



Incentives and Investment Attraction

A review of the Edmonton Metropolitan Region's
competitive position

MARCH 2022

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Mr. Steele has written on location strategy and real estate topics for *Area Development*, *Business Expansion Journal*, *Site Selection Online Insider*, and the *Journal of Corporate Real Estate*, and served as an editor for Ernst & Young's *United States Investment Monitor*. He also co-authored the chapter on US Incentives for Columbia University Press' *Rethinking Investment Incentives* (available at the Columbia University Press website).

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Executive Summary

Attracting investment in new corporate offices, industrial operations, or logistics applications is a highly competitive endeavor. The global marketplace provides companies with a long list of locations that can provide various combinations of skilled workforces, access to markets, specialized infrastructure, networks of related companies, and real estate that can meet critical business needs.

Many of the factors involved in the location decision are out of the direct control of local and regional governments, such as market access, existing workforce, and climate. As a result, national, sub-national, and local governments focus on those items they can control and often rely on fiscal incentives such as cash grants, rebates, infrastructure funding, and tax credits to act as a lever to companies to induce them to stay, expand, or locate in a jurisdiction.

Governments looking for ways to actively participate in attracting investment can develop effective and responsible incentive programs. However, to do so they first need to understand:

- The process and tools companies use in making location decisions.
- When and how incentives can affect this process.
- The different forms of incentives as well as their benefits and drawbacks.
- How any potential incentive tool will affect a jurisdiction's competitive advantages in attracting specific industries and activities.

The Site Selection Process

Businesses move for various valid reasons, including cost reduction, office consolidation, expansion and growth, access to new markets, and company reorganization.

Companies go through a process that begins with defining the business needs of the new location, evaluating the relative merits of various location options, and then negotiating with property owners and local jurisdictions as appropriate. Much of the analysis typically takes place as an analytic desktop exercise. As a result, jurisdictions are often unaware of the fact that they are candidates in a location project until late in the process, and they are also likely unaware of the competitive strengths that caused them to be included in the study.

While companies do include the value of incentive packages in their decision-making, they are evaluated as only one component of a company's overall operations planning approach and as one component of its long-term cost of doing business.

Incentive Types

Governments use a wide variety of tools to attempt to lure new or expanded development into their jurisdictions. Common tools include:

- Job training subsidies
- Infrastructure subsidies
- Government equity participation
- Loan guarantees
- Tax holidays or exemptions
- Investment tax credits
- Loss carryforwards
- Accelerated depreciation

General Incentive Program Best Practices

Economic Development incentive programs work best when they consider:

- **Costs** – The net revenue lost or gained by the jurisdiction, comparing the incentive award to additional tax revenue from economic activity and population growth.
- **Creation of Net Local Income** – Incentives given to businesses such as manufacturers that primarily sell their products outside the state or community bring new dollars and jobs to a region.
- **Assessment of Company Impact** – The effects cascading through a regional economy as a firm purchases goods from other local businesses and new employees spend a portion of their wages locally.
- **Design and Accountability** – The applicability of an incentive or award to specific business needs or challenges a company may face. All parties involved (including and especially the general public) should be given as much predictability and transparency into the award process as possible.

The Edmonton Metropolitan Region's Competitive Advantage

With regards to labour and workforce attraction, Canada already has a favorable position for attracting immigrants to the country. Low cost of living and generally high quality of life factors make attracting talent to the Edmonton Metropolitan Region (EMR) a relatively straightforward process. Similarly, the University of Alberta, NAIT, and other postsecondary institutions provide a natural regional well from which to draw national and even international talent.

Several jurisdictions have developed programs that incentivize individuals to come to, work in, and live in their regions, enhancing their competitive advantage. Such a program may be appropriate for the EMR, particularly in attempting to attract specific talent classes.

The Edmonton Metropolitan Region has established target sectors in:

- Artificial Intelligence, particularly in both Energy and Health
- Plastics Manufacturing
- Plant Protein
- Nutraceuticals, both traditional and CBD-based
- Pharmaceuticals
- Hydrogen

Several of these involve early-stage or start-up companies, and the Edmonton region's municipalities currently do not have programs to address these companies' most critical needs – namely early-stage financing. Competitive programs such as the Opportunity Calgary Investment Fund may provide models that the EMR may wish to adapt and implement.

Hydrogen, plastics, and plant protein are somewhat more established sectors that connect to industry clusters with significant histories of investment in the region. However, the facilities for these also require significant capital investment. As a result, adaptation of the Alberta Petrochemical Incentive Program – coupled with local programs enabled by the 2019 amendments to the Municipal Government Act – can provide the region with performance-based tax abatement programs that would provide tangible enhancements in competitiveness in attracting investment.

Introduction

Attracting investment in new corporate offices, industrial operations, or logistics applications is a highly competitive endeavor. The global marketplace provides companies with a long list of locations that can provide various combinations of skilled workforces, access to markets, specialized infrastructure, networks of related companies, and real estate that can meet critical business needs.

Many of the factors involved in the location decision are out of the direct control of local and regional governments, such as market access, existing workforce, and climate. As a result, national, sub-national, and local governments focus on those items they can control and often rely on fiscal incentives such as cash grants, rebates, infrastructure funding, and tax credits to act as a lever to induce companies to stay, expand, or locate in a jurisdiction.

Governments looking for ways to actively participate in attracting investment can develop effective and responsible incentive programs. However, in order to do so they first need to understand:

- The process and tools companies use in making location decisions.
- When and how incentives can affect this process.
- The different forms of incentives as well as their benefits and drawbacks.
- How any potential incentive tool will affect a jurisdiction's competitive advantages in attracting specific industries and activities.

This paper provides an overview of the above, as well as a specific review of the Edmonton Metropolitan Region's competitive context, available programs, and recommendations for enhancement.

Please note that much of the research included below comes from experience with incentive programs in the United States. While attention has been paid to show how incentive programs may be applied in a Canadian – and specifically an Edmonton Metropolitan Regional – context, the United States has a long history of experimenting with and applying incentive programs. The lessons learned from our key competitor can help demonstrate how to develop and apply programs that enhance the EMR's natural competitive advantages.

Description of the Corporate Site Selection Process

The location incentive discussion happens within the context of a broader location selection process as companies search for places to grow and expand. By understanding the process and the factors that inform it, jurisdictions have a much better understanding of their competitive context and the likely impact of any incentive program.

Events that Cause Need for New Locations

Businesses move for various reasons, including cost reduction, office consolidation, expansion and growth, access to new markets, and company reorganization.

Growth and Expansion – The most common reason a company will move is because their current facility, labour market, or supply chain no longer has enough capacity for them to do the things they need to do.

Operating Cost Reduction – High operating costs can, over time, make a company or plant uncompetitive. The competitive edge may be lost due to changes in labour costs, benefits, insurance, transportation costs, regulations, or taxes.

Process Improvement – Enhancements in plant, machinery, or even process may make a location obsolete, forcing investment in a new facility.

Market Access – It may become necessary for a company to move closer to a large segment of their market, or to establish a presence in a new market. A similar decision may be made to better access raw materials, larger or better labour pools, or to be closer to key partner institutions.

Consolidation – Whether because of mergers, acquisitions, or simple process improvement, a company may find that they have more locations than needed and will look to simplify.

To Gain an Opportunity to “Start Over” – Labour situations, unions, government relations, or other circumstances may become enough of a hindrance to business operations that a chance to begin again in a new location becomes not only a viable, but a preferred option.

To Cluster Near Similar Companies – Many companies gain partnering, innovation, and supply chain advantages by being near other companies within the same industry.

To Improve Quality of Life and/or the Ability to Recruit Global Talent – Some companies just want to improve their quality of life. This may be the personal choice of the owner for privately held companies, or it may be so that the company can better attract certain types of employees (e.g.: engineers, scientists, graphic artists, etc.) by being in a “high quality of life” location. If a company recruits nationally, or internationally, for high-talent employees, then being in a location generally perceived to be welcoming, diverse, and livable is a definite asset.^{1,2}

¹ Cronin, Lionel. “Relocating Your Business: Upsides and Downsides.” April 6, 2021. <https://www.commercialriskeurope.com/relocating-your-business/>

² Expansion Management. “Top 10 Reasons Why Businesses Relocate.” November 11, 2014. <https://mixedusemasterplancommunity.com/top-10-reasons-why-businesses-relocate/>

The Site Selection Process

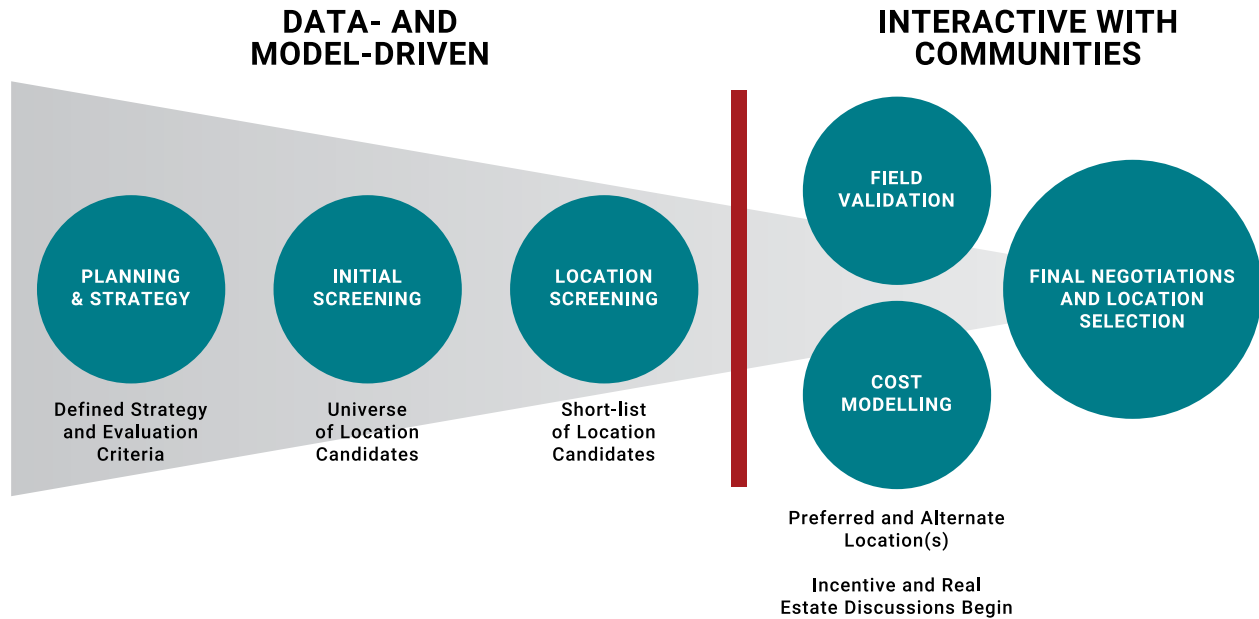


Figure 1: Typical Site Selection Process (Author’s collection)

The figure above describes the general process that companies and their consultants typically use when evaluating location options and making location decisions. The process can vary based on the participants in the process and the extent to which a company’s current locations are also under consideration. Even so, some version of the process above is likely in play.

