations.

4.2 Individual Case Summaries

These case summaries provide an overview of the actual and the desired labour market experiences of 15 distinct persons with disabilities in New Brunswick. These 15 individuals are currently, or have quite recently, engaged with a disability support stakeholder organization for assistance in navigating the labour force, government services, and/or disability adaptation, rehabilitation, and skill development. Details pertaining to labour market experiences and disabilities remain unaltered, however personal information has been anonymized. Each case summary is presented individually in what follows and is identified according to the principal type of disability experienced by the individual.

4.2.1 Individual #1: Mobility/Physical

Four years ago, at the age of 35, this individual was involved in an all-terrain vehicle accident resulting in a spinal cord injury leading to paraplegia. They have no mobility from the waist-down and consider their disability to be severe. Prior to the accident, this individual was engaged in full-time employment as a mechanic with over ten years of experience; the accident and subsequent rehabilitation required them to leave their position of employment.

This individual currently supports their household—consisting of themselves and joint-custody of two children under the age of 16—with government transfers and programs in the form of social assistance and extended health benefits for medications and equipment. They are currently on the wait-list for New Brunswick Public Housing as maintaining a private residence is no longer tenable.

Now 39 years of age, and with their physical rehabilitation well underway, this individual is seeking to return to the active labour force. They would prefer to re-engage in full-time employment as a small-engine mechanic and have recently been offered the opportunity to do so. To accomplish this, however, this individual requires a standing wheelchair in order to be able to access all areas of the workshop. Additionally, and although they are trained as a mechanic, they would feel more confident returning to work with a period of practice to re-familiarize themselves with the tasks, equipment, and responsibilities and to adapt to their new situation in the workshop.

Upon re-engagement as a full-time small engine mechanic, this individual can expect to earn \$34,000 in total annual labour income, which they consider quite favourable compared to their current situation wherein they are not earning any labour income. This individual's labour income would result in changes to their household spending patterns and lifestyle. Most notably, this individual would earn more in labour income than they are currently receiving in government transfers, and their spending patterns would be a re-circulation of earned income rather than of government transfers.

Nearly 95 percent of this individual's labour income, or \$32,122, would be re-circulated throughout the regional economy by means of direct consumer spending; the other approximate five percent, or \$1,878 would be directed toward non-consumer remittances such as income taxes, retirement savings, and charitable contributions. The principal elements of this scale of household consumer spending can be categorized as follows:

Spending Patterns of Current and Anticipated Total Labour Income of Individual #1			
		Current	Anticipated
Total Consumer Spending		N/A	\$32,122
	Food Expenditures	N/A	\$5,569
	Shelter, operations, furnishings and equipment	N/A	\$13,487
	Clothing and Accessories	N/A	\$1,211
	Transportation	N/A	\$6,079
	Health and Personal Care	N/A	\$2,010
	Recreation	N/A	\$1,370
	Miscellaneous Expenditures	N/A	\$878
Non-Consumer Remittances			
	Income Taxes	N/A	\$545
	Pension Savings	N/A	\$639
	Charitable Contributions	N/A	\$277

Clearly, a significant portion of this individual's consumer spending is directed toward housing and household operations. If they could access New Brunswick Public Housing, a large share of the consumer spending currently dedicated to this element could in turn be re-directed to other elements, such as food, transportation, and clothing, for examples.

This individual is currently in a position to return to employment, yet they could have done so much earlier with appropriate interventions and supports. This individual was engaged with a Social Assistance case manager from the New Brunswick Department of Social Development yet it was determined that neither provincial nor private health insurance would cover the cost of a standing wheelchair—a necessity for employment in this case—as it was not considered a 'basic need device'.

Confronted by such obstacles, this individual approached Ability New Brunswick (Ability NB) of their own agency as they had not been referred to, nor informed of, this organization by their Social Assistance case manager. Ability NB was able to engage with the Training and Employment Support Services unit of the New Brunswick Department of Post-Secondary Education, Training and Labour to assist in securing funding for the required standing wheelchair.

Although now ready and able to return to employment, this individual could have been more efficiently and effectively assisted had the case manager at New Brunswick Department of Social Development been able to more completely assess their employability rather than remain focused on the more

constrained perspective of basic needs and income supports. Additionally, the resolution of this situation required an external organization to identify and intermediate a solution strategy to be enacted between two departments of the same provincial government. Enhanced internal awareness of, and collaboration between, the various units, teams, and branches of the departments of the Government of New Brunswick could be beneficial in creating a structure and culture wherein individuals requiring assistance could engage an initial point of access within the government yet nonetheless rest assured that they were receiving the attention and consideration of the government as a whole.

4.2.2 Individual #2: Mobility/Physical

Due to a medical event shortly after birth, this individual lost all mobility from the neck down. Although they consider their disability to be severe, they nonetheless joined the active labour force with employment beginning while they were a student in university and have remained employed ever-since. Now 55 years of age, this individual is engaged in full-time employment within the Public Service and volunteers extensively throughout the community.

Their disability has not prevented them from full-time employment but it has required that they have 24-hour attendant care to assist with personal and household needs. This individual currently receives \$9,730^{xxx} each month from New Brunswick Social Development to assist, among other elements, in hiring three individuals to jointly provide this care, each at a wage of \$14 per hour; this individual remains responsible for the Canada Pension Plan, Employment Insurance, and Income Tax remittances for these attendant care positions.

This individual would prefer to continue working full-time until retirement, which they anticipate to be ten or more years from now. This individual has been able to continuously adapt to changing workplace environments and responsibilities and to evolving conditions relating to their disability and lifestyle, and hence remain a full-time member of the active labour force in New Brunswick. Yet the uncertain future of the disability support programs they benefit from is cause for concern—without the attendant care support network in place, this individual would not be able to continue in employment.

This individual currently earns \$85,000 in total annual labour income but finds themselves in a precarious position. Without the disability support programs which assist in providing the attendant care they require, this individual could quite readily be at risk of not being able to remain in the active labour force. If such were to come to pass, they could suddenly come to be earning no labour income at all which could carry significant consequences for their lifestyle now and long into the future as not only would their income be abbreviate but so too would their pension accrual period.

This individual, and hence their employment, requires that they receive 24-hour attendant care. Typically, the Disability Support Program would conduct means testing to determine the level of government subsidization of such care—in this case, this individual would more readily qualify for subsidized attendant care if they were unemployed with no labour income to report. Through continued advocacy by Ability New Brunswick, this individual has been granted a financial policy exemption and now receives a subsidy of \$14/hour to assist in securing the required attendant care. The individual contributes the employer-portion of the income taxes, Employment Insurance, and Canadian Pension Plan remittances for these attendant care positions, and is able to retain labour income to maintain their accessible house and transportation.

This individual's total annual labour income is re-circulated throughout the regional economy in the form of \$62,063 in direct consumer spending and approximately \$21,700 in non-consumer

remittances, including income taxes, pension savings, and charitable contributions. This scale of direct consumer spending is further distributed along the following principal elements:

Spending Patterns of Current and Anticipated Total Labour Income of Individual #2		
		Current and Continued
Total Consumer Spending		\$62,063
	Food Expenditures	\$8,532
	Shelter, operations, furnishings and equipment	\$20,120
	Clothing and Accessories	\$3,430
	Transportation	\$9,130
	Health Care, Personal Care, Remittances for Attendant Care	\$14,722
	Recreation	\$1,564
	Miscellaneous Expenditures	\$576
Non-Consumer Remittances		
	Income Taxes	\$14,298
	Pension Savings	\$6,670
	Charitable Contributions	\$732

A relatively larger proportion of this individuals' consumer spending is directed to Health and Personal Care on account of the network of attendant care they require. The government transfers this individual receives to assist in paying for this care is fully additional to the amount they spend each year on such care.

This individual's experience in the labour market, however, is dependent upon the retention of this 24-hour attendant care. This care is provided by three individuals engaged in full-time shift-based employment. Each attendant earns a total annual labour income of \$25,480; this situation results in a total of \$76,440 being paid in direct labour income to the team of three attendants. At this scale of compensation, each attendant can be anticipated to re-circulate \$24,073 in direct consumer spending throughout the regional economy. The spending patterns of the employment positions can be anticipated to lead to:

Spending Patterns of Attendant Care Workers Associated with Individual #2		
	Individual Attendant	Aggregate Attendant Team (3 positions)
Total Consumer Spending	\$24,073	\$72,219
Food Expenditures	\$4,174	\$12,522
Shelter, operations, furnishings and equipment	\$10,108	\$30,324
Clothing and Accessories	\$908	\$2,724
Transportation	\$4,556	\$13,668
Health and Personal Care	\$1,506	\$4,518
Recreation	\$1,027	\$3,081
Miscellaneous Expenditures	\$658	\$1,974
Non-Consumer Remittances		
Income Taxes	\$409	\$1,227
Pension Savings	\$199	\$597
Charitable Contributions	\$208	\$624

At a wage of \$14/hour, the individual is experiencing increasing difficulty in attracting and retaining suitably trained and experienced care givers. The expected wage for such experienced care givers is now approaching \$19/hour, yet this individual is unable to secure additional subsidization from the Disability Support Programs or from their own labour income. This situation contributes to the individual's anxieties about being able to remain in a position of employment; yet to not remain employed would result in this individual likely needing to transition into a long-term care facility. The prospect of this outcome is revisited every year as the Disability Support Program conducts an annual financial review, and the individual's current financial policy exemption is not guaranteed to continue indefinitely. Within the current structure and culture of disability support programs, this individual's employment and lifestyle are quite precarious.

4.2.3 Individual #3: Seeing

This individual's sight loss has developed over time due to diabetes and they now consider their disability to be of moderate severity. They are now legally blind and require assistive technology for reading and a white cane for independent travel. This individual is a co-earner in their household, consisting of themselves and their spouse with no dependents, having returned to the labour force after a period of unemployment due to the development of their disability.

This individual had long been employed in the Information Technology (IT) sector yet their increasing sight loss forced them to leave this employment position. At the time, they were not aware of the various disability and employment support organizations and programs and subsequently remained unemployed for two years. Through eventual engagement with community organizations, this individual was able to receive vision rehabilitation services and eventually return to university to complete degrees in Sociology and Psychology.

