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Framework for Economic Alignment and Growth

Ministry of Growth, Enterprise and Trade
December 15, 2017

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Amendment of any of the assumptions identified throughout this report could have a material impact on our analysis contained herein. Should any of the major assumptions not be accurate or should any of the information provided to us not be factual or correct, our analyses, as expressed in this report, could be significantly different.

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Table of Contents

Executive Summary	4
Background and Context	14
Economic Development Goals and Objectives	24
Economic Endowments	26
Economic Development Assets and Tools	37
Policy Considerations	58
Insights and Recommendations to GET	72
Conclusion	86
Appendices	88
Appendix A: Sensing Capabilities	91
Appendix B: Manitoba Economic Outlook Overview	99
Appendix C: Manitoba Program Overlap Review	103

Executive Summary

Introduction and context

The Manitoba government is investing in its economic delivery strategy capabilities

Like many jurisdictions, the Manitoba government is in the process of contemplating an economic development strategy that will best position its employers and citizens for success on the regional, national and global stage.

Recently, the Manitoba government pledged to enhance the province's economic development capabilities and refine its vision for the future of the economy. There is considerable momentum behind these commitments. Industry stakeholders are keen to be guided by a renewed vision for the economy, and strong federal commitments to support Canada's economic interests on the global stage, create the optimal backdrop for Manitoba to reconsider its approach to economic development strategy and policy design.

The ministry of Growth, Enterprise and Trade ("GET") has been tasked with enhancing the government's economic strategy capabilities. In this regard, GET retained Deloitte to develop an economic development framework and identify areas of duplication within a selection of its current suite of economic development programs.

The framework introduced in this study can be viewed as a tool that orients policy makers towards the key considerations, dependencies and trade offs that should be taken into consideration when confirming their economic development strategy. Our view is that the framework can position the Manitoba government for future success by providing the government with the necessary economic development components for a renewed vision.

Objectives of Study

- Our study draws upon several modes of analysis to achieve the following objectives:
 - 1. Identify a selection of opportunities to reduce administrative burden and duplication in existing economic development programming;
 - Design a framework to guide the province's economic development capabilities; and
 - 3. Create an implementation roadmap to guide GET in its development and execution of key economic development activities in both the short and medium term.

Our approach

Deloitte used several methods of analysis to complete this study, including consultations with industry and government leaders and research on best practices deployed around the world

Understanding the current state and identifying future opportunities

- Deloitte reviewed and analyzed datasets, program descriptions and other economic policy information from GET
- Deloitte conducted consultations with private and public sector stakeholders, as directed by GET to confirm challenges and opportunities related to the Government's current approach to economic development and the province's existing economic constructs

Current program overlap identification

from GET on the current

funding and objectives of

development program

state of economic

existing programs

Deloitte categorized

programs currently

in:

Mandate

Industry

Region

economic development

administrated and/or funded

Profile of clients served

by GET to identify overlap

- This step included collecting Deloitte led a working information and feedback
 - Presenting and aligning on the pillars of Deloitte's • proposed economic development framework
 - Presenting select best development
 - Presenting initial identified during consultations
 - Aligning with GET on the findings and analysis overlap exercise
 - Presenting a potential for the Government to consider to develop a strategy

Development of detailed economic development framework

Development of recommendations and implementation roadmap

session with GET on October 18th that included:

GET workshop

- practices in economic
- overarching themes
- conducted in the program
- road map of key activities

- Deloitte further developed the draft economic development framework into individual pillars
- Each pillar was contextualized and included:
- A review of the current state of policies, programs and other economic features relevant to the pillar
- A snapshot of best practices in public policy
- Supportive examples of relevant approaches undertaken by peer governments

 For each recommendation, Deloitte created a high level implementation roadmap that articulates concrete steps the Manitoba Government can take to further its economic development planning and programming

Manitoba's economic context

The Manitoba economy has traditional areas of strength that can be expanded through concentrated efforts to address challenges



Strengths

Manitoba's economy is diverse: The province does not rely on a small selection of sectors. Manitoba's highly diversified economy can mean that it is less susceptible to business cycle booms and busts.

Agriculture's forecasted expansion: Agricultural output is expected to increase at an annual rate of 2.2% through to 2021 as world demand increases, but volatility due to weather conditions is a concern.¹

Manufacturing expected to drive growth: Despite recent slow growth, manufacturing is expected to drive future growth with both food processing and transportation manufacturing making significant contributions. Aerospace, a significant legacy industry in the province, is expected to grow as demand for travel continues to increase. The impact of NAFTA renegotiations should be closely monitored given the importance of the sector to the province.

Manitoba's population is considerably younger than the national average: Manitoba's senior population represents just 15% of the population today, this will climb to just over 20% in 2040, but remain below the national average of 25%.¹ Its younger population is in part due to a younger and growing Indigenous population; 18% of Manitoba's population identify as Indigenous, a much greater share than in Canada as a whole.² With the proper policy supports, a relatively younger population could represent an opportunity for the province.

Strong levels of international immigration support the work force: International immigration is a key driver of Manitoba's working age population growth.³ As international immigration is projected to remain strong, this could help mitigate against documented challenges of attracting young, skilled workers to the province.

Acknowledgement of natural assets as drivers of economic growth: Manitoba's Climate and Green Plan identifies how infrastructure, human capital, innovation, financial capital, and agriculture and land use can support the development of clean technologies and job growth.

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- 2. Conference Board of Canada. 2017. Maximizing Manitoba's Potential.
- Statistics Canada. CANSIM Table 051-0012.
- CBC News. 2017. Manitoba credit rating downgraded for 2nd time in a year.



Challenges

Expected slowdown in average growth: Manitoba's economic growth is forecasted to slow and grow below the national average rate between 2018-2021, with mine closures and winding down construction projects (e.g., Manitoba Hydro) contributing to the slowdown.¹ Recent high profile lay offs in Winnipeg (e.g., Great West Life and Investors Group) have further contributed to these challenges. However, strengths in other sectors (e.g., manufacturing and agriculture) will help counterbalance these forces.

Significant regional variance in economic landscape: Over 55% of Manitoba's population is in the Capital Region, with the rest of the population dispersed throughout the province.² Relative to the Capital Region, certain rural Manitoba communities struggle with unique challenges including, limited internet connectivity and skills shortages.

Expected decline in mining sector: Manitoba's mining sector is expected to continue declining as commodity prices remain low and major mines close.¹ This will have a greater impact on the Northern economy than elsewhere in the province; for example, the closing of Vale's Birchtree mine in Thompson and Hudbay's mine in Flin Flon could mean upwards of 500 job loses in the North between these two mines alone. The government has proposed a working group as part of its broader *Look North* strategy to address this challenge.

Working age Manitobans leave the province: A review of StatsCan data for the last six years revealed that on net, more working age Manitobans leave the province each year than those coming to Manitoba from other provinces.⁴

Downgrade of Manitoba's credit rating: Growing public indebtedness and anticipated deficits caused Manitoba's S&P credit rating to fall last July, which can increase the Government's cost of borrowing.⁵

Technology adoption among legacy sectors might require additional support from government: Information provided by GET showed that firms in some legacy industries, such as aerospace and vehicle manufacturing, have had difficulty successfully adopting new productivity enhancing technologies.

Manitoba's existing economic development programming context

Manitoba has several economic development programs in flight. Our review found these efforts are challenged by several instances of overlap

With a diverse economy and a lack of over arching economic development strategy, the Ministry's policy efforts are building upon a relatively underdeveloped foundation. In the 2017 Throne Speech, the Government of Manitoba committed to developing a new province wide economic development policy. If executed, this would represent a foundational shift in the Government's economic development capabilities.

Deloitte conducted a review of existing economic development programs funded by GET to identify opportunities to reduce administrative burden and duplication in existing economic development programming. These programs can be viewed as only a snapshot of Manitoba's economic development programming landscape. For example, additional federal programs (e.g., programs administered by Western Diversification Canada) are also a feature of the province's economic development capabilities, as well as programs delivered by other Ministries with economic development objectives. Key insights from this review include:



A lack of clearly defined goals and objectives in current funding agreements with third parties

GET currently provides funding to industry associations and economic development stakeholders in the province as a means of provincial support for sector specific or regional objectives delivered by other bodies. However, the choice to fund organizations, or cease funding is not driven by a set of strategic considerations and can be viewed as ad-hoc, with a view to the immediate and short term.



Significant areas of mandate overlap

We assessed programs for duplication and redundancy on several factors including mandate, industry, client and region. Our analysis revealed several instances in which programs sought to achieve the same objectives across each and all of these factors. While the programs and desired outcomes may be sound policy instruments, this duplication is not by design and instead reflects an overall lack of coordination and synchronization of economic development objectives.



Limited intra-governmental coordination across economic development programming

GET lacks insight into programs with economic development objectives administered by other parts of the government, and vice versa. This includes insight into advising on the optimal design of programs, information on program outcomes and application of government funding.

Summary of stakeholder views on Manitoba's economic development landscape

Stakeholders identified a set of challenges in the government's ability to successfully drive economic development

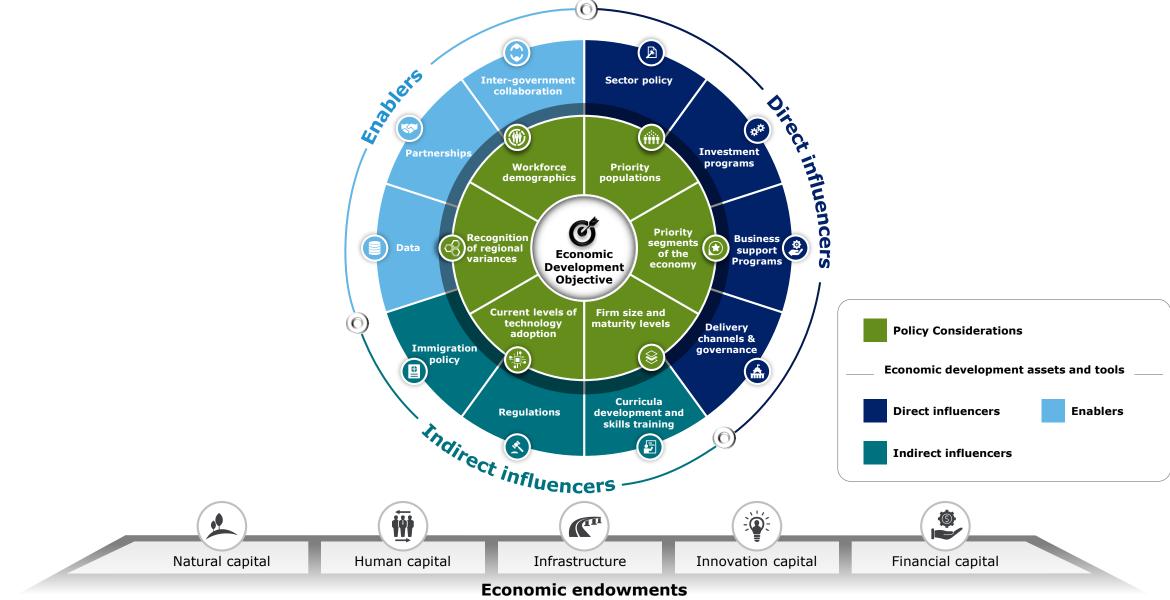
Our assessment of the Manitoba economic development context began with a review of the key features of its economy, and economic development program delivery capabilities. Concurrent to our program overlap exercise, and review of Manitoba's economic context, Deloitte also engaged in a series of consultations with selected industry and government leaders with perspectives on the potential role of the Manitoba government in economic development. During consultations, a set of key perspectives on Manitoba's economic development context emerged:

- A perceived lack of vision for Manitoba's economic future by the government;
- · A lack of a repeatable and well understood economic development decision framework;
- Difficulty in easily understanding what programs are available to companies, and what attributes are sought in applications for funding;
- A traditional public policy emphasis on a set of key sectors, rather than a set of articulated priorities identified as high value;
- The need to enhance the skills level and training of Manitoba's labour force;
- Challenges in retaining top talent;
- The need for a more refined approach to investment attraction that balanced creating enabling conditions for businesses to succeed (e.g., hospitable regulatory environment, and growth capital) combined with targeted pursuits of high-value jobs (e.g., company headquarters); and
- A lack of meaningful collaboration opportunities between industry and government (i.e., alignment of curricula with industry, lack of frameworks to work together effectively).

These are a snapshot of views presented by a small segment of industry representatives. Expanded consultations throughout the province that capture views from all sectors and regions would most likely yield additional insights. However, based on conversations had to date it is clear that industry is keen to see a more focused and transparent approach to economic development in the province, and would like to participate in the strategy definition and development process.

In summary, the province is unable to articulate a forward looking vision for the Manitoba economy. As a result, industry, academia, and peer governments are uncertain about how best to engage with the government of Manitoba, limiting the scope for true collaboration and policy innovation.

Our framework for the key elements of economic development strategy



How to view our economic development framework

Our framework introduces several pillars, each with different modes of influence on economic development strategy

Economic development policy is the sum of many integrated and interdependent considerations, and is not a subject-specific area of public policy. Accordingly, this economic development framework is intentionally designed to be far reaching and is categorized by:

Economic Endowments

Economic endowments can be viewed as the current stock of key natural and economic features in Manitoba's economy.

 While the health of the stock is shaped by public policy (e.g., the government's oversight and support for a natural resources industry), these elements of the framework are viewed as foundational, and to be built upon.

Endowments can be viewed as the setting(s) in which other forms of more targeted economic development policy and programming is deployed.

Economic Development Assets and Tools

Economic development assets and tools are policy realms in which the Manitoba government may have policy jurisdiction, or an ability to shape policy and programming decisions. This category is further segmented into:

- Direct influencers levers that the Manitoba government may have jurisdiction over and can deploy to achieve particular outcomes.
- Indirect influencers Indirect influencers can be viewed as policy spheres that can shape the outcome of provincial economic development objectives, but may not reside under exclusive provincial authority.
- Enablers Enablers can be viewed as institutional assets and tools that allow the Government to execute on objectives and monitor progress.

Policy Considerations

Policy considerations are cross-cutting, over arching public policy spheres that are relevant across portfolios. These considerations can be viewed as components of economic development policy that have broad reaching socioeconomic, productivity and economic implications.

Governments can choose to integrate policy considerations into economic development policy based on their relative importance to central (e.g., Premier's Office) priorities and provincial Budget commitments.

How to leverage the framework

Before a comprehensive economic development strategy can be defined, it is imperative to understand i) how each pillar can be leveraged, and ii) the interdependent elements that can catalyze transformative and sustained economic growth. For the Manitoba government, this framework can help identify and consider the economic endowments, assets and policy levers that can support the province's economic development goals and objectives.

Learning more about each pillar

Our report provides a primer on each pillar, and how it can be incorporated into economic development policy

Each pillar of our framework is a complex sphere of public policy. In our report, each pillar is dissected, and characterized in four ways:



A definition of what the pillar is



A high level overview of the current state of the pillar



A set of considerations and best practices to help frame how the government of Manitoba could use each pillar



Examples from global jurisdictions that profile the successful integration of each pillar into economic development programming.

12

Based on our review of Manitoba's economic development context, we recommend three actions in the short term



Expand current program review to all economic development programs delivered by the Manitoba government

- Compile inventory of economic development programming across governments
- Identify areas of redundancy and overlap
- Analyze key drivers of overlap
- Identify financial, stakeholder and policy impacts of identified examples of duplication
- Execute decision making on program changes
- Develop mechanisms to prevent future program duplications
- Reduction of redundancy and duplication
- Improved coordination in Manitoba's economic development ecosystem
- Increased transparency
- A trackable set of economic development programs



Confirm economic development goals and objectives, and develop a province wide strategy

- Define economic development objectives and outcomes
- Review Manitoba's economic development assets
- Analyze data and evidence to identify highpriority, high value sectors
- Design a new suite of economic development programs
- Confirm governance and delivery mechanisms
- Develop a tailored outcome measurement framework
- · Develop public reporting dashboards
- Agreed upon, cross-government economic development goals and objectives
- An overarching economic development strategy
- Successful execution of collaborative strategy development process



Consider a dedicated arms length economic development organization

- Establish a working group to explore economic development body
- Review current state of governance capabilities
- Review governance options
- Select optimal model based on consultation with government partners
- Submit recommendations to the government on optimal governance model
- · Agree on new governance model and initiate development of new body
- New dedicated economic development agency
- Refocus the role of government to policy strategy and design
- Definitive accountability and reduction of duplication of efforts
- Clear point of contact and leadership for economic development programs
- Improved client service and data collection efforts

Background and Context

Introduction

The first step in refining Manitoba's economic development capabilities is to review the current state

A government's ability to effectively elevate and support its economy, to support prosperity and growth, is limited to the strength of its economic development strategy decision making and program delivery capabilities. To date, Manitoba has articulated several independent economic development objectives, and aspirations for the future. However, these efforts can be viewed as standalone, and not aligned to common goals and outcomes.

In this section of the report, we summarize our perspectives on Manitoba's economic development capabilities, and present a framework that articulates the key considerations the government should review when developing the next iteration of their economic development strategy. Our framework can be viewed as a tool that orients decision makers on the key choices, trade offs and interactions that need to be considered when developing a robust and integrated economic development strategy.



15

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Summary of the Government of Manitoba's Economic Development Context

Manitoba's current economic development programs and policies are uncoordinated, with several instances of overlap

Faced with a diverse economy, and a lack of over arching economic development strategy, the Ministry's policy efforts are building upon a relatively underdeveloped foundation. In the 2017 Throne Speech, the Government of Manitoba committed to developing a new province wide economic development policy. If executed, this would represent a foundational shift in the Government's economic development capabilities.

A foundational step to the strategy development process is a review of the efficacy and breadth of the Ministry's current economic development efforts. In this regard, Deloitte conducted a review of current economic development programs funded by GET. These programs are either administered by GET or third-party organizations and can be viewed as only a snapshot of Manitoba's economic development programming landscape. For example, additional federal programs (e.g., programs administered by Western Diversification Canada) are also a feature of the province's economic development capabilities, as well as programs delivered by other Ministries with economic development objectives. Key insights from this review include:

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17

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- A lack of meaningful collaboration opportunities between industry and government (i.e., alignment of curricula with industry, lack of frameworks to work together effectively).

These are a snapshot of views presented by a small segment of industry representatives. Expanded consultations throughout the province that capture views from all sectors and regions would most likely yield additional insights. However, based on conversations had to date it is clear that industry is keen to see a more focused and transparent approach to economic development in the province, and would like to participate in the strategy definition and development process.

In summary, the province is unable to articulate a forward looking vision for the Manitoba economy. As a result, industry, academia, and peer governments are uncertain about how best to engage with the government of Manitoba, limiting the scope for true collaboration and policy innovation.

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18

The need for strategy

For the government to address inefficiencies and execute on new commitments, a new approach to economic development strategy creation is required

The current backdrop of uncoordinated economic development programs and initiatives is best explained by the government's lack of an overarching, integrated economic development strategy.

Today, the Manitoba government has made the first step towards addressing this foundational gap. Recently, it announced its intention to develop an economic development framework and improve the province's economic development capabilities. In the 2017 Manitoba Speech from the Throne the government committed to improvements including:



- "[restructuring] how [Manitoba] attracts investment and identifies those primary sectors that have the strongest potential for growth";
- Restructuring economic development efforts so they are more effective in delivering new investments in the City of Winnipeg, the capital region and rural and northern Manitoba;
- · Working with Northern Manitobans to unlock the economic potential this region holds; and
- Continuing to work with Manitoba's post secondary institutions to ensure higher education and training is aligned with the needs of today's rapidly evolving labour market (Government of Manitoba Speech from the Throne, 2017).

How to move forward



Delivering on these objectives will require a new, disciplined approach to economic development strategy. The government will need to correct current inefficiencies, while simultaneously looking to the future and making choices on priorities. This is not a straightforward task and requires a strategy framework that can articulate the key considerations required when designing an economic development strategy that guides policy makers and industry towards consensus. Importantly, the framework should be socialized with stakeholders across the public and private sectors, and outlines a set of repeatable decision making criteria that can enable this diverse group of stakeholders to work together to make impactful decisions that capture the breadth of outcomes and objectives most relevant to Manitoba.

Introducing the concept of an economic development framework

Choosing to use a repeatable framework yields several benefits for policy makers and the public

Often, governments articulate 'visions' for their economies. These visions can be expressed as descriptions of the future look and feel of an economy in public announcements (e.g., Budget 2017). In practice however, governments truly articulate their vision for an economy based on deploying a set of well crafted, synchronized policies, programs and regulation that work together to achieve common objectives. Such a coordinated approach to economic development is not accomplished through stand alone policy initiatives. Instead, around the world, governments have developed economic development frameworks that act as a foundational tool in the policy making process to achieve benefits such as:

A clearer ability to articulate objectives

Frameworks are made up of agreed upon component parts that can help policy makers agree on a clear vision of the current and future state of the economy. The framework can also help to articulate policy considerations and trade offs that need to be assessed and researched in the policy making process.

Enhanced transparency

Once developed and socialized across governments, frameworks can be shared publicly and with policy partners (e.g., federal/municipal governments). As such, governments can provide a level of transparency into the economic development policy choices a government makes and funding process for the public. Governments are increasingly sharing decision making and policy making frameworks publicly, as a means to publicly clarify investment decisions, policy mandates and goals.

A mechanism to identify policy interdependencies

A framework can account for and capture policy elements that are not within the exclusive jurisdiction of a government, but still relevant to economic development policy (e.g., federal immigration policy). This enables a government to have a holistic, broad interpretation of the elements, tools, and tactics that could be deployed to achieve economic development outcomes.

Accordingly, in the forthcoming section, we will present a framework for economic development policy. The framework is comprised of 18 variables that can be viewed as individual 'pillars' of economic development policy.

How to view our economic development framework

Our framework introduces several variables, with modes of influence on economic development strategy

Economic development policy is the sum of many parts, and is not a pure, subject-specific area of public policy. Accordingly, Deloitte's economic development framework is intentionally designed to be far reaching, and is segmented into framework categories.

Economic Endowments

Economic endowments can be viewed as the current stock of key natural and economic features in Manitoba's economy.

 While the health of the stock is shaped by public policy (e.g., the government's oversight and support for a natural resources industry), these elements of the framework are viewed as foundational, and to be built upon.

Endowments can be viewed as the setting(s) in which other forms of more targeted economic development policy and programming is deployed.

Economic Development Assets and Tools

Economic development assets and tools are policy realms in which the Manitoba government may have policy jurisdiction, or an ability to shape policy and programming decisions. This category is further segmented into:

- *Direct influencers* levers that the Manitoba government may have jurisdiction over and can deploy to achieve particular outcomes.
- Indirect influencers Indirect influencers can be viewed as policy spheres that can shape the outcome of provincial economic development objectives, but may not reside under exclusive provincial authority.
- Enablers Enablers can be viewed as institutional assets and tools that allow the Government to execute on objectives and monitor progress.

Policy Considerations

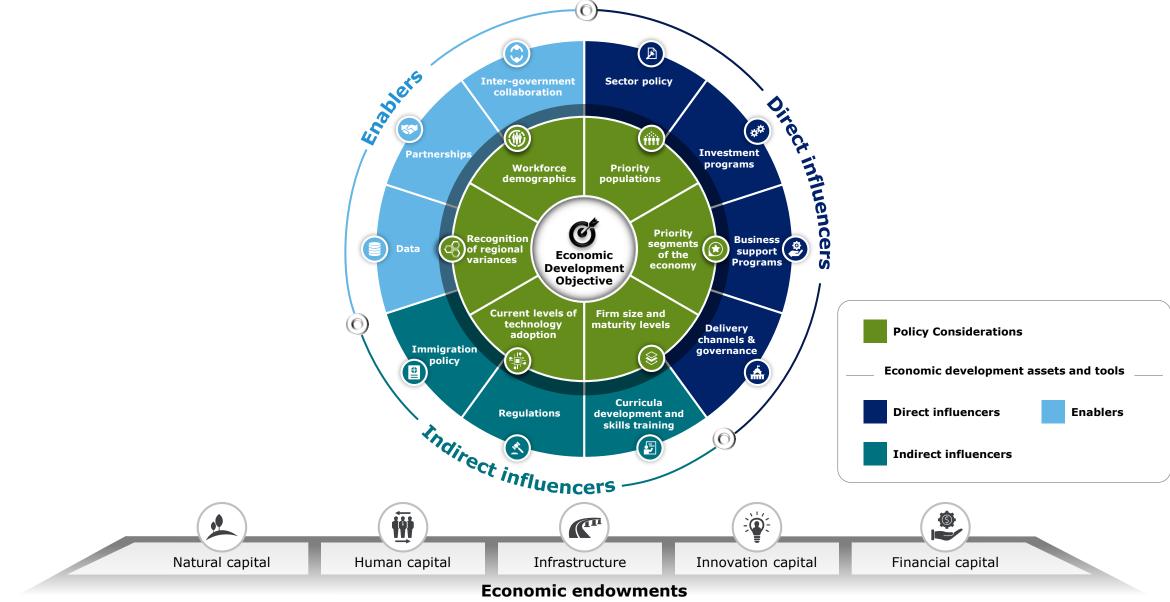
Policy considerations are cross-cutting, over arching public policy spheres that are relevant across portfolios. These considerations can be viewed as components of economic development policy that have broad reaching socioeconomic, productivity and economic implications.

Governments can choose to integrate policy considerations into economic development policy based on their relative importance to central (e.g., Premier's Office) priorities and provincial Budget commitments.