As described above, much of the analysis (the actions left of the red line in the diagram above) typically take place as an analytic desktop exercise. As a result, jurisdictions are often unaware of the fact that they are candidates in a location project until late in the process (after the red line above) and are also likely unaware of the competitive strengths that caused them to be included in the study.

The specific tasks involved are as follows:

Planning and Strategy

The site selection team – which may include corporate executives, financial/tax advisors, human resources (HR), operations, and other company personnel – needs to understand the drivers behind the project, including a thorough understanding of the genesis of the project. This team clarifies the key business objectives, assesses the business drivers for the operation, determines the location impacts on the success of the operation, establishes any configuration options which may be available, and evaluates the strategic benefits and risks which might be associated with the location strategy.

Incorporated within this task must be an understanding of:

- Human resources requirements at the new location, including headcount and skills required;
- Any impact to, or requirements for, the movement of people, products, or other materials;
- The information technology requirements, including software, hardware, and infrastructure; and
- Any legal, regulatory, or tax issues or structures which are either favorable or prohibitive.

Initial and Additional Location Screening

From here, a Corporate Real Estate (CRE) executive will be able to identify the universe of locations that may serve to house the new facility. Those attributes that are considered essential should be used to define the search area. These factors typically include items such as a minimum level of air access, location within a certain time zone, or a minimum (or maximum) size labour force.

Once the universe of qualified locations has been established, data is gathered to compare the candidate locations based on the business drivers identified at the beginning of the project. The main challenges for the site selection team will be threefold:

1. Finding data which appropriately measures or predicts the dynamics for each major business driver;
2. Developing some method for reconciling the relative importance of each data item or business driver; and
3. Evolving a process for gaining acceptance of the results of steps 1 and 2 above among the other corporate executives.

Field Verification and Cost Modelling

Once the location selection team identifies a short list of communities and gains the approval of any corporate stakeholders, the CRE executive should be prepared to perform on-site verification of the analysis performed above. While data captured in the above process is typically valid, the interpretation of the data may not precisely match the actual situation in each of the communities. Likewise, context, subjective, and anecdotal data may be captured through field verification in ways that are not possible through objective data analysis.

During the field verification, initial steps may also be made towards identifying, negotiating, and securing incentives from local or regional governments. Likewise, initial explorations should be made into the availability of suitable facilities or land for development. Extreme care is taken so that any such facility search (or any other action, for that matter) cannot be construed as a firm commitment to any of the communities under investigation. Any such premature commitment can eliminate the possibility for securing financial incentives and inducements.

The company will at the same time be constructing cost analysis of the different location options and, often, comparing these against a baseline case, current location, or a “do nothing” scenario. These models provide a feasibility analysis for the project overall and also highlight tradeoffs in total cost among the locations.

Negotiations and Implementation

The cost analysis included above may be used as leverage in negotiations with the finalist jurisdictions to make the concrete business case for why incentive packages are required to either:

- Enhance one location's overall cost attractiveness over the competition, or
- Enhance the overall project's financial viability, allowing the investment to move forward.

This is the stage at which incentives gain the highest prominence and importance. They can be the factor that enhances one location's overall value proposition over another. However, this negotiation is taking place in an environment where those jurisdictions competing against each other have already shown that they meet or exceed the company's driving business needs for the facility by virtue of being invited to the incentives conversation.

Once ultimate decisions are made regarding the location, and once incentives and inducements are approved, final implementation planning can proceed.^{3, 4, 5}

Location Drivers and Decision Criteria

Different industries, different functions, and even different companies will look at the site selection process differently. Every site selection process is a search for a resolution to both a current need and a constellation of future business needs. As a result, the specific drivers and their relative importance will vary from project to project. However, it is still possible to identify factors that drive projects more often and with greater importance than others.

Area Development magazine – a respected and long-running publication that covers the site selection and location consulting industry – conducts an annual survey of site selection factors affecting projects. The 2020 survey results are shown on the next page:

³ Barovick, Barry and Steele, Christopher. "The Location and Site Selection Decision Process: Meeting the Strategic and Tactical Needs of the Users of Corporate Real Estate", *Journal of Corporate Real Estate*, Vol. 3 No. 4 (September 2001), pp. 356-362

⁴ Hickey, David. "How are Uncertain Times Altering Company Location Strategies?" *Area Development Magazine*, Q3 2020. <https://www.areadevelopment.com/corporate-site-selection-factors/Q3-2020/changing-markets-in-uncertain-times.shtml>

⁵ "The Site Selection Process" *Greyhill Advisors*. Accessed September 21, 2021. <http://www.greyhilladvisors.com/site-selection-process>

FIGURE 2: COMBINED RATINGS - CORPORATE SURVEY ⁶

Site Selection Factors	2020	2019
Ranking		
1. Availability of skilled labour	91.4	92.30 (2)
2. Highway accessibility	88.7	92.4 (1)
3. Energy availability and costs	85.2	79.5 (7)
4. Quality of life	84.8	82.2 (4)
5. Labour costs	84.2	87.1 (3)
6. Occupancy or construction costs	80.6	80.3 (5)
7. Corporate tax rates	80.8	79.7 (6)
8. Tax exemptions	78.6	75.0 (8)
9. State and local taxes	77.2	70.2 (14)
10. Inbound/outbound shipping costs	76.8	69.8 (15)

The magazine notes in its writeup that “Over the 35-year course of this survey, availability of skilled labour and highway accessibility have ranked as the two most important factors with rare exception.” ⁷

The Role of Incentives in Site Selection

The above understanding of both the site selection process and key location drivers sheds light on the relative importance of incentives in making location-based decisions.

The same Area Development survey notes that, “those measures [that] sought to offset costs – i.e., tax exemptions and state and local incentives – follow in eighth and ninth place, considered “very important” or “important” by more than three quarters of the respondents to our 35th annual Corporate Survey. As companies seek more ways to keep costs in check, state and local incentives actually moved up to No. 9 from a No. 14 ranking the prior year.” ⁸

It is critical to note that the survey above collected responses from corporate executives and not site selector or location consultants. In practice, site selectors may place more emphasis on incentives as critical to the location decision. Even so, while incentives are not the prime movers in a location decision, they are an important tool and factor to be considered.

Companies do certainly include the value of such packages in their decision-making and in the cost analysis referenced above. State and local business incentives can temporarily, and sometimes significantly, offset a company’s tax burden and cost of operation by offering tax credits or payroll withholding tax refunds over significant periods of time.

⁶ Gambale, Geraldine. “35th Annual Corporate Survey: Effects of Global Pandemic Reflected in Executives’ Site and Facility Plans.” Area Development Magazine. Q1 2021. <https://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2021/35th-annual-corporate-survey.shtml>

⁷ Gambale. “35th Annual Corporate Survey: Effects of Global Pandemic Reflected in Executives’ Site and Facility Plans.”

⁸ Gambale. “35th Annual Corporate Survey: Effects of Global Pandemic Reflected in Executives’ Site and Facility Plans.”

However, business incentives are not and should not be evaluated in a vacuum. Instead, they are evaluated as one component of a company's overall operations planning approach and as one component of its long-term cost of doing business. As noted earlier, virtually all incentive programs come with specific performance requirements and commitments to create and maintain employment and invest capital. Not meeting those requirements potentially creates a risk of recapture and a return to higher tax costs. In other words, business incentives do not always offset the tax costs related to new investment, and companies will always consider the full cost profile of a location option both with and without the incentive award.⁹

Defining Economic Incentive Programs

Incentives, grants, training programs, and other inducements are tools and policies that are designed by a government to enhance a location's competitiveness, create a local benefit, or otherwise induce a company to make a location decision that they might not otherwise make.

Incentives are tools in the foreign direct investment (FDI) toolkit. And just like any other tool, they can only be used effectively if the wielder understands the problem they are trying to solve and then brings the right tool or policy to the table.

What is an Incentive

The Organisation for Economic Cooperation and Development (OECD) defines investment incentives as "measures designed to influence the size, location, or industry of a foreign direct investment project by affecting its relative cost or by altering the risks attached to it through inducements that are not available to comparable domestic investors."¹⁰ While OECD is focused on the effects of such programs on investment between countries, the same programs may also be used to influence a company to expand in its existing location instead of growing in a new location. Further, these programs can be used to lure companies to relocate from one sub national jurisdiction to another within the same country – a common practice in the United States, for example.

The key issue is that the incentives in question affect a company's decision-making specifically relating to the location of an investment decision.

The awarding of incentives is usually done to accomplish the goals of increasing economic viability of a region, attracting more or better paying jobs, increasing the overall tax base, and/or encouraging the development of new industry clusters. As a result, two key features that define incentive programs are:

- **Specificity** – Incentives are given to particular kinds of companies for defined kinds of investment and/or hiring.¹¹
- **Measurability** – Since incentives are designed to achieve specific policy goals, it should be possible to measure the results gained from any specific program.¹²

⁹ Schmidt, Ulrich. "Of This You Can Be Certain: Why Location Does Matter for Business Operations." *Site Selection Magazine*. November 2015. <https://siteselection.com/issues/2015/nov/incentives.cfm>

¹⁰ OECD. *Checklist for Foreign Direct Investment Policies*. (Paris: Organisation for Economic Cooperation and Development, 2003), 12

¹¹ Tavares-Lehmann, Ana Teresa, Lisa Sachs, Lise Johnson, and Perrine Toledano. *Rethinking Investment Incentives: Trends and Policy Options*. (New York: Columbia University Press, 2016), 4

¹² Tavares-Lehmann et al. *Rethinking Investment Incentives: Trends and Policy Options*, 5

The activities that governments typically incentivize include job creation, employee training, and real and personal property investments that are associated with new facility investments, corporate expansion, the consolidation (and expansion) of operations, or relocation to the jurisdiction. Other investment behaviours like site preparation, building acquisition, infrastructure improvements, research and development, commercialization, energy efficiency, water and air quality, and even social goals have been incentivized, but typically on a more discretionary basis.¹³

The methods for awarding incentives typically fall into one of four different categories depending on the goals of the incentive policy:

- **Economic impact on distressed area** – The incentive is only awarded (or awarded at a higher rate) if the site of the investment is in a designated economically distressed area, and/or if the proposed employee wages exceed the average wage of the area.
- **Competitive gap-filler** – Economic development staff, appointed officials, or elected officials are able to negotiate a specific amount in order to fill an identified gap in the company's project cost or to address a competitive shortcoming.
- **Defined formula** – The credit or grant is awarded in a formulaic manner against hiring, salary, and capital investment estimates. These are typically derived from a government's expected return-on-investment calculation, where typically the amount awarded is not likely to exceed the amount expected to be received in tax revenue.
- **Industry-specific** – Credits are only awarded, or only awarded at a high value, if the project is within a specific industry, usually an industry determined by the state or region as key to its current or future economic success."¹⁴