Since graduation in 2019, they have been engaged in an office administration role in the health services sector as a full-time contractual position earning \$15 per hour. This individual is keenly aware that they are effectively re-launching their career and needing to start at an entry-level position, and they hope to return to a similar level of seniority as they had established prior to the development of their disability.

With this objective, this individual is aiming to transition from a contractual office administration role in the health services sector to a permanent position in career and/or personal counselling services for persons with disabilities. Not only would such a transition help fulfill their personal ambitions but the work environment would be more amenable to the workplace conditions necessitated by their disability.

With the appropriate post-secondary education now complete, such a transition would lead to an anticipated annual labour income of \$51,331. This compares to their current entry-level contractual position wherein they earn an annual labour income of \$28,250. This change in total annual labour income would also result in substantial changes to this individual's annual consumer spending patterns.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #3			
		Current	Anticipated
Total Consumer Spending		\$26,690	\$41,219
	Food Expenditures	\$4,627	\$6,451
	Shelter, operations, furnishings and equipment	\$11,206	\$14,196
	Clothing and Accessories	\$1,006	\$1,900
	Transportation	\$5,051	\$10,636
	Health and Personal Care	\$1,670	\$3,094
	Recreation	\$1,138	\$1,950
	Miscellaneous Expenditures	\$730	\$967
Non-Consumer Remittances			
	Income Taxes	\$453	\$5,940
	Pension Savings	\$531	\$2,814
	Charitable Contributions	\$230	\$491

This individual's disability is continuing to develop and is changing, and will continue to change, how they interact with their workplace and responsibilities. They are currently re-entering the labour force in an entry-level position yet with ambitions of being able to demonstrate their abilities and progress to a level of seniority they had experienced prior to the progression of their disability. In this sense, this individual will require ongoing support for vision rehabilitation as well as evolving workplace accommodations, technology assessments and training, and skill-development—this individual would benefit from being able to engage with an employment counsellor as needed throughout their career and not only upon their re-integration into the labour force.

4.2.4 Individual #4: Seeing

This individual is a full-time high school (secondary) student who moved to New Brunswick from the Middle East with their mother and younger siblings over the last year. This individual has hereditary progressive eye disease which is currently leading to significant loss of sight and which typically leads to complete blindness over time. They consider their disability to be of moderate severity yet anticipate this severity to increase as the disability continues to develop.

This individual is currently completing secondary education and is seeking part-time employment throughout the school year. They hope to be able to increase the number of hours worked each week to full-time employment over the summer and upon graduation with the ambition of enrolling in a post-secondary degree program majoring in Psychology.

Along with the considerations of immigrating to a new country, this individual is also in the position of needing to increase their fluency in either English and/or French in order to more readily engage in the active labour force. Prior to immigrating to Canada, they did not have any support with their disabilities in their former home-country and are only now engaging in more appropriate vision rehabilitation services. This individual is beginning to learn braille and this skill will be instrumental in assisting with learning English and/or French more rapidly and completely.

In these circumstances, this individual anticipates engaging in part-time work at approximately \$12 per hour in the immediate future and has ambitions of earning a professional salary as a psychologist upon further education and in the longer-term future. In the near-future, this individual can anticipate contributing meaningfully to their family's household spending and consumer patterns. Upon completion of their intended post-secondary education program, a career as a licensed psychologist could lead to even more substantial spending patterns.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #4			
		Current	Anticipated
Total Consumer Spending		\$11,810	\$58,412
	Food Expenditures	\$2,050	\$8,030
	Shelter, operations, furnishings and equipment	\$4,958	\$21,760
	Clothing and Accessories	\$445	\$3,228
	Transportation	\$2,235	\$12,357
	Health and Personal Care	\$740	\$4,445
	Recreation	\$503	\$4,296
	Miscellaneous Expenditures	\$323	\$1,485
Non-Consumer Remittances			
	Income Taxes	\$200	\$13,457
	Pension Savings	\$235	\$6,278
	Charitable Contributions	\$96	\$621

This individual has demonstrated an aptitude for focused study and their progression to post-secondary education should not be doubted, however their more urgent pressure to earn income may present a barrier to such a trajectory. This individual is increasingly becoming work-ready and largely so with the support of various organizations and entities as coordinated within the secondary education system. Upon graduation, however, the ability to engage in such services in such a coordinated manner is uncertain, and, as such, their continued employment readiness and disability rehabilitation may be slowed.

4.2.5 Individual #5: Hearing and Mobility

This individual has been deaf since birth and uses American Sign Language (ASL) as their primary language; they have also developed multiple sclerosis later in life and consider their disabilities to be severe. This individual is single with no dependents, is currently unemployed, and resides in New Brunswick Public Housing. They have had a varied career of working full-time in welding, carpentry, manual labour, and cleaning, and more recently were working in a seafood processing plant yet were compelled to leave this position, and the active labour force itself, by the continued development of multiple sclerosis.

Having undergone some rehabilitation, this individual now uses a wheelchair for mobility although they can walk with a cane and stand for short periods of time when necessary. At this point, they are seeking to re-engage in the active labour force in any skilled trade which would allow them to craft with their hands. With the exception of relatively more physically demanding manual labour, which they would prefer to avoid, this individual would require additional training and education to progress in a skilled trade career. For this individual, the skill training and eventual career would need to be developed with respect not only to their mobility disability but also to their primary disability of being deaf—a situation which is proving quite difficult to address.

This individual is aware that they would be re-engaging in the labour force at an entry-level position and anticipates earning approximately \$15 per hour leading to a total annual labour income of \$28,270.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #5			
		Current	Anticipated
Total Consumption		N/A	\$26,709
	Food Expenditures	N/A	\$4,630
	Shelter, operations, furnishings and equipment	N/A	\$11,214
	Clothing and Accessories	N/A	\$1,007
	Transportation	N/A	\$5,055
	Health and Personal Care	N/A	\$1,671
	Recreation	N/A	\$1,139
	Miscellaneous Expenditures	N/A	\$730
Non-Consumer Remittances			
	Income Taxes	N/A	\$453
	Pension Savings	N/A	\$531
	Charitable Contributions	N/A	\$231

The joint hearing and mobility disabilities present significant obstacles to accessing training and education. This individual would benefit from fully-individualized and continuous employment counselling to assist in the identification and/or development of appropriate training and education programs. This individual is actively seeking to engage in preparing for employment, yet navigating this landscape and situation is proving quite challenging without adequate support and guidance.

4.2.6 Individual #6: Hearing

This individual has been deaf since birth and relies on American Sign Language (ASL) as their primary language; they consider their disability to be of moderate severity. They are a single parent of two children and had been engaged in the active labour force until the time of the divorce. Having left the labour force to be the sole care-giver to their children, this individual has returned to their home-town to be near to family members for additional support.

This individual has many years of experience having worked as an employment counsellor within a community organization and thereafter as an employment support worker for persons with disabilities. With the intention of re-engaging in the labour force, this individual is now completing training in the field of information technology services and in web-design and development more specifically.

This individual's situation is complicated by trying to navigate available training and support programs to be able to advance their training while also residing in a rural area of the province. Certain governmental support programs have been unwilling to consider further support as it was determined that employment prospects in their desired sector of employment are too low in the region where this individual resides. This individual is willing to move to an urban area where employment prospects may be improved, yet could only be able to do so if the employment income were sufficient to cover their and their children's' needs as they would no longer be able to rely on family members for assistance and support. Compounding this situation, this individual needs a new cochlear implant processor, which represent a significant cost not currently covered by the government assistance programs this individual is engaged with.

Upon overcoming these obstacles, and once their training is complete, this individual anticipates engaging in full-time employment at an annual total labour income of \$44,460.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #6			
		Current	Anticipated
Total Consumer Spending		N/A	\$38,972
	Food Expenditures	N/A	\$6,440
	Shelter, operations, furnishings and equipment	N/A	\$14,751
	Clothing and Accessories	N/A	\$1,698
	Transportation	N/A	\$8,312
	Health and Personal Care	N/A	\$3,107
	Recreation	N/A	\$1,888
	Miscellaneous Expenditures	N/A	\$929
Non-Consumer Remittances			
	Income Taxes	N/A	\$2,313
	Pension savings	N/A	\$1,535
	Charitable Contributions	N/A	\$734

4.2.7 Individual #7: Hearing

This individual is 40 years of age and has been deaf since birth. They are a single individual with no dependents who has dedicated themselves to achieving the highest levels of their craft and profession. Although they consider their disability to be severe, this individual has engaged various employment and disability support programs and has completed their education and training to become an executive chef and fulfill their professional ambitions.

This individual engaged the necessary interpretation services and participated in training and employment support programs to be able to train as a chef, undertake an apprenticeship, and ultimately become certified as a Red Seal cook. This individual is now earning an annual total labour income of \$69,745 and anticipates remaining fully employed through to retirement, which they project being more than 20 years from now.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #7		
		Current and Anticipated
Total Consumer Spending		\$56,005
	Food Expenditures	\$8,765
	Shelter, operations, furnishings and equipment	\$19,289
	Clothing and Accessories	\$1,006
	Transportation	\$14,452
	Health and Personal Care	\$4,203
	Recreation	\$2,648
	Miscellaneous Expenditures	\$1,315
Non-Consumer Remittances		
	Income Taxes	\$8,066
	Pension Savings	\$3,824
	Charitable Contributions	\$601

This individual is now fully-employed and earning a labour income among the top quintile of their profession, yet this would likely not have been possible without the assistance of various disability support programs so engaged. The value of the programs and supports this individual activated can be approximated at \$250,000 over the course of their professional development trajectory—which is a total value equal to less than five years of this individual's consumer spending within the New Brunswick economy.

4.2.8 Individual #8: Learning

This individual is currently in primary school and is struggling to perform academically at an appropriate grade level. The parents, who have family histories of learning disabilities, suspect their child has a learning disability of a mild severity but have not yet been able to access adequate assessment services to properly determine if this is the case.