How to leverage the framework

Before a comprehensive economic development strategy can be defined, it is imperative to understand i) how each pillar can be leveraged, and ii) the interdependent elements that can catalyze transformative and sustained economic growth. For the Manitoba government, this framework can help identify and consider the economic endowments, assets and policy levers that can support the province's economic development goals and objectives.

Our framework for the key elements of economic development strategy



Introducing framework pillars

In the next section of the report we provide a primer on each component of our economic development framework shaped for the Manitoba context

Each pillar of our framework is a complex sphere of public policy that can include its own distinct stakeholders, as well as strengths and weaknesses. In the next section of the report we provide an introduction to each pillar that includes:

A definition of the pillar.

A selected, high level overview of the current state of the pillar based on our review of the current state of Manitoba's economy, consultations and our program overlap exercise. A set of key considerations and best practices to help frame how the government of Manitoba should view each pillar. We have selected considerations that reflect our understanding and analysis of Manitoba's strategy context.

Examples from other jurisdictions that profile the successful integration of each pillar into economic development programming.

23

This information can be viewed as a playbook for how to characterize each pillar. We have organized the presentation of each pillar based on the categories of pillars in the framework into 3 sections:

- Economic Endowments
- Economic Development Tools and Assets
- Policy Considerations

Our view of economic development goals and objectives

In our framework, we view goals and objectives as a necessary condition of economic development strategy. We have described considerations that articulate what criteria should be considered when setting goals and objectives, but have not recommended what Manitoba's goals and objectives should be. Accordingly, our description of this pillar is framed differently from the others.

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Economic Development Goals and Objectives

Economic development goals and objectives

Key considerations

- The absence of clearly articulated economic development goals and objectives can challenge both government and industry stakeholders. When governments articulate priority technologies, sectors, or economic outcomes (e.g., patent development, job creation) businesses have a level of certainty about the future.
- For example, clearly articulated goals to support industries adopting new technologies coupled with programs designed to support firms in transition can financially de-risk the decision of companies to consider new technology deployments.
- For governments, a lack of over arching goals can cause scattered decision making, and result in the inefficient allocation of dollars and policy efforts.
- Elements to consider when developing goals and objectives include:
 - **Setting time frames:** Confirmation of a time horizon (e.g., ten years) and articulation of quantifiable desired outcomes;
 - **Articulating a broad view of economic development success:** When developing the province's economic development vision, consideration should be given to clearly identifying the desired outcomes and related measures of success. Overreliance on standard metrics related to job creation or investment dollars alone may not capture other forms of sustainable, meaningful economic impacts (e.g., patent creation);
 - Alignment with other relevant provincial policy: The Government of Manitoba has several province-wide policy mandates and initiatives (e.g., the Manitoba Look North Strategy). Economic development goals should either align with, or directly support broader government initiatives. This can prevent the development of trade offs between policy portfolios, or unintended consequences (e.g., electing to channel support towards a sector that is largely damaging to the environment, limiting the ability of a jurisdiction to achieve previously stated environmental objectives); and
 - **Alignment with federal policy:** The federal government has a suite of economic development objectives some of which include increasing innovation, supporting life long learning, and expanding Canada's clean economy. In support of these, the federal government has provided funding for select projects in Manitoba, such as investments in the Manitoba dairy industry that will support the scientific research capacities of the University of Manitoba's Glenlea Research Station diary barn. However, Manitoba's efforts are not always aligned with the federal governments and the province should identify areas of mutual economic interest that can be integrated into future policy to increase the amount of federal funding the government receives and maximize efficiency of economic development resources.

Economic Endowments

Economic Endowments





Natural capital

Financial capital

Natural Capital



Framework Component

Natural capital refers to the suite of natural resources that an economy can leverage. The supply of natural capital is largely fixed and can spin off entire industries devoted to the extraction and management of a natural resource supply chain (e.g., mining).

Current State

Manitoba's economy is diverse and it is less dependent on resources than other prairie provinces: Natural resources accounted for just below 9% of Manitoba's GDP in 2016. Meanwhile, natural resources accounted for 29% and 28% of Alberta and Saskatchewan's GDP, respectively.¹

Mining is expected to decline: Mining is the largest primary resource industry in Manitoba, accounting for approximately 5% of Manitoba's real GDP. However, the industry has been declining and is expected to continue declining over the next five years. This is largely attributed to low commodity prices, major mine closures (as mines approach their end of life), and regulatory changes.²

Agriculture is growing: Agriculture represents only 3% of Manitoba's GDP, but growth in the industry has been faster than the national average and output is expected to continue growing at an average annual rate of roughly 2.2% through 2021.³

• Importantly, the sector's linkages with other parts of the economy (e.g., logistics and warehousing, scientific research and development) can mean that positive growth in the sector could lead to positive spinoffs throughout the economy.

Agriculture is growing despite land restrictions and weather: The area reserved for agriculture in the province has not changed since 1966, potentially stunting the sector's growth. Moreover, the sectors success (yields) are often be determined by the weather, making yearly output from the sector volatile.

Statistics Canada, CANSIM Table 379-0030.

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Best Practices and Policy Considerations

Future proofing natural resources sectors: The natural resource sector can be particularly vulnerable to fluctuations in economic output based on market pressures that the government has a limited ability to influence (e.g., global commodity prices, drastic changes of consumer preferences). As a result, governments should consider the longevity and stability of natural resource sectors when identifying their optimal role in sectors. For example:

- For natural resource sectors projected to grow, ensuring supports that retain competitive advantage and support the adoption of new technologies, rather than on-going one-off funding to firms can be effective
- For natural resource sectors experiencing contraction or in threat of market challenges, transitioning skill sets through upskilling, or retraining initiatives that can help workers transfer valuable knowledge and skills in a new industry should be considered.

Preparing for disruption: Around the world, agricultural and mining industries have gone through significant levels of change as a result of the deployment of new robotic, internet-of-things and optical technologies that can enhance safety, increase efficiency and shorten production cycles. Firms adopting these technologies can increase output relative to peers.

• The government has a role in supporting the adoption of new technologies in the natural resources sector. Supporting companies adopting safety and productivity enhancing technologies can increase the competiveness of firms.

Examples

The Government of **Canada's Forest Innovation Program** supports research, development and technology transfer activities across Canada's forest sector. Together, these activities are intended to help the sector pursue its ongoing transformation through the development and adoption of innovative science-based solutions (Government of Canada, 2017). The program can be viewed as an example of government support towards the natural resource sector that is future-oriented, and channels support towards potentially impactful activities in the long term that can scale existing natural resource industries.

^{2.} Conference Board of Canada. Summer 2017. Provincial outlook economic forecast: Manitoba.

^{3.} Conference Board of Canada. Summer 2017. Provincial outlook economic forecast: Manitoba.

Human Capital



Framework Component

Human capital refers to the supply, quality and competitiveness of an economy's labour force. Importantly, considerations related to human capital relate to individuals not yet part of the work force (e.g., students) and the existing work force.

Current State

Educational attainment is lower in Manitoba: In 2016, approximately 50% of Manitobans have either a postsecondary diploma or at least a bachelor's degree. Comparatively, this is true for 56% of the national population, implying that educational attainment is somewhat lower in Manitoba.¹

Overall, Manitoba job markets are expected to remain balanced, but tightness could occur in specific occupations. The 2017-2023 Manitoba Labour Market Occupational Forecast established the existence of tightness (difficulty to find workers) in the Manitoba labour market, including in many occupations with high and middle skill-level requirements.² According to this report, tightness is expected in natural resources, agriculture, health occupations, and trades and transport. Specific occupations expected to experience tightness include, but not limited to: geologists, chiropractors, program officers unique to government, and electrical mechanics.

Manitoba loses working age individuals to other provinces: Net interprovincial migration shows that Manitoba lost over 5,000 working-age individuals to other provinces in 2016, a pattern that has been persistent over the years.³ International immigration helps counteract this effect, but its persistence is nonetheless problematic.

• **Stakeholders also expressed concern about talent strengths:** Deloitte heard from stakeholders that there is a need to teach students skills that are relevant to private sector needs.

Statistics Canada. CANSIM Table 282-0004.

Best Practices and Policy Considerations

Developing school level curricula: Effective support for a competitive labour force starts in elementary and secondary school. Governments around the world have taken steps to enhance the quality of school learning by focusing on skills relevant in the future (e.g., STEM – computer engineering skills), or by integrating exposure to industry environments at an early age (e.g., high school apprenticeships, co-operative education programs).

 These efforts include working with social assistance/youth organizations to understand the barriers of secondary school attainment and actively target at risk populations.

Consulting with industry: Retaining existing top talent is a role for firms to take on, as well. While firms are able to respond to the needs of talent by undergoing changes (e.g., enabling working from home, or providing highly valued benefits), the government can convene industry consultations, round tables or surveys to hone in on specific pressure points that may cause talent to leave.

Identify and supporting talent linkages: Given the variance in Manitoba's economy, as well as a marked rural/urban and north/south divides across the province, consideration should be given to collecting data and understanding how talent within different parts of the economy interact with each other, and how this can be optimized.

While the clustering of specific skill sets can reflect specialization, and competitive advantage, over time, it can also create or exacerbate a 'rural/urban' divide in skill sets, making rural economies less diversified and susceptible to unemployment. Proactive measures governments can take to avoid this outcome include:

- Working with regional/municipal governments, identification of areas of skills specialization, or skills gaps in rural and urban settings should take place;
- Where gaps in a province exist, consideration for incentivizing talent to locate in areas of the province where there is demand (e.g., investment attraction campaigns, financial incentives for skilled workers); and,
- Where established links exist, supportive infrastructure (e.g., transit, road infrastructure) should be prioritized to further enhance the movement of goods and services and people.

^{2.} Growth, Enterprise and Trade. 2017. Manitoba Labour Marker Occupational Forecasts 2017-2023.

^{3.} Statistics Canada, CANSIM Table 051-0012.

Human Capital continued



30

Examples

British Columbia, and New Brunswick have led Canadian provinces in integrating computer coding teaching in school education as a means to update high school curricula in a manner to align it to the needs of the economy. This approach begins to equip students with work-place relevant skills at an early age. Manitoba is currently evaluating options in deploying similar initiatives as British Columbia and New Brunswick (The Canadian Press, 2017).

Australia's Foundation for Young Australians recently released a report titled *The New Work Mindset*, which is an evidence based look at the future of work in the nation. However, the Foundation takes a different approach to defining the future of work by focusing on skills rather than industries or occupations (i.e., a job cluster might be Artisans, those who have skills in manual tasks related to construction, production, and maintenance). This approach focused on identifying skill sets across sectors that could be relevant, moving away from a singular, sector focused view of the workforce. The study found that for every skill a worker gained, that skill could be applied to an average of thirteen other jobs. Focusing on skills based work could allow for smoother jobs transitions (Advisory Council on Economic Growth, 2017).

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Infrastructure



Framework Component

'Infrastructure refers to the quality and reach of an economy's transportation, transit and digital infrastructure stock. Importantly, infrastructure owned or maintained by government is often a common good that benefits several member groups within society and can often be used repeatedly, generation after generation.

Current State

Manitoba's Ministry of Infrastructure is in the process of undertaking a policy review: The Ministry is currently in the process of assessing its program delivery, which includes providing a path for making decisions around road, water, flood protection and other projects the Ministry is considering.

Expressed need for all weather roads in Northern Manitoba: Communities in Thompson have expressed a need for all weather roads in Northern Manitoba to service communities, increase commodity and visitor flow. Meanwhile communities of The Pas expressed a need for reduced traffic on road from trucks (and possibly increased rail services).¹

Internet availability in Northern Manitoba could be improved: Individuals in The Pas and Churchill noted that the North could be opened up in terms of internet and cell service, arguing that broadband could unlock the potential of small, remote communities.²

The province has an established channel for interacting with the federal government to receive infrastructure funding: The Canada-Manitoba Infrastructure Secretariat acts as a single window for federal-provincial program delivery to local governments.

- Four major federal-provincial infrastructure funds are under the administration of the Secretariat. Since its inception in 1994, the funds have administered over \$1.7 billion in infrastructure funding to the province.
- Most recently, the federal government committed to fund a \$95 million project to improve water and wastewater capabilities in the province.

Best Practices and Policy Considerations

When designing a strategic vision for infrastructure, consider innovative infrastructure approaches: Infrastructure investments are often large, capital intensive investments and therefore necessitate a strategic vision to guide their development.

Working with infrastructure planning stakeholders to articulate the economic benefit of specific projects: Typically, governments have stand alone ministries/agencies charged with infrastructure planning. Ensuring infrastructure investment decision making does not occur in silos and incorporates criteria relevant to economic development planning and goals can maximize return on investment for infrastructure projects. Articulating and quantifying the proposed benefits associated with infrastructure projects can be an important role for economic development agencies. Working across government, confirming a set of meaningful criteria that can express a broad view of economic development success can help the government make better decisions. This approach may extend beyond traditional quantified economic impact assessments of the potential direct, indirect and induced benefits to regional/sectoral economies, and include considerations such as:

- The extent to which marginalized, vulnerable populations can be uplifted through infrastructure investments.
- The extent to which infrastructure investments could enhance or diversify the quality of a region's labour force through building accessible transit/ road infrastructure exists.

Ensuring digital infrastructure capabilities are competitive: Broadband internet access is a necessity to remain competitive in today's economy, and can enable a suite of business services (e.g., online e-commerce). Continuing to ensure all parts of the Province have uniform access to internet is critical in ensuring socioeconomic balance. For government, service delivery and oversight of public safety and well being can be significantly enhanced through the development of smart city technologies including cloud services that monitor demand responsiveness in transportation, and the use of services.

^{1.} Look North. 2017. Workshop Report: Thompson., Look North. 2017. Workshop Report: The Pas.

^{2.} Look North. 2017. Workshop Report: The Pas., Look North. 2017. Workshop Report: Churchill.

Infrastructure



32

Examples

Columbus Ohio's successful win of a US Smart Cities initiative exemplifies how governments can view infrastructure as an economic development feature and city building capability. Columbus' win was attributed to its: "holistic vision for how technology can help all of the city's residents to move more easily and to access opportunity". Included in the city's vision were investments such as:

- Deploying three electric self-driving shuttles to link a new bus rapid transit center to a retail district, connecting more residents to jobs.
- The use data analytics to improve health care access in a neighborhood that currently has an infant mortality rate four times that of the national average, allowing them to provide improved transportation options to those most in need of prenatal care (Government of the USA, 2017).

Innovation Capital



Framework Component

Innovation capital refers to the suite of organizations and institutions that support innovation as part of their mandate. This component can be viewed as enabling and accelerating the 'supply' of innovation to the economy. Key examples can include incubators, accelerators, technology transfer offices, research funding councils, research and innovation advisory bodies and public sector innovation teams.

Current State

Existing infrastructures clustered within the Capital region: The province supports several incubators and accelerators including: North Forge, Manitoba Technology Accelerator, Innovate Manitoba (winding down), and Futurpreneur. All of these organizations serve clients province-wide, but only North Forge has physical space and services offered outside the Capital region.

- Continued emphasis on the clustering of innovation infrastructure in the Capital region has not been identified as strategic choice, with a clear rationale that ties to broader provincial economic development goals.
- While the Government does fund activities across the province, a review of options to ensure regional coverage in programming has not been done.
- Seen this way, the Province currently does not a physical presence across the province and has not investigated the trade offs associated with having most infrastructure in the Capital region.

Limited coordination and visibility into the outcomes of incubators. Our review identified instances of overlap between services provided across incubators funded by the province. Outcomes of these incubators have historically not been tracked by government, but under the PEG program efforts to correct this are underway.

Industry specific innovation funding available: The Manitoba government provides sector specific funding and support to stimulate innovation in specific parts of its economy. For example, Manitoba Agriculture provides funding to individual firms and research institutions to support the discovery, pre-adoption and technology transfer phases of innovation activities. The overarching goal of this initiative is to increase the scope and effectiveness of Manitoba's innovation support network as it relates to the agriculture, agrifood, and agriproduct sectors.

Current State

Manitoba has articulated a desire to grow technology clusters: A recent example of this commitment is EMILI, a CEO-led, public-private funded initiative to make Manitoba the most advanced agricultural economy in the world. EMILI plans to change the traditional agricultural industry using artificial intelligence and machine learning.

• EMILI was not shortlisted for the Federal Government's supercluster initiative. However, the organization teamed up with the shortlisted protein supercluster from Saskatchewan for the next round of proposals.

Best Practices and Policy Considerations

Ensure effective tracking and monitoring of innovation outcomes: Analyzing the incremental innovation impacts that can be attributed to public investment (e.g., funding of incubators) can be challenging.

 Effective outcome measurement requires analyzing data on a broad set of metrics, that do not simply capture volume based metrics as positive innovation outcomes is critical (e.g., IP creation, progression from start up to scaling, successful acquisition of venture capital funding, establishment of research partnerships)

Ensuring a breadth of innovation support: Firms developing technology or seeking to adopt innovative technologies may require financial support at different phases of firm maturity. Supporting established or maturing companies requires different types of public policy supports than those needed by start ups.

 Working with incubators and regional governments, provincial governments should identify the specific financing/business supports required by a region, or sector to ensure public funds are deployed to the highest level of impact.

Balancing specializations and local coverage: Identifying the location and optimal delivery model of innovation infrastructure is not a straight forward task. Governments need to balance several factors including ensuring all regions of the province have access to programming. However, as well as developing centralized, centers of expertise in innovation capital that can be technology/sector specific (e.g., Manitoba's Grain Innovation Hub). These factors can create trade offs that need to be carefully assessed in consultation with municipalities/regional economies.

Innovation Capital



34

Examples

Sweden offers a good example of for **centralized performance tracking** to improve comparability and tracking of incubators that have multiple sources of funding. The Almi Analysis database provides a centralized performance tracking framework that can be used by multiple levels of government to assess impact. As a result of this data collection and tracking capability, the Swedish government is well positioned to provide data-driven annual reports on the state of innovation in the economy. In 2015, Almi announced intention to incorporate peer review into reviews of incubators, exemplifying new innovative measures of appraising performance that move away from static, output based indicators.

Michigan has developed a Performance Tracker of Economic Competitiveness which provides an overview of Michigan's positioning relative to peer states on a broad set of metrics including employment, personal income, taxes, traffic congestion, expenditure on economic development programming, and education metrics annually. Ten comparator states were selected based on their average rankings on key job, economic, personal income, and population indicators.

Included in these metrics is data related to technology, including research and
development spending, venture capital investment and entrepreneurial activity. By
casting a wide net of metrics to be assessed, Michigan is able to communicate and
benchmark results in a comprehensive manner, enabling robust analysis of yearover-year results. Data is demonstrated on their website for the public to view and
analyze along with an accompanying report to show detailed results.

Germany's **Fraunhoffer Society** model exemplifies a national governance structure to innovation capital that can be adapted elsewhere. The Fraunhoffer Society runs approximately sixty-nine subject specific research institutes which work on contracted research solution building for companies as a temporary partner. The location of these institutes reflects regional industrial specialization, as well as ensuring a supportive local cluster of SMEs to potentially partner with. However, firms from across the country are able to access any center, should they fit the criteria. This approach can ensure sufficient regional coverage of innovation expertise, while balancing the need for subject specific areas as well.

Financial Capital



Framework Component

Financial capital refers to sources of financing, funding and managerial expertise available to firms. This component can be viewed as enabling and accelerating the 'supply' of firms by supporting the generation of new companies, and supporting investments, and expansion of existing firms.

Key examples can include public grants, loans, government-backed venture capital funds, private equity firms, private angel and venture capital firms and 'challenge' or inducement prizes.

Current State

The Province has prioritized improving access to capital: In the 2017 GET Ministry Mandate Letter, the Ministry was charged with developing a "comprehensive Access to Capital Strategy" to attract venture capital.

The province offers a breadth of financing initiatives: GET administers or provides funding for a number of grant and loan programs, equity financing, and tax incentives for various industries. See Appendix B for a detailed list of GET financial support.

GET has led several initiatives to improve access to capital in the past: Recent examples of these efforts include the provinces three year agreement (started in 2015/16) with the National Angel Capital Organization, which aims to attract seed and early stage investment, launching the Manitoba Sidecar Fund where the government acts as a co-investor with private sector investors, and increasing the threshold for tax breaks on corporate income.¹

Current State Continued

Despite these efforts, reviews of Manitoba's economy have identified a *gap in funding for medium and large businesses:* Consultations with Deloitte highlighted that industry perceived that a majority of financial supports available were geared towards small and medium businesses. Once a company reaches 200 employees, support options are fewer (i.e., no longer eligible for tax credits to help raise equity investment). This could potentially contribute to challenges of scaling up.

Best Practices and Policy Considerations

Ensuring financial capital is available for key pressure points: Across industries, the 'valley of death' can occur in different stages of company maturity. For example, software start ups may require initial seed funding to enable testing and prototyping. More capital intensive segments such as industrial water treatment clean technologies may require longer research cycles, thereby changing their financial profile.

 Working with industry to identify specific pressure points in the availability of financial capital is necessary to design and deploy the most effective financial instruments.

Supporting companies scaling: Larger sized companies can have larger economic impacts. Ensuring that companies are able to scale can contribute to economic gains and ensure their ability to continue to thrive. Examples of relevant supports include:

- Ensuring companies have access to exporting and internationalizing supports;
- Developing hospitable IP, and tax regimes that can enable firms to continually invest in productivity enhancing technologies/approaches.

De-risking and stimulating private investment: Public funding is only one element of a financing ecosystem. Governments can stimulate private investment (within firms) as well as private investments in other firms through guarantees, underwriting, and other tools that can de-risk private investment. These approaches can stimulate additional angel or venture capital, thereby broadening the pool of available funding for Manitoba firms.

^{1.} GET internal document. October 2016. Advisory note for the Minister of Growth, Enterprise, and Trade.

Financial Capital



36

Examples

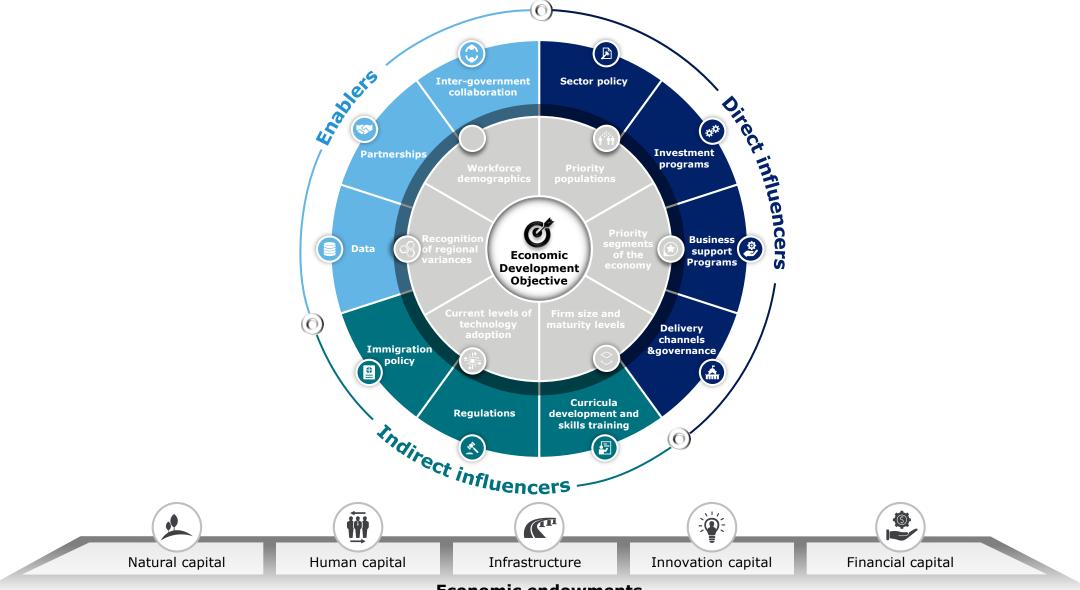
The Danish Growth Fund exemplifies how governments can incent private sector investment. The Fund invests equity and provides loans and guarantees for small and medium-sized enterprises in collaboration with private partners and Danish financial institutions. The Fund uses several tactics including subordinated loans, and guarantees that cover up to 75% of co-investing banks' risks.

To support development of new ideas, the **California Clean Energy Fund** provides human and financial capital to a broad suite of companies at different stages in the lifecycle, from entrepreneurs to ideation to scale up stages. The Fund has three venture capital funds which take early positions in companies.

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Economic Development Assets and Tools

Economic development assets and tools



38

Sector Policy



Framework Component

Sector policy refers to the set of rules, regulations, and programming targeting a particular sector within the economy. A sector can be defined in many ways and its definition evolves over time to incorporate changes to the organization of activity within an economy.

Current State

Manitoba's economy is fairly diverse: This is often said, but looking at Manitoba's GDP composition shows that its economy is diversified across several sectors, with real estate and manufacturing being the largest (please see appendix A for a review).

- This has been viewed as an advantage with some noting that it helps the economy during times of recession.1
- However, others have noted how this challenges government in making clear choices on which sectors to support.²

GET internally has a view of the economy; however, no formal sector strategies have been created by the provincial government: GET has focused its efforts on manufacturing (specifically, food processing, transportation equipment, and agribusiness), ICT, interactive digital media, and life sciences. In addition, the government works with other sectors through the Ministries of Agriculture, Mining and Mineral Extraction, and Tourism.³

The government has invested in initiatives to support each sector: For example, in manufacturing, GET provides funding for the Composites Innovation Centre, the Vehicle Technology Centre, Manitoba Aerospace Inc., and Canadian Manufactures and Exporters.