Credits and other incentives may be awarded either in advance to defray startup or related costs or over time based upon the project and company meeting key performance thresholds. Awards in advance may enhance the initial financial feasibility of a project, but they pose increased risk for the jurisdiction as the project may never realise the promised investment and hiring goals. Many communities employ so-called "clawback" provisions to attempt to reclaim incentive awards if promised investment levels are not achieved. The practice of waiting for companies to meet key investment and hiring thresholds *before* receiving promised awards (performance-based incentive awards) reduces the risk to the participating jurisdiction.¹⁵

¹³ Magill, Chris, "Understanding Economic Incentives in Site Selection" Area Development, Q2 2015, <https://www.areadevelopment.com/taxesIncentives/Q2-2015/site-selectors-understanding-available-incentives-272721.shtml>

¹⁴ Magill. "Understanding Economic Incentives in Site Selection"

¹⁵ Sallee, C. M., *Review of Kentucky's Economic Development Incentives*. (Chicago: Anderson Economic Group, 2012), 45

Descriptions of Types of Programs

Governments use a wide variety of tools to attempt to lure new or expanded development into their jurisdictions. Common tools include:

- **Job Training Subsidies** – Used to fund training and skills development programs for either new or existing employees.
- **Infrastructure Subsidies** – Either the direct construction of infrastructure (roads, rail extension, water, sewer, and other utility lines) or the provision of funds or financing mechanisms to develop infrastructure.
- **Government Equity Participation** – Used less frequently in North America, this measure is structured as a targeted joint venture to enhance the overall financial feasibility of the project (as governments will typically require a lower return on investment than private financiers).
- **Loan Guarantees** – Governments may provide loan insurance or other tools to provide additional security to commercial or other lenders when funding would not be available (or available at less favorable terms) without such guarantees.
- **Tax Holidays or Exemptions** – A measure in which qualifying new companies are exempt from paying corporate income, property, sales and use, or other taxes for a certain period of time.
- **Investment Tax Credits** – These are typically earned either at a flat rate (as a percentage of the investment made in any given year) or incremental (increasing above stepped thresholds or moving averages). Some jurisdictions have also made tax credits “saleable” at a discounted rate. In situations where a company has earned a tax credit, but does not have a tax liability, they may sell the credit to another company that does. In this way, the credit still has measurable value and may provide usefulness for, as an example, startup or R&D functions.
- **Loss Carryforwards** – Allows for losses to be carried either forwards or backwards for a determined number of years and applied to tax liabilities.
- **Accelerated Depreciation** – Firms are permitted to write off capital costs in a shorter period of time than nominally dictated by that capital’s useful life. This reduces property tax exposure over the life of the equipment.¹⁶

Criticism and Scrutiny of Investment Incentives

Economic development incentives are often criticized as “corporate welfare” or as creating an unhelpful “race to the bottom” mentality among jurisdictions. Larger deals of the recent past – such as those offered to Amazon in efforts to attract the company’s second headquarters – renewed the scrutiny and analysis of these programs. Advocacy groups have emphasized academic evidence that does not support the effectiveness of incentives, arguing that incentives do not influence business decisions to nearly the extent policymakers claim nor are they properly targeted to businesses and industries that can offer the greatest economic and social benefit.^{17, 18}

¹⁶ Tavares-Lehmann, Ana Teresa. “Types of Investment Incentives.” In *Rethinking Investment Incentives: Trends and Policy Options*, 21-

¹⁷ Parilla, Joseph and Liu, Sifan. “Examining the Local Value of Economic Development Incentives: Evidence from four U.S. cities.” (Brookings Institution, March 2018)

¹⁸ Francis, Norton. “The Perils of Tax Incentives for Economic Development.” Accessed September 21, 2021.

Part of this may be due to the use of incentives where they are not required to produce investment. Paul O'Neill, former chief executive officer of Alcoa, is famously quoted as saying, "As a businessman I never made an investment decision based on the tax code. If you give money away I will take it, but good business people don't do things because of inducements."¹⁹

Research is inconclusive on the overall effectiveness of incentives on their own as an economic development tool, as it is difficult to isolate the effects of incentives from other factors influencing location decisions such as market access, existing workforce, and climate. The Brookings Institution notes as much and further questions whether tax incentives:

- are material enough in the overall cost equation as compared to labour and property costs;
- truly help create jobs and, if so, do the programs operate to focus job creation on particular populations and communities; and
- can be structured in ways that provide a true net positive return on investment for governments.²⁰

Risks and Penalties

Several trends have increased the apparent importance of incentives in recent years, and each represents a risk for local and sub-national governments as they design policy:

- Asymmetries in information and inequality in bargaining power between governments and firms. Governments are unable to know what incentives packages competing jurisdictions are offering.
- The growing use of site consultants, which in some markets can strengthen those asymmetries and the extractions of "rent."
- Misalignment of costs and benefits – with the benefit of attracting an investment being "booked" for the government officials in office at the time, but the costs often pushed off onto future governments.
- The absence of a counterfactual – i.e.: the inability for a government to always know what would have happened had it not granted the incentive, or had it provided a smaller incentive package.
- The increasing mobility of capital, making it more difficult for governments to ensure the longevity of any investment.²¹

In order to control for these potential risks, governments have developed a series of checks and balances on incentive awards to ensure that companies receiving incentives are held accountable to their obligations under an incentives program.

Penalties and clawbacks for program non-compliance are often included in policies and triggered by not meeting the expected capital investment and/or agreed upon employment thresholds. Penalties may include reduced

¹⁹ Jensen, Nathan. "The Effect of Economic Development Incentives and Clawback Provisions on Job Creation: A Pre-registered Evaluation of Maryland and Virginia Programs." *Research and Politics* (Austin, TX: April-June 2017).

²⁰ Davidson, Charles. "Economic Development Incentives Keep Flowing, Despite Uncertain Benefits." November 2018. <https://www.atlantafed.org/economy-matters/regional-economics/2018/11/13/economic-development-incentives-keep-flowing-despite-uncertain-benefits>

²¹ Johnson, Lise and Toledano, Perrine. *Background Paper for the Eighth Columbia International Investment Conference on Investment Incentives: The good, the bad and the ugly, Assessing the costs, benefits and options for policy reform.* (New York: Columbia University, 2013)

credit amounts or forfeiture of additional benefits. Clawbacks represent the most extreme penalty, because rather than terminating the incentive or reducing the benefit, the government requires the company to pay back the money it received, and depending on the state and collection process, this repayment could be increased by penalties and interest.

In addition to the above, both company and government are exposed to public relations considerations. A premature announcement that a project is moving forward, prior to a formal approval of incentives, can actually jeopardize the ability of a company to obtain incentives in many jurisdictions due to the inclusion of “but-for” language. In these locations, companies must attest in writing that the location would not be in consideration for the project but for the award. Obviously, such attestation is moot if the company appears to be moving forward with an investment independent of the award.

Also note that a large portion of the information submitted to governments is a matter of public record, and many states require company performance metrics to be reported in a public document each year.²²

Additional US Attempts to Provide Transparency

Noting the concerns regarding transparency of the incentive process and the amounts of tax revenue that may be sacrificed by such programs, the US Government Accounting Standards Board (GASB) issued rule GASB 77 to take effect for budgets starting calendar year 2016 and later. The rule requires each state and local government to report a dollar-cost figure for each of its economic development programs per year. Each government may voluntarily choose to provide the names of specific taxpayers that received abatements, pursuant to a specified quantitative threshold (such as all abatements above a given percentage tax reduction or all abatements above a given percentage of the program’s annual cost).

Each government must also provide a general description of each abatement program, including its statutory authority, its public purpose, the kind of revenue lost, and whether there is a clawback safeguard (but not whether clawbacks were invoked or how many dollars were recaptured), and must also disclose major associated obligations it may have incurred as part of an abatement deal, such as a large infrastructure spending commitment it has made in association with an abated project.²³

Such practices are highly desirable in achieving transparency on how incentives are used and their net impact on government finances. However, such policies work best when enacted uniformly across all jurisdictions and therefore should be pursued at the federal level.

²² Magill. “Understanding Economic Incentives in Site Selection”

²³ LeRoy, Greg. “Good Jobs First Analysis, Governmental Accounting Standards Board (GASB) Statement No. 77 on Tax Abatement Disclosures [a.k.a. Economic Development Tax Breaks].” Updated April 28, 2017. <https://www.goodjobsfirst.org/GASB77Analysis>

General Incentive Program Best Practices

Economic development incentive programs work best when they take the following factors into account:²⁴

Costs

The revenue lost due to the incentive award will ideally be made up for by additional tax revenue from economic activity and population growth. However, government spending will also grow as new job opportunities draw in additional population, boosting demand for government services such as transportation and public safety. The net budget cost – the incentive’s initial cost, plus the increased spending needs, less the increased revenue – depends on the relative strength of these three effects, and a thorough analysis must account for these contrasting budget impacts.

Creation of Net Local Income

Giving incentives to companies that sell their goods locally, such as retailers, will tend to harm other businesses in the community and undermine the program’s potential economic benefits. However, incentives given to businesses such as manufacturers that primarily sell their products outside the state or community are more likely to deliver local economic return on investment for the incentive because those firms bring in new dollars and jobs.

Assessment of Company Impact

When a company relocates or expands because of an incentive, the effects cascade through the economy. As the firm buys goods from other local businesses and new employees spend a portion of their wages locally, some additional jobs are created in a process called a multiplier effect. It is important for incentive evaluators to consider whether the targeted industries, activities, and recipient companies are likely to have high or low local multipliers.

Design and Accountability

Businesses prefer to receive funds earlier as this will improve the overall feasibility of the project and enhance the company’s financial reporting. Therefore, a front-loaded program is more valuable to the recipients and has more influence over their decisions to invest. However, as noted, an incentive delivered far in advance of a business’s investment can be wasted if the company does not follow through on its plans. Incentive payments that coincide with agreed-upon job creation targets can provide a high value to businesses while protecting public resources. Likewise, all parties involved (including and especially the general public) should be given as much predictability and transparency into the award process as possible.

²⁴ Pew Charitable Trusts. “What Factors Influence the Effectiveness of Business Incentives?” Pew Charitable Trusts issue brief, April 4, 2019. <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/04/what-factors-influence-the-effectiveness-of-business-incentives>

Generally, economic development leaders and policymakers should design and deploy incentives policies that align with broader economic objectives, embrace public transparency and rigorous evaluation, and only target firms that advance broad-based opportunity.²⁵ An economic development policy is a tool that acts as an expression of a jurisdiction's economic development and investment strategy. The strategy must inform the tool and its use, never the other way around.