This individual should be referred to a school psychologist for assessment yet the wait-times to access such services are significant and increasing. The individual's parents are considering paying for private assessment services, yet the cost of such, often approaching \$3,000, is proving to be an obstacle. Yet without a certified diagnosis, the individual is not able to access an accommodated learning environment customized to their needs and hence will likely continue to struggle academically.

The young individual has aspirations of becoming a police officer and they and their parents are aware that this objective will require the completion of secondary and post secondary education along with notable academic achievement therein. Should the young individual achieve this objective, they can anticipate to earn annual total labour income of approximately \$65,600, yet without the proper interventions at the appropriate times, achieving this objective may be unnecessarily challenging if not impossible. If successful in their aspirations, this individual would expect to have the following consumer spending patterns.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #8			
		Current	Anticipated
Total Consumer Spending		N/A	\$52,677
	Food Expenditures	N/A	\$8,244
	Shelter, operations, furnishings and equipment	N/A	\$18,142
	Clothing and Accessories	N/A	\$2,427
	Transportation	N/A	\$13,593
	Health and Personal Care	N/A	\$3,954
	Recreation	N/A	\$2,490
	Miscellaneous Expenditures	N/A	\$1,236
Non-Consumer Remittances			
	Income Taxes	N/A	\$7,587
	Pension Savings	N/A	\$3,597
	Charitable Contributions	N/A	\$627

The obstacles this individual faces in transitioning toward their desired labour market experiences exist primarily on account of them not being able to access appropriate identification and assessment (diagnosis) services. Learning disabilities refer to neurological disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disabilities are distinct from developmental (intellectual) disabilities in that they affect the ways in which an individual engages and intermediates information and not the individual's ability to engage and intermediate information. As such, learning disabilities are often considered 'invisible' and often mis-identified as behavioural and/or attitudinal issues. Related, many individuals with learning disabilities also report struggling with problems such as anxiety, depression, or low self-esteem.

A fundamental step in overcoming the barriers associated with learning disabilities is the timely identification and assessment (diagnosis) of a specific learning disability(ies) achieved by the completion of a psycho-educational assessment. With the correct assessment, interventions involving home, school community, and the workplace can be established and implemented. The interventions should be appropriate for each individual's learning disability sub-type and, at a minimum, include the provision of specific skill instruction; learning accommodations; compensatory strategies; and self-advocacy skills.

The timely identification and assessment (diagnosis) of learning disabilities should be a two-part process. With a focus on reaching individuals early in life, an early identification should take place in the primary years of schooling to ensure a child's early educational development. Secondly, an updated psycho-educational assessment should coincide with a secondary student's vocational ambitions. A second assessment to be conducted during the last two years of a student's secondary education is a requirement to qualify for the Canada Study Grant for Persons with Disabilities.

Yet in recent years, the New Brunswick Department of Education and Early Childhood Development reduced psychologist staffing in the school system thereby substantially limiting the access to psycho-educational assessments available to students in grades K - 12. Without access to these assessments, most children with a learning disability go undiagnosed, do not receive support and intervention, and hence do not achieve their full potential in school—and later within the labour force.

Adults in post-secondary education and/or the labour force can nonetheless benefit from later-stage assessments as interventions and skill training can be developed and implemented. Once properly diagnosed and with interventions in place, persons with learning disabilities typically lead very productive and rewarding lives—both personally and professionally.

If an individual is not going to be assessed while they are in school, individuals/parents can arrange for a psycho-educational assessment from a private sector provider. The cost of private sector assessments—from \$2,000 to \$3,000—do represent a significant obstacle to many individuals and families.

4.2.9 Individual #9: Learning

Following graduation from high school, this individual has been working for two years as an automotive service technician while they also pursue training and certification to become a licensed/certified automotive mechanic. The individual is single and continues to reside with their parents while progressing through their training and certification.

Based on experiences throughout primary and secondary education, and continuing now through their automotive mechanic training program, the individual has reason to suspect they have a learning disability of a mild severity. A diagnosis of such has not been forthcoming as the individual and their support network have had difficulty accessing the services required to properly test, identify, and diagnose for such on account of the availability and costs of these assessment resources.

Without a clear diagnosis, the individual is not in a position to engage with disability and employment support programs nor receive any form of consideration in their learning environment, such as learning aides or alternate testing formats, as examples. At this time, the individual has two more blocks of training and testing to complete in order to achieve certification, yet they increasingly doubt their ability to do so without some form of consideration and learning environment modifications.

As a full-time automotive service technician, the individual is earning an annual total labour income of \$30,740. This annual total labour income would increase to \$53,232 upon completion of training, certification, and respective employment.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #9		
	Current (adjusted to reflect living with parents)	Anticipated
Total Consumer Spending	\$29,043	\$42,745
Food Expenditures	\$2,118	\$6,690
Shelter, operations, furnishings and equipment	\$5,075	\$14,722
Clothing and Accessories	\$2,789	\$1,970
Transportation	\$6,115	\$11,030
Education	\$5,740	N/A
Health and Personal Care	\$2,798	\$3,208
Recreation	\$2,989	\$2,021
Miscellaneous Expenditures	\$1,659	\$1003
Non-Consumer Remittances		
Income Taxes	\$493	\$6,156
Pension savings	\$578	\$2,919
Charitable Contributions	\$251	\$508

This individual could more readily adapt to their (probable) learning disability and access the necessary learning environment considerations and modifications if their (probable) learning disabilities could be assessed and diagnosed. The inability to access timely and appropriate assessment and identification (diagnosis) services, as described in the case summary #8, is increasingly jeopardizing this individual's ability to achieve academically and to transition toward their desired labour market experiences.

4.2.10 Individual #10: Mental Health

This individual developed a mental health disability subsequent to a brain injury resulting from a vehicular accident; they consider their disability to be of a mild severity. Prior to their injury, this individual was employed full-time as a manager of a retail location of a nation-wide brand. Subsequent to the accident, this individual left the labour force and returned to their home-town to live with their parents as they adapted to their injury and rehabilitation.

Through the assistance of a job coach and the collaboration of their former employer, this individual attempted returning to work on a flexible basis yet challenges with commuting to work and information retention prevented this from being a sustainable solution. Further engagement with their job coach has led this individual to be employed part-time nearer to home in a seafood processing plant. The repetitive nature of the tasks proved helpful in developing confidence and assisting throughout the individual's continued rehabilitation.

This individual has been employed in this position for over one year and is now working toward being able to work more hours each week and being able to live independently. Last year, they earned approximately \$7,280 in total annual labour income. With their rehabilitation and employment strategy proving successful, this individual has ambitions of returning to a full-time assistant-managerial level position in a retail environment. With this objective in mind, their annual total labour income could be anticipated to increase to \$38,825.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #10		
	Current (adjusted for living with parents)	Anticipated
Total Consumption	\$6,878	\$34,033
Food Expenditures	\$501	\$5,623
Shelter, operations, furnishings and equipment	\$1,201	\$12,881
Clothing and Accessories	\$542	\$1,483
Transportation	\$1,360	\$7,259
Health and Personal Care	\$2,259	\$2,713
Recreation	\$613	\$1,649
Miscellaneous Expenditures	\$393	\$810
Non-Consumer Remittances		
Income Taxes	\$116	\$2,019
Pension savings	\$136	\$1,340
Charitable Contributions	\$60	\$641

In order to transition toward their desired labour market position, this individual would benefit from continued engagement with an employment counsellor and/or job coach. Over time, such assistance would become unnecessary, yet for now, the continued support and guidance so provided would prove beneficial. However, as the individual is currently employed, although, it should be noted, not in their desired industry sector nor position structure, their ability to access public employment counselling and job coaching services is significantly diminished. Transitioning to their desired labour market experience is feasible, yet may require a longer period of assistance than current public support programs are designed to provide, and this fact may in turn jeopardize this individual's ability to successfully navigate this transition.

4.2.11 Individual #11: Mental Health

This individual is 34 years of age and has borderline personality disorder which is often compounded by depression, anxiety, and panic attacks; they consider their disabilities to be of moderate severity. They experience a variability to the severity of their conditions dependent upon their behaviour and activities, consistency of medication, and social determinants. This variability has made it difficult to secure stable and permanent employment.

They currently live with their parents on account of their employment and financial situation. This individual's desire to live independently is a strong motivator in their search for full-time permanent employment. Their employment history has been sporadic with a variety of part-time and temporary positions in food service, hospitality, clerical support, and general labour. This individual considers themselves to be underemployed largely on account of mental health leaves from work and the concomitant workplace stigma such leaves are perceived to engender.

This individual has engaged with a job coach and has been able to remain in part-time employment in an entry-level position in the hospitality sector; however, their hours are minimal and often irregular and their annual total labour income amounts to approximately \$9,750. They enjoy working in the hospitality sector and would like to progress to a full-time employment position and higher degree of responsibilities over time; they anticipate being able to earn an annual total labour income of \$30,160.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #11			
		Current (adjusted for living with parents)	Anticipated
Total Consumer Spending		\$9,212	\$26,437
	Food Expenditures	\$671	\$4,368
	Shelter, operations, furnishings and equipment	\$1,409	\$10,006
	Clothing and Accessories	\$726	\$1,152
	Transportation	\$1,821	\$5,638
	Health and Personal Care	\$1,204	
	Education/job coach	\$1,900	N/A
	Recreation	\$821	\$1,281
	Miscellaneous Expenditures	\$526	\$629
Non-Consumer Remittances			
	Income Taxes	\$156	\$1,569
	Pension Savings	\$183	\$1,041
	Charitable Contributions	\$80	\$498

This individual would benefit from on-going support of mental health services. The public mental health services are not positioned to provide long-term and on-going support and the wait-times to access such services often create an untenable situation. Furthermore, accessing private mental health services are prohibitively expensive for this individual. This individual is currently engaged in the labour market and would prefer to be even more engaged, yet the support they require to intermediate their disability and employment is not currently accessible nor sustainable.

4.2.12 Individual #12: Developmental

This individual recently graduated from high school (secondary education) and is now engaged in part-time employment as a sales associate in the retail sector. They benefitted from the assistance of a full-time education assistant while in high school and an adjusted curriculum designed specifically in relation to their Autism Spectrum Disorder, which they consider to be of moderate severity.