 Digital media is supported through the Interactive Digital Media Tax Credit. The Ministry also provides funding through a number of initiatives that cover several industries; for example, the Manitoba Industrial Opportunities Program provides funding for companies in IT, arts and new media, aerospace, agriculture, and manufacturing.

Current State Continued

- However, these programs can be considered standalone, and isolated forms of support and do not map to broader provincial priorities or stated sector goals.
- · Sector growth strategies are a government commitment: One of the ten pillars of the current government's action plan includes "developing targeted growth strategies for key sectors". This initiative has not been completed and GET does not currently have a comprehensive sector strategy.
- There is little inter-departmental coordination on sector policy: Other government departments support businesses in specific sectors (e.g., The Ministry of Agriculture has several business support programs), but policy is created separately. This can increase the risk of missed opportunities or duplication and inefficient use of public resources.

Best Practices and Policy Considerations

Identify and support competitive advantages: Manitoba can shift its support for sectors away from broad based programs and policies, towards a more focused approach on specific value chains, clusters or capabilities that are competitive.

- This process would require Manitoba to confirm specific areas of existing or emerging sector competitive advantage(s) through extensive data analysis and research.
- · Once identified, areas of advantage should have dedicated policy supports developed in order to leverage and retain advantages.

Honing in on sector-specific challenges: Several sectors can be challenged by common factors (e.g., difficulties in exporting). However, conducting research and consultations with industry leaders to confirm sector-specific barriers that relate to the unique market context firms operate in should be executed in advance of developing support policies. This exercise should hone in on identifying factors that may vary across sector such as:

- Confirming the specific stages when firms most require financial support
- Sector-specific regulatory challenges
- Identifying key talent shortages/challenges

^{1.} Conference Board of Canada. 2017. Maximizing Manitoba's Potential.

^{2.} The Winnipeg Chamber of Commerce. Manitoba Bold: A Manitoba Built for Success.

^{3.} GET internal document. 2016. Building on Manitoba's Industrial Strengths.

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Investment Programs



Framework Component

Investment programs are programs that provide financial support or tax breaks to various actors within society as a means to support economic development. These programs can be directly administered by government (as is the case for tax credits), but can also be administered by non-government actors with or without a financial contribution from the government. Programs can fund a variety of actors including, but not limited to: entrepreneurs, small and medium-sized businesses, large companies, educational institutions, or incubators.

Current State

GET administers and/or funds various loan programs: Investment programs cover various businesses in Manitoba from startups and small businesses to northern businesses and those in small communities. Types of programming include:

- Loans (e.g., Manitoba Industrial Opportunities Program)
- Tax credits (e.g., Interactive Digital Media Tax Credit)
- Equity investments (e.g., Community Economic Development Fund). For a complete list of investment programs administered and funded by GET. Please see Appendix B for our Program Overview Analysis.

Programs are often designed to be available for SMEs: While there are instances of funding provided to specific industries (e.g., Vehicle Technology Centre), funding support through GET usually covers several sectors. Key sectors for the Enterprise Branch of GET are ICT, arts and new media, aerospace, agriculture, and manufacturing. While these sectors represent many firms in the province, they do not align with a smaller sub-set of high priority or strategic firms of special interest. However, there is generally more support for SMEs than there is larger businesses. Once above the 200 employee mark, there are fewer funding options for businesses.

Investment programs are deployed without a strategic vision: On their own, investment programs may have strong rationales. However, no overarching vision or acceptance criteria has guided the government that explains the current mix of investment programs available today. Programming has largely emerged at different points in time, to serve specific agendas (e.g., various access to capital initiatives, funds to serve aboriginals, the film industries, and to support innovation).

Current State continued

In addition, several Federal organizations provide funding to businesses in Manitoba: Federal or regional organizations providing funding include: Business Development Bank of Canada, the Western Innovation Initiative, Women's Enterprise Centre, and the Canadian Agricultural Loans Act program. This is not an exhaustive review of investment programs offered outside GET.

GET is addressing duplication within its own ministry, but economic development funding is also provided by other ministries and other levels of government where coordination is ad hoc: In consultation with GET, examples of other funding or tax credit programs administered by other government Ministries were provided. While the government has reviewed business support programs from Education and Training and the Ministry of Agriculture, it has not performed this exercise for all government and special operating agency funding programs.

Best Practices and Policy Considerations

- Regularly reviewing efficacy of current suite of programs: To provide funding that is effective and efficient, it is necessary to track program outcomes, not outputs. Beyond this, however, economic development agencies need to track several outcomes to have a holistic view of program efficacy. For example, relying solely on jobs created or maintained as a measurement of successful outcomes could miss productivity improving process changes, increased output, or benefits derived from accessing new markets. GET has started this process of tracking multiple outcomes via the PEG Program, but this approach to monitoring outcomes needs to be applied throughout all GET business support programs, whether funded through third parties or acting as a special operating agency.
- Aligning funding with strategic objectives: Strategic objectives could include priority sectors or populations where the government has identified a need for and benefit of support. With limited funding available, having clearly identified strategies and, where possible, aligning funding to these strategies will help improve transparency and effectiveness of funding. The government will continue to consider all proposals, however, where other selection criteria are met, a business will benefit from addressing the strategic goals of the province. In turn, this requires strategic objectives to be well defined and understood by applicants.

Investment Programs



41

Best Practices and Policy Considerations

- Outcome monitoring as a condition of service: Whether a service is provided directly by government or funding is provided to a third party that provides services, monitoring of outcomes should be included as a condition of program participation. Formalizing the monitoring of outcomes improves transparency by informing clients of the program intentions and ensures governments are able to track program efficacy, as above.
- Having a clear rationale for 'stopping funding': To meet funding reduction goals and avoid duplication, funding will be discontinued for some past recipients of provincial support. However, before discontinuing funding a clear rationale should be in place to determine which recipients should no longer receive funds. This rationale will be guided by the strategic policies in place by the government and should also be informed, where possible, by performance evaluations of past funding. A clear rationale will help avoid gaps in funding for strategic populations and sectors and will help to avoid canceling funding where it is most effective.
- Formalizing interdepartmental (inter-ministry) coordination on funding:
 Broadly, collaboration on economic development funding programs between
 government departments works to ensure program duplication is minimized.
 Several actors work on economic development initiatives and have their own
 strategies and goals for these initiatives. Formalizing meetings between relevant
 economic development funding agents can help ensure that common goals are
 achieved as efficiently as possible and that there are checks in place to avoid
 duplication.
- **Reducing redundancy:** Without generating gaps or sacrificing strategic goals, the department should seek to reduce the number of business support programs it funds. This will help to eliminate duplication (a process that is currently under weigh) and simplify the process for businesses seeking support. Minimizing the number of programs supported could entail amalgamating programs working to achieve similar goals.

Examples

The American ARPA-E program, designed to tackle energy-related challenges in the US, is an example of a strategic investment program with an effective governance structure. The US Department of Energy is responsible for the program, but it is run by an independent set of experts from other departments. These professionals return to their home organizations after five years, taking with them their experience with ARPA-E. The program co-funds energy-related technology projects with private sector applicants whose progress is monitored closely; funding is terminated if projects do not reach set outcomes.

Manufacturing USA provides an interesting example of how governments can oversee a set of investment and business support programs working toward a common sectoral objective, thereby limiting duplication of efforts and ensuring a targeted approach to supporting the sector. Manufacturing USA is a federal program that articulates goals related to enhancing the productivity of the manufacturing sector nationally. It works with local governments to foster innovation in the manufacturing sector and matches private and non-governmental funds to build regional institutes of excellence in manufacturing innovation.

- Manufacturing USA convenes program monitoring for several programs all related to manufacturing and reports outcomes to the federal government.
- The program is monitored by an interagency office that resides in the Department of Commerce.

Similarly, the **Canadian Agricultural Partnership** represents a possible model for effective oversight of programs administered by a partner. The Partnership is a five-year \$3 billion investment by federal, provincial, and territorial governments to strengthen the agri-food sector and is guided by six overarching priorities such as:

 Improving productivity with research and innovation, expanding to new markets, reducing GHGs and enhancing sustainable growth, increasing value-added agriculture, increasing public trust by improving regulation and transparency, and enabling proactive risk management within the sector.

Business Support Programs



42

Framework Component

Business programs are non-financial support programs provided for various actors within society by government and non-governmental institutions. They include support such as trade assistance, management training, and technology adoption support. These programs are often developed to provide services to smaller businesses and individuals that would otherwise not have access to such services.

Current State

GET supports various specialized forms of business support programs: A strength of GET's approach to programming is that it has a **good breadth of** programs covering several important issues, including:

- Trade support (e.g., World Trade Centre Winnipeg)
- Technology adoption support (e.g., North Forge)
- Bilingual business support (e.g., Conseil de développement économique des municipalités bilingues du Manitoba)

Business support programs exist to serve both the Capital Region and rural and northern Manitoba: General business support programs, such as business 101-type information sessions and workshops are provided in and outside the capital region. Incubators may be an exception where some services are almost exclusively offered in Winnipeg (e.g., North Forge and MTA); however, given the specialized services these organizations provide, it is possible that businesses would find it worthwhile to travel to the city for them.

Opportunity exists to review business support programs using a system-wide approach: Again, GET has started to review programs and program outcomes measured on a case-by-case basis, such as under PEG. However, many organizations provide support services to businesses. For example, Manitoba Education and Training provides support to Community Futures, an organization that potentially overlaps with Entrepreneurship Manitoba's work in rural and northern communities. Entrepreneurship Manitoba is aware of this potential overlap and suggests that it works to avoid duplication, but without further review it is difficult to determine whether duplication is truly being avoided or if there are areas to improve efficiency.

Best Practices and Policy Considerations

Several best practices and policy considerations relevant to the effective administration of business support programs are also relevant to investment programs. Please refer to pages 36 and 37 for best practices we consider applicable here as well. In addition, below we present considerations related specifically to business support programs.

- Ensuring business support programs reflect current and future pressure points: Governments must consider the risk profile of recipients when designing business support programs. As a result, governments may be incented to develop broad, far reaching programming that is designed to achieve a limited set of outcomes. However, scanning the economy to identify state and sector specific pressure points, verified by empirical evidence and testimonials from stakeholders can help design relevant policy. Factors that can be supported include:
 - Support for priority sectors/populations
 - Programs designed to address future risks (e.g., projected unemployment in legacy industries, out migration within specific populations)
- Considering regional breadth: An economy will have significant regional breadth and variance. Accordingly, businesses across sectors will require different forms of support. Moving away from a 'one-size-fits all' approach to business support program design can ensure the relevancy of programs.
 - Ensuring businesses across the province have a relatively uniform level of access can also diversify the impact of available programs. This can be accomplished through a combination of physical bricks and mortar presence, as well as the use of online intake/administration approaches.

Please refer to page 44 for more details on the delivery and governance structure of business support programs.

Business Support Programs



43

Best Practices and Policy Considerations continued

Focusing on high value firms: In contrast to financial support, the level of effort and government resources that can be required to provide services, such as internationalization support and one-on-one coaching, can be high. Ensuring that more resource intensive, activities are able to be focused on high value firms can be achieved through approaches to program design including:

- Required 'graduations' from steps, or achieving specific outcomes before proceeding forward
- Reviewing metrics such as annual growth rate as part of the application process for supports designed to assist start ups or young companies
- Requirements for specific scale (e.g., international reach, or employment footprint) to receive specified types of funding.

Ensuring agreements with funded agencies align with provincial objectives: At times, the optimal role for the province is financial support for a program or initiative that is delivered by a partner/external agency. This approach can limit redundancy and be cost effective. However, support should be channeled to opportunities that align with broader provincial objectives, and fill gaps within the province's existing economic development programming.

- Developing decision criteria that map directly to provincial economic development strategy to provide help to qualify potential partnerships can be a means of achieving this
- Working with partners or potential delivery agencies to co-design or pilot programs should be considered.
 - This approach moves away from the province acting as a 'silent partner' and would require program design objectives that can simultaneously meet provincial and local requirements / objectives of the agency.

Delivery Channels & Governance



Framework Component

The ability of governments to meet economic objectives, or deliver on stated strategies is influenced by the quality, fit and efficiency of the governance structure(s) convening and managing economic development efforts, and the efficient design of delivery channels.

Current State

GET is the lead economic development Ministry: As outlined in the Ministerial Mandate Letter, GET has two main objectives:

- be the most improved province on job creation and;
- and most improved partnerships with businesses and communities.

This direction is high level, and does not specify tactics to achieve these outcomes, or provide quantifiable yardsticks for which the Ministry can be held accountable.

Lack of over arching provincial economic development strategy: Despite this direction, currently, the Manitoba government does not have an economic development policy. This is a foundational challenge that can trigger several other challenges such as:

- Limited quality and efficacy of intra-government collaboration on economic development: Currently, there is a Deputy Minister Roundtable on economic development that convenes regularly. However, to date, the specific mandate of this group is still under consideration.
- Potential options for the role of the Roundtable include:
 - A decision making body to execute on strategic decisions or
 - A policy development body
- As a result of a lack of confirmed objective, the body has not yet become an effective asset in the province's economic development capabilities.
- Limited direction to other Manitoba governments: In the absence of provincial goals and objectives, municipal and regional governments do not have direction on how to work with the provincial government, and current initiatives lack coordination.
- Several stakeholders execute economic development programs, with little coordination: Economic development programs are administered through the Ministry of Agriculture, Education and Training, Finance, and Indigenous and Municipal Relations.

Current State Continued

Stakeholders have expressed desire for a centralized economic development agency: Given the complexity of the current economic development governance landscape, stakeholders interviewed as part of Deloitte's review of economic development programming have identified a need for a centralized economic development delivery body that is arms length from the government.

The current governance structure for these business support programs is complicated: GET funds business support programs in two ways. Frist, it both funds and administers programs through special operating agencies (e.g., Entrepreneurship Manitoba) or funds and directly administers programs (e.g., Manitoba Trade and Investment). Second, it funds programs run entirely by third parties (e.g., North Forge).

Funding has at times been provided without clear, written expectations for its use: In consultations with GET, examples were highlighted where funding was provided to third parties without a clear understanding of the programs the funding was supporting. GET has started to address this issue by restructuring its funding to third parties under the Partnerships of Economic Growth Program (PEG). This single window approach to third party funds is a good start to streamlining business support programs, but overlap can and does still exist as GET both funds other organizations and administers business support itself.

Lack of criteria for determining optimal delivery approach of business support programming: GET both delivers and funds business support programs that overlap in mandate and type of clients served, but lacks a decision tool for determining what should be delivered by government versus what is optimally delivered by third-parties.

- Funding is provided to third parties based on requests, not strategy.
- Likewise, there is no strategy determining how support services in rural and northern areas are delivered.

Identified overlap in business support programs that is currently being addressed: Overlap occurs between programs run by third parties as well as between third party programs and GET special operating agencies (SOAs). Please see Appendix B for further detail.

Delivery Channels & Governance



Best Practices and Policy Considerations

Confirming Ministry roles and responsibilities: Province-wide economic development policy requires several skill sets and vantage points. Within GET, reviewing and formalizing the scope of policy and programming roles can ensure the Ministry seeks needed expertise, and reduce administrative burden.*

Developing formal channels for non GET ministries to provide perspectives:

The Government should identify economic development champions and convene collaboration bodies (e.g., committees) in which policy makers across government have the opportunity to connect and provide insight that can align policy (e.g., ensuring curricula review activities in the Ministry of Education reflect the perspectives of industry GET may be connected to).

Considering a role for an arms length government agency to deliver on specific economic development objectives: Program design and oversight capabilities differ from program delivery and applicant management capabilities. Currently, GET executes both sets of functions internally. However, several governments have prioritized the development of arms-length delivery bodies tasked with the mandate to deliver specific programs or achieve economic development objectives.

- This approach enables the government to develop specialized nodes of expertise and reduce redundancy. Defining the mandate of a standalone economic development agency is a critical step for governments to make. Options to consider include:
 - Program delivery agent
 - An innovation agency charged with supporting innovation across an economy;
 - Subject-specific agencies designed to designed to stimulate specific industries; or
 - A dedicated investment attraction agencies

Formalizing approaches to regional economic development: Given the variance in Manitoba's regional economic development challenges and opportunities, ensuring municipal and regional economic development agencies are coordinated, provide complementary services and do not duplicate efforts can strengthen the province's economic development ecosystem. For further information please see pages 66 and 67.

*For further details on our review of administrative burden in GET and GET funded programs please see Appendix C

Best Practices and Policy Considerations continued

Ensuring the optimal governance structure design: The structure of the delivery channel(s) for economic development agencies, ministries or program administration teams should be bespoke and reflect the intended economic objectives it is trying to achieve. For example, in instances where the province is trying to achieve replicable outcomes across a broad geography, a network approach of 'franchise'-like program delivery agents/innovation centers is appropriate. In instances where specific sector specialization, or competitive advantages are trying to be maximized, considering a hub and spoke model that allows for variability across a province.

Examples

Canada's Invest in Canada Hub is an example of the government developing an arms length agency with a specific, defined economic development objective. The Hub centralizes lead generation and investment attraction capabilities across the federal government. Prior to this, these activities were interspersed across parts of the federal government. While the Hub is standalone, it will work with trade commissioners, and Global Affairs Canada, thereby also creating a central point of contact for government stakeholders.

The **Finnish Funding Agency** for Innovation is steered and funded by the Ministry of Employment and Economy, but tasked with financing for research and development and innovation projects. The Agency's mandate includes stimulating specific sectors of the economy with a traditional focus on information technology and telecommunication industries. Today, the Agency executes financial programming for the Finnish government including managing a state-owned venture capital fund, and facilitates procurement of innovative products.

Singapore's Agency for Science, Technology and Research (A*STAR) is an interesting example of centralized expertise available for industry connections. The Agency offers scholarships to international experts at the undergraduate, graduate and post-doctoral levels. As part of its Graduate Academy, industry partners including SMEs are able to access scholars at the Academy for research collaboration and advisory opportunities directly. By acting as a coordinator, firms can seek out individual expertise quickly and seamlessly. These projects can be given government funding to reduce costs for industry partners.

Delivery channels and governance



Examples

The **Michigan Economic Development Corporation (MEDC)** is an interesting example of a dedicated, subnational economic development organization that is charged with specific economic development objectives. The organization has a broad mandate and is responsible for both domestic retention and international investment attraction responsibilities. The organization nurtures start ups, helps companies scale and also assists in site selection. Notably, the organization is the uniting force behind the 'why Michigan' and 'pure Michigan' marketing campaigns with international presence.

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Data



Framework Component

The quality of a government's repository of economic data, as well as its capabilities to effectively analyze data to inform economic development policy is a foundational capability. Increasingly, governments are investing in more robust databases that are also available to the public.

Current State

Lack of credible, centralized data repository: Stakeholders interviewed by Deloitte said that there was a need and desire for a centralized data repository so that decision makers and interested parties can work off the same fact base when making decisions. This view was reinforced by the Rural Economic Development Steering Committee where "the lack of credible, current information about the population and businesses in rural Manitoba" was said to be preventing evidence-based identification of priorities.¹

As a result of limited data, the province does not have a line of sight into
what municipal and regional partners fund: Given that there is no central data
repository and no formal economic development strategy, communication between
governments is often ad hoc and the province does not have a formal channel to
track funding by other governments in the realm of economic development.

Manitoba has invested in some open data portals: The City of Winnipeg Open Data Portal, as well as the Manitoba Land Initiative are examples of free, online data sets available for the public. This approach to conveying information to the public is viewed as an efficient means to provide public stakeholders with important information. The Manitoba government has made a broad commitment to creating an open data policy to provide government collected data more readily to the public.

Economic development programming is not tracked consistently, and when it is tracked the data is insufficient: The province provides a suite of economic development programming, but monitoring of programs has not consistently been required and is therefore done on an ad hoc basis. Moreover, when monitoring of programs is conducting, information on inputs and outputs is usually collected, but rarely information on outcomes. Thus, it is difficult to determine which programs are the most effective at achieving their goals.

Current State continued

• Limited coordination and visibility into the outcomes of incubators: The government's lack of reliable datasets persists in its oversight of incubators and other innovation infrastructure. Our review identified instances of overlap between incubators, but outcomes of these incubators are not closely tracked by the Government making it hard to determine which programs are successful.

Best Practices and Policy Considerations

Centralizing outcome measurement: Accurate reporting of return on investment that incorporates the full breadth of the impact of government's investments can only be done if the outcomes and metrics related to investments are tracked in uniform quality, and effectively. This can require significant coordination across government, and investment in data analysis and tracking capabilities.

- Regional, or local economic development agencies which may receive partial funding or partnership from the provincial government should report on a standard set of metrics, with accompanying qualitative rationale that can contextualize regional variances in outcomes.
- This approach requires agreement and coordination between governments on which outcomes will be tracked, and how.
- In addition to a common set of standardized metrics, the government should also track context-specific outcomes that reflect the regions organizations serve in, or the particular policy challenge they are seeking to address.
- Consideration should be given to providing degrees of flexibility in the metrics tracked as part of funding agreements, as prioritization of jobs created, or interactions with prospective start ups can lead to scenarios in which recipients are unable to customize programming for their local contexts, instead seeking to achieve funder metrics.

^{1.} Rural Economic Development Steering Committee. 2016. Rural economic development strategy for Manitoba.

Data continued



Best Practices and Policy Considerations Continued

Firm-level geospatial analysis of the economy: Provincial governments and Statistics Canada collect several data elements valuable in characterizing the economy. Often, information is analyzed at a broad level, focusing on geographic, or sector categorizations. Instead, collecting and plotting the characteristics of firms in the economy can provide important descriptive insights, and provide insights into emerging clusters. This approach can require detailed surveys and the generation of new data sets. Key elements to consider analyzing include:

- · Firm age;
- Firm location (postal code level);
- · Year-over-year growth rates;
- · Status as parent company or subsidiary; and,
- · End market/ end buyer segment.

Analyzing the economy can require bespoke definitions: The data required for the province to make decisions may not be straight forward. For example, conventional approaches to characterizing and tracking sector data such as reliance on NAICS codes is being challenged by the emergence of new forms of companies that may serve multiple sectors, or are part of new segments of the economy (e.g., social enterprise firms, clean technology firms, micro-lending companies). As a result, there may be gaps in available data for the Province of Manitoba in key emerging sectors.

- Statistics Canada is undertaking steps to develop data strategies for new segments of the economy (e.g., the forthcoming Clean Technology Data Strategy).
- In the absence of this work being finalized, the Government may need to consider interim, bespoke definitional approaches to characterize sectors.
- Definitions of sectors should not rely on subjective 'self identification', but rather include assessment of the defining characteristics and features of sectors.

Best Practices and Policy Considerations Continued

- Once definitions are agreed to and codified, consideration should be given to framing how tracking region or industry specific outcomes that are of high value to the province could be nuanced, and not neatly align with 'generic' economic development KPIs.
 - Confirming precise KPIs, and data rules related to economic development in the province is critical. This information should be shared with all partners, and harmonized data collection should be mandated as part of funding partnerships.

Examples

Sweden offers a good example of for **centralized performance tracking** to improve comparability and tracking of incubators that have multiple sources of funding. The Almi Analysis database provides a centralized performance tracking framework that can be used by multiple levels of government to assess impact. As a result of this data collection and tracking capability, the Swedish government is well positioned to provide data-driven annual reports on the state of innovation in the economy. In 2015, Almi announced intention to incorporate peer review into reviews of incubators, exemplifying new innovative measures of appraising performance that move away from static, output based indicators.

The **Cambridge Cluster Map** provides one example of how big data can be used to map the business ecosystem within a given region or sub-region. The project was completed by the University of Cambridge with support from private sector partners. The cluster map helps Cambridge highlight areas of attractiveness and make cases for investment support from Government. It also allows businesses and individuals to examine individual company data to see where growth is occurring in the region. Similar initiatives in the US include the **U.S. Cluster Mapping** initiative led by Harvard in partnership with the U.S. Department of Commerce. Again, the initiative helps governments make data-driven decisions about investment, among other uses.

Curricula development and skills training



Framework Component

Curricula development and skills training refers to the primary set of plans, programs and institutions that are used to build human capital within society. Several actors within society take part in defining and administering curricula development and skills training, including governmental and non-governmental organizations. Today, the ability of curricula and skills training to keep pace with the needs of an economy is of central concern.

Current State

Manitoba has prioritized skills training: One of the ten pillars of the current government's action plan includes fostering a skilled workforce through investments in skills training related to current and emergent business needs.

 For example, Manitoba's Industry Expansion Program supports companies with funds for skills training. The program supports companies opening new locations in Manitoba or expanding existing locations in the province. Funds are provided to companies to provide employees with skills training and is linked to the number of jobs created or maintained by company as a result of the funding, as well as the economic benefit these jobs create.

GET funds some skills development programs: Entrepreneurship Manitoba's Business Skills Development seminars and their student outreach programs are both aimed at increasing entrepreneurial skills throughout the province.

• Skills development is also funded by other ministries and organizations (e.g., the Ministry of Education and Training, other industry organizations).

Stakeholders raised concerns over the knowledge and skills of talent coming from academic intuitions in Manitoba: Stakeholders interviewed by Deloitte suggested that students need skills that are better aligned with private sector needs, reflecting a potential area of improvement in collaboration between academia and industry.

Current State

Review of college education is underway: A review of the Manitoba college education system is currently being undertaken by the Ministry of Education and Training to identify opportunities to strengthen the system and focus on skills needed to succeed in the labour market. This exercise could enhance the relevance of post secondary education to employers.

Best Practices and Policy Considerations

Developing workforce ready curricula: Connecting academic and work place spheres has increasingly become a best practice in curricula development. This approach can prepare students to meet the future requirements of employers.