Generally, economic development leaders and policymakers should design and deploy incentives policies that align with broader economic objectives, embrace public transparency and rigorous evaluation, and only target firms that advance broad-based opportunity. An economic development policy is a tool that acts as an expression of a jurisdiction's economic development and investment strategy. The strategy must inform the tool and its use, never the other way around.

The Pew Charitable Trusts cites the following US state examples as sample best practices for both designing and applying incentive policies:

- Oregon, where tax credits are given expiration dates
- Washington, where legislative committees hold annual hearings on the results of evaluations
- Rhode Island, where a new law ensures that incentives are reviewed alongside other state spending
- Minnesota, which seeks to establish how much economic activity is directly attributable to incentives and how much would have happened anyway
- Louisiana, which looks at the wider effects of incentives, including the extent to which incentives may cause some companies to benefit at the expense of others
- Massachusetts, which evaluates the extent to which incentives require cuts to other state programs and the potential job losses that may result
- Maryland, Washington, and Vermont, which require proposals for tax incentives to include a statement of purpose and a mechanism for evaluating whether that purpose has been achieved.²⁶

In addition, anchoring incentives to specific sectors enables more thoughtful investments in related areas that can also boost economic growth, such as infrastructure improvements and targeted workforce-development programs to attract additional businesses in those industries. In other words, strategic incentives can help to catalyze private investment that then spurs further actions in talent development, expansion of supply and value chains, and the further development and enhancement of desirable and appropriate industry clusters.²⁷

Lessons from Optimal and Suboptimal Applications

Nothing illustrates the importance of good program design and monitoring so much as real-world examples from other locations.

²⁵ Parilla and Liu. "Examining the Local Value of Economic Development Incentives: Evidence from four U.S. cities."

²⁶ Chapman, Jeff. "How to Inform Policy Choices - Evaluating State Tax Incentives." (Pew Charitable Trusts, April 2014)

²⁷ Gonzales, Christian; Kerlin, Mike; Schaff, Rachel; and Tucker-Ray, Sarah. "How State and Local Governments Win at Attracting Companies." Accessed September 21, 2021. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/how-state-and-local-governments-win-at-attracting-companies>

In general, incentive programs designed to benefit one company or one opportunity fail most of the best practice tests outlined above. Famously, 38 Studios, a Massachusetts-based video-game venture (started by former Boston Red Sox pitcher Curt Schilling) moved its entire operation in 2010 to neighboring Rhode Island after negotiating a \$75 million loan guarantee with the Rhode Island state government. The government of Massachusetts refused to enter a bidding war and declined to match the offer. Rhode Island agreed to a “moral obligation” bond issue in its program, which carried an implicit commitment to pay bondholders if the company defaulted. 38 Studios did default after missing a scheduled \$1 million loan payment and laid off its entire workforce. The state government was then left with an obligation for an estimated \$112 million in principal and accrued interest.²⁸

Conversely, a well-designed systematic program can have positive impacts even if its genesis comes from one project. Such programs – if viewed from a broader perspective of enhancing overall competitiveness – can result in long-term advantages.

In November 1996, Intel announced plans to build a \$300 million semiconductor assembly and test plant in Costa Rica. Local officials seem not to have offered any dramatic giveaways or extra-legal arrangements, and Intel explicitly never asked for any. Officials stated a willingness to work with the legislature and government agencies to modify unfavorable laws, policies, or procedures that might affect the pending investment, especially in the areas of taxation, education, infrastructure, and permitting. However, the deals and modifications that were eventually made were designed to apply to all foreign investors in the country, and never just to Intel.²⁹

Intel closed the assembly and testing operation in Costa Rica in 2014 in the face of a shrinking market for personal computers.³⁰ However, Intel’s initial investment – and the associated programs – are also credited with spurring development of a technology cluster in Costa Rica, which includes companies such as Infosys, IBM, and HP, and which has expanded to include a wide range of investments in engineering and design, automotive components, pharmaceuticals, and medical devices.³¹

Descriptions of Currently Active Incentive Programs

Incentives Enabled Under Amended Municipal Government Act

In 2019, the Legislative Assembly of Alberta implemented both the Municipal Government (Property Tax Incentives) Amendment Act and the Municipal Government (Machinery and Equipment Tax Incentives) Amendment Act. These two acts were intended to provide local municipalities with tools that would allow them to incentivize new investment and growth through reductions, exemptions, or deferrals of property taxes, and the reduction or elimination of machinery and equipment taxes.

The Property Tax Incentives Act allows municipalities to decide if, and how, to implement the tax incentives by passing a single bylaw that will offer incentives to reduce, exempt, or defer the collection of property taxes for non-residential properties for up to 15 years, with the option for renewal. Each bylaw also must establish an eligibility criteria and application process to streamline tax incentive offers, instead of requiring a separate

28 Krakoff, Charles. “Good Money After Bad: Why Government Should Not Fund Private Business.” *Emerging Markets Outlook*, Accessed May 30, 2015. <http://www.emergingmarketsoutlook.com/?p=1854>

29 Spar, D. “Attracting High Technology Investment: Intel’s Costa Rican Plant.” *Foreign Investment Advisory Service Occasional Paper No. 11* (Washington CD: World Bank. 1998)

30 “Business in Costa Rica: Intel Outside.” 2014. *Economist*, April 19

31 CINDÉ. 2015. *Costa Rican Investment Promotion Agency*, accessed September 15, 2015, <http://www.cinde.org/en>.

council resolution or bylaw for each property. The Machinery and Equipment Tax Incentives Act allows municipalities to pass a bylaw enabling them to reduce or eliminate property taxes for up to 15 years on machinery and equipment.³²

Several municipalities have already acted on the opportunity and have developed both bylaws and the programs and procedures to support offering incentives.

City of Wetaskiwin

The City of Wetaskiwin was an early adopter of the new law and approved bylaw 1969-20 at their regular July 2020 City Council meeting. Designed to encourage industrial growth and expansion in Wetaskiwin, the Council developed a system of deferred property tax implementation for new non-residential projects to attract investment, development, and revitalization. In the 2021 budget process, the City has also proposed a comprehensive property tax strategy, reviewing tax rates and structures at all levels in an effort to ensure Wetaskiwin is competitive.^{33, 34}

The three-year sliding scale tax incentives for new industrial development and expansion works as follows: New industrial developments and the expanded portion of industrial expansion developments will be rebated municipal property taxes equal to:

- 75% of the value of the current years' municipal tax levy in the first year of taxation of the new development;
- 50% of the value of the current years' municipal tax levy in the second year of taxation of the new development; and
- 25% of the value of the current years' municipal tax levy in the third year of taxation of the new development.

New commercial developments that meet the minimum threshold of \$2 million actualized investment in new building permit value will be rebated municipal property taxes equal to:

- 75% of the value of the current years' municipal tax levy in the first year of taxation of the new development;
- 50% of the value of the current years' municipal tax levy in the second year of taxation of the new development; and
- 25% of the value of the current years' municipal tax levy in the third year of taxation of the new development.³⁵

³² "Property Tax Incentives." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/property-tax-incentives.aspx>

³³ "Wetaskiwin Initiative to Boost New Industrial Developments and Expansions." Pipestone Flyer. August 10, 2020. <https://www.pipestoneflyer.ca/marketplace/tax-incentives-bylaw-aims-to-attract-new-industrial-developments-and-expansions-in-wetaskiwin/>

³⁴ "Review the Business Climate." City of Wetaskiwin. Accessed October 1, 2021. <https://wetaskiwin.ecdev.org/business-climate>

³⁵ "Bylaw NO. 1970-20 of the City of Wetaskiwin in the Province of Alberta: A Bylaw to Provide Non-Residential Property Tax Incentives for New Industrial and Commercial Development and Expansions." City of Wetaskiwin.

Heartland Incentive Program

Alberta's Industrial Heartland Association (AIHA) worked with its member municipalities (City of Edmonton, City of Fort Saskatchewan, Lamont County, Strathcona County, and Sturgeon County) to develop a policy that would use the stipulations of the Property Tax Incentives Act and Machinery and Equipment Tax Incentives Act to provide a coordinated regional incentive for investment attraction to the area.

The member municipalities also wished to develop a program that directly complemented and worked in concert with the Alberta Petrochemicals Incentive Program (APIP). It was felt that the combination of the two incentives could provide enough of a cost differential to directly compete with offers made by the US states of Louisiana, Texas, and Pennsylvania.

The resulting Heartland Incentive Program (HIP) is a novel incentive program offered by the five member municipalities of AIHA to encourage industrial development in Alberta's Industrial Heartland (AIH). Municipalities located in AIH offer incentives to new projects or expansions within the energy value chain that locate within the designated area. The program provides incentives valued between 1.0% and 2.5% of a project's total capital cost, but specific incentive opportunities range depending on the municipality.

An eligible project must:

- be physically located within Alberta's Industrial Heartland,
- be within the energy value chain or associated infrastructure,
- be either a new construction or expansion project,
- have a capital cost greater than \$50 million,
- employ at least 250 construction workers or 15 permanent staff after construction concludes,
- not be transitioning development from one AIH municipality to another, and
- meet other legal and financial requirements as outlined in specific municipal bylaws.³⁶

As of October 2021, The City of Fort Saskatchewan, Strathcona County, and Sturgeon County have all passed bylaws implementing the program. The City of Edmonton already exempts machinery and equipment from taxation and therefore has not developed a specific bylaw for the program.

Both the Wetaskiwin and Heartland Incentive programs have the benefit of applying only to investment that have already been made, meaning that there is no up-front exposure for the municipalities involved. Moreover, awards are made on a formulaic basis, ensuring both predictability and transparency. As such, both absolutely meet some of the more stringent criteria for incentive best practices.

In addition, the HIP explicitly leverages a provincial-level program — APIP. The ability to package programs together not only enhances the overall benefit to the potential investor, but also ensures coordination at multiple levels of government in attracting and retaining investment.

³⁶ "The Opportunity – Investor Overview." Alberta's Industrial Heartland Association. Accessed October 1, 2021. <https://industrialheartland.com/opportunity/>

Programs in Competitive Jurisdictions

Multiple jurisdictions may be considered competitors to the Edmonton Metropolitan Region (EMR) depending on the industry and function under consideration. Each of the jurisdictions below either competes with or provides useful examples to inform the discussion of regional incentive programs.

The listing below is not a comprehensive listing of all the programs in the competitive jurisdictions. Instead, the programs here are intended to show the breadth of programs on offer and to illustrate how each program is an expression of its jurisdiction's stated economic development policy. A summary of some programs in Alberta are contained in the Appendix.

Canadian Jurisdictions

Calgary, Alberta

Opportunity Calgary Investment Fund

The City of Calgary established the Opportunity Calgary Investment Fund (OCIF) in 2018 as a discretionary cash grant available to projects locating operations in Calgary. The goal was to act as a catalyst to attract investment, drive innovation, and spur transformative economic development in the city. A total of \$100 million is available to catalytic projects to support high growth and high-wage industries.³⁷ While recent political developments have put the future of the OCIF in question, it is still useful to understand how the tool has been used and the projects that have benefitted from the program.