This setting assisted the individual in developing their current labour market experience. The individual was employed part-time for the summer season at this retail location and continued in the position throughout the school year as a co-op placement. A full-time job coach also provided guidance and support to assist in developing a foundation to their employment. With school now complete, this individual typically works one eight-hour shift each week and remains available for additional shifts if ever necessary. They earn a minimum wage hourly remuneration leading to an annual total labour income of \$5,200.

The individual enjoys this employment and would prefer to be engaged for more hours throughout the week, and even at a full-time scale, if available. They anticipate being able to accept greater responsibilities in the workplace over time and with the support of a job coach. With an increase in remuneration over time and with being engaged for more hours each week, this individual anticipates being able to earn an annual total labour income of approximately \$20,000.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #12			
		Current (adjusted for living with parents)	Anticipated
Total Consumer Spending		\$4,913	\$18,896
	Food Expenditures	\$838	\$3,276
	Shelter, operations, furnishings and equipment	\$410	\$2,340
	Clothing and Accessories	\$1906	\$712
	Transportation	N/A	\$3,576
	Health and Personal Care	\$1,503	\$1,182 (reduced reliance on job coach services)
	Recreation	\$1,025	\$806
	Miscellaneous Expenditures	\$657	\$516
Non-Consumer Remittances			
	Personal Savings	\$1,497	\$5,593
	Income Taxes	N/A	\$320
	Pension Savings	N/A	\$376
	Charitable Contributions	N/A	\$163

In order to transition toward their desired labour market experience, this individual would be required to undertake additional responsibilities within the retail environment, yet undertaking additional responsibilities would require the continued assistance of a job coach, likely for a period of time extending to one year or beyond. Currently, this individual cannot open and close the store nor undertake cash register responsibilities, which are responsibilities the store manager needs to have fulfilled.

A job coach could assist this individual in developing these skills; however, the individual does not work sufficient hours to justify the continued engagement of a job coach and the employer cannot justify allocating more hours to this individual until they develop these skills. This situation could benefit from a form of wage subsidization wherein the individual could be allocated additional work hours—and thereby justify engaging a job coach—without these hours representing an undue financial pressure on the employer as the remuneration for these additional hours would not entirely be the responsibility of the employer. The wage subsidization need only be temporary as once the individual develops sufficient skills to open and close the store an/or operate the cash register they would be less reliant on the job coach and, by extension, the allocation of their work hours would be less dependent upon the subsidization. Such a solution, however, has yet to materialize.

4.2.13 Individual #13: Developmental

This individual was born with a developmental disability which they consider to be of mild severity. Upon recent graduation from high school (secondary education), they connected with their local Employment Assistance program to find their first employment position. The individual is currently in their first year of employment and is engaged as a sales associate in the retail sector working 10 hours per week at minimum wage. The individual continues to live with their parents who are divorced and have established a joint custody arrangement; although now of adult age, this arrangement is likely to continue for the foreseeable future.

The individual currently earns an annual total labour income of \$6,500. They enjoy this employment and would prefer to be engaged for more hours throughout the week, and even at a full-time scale, if available. They anticipate being able to accept greater responsibilities in the workplace over time and with the initial support of a job coach. With an increase in remuneration over time and with being engaged for more hours each week, this individual anticipates being able to earn an annual total labour income of approximately \$20,000.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #12			
		Current (adjusted for living with parents)	Anticipated
Total Consumer Spending		\$6,141	\$18,896
	Food Expenditures	\$1,046.66	\$3,276
	Shelter, operations, furnishings and equipment	\$512.09	\$2,340
	Clothing and Accessories	\$1,131.59	\$712
	Transportation	N/A	\$3,576
	Health and Personal Care	\$1,877.25	\$1,182 (reduced reliance on job coaching services)
	Recreation	\$1,280.23	\$806
	Miscellaneous Expenditures	\$820.59	\$516
Non-Consumer Remittances			
	Personal Savings	\$1,869.75	\$5,593
	Income Taxes	N/A	\$320
	Pension Savings	N/A	\$376
	Charitable Contributions	\$53	\$163

Moving forward, this individual would benefit from the continued availability of employment support whether in the form of employment counselling and/or job coaching—the ability to turn to professional support when obstacles and/or challenges arise at work would ensure this individual a higher probability of remaining in employment.

4.2.14 Individual #14: Mental Health

This individual is a single parent of one primary school-aged child and has been dealing with variable cycles of depression and anxiety since late adolescence. Their mental health disability, which they consider to be of moderate severity, has led to a sporadic employment history. Over the last five years, they have been engaged in part-time, full-time, and seasonal employment in the food service sector and are currently working approximately nine hours each week therein. This individual has always earned the minimum wage, or very close thereto, throughout this employment history.

Having completed high school over ten years ago, the individual would like to begin a post-secondary education trajectory with the objective of becoming a Licensed Practical Nurse. The individual is anxious of starting this process when considering the costs of tuition, displaced income (opportunity cost), childcare, and potential impacts on their mental health. Yet with an annual total labour income of \$5,850, they do not see how the current situation could be sustainable; as a full-time LPN, the individual anticipates earning an annual total labour income of \$45,670.

Their current income is largely dependent upon government assistance in the form of Social Assistance, Child Benefit, and GST rebates; in aggregate, these government transfers amount to an annual sum of \$15,369, bringing their total income to \$21,219. Yet elements of these government transfers are retracted (clawed-back) if the individual increases their labour income. This situation is quite unstable and unsustainable and is largely why the individual would prefer to develop a career beyond the need of any government transfers.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #14			
		Current (includes government transfers)	Anticipated
Total Spending	Consumer	\$20,047	\$40,033
	Food Expenditures	\$3,475	\$6,615
	Shelter, operations, furnishings and equipment	\$8,417	\$15,152
	Clothing and Accessories	\$756	\$1,744
	Transportation	\$3,794	\$8,538
	Health and Personal Care	\$1,254	\$3,192
	Recreation	\$855	\$1,939
	Miscellaneous Expenditures	\$548	\$953
Non-Consumer Remittances			
	Income Taxes	\$340	\$2,376
	Pension Savings	\$399	\$1,577
	Charitable Contributions	\$173	\$754

This individual's disability is clearly impacting their ability to work yet not their desire to do so. As this individual has been designated as a non-urgent case, they have been placed on a wait-list to engage in public mental health services and counselling—and they have now been on this wait-list for over two years with no immediate prospect of receiving the services they need. With labour income of \$5,850, and an additional \$15,369 in government support transfers, this individual is not in a position to access mental health services in a private setting with any stability or sustainability. Although public services do exist, they have not been accessible to this individual.

4.2.15 Individual #15: Physical & Mental Health

This individual had been employed full-time for 20 years in the construction sector until a vehicular accident resulted in a back injury. They can no longer stand for more than 10 minutes at a time nor lift any object weighing more than five kilograms. Adjusting to the disability has, at times, led to depression and anxiety. They consider their disabilities to be of moderate severity.

This disability has had a significant impact on the household, consisting of the individual and their spouse, as they have been unemployed since the accident five years ago. Formerly the sole earner of the household, their lifestyle has required substantial adjustments with both individuals now being unemployed.

With a secondary education completed nearly 30-years ago and with a self-taught interest in computers, the individual would like to engage some form of post-secondary education in an effort to catalyze a career in the Information Technology (IT) sector. They are quite interested in the Network Support course at the New Brunswick Community College but perceive the costs as a barrier to engagement—in addition to tuition and related fees, the individual would need to relocate to better engage in this particular course. Upon completion of the course and achieving full-time employment as a network support technician, the individual anticipates earning a total annual labour income of approximately \$34,800.

As a household of two individuals with no income, they collectively receive government transfers of income assistance, GST rebates, and heating supplement for an annual total income of \$13,738. Although the individual could qualify for a Disability Tax Credit, their spouse has no earned income to benefit from such.

Spending Patterns of Current and Anticipated Total Labour Income of Individual #15		
	Current (includes government transfers)	Anticipated
Total Consumption	\$13,738	\$30,505
Food Expenditures	\$2,381	\$5,040
Shelter, operations, furnishings and equipment	\$5,768	\$11,546
Clothing and Accessories	\$518	\$1,329
Transportation	\$2,600	\$6,506
Health and Personal Care	\$860	\$2,432
Recreation	\$586	\$1,478
Miscellaneous Expenditures	\$375	\$726
Non-Consumer Remittances		
Income Taxes	N/A	\$1,810
Pension Savings	N/A	\$1,201
Charitable Contributions	N/A	\$574

This individual continues to adapt to their mobility disability and now often find their secondary mental health disabilities, depression and anxiety, to be more constraining. This individual will require financial assistance to engage the post-secondary education fitting their desired career development trajectory, and this individual does anticipate being able to secure such assistance; however, their struggles with mental health continue to prevent them from engaging such programs and services and truly initiating their post-secondary education trajectory and labour force re-integration. As a non-urgent case, however, this individual does not qualify for any timely mental health services and counselling, and nor do they retain sufficient income to be able to access such services within the private sector.

4.3 Aggregated Economic Impacts

The case summaries of these 15 individuals provide context to the labour market experiences of persons with disabilities as well as insights into the economic impacts of their current and potential employment details. As discussed in the previous sections, an individual's labour income relates to productivity and hence demand for additional products and services within a regional supply chain as well as by means of personal/household consumer spending. This additional demand can in turn generate pressures within the regional economy supporting additional employment. In this sense, an individual's labour market experience, and changes thereto, can be correlated to regional economic impacts as measured by labour income, provincial economic activity as measured by gross domestic product (GDP), and regional job support and growth. Collectively, these economic impacts also present tax effects for municipal, provincial, and federal governments.

As discussed in each of the case summaries, these individuals largely consider themselves to be under- and/or un-employed due to obstacles presented by, or in relation to, their disabilities in further engaging in the provincial labour market. Those few individuals who consider themselves to be fully engaged—two such individuals among this sample of 15—do so on account of having already intermediated their professional development within the labour force through various disability and employment support programs, yet these two also perceive their fully engaged status with uncertainty as any changes to disability and employment support programs could quite readily result in changes in their labour market engagement.