- To ensure maximum alignment, the Government should continue to hone curricula development activities towards addressing known skills gaps.
- Consideration should be given towards adapting curricula to reflect regional economic development contexts in Manitoba.
- Honing in on specialized support for at-risk, or disadvantaged populations during school as a means to increase the chances of their successful integration into the work force.

Reskilling and enhancing the existing work force: As traditional industries undergo rapid change (e.g., automated forms of manufacturing) and customer demands change (e.g., drivers wanting smart technologies in cars), the existing labour force may require upskilling or re-skilling to remain current. Government support for these activities can encourage the growth of new industry verticals, or clusters, and mitigate potential wide spread lay offs.

Ensuring curricula includes industry-relevant skill sets: For graduates to find meaningful work upon completion of post-secondary programs, curricula need to include industry-relevant skills training. Meeting the needs of industry could in some instances require small adjustments to the skills taught to students or it could also include the development of entirely new programs to meet the needs of emerging industries. Industry-education partnerships could include:

- Developing apprenticeship programs as part of post-secondary education
- Developing panels on skill shortages and labour market needs to identify ways that curricula could be enhanced

Curricula development and skills training



50

Examples

Michigan presents an interesting example of how to align curricula on a specifically defined area of potential competitive advantage. The government of Michigan identified electric vehicles and battery capabilities as priority segments of the economy. This decision was made after extensive review of their competitive advantages and existing capabilities in the automotive sector. In addition, Michigan invested in research centers and worker training programs for existing automotive manufacturing workers for electrified vehicles. These efforts were complemented by federal grants under the 2009 *American Recovery and Reinvestment Act.* During consultations with local universities, Wayne State University developed a curriculum for degree programs for batteries and electric-drive vehicles.

The Whitecap First Nations programming to improve high school completion rates can be viewed as an example of targeted support towards a disadvantaged community. Indigenous students in the Whitecap community would attend school on reserve until grade six when they were transferred to a high school in Saskatoon. Indigenous students were often behind in critical skills and had lower completion rates than non-Indigenous students. In response, the Whitecap community requested that its primary school be included as part of the Saskatoon School Board. This required the Whitecap community to secure additional funding from Indigenous and Northern Affairs Canada. As a result of this decision, students were fully integrated into primary and high school systems and teachers at Whitecap had access to the professional development tools offered by the Saskatoon School Board. The collaboration was a success in that Whitecap students are approaching the success rates of the general population.

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Immigration Policy



Framework Component

The laws and regulations that determine the settlement of international migrants in a country. Immigration policy includes the rules and regulations regarding services and programs for international immigrants once settlement occurs. As well, immigration policy governs the inflow of temporary workers into a country. Under the Constitution Act, immigration policy is a federal-provincial responsibility in Canada, and is also guided by international standards to which the Government of Canada is a signatory.

Current State

International immigration is strong: The Manitoban Government introduced the Business Program of the Provincial Nominee Program for international immigrants in 2000. Since then, more than 633 businesses have been established through the program, which has supported over \$222 million in investment. In 2016 alone, there were over 13,000 new immigrants in Manitoba of which over 70% were of working age. This represents nearly 7% of all new Canadian immigrants that year when Manitoba represents under 4% of Canada's total population.²

GET funds some business support programs for immigrants: Through Entrepreneurship Manitoba, GET supports immigrants by offering business settlement workshops, information sessions and research services for business immigrants.

Federal Government programs are expected to help Manitoba attract international immigrants: The Global Skills Strategy's expedited, two-week work permit application process for international professionals and managers looking to work in Canada streamlines the process for businesses in Canada looking to hire global talent.

- Despite strong levels of international immigration, over all, **Manitoba has net outmigration with respect to inter-provincial migration.** While approximately 72% of the international and interprovincial immigrants to Manitoba are aged between fifteen and sixty-four years (working age group), a slightly larger proportion of this age group, approximately 76%, is lost through interprovincial immigration, suggesting that the share of working age groups is shrinking in Manitoba.³
- 1. The Winnipeg Chamber of Commerce. Manitoba Bold: A Manitoba Built for Success.
- 2. Statistics Canada. CANSIM Table 051-0011.
- 3. Statistics Canada. CANSIM Table 051-0012 and Table 051-0011.

Best Practices and Policy Considerations

Ensuring labour market forecasts are continually revised and accurately reflect changing labour market needs: Forecasting labor market needs is essential to ensure immigration supports economic prosperity. Labor market forecasts should be updated regularly and reflect not only potential job shortages, but skill shortages. Having narrowly defined occupation-based criteria for applicants, as was the case under past Federal Skilled Workers programs, can lead to the rejection of qualified applicants and ultimately reduce the level of economic immigration.

Collaborative approach to needs identification and settlement programming: In addition to quantitative labor market forecasts, immigration needs should be identified in consultation with relevant stakeholders including universities, Chambers of Commerce, and government departments outside of those directly responsible for immigration policy. Collaboration should focus on both identification of immigration priorities and programs to improve immigrants employment successes. Successful integration of immigrants supports economic development goals.

Continuing to work with Federal Government programs: The Federal Government's new, fast-track program for temporary entry of skilled-workers represents an opportunity for employers to fill skills gaps efficiently. Deliberately encouraging employers to use this program, possibly via awareness campaigns, will help to ensure employers capitalize on this opportunity and get the talent they need.

Cooperating with municipal leaders: New Canadians can be attracted to large population centers based on perceived better economic prospects, and presence of individuals with shared cultural practices. Working with municipal leaders to ensure social and employment related services for new Canadians are able to be translated into multiple languages, or are investing in community based organizations that can make the province more attractive to new immigrants can be a means of attracting talent in the long term.

Examples

The Cities of **New York** and **Chicago** work with their respective state governments to demonstrate the value of an active outreach, including going outreach into immigrant neighborhoods with mobile programs that share vital information and foster inclusion of new immigrants. The Cities have also established offices of Immigrant Affairs charged with collaborating with other cities to improve immigrant outreach services.

Inter-governmental collaboration



Framework Component

Intergovernmental collaboration refers to interactions between government entities across all levels of government (i.e., federal, provincial, and local) for the purpose of advancing common goals. Interactions can be both horizontal (i.e., between provincial government departments) and vertical (i.e., between the provincial government and federal or regional governments) and they can range from informal meetings to regulations that formally mandate intergovernmental agreement (e.g., mandatory consultations as a condition of funding).

Current State

Western Economic Diversification Canada is the primary federal government vehicle for action in Manitoba: Western Economic Diversification Canada is responsible for promoting the "development and diversification of the economy of Western Canada and to advance the interests of the West in national economic policy, program, and project development". The Federal-Provincial Relations branch of the Ministry of Finance is responsible for providing the premier advice regarding federal government initiatives. However, the website for this branch has not been consistently updated and therefore lacks effectiveness when informing the public of federal-provincial relations.²

The federal government has invested in key sectors: In August of 2017, the federal government, through Western Economic Diversification Canada, announced that it will be investing \$10 million in Red River College. The funding will support the college's Centre for Aerospace Technology and Training and the college's Smart Factory being development in 2018 by providing equipment and technology support for aerospace and specialized manufacturing.³ The federal government also committed to investing more than \$1.4 million to expand dairy and scientific research in Manitoba.⁴

Current State continued

GET works with provincial and federal partners through many of its programs: Through Manitoba Trade and Investment, GET works with other provincial actors (Economic Development Winnipeg, Yes! Winnipeg, chambers of commerce) as well as various federal departments. Additionally, GET works with the National Research Council through the Industrial Technology Centre.

The provincial government works directly with municipalities through the Association of Manitoba Municipalities: The association acts as one voice for seven districts: Parkland, Interlake, Midwestern, Central, Western, Eastern, and Northern.⁵

Greater need for collaboration with other governments: Deloitte received feedback from industry stakeholders that there is a need for greater collaboration between the provincial and federal governments to take advantage of federal initiatives.

Best Practices and Policy Considerations

Identifying current state gaps across government: With several federal, provincial and municipal economic development programs currently deployed, the challenge for provincial governments is to identify their optimal role in the economy. This requires a broad view of the inventory of existing programs, their objectives and their sponsors. Consideration should be given to focusing provincial economic development investment in areas where gaps exist that are within provincial policy jurisdiction.

- This approach does not mean that provincial support cannot be layered onto, or support other governments' initiatives. Instead, it requires laser focus on the areas of highest value for provincial dollars to be allocated.
- Our review has initiated this process, by conducting this exercise on a small subset of Manitoba's economic development programs. Broadening this exercise across government is required to fully analyze the current strengths and weaknesses of programming.
- 1. Western Economic Diversification Canada. The department. Retrieved from: https://www.wd-deo.gc.ca/eng/36.asp
- 2. Manitoba Government. Intergovernmental affairs and international relations. Retrieved from: http://www.gov.mb.ca/fpir/fedprov/index.html
- 3. Western Economic Diversification Canada. 2017. News and opinion highlights. Retrieved from: https://www.wd-deo.gc.ca/eng/19437.asp
- 4. Government of Canada. 2017. New investments in research to help Manitoba dairy sector.
- 5. Association of Manitoba Municipalities. 2017. Growth, Enterprise, and Trade position paper.

Inter-governmental collaboration



53

Best Practices and Policy Considerations continued

- Articulating clear visions and objectives to government counterparts: effective engagement with the federal government requires clear and concise communication of Manitoba's vision for the economy, and its priorities. Using this as a baseline, subnational governments can identify specific areas of support required by the federal government.
 - Achieving alignment between provincial and federal governments on the optimal role of inter-governmental collaboration can be codified through establishing working round tables on specific topics, or Memoranda of Understandings.
- Harmonizing data collection and collaborating on outcome measurement
 activities: In shared policy activities, it is possible that parties track different
 metrics/outcomes for the same activity based on different objectives. Ensuring
 that governments collaborate and track metrics together, and share information
 can optimize the strength of partnerships.

Examples

- The **Canadian Federal Framework for Aboriginal Economic Development** exemplifies a formal approach to intergovernmental cooperation. The Framework was launched in 2009 and approaches Aboriginal economic development using a system-wide approach (i.e., including entrepreneurship, human capital, partnership, and policy goals) with provinces.
 - To support human capital development, the Framework focused on supporting demand-driven skills development and fostering partnerships with provincial stakeholders.
 - For example, funds provided to the Neeginan Institute of Applied Technology in Winnipeg helped train workers in welding and connect them with private sector employers who needed workers with these skills. As a result the larger program, over 16,000 clients found jobs in FY2012-13. (Government of Canada, 2014).

Partnerships



Framework Component Definition

Partnerships relevant to economic development can be viewed as instances in which actors from different parts of the economy come together to meet common objectives. Partnerships can include formalized agreements to collaborate together (e.g., a Memorandum of Understanding between a University and firm to undertake joint research) or ongoing mechanisms through which industry interacts with other parts of the economy (e.g., co-operative education systems).

Governments are also key partners to other parts of the economy through funding partnerships, and convening policy forums/roundtables with relevant stakeholders as part of the policy making process.

Current State

Improving partnerships with business and communities is a core goal for **GET:** Improving partnerships is one of two primary goals detailed in the Minister's mandate letter.

Strategic considerations for entering or leaving partnerships not developed: On an individual program basis, GET has provided a rationale for its support to industry organizations. However, the selection of funded agencies does not map to an overarching strategy. GET has started to move in this direction through the Partnership for Economic Growth initiative.

Interactions beyond funding support appear limited: GET has a list of 'established partnerships to meet economic objectives. However, the scope of shared activities appears to be slim, and related only to GET providing funding to third party recipients.

 There is little evidence of the province leading non-funding interactions with industry such as roundtable discussions on challenges and opportunities, conferences, research partnerships or forms of informal interactions that could build rapport between these actors.

Current State continued

However, industry representatives have expressed a desire to have better formalized channels through which to advise on industry needs, and shape policy.

- For example, the Advanced Manufacturing Stakeholder Alliance recommended that a formal framework, including a point-person in government, be established to support collaboration between the sector and government.¹
- Likewise, industry leaders interviewed by Deloitte see a need for deeper partnerships with Government and a coordinated plan to steer these interactions and economic development in general.

Best Practices and Policy Considerations

Developing of acceptance criteria and expected outcomes for partnerships:While governments have a responsibility to remain responsive to requests from

While governments have a responsibility to remain responsive to requests from industry associations, universities, and firms to enter into collaborative partnerships, clear acceptance criteria should be established to guide governments in selecting the highest value forms of partnerships. Considerations could include:

- Is this partnership within a priority sector/segment of the economy, or aligned with the province's over all economic development strategy?
- Would this partnership represent an opportunity for the government to be aware of an unrepresented view?
- Can this partnership help shape policy development by providing data, insights or perspectives?

Creating clear expected outcomes from partnerships: Government partnerships can come in the form of funding, or participation in shared policy discussions/forums. In each case, clear measureable objectives should be identified and agreed upon as a condition for partnership.

 This approach can prevent participation in partnerships for the appearance of collaboration, or participation in several forms of the repeating, overlapping partnerships.

Partnerships continued



Examples

Germany's **Fraunhoffer Society** model exemplifies governments actively prioritizing enabling partnerships between small and medium enterprises and academia. In Germany, the Fraunhoffer Society runs approximately 69 subject specific research institutes which work on contracted research solution building for companies as a temporary partner. Costs for these partnerships are competitive, enabling SMEs to access leading research capabilities. The German government provides baseline funding for the institutes, with the remaining revenue coming from industry research partnerships. This approach enables governments to connect nodes of expertise across the economies, and foster relationships that otherwise may be out of reach.

^{1.} Advanced Manufacturers Stakeholder Alliance. 2016. Advanced manufacturing in Manitoba: Addressing competitive threats – Promoting the brand.

Regulation



Framework Component

Regulations in economic development can have several points of impact, by enforcing an equitable and safe business environment for firms, and also creating or stimulating demand for specific technologies and services or enforce other forms of policy objectives. The extent to which regulations are accessible, and easy to follow for the business community can also be a key determinant of the ease at which firms can do business in one jurisdiction.

Current State

The government has started the process of reducing red-tape: In late 2016, the province struck the Red Tape Reduction Task Force with the goal of reducing the regulatory and administrative burden facing businesses and citizens in Manitoba.¹

• The task force is comprised of industry leaders and members of Manitoba's legislative assembly and it reports to the Minister of Finance. The task force has four industry specific sub-committees focused on: agriculture and food processing, transportation, non-profits, and land development.

The province recently identified and reviewed all regulatory requirements across government and is working to improve efficiency: The government created The Regulatory Accountability Act that requires the government to annually produce the number of regulatory requirements imposed by government. Regulations imposed by government affect businesses, non-profits, municipalities, and private citizens and therefore are an important part of economic development. The province identified more than 900,000 requirements government-wide. Identifying current regulations is the first step in reducing inefficiency and improving transparency.²

Best Practices and Policy Considerations

Developing mechanisms to prevent regulatory overlap and burden: Ongoing mandated reviews of regulations for efficacy and relevance can limit the number of overlapping, redundant regulations.

Developing streamlined enforcement approaches: For businesses, receiving multiple forms of inspections and enforcement checks from multiple arms of the government can be challenging. Consideration should be given to creating a unified information system, and merging inspection structures within a 'single inspectorate' approach.

 This approach can enable agencies to keep subject specific specialized departments, but managed under a single agency/team structure.

Understanding impacts on innovation and technology adoption: The regulatory environment can encourage or discourage research and commercialization efforts, and create barriers to innovation by increasing the uncertainty and costs associated with the development process. Regulations can also distort the choice of technology that is chosen by firms (OECD, 2015). Accordingly, integrating considerations that measure the extent to which new regulations could affect technology adoption should be integrated in the regulatory review process.

• Importantly, regulations can stimulate demand for specific technologies or services (e.g., greening requirements that can incentivize the adoption of smart building technologies).

Identifying opportunities to achieve economic objectives through regulations: Regulatory tools should be reviewed as an option to support broader economic/socioeconomic goals. For example, enhancing the strength of a nation's workforce can be achieved through enforcing regulations that require firms to invest in accessible infrastructure, or to try and support priority populations (e.g., First Nation communities) or identification of priority sectors. Governments can enforce change through well crafted regulations in consultation with industry.

^{1.} News Release - Manitoba. 2016. Co-chairs to lead Red Tape Reduction Task Force.

^{2.} News Release - Manitoba. 2017. Province releases baseline count of regulatory requirements across government.

Regulation continued



57

Examples

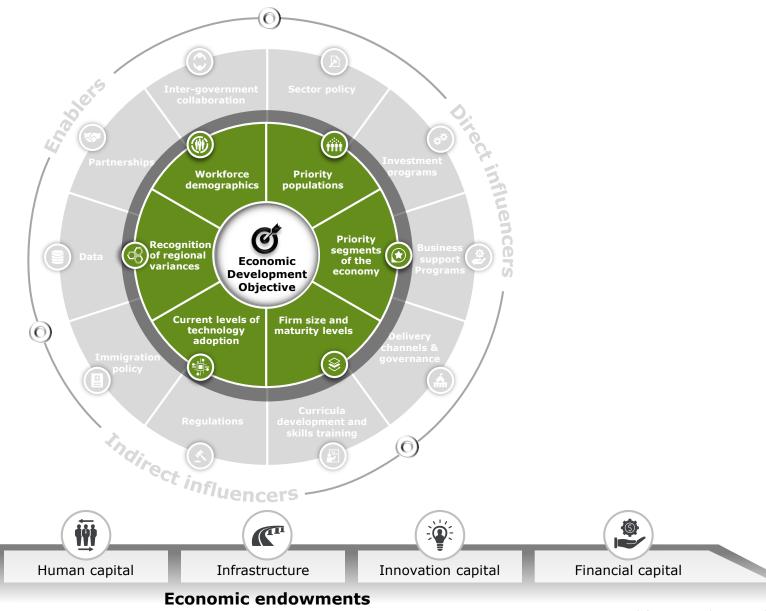
Israel's Clean Air Act is an example of a regulatory framework that has several elements designed to discourage pollution and pollutant emissions in the air. The Law was designed after the Clean Air Act legislated in the U.S.A. Key elements of the legislation work together to create a set of conditions that could grow market demand for clean technologies that can help achieve businesses and individuals achieve regulatory compliance including:

- Setting air quality values (environmental standards);
- · Establishing economic incentives for reducing emissions;
- · Establishing enforcement schemes for emission violators and;
- Requiring plants with a potential for high air pollution to purchase permits.

In a 2015 United Nations Environmental Program review, the *Act* was attributed to improved air quality in Israel in recent years as well as forthcoming amendments and adjustments to the *Act* that have led to strong levels of compliance across the nations. Importantly, the *Act* triggered significant investment in clean technology pubic infrastructure required to enforce compliance. For example, today Israel's air quality is composed of over 100 monitoring stations with capabilities to monitor air particle pollution.

Policy Considerations

Policy considerations



Natural capital

Priority Populations



Framework Component

- Effective economic policy is a mixture of expansive foundational policy platforms that benefits users and non users, and targeted policy efforts to address and support smaller groups in the economy
- Identifying instances in which channeled support or policy focus on a smaller subset of the population could enable the province to achieve economic objectives and address disadvantages and/or resource inequalities throughout the province can ensure policy is reflective of multiple vantage points
- While the benefits of these efforts are concentrated towards a specific group, these efforts can accomplish outcomes such as:
 - Addressing, or correcting historical disadvantages or barriers to economic productivity;
 - Honing in on high-risk/vulnerable populations to ensure they are able to contribute to the economy in their full capacity
 - Enhancing regional economies
 - Channeling resources towards high potential firms/entrepreneurs with an objective to scale areas of strength

Current State

The Manitoba government has not articulated how priority populations will be supported in economic development activities: In the 2017 Speech from the Throne, the Manitoba government committed to supporting specific populations including enhancing early childhood education and supporting Northern Manitobans to "unlock the economic potential [the region] holds" (Manitoba government, 2017). The speech also confirms the governments intention to "identify those primary sectors that have the strongest potential for growth" (Manitoba government, 2017). Currently, GET administers and funds programs that do target specific populations. Examples include:

 Entrepreneurs (e.g. Entrepreneurship Manitoba), startups (e.g. North Forge), bilingual individuals (e.g. Economic Development Council for Bilingual Municipalities), and aboriginals (e.g. Community Economic Development Funds).
 However, the government has not articulated why or how priority populations will be

However, the government has not articulated why or how priority populations will be supported across policy portfolios, or how they relate to broader government priorities. Seen this way, GET's current support for specific populations is similar to its support of sectors – ad-hoc, and uncoordinated.

Current State continued

Immigrants and indigenous populations are expected to drive workforce growth: Working age Manitobans leave the province on net each year, but international immigrants and a younger Indigenous population help combat this loss.

- Net international immigration has been a critical driver of population growth in Manitoba, more so than in Alberta and Saskatchewan.¹ It is projected that international immigrants will account for between 80 and 90% of Winnipeg's population growth to 2040.
- Manitoba is also home to Canada's largest provincial population share of
 Indigenous peoples (outside the territories) and population growth is higher among
 Indigenous peoples than the non-indigenous population.¹ It is estimated that
 Indigenous peoples will represent over 20% of Manitoba's population by 2036. The
 Look North Economic Task Force called for a joint action group with a focus on
 indigenous engagement and partnerships.
- Room for improvement in relationships with existing key employers:
 Consultations, and relations with 'anchor' firms in the province are developing, but could be improved. In selected consultations with industry, leaders indicated interest in developing more formalized channels to affect and shape economic development policy.

Best Practices and Policy Considerations

Scaling areas of strength: Firms within existing industries are important constituents in economic development policy. To support these firms, the government's main role is ensure a supportive set of conditions that can enable companies to retain and grow market positions. This approach is achieved through continued, structured dialogue between the government and leaders to understand unique pressure points.

- Ensuring the quality of the current and future labour force reflects the needs of industry is a key role the government can play in its support for this group in the economy.
- Upskilling and retraining supports for laid off or at risk workers can also broaden the labour force during periods of industry contraction.

Priority Populations



Best Practices and Policy Considerations continued

Integrating support for aboriginal populations as a component of economic development objectives: As first nation communities are projected to be a key component of Manitoba's future workforce, assessing to what extent policy choices can enable or support these communities to meet their potential in the economy, and access opportunity should be integrated formally into the policy making process across portfolios.

 Requirements to consult First Nation communities and/or consider the potential benefits or trade offs associated with Manitoba's public policy choices can enable this approach.

Targeting support towards high value or high potential firms: When designing direct funding programs, including considerations related to a firm's past business performance, or potential growth prospects can be a valuable means at channeling investment towards high value or high potential firms. This approach can have concentrated benefits, but can provide positive return to the economy, as high growth firms can have a disproportionately high economic impact (Nesta, 2012).

Examples

The **United Kingdom's Future Fifty** program is an example of a government initiative that specifically targets high potential companies and helps them grow. Established in 2013, a 17 member independent advisory panel advises the government with a recommendation for the highest growth potential firms with a customized suite of programming and networking opportunities to help them scale. Firms must apply and demonstrate an average annualized growth (revenue or employment) of greater than 20% a year.

^{1.} Conference Board of Canada. 2017. Maximizing Manitoba's Potential.

Firm size and maturity levels



Framework Component

When developing economic development policy, identifying the stage and maturity of companies in the Province, and analyzing of growth rates/barriers can provide important insight into the health of an economy, and its ability to support a hospitable market context for firm expansion and growth.

Current State

Most Manitoba businesses are small, but the province has a somewhat greater share of large businesses than on average in Canada: Roughly 85% of businesses in Manitoba have between one and nineteen employees, which is a smaller share than in Canada (87%). Alternatively, nearly 15% of Manitoba's businesses have greater than twenty employees. This point alone does not provide enough insight into the maturity levels of firms or if there are true problems with scaling up.

Best Practices and Policy Considerations continued

Identifying scale up challenges: In reviews of Canada's economic performance, concern has been raised over the relatively small size of Canadian firms relative to peers such as the US. While some of this could be attributed to a smaller population than peers, the 'scale up challenge' has been attributed to several factors including:

- · Limited success in exporting and accessing international markets; and
- Limited access to managerial and sales talent;

However, conducting research and analysis to hone in the unique Manitoba-specific challenges firms may encounter that limit its growth is a foundational step required to identify the optimal form of government support.

Channeling support towards high potential firms: Within the economy, there are firms that are able to outpace competitors and demonstrate strength (e.g., successful access of large financing rounds, global award winners, etc.). Prioritizing evidence of high growth or high potential as part of eligibility criteria in funding programs can be an effective means for the government to channel support towards firms that could have strong impacts to the economy in the short term.

Leveraging established, larger firms: Larger, 'anchor' firms within Manitoba's economy are important employers (e.g., Boeing, Great-West Life, New Flyer Industries). These firms can be uniquely positioned to stimulate supply chains, and act as catalysts for clusters. Ensuring the expertise and capabilities of large firms are being effectively leveraged in creative partnerships, and policy forums can have positive spin off potential. Examples include:

- Partnerships between anchor firms and universities for common objectives (e.g., smart city building, youth skills development)
- Investment attraction partners (e.g., shared provincial trade delegations)
- Potential partners supporting vulnerable populations as firms shift to prioritize
 measures of corporate social responsibility, large companies can be important
 partners in initiatives designed to target support towards vulnerable, or
 underserved populations (e.g., supporting indigenous employment, encouraging
 women in STEM)

Firm size and maturity levels continued



63

Examples

The Ontario government identified scaling up SMEs as a key challenge in its economy. Traditionally, the government has deployed a suite of programming for small firms, and to support entrepreneurship. Separately, they have dedicated funding for large, 'anchor' employers (e.g., the Jobs and Prosperity Fund).