OCIF is a wholly owned subsidiary of The City of Calgary that is governed by an independent Board of Directors and administered by Calgary Economic Development. The fund offers financial support to private sector companies, non-profit organizations, and public institutions proposing investments. According to OCIF's website, as of March 1, 2022, the fund has assisted 20 projects and distributed more than \$59 million in funding.³⁸

The portfolio of projects supported by OCIF includes investments in strategic sectors aligned with the vision in Calgary Economic Development's *Calgary in the New Economy* strategy to embrace innovation and technology to resolve global challenges.³⁹ To receive the non-repayable funds, applicants must demonstrate that their project aligns with the following criteria:

- Economic Benefits - Increases direct investment in Calgary and increases tax revenues.
- Job Creation - Increases quantity and quality of full-time direct and indirect jobs.
- Innovation and Sector Benefits - Fosters disruptive innovation to create competitive advantages.
- Alignment with Key Industries - Facilitates growth in key sectors in *Calgary in the New Economy*.

³⁷ "Opportunity Calgary Investment Fund." Calgary Economic Development. Accessed October 1, 2021. <https://calgaryeconomicdevelopment.com/about-us/initiatives/opportunity-calgary-investment-fund>

³⁸ "Opportunity Calgary Investment Fund." Calgary Economic Development. Accessed March 1, 2022. www.opportunitycalgary.com

³⁹ "Calgary in the New Economy." Calgary Economic Development. Accessed January 1, 2022. <https://www.calgaryeconomicdevelopment.com/assets/Reports/Research/Calgary-in-the-New-Economy-Sept-2019.pdf>

- Alignment with Strategic Initiatives - Supports government or private-sector innovation initiatives.
- Social Benefits - Provides specific benefits to Calgarians or the environment.

Companies and institutions aided by the fund include Thrive (SVG Ventures), Endeavor Canada, LodgeLink, Alberta IoT, SAIT, Harvest Builders, AltaML, Lighthouse Labs, Parkland Fuels, the University of Calgary, and Attabotics.

Examples of OCIF Applications

In 2020, OCIF announced that it would provide AltaML Inc. with up to \$3.25 million in funding over three years to create applied data science internships in artificial intelligence/machine learning (AI/ML) skill development in Calgary through hands-on, mentored work experience.

The investment is deemed to be strategic, given Alberta's long history at the forefront of AI/ML, and the applied data science internship program will be an industry-led initiative, building on and extending the province's strength in the field, and specifically shoring up capacity in Calgary.⁴⁰

Similarly, in 2018 the fund assisted ATTAbotics Inc., a Calgary-based company in the robotics sector, to support construction of two production lines (or "nodes") at a new facility in the YYC Global Logistics Park at Calgary International Airport. If its business development strategy proceeds as projected, ATTAbotics also intends to build a new corporate headquarters and research campus at the site.

ATTAbotics was approved to receive up to \$4.5 million to expand its operations in the city. The OCIF funding will support scaling up of manufacturing facilities in the city, supporting 150 new full-time positions at the company and another 15 jobs to be created in construction of new production lines for the innovative product storage and retrieval systems.

Scott Gravelle, co-founder and CEO of ATTAbotics noted, "OCIF funding was critical in determining if we would be able to scale up our manufacturing in Calgary. ... ATTAbotics is an economic engine for e-commerce operations and we are proud the systems and technology we are exporting worldwide are developed in Calgary."⁴¹

In each case, the municipality is actively investing funds to encourage the growth and expansion of companies in targeted industry clusters. The OCIF program is therefore not without risk. However, Calgary has maintained a staff of fund managers to provide professional due diligence and oversight of the program. Moreover, this degree of direct funding was developed to address the specific needs of strategic targets.

Ontario

Ontario provides a suite of programs that are specifically tailored to its target cluster industries and policy goals.

Ontario Centres of Excellence (OCE) Smart Seed Program: OCE Smart Seed Program will fund 50%, up to \$60,000, for entrepreneurs with an incorporated, Ontario-based start-up company.⁴²

40 "Opportunity Calgary Investment Fund Supports AltaML Initiative to Create AI/ML Talent Pipeline." *Calgary Economic Development*. July 22, 2020. <https://calgaryeconomicdevelopment.com/assets/Uploads/0722-OCIF-AltaML-News-Release.pdf>

41 "Opportunity Calgary Investment Fund Selects Attabotics for Funding." *Calgary Economic Development*. December 12, 2018. <https://calgaryeconomicdevelopment.com/assets/Uploads/OCIF-Media-Release-ATTAbotics2.pdf>

42 "Ontario Government Incentives." *Toronto Global*. Accessed October 1, 2021. <https://torontoglobal.ca/A-Competitive-Edge/Incentives>

Ontario Interactive Digital Media Tax Credit (OIDMTC): OIDMTC is a refundable tax credit on 40% of eligible Ontario labour expenses directly attributable to interactive digital media products and eligible marketing and distribution expenditures to a maximum of \$100,000 per product.⁴³

Ontario Media Development Corporation Export Fund: This fund provides support to cultural entrepreneurs from the book and magazine publishing, film and television production, and sound recording and interactive digital media content production industries to develop their export markets.⁴⁴

Ontario Media Development Corporation Interactive Digital Media Fund: Companies producing original, interactive digital media content for sale to the general public may qualify for up to 50% of eligible costs to a maximum of \$150,000.⁴⁵

MaRS Investment Accelerator Fund (IAF): The IAF helps build and strengthen Ontario-based businesses in the cleantech, technology, and life sciences sectors. It offers two types of funding, from \$250,000 to \$500,000, tailored to each type of applicant.⁴⁶

While the Province of Ontario does allow for the provision of local incentives for downtown revitalization and tax increment grants, the province does not have municipal tools available for business attraction and expansion of the forms under consideration in Alberta.

Québec

The Province of Québec provides targeted investment tax incentives for manufacturing and for information businesses.

Production of Multimedia Titles: A refundable tax credit is available of up to 37.5% of eligible labour expenditures to encourage the production of multimedia titles in Québec. Titles must be published on an electronic medium, controlled by software allowing interactivity, and contain a substantial volume of three of the following four types of information: text, sound, still images and animated images. The labour expenditure related to the main multimedia title with which the related title is associated must be at least \$1 million. Eligible production work refers to work carried out for the purpose of completing the production stages of the title, commencing with the design stage and indefinitely thereafter.⁴⁷

Development of E-Business: This tax measure enables specialized corporations that carry out innovative, high-value-added activities in the IT sector to obtain a tax credit of an annual maximum of \$25,000 per eligible employee. The tax credit is equal to 30% (24% refundable and 6% non-refundable) of the eligible salaries paid by the corporation to eligible employees. An eligible company must show that at least 75% of its activities are in the IT sector (as defined by a specific list of NAICS codes) and that it maintained, at all times, for a given taxation year, a minimum of six eligible full-time employees; however, specific rules apply to transfers of activities and business start-ups in Québec.⁴⁸

Project Financing: In addition to the items above, Investissement Québec has positioned itself to be able to directly assist companies in finding or sourcing financing for companies interested in building projects in the province. These tools include:

⁴³ "Ontario Government Incentives."

⁴⁴ "Ontario Government Incentives."

⁴⁵ "Ontario Government Incentives."

⁴⁶ "Ontario Government Incentives."

⁴⁷ "Tax Incentives." Investissement Québec. Accessed October 4, 2021. <https://www.investquebec.com/international/en/why-quebec/tax-incentives.html>

⁴⁸ "Tax Incentives."

- Financing of refundable tax credits
- ESSOR program ⁴⁹
- Development capital
- Project financing
- Business Assistance – Immigrant Investor Program
- Employment assistance from Emploi-Québec
- Industrial Research Assistance Program (IRAP)

Saskatchewan

The province of Saskatchewan has aggressively pursued a strategy of developing programs tied to its target sectors. A sample of relevant programs includes:

Research and Development Tax Credit: The Saskatchewan Research and Development (R&D) Tax Credit is designed to encourage private-sector R&D investment in Saskatchewan. Qualifying R&D expenditures by Saskatchewan Canadian-controlled private corporations (CCPCs) are eligible for a 10% refundable R&D tax credit for the first \$1 million annual qualifying expenditures made on or after April 1, 2017. Qualifying R&D expenditures in excess of the annual limit, as well as qualifying expenditures by other corporations are eligible for a 10% non-refundable R&D Tax Credit. The total refundable and non-refundable R&D Tax Credits that may be claimed by a corporation will be limited to \$1 million per year.⁵⁰

Saskatchewan Chemical Fertilizer Incentive (SCFI): The Saskatchewan Chemical Fertilizer Incentive (SCFI) is a non-refundable, non-transferable 15% tax credit on capital expenditures valued at \$10 million or more for newly constructed or expanded eligible chemical fertilizer production facilities in Saskatchewan. Eligible chemical fertilizer production is defined as: All processing of mineral and chemical feedstock to create single or multi-nutrient synthetic fertilizer products. This definition excludes facilities that manufacture potash fertilizer products for which potash is the primary feedstock.⁵¹

Corporation Income Tax Rebate for Primary Steel Production: This rebate provides a tax incentive for eligible primary steel producers that make a minimum capital investment of \$100 million in new or expanded productive capacity. The tax incentive for each year of a five-year rebate period will be based on the incremental Saskatchewan Corporation Income Tax payable by the corporation as a result of the new investment.

The tax incentive rebate schedule is as follows:

- 100% of the incremental tax for each of the first two years of the rebate period;
- 75% of the incremental tax for the third year of the rebate period;

⁴⁹ <https://www.investquebec.com/quebec/en/financial-products/all-our-solutions/essor.html>

⁵⁰ "Research and Development Tax Credit." Government of Saskatchewan. Accessed October 12, 2021.

<https://www.saskatchewan.ca/business/taxes-licensing-and-reporting/tax-incentives/research-and-development-tax-credit>

⁵¹ "Saskatchewan Chemical Fertilizer Incentive (SCFI)." Government of Saskatchewan. Accessed October 12, 2021.

<https://www.saskatchewan.ca/business/investment-and-economic-development/business-incentives-and-tax-credits/saskatchewan-chemical-fertilizer-incentive>

- 50% of the incremental tax for the fourth year of the rebate period; and
- 25% of the incremental tax for the fifth year of the rebate period.⁵²

Product2Market: Value-Added: The program promotes the development and expansion of small to medium-sized enterprises by supporting agri-business product development and the marketing of value-added products. The program is divided into two application-based tracks:

- **Prototype and Product Development Stream:** supports new product development, commercialization, market readiness, and promotional activities.
- **Market Development Stream:** supports Saskatchewan companies to expand their domestic and international markets through promotional and marketing activities.