The economic impacts of enhancing the labour market experiences of persons with disabilities are most readily perceived when they are compared to the economic impacts of the current labour market experiences of persons with disabilities. Herein we provide a more contextualized analysis of current and potential economic impacts by further contrasting the structure of the current and the desired (or potential) labour market experiences of these 15 distinct individuals.

4.3.1 Identification of Current Economic Impacts

Currently, these 15 individuals collectively earn a total of \$105,380 in labour income each year^{xxxi}. All of these individuals desire to be employed, yet the mean annual labour income within this group is \$7,025 and the median is \$5,200. Seven individuals are in a position of earning no labour income at all and the remaining individuals earn between \$5,000 and \$31,000 in labour income each year.

This collective level of employment can be summarized as being equivalent to four full-time equivalent (FTE) jobs resulting in a direct labour income of \$105,380 and a direct GDP contribution of \$52,228. These direct economic impacts lead to additional demand and activity within the regional economy of the Province of New Brunswick resulting in additional indirect and induced economic impacts. In this sense, the current labour market experiences of these 15 individuals with disabilities result in total economic impacts amounting to 5.8 FTE jobs and \$149,460 in total labour income. This total employment and labour income, along with concomitant consumer spending, in turn generates a total annual GDP contribution of \$78,342.

Table 16: Direct and Total Economic Impacts of Current Employment Experiences of 15 Individuals with Disabilities in New Brunswick		
	Direct Impacts	Total Impacts (Direct, Indirect, and Induced)
Employment (FTE)	4 (FTE)	5.8 (FTE)
Labour Income	\$105,380	\$149,460
GDP	\$52,228	\$78,342

4.3.2 Identification of Potential Economic Impacts

These same 15 individuals have all expressed a desire and willingness to be, or to be more fully, employed. Some have had existing labour market experiences temporarily truncated due to the development of a disability, and are now seeking to re-engage, while others have yet to fully initiate their labour market experiences. In all situations, however, these individuals are facing obstacles to employment on account being required to navigate the labour market as persons with disabilities.

It should be noted that these 15 individuals seek to develop careers in sectors which are already active in the Province of New Brunswick and which are seeking labour supply. These individuals also anticipate earning labour wages appropriate to their level of professional development and the sectors they respectively seek to be engaged in, according to observed actual earned wages reported within the Census 2016. In this sense, the desired labour market experiences of these fifteen individuals should be understood not only as a series of personal ambitions, but also as a *feasible* labour market development capable of being achieved.

Should all 15 individuals develop the degree and nature of employment they respectively desire—as some seek part-time, full-time, entry-level, and/or professional positions—they would collectively represent 13 full-time-equivalent employment positions earning \$689,400 in direct labour income each year. They would report a median labour income of \$44,460 with a range from \$20,000 through to \$85,000 in annual labour income.

These direct 13 FTE jobs and \$689,400 in direct labour income would result in a direct annual GDP contribution within the regional economy of the Province of New Brunswick of \$294,182. This scale and nature of direct economic activity results in additional indirect and induced economic impacts amounting to total employment of 19 FTE individuals for a total annual labour income of \$978,948 and a total annual GDP contribution of \$441,273.

Developing these labour market experiences for these 15 individuals does require some intermediation in relation to their disabilities. Certain individuals require attendant care while others require the intermittent assistance of job coaches, and all could reasonably benefit from the efforts of employment counsellors as they navigate both the culture and structure of the labour market. These employment positions could be considered as ancillary employment and would be additional to the employment positions discussed above.

This sample of 15 individuals with disabilities who are seeking enhanced employment would reasonably catalyze the development of five full-time equivalent ancillary employment positions. These positions would be distributed as three positions in attendant care each earning annual labour income of \$25,480 and two full-time equivalent positions providing employment counselling and/or job coaching services each earning annual labour income of \$43,506. These five ancillary employment positions would result in an additional \$163,452 direct annual labour income thereby contributing an additional \$81,009 in direct GDP to the regional economy of the Province of New Brunswick.

The economic activity engendered by these ancillary employment positions would further result in economic impacts of 7.3 FTE total employment positions leading to \$231,823 in total annual labour income and \$121,514 in total annual GDP.

In effect, enhancing the labour market experiences of the sample of 15 individuals with disabilities could create employment for up-to 20 individuals as the employment opportunities for the 15 persons with disabilities are to be intermediated by individuals fulfilling five ancillary employment positions. This degree of anticipated employment activity would result in the following economic impacts within the Province of New Brunswick.

Table 17: Direct and Total Economic Impacts of Desired Employment Experiences of 15 Individuals with Disabilities in New Brunswick, Including Economic Impacts of Ancillary Employment Positions		
	Direct Impacts	Total Impacts (Direct, Indirect, and Induced)
Employment (FTE)	18 (FTE)	26.3 (FTE)
Labour Income	\$864,545	\$1,227,371
GDP	\$380,335	\$570,503

4.3.3 Comparison of Actual and Potential Economic Impacts

The actual and the desired labour market experiences of the 15 individuals with disabilities, and the resultant economic impacts thereof, can be compared and contrasted as two scenarios. The first scenario represents the *status quo* and is reflected by the current labour market experiences of these 15 individuals within a system of disability support programs which prioritize income support. The second, and alternative, scenario represents the desired labour market experiences of these individuals and would include a system of disability support programs which prioritized employability. The contrast in these two scenarios is clear:

Table 18: Direct and Total Economic Impacts of Current and Potential Employment Experiences of 15 Individuals with Disabilities in New Brunswick, Including Economic Impacts of Ancillary Employment Positions					
	Direct Impacts— Current	Direct Impacts— Potential		Total Impacts— Current	Total Impacts— Potential
Employment	4 (FTE)	18 (FTE)		5.8 (FTE)	26.3 (FTE)
Labour Income	\$105,380	\$864,545		\$149,460	\$1,227,371
GDP	\$52,228	\$380,335		\$78,342	\$570,503

The economic impacts associated with the potential framework of employment-support for persons with disabilities far exceed those associated with the current framework of income-support programs for persons with disabilities. In reference to a sample of 15 persons with disabilities in New Brunswick who are currently engaged, are seeking to be engaged, or are seeking to enhance their engagement with, the active labour force in New Brunswick, a framework of employment-support programs would generate nearly five times as many full-time-equivalent employment positions and over eight times as much total labour income and total GDP than does the currently established framework of income-support programs.

The labour market experiences of these 15 persons with disabilities present not only economic impacts in the form of additional employment, labour income, and GDP so generated, but also in the various forms of taxation accruing to all scales of government.

Table 19: Total Jurisdictional Tax Impacts of Current and Potential Employment Experiences of 15 Individuals with Disabilities in New Brunswick					
	Current Total Tax Impacts			Potential Total Tax Impacts	
	Accruing Across all Jurisdictions (Federal, Provincial, Municipal)	Accruing within New Brunswick Jurisdictions (Provincial and Municipal)		Accruing Across all Jurisdictions (Federal, Provincial, Municipal)	Accruing within New Brunswick Jurisdictions (Provincial and Municipal)
HST	\$12,704	\$8,385		\$108,515	\$71,620
Income Tax	\$20,775	\$9,349		\$177,455	\$79,854
Property Tax	\$2,690	\$2,690		\$22,979	\$22,979
Indirect Taxes	\$6,449	\$3,546		\$53,327	\$29,330
Totals	\$42,618	\$23,970		\$362,276	\$203,783

Enhancing the labour force engagement of these 15 persons with disabilities not only results in substantial growth in labour income, provincial GDP, and additional total employment levels, but also results in \$203,783 in total taxation being remitted to the New Brunswick Provincial and Municipal jurisdictions each year. This scale of tax remittances represents an additional \$179,823 in total taxation compared to the value of taxes currently remitted within the existing income-support framework.

4.4 Observations and Discussion

The economic impacts of the enhanced labour force experiences of these 15 individuals, and of persons with disabilities more generally, can only materialize if these individuals are supported in achieving and sustaining the employment as described in their desired labour market experiences. The 15 case summaries presented above demonstrate certain realities which must be addressed to ensure this happens.

The following observations relate to insights gained from the analysis of the 15 distinct case summaries presented above. These observations are provided in the interest of discussion and are not intended as recommendations. More considered actionable recommendations which relate to the provincial disability and employment support landscape, and not only to 15 individual case summaries, are provided later in **Section Five**.

1) Identification, Understanding, and Awareness

Enhancing the labour market experiences of these 15 persons with disabilities requires first and foremost that individuals receive professional identification and assessment (diagnosis) services in a timely manner. It is difficult for individuals to adapt their lifestyle, engage in a rehabilitation program, develop compensatory behaviours, habits, and skills, or modify their learning and/or employment environment if they are not fully aware of the nature and the anticipated developmental trajectory of their disability.

The manners by which diagnoses are achieved are quite varied. Within the 15 case summaries, some individuals accessed identification and assessment (diagnosis) services within the healthcare system, the education system, a network of non-governmental organizations, and/or private services. Some individuals had to wait more than two years to properly engage the landscape of identification and assessment (diagnosis) services while others are still waiting to receive adequate services. This landscape of services is quite fragmented and largely inaccessible.

Most persons with disabilities will be required to make adjustments and compensations and to develop new skills as they engage in education and employment and this requires that these individuals have a full understanding and awareness of their disabilities and how these will influence their labour force experiences. The experiences of the 15 individuals explored above demonstrate that further development of the landscape of identification and assessment (diagnosis) services is required.

2) Awareness of, and Access to, Support Programs

There is a network of support services for persons with disabilities built largely from governmental programs and non-governmental organizations, yet many individuals operating as service providers

within this system and/or as individuals needing to access services within this system are not fully aware of the services so provided. As demonstrated in the case summaries, some individuals with disabilities struggle to adjust to a developing disability without accessing available support services simply because they were unaware that such services existed. Other times individuals with disabilities may engage a support program yet nonetheless still not receive the services they require as not all service-providers are aware of the full-suite of services available to be engaged and leveraged. Other times still, individuals with disabilities may be adequately engaged with service providers yet within a system to which their access is limited to a fixed period of time, such as the services a young individual may be able to engage as coordinated within the secondary education system yet to which they will not have access upon graduation.