In 2016, Ontario developed a new approach that leverages the inherent strength of large anchor partners to benefit smaller firms. The **Ontario government partnered with IBM** to leverage the firm's expertise in technology development to launch the IBM Innovation Space, a new startup hub in Toronto to accelerate the growth of small technology companies by helping businesses propel into the global marketplace. This approach reflects how the government can leverage large firms to help smaller companies grow and go up the value chain.

© Deloitte LLP and affiliated entities. Framework for economic alignment and growth.

Technology Adoption



Framework Component

The extent to which an economy's existing sectors readily adopt new productivity enhancing technologies/services can be viewed as a barometer of its ability to adapt to change, and remain competitive in the long term. Successful technology adoption is powered by ability for firms and individuals make to buy/procure new technologies.

Current State

- The Manitoba economy is comprised of several industries undergoing significant technology change: Some of Manitoba's core industries, including agriculture and industrial manufacturing, are undergoing rapid changes both in the processing and production of goods, and in the business models through which customers access goods/and services.
 - Taken together, ensuring Manitoba's economic base is accessing productivity enhancing technologies will be a key determinant of its success in the future.
 - Some industries have identified challenges in in this regard. Aerospace and vehicle equipment sectors have encountered challenges in adopting new technologies. According to information provided by GET, the aerospace, vehicle, and equipment sectors have at times, faced challenges in automating certain processes of their operations as the industry is characterized by highly customized, low-volume orders.¹
- There are programs in place to support technology diffusion are administered across the government: Programs such as Growing Forward 2 (the federal government) and the, Growing Innovation Capacity and Knowledge Department Initiative (Manitoba Agriculture, Food and Rural Development) have prioritized investments that support technology adoption.
 - In addition, several organizations exist to help Manitoba companies with technology adoption. As noted, GET supports several organizations with mandates to support businesses in technology adoption. Key examples include the Industrial Technology Centre, the Composite Innovation Centre, and the Vehicle Technology Centre. GET both administers programs for technology adoption (e.g., the Industrial Technology Centre) and funds third-party organizations that run programs at arms-length from government (e.g. Vehicle Technology Centre).

Current State continued

 Organizations throughout the province support the technological capabilities of Manitoba, independently from GET support: Programs such as the Food Development Centre, which assists companies in developing products and refining processing of new food products, or the Technology Access Centre of Red River College, which provides expertise in technology for aerospace and manufacturing firms, have committed to helping Manitoba companies test new technologies and ideas to improve their businesses.

Best Practices and Policy Considerations

Supporting the diffusion of technology in an economy's sector can ensure industries are able to remain competitive, and potentially prevent downturns. The governments role in this regard is complex, and relates both to ensuring adequate 'supply' of technologies, as well as reducing the barriers to technology adoption at the firm level.. Key examples of roles the government can take include:

- Mitigating short term cost barriers: Funding programs can assist firms in offsetting capital expenditures related to the purchase of new technologies/capital upgrades.
- segments of the economy can benefit from new technologies, legacy industries that were established historically and may not have as defined of a competitive advantage today should be honed in on. This approach can help legacy industries retain employment opportunities, and move up the 'value chain'.
- Providing training, re-training or skills development opportunities for workers at risk of displacement due to a lack of technology training, or providing funding for firms to adopt new technologies.

Technology Adoption



65

Examples

• The United States Manufacturing Extension Partnership brings together the National Institute of Standards and Technology (NIST) and the U.S. Department of Commerce (DoC) to provide skills training supports to manufacturing firms. Included in these services is support for small to medium businesses seeking to achieve sustainability goals including applying new technologies or business processes to mitigate energy costs, or achieve savings though more sustainable means of production. This approach can help to frame the application of clean technologies as a cost saving, or business strategy tactic, encouraging adoption by businesses that may otherwise lack the technical or strategy skills to execute. The Partnership provides practical supports to companies including hands on evaluations and advice on how to implement energy saving products, and connections to a national Green Suppliers Network which can help companies access new products and supply chains.

Recognition of Regional Variance



Framework Component

Assessment of the variation in regional economic performance across a province can identify regional and sectoral strengths and challenges. It can also enable governments to identify new areas of growth that could utilize parts of the provincial work force that may be at risk for lay offs.

Current State

- The province has six economic regions: The six economic regions of Manitoba include: Central, Interlake, Parklands and North, Southeast, Southwest, and Winnipeg. Organizations will sometimes split the Parklands and the North as regions (i.e. the Association of Manitoba Municipalities has representatives from both areas). For economic reporting purposes, the province splits the Central region into North Central and South Central.
 - In information provided by GET, a detailed economic development strategy was only provided for the Northern region (Look North). Through the Regional Economic Analysis Process, the government identified demographic and business facts for all regions in Manitoba, this exercise identified regional strengths, potential competitive advantages and business opportunities. Region profiles are readily available on the government of Manitoba's website, covering sector strengths, demographics, and other economic indicators.
- The capital region has unique economic features: With over 60% of the workforce located in the Winnipeg economic region, the capital region is an important part of Manitoba's economy and is distinctly different from other regions.¹
 - The region is home to over 65% of service jobs in the province, with over 70% of jobs in professional and scientific services, information and culture, and business, building and other support services.
 - The region has a lower proportion of total goods production jobs with only 46% of these jobs being located there. Moreover, Winnipeg has several region-specific economic development actors; such as, the Winnipeg Chamber of Commerce, Economic Development Winnipeg, and the World Trade Centre Winnipeg.

Current State continued

- Northern economic development strategy is under development: Starting in late 2016, a task force for northern economic development was struck and published an action plan in August of 2017. The northern region covers 67% of Manitoba's land, but is home to just over 7% of Manitoba's population (of which nearly 75% identify as Indigenous). The north's strongest business clusters include local health services, mining, and advanced manufacturing (metal processing, and paper mills).
 - Economic development in the north faces several challenges: Several economic features challenge Northern communities including recent mine closures, high unemployment among First Nations, and housing and infrastructure challenges.

Best Practices and Policy Considerations

Identifying and characterizing regional challenges and competitive advantages: Characterizing the differences in the sectoral composition of a province's region can be accomplished relatively easily. For governments, extending analysis to identify nascent or emerging regional advantages, is a foundational step required to identify the optimal approach to serving different regions.

Examples of regional competitive advantages include clusters of highly skilled talent, logistical/locational advantages, and nascent or emerging clusters of technology development. For areas in which there may be foundational challenges (e.g., unemployment) a different set of tools designed to lift individuals/firms up should be considered.

Supporting the stimulation of regional clusters: Governments can deploy targeted resources to help foster the development of new sectors/value chains in the economy based on existing/nascent competitive advantage. This approach can enable the government to combine existing features of the economy towards each other and build clusters that can create positive spin offs across the economy. In the long term, internationally competitive clusters can develop – amplifying an economy's impact.

Recognition of Regional Variance



Best Practices and Policy Considerations continued

Identifying regional pressure points: Reviews of Manitoba's economy can provide descriptions of the key economic differences between urban and rural settings. However, understanding the unique profile of rural businesses, entrepreneurs, or students can require extensive consultation with rural/regional governments, First Nation communities (if applicable), existing rural economic development agencies/program administration teams and employers. Key outcomes of consultations should include:

- Identification of the key differences in risk profile, and requirement for financial capital;
- Sector/region specific logistical, talent or infrastructure challenges that can be honed in on in other policy activities;
- Confirming positive talent, resource and financial linkages between urban and rural settings that can be strengthened or reinforced;
- Specific socioeconomic, climate or industry risks that are nascent and could be disruptive in the short term.

Moving away from a one-size fits all approach to regional policy: Where regional competitive advantages are identified, consideration should be given to developing specific forms of programs an policies that reflect these advantages.

• This approach moves away from a 'one size fits all' approach, in which a uniform set of economic development tools/supports are available for regions irrespective of their unique economic contexts.

Coordinating regional economic development organizations: Regional economic organizations are often funded by distinct donors/funders and have different mandates. However, consideration should be given towards providing funding for shared administrative services (e.g., human resources, data tracking, outcome measurement). This approach can enable regional economic develops to remain standalone agencies, but alleviate potential administrative burden, and provide for more effective information sharing.

Examples

In 2010, **the UK government** introduced the catapult program aimed at creating regional economic clusters around new technologies in the UK. These include, cell therapy, digital technologies and high value manufacturing. Catapults are intended to open access to world class R&D facilities that facilitate the collaboration between universities, local authorities and businesses in key regions of the UK.

There are currently ten catapults in operation with the establishment of each following several key criteria (Hauser, 2014):

- The existence of potential global markets for the innovations.
- Excellence of UK research in the area.
- The capability of UK businesses to exploit the technology.
- Potential to attract activity from global knowledge intensive companies.

^{1.} Statistics Canada. CANSIM Table 282-0124.

^{2.} Look North Economic Task Force. 2017. Northern Manitoba economic development report & action plan.

^{3.} Manitoba Government. 2017. Northern region economic profile at a glance.

Workforce Demographics



Framework Component

When considering economic development policy, assessing the current and projected demographics (e.g., age, location, gender) can be important determinants of the strength or weakness of an economy's labour force. Specifically, identifying the characteristics of the future work force can help the government plan for potential skills gaps, or opportunities for an over supply of talent in the future.

Current State

Manitoba is younger than average: With a median age of 37.5 years, Manitoba has one of the youngest population in Canada and has one of the lowest proportions of seniors (population 65 years an over) to the total provincial population. Almost 25% of the population is aged under 18, while seniors comprise 15.6% of population compared to 17% for the national average.¹

- Indigenous peoples constitute a larger share of Manitoba's population than any
 other province. The fertility rate of the Indigenous population is higher than that of
 the non-indigenous population in Manitoba; as such, Indigenous peoples represent
 an important part of Manitoba's future workforce and will represent over 20% of
 the population by 2036.²
- A young and growing Indigenous population could represent an opportunity for the province as these individuals represent a supply of new workers. However, it is necessary to deliberately address challenges such as higher unemployment and lower reported health among Indigenous peoples before these benefits can be realized.

Low labour force population growth: Manitoba's labour force is generally increasing, albeit marginally, with a growth rate of 0.1% in 2016, lower than the national average of 0.8%. Between 2011 and 2016, Manitoba's labour force grew at about 0.8% while the participation rate remained relatively unchanged.³

Current State continued

Job openings will be greatest in skilled and technical occupations: 62% of projected job openings between 2017 and 2023 are in positions requiring either university education or college and apprenticeship training.⁴

Projected labour market tightness in select occupations: Between 2017 and 2023 the following industries are forecasted to experience the highest levels of labour market tightness (a measure of how difficult it is to find workers): natural resources, agriculture and related production occupations, health occupations, trades, transportation and equipment operators.⁴

Best Practices and Policy Considerations

Aligning skills to the needs of industries during secondary school: Forward looking labour force development policy requires the integration of the ends of industry into curricula starting in school. For further details on recommended best practices in curricula development please see pages 44 and 45.

Bringing workforce projections to life: Identification of projected skills shortages and excesses is a standard task in most national statistical agencies. For economic development policy makers, projections can describe the nature of the existing and future workforce.

- However, where projections indicate potential skills shortages, it is important to understand the socioeconomic, and firm-level root causes of shortages.
- Understanding what barriers individuals may face in attaining particular credentials, or the perceived attractiveness of industries through focus groups, industry-specific policy forums or additional surveys can help the government identify its optimal role moving forward.

Statistics Canada, CANSIM Table 051-0001.

^{2.} Conference Board of Canada. 2017. Maximizing Manitoba's Potential.

^{3.} Conference Board of Canada. Summer 2017. Provincial outlook economic forecast: Manitoba.

^{4.} Growth, Enterprise and Trade. 2017. Manitoba Labour Market Occupational Forecasts 2017-2023.

Workforce Demographics continued



Examples

Queensland, Australia provides a valuable example of governments having thoughtfully integrated workforce demographics into economic development policy planning. The Queensland government identified several projected changes in the specialization and composition of the economy. Where persistent skills gaps were identified (in high and low employment scenarios), individual Skills Formation Strategies were deployed. These Strategies framed shortages as lower order issues after dealing with workforce management and organizational issues. Specifically, if an industry, a region or a community has a serious skills or labour issue, they are given the opportunity to work with government and other stakeholders to undertake indepth analyses of the skills issues and their root causes. The outcomes of these Strategies are used to inform other economic and educational policy.

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Priority segments of the economy



Framework Component

Any economy has several sectors with unique economic contributions and benefits, as well as requirements for government intervention and support. Priority segments of the economy can be viewed as sectors, regions, capabilities or clusters that governments deem of specific importance based on analysis of current and future economic impacts (e.g., employment, contribution to GDP, or alignment with global export demand).

Current State

- Established view of the economy's current state: In information provided by GET, the government has a clear view of the current and historical composition of the Manitoba economy.¹
- **Employment concentrated in four industries:** Almost 50% of Manitoba's total labour force are employed in four industries: healthcare (16%), wholesale and retail trade (14%), manufacturing (10%), and education services (8%).² There is an opportunity for the Province to focus on sectors that drive economic growth through identifying business expansion and other support opportunities.
- **Lack of sector priorities:** However, the government has not conducted a prioritization exercises in which it selects segments or capabilities within the economy of high priority, or focus in the coming years.
- Sector-specific programs are not aligned to common vision: The Government has developed programs eligible for some specific segments of the economy including the Food Development Centre, the Rural Entrepreneur Assistance program, and the Co-operative Loans and Loan Guarantee Board.
 - However, these programs appear to stand alone and do not align with articulated strategic sectors or capabilities the government is seeking to stimulate or support.

Best Practices and Policy Considerations

Identifying high value segments of the economy and targeting policy supports towards them: While the provincial government is responsible for stewardship of the entire economy, faced with limited resources and increased competition for investment, governments should identify and publicly articulate priority segments of the economy. These priority segments should have demonstrable competitive advantages or future value to the economy.

- This is a complex policy activity that requires a unique combination of current state analysis and future oriented planning, to identify what the desired end state of the Manitoba economy could look like, and how its legacy industries are changing.
- This exercise can be viewed as an extended, detailed confirmation of existing competitive advantages, balanced with a future vision of the economy. Please see slide 71 for examples of criteria and considerations that can be included in prioritization exercises.

This approach requires the government to take public stances, and can create stakeholder challenges. Providing a clear, quantifiable justification for the selection of priorities can minimize these impacts.

Honing in on priority sub-sectors: Once confirmed, within priority sectors, a further level of analysis is required to articulate specific value chains, sub-sectors or capabilities of highest relevance to provincial policy. This exercise requires a datacentered approach that analyzes assessment of the differing market, economic and talent characteristics across subsectors.

Examples

The **Australian** government developed the Industry Growth Centre Initiative which can be viewed as an industry-led approach to selecting priority sectors with competitive advantage. The initiative enables the national government to focus collaboration, commercialization, international engagement, skills and regulatory reform to anchor supports towards meeting common objectives. Six priority sectors were elected as priorities. For each, a long term strategy was developed, which described how to "lift the capability of the sector, boost productivity and skills, create jobs, reduce regulation and engage with internationalization opportunities" (Australian government, 2017).

^{1.} GET internal document. 2016. Building on Manitoba's Industrial Strengths.

^{2.} Statistics Canada. CANSIM Table 282-0088.

Priority segments of the economy continued



Below we summarize considerations the Government of Manitoba can include when identifying priority sectors.

Is there evidence of existing signs of a comparative advantage?

Is there an opportunity to work with, or align with the views of industry?

Is there a potential for diffuse gains across the economy?

Does the sector have traction in the long term?

Are there existing federal supports that could be leveraged?

Is the profile of the talent base healthy?

Is the government set up to effectively support this industry?

Example considerations

- Presence/emergence of geographic concentration of small, medium and large firms
- · Presence of high performing, high growth firms
- Positive venture capital trends (if relevant)
- Presence of locational/logistical endowments that can reinforce a competitive advantage
- Endowment of natural resources
- Well established industry communities (e.g., associations, leaders) to liaise with and test policy options with
- Opportunities to partner with, or support industry to unlock potential
- Potential for net new research and development activity
- Potential for increase in local employment and/or retention
- Cross-simulation of other industries (e.g., supply chain impacts)
 - Potential for integration with other government priorities (e.g., skills and employment programs, modernization of legacy industries, or regional development programs)
 - Projected future global and national market demand for technologies and products, specifically from key trade partners
- Applicability and potential diffusion of products and services produced by the sector within key legacy industries
- Diverse client/end users in and around Manitoba
- Alignment or harmony with the sectors/platforms selected as priorities by the federal government in the long term
- Potential eligibility to receive federal funding and/or collaboration support based on federal economic development policy
- Evidence of pipeline of future graduates to potentially supply the industry/sector
- · Potential for creation of long term, value-added jobs
- Opportunity for up-skilling, or re-training of individuals in legacy industries
- Existence of subject matter experts, or existing government skills, knowledge and talent that can effectively support the industry
- Enabling governance structure to support on going tracking, support and engagement with an industry/sector

Insights and Recommendations to GET

Developing recommendations

Looking ahead, the Manitoba government can take steps to achieve economic development success

Manitoba's 2017 Speech from the Throne clearly articulated a desire to achieve economic development success. Our overview of how each of our framework pillars presents itself in Manitoba's economic development context reveals significant areas for improvement. Responding to individual challenges or pressure points on their own would be a time consuming exercise, that would not yield the same strategic benefit as carefully executed, strategic activities in the next year.

In the forthcoming section we present a set of recommendations for the government to consider. These recommendations and purposefully sequenced, and build on each other. This section of the report can be viewed as a playbook for strategic actions the government can undertake to help the government achieve its desire for enhanced economic development capabilities.



73

Key insights

Our review yielded cross-cutting themes that can help orient the economic development strategy requirements of the province

Manitoba's lack of economic development policy can be viewed as a foundational challenge. However, despite a lack of strategy, the government has deployed several forms of economic development policy and programming. Our review of the current state of Manitoba's existing efforts within each pillar of our framework provides us insights into the current context these efforts operate within:

Efforts to enhance economic development outcomes and capabilities underway

- The Manitoba government has articulated a set of commitments designed to enhance its role in supporting the economy. For example, in the 2017 GET Mandate letter, the government committed to initiatives such as:
 - Development of a comprehensive access to capital strategy in consultation with the business community;
 - Increase tourism in the province; and
 - Improvements to the Small Business Venture Capital Tax Credit.
- In addition, the government has initiated efforts to streamline how it delivers economic development activities and identify cost saving opportunities. Key actions in this regard include:
 - The creation of the Premier's Enterprise Team
 - Activities to determine instances of program duplication and overlap. Please see Appendix C for our Program Overlap Analysis.

Current economic development activities not aligned to strategic objectives, leading to a propensity for inefficiency

- As a result of not having an economic development strategy, the government's current suite of programming and support is not synchronized to meet common objectives.
- GET and other ministries currently execute several financial, business and innovation programs. In some cases, programs are delivered directly by GET, while others are administered by third parties. While each program may have a set of desired objectives and a rationale, the government's decisions to deliver/support programs is not grounded by over arching economic objectives.
- Notably, some programs are sectorspecific, and targeted towards segments of the economy. In these cases, support for programs does not align to a vision for individual sectors either.
- This lack of direction is a contributing factor for the high level of overlap, and redundancy uncovered in our review of a selection of economic development programs. Please see Appendix B for our Program Overlap Analysis.

Linkages and engagement with industry is limited, and could be improved

- Research and analysis on the needs of industry, and opportunities in the economy requires skilled engagement with industry. The approach to effective engagement with industry leaders varies depending on the policy question at hand.
- Currently, the depth of interaction with industry is limited to financial contributions towards third parties (e.g., industry associations).
- However, deeper opportunities for engagement with industry are largely missed (e.g., focus groups, formal structured consultations, industry round tables etc.).
- Industry stakeholders have expressed a desire to be further engaged in the policy making process and see a higher degree of transparency related to government funding choices.
- Increasingly, governments are actively engaging with citizens and industry as a key step in the economic development strategy process.

A forward looking vision for the economy has not been articulated

- Some efforts to enhance the application of innovative technologies in legacy industries are underway, (e.g., the Enterprise Machine Intelligence and Learning Initiative).
- However, without clear economic objectives and goals, the government has not articulated a clear outlook for the economy. As a result, industry identified stakeholders perceive a lack of transparency in funding decisions and policy initiatives.
- A lack of forward vision is inconsistent with best practices deployed in other jurisdictions that have long prioritized setting long term policy agendas to guide legacy industries through transition, and 'future proof' their economies.

Key insights from peers

Our review of examples of our framework pillars in action yields insights into the advantages of a systematic approach to economic development

Around the world, governments have successfully integrated pillars of our framework into economic development policy and programming successfully. Reviewing the best practices presented in our study, a set of strategic benefits associated with these pillars emerges, including:

Enhanced ability to report outcomes and interact with the public

- When governments invest in outcome measurement frameworks that enable them to publicly report outcomes quickly, and in interactive formats, they are able to increase the level of transparency associated with investment decisions and public value for money.
- In turn, this can enhance the level of interaction between government, industry and citizenry.

Ability to reach consensus on economic priorities

- Selecting sectors, value chains, and priority populations to be focused on requires a harmonized approach to public policy making.
- When governments agree to take a data-driven approach to selecting priorities, they are better able to balance economic, social and fiscal constraints, whilst eliminating subjective approaches to public policy, or serving perceived special interests.

Coordinated integration of several government portfolios

- When governments are able to clearly understand and project the economic development policy implications of other government portfolios, they are able to deliver services in a more coordinated, sophisticated manner.
- This approach minimizes silos, and can enhance value for money and return on investment, as investments are made with multiple objectives in mind.

75

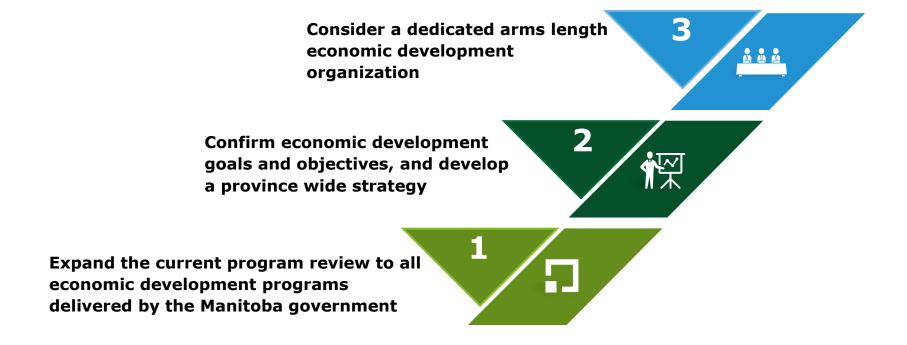
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Recommendations

We recommend three strategic steps to be initiated in the short term

Currently, the province is unable to articulate a forward looking vision for Manitoba's economy. As a result, industry, academia, and peer governments are uncertain about how best to engage with the government of Manitoba, limiting the scope for true collaboration and policy innovation.

Based on the challenges and opportunities uncovered in our review of Manitoba's current economy and economic development policies, and best practices in economic development strategy, we recommend the Manitoba government undertake three foundational activities in the short term:



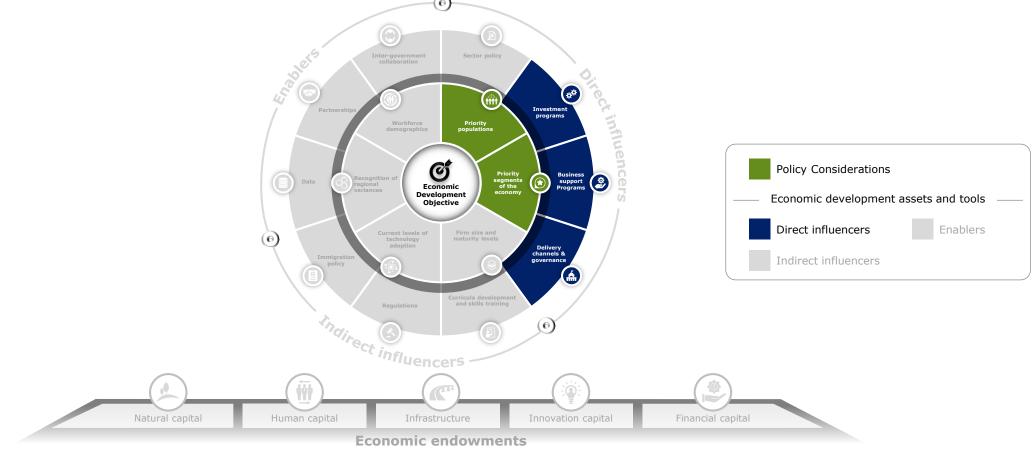
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76

Five pillars of the framework most directly apply to our recommendations

Best practices in a selection of pillars may be most applicable to Manitoba

Our recommendations are purposefully broad, and touch upon many features of public policy. Our view of the recommendations sees them affecting the following pillars of our framework most concretely in the short term:



This does not preclude the relevance of integration of other pillars in forthcoming action by GET. Instead, the highlighted pillars can be viewed as areas in which best practices and considerations articulated in this study are most relevant to the proposed activities we recommend GET consider.