Each project will be eligible for up to \$100,000 per company per year. Funds will cover 50% of eligible expenses, except where funding maximums are listed. Activities/projects cannot also be funded by another government or program.⁵³

Saskatchewan Value-added Agriculture Incentive: This program offers a non-transferable 15% rebate on capital expenditures valued at \$10 million or more for newly constructed or expanded value-added agriculture facilities in Saskatchewan. Companies apply the benefit against corporate income tax (CIT) paid and are able to claim the benefit over a three- to 10-year period once the new or expanded facility is brought into operation.

Value-added agriculture is defined as: the physical transformation or upgrading of any raw/primary agricultural product(s) or any agricultural by-product or waste into a new or upgraded product. This definition excludes facilities solely dedicated to cleaning, bagging, handling and/or storing of primary products.

Upon the commissioning of a new or expanded facility, companies apply the benefit against CIT paid and are able to claim the benefit over a three- to 10-year period. Redemption of the benefits is limited to 20% in year one after the facility enters operation, 30% in year two, and 50% in year three, following the taxation year in which a Certificate of Eligibility is issued. Remaining amounts can be carried forward for up to 10 years.

In addition to reducing the tax paid based on 15% of qualifying capital expenditures, eligible applicants will be entitled to claim any other eligible tax incentive or grant Saskatchewan may offer without impacting SVAI eligibility or impairing the ability to claim the SVAI tax credit.⁵⁴

Saskatchewan Commercial Innovation Incentive (SCII): The Saskatchewan Commercial Innovation Incentive (SCII or 'Patent Box') is a new-growth tax incentive that offers eligible corporations a reduction of the provincial Corporate Income Tax rate (CIT) to 6% for 10 consecutive years for eligible corporations that commercialize their qualifying intellectual property in Saskatchewan. Companies can extend the benefit period to 15 years if at least 50% of the related research and development in advance of commercialization occurred and was conducted in Saskatchewan.⁵⁵

⁵² "Corporation Income Tax Rebate for Primary Steel Production." Government of Saskatchewan. Accessed October 12, 2021.

<https://www.saskatchewan.ca/business/taxes-licensing-and-reporting/tax-incentives/corporation-income-tax-rebate-for-primary-steel-production>

⁵³ "Product2Market: Value-Added." Government of Saskatchewan. Accessed October 12, 2021.

<https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/agribusiness-farmers-and-ranchers/canadian-agricultural-partnership-cap/value-added-agriculture-and-agri-food-processing/product-2-market-value-added>

⁵⁴ "Saskatchewan Value-added Agriculture Incentive." Government of Saskatchewan. Accessed October 12, 2021.

⁵⁵ "Saskatchewan Commercial Innovation Incentive (SCII)." Government of Saskatchewan. Accessed October 12, 2021.

<https://www.saskatchewan.ca/business/investment-and-economic-development/business-incentives-and-tax-credits/saskatchewan-commercial-innovation-incentive>

US Locations

While multiple US locations may both compete with and provide examples for the Edmonton Metropolitan Area, the following examples showcase situations in which state programs both empower local municipalities to offer incentives and provide direct state programs. In this way, a greater level of funding is made available while at the same time ensuring the full participation and oversight of both levels of government.

Texas

Property Tax Abatement Act, Tax Code Chapter 312 (Property Tax Abatement)⁵⁶: The tax abatement is a local agreement between a taxpayer and a taxing unit that exempts all or part of the increase in the value of the real property and/or tangible personal property from taxation for a period not to exceed 10 years. Tax abatements are an economic development tool available to cities, counties, and special districts to attract new industries and to encourage the retention and development of existing businesses through property tax exemptions or reductions. School districts may not enter into abatement agreements.

Harris County (Houston Bay Area) Tax Abatement Program: Harris County's Tax Abatement Program promotes new growth, new wealth, new jobs, new opportunities, and environmental sustainability.

Basic Qualifications:

- Increase tax roll value of new real property by at least \$1 million.
- Create at least 25 new full-time permanent positions at the project site.
- Be competitively sited where senior management is actively evaluating jurisdictions, in addition to Harris County and, but for tax abatement, the project would not be constructed in Harris County.

Manufacturing Machinery and Equipment (Sales and Use Tax Exemption)⁵⁷: Leased or purchased machinery, equipment, replacement parts, and accessories that are used or consumed in the manufacturing, processing, fabricating, or repairing of tangible personal property for ultimate sale, are exempt from state and local sales and use tax. Texas businesses are exempt from paying state sales and use tax on labour for constructing new facilities. Texas businesses are exempt from paying state sales and use tax on the purchase of machinery exclusively used in processing, packing, or marketing agricultural products by the original producer at a location operated by the original producer.

Texas Enterprise Fund (Grant)⁵⁸: The Texas Enterprise Fund (TEF) awards discretionary "deal-closing" grants to companies considering a new project for which one Texas site is competing with other out-of-state sites. The fund serves as a financial incentive for those companies whose projects would contribute significant capital investment and new employment opportunities to the state's economy. To be eligible, the project must also be considering a location outside of Texas and create significant jobs, offer above-average wages, and create substantial capital investment, and there must be community involvement in the form of local economic incentive offers.

⁵⁶ "Property Tax Abatement Act, Tax Code Chapter 312 Overview" State of Texas. <https://comptroller.texas.gov/economy/local/ch312/>

⁵⁷ "Bay Area Houston Economic Partnership Incentives: State of Texas Economic Incentives."

⁵⁸ "Texas Enterprise Fund." Accessed October 13, 2021. State of Texas. <https://gov.texas.gov/business/page/texas-enterprise-fund>

Texas Enterprise Zone Program (Sales Tax Refund)⁵⁹: An enterprise project is eligible for a refund for all state sales and use taxes paid and used at the qualified business site. The total amount of any refund will continue to be predicated on investment amount and number of jobs created/retained. The refund for each designation can be an amount ranging from a minimum of \$2,500 per job to a maximum of \$7,500 per job.

Natural Gas and Electricity (Sales and Use Tax Exemption)⁶⁰: Texas companies are exempt from paying state and local sales and use tax on electricity and natural gas used in manufacturing, processing, or fabricating tangible personal property. The company must complete a “predominant use study” that shows that at least 50% of the electricity or natural gas consumed by the business directly causes a physical change to a product.

Louisiana

Industrial Tax Exemption (Property Tax Abatement): The Louisiana Industrial Ad Valorem Tax Exemption Program (ITEP) is an original state incentive program, which offers an attractive tax incentive for manufacturers who make a commitment to jobs and payroll in the state. With approval by the Board of Commerce and Industry and local governmental entities, the program provides an 80% property tax abatement for an initial term of five years and the option to renew for five additional years at 80% property tax abatement on a manufacturer’s qualifying capital investment related to the manufacturing process in the state.⁶¹

Quality Jobs Rebate (Payroll Cash Rebate): The Quality Jobs Rebate program provides a cash rebate to companies that create well-paying jobs and promote economic development. The program provides up to a 6% cash rebate of annual gross payroll for new direct jobs for up to 10 years. It provides a state sales and use tax rebate on capital expenditures or a 1.5% project facility expense rebate on the total capital investment, excluding tax-exempted items.

Covered industries include bioscience, manufacturing, software, cleantech, food technology, advanced materials, headquarters of multi-state businesses, aircraft MROs or oil & gas field service. The program can also be applied to companies that have at least 50% of annual sales out-of-state and/or to in-state customers or buyers if the product or service is resold by the purchaser to an out-of-state customer or buyer or to the federal government. Finally, the program is available if the employer is located in a parish that is within the lowest 25% of parishes based on per capita income.⁶²

Enterprise Zone Tax Credit (Jobs Incentive Tax Credit): The Enterprise Zone program is a jobs incentive program that provides Louisiana income and franchise tax credits to a new or existing business located in Louisiana creating permanent net new full-time jobs and hiring at least 50% of those net new jobs from one of four targeted groups. The benefit provides either a one-time \$3,500 or \$1,000 tax credit for each net new job created. The program also includes a rebate of state sales and use taxes paid on qualifying materials, machinery, furniture, and/or equipment purchased or a 1.5% refundable investment tax credit on the total capital investment, excluding tax-exempted items. The rebate shall not exceed \$100,000 per net new job.⁶³

⁵⁹ “Bay Area Houston Economic Partnership Incentives: State of Texas Economic Incentives.” Bay Areas Houston Economic Partnership. Accessed October 13, 2021. https://www.bayareahouston.com/content/Business_Assistance/incentives

⁶⁰ “Bay Area Houston Economic Partnership Incentives: State of Texas Economic Incentives.”

⁶¹ “Industrial Tax Exemption Program.” State of Louisiana. Accessed October 13, 2021. <https://www.opportunitylouisiana.com/business-incentives/industrial-tax-exemption>

⁶² “Louisiana Quality Jobs Rebate.” State of Louisiana, Accessed October 13, 2021. <https://www.opportunitylouisiana.com/business-incentives/quality-jobs>

⁶³ “Enterprise Zone Tax Credit.” State of Louisiana. Accessed October 13, 2021. <https://www.opportunitylouisiana.com/business-incentives/enterprise-zone>

Effect of Incentive Programs on the Edmonton Metropolitan Region's Competitive Advantage

McKinsey & Company has found that the highest payoffs from business-attraction efforts come from projects that are one part of a comprehensive strategy to boost growth within certain economic sectors and/or to address areas in which investment otherwise wouldn't happen. These efforts can drive long-term growth and competitiveness that exceed the impact of any singular business. Sector clusters create a critical mass that attracts other associated companies or those that could benefit from sharing a location or similar inputs.⁶⁴

Incentives work best when they can leverage the natural assets of a region, provide a fiscal return for the jurisdiction, and create a viable, mutually beneficial partnership between company and jurisdiction. Providing incentives can create risks that might have implications for the investment climate and overall fiscal compliance. Such a practice might encourage lobbying and rent seeking. Increasing transparency on the costs and benefits of tax incentives would, in the long run, help frame future policy. Providing a level playing field to all businesses through reasonable, broad-based taxes has been the best investment incentive in many countries.⁶⁵

General Factors⁶⁶

The EMR has several natural advantages and disadvantages that span across sectors. These are somewhat less directly susceptible to alteration through spot programs, though some adjustments may be possible.

Labour and Talent Access

Canadian immigration policy, the Alberta Advantage Immigration Strategy, low cost of living and generally high quality of life factors make attracting talent to the EMR a relatively straightforward process. Similarly, the University of Alberta, NAIT, and other postsecondary institutions provide a natural regional well from which to draw national and even international talent.

Some jurisdictions are beginning to explore incentives to individuals (rather than to companies) as a way to attract talent and boost economic competitiveness. Topeka, Kansas – through its Choose Topeka program – is offering up to \$15,000 for people who move to the city.⁶⁷ Applicants with full-time employment work with their participating local employers and relocate to Shawnee County to qualify for the incentive. The program has also been extended (at a lower rate) to apply to those who work remotely for employers outside of the region but who choose to live permanently in the region.