Although there is a network of support services for persons with disabilities it is clear that this network is not coordinated nor explicitly developed. It would appear this network has developed over time from various discrete initiatives and programs which have grown to appear as a provincial network yet which operate more so as an uncoordinated mosaic.

3) Accessibility of Services

From some services being applied differently in urban or rural regions, to some incurring a significant financial cost, to some entailing a multi-year wait list to access, the existence of a service is not the same as the accessibility of a service. The experiences of the 15 individuals presented in the above case summaries clearly demonstrate that many services are simply not accessible.

4) Continuation of Support

Many support services are currently designed to assist individuals with disabilities to (re-)enter the labour force yet do not provide continued support to assist individuals to remain in the labour force. Employment counselling and job coaching can be an integral component in supporting the employment of persons with disabilities and this component should be thought of as an on-going and continuous service rather than as an initial discrete step in the employment trajectory.

Support services often treat the initiation of employment as a 'mission accomplished' moment and are thereafter scaled back or removed altogether. As demonstrated in the case summaries above, however, many persons with disabilities would benefit from longer-term support services which could be accessed when and as necessary—this support may not always be necessary but it could be critically beneficial if it were available when necessary whether that be during the first few months of employment or the next few years.

5) Workplace Accessibility and Culture

Whether trying to navigate the re-entry to employment, or trying to adjust to on-going employment as a disability develops, many of the case summaries demonstrate challenges relating to workplace accessibility and culture. It would seem that persons with disabilities are largely expected to adapt to work environments, including physical infrastructure and colleagues' perceptions, understandings, and attitudes, which have typically been developed from the perspective of persons without disabilities. Accessibility relates not only to the physical aspects of the work environment but also to the culture and processes of the work environment—and many work environments are not accessible.

6) Government Services Means-Testing

As discussed earlier in this report, the current disability and employment support framework is largely premised on income- rather than employment-support. In this sense, many benefits and supports are retracted as an individual's income increases, and so much so that some individuals risk losing all support and benefits as they seek to enhance their engagement with the active labour market. In most cases, the enhanced employment experiences of persons with disabilities will be sufficient so as to ensure the individual does not require any, or as much, government transfers and services, yet it should be noted that developing these enhanced employment experiences may represent a transition period of multiple years. Currently, government transfers and services are retracted as this transition begins and not as it is completed thereby creating additional obstacles and hardship for persons with disabilities as they navigate this transition. For some individuals such obstacles represent a significant consideration as to whether enhancing their employment is worth it—the immediate income-graded retraction of supports and services (or claw-backs) serve as a significant disincentive to embarking on a longer-term transition into the active labour market.

7) The Duality of Personal and Economic Development

The contrast of economic impacts from the current to the potential labour market experiences of these 15 individuals suggests that the regional economic development potential of enhancing the labour market participation of persons with disabilities are significant and should not only be considered secondarily to the personal development potential of these individuals. Enhancing the employment experiences of persons with disabilities has long been promoted, as discussed in previous sections, from an interest in fostering personal development and independence. Unfortunately, this narrative easily leads to a perspective that enhancing the employment experiences of persons with disabilities is some form of altruistic program promoting a social benefit. Although the personal development impacts are notable, so too are the regional economic development impacts, as evidenced by the 15 case summaries. The personal and the regional economic development aspects of enhancing the employment experiences of persons with disabilities are not mutually exclusive but rather more so a synergistic duality.

Section Five: Discussion and Conclusion

With attention paid to actual outcomes, broader economic impacts and developments, and the respect for individual rights and opportunities, stakeholders of all sorts have increasingly been questioning the appropriateness of disability support programs in the Province of New Brunswick, and likewise across Canada and beyond. The issue is not so much in any perceived absence of disability support programs but rather in the structure and culture of many programs. To many, the programs which are available seem to be leading to a confluence of disability support through social assistance and furthering the segregation and dependence of persons with disabilities. The broader discussion at-hand is a consideration of transitioning away from the hegemony of disability support programs developed within an income-support framework toward a complement of support programs developed primarily within an employment-support framework.

As stated in the framing of this research, determining how to best develop an employment-support framework cannot effectively be determined without first conducting a series of cost-benefit analyses of the various potential development trajectories and objectives. Yet, more importantly, such cost-benefit analyses cannot be performed without first identifying the personal and the regional economic impacts—or benefits—of such a transition.

The personal benefits of an employment-support framework for persons with disabilities have been assessed and thoroughly discussed in previous research, and largely found to be quite positive. What has not been assessed, at least not thoroughly and certainly not within the jurisdiction of the Province of New Brunswick, are the impacts of such programs at a regional economic scale. Knowing such potential macro-economic impacts is of critical importance within this discussion as integrating persons with disabilities within a regional labour force would represent substantial economic and labour market developments. Accepting that employment-support programs have positive impacts for beneficiaries, of greatest interest at this time comes the question as to the nature, scope, and scale of the regional economic impacts of transitioning from a framework of income-support to one of employment-support for disability support programs.

There are currently 95,370 persons with disabilities of working age (25 to 64 years) residing in New Brunswick. The long-term and continued operation of disability support programs, typically developed under an income-support framework, has contributed to a situation wherein 52,870 of these individuals are employed in some form; 6,410 are active in the labour force yet unemployed; and 36,100 are not participating in the labour force at all. It is this nearly 38 percent of the sub-population of persons with disabilities who are not participating in the labour force which is most notable as they, by default, must otherwise support themselves, or be supported, by independent wealth, as dependents to others, and/or through social assistance disability support.

Even more notable, however, is the stated reality that many of these individuals are willing and able to work yet would require accommodations and/or support which are not currently provided or of which they are not aware of as being provided. For others, the structure and conditions of current disability support programs may be perceived to actually hinder their (re-)integration into the labour force as doing so even tentatively could lead to a rescinding of current levels of support.

Disability support programs developed within an employment-support framework would be purposefully designed to promote and support the (re-)integration of persons with disabilities into the regional labour force. The data from the New Brunswick landscape do suggest that, with proper accommodations and supports, the sub-population of working-age persons with disabilities in the province could demonstrate labour market dynamics similar to those of the sub-population of working-age persons without disabilities in the province over time. Such a transition would mean an additional 21,318 persons with disabilities would (re-)enter the active labour force, with 20,011 of these being employed and 1,307 being unemployed.

As demonstrated in this report, the anticipated economic impacts of such a labour market development fall on a spectrum dependent upon two factors. The first is a question of the extent to which new employment-support programs would include support for education and (re-)training, including primary and secondary education. Employed persons with disabilities currently demonstrate a lower median income than do employed persons without disabilities, and the data suggest that this discrepancy is due largely to lower levels of attained education among the former. Lower levels of attained education serve as a constraining parameter in the type of employment individuals may seek as well as the trajectory of promotion within employment, and hence typically result in lower levels of remuneration.

The second is a question of the extent of support to be developed within these employment-support programs. Such programs will lead to new employment in the forms of case managers, employment counsellors, job coaches, rehabilitation/adaptive skill training, and attendant/support care-givers, as examples. Precisely how many new employment positions will be created depends largely upon the final structure of the programs and the scale of resources mobilized therein.

The lower-end projections of the spectrum are due to a development trajectory which does not address educational support and hence does not enhance the median income of employed persons with disabilities, and which only moderately develops the employment support sector. The higher-end projections are due to a development trajectory which does address educational support and hence enhances the median income of employed persons with disabilities, and which substantially develops the employment support sector. Within this setting, the total economic impacts of (re-)integrating 21,318 persons with disabilities into the New Brunswick labour force are anticipated to occur within the following range:

Table 20: Range of Aggregated Total Annual Economic Impacts Accruing within New Brunswick Associated with Enhanced Labour Force Participation by Persons with Disabilities in New Brunswick

	Low-End Projections	High-End Projections
Total Employment	28,824 (FTE)	29,705 (FTE)
Total Labour Income	\$872,397,599	\$1,379,222,385
Total GDP Contribution	\$1,249,396,072	\$1,970,622,770
Total Taxation Revenues	\$139,131,040	\$219,886,464

These aggregated impacts are also contextualized by 15 case summaries of distinct persons with disabilities seeking to (re-)enter the provincial labour force, or enhance their participation therein. For these 15 individuals, this transition is first an opportunity to fulfill personal and professional aspirations which have been hindered by the combination of disability and the existing disability support framework. Second, and aggregated across these 15 individuals, the transition in programs could lead to a five-fold increase in total employment and over an eight-fold increase in total labour income, total GDP, and provincially-retained taxation revenue as these individuals are supported in transitioning from their current to their desired labour market positioning. However, doing so requires the assistance of multiple stakeholders overcoming multiple obstacles present in the current landscape of disability support programs.

Although substantial, achieving this scale of economic impact will require concerted and persistent effort by a varied network of stakeholders. The notion of further integrating over 20,000 individuals into the regional labour force is quite different when considered from a macro- or a micro-economic perspective. Under the former, the issue is framed as enhancing a regional labour market and developing an equilibrium between supply and demand; under the latter, the issue is framed as transitioning the life trajectories of over 20,000 unique individuals all with distinct circumstances, desires, challenges, and aspirations. Finding the balance between macro- and micro-economic realities is a perpetual challenge for all forms of public support programs, as one is a consideration of economic development and the other of personal development.

Although the COVID-19 pandemic situation has led to a temporary dislocation of regional economies and labour markets, the fact remains that most advanced Western economies are experiencing the onset of chronic labour supply shortages on account of ageing populations, declining birthrates, and competitive immigration. In this situation, it is worth noting that persons with disabilities represent a significant labour supply pool which remains unnecessarily constrained and hence under-developed. Many persons with disabilities are able and willing to engage in competitive employment yet experience difficulties in their attempts to do so on account of sincere but inaccurate views about the work-related abilities of persons with disabilities as well as the limiting structures and cultures of most disability support programs. A transition in disability support programs from a framework of income-support to one of employment-support could assist in addressing and correcting this situation.