Executing our recommendations

There are key considerations and next steps required for the government to action our recommendations

Our recommendations are a set of three sequenced strategic activities. In the forthcoming slides, we articulate:

The context for our recommendation

A rationale for our recommendation that reflects the analysis and insights on Manitoba we have gained to date An implementation roadmap for each recommendation that includes the key activities the Government should consider, as well as examples of relevant considerations and trade offs that for each step

Given the interdisciplinary nature of economic development, and the internal nature of government approval processes, the activities outlined in each recommendation should be viewed as directional. Government leaders may be aware of additional strategy, risk, or governance considerations that could alter the sequence of activities presented, or introduce new steps within each activity.





Continue and broaden current program review(s) to identify areas of duplication and redundancy

Context

Deloitte reviewed economic development programs funded and/or administered by GET. The review looked at current programs and identified areas of potential overlap in program mandate, industry, region, and clients served. This review identified **several areas of overlap where GET both funds and administers business and investment programs** that address similar issues in economic development. **GET has started to implement changes in its program delivery and monitoring plans**. Our review of GET's economic development capabilities also identified a lack of intra-government collaboration across government portfolios. As our framework shows, a government's economic development policy is a system that can touch many ministries. With limited formal collaboration, it is likely that there are other areas of administrative inefficiency and overlap today. Further investigation into these instances is a key first step in the government's attempt to enhance economic development success.

Rationale

- Lack of collaboration on economic development programming provided by the province and its federal and regional partners. Each level of government has various economic development objectives, but these often do not align. In the absence of collaboration, programming efforts can be duplicated.
- Similar to the provincial level, lack of alignment or consideration of programming by other actors can mean that **government resources are wasted or opportunities for economies of scale are missed**.
- Multiple provincial ministries conduct economic development programming with limited alignment on strategy. While ministries and special agencies work together in certain circumstances, there exists potential duplication in economic development programming delivered (Please see Appendix C for further details) across government. The current review only included direct economic development support and did not consider potential overlap across elements of the wider economic development framework.
- Government **resources** are **wasted** or **inefficiently used** when duplication persists and without alignment across government **strategic goals** are less likely to be achieved.
- There is insufficient tracking of and reporting on program outcomes. Program monitoring is completed on an ad hoc basis, based on a limited set of input or output variables as opposed to outcomes, and not shared publicly. GET has started to address these issues with programs such as PEG, but this exercise has not been completed for the economic development system as a whole.
 - Without adequate and consistent monitoring, GET is unable to determine program effectiveness and efficiency, to compare program performance overtime, and to determine if set objectives are being achieved.

Desired Outcomes

- 1. Develop a complete inventory of economic development programing in Manitoba
- 2. Reduce program duplication and, as a result, potentially reduce spending by government on economic development programing
- 3. Improve coordination between economic development program providers, which could increase program efficiency and effectiveness
- 4. Improve program effectiveness by improving how programs are tracked
- 5. Increase government transparency which could lead to improved feedback from the public
- 6. Have a trackable set of economic development programs that can be adapted to strategic objectives over time

Key Activities



Program review across provincial government ministries

- Using the Deloitte framework as a guide, compile inventory of all provincial economic development programming across government. Factors to consider include:
- Innovation programming;
- Sector policy;
- Investment and business support programs;
- Immigration programming; and/or
- Curricula development and skills training.
- Identification of key contacts/leads for identified programs across government
- Development of briefing materials outlining GET's intention to undertake an overlap assessment exercise across government
- Identify criteria to be analyzed when determining overlap and key factors could include evidence of duplication across:
- Program mandate (e.g., research, trade support, industry development);
- Industry served (e.g., GET overlap with Ministry of Agriculture);
- Region
- Profile of clients (e.g., youth, SMEs, Indigenous peoples);
- Timeline (i.e., do programs sunset and if so, when?); and/or
- Level of funding (i.e., what is the total provincial spend on each component of economic development?).
- Considerations when executing these steps include:
- Is the way programs are used different from how they are designed or described on paper?
- Are the right individuals providing information? (i.e., those who have experience working with the program)

В

Review of overlap with regional and federal partners

- Compile inventory of regional and federal economic development programming in Manitoba using the same criteria as in the provincial program review.
- Review industry and clients served by regional and federal partners to identify programming overlap. The government might consider answering the following:
- What is the level of federal or regional funding dedicated to framework components that are also funded by the province?
- What are the program timelines (e.g., is support temporary?)
- Review levels and methods of collaboration between the provincial government and its federal and regional partners on economic development programming. The review might include determining:
- Who collaborates?
- What does collaboration mean?
 - i.e., are programs designed collaboratively? is funding matched for programs? Does collaboration simply mean meeting and informing?)
- What mechanisms should be put in place to enable collaboration?
- How frequently does collaboration happen?

C

Synthesis of results and decision making

- Summarize findings from inventory including:
- Succinctly identify areas of overlap, organized by framework component
- Determine if gaps in programming exist (i.e., are all components of the economic framework sufficiently addressed?)
- Determine where funding can be reduced, programs combined, or programs terminated.
 Ouestions to consider:
- Are there instances where regional or federal partners sufficiently or more effectively address a particular component of the framework?
- What is the preferred funding amount for each component compared to the current level?
- What tradeoffs are made between specialized programming (i.e., only for advanced manufacturers) and general programming?
- Determine impacts on the government's strategic goals and objectives. Consider how program changes could impact factors including:
- Priority populations;
- Priority segments of the economy; and/or
- Regions
- Communicate results of work with internal and external partners:
- Development of regular, scheduled ongoing minister updates
- Update regional and federal partners on changes to provincial programming



Ongoing monitoring and tracking

- Develop mechanisms to ensure funding provided to new programs does not produce overlap
- Mechanisms to consider include:
- Requirements to consult across government in advance of seeking new funding/ program changes;
- Mandatory sunset clauses to ensure programs are reviewed regularly for their effectiveness, potential overlap, and continued alignment with strategy; and/or
- Clauses to align funding with new initiatives by other partners.
- Develop consistent outcomes that are continuously tracked. Outcomes should be broad (i.e., not just number of jobs created) and have some overlap with outcomes tracked in other programs for comparability. Elements to consider include:
- How should outcome data be collected (e.g., participant surveys, regular reporting etc)
- Who provides and compiles information?
- How frequently are outcomes reported?
- Develop strategy for public reporting on economic development funding. Factors to determine include:
- Database structure and location (i.e., which department will manage the database? How frequently will it be updated? What format will information be provided in?)
- Information provided (e.g., amount of funding, timeline, purpose, recipient, outcomes expected, outcomes achieved)
- Communication of data (e.g., sent directly to relevant stakeholders, public dashboard)

Confirm economic development goals and objectives and develop a province wide strategy

Context

The Manitoba government has several opportunities to support economic development and growth. A standalone ministry charged with economic development is a starting point. However, in order to both i) effectively signal the government's objectives to markets and stakeholders, and ii) to better coordinate economic development programs, the government should articulate definitive economic development objectives and priorities. This approach requires the government to make strategic choices and channel support towards areas of high value opportunity and address foundational challenges.

Rationale

- A lack of stated strategy and objectives can be viewed as a root cause of weaknesses in Manitoba's
 economic development capabilities: Our analysis of the current state of each of each of our framework's
 pillars revealed foundational weaknesses in the Manitoba government's economic development capabilities.
 Cross cutting challenges include instances of program duplication, and redundancy, and limited abilities to
 proactively engage with industry. These weaknesses can be attributed to a lack of stated economic
 development objectives and goals.
 - In the absence of prioritized sectors or desired outcomes, the government's current programming and support for economic development can be viewed as ad hoc, and uncoordinated.
- Stated objectives and goals create important signals to the economy and enhance transparency: When governments make choices on what parts of the economy it will support, it can foster a sense of certainty in the economy. Stated priorities can enable industry, government, and academic stakeholders to identify effective channels to engage with governments. This clarity can also help to provide a context and rationale for government funding decisions, and the selection of government programs deployed across the province.
 - In addition, economic development policy can stimulate new market opportunities for firms with technologies and services that can help governments achieve goals (e.g., greening technologies that can help achieve low carbon targets).

Desired Outcomes

- 1. A set of agreed upon, cross government economic development goals and objectives
- 2. An overarching economic development strategy for the province that articulates factors including:
 - Priority sectors of highest relevance to achieving stated goal(s);
 - Priority populations to receive targeted support and programming; and
 - A timeframe for achieving outcomes.
- 3. A successfully executed strategy development process that actively engages citizens and internal stakeholders.

Key activities (1/2)



Definition of Economic Development Objectives and Outcomes

- Assessment of findings in government-wide program review (results of recommendation 1) and other relevant analysis of the current state of the Manitoba economy
- Synthesis of economic development outcomes achieved to date
- Review of goals/objectives tracking to be achieved from in-flight programs/policies
- Factors to be considered:
- What common goals/metrics are currently being executed upon, and should be retained?
- What goals and objectives have been eliminated and do not reflect the current economic context in Manitoba?
- What outcomes can we expect to achieve in the short term?
- Review of the goals/objectives of federal/regional economic development stakeholders, including the Premiers Enterprise Team
- Where instances of shared goals/objectives with partners exist, consultations should be initiated to confirm the optimal role of the Manitoba government
- Structured workshop(s) with GET, Premier Enterprise Team, Deputy Ministers and other stakeholders to develop a set of realistic economic development goals/objectives
- Confirmation of the metrics of success for objectives
- Confirmation of time horizon to achieve economic development strategy
- Confirmation of spending envelope available for Strategy

В

Review of current state of economic development assets

- Review of current composition of economy and work force (e.g., industry mix, firm size, growth rate, geographical reach)
- Identification of current competitive advantages in Manitoba economy. Factors that could be considered include:
- Evidence of firm clustering, strong location quotient values in occupations;
- Patterns of growth rate(s) in specific sectors/regions; and/or
- Capabilities in technologies/services projected to be in demand in global markets.
- Design of structured interactive consultation(s) with industry across sectors and regions in Manitoba to solicit views on Manitoba's competitive advantages and opportunities.
 Factors to be identified could include:
- Sector specific challenges to company scale up
- Regional challenges/opportunities
- Development of new database(s) that describes and quantifies areas of competitive advantage and challenge (e.g., economic data)
- Mapping of existing in-flight programming and policy supports' ability appropriateness to respond to identified pressure points, and support areas of competitive advantages
- Identification of gaps in public support that exist today

C

Selection of Priorities*

D

Assessment of opportunities for policy alignment across government

- Review of long term federal priority segments of the economy to identify opportunities for alignment
- Development of tailored selection criteria and characteristics of priority sectors*
- Filtration of stakeholder insights collected to date, new database to a long list of potential priority sectors (i.e., key sectors that have been relevant to the government to date)
- Further analysis of specific value chains/capabilities within sectors. Factors to be explored include:
- Manitoba's current and projected labour force capabilities;
- Opportunities for positive economic, socioeconomic spin offs; and/or strong future outlook
- Alignment with other economic priorities (e.g., environmental, regulatory or workforce goals)
- Identification of short list of priority sectors
- Codification of bespoke definitions that clearly articulate the specific value chains and capabilities that Manitoba will prioritize.
 - Identification of relevant NAICs codes (appropriate);
 - Layering of additional definitional elements (e.g., minimum size), to prevent firms from self-identifying as within a priority sector.
- Structured consultation with industry and academic leaders including Premiers Enterprise Team within shortlisted priority sectors to identify optimal role of government in supporting sectors. Options include:
- Providing financial support
- Regulatory changes
- Marketing and business development supports

- Review of inventory of programs from recommendation 1 to identify high value programs currently administered across government portfolios
- Identification of sunsets/ program closures expected that could require new, or amended policies to take their place
- Ranking of existing programs based on ease of amendment (e.g., requirement for Minister approval vs. change in legislation)
- Review of optimal role(s) of government identified in step C of this recommendation to identify 'intersections' between government of Manitoba portfolios.

Key activities (2/2)



Program design



Confirmation of governance and delivery mechanism(s)*

G

Development of outcome measurement framework

H

Execution and Monitoring

- For areas of policy intersection identified in step D of this recommendation, execute structured program design workshops between GET and relevant partner ministries to confirm how programs/policies can be integrated
- Formalization of approach to ensure integration across portfolio portfolios in government in the future. Options to consider developing include:
- Intra ministry working groups with regular meetings and decision making authority
- Formal requirement to ensure consultation with other ministries prior to new program investments
- Execution of internal program design work shops with GET program areas to amend/change existing programs to reflect newly selected priorities. Factors to be considered include:
- Changing eligibility criteria to privilege priority sectors
- Changing the regions of the province programs operate in to hone in on competitive advantages
- Development of net new programming to reflect new priorities. Key activities include:
 - Execution of citizen engagement initiatives to solicit views from industry on optimal types of programs
- Identification of potential piloting opportunities for new types of programs
- Development of a list of new and amended program options that directly align to economic goals and objectives identified in step A of this recommendation
- Execution of required business case, treasury board assessments required to execute new programs

- Review of internal talent capabilities and deliver mechanisms
- Development or amendment of new governance structures (e.g., agencies, panels, ministry functions)
- Development of customer service standards
- Review of current organizational structure(s

- Review of vision for success identified in step A of this recommendation
- Review of efficacy and insightfulness of current outcome measurement approach
- Identification of gaps in information and data in current suite of program metrics
- Identification of metrics tracked by federal and/or relevant regional funders
- Brainstorming and identification of meaningful metrics that can demonstrate success relative to Manitoba's economic objectives
- Development government wide economic development metrics
- Assignment/translation of metrics of specific programs
- Confirmation of outcome capture and analysis approach for each program (e.g., surveyed responses of funded agencies, quarterly formal reporting requirements)
- Socialization and training on agreed upon metrics, and how they should be interpreted
- Confirmation of internal reporting schedule and requirements
- Identification of templates/KPIs to be publicly reported
- Confirmation of schedule and formatting of outcomes (e.g., Minister announcements, annual reports)
- Development of public reporting dashboard(s)

- Development of strategy document articulating goals, objectives, programs and tactics and key outcomes to be tracked
- Development of external communications strategy to industry and the public
- Execution of communication strategy (e.g., advanced communications, development of Strategy branding)
- Public launch event of strategy
- Tracking of outcomes
- Regular internal and public updates

Consider the development of a dedicated arms length economic development body

Context

Currently, economic development programs are delivered through several ministries and by funded agencies. Ownership of policy portfolios is also spread across several Ministries. While GET is charged as the provincial lead in economic development, several other Ministries have responsibility for policy areas relevant to economic development policy (e.g., Manitoba Indigenous and Northern Relations' promotion of the Look North strategy which seeks to increase investment in Northern Manitoba). Taken together, economic development responsibilities are currently delivered through silos, which triggers instances of overlapping program mandates, redundant programming options, and confuses potential customers.

To address these challenges, considering options to develop a dedicated economic development body that can guide businesses to the correct supports, and harmonize the province's interactions with the economy can be an impactful way to enhance the government's ability to deliver economic development objectives, and make it more nimble and responsive to the changing needs of the economy.

Rationale

Developing an arms length agency responsible for economic development would provide singular leadership and oversight on economic development program administration and execution, and create an actor that could lead and orient other economic development stakeholders in a united 'Team Manitoba' approach. The rationale for this proposed action includes:

- **Weak intra-ministry coordination:** Currently, several teams within GET are charged with economic development policy and programming. Our review found several instances of overlap and limited coordination capabilities.
- Lack of coordination between regional, municipal and provincial economic development bodies: Currently, outside of the capital region, Manitoba's economic development ecosystem does not include GET centers, or offices. This limited presence outside of the Region has been attributed to a lack of cross-provincial view in policy making.
- Limited visibility into available government supports and programming: Industry stakeholders identified challenges in identifying relevant government programming. For those that do apply, challenges related to long application turn around times, and limited feedback on the rationale for investment decisions were also identified.
- **Peer governments are taking action:** Around the world, governments have centralized economic development delivery responsibilities in arms length agencies that orient programming and policies and deliver on specific objectives as a meaningful, impactful way to execute economic development strategy.

Desired Outcomes

- Refocus the role of government to policy strategy and design
- Definitive accountability and reduction of duplication efforts
- Clear point of contact and leadership for existing economic development stakeholders
- Improved client service and data collection efforts

Consider the development of a dedicated arms length economic development body

Considerations

Manitoba needs to establish **a dedicated delivery body** for its economic development ecosystem. This body would carry out the new programming, support priority sectors of the economy. A focused strategy requires a focused delivery body. Currently, the government of Manitoba does not have an existing economic development body outside of GET. Planning for a new agency would be a complex foundational task. To guide GET's thinking in this regard, below we summarize key considerations.

1. Mandate

A provincial economic development agency can take many forms, and could be tasked with a specific mandate. Options relevant to Manitoba include:

- Convener of federal, provincial, regional and municipal economic development efforts A central organization could act as a hub for other economic development stakeholders. The hub could hold organizations accountable for strategy execution and actively provide support.
- Exclusive program delivery agent Currently, the government's administration of programming in different ministries, and through different third party agents has led to duplicative services and administrative inefficiencies.
 - Tasking an organization to execute all programs would centralize due diligence, client service, monitoring and reporting into one group, shutting down established silos.
 - This approach would enable the government (GET) to focus on policy and strategy design activities and harmonize the client experience and level of service of economic development programming.

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85

Consider the development of a dedicated arms length economic development body

2. Structure

As a singular entity, this dedicated body could accomplish many objectives that are currently not achievable based on the existing structure in place today. In addition, tan organization could also amplify the activities and outcomes that other economic development agencies (e.g., municipal organizations) are tasked with. Below we present five focal points this new body could address:



Administrative

Efficiencies

necessary corporate services to

support economic development

This unified body would also

centralize and administer

Intergovernmental coordination

Duplication of efforts can occur when This body, being closer to the several governments are deploying activities in the same jurisdiction. For with the market than federal, regional and municipal bodies, government, could be a a lack of direction from provincial authorities on key priorities can limit government is made aware of the effectiveness of their programs. A the pulse of industry, efficacy dedicated body could facilitate collaboration of support for the following:

- Setting direction on priority sectors or populations;
- Delivery of programming for clients;
- Developing harmonized outcome measurement approaches;
- Developing a 'team Manitoba' approach to investment attraction; and/or
- Leading a harmonized approach to supporting Northern Manitoba.

Programming Efficiencies

customer and more in-tune mechanism through which the of existing programs, and need for additional programming.

A central 'back office': centralized administrative,

for the province including:

financial management and human resource capabilities.

Data collection/survey execution: Collecting programming data, outcomes and/or delivering surveys centrally could reduce the resources required to execute these tasks.

Ongoing research: Over time, the organization's data, and insights could build into a key information/research source for the government.

Data Collection and Analysis

Once the government identifies the relevant strategy success metrics, the dedicated body could be tasked with streamlined dissemination and collection of the metrics pertinent to each economic development organization.

The dedicated body could also analyze these metrics to ensure that each organization is driving the intended strategic outcomes. This "live" reporting would allow the agency to actively managing its' ongoing programs, whilst also being agile enough to meet the emerging needs of the marketplace.

Communication and Marketing

A unified body could concentrate on communication and marketing for the province. Examples include:

Internally: There would be one point of contact with the government for all clients and programs, and one entity doing progress reports across the government.

Externally: There would be one body managing the web presence and brand for Manitoba. This could entail coordinating global investment attraction initiatives, showcasing the brand to other governments, investors, and global jurisdictions. For example, by facilitating 'roadshows' for clients.

Key activities

GET Activities Establishment of working group to explore economic

development governance

body

- GET to prepare business case for establishment of working group to explore development of economic development body.
- Identification of internal government subject matter experts required to investigate governance body options. Examples include:
- Legal/legislative experts;

- Development of a working group charter that includes a mandate to on a potential re-design of economic development governance structures
- Communication to relevant internal government stakeholders of mandate and scope of working group
- provide recommendations to aovernment



Review and mapping of GET

Key factors include:

structures:

current structure(s)

Convene structured

improved

Current state review of existing governance structure(s)

organizational structure and economic

development full time employees:

Identification of relevant centralized

marketing, legal services) relevant

to economic development; and/or

identify strengths and weaknesses of

consultations/interviews with economic

development stakeholders in Manitoba

Commerce etc.) to seek views of how

Identify effective governance/reporting

services (e.g., communications;

Convene internal focus groups to

(e.g., Economic Development

Winnipeg, Winnipeg Chamber of

governance structures could be

elements or structures within the

Manitoba government to be retained

a new body would have to focus on

Identification of key weaknesses gaps/

Identification of existing reporting

development program/policy delivery

groups across Manitoba government

Confirmation of total economic

- governments
- for further examination

D

Selection of optimal model

Review of working committee report

Е

Government of Manitoba

Activities

Conduct jurisdictional scan of governance models for economic development agencies by comparable subnational governments in peer

Working Group Activities

C

Review of governance

model options

- Identify shortlist of governance models
- Review of governance strength and weakness challenges identified in step
- Review of the extent to which identified examples in step C address identified challenges and would suit Manitoha
- Assessment of optimal delivery vehicle from shortlisted option (e.g., 1 centralized arms length agency, network of regional/sector focused bodies etc.)
- Consultation with Treasury Board, Ministry of Finance and/or other relevant legislative/ policy experts in the Government to confirm required legal steps to develop new body
- Submission of report to government decision makers outlining:
- Review of key findings related to the strength and weaknesses of existing governance structure;
- Options for potential governance models to be studied in detail:
- Key strengths and weaknesses of proposed options; and/or
- High level risk assessment of potential options and relevant budgetary impacts.

- Synthesis of report and selection of proposed governance structure to be pursued
- Impact analysis of human capital and financial impacts associated with proposed new model. Factors to be considered include:
- Changes to FTE(s)
- Budget required to execute
- Assessment of fiscal impacts
- Formal business case process (i.e., to articulate proposed benefits in

- Intra-government talent experts;
- Senior central agency leaders (e.g., Treasury Board, Premiere's Office):
- GET subject matter experts;
- Premieres Enterprise Team;
- Deputy Ministers Economic Development Committee; and/or
- Relevant third party consultants.
- provide government recommendations
- Confirmation of time horizon to

- proposed model
- initiation of treasury board requests) accountability, transparency, program delivery, client service, and strategy.

Conclusion

Looking forward

Targeted activities can significantly enhance outcomes

Our recommendations reflect activities that we believe can significantly uplift the government's economic development capabilities. Each of these activities is complex, and will draw upon expertise from across the government, and industry. These recommendations will also help the government achieve public commitments to enhancing economic development outcomes across the province by orienting efforts towards a set of common goals. The Government is positioned for success with continued and dedicated strategic focus.

We have not put forward potential timelines associated with each recommendation, or the individual activities within them. Instead, we have provided a 'roadmap' of sequenced activities for Government to follow in the months ahead. Embarking on these recommendations will involve new forms of analysis and teamwork, and will also provide important professional development opportunities for Government staff. Viewed this way, these activities are long term investments that will serve to better the economic and social outcomes for all Manitobans.



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Appendices

Appendix A: Sensing Capabilities

The role of transformative technologies in economic development

The role of technology as an enabler and driver of economic development is becoming an increasingly important consideration for governments. Accordingly, it is important for governments to build internal 'sensing capabilities' to identify how these enabling technologies could be deployed within their economic environment and to understand the full scope of their potential impacts.

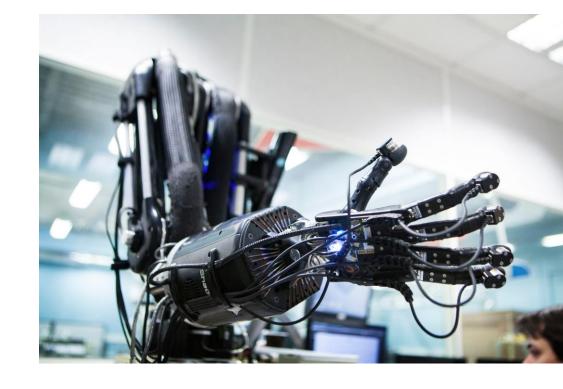
'Sensing capabilities' are particularly relevant to the Manitoba government, as several of its sectors are undergoing significant technological change in order enhance productivity and move up the value chain to more technology intensive activities, in a competitive, global market.

What are transformative technologies?

Transformative technologies can be viewed as a groups of technologies that have the capability to fundamentally change how we work, live, consume and produce. These technologies can combine together and create a set of unique economic and social impacts.

Looking ahead, the ability to analyze and understand the impact of various transformative technologies on the Manitoba economy will be a critical success factor in the province's ability to identify priority sectors of the economy and to support the development of nascent and emerging clusters.

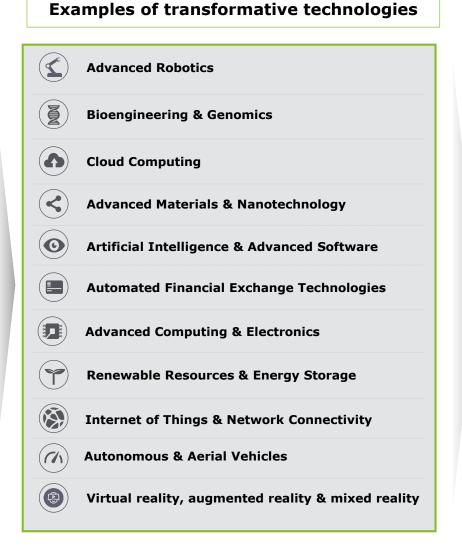
In the following slides we will present a high level analysis on how these transformative technologies impact the economy and the economic development policy process. We then spotlight the Manitoba economy through a case study of potential types of impacts transformative technologies could have on a key sector in the province - the agricultural industry.