Saskatchewan has its own version of a talent attraction and retention program, the Graduate Retention Program (GRP). The program provides a rebate of up to \$20,000 of tuition fees paid by eligible postsecondary graduates who continue to live in Saskatchewan and who file a Saskatchewan income tax return. Saskatchewan

⁶⁴ Gonzales, Christian et al. "How State and Local Governments Win at Attracting Companies."

⁶⁵ Johnson, Lise and Toledano, Perrine. *Background Paper for the Eighth Columbia International Investment Conference on Investment Incentives: The good, the bad and the ugly, Assessing the costs, benefits and options for policy reform.*

⁶⁶ Edmonton Global. *Edmonton Global Sector Strategies.* (Edmonton: Edmonton Global, September 2020)

⁶⁷ Greater Topeka Partnership. "Choose Topeka." Accessed October 14, 2021. <https://choosetopeka.com/>

postsecondary institutions will apply on behalf of their graduates, but the program is also available to residents who attended a postsecondary institution elsewhere. Rebate rates vary with the level of education and range from \$3,000 for a one year certificate or diploma to \$20,000 for a four-year undergraduate degree.⁶⁸

While the EMR does not appear to be at significant risk in this area, it is useful to know that such tools exist should specific skills needs occur in the future.

Access to Markets

The EMR boasts access to two national rail lines, major trucking operations, and the Edmonton International Airport, which has North America's shortest flying times to Asia and is also certified for cold supply chains including nutraceutical and pharmaceutical products. The EMR has excellent access (via transportation and trade agreements) to the largest global consumer markets for major products: US, EU, and UK.

It is unclear how economic development policies would directly affect market access aside from continuing to explore potential of new markets through direct flights and/or additional cooperative freight agreements between Canadian and international carriers.

Examination by Key Target Sector⁶⁹

Edmonton Global has identified the following desired industry target sectors. Each has input and labour requirements that match the EMR's profile, and all of the target sectors represent growth industries with a strong future:

- Artificial Intelligence, particularly in both Energy and Health
- Plastics Manufacturing
- Plant Protein
- Nutraceuticals, both traditional and CBD-based
- Pharmaceuticals
- Hydrogen

Incentive and inducement programs may influence the relative competitive advantage in different ways, given the differing drivers for each sector:

⁶⁸ <https://www.saskatchewan.ca/residents/education-and-learning/graduate-retention-program>

⁶⁹ *Edmonton Global Sector Strategies, 2020*

Artificial Intelligence, particularly in both Energy and Health

The EMR (and Alberta as a whole) have significant advantages in artificial intelligence (AI) and machine learning that have resulted from decades of investment. The University of Alberta is ranked third globally for AI research, the region is home to the Alberta Machine Intelligence Institute (Amii), and the Edmonton region is part of the pan-Canadian AI Strategy.

This is coupled with the region's strengths in energy. The Edmonton Region is home to Alberta's Industrial Heartland – Canada's largest hydrocarbon processing region, including over 40 companies producing petrochemicals, fuel, and fertilizer. With respect to AI, the EMR also serves as a hub for the province's pipeline system, and AI is used to monitor the health and operations of these systems.

From the health perspective, the EMR benefits from all of the above and also from access to Alberta Health Services (Canada's largest single healthcare system), and the Alberta Real World Evidence Consortium (one of the world's most comprehensive health data sets).

The Government of Alberta's Innovation Employment Grant will support companies that invest in R&D with a grant worth up to 20% of qualifying expenditures. However, the region does not have tools available to help finance startup companies in the way that the Opportunity Calgary Investment Fund does. As a result, the region is at something of a disadvantage within the province in nurturing startup companies.

Plastics Manufacturing

As noted above, the EMR is already globally known for its energy and petrochemical prowess. The region is home to one of the world's largest populations of qualified engineers working in the oil and gas sector, including petrochemicals, and postsecondary institutions in the region have extensive experience in producing a skilled workforce for the petrochemical sector.

The region has already begun to experiment with incentives in this sector in the form of the Heartland Incentive Program (HIP) – specifically designed to also leverage the Alberta Petrochemicals Incentive Program (APIP).⁷⁰ The HIP is intended specifically to build on the region's known expertise, infrastructure, and industrial base to spur diversification in the petrochemicals and plastics sector. Further growth of this program will enhance overall cost competitiveness with other locations (particularly in the US Gulf Coast) by allowing companies new to the region to reduce their front-end tax exposure, make new investments, and bring new capabilities to the market. This in turn will provide long-term employment and tax revenue to the region's municipalities.

However, as noted in the competitive jurisdictions section of this paper, the region's competitors have similar aims and significant incentive tools at their disposal. Alberta and the municipalities of the EMR will need to continually balance whether and how incentives are strategically the most important levers as compared to other forms of competitive improvement.

⁷⁰ More information on the Alberta Petrochemicals Incentive Program is found in the Appendix.

Plant Protein

The province of Alberta and the EMR have been aggressively pursuing protein industries investment as part of the federal Protein Industries Supercluster initiative. This Government of Canada program supports research and economic development in this sector.

The University of Alberta is already ranked 33rd in the world for agriculture and food science research, and the region boasts a highly valuable asset in the form of the Food Processing Development Centre. The centre is a modern, fully equipped pilot plant and product development laboratory facility staffed with experienced food scientists, engineers, and technologists. Services are designed to strengthen and expand the capability of food processors to meet the challenges of the marketplace through application of innovative technology and the development of new or improved products and processes. Experienced food scientists, engineers, and technologists can be contracted on a day-use basis in all speciality areas from the Food Processing Development Centre.

The Government of Canada is also developing subsidies for plant-based protein investments and will support funded access to machinery for product testing and manufacturing within the Food Processing Development Centre. These programs and the facility are significant competitive advantages. However, there are no tools currently in place to specifically target investment in plant protein development and manufacturing in the region.

The EMR's natural, industrial, and asset advantages – coupled with access to the agricultural lands – are considerable. However, other jurisdictions in the US and Europe are also looking at plant-based proteins and meat substitutes. Both the US and Europe have similar institutions and jurisdictions with access similar to that available in Edmonton. Targeted programs could tip the balance in favor of any of these locations.

Pharmaceuticals and Nutraceuticals (both traditional and CBD-based)

There may be multiple angles for considering the health sciences opportunities in the region. First, the COVID-19 pandemic shone a spotlight on the issue of drug shortages that already existed around the globe and created a heightened concern over the need to secure a reliable supply chain for pharmaceuticals. Second, the world of nutraceuticals has been expanding – accelerated by the availability of CBD and related products.

The EMR already has pharmaceutical manufacturing infrastructure, which can be scaled up, allowing companies to compete for supply contracts across Canada with an estimated value of \$25–100 million.

From the CBD nutraceuticals perspective, the legalization of cannabis in Canada in 2018 has led to significant market growth among all cannabis-derived products, including CBD, which has no psychoactive effects.

There is a large concentration of cannabis producers within the Edmonton region, many with international subsidiaries and resultant distribution and production channels. National legalization allows for the use of traditional financial institutions that are federally insured, such as banks, as well as the ability to participate in the country's stock market – an opportunity not available in the US and some other markets.

Companies in these sectors benefit from a Government of Canada investment tax credit ranging from 15% to 35% for scientific research and experimental development opportunities. Also, the Government of Alberta's Innovation Employment Grant will support companies that invest in R&D with a grant worth up to 20% of qualifying expenditures. In addition to this, a \$1.26 billion investment by the Government of Canada in the Strategic Innovation Fund generates incentives for large (over \$10 million) R&D and commercialization projects.

However, the programs identified above are either national or provincial in nature. Other jurisdictions across Alberta – or Canada for some programs – can claim the same advantages.

Hydrogen

The EMR has a strong legacy of energy investment and also describes itself as an energy innovation mecca where ideas and technologies can be tested, iterated, and built out at scale. The skills, infrastructure, research capabilities, and industrial ecosystems to support new development in various energy technologies are all present in the area, and as a result the Edmonton region has found itself at the forefront of Canada's hydrogen economy – a market that is expected to eventually grow to an annual demand of \$2.3 trillion.^{71, 72}

This collaboration is already bearing fruit. In June of 2021, Air Products announced a transformative \$1.3 billion net-zero hydrogen production and liquefaction facility that is expected to be fully onstream in 2024. When the facility begins full operations, it is planned to be a cornerstone of a broader zero-carbon hydrogen network. The first phase of the project is expected to dramatically de-carbonize industry, energy, and transportation networks across western Canada and will also be an economic development draw in its own right. Future phases of this project and other parallel investments will allow the region to export hydrogen to markets like California and Asia.

Recommendations

As explored early in this paper, incentives typically become part of the site selection and location investment question later in the process when companies are:

- Computing the overall cost to establish and operate a location and comparing these costs to other locations, and
- When initial contact has been made by the company (or consultant) to the finalist location(s), beginning the negotiation process.

Hence, effective incentive programs will augment the strengths that will have already caused the location to be considered in the first place and act as a defensive safeguard against other jurisdictions' attempts to undercut competitive advantage.

Given the information above, there may be areas in which the Edmonton Metropolitan Region can develop programs that will enhance competitiveness in the exact sectors the region is targeting.

⁷¹ "Edmonton's hydrogen economy will catapult Canada into a clean energy powerhouse." *Edmonton Global*, June 17, 2021, <https://edmontonglobal.ca/edmontons-hydrogen-economy-will-catapult-canada-into-a-clean-energy-powerhouse/> Accessed November 5, 2021.

⁷² "Air Products Announces Multi-Billion Dollar Net-Zero Hydrogen Energy Complex in Edmonton, Alberta, Canada". June 6, 2021. <https://www.airproducts.com/news-center/2021/06/0609-air-products-net-zero-hydrogen-energy-complex-in-edmonton-alberta-canada>. Accessed November 5, 2021

Direct Funding

Innovation sectors like artificial intelligence, machine learning, and the applications of these to the healthcare and energy fields will not benefit as directly in the short term from programs like tax abatements or credits. Companies in these sectors are early in their lifecycles and as such may not yet be generating profits at a level where such incentives provide tangible benefit.

Instead, the municipalities of the EMR should consider introducing a program similar to the Opportunity Calgary Investment Fund (OCIF), funded by the region's participating municipalities. Experience shows that the OCIF created an ability to directly participate in funding desirable projects. Full reporting of companies and projects assisted by the fund may be found on the OCIF's website.⁷³

While such a program faces the hurdles of obtaining funding, and ensuring proper due diligence and oversight, it is a way to directly assist innovative companies in industry sectors that the region has identified as an opportunity for the future.