Section Six: Moving Forward

This current research has remained focused on assessing the regional economic impacts of transitioning disability and employment support programs from a framework of income-support to one of employment-support—and these impacts are anticipated to be substantive over time, as discussed and concluded to in the previous section. As an exercise in economic impact assessment, it is beyond the remit of this research to pass judgement on the merit of the impacts so identified or to present distinct recommendations as to whether, and if so, as to how, such a transition in disability and employment support frameworks could or should be performed. Yet with certain details of the analyses herein, and with the involvement of various stakeholder organizations active within the New Brunswick landscape of disability and employment support programs and services, it is nonetheless possible to discuss potential trajectories to move the broader research and advocacy agenda forward.

As discussed, previous research has documented positive correlations between employment-support programs and the personal and professional developments of persons with disabilities—or, the micro-economic experience. From this, and from perceived short-comings and/or experienced frustrations with existing disability support programs developed within an income-support framework, stakeholders of all types have been increasingly voicing an interest in exploring the further development of, and in some cases transitioning toward, support programs fitting an employment-support framework. This current research is among the first to assess the regional economic impacts—or, the macro-economic experience—of such a transition, and the results would suggest further exploration and pursuit of such a development could be justified under certain conditions and circumstances.

With insight into the micro- and macro-economic impacts of transitioning disability support programs from a framework of income-support to one of employment-support now in place, two related questions remain:

1. What does a landscape of disability support programs developed within an employment-support framework look like in New Brunswick?
2. What does an inclusive, effective, and efficient transition from the current landscape to the desired landscape of disability support programs look like?

A next phase of research could be undertaken to address these two questions and provide insight not only into how to develop a landscape of disability support programs within an employment-support framework in New Brunswick but also the costs associated with doing so. Combining this current research with this anticipated research would allow for the development of a cost-benefit analysis of

the various policy trajectories leading from the current to the desired landscape of disability support programs.

It is important to note, however, that exploring and initially pursuing a transition toward an employment-support framework need not be on hold until the completion of this next stage of research. Although the current disability support programs within the New Brunswick landscape are predominantly developed within an income-support framework, certain programs, and certain aspects of certain programs do nonetheless focus on supporting the (re-)entry and retention of persons with disabilities in the provincial labour force. Notably, more such programs are in operation now than even only five years ago. That the New Brunswick landscape of disability support is premised within an income-support framework is incontrovertible, yet the fact that this landscape is beginning to show signs of transitioning toward integrating an increasing share of employment-support programs is increasingly clear. Previous and current research would support that this incremental development of an employment-support framework in New Brunswick could continue as more focused research is undertaken.

This current research has demonstrated the substantial economic impacts to be catalyzed by such a transition, however it has not detailed how to most efficiently undertake such a transition. Even so, it is fair to assume that such a wholesale transition would require equally substantial effort in both development and implementation. The magnitude of this effort need not be perceived as an obstacle to continuing the pursuit of this transition concurrent to continuing additional research. Through gradual and concerted efforts, the New Brunswick landscape of disability support programs could incrementally transition from a framework of income-support to one of employment-support while nonetheless catalyzing regional and personal economic impacts at every step of the way. A step-wise transition could proceed along a broad agenda as follows and in parallel to on-going research and evaluation:

1. **Step One—Program Modifications:** Simple alterations to a few existing support programs, enhanced awareness and accessibility of others, and improvements to broader workplace culture and awareness would require little investment and would not prove divisive or disruptive yet could nonetheless represent a significant initial progression within the broader transition. Such modifications and developments represent “picking the low-hanging fruit” and are largely supported by existing research.
2. **Step Two—New Program Development:** The development of new employment-support programs within government departments and associated community stakeholders already active within this landscape would require further investment and effort and would equally catalyze further regional economic impacts. The emergence of these new programs would also create an opportunity to retire previously-developed income-support programs which cannot be readily modified or which are not achieving the results they are expected to achieve. This step would be the first truly substantive investment in progressing along the transition and would require further research and guidance which is not yet available.

3. **Step Three—Shifting Ideology:** The development of new employment-support programs within government departments and associated community stakeholders which are not currently active, at least not directly so, within the landscape of disability support programs could be beneficial. This could mean applying a disability support lens to entities and programs which have not traditionally been considered to be involved in disability support. This requires the development of a novel disability support ideology and narrative which would reside across all government departments as a holistic narrative and responsibility rather than predominantly in the mandate of one, or only a few, government department(s), such as the current income-support framework residing predominantly within the Department of Social Development. This step is a significant juncture in the transition as it entails a change to government and public culture and structure and would need to be determined to be advisable following the continued research as mentioned in Step Two.
4. **Step Four—Concerted Community Development:** The employment-support framework would largely be in place at this time and the regional and personal economic impacts to be catalyzed would now be dependent upon the continued implementation and support of these programs. This requires not only a commitment to maintaining the programs but also to guiding the broader labour market throughout a period of transition as the established perceptions about persons with disabilities are challenged and adjusted, particularly those of employers. This step is less so structural and more so cultural at a societal scale and would be catalyzed largely from the implementation of research findings throughout this four-step process.

The four steps do not need to be complete before the regional economic impacts can begin to be catalyzed; rather, the impacts can be expected to increase in step with the progression of the transition. Due to certain synergies and associated inter-relations within the labour market and regional economy, it can be assumed that proportionally more economic impacts will be catalyzed as the transition progresses step by step. In this sense commitment to Step One, the low-hanging fruit, would be anticipated to catalyze 20 percent of the total projected regional economic impacts. In turn, Steps Two and Three would each be anticipated to catalyze 25 percent of the total projected regional economic impacts, respectively. Step Four, which represents the culmination of the transition and the continued implementation thereof, would likely leverage the most interdependencies within the regional labour market and economy and hence would be anticipated to catalyze the remaining 30 percent of the total projected regional economic impacts.

Table 21: Additive Economic Impacts Accruing within New Brunswick Throughout Stages of Procession of the Transition in Disability Support Frameworks

	Progression of Transition	Total Employment	Total Labour Income	Total GDP Contribution	Total Taxation Revenues
Step One	20%	5,941 (FTE)	\$275 Million	\$394 Million	\$44 Million
Step Two	45%	13,367 (FTE)	\$620 Million	\$887 Million	\$99 Million
Step Three	70%	20,794 (FTE)	\$965 Million	\$1.38 Billion	\$154 Million
Step Four	100%	29,705 (FTE)	\$1.38 Billion	\$1.97 Billion	\$220 Million

Note, however, that moving forward is dependent upon concurrently continuing further research and evaluation. More specifically, the structure and culture of the desired framework and landscape of disability and employment programs must be explicitly detailed; a trajectory to transition to this desired framework and landscape must be identified; and the costs associated with pursuing this trajectory must be assessed and weighed against the anticipated benefits.

Although this current research has focused on assessing the anticipated economic impacts of enhancing the labour force participation of persons with disabilities in New Brunswick, details in the economic analysis and throughout the 15 distinct case summaries provided herein can provide early guidance into the next stage of research. In particular, disability and employment programs within an employment-support framework should be reviewed and/or developed with a perspective addressing the following elements:

1. **Diagnostic Services:** A clear and early identification and assessment (diagnosis) of a disability is instrumental in developing lifestyle adaptations, rehabilitations, and new skill developments by, and for, a person experiencing the disability. In many cases, developing accommodations and rehabilitations can be time-sensitive and delays in receiving a clear diagnosis can result in challenges in developing such accommodations and rehabilitations, undue consequences to a person's physical and mental health, and possibly even an aggravation of the severity of the disability.

Not all disabilities are equally easily diagnosed, and even the same type of disability is not equally easily diagnosed across individuals. Disability support programs must include an element of accessible and early identification and assessment (diagnosis) services as a fundamental component of support—as targeted support can only be developed upon a clear diagnosis.

2. **Cultural Awareness:** Persons with disabilities have long been segregated and often isolated. Support programs must focus not only on persons with disabilities but also on the broader cultural awareness of the societies these individuals are part of. The moniker of 'persons with

disabilities’ is often employed to convey a perceived uniformity to an identifiable sub-population even though the experiences and situations of persons with disabilities are not homogeneous—just as an individual with a mobility disability may experience employment differently than an individual who is deaf so too could an individual who is recently deaf compared to an individual who has been deaf for decades. Persons with disabilities are no less persons than are persons without disabilities and the experiences and situations of the latter are not less diverse, variable, or complex than those of the latter. Supporting persons with disabilities includes assisting employers, legislators, and neighbours in recognizing this reality.

3. **Education as Precursor to Employment:** Education is a strong predictor of labour force participation, employment, and scale of remuneration. Persons with disabilities demonstrate notably lower mean levels of educational achievement compared to persons without disabilities. The education and disability dynamic may be as dislocated as is the employment and disability dynamic; and although the latter may be the focus of employment-support programs it nonetheless remains dependent upon the former. Disability support programs must consider that employment is not the beginning but rather the result of a personal and economic development trajectory.
4. **Awareness and Accessibility of Support Services:** Disability support programs, even if carefully designed and developed, are of little value if the potential beneficiaries are not aware of their existence or find them inaccessible—impact comes not from the existence of a program but rather from actual engagement with the program. Issues such as program marketing, participation criteria, delivery mediums, geographic considerations, and actionable timelines and schedules must all be carefully managed to ensure persons with disabilities are aware of the support available and find such support to be accessible. Ideally, all individuals would be aware of the landscape of support programs before, and if, they ever needed them.
5. **Employer Involvement and Participation:** The (re-)integration of persons with disabilities into the New Brunswick labour force will depend not only upon the work-readiness of labour supply but equally upon the understandings, perceptions, and accommodations of employers (when excluding cases of self-employment). Employment-support programs, at a fundamental level, seek to nurture an equilibrium between employees and employers, and as the former are already engaged as the principal participants of such programs, efforts should be extended to enhance participation by the latter.
6. **Inter-Departmental Approach:** The disability and employment dynamic is one of both personal and economic development, and support for such must transcend all government departmental boundaries. Within the New Brunswick governmental landscape, this dynamic clearly touches on Education and Early Childhood Development; Post-Secondary Education, Training and Labour; Social Development; Health; Economic Development and Small Business; and Finance, while also to a lesser degree reaching into all other departmental portfolios. Effective support is dependent upon case managers and program directors in any one

department remaining fully-aware and informed of services and programs in all other departments—and of all programs available from community-based stakeholders. An individual must know and trust that by engaging any one government department or program they are engaging all departments and programs.