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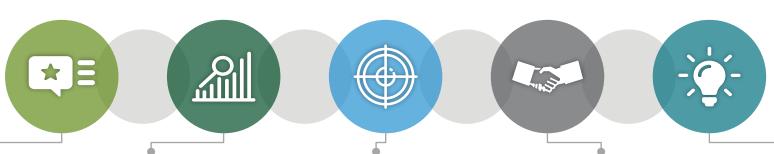
Examples of emerging industries that can emerge as a result of transformative technologies

Traditional Industries Manufacturing and Construction Health Care and Social Assistance Public Sector Transportation and Utilities Finance, Insurance and Real Estate Wholesale & Retail Trade and Commercial services **Energy Agriculture Information and Culture**





Examples of the impact of transformative technologies on the economy



ategories of impact

Increased demand for new skill sets

- As demand for new technologies increases, there will be a premium for talent that is able to interact with and apply technology and data analytics across sectors
- Upskilling support may be required in order for individuals to remain current

Productivity Increases

- New technologies can enhance individual productivity and reduce time spent on laborintensive functions
- Automating labor-intensive tasks can enable firms to realize gains in unit productivity measures and reduce costly errors/ inefficiencies

New business models and solutions

- Software enabled capabilities can create new pathways between service providers and clients, and can result in new entrepreneurship opportunities and sub industries
- Classical definitions of sectors or segments of the economy may no longer be applicable, as these emerging business models may transcend multiple industries
- Policy capabilities will need to be able to respond to newly formed industries and create a hospitable environment for new business models
- Investment in new data collection and analysis tools may be required to actively track economic performance

Enhanced importance research and development capabilities

 Research and development partnerships can create new innovations to be leveraged and applied by existing firms

Cluster development

- The site selection criteria of technology firms varies from those in traditional industries
- Technology firms may place a higher premium on locating close to specialized talent, changing investment attraction tactics for governments
- In the long term, technology clusters can develop across cities, which can shift the drivers of economic impact/investment activity to localized, often urban centers
- Clusters can require specialized forms of economic development support/incentives to ensure companies scale
- New approaches to urban planning may be required to better support industry clusters

The successful retention of STEM workers may be a critical component to an economy's ability to attract technology intensive firms

- Government support for workers at risk of lay off or underemployment may require collaboration with industry
- Firm level productivity gains can contribute to positive GDP impacts
- Designing programs that help firms access/adopt technologies can play a critical role in unlocking these opportunities

 Governments may need to consider R&D matching programs on technological developments that have the opportunity to impact multiple sectors

Example policy implications

Examples of the impact of transformative technologies on the economic development policy process



ney categories of impact

Enhanced data and analytics capabilities

- New forms of data collection (e.g., biometric tracking of program participants) can help the government deeply understand usage patterns for public programming, or investments
- Software platforms can capture new data points that can be tracked in real time, enabling the government to have a more sound fact base to make decisions from and identify economic growth

Example policy implications

 Data analytics skill sets and qualifications may be in demand for governments in the future

 Data driven, evidence based methodologies will guide policy decision making for governments

New approaches to development and management of regulations

 New data analysis and collection capabilities can enable governments to make real-time use of compliance information to significantly streamline and enhance the government's oversight of rules and regulations

- Enhanced regulatory compliance monitoring capabilities can decrease administrative burden
- 'Red Tape Reduction' initiatives may be more accessible and less resource intensive initiatives to deliver for governments

New modes of engagement with citizens

- New technologies and products are enabling citizens and government to connect like never before
- Social media platforms for example, can solicit instant feedback on programming and policies enabling 'live' stakeholder consultations
- Funding recipients, or other stakeholders are able to amplify and share collaborations with government, spreading awareness of government programs and initiatives
- Social media can give governments increased ability to identify stakeholders relevant to economic development and get the pulse of industry/citizenry in real

Potential cost savings and reinvestment opportunities

- New technologies can enable governments to develop new solutions for longstanding economic and social problems (e.g., enhancing education outcomes while limiting government spending)
- For example, online interactive teaching modules could help develop personalized learning experiences that could reduce overhead spending
- These cross-government savings can be reinvested into economic development activities and programming, and social initiatives
- Reinvestment opportunities from savings across government can be reinvested into economic development activities previously out of scope/budget . This also includes a reallocation of resources into social initiatives.

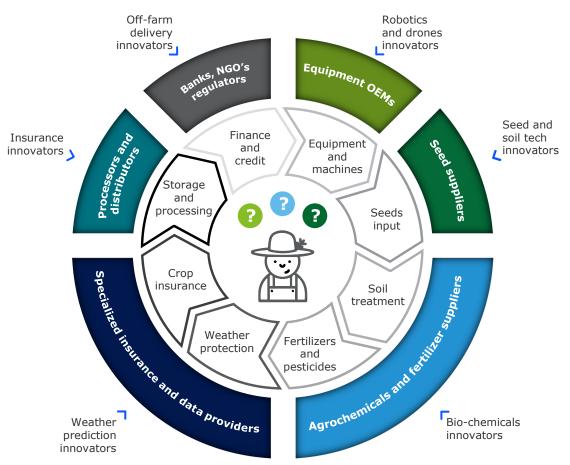
Enhanced safety and security

- New technologies can predict, or signal pending accidents of mechanical failures in industrial settings
- This can help create safer environments for workers across industries, and can derisk activities in industries such as agriculture, in which several sequential activities/steps are required to flow smoothly to successfully produce goods/services
- Reduction of safety risks for workers can help to retain workers, save resources and enhance productivity by preventing accidents, outages and failures
- Individual worker productivity can also be increased, given the ability to better predict outcomes

Case study – Examples of the impact of transformative technologies on the agricultural industry

The Current State of Manitoba Agriculture

- Agriculture has long been a significant sector in Manitoba and its importance was recently reaffirmed in the Premier's Throne Speech where it was highlighted that the federal and provincial governments have made a commitment to invest \$176 million over the next five years to strengthen agriculture and agri-food in the province.
 - Agriculture contributed to roughly 3% of Manitoba's GDP in 2016 and food manufacturing accounted for an additional 2% of GDP. One in eleven jobs depend on the direct and indirect spin-offs from agriculture.¹
 - Manitoba's largest agriculture industries (by farm receipts) include canola, wheat, and hogs.² These
 products accounted for over 60% of the value of Manitoba's agriculture exports in 2016.³
 - Meat product manufacturing (54%), fruit and vegetable manufacturing (18%), and grain and oilseed milling (14%) account for the largest share of Manitoba's food manufacturing GDP.⁴
 - Manitoba's agriculture sector is forecasted to expand at an annual rate of about 2.2% annually through 2021 as domestic and global demand increase.
 - Important linkages to other industries: Agriculture's importance is exacerbated when you consider its
 direct and indirect impacts on other sectors in the economy. These sectors include food manufacturing,
 transportation and warehousing, retail and wholesale trade, and finance and insurance.
- The **sector is showing signs of decline, as seen in decreases in employment.** However, the area of farms, herd sizes and gross farm receipts have all been growing.² These trends may reflect wider market changes in agriculture including:
 - Farms are becoming larger, more complex and capital intensive: In order to stay competitive, many operations are beginning to adopt new technologies to enhance yield, storage capabilities and distribution to market. As a result, the level of capital investment required to remain competitive has increased. Transformative technologies can impact all aspects of the production process (see right diagram).
 - New technology solutions are enabling farmers to track farm yields, energy usage, staffing and security remotely.
- These technologies are also impacting industries higher up the value chain in areas such as food processing, machine manufacturing, and research and development (e.g., biotechnology).
 - For example, agriculture or food processing machine manufacturers can use technologies such as the digital twin (digital image of a physical object) to minimize losses from maintenance and repair by detecting issues sooner.
- Manitoba's agriculture sector has already started to invest in many of these technologies: Bell MTS has partnered with the University of Manitoba to research agricultural applications of the internet of things for uses such as soil analysis and processing and storage monitoring. EMILI is a consortium of interested stakeholders working on artificial intelligence and machine learning applications in agriculture.



 Government of Manitoba. Agriculture and food processing. Retrieved from: http://www.gov.mb.ca/trade/globaltrade/agrifood/industry/index.html
 Manitoba Agriculture. 2017. Agriculture profile, 2016 census.
 Manitoba Agriculture. 2017. The Manitoba top exports.

4. Statistics Canada. CANSIM Table 379-0030.

Case study – Examples of new capabilities in agriculture driven by transformative technologies

Below is a selection of examples of transformative technologies that are already being used to change the traditional agriculture industry and solve various problems that the industry can face.



Less water, more potato

PepsiCo has reduced water input used in their potato crop by 26% over the last ten years.

They have done this using several approaches, including:

- locating sources of waste water for re-use in irrigation;
- monitoring their system for leaks; and,
- monitoring soil moisture and linking this to weather forecasts to set more efficient irrigation levels.

Transformative technologies could help farmers reduce their environmental footprint.



Increasing oyster yields

Oyster farmers in Tasmania have partnered with technology firm The Yield to install sensors and monitors in their farms that monitor water contaminant levels.

The technologies allow real-time data to be displayed on a clear user interface so that farmers can take proactive steps to decontaminate the water and reduce oyster loss.

Sensing, predictive, and intelligent technologies allow continuous, web-based access to data for better decision making.

Managing crop contaminants can increase yields and maximize the use of farm resources, such as scarce land.



A new lettuce

Fujitsu, Microsoft and other firms teamed up to grow lettuces with 80% less potassium. Too much potassium is unhealthy for people with kidney disease, which is a problem that 10% of the population of Japan.

In order to mass produce this type of lettuce, the companies used **sensors, analytics and data visualization** technologies to control the growing conditions of the lettuce.

Bioengineering technologies can help improve the nutritional value of foods and solve global food crises.



Finishing the deal

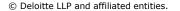
Full Profile is an Australian company working to improve the efficiency of transactions along the agriculture supply chain.

They use **blockchain technology** to improve the grain industry by solving two key issues:

- Matching title transfer of the grain asset to payment; and,
- Supply chain provenance and traceability.

Blockchain technologies could help farmers solve supply chain inefficiencies and risks.





Case study – Examples of potential challenges and benefits of transformative technologies

Below is a selection of potential benefits and challenges for governments and industry stakeholders to consider when moving from traditional agriculture production to agreeh.



Potential Benefits

Potential for increased efficiency across the entire value chain

As previously mentioned, transformative technologies can impact all aspects of the agricultural
value chain: bioengineering technologies can be used to create healthier crops, monitoring
technologies can be used to improve storage and transportation to reduce losses, and advanced
robotics can help improve food processing productivity. Ultimately, transformative technologies
can be used to integrate systems across the entire value chain to allow better information sharing
from "farm to fork".

Benefits for the environment

Transformative technologies can help reduce reliance on chemicals, decrease waste and spoilage, and better match supply for demand. For example, Agriculture and Agri-Food Canada (AAFC) is working on a precision feeding system that could customize feed for hogs and ultimately reduce the levels of nitrogen, phosphorus, and other pollutants from manure by more than 40%.¹ It may take time for these technologies to be adopted on a larger scale as the investment associated with replacing old systems could be large. However, some technologies are already being used, such as advanced materials that reduce the environmental footprint of food packaging.

Enhanced ability to track food quality and distribution

 For food producers, quality assurance capabilities are of utmost importance. New technologies (e.g., Internet of Things sensors) that can help companies track the temperature, quality and quantity of food or ingredients through all stages of the production cycle can reduce the risk of spoilage and waste, thus minimizing key reputational and health safety risks. In turn, this can help companies identify new distribution routes or market opportunities by equipping producers with live data on how far food can travel without spoilage.

Development of a market for new technologies

• Given the prevalence of new technologies, the agricultural sector is now a key potential buyer market for technology developers. Over time, technology firms that see defined business opportunities in the sector could select to cluster around agricultural centers. This can lead to new economic development opportunities for economies and could create new jobs and/or help attract new businesses. There have already been some cases of this occurring; for example, Trimble Navigation, a geographical-information firm, has moved into smart-farming and bought the Canadian agriculture consultancy, Agri-Trend, to help the firm understand the agriculture industry.²



Potential Challenges

Employment impacts

• Agriculture accounts for roughly one in every eleven jobs in Manitoba (directly and indirectly) and the use of transformative technologies has the potential to reduce the need for traditional laborers in agriculture. While it is likely to create the need for jobs in other areas (e.g., computer science), there could be disruptions in many areas of the current industry. For example, instead of needing cheap labour that traditionally fueled the industry, food processors and manufacturers could need individuals with the skills to interact with robotic technology. This trend highlights the importance of retraining programs as well as the need for curricula and training programs to be aligned with current and future needs of industry.

Requirement for highly specialized, niche technologies

The subsectors of agriculture, food manufacturing and related industries face unique challenges that could require highly specialized technological solutions. For example, manufacturers and processors often require specialized technologies to meet customer needs and distribution patterns. Technology firms may be designing technologies to serve a general purpose, or for other industries altogether, and may be unable to address the unique needs of any given operation. This could result in a mismatch of capabilities, or failed investments in new technologies. As a result, parts of the sector may require highly specified, sector-specific technologies to be deployed by niche firms that are able to tailor solutions for their needs. For example, Canadian meat processors have had more difficulty adopting standard manufacturing and automation and robotics technologies due to the harsh environment (e.g., low temperatures, daily wash-down of equipment) and the high food and safety standards of the sector compared to other food processing sectors.³

Connectivity and security challenges

With technologies being developed across the value chain, from fields to data centers to users
and back, reliable connectivity between these various technologies will be crucial for the system
to function properly. Loss of connectivity in one area could create problems across the whole
system. For example, disruptions in food tracking distribution technologies could prevent the
ongoing monitoring of food quality, and lead to health and safety compromises. These types of
incidents can increase the risk for 'domino' like impacts that can affect multiple stakeholders.

^{1.} Agriculture and Agri-Food Canada. 2017. Feeding pigs for a cleaner environment.

^{2.} The Economist. 2016. Technology quarterly: The future of agriculture.

[.] Global Consulting Firm, 2014. Technology readiness assessment of automation and robotics in the food and beverage processing sector in Canada.

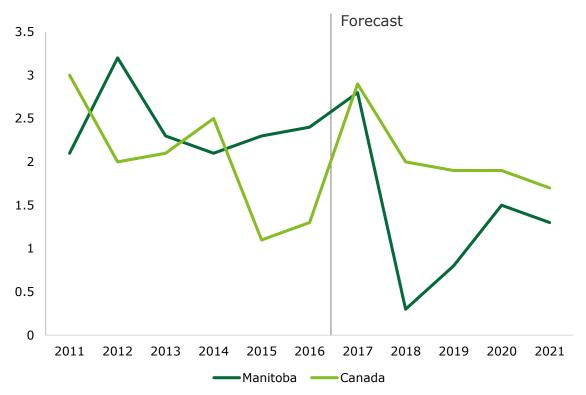
Appendix B: Manitoba Economic Outlook Overview

Manitoba Real GDP Growth Rate (1/2)

Overall trends suggest that Manitoba's economic growth has been outperforming the national average, however the real GDP growth rate is expected to slow down to 0.3% in 2018, partly owing to the decline in the performance of the key economic sectors including mining, construction and related support industries, and agriculture

- Manitoba is the fifth largest economy among Canadian provinces, contributing roughly 3% to the Canada's real GDP annually.
- Construction activities driving growth: Manitoba's real GDP grew 2.4% in 2016, and is expected to grow by 2.8% in 2017, primarily driven by increased investments in residential and non-residential building construction, and in industries supporting the construction activities including wholesale and retail trade, and transportation and warehousing.¹
- Manitoba's 5-year growth out performed the Canadian average: Since 2011, Manitoba's economy has grown at an average annual rate of 2.4%, outperforming the Canadian average annual growth rate of 2.0% during the same period.¹
- Expected decline in average growth rate: However, the growth rate is expected to decline below the national average, slowing down to an annual average rate of 1.0% from 2018 to 2021, primarily attributed to the following factors:
 - The mining sector is expected to continue to slow down following the drop in oil prices and decline in mining activities as key mines are approaching the end of their mine life;
 - The investments in construction related projects by Manitoba Hydro (i.e. Bipole III transmission line, Keeyask power project) and in residential housing are expected to ease in the next year, impacting the industries that support the construction sector; and
 - Agricultural growth is expected to remain relatively flat through 2017 partly owing to pressure on livestock prices, however it is expected to regain some strength in 2018 with a projected growth of 2.2% annually through 2021.





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^{1.} Statistics Canada. CANSIM Table 379-0030.

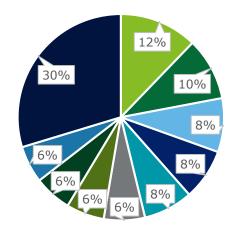
^{2.} Unless stated otherwise, all data is sourced from the Conference Board of Canada.

Manitoba Real GDP Growth Rate (2/2)

While Manitoba's relatively diverse economy makes it challenging to identify competitive sectors for growth, historical trends indicate significant variations in sectoral level growth rates and regional industry clusters, which present opportunity to identify competitive industries for growth.

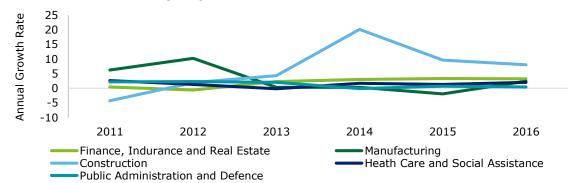
- The projected slow down in Manitoba's GDP over the next five years presents the Province with an opportunity to boost growth in key sectors of the economy.
- Manitoba's economy is diversified: Manitoba has a relatively diverse economy
 making it challenging to identify key competitive advantage industries to focus
 the development efforts.
- Nevertheless, historical growth trends indicate that five sectors comprise about half of Manitoba's GDP with the leading industry, real estate, accounting for 12% of the Province's GDP (upper chart), suggesting existence of moderate dominance of some industries to allow for assessment competitiveness:¹
- Since 2011, Manitoba's construction sector has been strong, growing at a
 compounded average rate of 6% thanks to major projects such as the
 development of the Keeyask power project and the Bipole III transformation line
 as well as strong residential investment.
 - However, the Keeyask project will wind down in 2018 and construction growth is expected to slow as a result.
- Mine closures are a problem for the North: The northern Manitoba economy is predominantly dependent on mining and manufacturing industries, however, growth in these industries has been declining with the mining sector expected to take a big hit due to mine closures.²
 - This variation in regional economic performance provides an opportunity for the Province to assess its regional sectoral strengths and to identify new areas of growth to utilize the existing trained workforce.

Manitoba's Real GDP by Industry, 2016



- Real estate & leasing (12%)
- Manufacturing (10%)
- Construction (8%)
- Health care & social assitance (8%)
- Public administration (8%)
- Transportation & warehousing (6%)
- Finance & insurance (6%)
- Retail trade (6%)
- Wholesale trade (6%)
- Other (30%)

Annual GDP Growth by Key Industries 2011-2016



Statistics Canada. CANSIM Table 379-0030.

^{2.} Government of Manitoba. Northern Region Economic Profile at a glance. 2017. Retrieved from: https://www.gov.mb.ca/jec/rned/

^{3.} Unless stated otherwise, all data is sourced from the Conference Board of Canada.

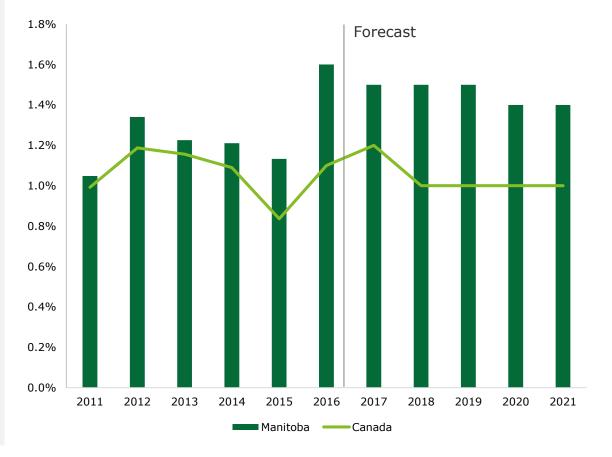
[©] Deloitte LLP and affiliated entities.

Population and Labour Force (1/3)

Manitoba has one of the youngest populations in Canada with high birth rates and international immigration contributing to the growing labour force

- Steady population growth during the last five years to continue: Manitoba's population is growing steadily, posting a growth rate of 1.6 % in 2016, higher than the national average of 1.1%.
 - Between 2011 and 2016 Manitoba's population grew at an average annual rate of 1.3% compared to 1.1% for the national average.
 - Manitoba is expected to continue to sustain a steady annual population growth of about 1.5% over the next 5 years (2017-2021) primarily driven by high international immigration into the province.
- Manitoba is younger than average: With a median age of 37.5 years,
 Manitoba has one of the youngest populations in Canada as well as has one of the
 lowest proportions of seniors (population 65 years an over) to the total provincial
 population:¹
 - Almost 25% of the population is under 18 years of age, while seniors comprise
 15.6% of the population compared to 17% for the national average.
- Low labour force population growth: Manitoba's labour force is generally increasing, albeit marginally, with a growth rate of 0.1% in 2016, lower than the national average of 0.8%.
 - Between 2011 and 2016, Manitoba's labour force grew at about 0.8% while the participation rate remained relatively unchanged.
 - Manitoba's year-over-year employment has been increasing modestly, registering an annual growth rate of 0.8% between 2011 and 2016, however 2016 saw a decline in employment growth (-0.5%), compared to the national growth rate at 0.7%.
 - Since 2011, Manitoba's unemployment rate has been relatively unchanged at about 5.4% however, in 2016 the unemployment rate increased to 6.1%, nevertheless lower than the national average of 7%.

Population Growth Rate, Manitoba and Canada, 2011-2021



^{1.} Statistics Canada, CANSIM Table 051-0001.

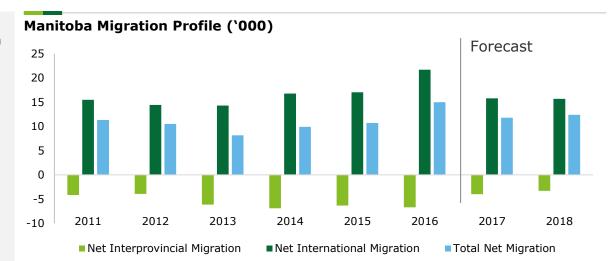
^{2.} Unless stated otherwise, all data is sourced from the Conference Board of Canada, Provincial Economic Outlook, 2017.

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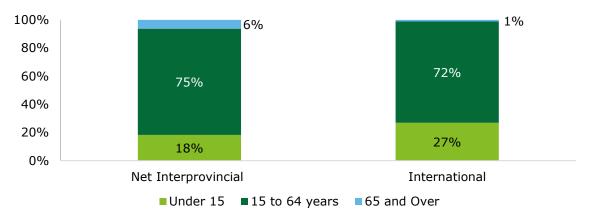
Population and Labour Force (2/3)

Manitoba's negative interprovincial immigration of working age group coupled with low unemployment rate present the Province with a challenge to grow the labour force and retain skilled labour

- International immigration supports population growth while Manitobans leaving the province detract from it: Manitoba's labour force growth is driven by an increasing birth rate and international immigration, however the net loss from interprovincial immigration accounts for about 20% of the decline in population growth in the province, indicating that a significant share of the population is lost through outmigration.¹
- Loss of working age population: While approximately 72% of the international and interprovincial immigrants to Manitoba are aged between fifteen and sixty-four years (working age group), a slightly larger proportion of this age group, approximately 76%, is lost through interprovincial immigration, suggesting that the share of working age groups is shrinking in Manitoba.¹
- These trends demonstrate the opportunity for the Province to invest in incentives to attract interprovincial immigrants and retain emigrants within the working age group to support the growth of Manitoba's labour force.
- Steps taken to attract skilled labor, but gaps remain: Manitoba has undertaken significant steps to attract skilled labour through the Manitoba Provincial Nomination Program and Manitoba Start Program², however labour shortages and skills shortages are some of the key challenges that have been identified in Manitoba labour market:³
 - Manitoba job markets are expected to remain balanced, but shortages could occur in specific occupations. The 2017-2023 Manitoba Labour Market Occupational Forecast established the existence of tightness (difficulty to find workers) in Manitoba's labour market, including in many occupations with high and middle skill-level requirements. According to this report, tightness is expected in natural resources, agriculture, health occupations, and trades and transport. Specific occupations expected to experience tightness include, but not limited to: geologists, chiropractors, program officers unique to government, and electrical mechanics.⁴
- This indicates opportunity for the Province to invest in growing local talent and attracting more qualified and skilled international immigrants particularly in tight occupations.
- 1. Statistics Canada. CANSIM Table 051-0012 and Table 051-0011.
- Government of Manitoba. Manitoba immigration Facts, 2014 Statistical Report. Retrieved from http://www.immigratemanitoba.com/wp-content/uploads/2015/09/MIF-2014_E_Web_Programmed.pdf
- 3. The Canadian Chamber of Commerce. 2012. Canada's skills crisis: what we heard.
- 4. Growth, Enterprise and Trade. 2017. Manitoba Labour Market Occupational Forecasts 2017-2023. © Deloitte LLP and affiliated entities.