7. **Extending Support Program Timelines:** It is important to consider that the goal of employment-support programs is not only to assist persons with disabilities in achieving employment but also in maintaining employment. Of the current employment-support programs, most begin to withdraw services once employment is achieved; however, many participants could perhaps more meaningfully engage in longer-term competitive employment if such supports were available, even if at a reduced scale, for longer periods of time throughout the first few months or years of career development.
8. **Revision of Means-Testing of Benefits:** It is common for public support services and programs to be means-tested, and it is also common for the benefits from these services and programs to be rescinded immediately following, or very shortly thereafter, a change to a person's situation. A person with disabilities who chooses to tentatively or iteratively engage in the active labour force and ease into full-time career development may understandably be concerned that any program benefits they currently receive could be withdrawn in an absolute, rather than iterative, manner. With appropriate employment-support programs, more persons with disabilities should be able to transition from income-support to gainful employment, yet it is important for program operators—and any means-testing therein—to understand that this is likely a transition occurring over a period of time and not as an acute development.
9. **Ancillary Services to Employment:** Work-life balance is a consideration for all employed persons, yet it is generally a different consideration for persons with than without disabilities. Elements such as child care, transportation, access to rehabilitative/medical services during working hours, personal care, may present differently to persons with and without disabilities. Disability support programs designed to promote employment must be aware of such considerations.

The projected economic impacts of transitioning disability support programs from a framework of income-support to one of employment-support are substantial, as are the efforts required to progress through such a transition. The challenges associated with progressing through such a transition need not be perceived as an impediment to starting, however, as even only incremental steps in transitioning are still associated with real and substantive regional economic impacts and can be undertaken concurrent to on-going research and evaluation. Taking the first few progressive steps in pursuing an employment-support framework in itself will begin catalyzing benefits for the regional economy and for the lives of many individuals navigating this landscape.

Appendix One: Public Data Sources

The following publicly-available data sources have been engaged throughout this research. Private and/or confidential data sources are not listed—please contact the research project proponents and/or authors for further information.

1. Statistics Canada Provincial Input-Output Multipliers, Industry Accounts Division, Catalogue no. 15F0046XDB
2. Statistics Canada, Table 36-10-0402-01, Gross Domestic Product (GDP) at Basic Prices, by Industry, Provinces and territories (x1,000,000). Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610040201>
3. Statistics Canada, Table 14-10-0092-01 Employment by Industry, Annual, Provinces and Economic Regions (x1,000). Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410009201>
4. Statistics Canada, Table 14-10-0023-01 Labour Force Characteristics by Industry, Annual. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002301>
5. Statistics Canada, Table 14-10-0037-01 Actual Hours Worked by Industry, Annual. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410003701>
6. Statistics Canada, Table 14-10-0029-01 Part-Time Employment by Reason (x1,000). Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002901>
7. Statistics Canada, Table 11-10-0223-01 Household Spending by household Income Quintile, Canada, Regions and Provinces. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110022301>
8. Statistics Canada, Table 11-10-0239-01 Income of Individuals by Age Group, Sex and Income Source, Canada, Provinces and Selected Regions. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110023901>
9. Statistics Canada, Table 11-10-0239-01 Income of Individuals by Age Group, Sex and Income Source, Canada, Provinces and Selected Census Metropolitan Areas. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110023901>

10. Statistics Canada, Table 14-10-0064-01 Employee Wages by Industry, Annual. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410006401>

11. Statistics Canada, Data Tables, 2016 Census. Employment Income Statistics, Occupation-National Occupational Classification (NOC) 2016, Work Activity During Reference Year and Sex for the Population Aged 15 Years and Over in Private Households of Canada, provinces and Territories and Census Metropolitan Areas, 2016 Census-25% Sample Data. Available at: <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/dt-td/Rp-eng.cfm?TABID=2&LANG=E&A=R&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=13&GL=-1&GID=1325194&GK=1&GRP=1&O=D&PID=110698&PRID=10&PTYPE=109445&S=0&SHOWALL=0&SUB=0&Temporal=2017&THEME=124&VID=0&VNAMEE=&VNAMEF=&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0>

12. Statistics Canada, Table 14-10-0326-01 Job Vacancies, Payroll Employees, Job Vacancy Rate, and Average Offered Hourly Wage by Industry Sector, Quarterly, Unadjusted for Seasonality. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410032601>

13. Statistics Canada, Table 14-10-0051-01 Job Tenure by Type of Work (Full- and Part-Time), Annual (x1,000). Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410005101>

14. Statistics Canada, Table 13-10-0374-01 Persons With and Without Disabilities Aged 15 and Over, by Age Group and Sex, Canada, Provinces and Territories. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310037401>

15. Statistics Canada, Table 13-10-0375-01 Severity of Disability for Persons with Disabilities Aged 15 Years and Over, by Age Group and Sex, Canada, Provinces and Territories. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310037501>

16. Statistics Canada, Table 13-10-0376-01 Type of Disability for Persons with Disabilities Aged 15 Years and Over, by Age Group and Sex, Canada, Provinces and Territories. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310037601>

17. Statistics Canada, Table 13-10-0377-01 Labour Force Status of Persons With and Without Disabilities Aged 25 to 64 Years, by Age Group and Sex, Canada, Provinces and Territories. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310037701>

18. Statistics Canada, Table 13-10-0740-01 Potential to Work for Persons with Disabilities Aged 25 to 64 Years, by Sex. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310074001>

19. Statistics Canada, Table 13-10-0378-01 Highest Certificate, Diploma or Degree for Persons With and Without Disabilities Aged 25 to 64 Years, by Severity, by Age Group and Sex, Canada. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310037801>
20. Statistics Canada, Table 13-10-0379-01 After-Tax Income for Persons With and Without Disabilities Aged 25 Years and Over, by Severity, by Age Group and Sex, Canada. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310037901>
21. Statistics Canada, Table 13-10-0348-01 Labour Force Status for Adults With Disabilities by Disability Type. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310034801>
22. Statistics Canada, Table 13-10-0354-01 Industry of Employment for Adults With Disabilities. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310035401>
23. Statistics Canada, Table 13-10-0349-01 Limitations and Barriers to Employment for Adults With Disabilities. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310034901>
24. Statistics Canada, Table 13-10-0350-01 Modifications for Labour Force Participation for Adults With Disabilities. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310035001>
25. Statistics Canada, Table 14-10-0033-01 Actual Hours Worked by Job Type (Main or All Jobs), Annual (x1,000). Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410003301>
26. Statistics Canada, Table 13-10-0353-01 Hours Worked per Week for Adults With Disabilities by Age Group. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310035301>
27. Statistics Canada, Table 14-10-0043-01 Average Usual and Actual Hours Worked in a Reference Week by Type of Work (Full- and Part-Time, Annual. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410004301>
28. Statistics Canada, Table 14-10-0283-01 Sources of Income of Adults With and Without Disabilities. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028301>
29. Statistics Canada, Table 13-10-0355-01 Occupations of Adults With Disabilities. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310035501>
30. Statistics Canada, Table 14-10-0283-01 Sources of Income of Adults With and Without Disabilities. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410028301>

31. Statistics Canada, Table 11-10-0239-01 Income of Individuals by Age Group, Sex and Income Source, Canada, Provinces and Selected Census Metropolitan Areas. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110023901>

Notes and Sources

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^{xvi} Banaccio, S., Connelly, C, Gellatly, I., Jetha, A., and Martin, Ginis, K. (2020). The Participation of People with Disabilities in the Workplace Across the Employment Cycle: Employer Concerns and Research Evidence. *Journal of Business and Psychology*, 35(2), 135-158.

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^{xix} More information about this survey instrument is available at <https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3251>

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^{xxi} A discussion of cost effectiveness of various employment-support programs can be found in: Revell, G., Kregel, J., Wehman, P., and Bond, G. (2000) Cost Effectiveness of Supported Employment Programs: What We Need to Do to Improve Outcomes. *Journal of Vocational Rehabilitation*. Available at : <https://content.iospress.com/articles/journal-of-vocational-rehabilitation/jvr00079>

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^{xxiii} The definition and conceptualization of potential to work is available at: <https://www150.statcan.gc.ca/n1/pub/89-654-x/89-654-x2018002-eng.htm>

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^{xxvi} The assumption of a sufficiently large potential labour supply holds even over longer time periods. Although older-aged persons with disabilities may 'age-out' of the active labour force prior to a full transition to an employment-support framework within New Brunswick, more younger persons with disabilities will 'age-into' the active labour force and many working-aged individuals will develop disabilities. Estimates suggest that the number of Canadians with disabilities will grow at twice the rate of Canada's total population, as explored in: Gibbard, R., Desormeaux, M., Persaud, P., and Wright, R. (2018). The Business Case to Build Physically Accessible Environments. The Conference Board of Canada. Available at: <https://www.conferenceboard.ca/e-Library/abstract.aspx?did=9434>

^{xxvii} Province of New Brunswick. New Brunswick Labour Market Outlook 2018-2027. Available at: <https://www.nbjobs.ca/sites/default/files/pdf/2019-04-15-lmo-report-en.pdf>

^{xxviii} The experiences of certain community organizations assisting persons with disabilities (re-) enter the labour force do suggest that personal circumstances, the type of disability, the severity of disability, and the stage of employment trajectory all influence whether a person with disabilities is likely to be employed in a part- or full-time position. In aggregate, however, the sub-populations of employed persons with and without disabilities broadly demonstrate similar distributions of part- and full-time employment.

^{xxix} Educational attainment data is not available at the provincial scale at the time of writing.

^{xxx} This individual receives a total of \$10,192 per month however pays a \$462 participation fee, as determined by their income level, to the support program resulting in a monthly transfer of \$9,730.

^{xxxi} Adjusting the labour income of the two individuals who have already engaged employment and disability support programs to enhance their labour market experiences to levels of labour income achieved prior to such engagement.