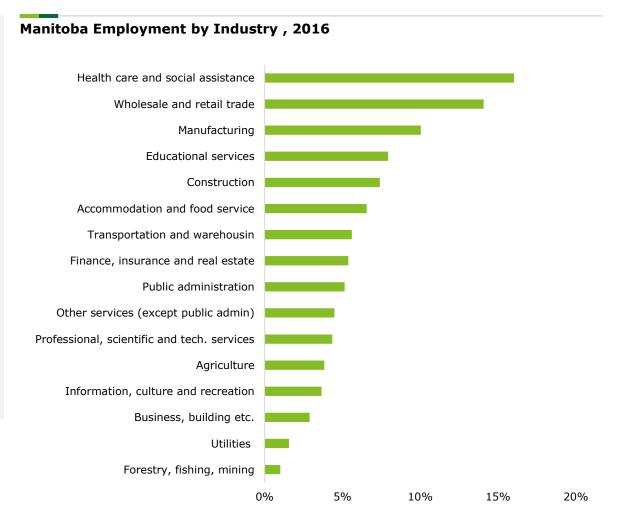




Population and Labour Force (3/3)

The variation in employment in Manitoba by industry provides an opportunity to identify a competitive industry sector to focus efforts

- Manitoba's employment within the goods-producing and services-producing sectors are generally growing, registering an annual growth rate of 1.4% and 0.5% between 2011 and 2016, respectively.
- Goods growth is widespread, services decline: In 2016, the goods-producing sector employment rose by 2.3% to 151,000 with gains occurring in most areas, while services employment declined by 1.3% to 482,300:1
 - The utilities sector held the largest share of employment within the goodsproducing sector, registering a 19.3% growth while manufacturing sector registered the largest loss of 1.9%.
 - Within the services-producing sector, professional services sector registered the largest gain at 8.2% while transportation and warehouse had the largest decline at -7.6%.
- Between 2011 and 2016, the largest share of employment gain was in secondary and tertiary sectors: utilities (7.2%), professional services (2.8%), educational services (2.1%), other services(1.9%) construction (1.8%), and manufacturing (1.4%) suggesting that tertiary sectors provide competitive labour advantages for the province.²
- Employment concentrated in four industries: Further, almost 50% of Manitoba's total labour force are employed in four industries: healthcare (16%), wholesale and retail trade (14%), manufacturing (10%), and education services (8%), indicating an opportunity for the Province to focus on sectors that drive economic growth through identifying business expansion and other support opportunities.¹



^{1.} Statistics Canada, CANSIM Table 282-0088.

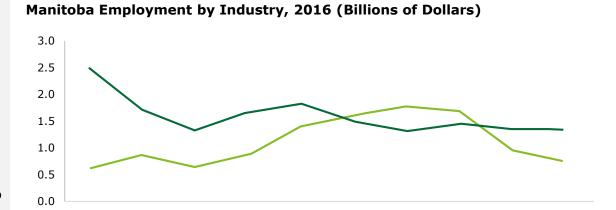
Secondary sector include industries that process raw materials into goods, while tertiary sectors include industries that provide goods and services to customers

^{3.} Publically funded sectors are usually not considered

Industry Analysis – Mining, Oil and Gas (1/2)

The mining industry in Manitoba is slowing down, and it is expected to keep declining into 2021 partly owing to falling commodity prices, declining capital investments by mining companies, and expected major mine closures due to depletion of reserves

- Mining is the largest primary resource industry sector in Manitoba, accounting for approximately 5% of Manitoba's real GDP.
- Metal ore mining is the largest segment of the mining industry at 50% and includes nickel, copper, zinc and gold, followed by oil and gas extraction and coal mining segment at 35%, with non-metallic minerals and support activities for mining and oil and gas extraction comprising the remaining share (15%).
- Mining sector in decline since 2013: In line with the national level trend, Manitoba's mining industry has been declining owing to the fall in commodity prices and reduction in capital spending within the sector¹:
 - According to Government of Manitoba's 2017 economic review and outlook, capital spending by mining companies has declined from \$1.3 billion in 2012 to \$427.6 million in 2016.
- **Decline to continue:** The decline in the mining sector is expected to continue over the next 5 years, largely attributed to persisting low commodity prices, major mine closures as the mines approach their end of mine lives, and regulatory changes.
 - Metal mining production is expected to decline by 20.4% in 2018, and by 38.1% with more declines expected into 2021.
 - Reed mine and 777 mine are expected to terminate their operations as they reach the end of project life by 2020.
 - The oil drilling industry growth is expected to decline as the crude oil prices remain low and the industry still faces oversupply from the United States.



2011

Metallic and Industrial Minerals

2012

2013

----Petroleum

2014

2015

2016

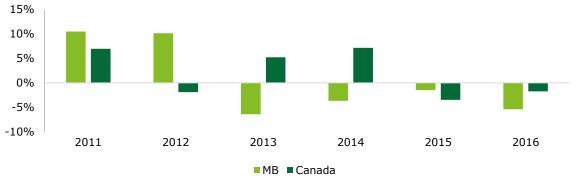


2009

2010

2008

2007



Sources: Natural resources Canada and Manitoba Petroleum Branch

^{1.} Government of Manitoba, 2017, Economic Review and Outlook,

^{2.} Statistics based on the Conference Board of Canada, unless stated otherwise.

Industry Analysis – Mining, Oil and Gas (2/2)

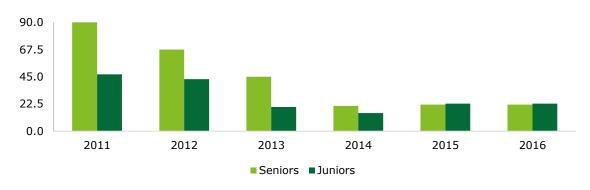
While the mining industry is declining, there is an opportunity for Manitoba to attract investment into the sector as the province is home to high mineral potential in the northern Manitoba region

- Low market share of exploration expenditure: According to the Look North Report and Action Plan for Manitoba's Northern Economy, the Northern Manitoba region still holds mineral and other resource potential despite the declining in the mining industry:
 - Compared to other Canadian Provinces, Manitoba's market share of total exploration expenditure is small, suggesting untapped mineral potential opportunity (bottom graph).
- The 2016-2017 Manitoba Mining Review reports that precious metals exploration and development activity is seeing improvements as past gold mines are reopening and potential new mining projects areas are being explored, however investments in mining exploration continue to decline:
 - Government investments in mineral exploration in Manitoba has declined from \$4.2 billion in 2011 to dollars \$0.0439 billion in 2016.²
- Manitoba is an attractive location for mining: Manitoba's long standing reputation as a desirable destination for mining investment provides an opportunity to promote mineral exploration activities in the region:
 - Fraser Institute's 2016 Survey of Mining Companies found that Manitoba is the second-most-attractive jurisdictions in the world for mining investment.3
- Therefore, there is an opportunity for the Province to support the growth of the mining industry through facilitating investments into mineral exploration and development in Manitoba.

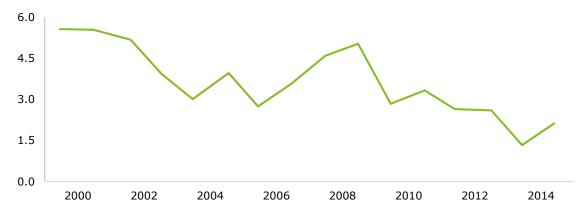
1. Manitoba Prospectors and Developers Association Inc. 2016-2017 Manitoba Mining review. 2017. Retrieved from https://issuu.com/delcomminc/docs/mbmining 2016 2017 web/25

Mineral Exploration Expenditures Manitoba for 2011 through 2016 by Seniors and Juniors

(spending intentions)



Mineral Exploration Expenditures Manitoba's Percentage of Canadian Mineral **Exploration**



106

^{2.} Spending intentions

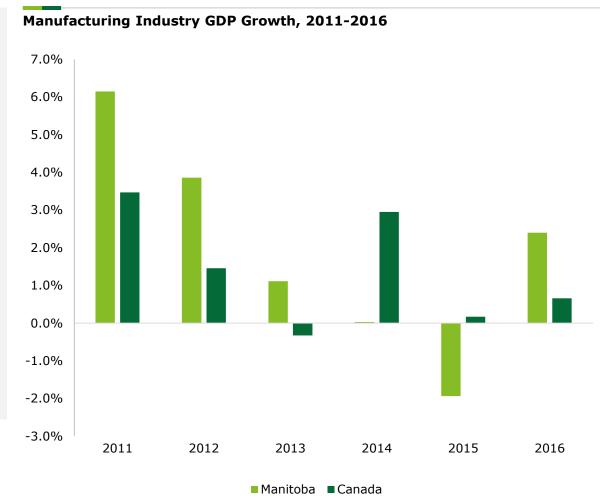
^{3.} Fraser Institute. Survey of mining companies 2016. Retrieved from: https://www.fraserinstitute.org/sites/default/files/survey-of-mining-companies-2016.pdf

^{4.} Statistics based on the Conference Board of Canada, unless stated otherwise.

Industry Analysis - Manufacturing

Manitoba's manufacturing sector remains a key growth driver in the province notwithstanding its recent decline in growth and employment indicating its high relative strength and competitive advantage in the province

- Manitoba's manufacturing sector is a leading exporter of high value goods and services accounting for approximately 10% of both Manitoba's GDP and employment.1
- **Diverse production:** The sector is relatively diverse with food processing as the largest subsector followed by transportation equipment (aerospace, motor vehicle and trailers). Other manufacturing subsectors include primary metals, electrical products, machinery and chemicals.
- Recent growth slow down: Between 2011 and 2016, the Manitoba manufacturing sector registered an annual growth rate of 1%, indicating a general declining trend, partly attributed to the fall in commodity prices that has affected capital spending and demand for manufactured products.
- **Expected to drive future growth:** Nevertheless, manufacturing is expected to drive Manitoba's growth with the key drivers including:²
 - The aerospace manufacturing sector is expected to grow to meet the rising demand for air transportation;
 - Demand for public passenger vehicles from the United States is expected to boost the Manitoba bus manufacturing sector, fueling demand for Manitoba's leading bus provider, New Flyer; and,
 - Increasing capacity at processing facilities, such as Maple Leaf Foods bacon processing, continues to contribute to the growth of the sector.
- The trends indicate an opportunity for the government to support business growth and investments into the sector to support growth.



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107

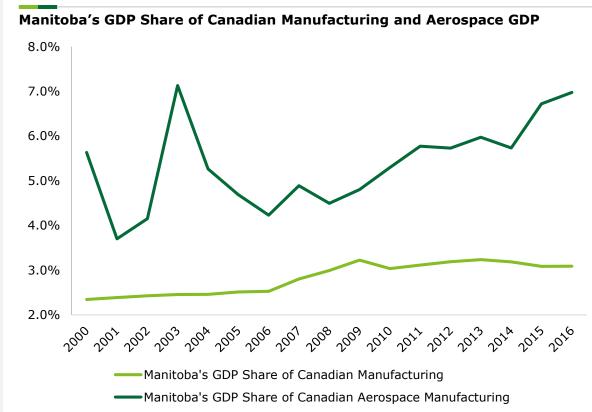
^{1.} Statistics Canada. CANSIM Table 282-0125 and 379-0030.

^{2.} Conference Board of Canada. Summer 2017. Provincial outlook economic forecast: Manitoba.

Industry Analysis - Aerospace

Manitoba's aerospace manufacturing industry is an important subsector in manufacturing and the province punches above its weight in this industry nationally

- Manitoba's aerospace industry is the largest in Western Canada:
 Transportation equipment manufacturing is the second largest manufacturing industry in Manitoba and aerospace product manufacturing accounted for 57% of its 2016 GDP. Aerospace product manufacturing contributed over \$460 million to Manitoba's GDP in 2016; this is significantly larger than other Western Provinces combined, where aerospace GDP totaled \$218 million.¹
- Manitoba captures a greater share of Canadian aerospace manufacturing GDP than manufacturing overall: In 2016, Manitoba's manufacturing output accounted for 3% of Canada's total manufacturing output, but it accounted for 7% of Canada's total aerospace manufacturing output. This pattern has been persistent over time (see chart).²
- Aerospace jobs employ a greater share of individuals in Manitoba: In 2016, 4,580 individuals were employed in aerospace manufacturing jobs. This accounted for roughly 0.7% of all industry jobs in 2016, higher than the national average of 0.3% of jobs.³
- **Global center for aerospace engine testing:** Approximately 85% of the world's new large commercial aircraft developmental engines are operated in Manitoba test facilities before they are approved for flight.⁴
- The industry is anchored by three global firms: Boeing, StandardAero, and Magellan are all located in Manitoba; these firms account for roughly 70% of aerospace jobs in the Province. A number of SMEs support these firms, acting as suppliers and education and training providers.⁵
- Aerospace services also contribute significantly to the provinces GDP: In addition to aerospace manufacturing, aerospace services including maintenance, repair and overall, testing facilities, and training services account for roughly 25% of the province's aerospace industry.⁵
- Aerospace manufacturing to support future GDP growth: Increasing air traffic and global demand for transportation has been supporting aerospace expansion year after year and this trend is expected to continue.⁶

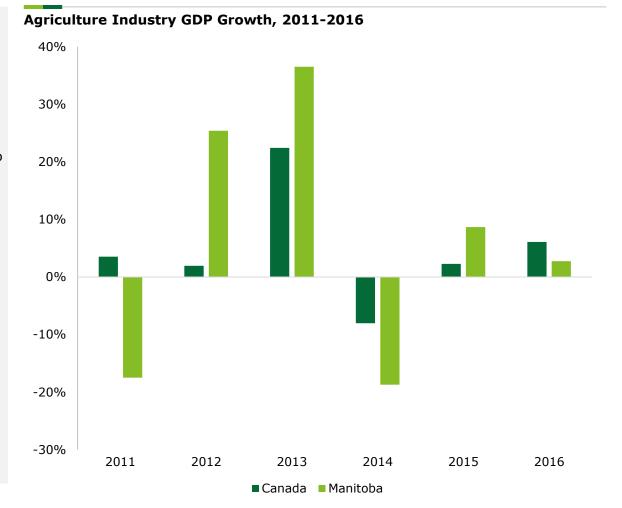


- 1. Statistics Canada. CANSIM Table 379-0030.
- 2. Statistics Canada. CANSIM Table 379-0030 and Table 379-0031.
- 3. Statistics Canada, CANSIM Table 383-0033.
- 4. GET internal document. 2016. Building on Manitoba's Industrial Strengths.
- 5. GET internal document. 2017. Aerospace Industry Overview.
- 6. Conference Board of Canada. Summer 2017. Provincial outlook economic forecast: Manitoba.

Industry Analysis - Agriculture

While Manitoba's agricultural sector continues to show overall positive growth, the impact of climate change on output presents an opportunity for investment in innovative tools to manage the effects and increase output

- Primary agricultural production accounts for 3% of the Manitoba's GDP and contributes approximately \$6.0 billion to Canadian total farm cash receipts.¹
- Important linkages to other industries: Agriculture is an important sector to Manitoba's economy due to its direct linkages to the economy's secondary and tertiary sectors including food manufacturing, transportation and warehousing, retail and wholesale trade, and finance and insurance. For instance, food production accounts for about a quarter of total manufacturing sales.²
- Stronger growth than national average: Between 2011 and 2016, the agricultural sector registered an average annual growth rate of 9.2% compared to 4.5% for the national average.
- Output levels are volatile: Manitoba's agricultural sector continues to be affected by weather conditions resulting in great variance in agriculture output with registered annual growth rates as high as 34% in 2013 and as low as -19% in 2014.
- Land restrictions: Furthermore, the area reserved for agriculture has not changed since 1966, leaving limited room for agriculture to expand
- Output will continue to expand: Nevertheless, agriculture is expected to continue to expand at an annual rate of about 2.2% annually through 2021 partially owing to³:
 - The rise number of trade agreements, such as the Canada-Korea Free Trade Agreement, the Comprehensive and Economic Trade Agreement (CETA), among others that are expected to boost trade;
 - The growth in the global population, which is forecasted to reach 8.8 billion in 2035, increasing the demand for consumption of agricultural products; and
 - The impact of climate change on output and the limited agricultural land provides an opportunity for the Province to invest in innovative agricultural tools to boost output in the sector.



^{1.} Statistics Canada. CANSIM Table 002-0001.

^{2.} Government of Manitoba. 2017. Economic review and outlook.

^{3.} Conference Board of Canada. Summer 2017. Provincial outlook economic forecast: Manitoba.

Appendix C: Manitoba Program Overlap Review

Summary of GET's economic development program overlap

There is demonstrable overlap among economic development programs administered by the province and economic development agencies that the province funds

GET Programs and Special Operating Agencies				Overlap S		
	GET Funded Agencies	Area of overlap	Mandate	Industry	Region	Target Client
Entrepreneurship Manitoba (\$0)Manitoba Trade and Investment (\$4M)	 World Trade Centre Winnipeg (\$891K) Economic Development Winnipeg (\$1.4M) 	 Helping businesses become first time exporters and enter new markets WTCW and EDW are Winnipeg-based, GET programs are province-wide 	⊘	✓	⊘	⊘
Manitoba Trade and Investment (\$4M)	 World Trade Centre Winnipeg (\$891K) Economic Development Winnipeg (\$1.4M) Canadian manufacturers and exporters (CME) (\$281K)* 	 These organizations provide services to exporters (e.g., information on events, training, market analysis) This is different from the area of overlap noted above as CME does not provide funding to businesses, they only provide services 	⊘	⊘	⊘	⊘
 Manitoba Trade and Investment (\$4M) 	 World Trade Centre Winnipeg (\$891K) Economic Development Winnipeg (\$1.4M) 	Investment attractionSupport small businesses	⊘	⊘	✓	⊘
 Manitoba Industrial Opportunities Program (MIOP) (\$8.8M) Community Economic Development Fund (CEDF) (\$1.4M) 		 Funding for businesses expanding in Northern Manitoba or Aboriginal businesses throughout the province There is no formal sharing agreement, but in practice steps are taken so that the programs do not fund the same deals 	⊘	⊘	⊘	⊘
	Economic Development Winnipeg (\$1.4M)Travel Manitoba (\$12.1M)	Tourism development efforts		⊘	✓	✓

(Estimates of expenditure in FY 2017/18)

^{*}Now under Partnership for Economic Growth program (total budget of \$4M); PEG funding is provided each quarter. Treasury Board has only approved the first round of funding, which is reported here. The next round of funding is still under review. †Winding down

Summary of GET's economic development program overlap (continued)

There is a demonstrable overlap among economic development programs administered by the province and economic development agencies that the province funds

			Overlap Su			ummary		
GET Programs and Special Operating Agencies	GET Funded Agencies	Area of overlap	Mandate	Industry	Region	Target Client		
Entrepreneurship Manitoba's Business Start Program (\$0)	 Futurpreneur (\$50K)* CEDF's business line program (\$1.4M) 	 Small business/startup loans, both Entrepreneurship Manitoba and Futurpreneur operate province wide Note, in practice CEDF has little overlap with Entrepreneurship Manitoba as the program requires a credit union to refer the client, which acts as a practical separator in the North 	⊘	⊘	⊘	⊘		
 First Peoples Growth Fund (\$2.7M) Metis Economic Development Fund (requested, not approved \$445K) CEDF (\$1.4M) 		 All provide businesses with support and loans (Metis Fund is somewhat different as it looks at equity investing) 	✓	✓	✓	⊘		
	 Manitoba Technology Accelerator (MTA) (\$225K)* Innovate Manitoba (\$25K)*† North Forge (\$300K)* Futurpreneur (\$50K)* 	 Support technology commercialization and entrepreneurship MTA and North Forge are both incubators that focus on start-ups 	⊘	⊘	⊘	⊘		
	 Enterprise Riel (\$41.2K)* Economic Development Council for Manitoba Bilingual Municipalities (CDEM) (\$71.7K)* 	 Francophone business development and promotion Enterprise Riel serves Winnipeg, CDEM serves 16 communities including Winnipeg 	✓	✓	⊘			
Industrial Technology Centre (\$730K)	 Composite Innovation Centre (\$512K)* Vehicle Technology Centre (\$281K)* North Forge (\$300K)* Canadian manufacturers and exporters (\$281K)* 	 Support technology adoption in start-ups CIC and VTC are for specialized sectors while ITC is general Possible overlap with CME as they provide advice/insights on technology adoption, but it is unclear what funding to CME is being used for 	⊘	⊘	⊘	⊘		

(Estimates of expenditure in FY 2017/18)

^{*}Now under Partnership for Economic Growth program (total budget of \$4M); PEG funding is provided each quarter. Treasury Board has only approved the first round of funding, which is reported here. The next round of funding is still under review.

†Winding down

GET Economic Development Programs

Program	Mandate	Industry	Region	Target Client
Community Economic Development Fund	 Crown corporation that encourages economic development in northern and rural Manitoba via financial assistance (loans, guarantees) 	GeneralFisheries	 Northern and rural Manitoba All Manitoba for Aboriginal clients 	Northern/ruralAboriginal clients
Community Enterprise Development Tax Credit	 Allows community enterprises to raise a maximum of \$3M in equity capital, the program encourages investment from Manitoba-based investors and corporations 	 IT, arts & new media, aerospace, agriculture, and manufacturing 	• Provincial	 Eligible community enterprises with a permanent establishment in Manitoba
Manitoba Industrial Opportunities Program	 Flexible support, targets loans in excess of \$500,000 with the goal of securing investment in Manitoba that would not occur without government support 	 IT, arts & new media, aerospace, agriculture, and manufacturing 	 Provincial 	 Companies with significant presence in Manitoba or wishing to establish presence in Manitoba
Third Party Investment Funds Program	 Provides investment capital to venture capital limited partnerships managed by the private sector for investment in SMEs 	 IT, arts & new media, aerospace, agriculture, and manufacturing 	 Provincial 	 Venture capital limited partnerships (ultimately SMEs)
Commercialization Support for Business Program	 Offers financial assistance to support entrepreneurs and businesses as they conceive, develop and commercialize products and expand into new markets 	 IT, arts & new media, aerospace, agriculture, and manufacturing 	• Provincial	Sole proprietors and small businesses in Manitoba
Small Business Venture Capital Tax Credit	 Assists small corporations in raising new equity capital (from \$100,000 to \$10M) 	 IT, arts & new media, aerospace, agriculture, and manufacturing 	• Provincial	Eligible small corporations in Manitoba
Interactive Digital Media Tax Credit	 A 40% or 35% tax credit on eligible costs paid to develop an eligible interactive digital media (IDM) product 	Interactive digital media	• Provincial	 Taxable corporation with a permanent establishment in Manitoba
Manitoba Trade and Investment	 Supports Manitoba businesses to become export-capable and to diversify into domestic and internationa markets (e.g., trade shows, market intelligence, match-making events, etc.) Promotes Manitoba as a destination for inward investment 	 Priority: Agricultural machinery, agri-food, advanced manufacturing, ICT, new media, cultural industries/music, life sciences, agricultural machinery Developmental: Building products, clean tech/ environmental, consumer products, energy services, mining (suppliers) 	• Provincial	Manitoba businesses

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GET Economic Development Programs (continued)

Program	Mandate	Industry	Region	Target Client
Manitoba Innovation Growth Sidecar Program	 The Fund co-invests between \$200,000 and \$500,000 with one or more investors providing funding to an early stage venture based in Manitoba 	 High-growth sectors such as IT, life sciences, and clean tech 	• Provincial	 Investors and early stage ventures in Manitoba
Manitoba Film Loan Guarantee	 Assistance provided for the financing of film projects including feature films, television programs and series 	• Film	 Provincial 	 Project must be eligible for Manitoba Film and Video Production Tax Credit Other restrictions apply
Labour Sponsored Investment Funds	 Provides Manitoba investors with a 15% provincial tax credit on annual purchases up to \$12,000 in qualifying funds, plus access to a 15% federal tax credit 	Not specified	 Provincial 	Manitoba investors
Metis Economic Development Fund	 Provides Metis Businesses with access to capital (equity investing) 	Not specified	 Provincial 	 Metis entrepreneurs or businesses
First Peoples Economic Growth Fund	 Program areas include business plan assistance, skills development, entrepreneur loans, community economic expansion loans, joint-venture investments, aftercare, and resource investment 	Not specified	• Provincial	 First Nation owned businesses

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114

GET Special Operating Agencies and Regional Economic Development Agencies

Program	Mandate	Industry	Region	Target Client			
Special Operating Agencies							
Industrial Technology Centre	 Provides a wide range of technical services in support of technology-based economic development in Manitoba 	 Aerospace, building, architecture, construction, general manufacturing health, transportation, utilities 	• Provincial	 Manitoba companies (all sizes) and federal, provincial and municipal government agencies 			
Entrepreneurship Manitoba	 Provide a range of services to businesses including: market research, business skill development, succession planning, help with permits and licenses, financial programs etc. 	Not specified	• Provincial	 Manitoba entrepreneurs and businesses 			
Third Party Investment Funds Program	 Provides investment capital to venture capital limited partnerships managed by the private sector for investment in SMEs 	 IT, arts & new media, aerospace, agriculture, and manufacturing 	• Provincial	 Venture capital limited partnerships (ultimately SMEs) 			
	Admir	istrative					
Manitoba Development Cooperation	 Crown corp. used to administer four divisions: Business Support (administers loans, guarantees via Third-Party Investment Funds Program and Manitoba Industrial Opportunities Program), Provincial Nominee Program, Manitoba Trade and Investment, Economic Innovation Technology Council 	Not specified	• Provincial	 Administrative 			
Regional Development Agencies							
Economic Development Winnipeg	 Leads, facilitates, and promotes Winnipeg's economic development and tourism 	 Aerospace, agribusiness, creative industries, energy & environment, financial services, ICT, life sciences, transportation & distribution 	• Winnipeg	 Entrepreneurs and businesses (new and established) 			
Partnerships for Economic Growth (PEG)	 Consolidates funding to third party organizations in support of economic development Includes: general business support, technology development, and industry development 	Covers wide range	 Provincial 	 Manitoba based non-for- profit corporations (or Manitoba branches of Canadian non-profits) 			

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115

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