Tax Abatement for Capital Investment

The Alberta Petrochemical Incentives Program (APIP) – coupled with the changes to the Municipal Government Act (MGA) embodied in the Municipal Government (Property Tax Incentives) Amendment Act and the Municipal Government (Machinery and Equipment Tax Incentives) Amendment Act – has provided a useful framework for both the province and Alberta's municipalities to thoughtfully use tax policy as a tool to attract large capital investment. The same tool can be modified to also attract and accommodate other important sectors, such as agricultural processing and hydrogen.

Such tools are also appropriate for other large capital investment sectors, including the targeted sectors of plant protein, value-added agriculture, nutraceuticals, pharmaceuticals, and plastics manufacturing. Small modifications or additions to the APIP – or a new program built on the lessons from APIP – could dramatically increase Alberta's profile in these market sectors and provide a foundation for collaboration between public and private sectors.

Importantly, both the APIP and the MGA tax incentive programs are performance-based, meaning that while they provide real and tangible benefit to employers, they do not extend funds to companies until and unless they have met the requirements of the program. As such, risk is appropriately shared between the two parties for these large projects.

Programs like APIP and HIP are excellent and proven examples of effective, predictable, and responsible incentive programs that provide mutual benefit for companies and for Alberta municipalities. While these have been limited to applications for the energy and petrochemical sectors to this point, Alberta and the municipalities of the EMR should examine whether they may also be applied to other critical target sectors, such as plant protein and hydrogen.

⁷³ Accessed January 10, 2022. <https://www.opportunitycalgary.com/>.

General

The above items all suggest specific actions for sector-based programs based on the needs of those sectors. Regardless of the sector or the specific tool applied, research and experience also suggest that the following be considered as foundational values when designing and evaluating programs:

Relevance – As noted with the program suggestions above, different companies will likely have different needs based on where they are in their corporate life cycles and their general business operations. Any program that wishes to influence the location decisions of a company must be tailored to address specific business needs.

Predictability – The private sector values predictability and stability when evaluating locations for future investments. The province's experimentation in economic development programs is understandable given the need to find tools that will serve the needs of an evolving regional economy. However, ongoing changes to the province's business attraction program toolbox can create not only confusion but skepticism about overall business friendliness and readiness.

Leverage – Where possible, local incentive programs should leverage or be joined up with complementary programs available through provincial or federal sources. Doing so ensures alignment among programs, but more importantly ensures that a greater overall sum is available to competitive projects.

Transparency – Whenever public assistance is offered or provided to the private sector, taxpayers will have a legitimate need to understand how and why that money is being used. They will also expect to understand the return on that investment over time. Any agency providing incentives should be prepared to document the process by which incentives are granted, make general criteria known for each deal, and report back on results as progress is made and awards given.⁷⁴

⁷⁴ Johnson, Lise and Toledano, Perrine. *Background Paper for the Eighth Columbia International Investment Conference on Investment Incentives: The good, the bad and the ugly, Assessing the costs, benefits and options for policy reform*

Appendix: Alberta Programs

Alberta's own assistance programs have undergone considerable change over the past several years as the province has studied and examined different strategies for investment attraction.

Current Programs

Alberta's current suite of incentive programs has been adjusted and changed over time to reflect the priorities of each administration. Work has also been done to attempt to tailor tools to the perceived needs of the province's strategic target clusters.

Canada-Alberta Job Grant

The Canada-Alberta Job Grant is a training program available to private and non-profit employers to fund eligible training costs. Funding is provided by the Government of Canada through the Workforce Development Agreement, and employers design the training programs and determine which employees receive training. Government contributes two-thirds of the cost to a maximum of \$10,000 per trainee per fiscal year. If a company hires and trains an unemployed Albertan, up to 100% of training costs could be covered, up to \$15,000 per trainee. Individual employers have a cap of \$300,000 for the total funding they can receive per fiscal year. This ensures that funding is available for as many Alberta employers as possible.

The program is available for direct training costs only, including:

- tuition fees or instructional fees charged by the training provider,
- mandatory student fees,
- examination fees,
- textbooks or software,
- other required materials directly relevant to the training course and distinct from materials required to run the employer's business, and
- eligible travel cost for participant and trainers when training is over 100 km one way within Alberta for small- and medium-sized organizations.

Employee wages cannot be reimbursed through the grant and Income Support is not available for workers who are in grant-funded training.

Employers are responsible for finding appropriate training providers and programs. Training providers must be third-party trainers separate and distinct from the employer. The employer may not act as the training provider and the training provider may not employ the individual in training. Training must be a main business activity of the training provider.⁷⁵

Innovation Employment Grant

Alberta's Innovation Employment Grant is targeted at small- and medium-sized businesses that invest in R&D with a grant worth up to 20% of qualifying expenditures. The program promotes investment and diversification by focusing on small- and medium-sized firms in the earlier stages of operation, when they might not yet be profitable.

The grant provides qualified corporations with:

- An 8% payment for eligible R&D spending carried out in Alberta, up to the corporation's base level of spending.
- An enhanced 20% payment for eligible R&D spending that exceeds the corporation's base spending level.

Firms with \$50 million or more in taxable capital are not eligible for the grant. The grant will also phase out incrementally for firms with between \$10 million and \$50 million in taxable capital to maintain the focus on small- and medium-sized companies. Eligible expenditures must have been incurred in Alberta after December 31, 2020, and match those that qualify for the federal Scientific Research and Experimental Development Tax Incentive Program.⁷⁶

Alberta Petrochemicals Incentive Program

The Alberta Petrochemicals Incentive Program (APIP) replaces the Petroleum Diversification Program and is targeted at the global petrochemical sector. The intent is to grow from the province's existing strength in oil and gas and to encourage economic diversification.

Key features of the program include:

- A 5- or 10-year program period, depending on the scope of the project, during which eligible projects must be built and operational to receive funding.
- An open and transparent approach, whereby every project submitted that meets the program's criteria will receive funding once built and operational.
- Grants worth 12% of a project's eligible capital costs will be issued to companies after projects are operational. Grants allow companies to account for the full value of the incentive provided when calculating their project's return on investment.
- Better alignment with typical investment cycles by making funding available throughout the program's duration.

⁷⁵ "Canada-Alberta Job Grant." Accessed October 1, 2021. <https://www.alberta.ca/canada-alberta-job-grant.aspx>

⁷⁶ "Innovation Employment Grant." Accessed October 1, 2021. <https://www.alberta.ca/innovation-employment-grant.aspx>

The project must be physically located and create permanent jobs in Alberta, cost at least \$50 million, and use natural gas, natural gas liquids, or petrochemical intermediaries such as ethylene, propylene, benzene, etc. in the manufacturing of its own products. New facilities, brownfields, and expansions on existing facilities are eligible for the program.⁷⁷

Film and Television Tax Credit

Alberta's Film and Television Tax Credit (FTTC) offers a refundable provincial tax credit certificate on eligible Alberta production and labour costs to corporations that produce films, television series, and other eligible screen-based productions in the province.

Applicants can apply for either a 22% or a 30% tax credit certificate. In addition to the basic eligibility requirements, productions applying for a 30% tax credit must also:

- Be owned (at least 50%) by Alberta-based shareholders; this includes proportionate financial control and proportionate profit participation.
- Have at least one Alberta-based producer with a single card credit recognition.
- Have the production's copyright held, at least in part, by an Alberta-based individual partnership or corporation at the time of application and for a minimum of 10 years following the completion of production.
- Spend at least 60% of the total production costs in Alberta or spend at least 70% of the total production salary or wages on Alberta-based individuals.

Applications that do not meet the above criteria may be eligible for a 22% tax credit certificate provided they meet the eligibility criteria for corporations.

International treaty co-productions may also be eligible for a 30% tax credit certificate if they have at least one Alberta-based producer with a single card credit recognition and spend at least 60% of the total production costs in Alberta or spend at least 70% of the total production salary or wages on Alberta-based individuals.⁷⁸

⁷⁷ "Alberta Petrochemicals Incentive Program." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/alberta-petrochemicals-incentive-program.aspx>

⁷⁸ "Film and Television Tax Credit." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/film-television-tax-credit.aspx>

Closed Programs

Several recent, but no longer available programs include:

Capital Investment Tax Credit

The Capital Investment Tax Credit (CITC) was a two-year program that provided a non-refundable tax credit of 10% of eligible capital expenditures, up to \$5 million. The CITC was available to companies involved in the activities of manufacturing, processing and tourism infrastructure making an investment of \$1 million or more. The eligible costs under this program include the purchase of machinery, equipment, and buildings. The program closed as of October 2019.¹⁹

Petrochemicals Diversification Program

The Petrochemicals Diversification Program (PDP) was created as part of the Alberta government's continued action to create jobs, attract investment, and diversify Alberta's economy. It encouraged companies to invest in the development of new Alberta petrochemical facilities by providing incentives through royalty credits.

The program operated for two distinct rounds, with slightly different emphases. The first round of the program was announced in February 2016, targeting methane and propane upgrading. Two projects were approved in a competitive process, receiving up to \$500 million in royalty credits. In December 2017, Inter Pipeline, based in Calgary, announced it had approved the construction of the company's proposed \$3.6 billion Heartland Petrochemical Complex. One of the facilities in this complex, the propane dehydrogenation plant, was approved to receive up to \$200 million in royalty credits under the PDP. The other successful project, Canada Kuwait Petrochemical Corporation's \$4.5 billion propane dehydrogenation and polypropylene complex, was confirmed in February 2019.

The second round of the program was developed as a response to the report from the Energy Diversification Advisory Committee. This second round broadened the scope of the program to include ethane and made \$1.1 billion available in royalty credits. It was felt that the PDP and feedstock infrastructure program were complementary in that investments in new ethane processing would likely require investments in new ethane supply in Alberta. This is because Alberta's ethane supply and demand is currently balanced. This change was designed to expand Alberta's petrochemical sector, increase the supply of natural gas liquids to encourage investment in additional petrochemical processing and, ultimately, diversify Alberta's energy sector.

The call for applications for round two closed on October 1, 2018.^{80, 81, 82}

⁷⁹ "Capital Investment Tax Credit (CITC)," Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/capital-investment-tax-credit.aspx>

⁸⁰ "Energy Petrochemical Diversification Factsheet" (Government of Alberta, November 2018)

⁸¹ "Petrochemicals Diversification Program." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/energy-petrochemical-diversification-program.aspx>

⁸² CAIC "CIAC welcomes CKPC's \$4.5 billion investment in Alberta." Chemistry Industry Association of Canada. February 4, 2019. <https://canadianchemistry.ca/ciac-welcomes-ckpcs-4-5-billion-investment-in-alberta>

Scientific Research and Experimental Development Tax Credit

Alberta's Scientific Research and Experimental Development (SR&ED) Tax Credit was administered by the Alberta Ministry of Finance and Enterprise and is refundable at the rate of 10% on up to \$4 million in eligible expenditures of a qualified corporation, for a maximum credit of \$400,000. The credit was available to corporations with a permanent establishment in Alberta, for SR&ED activities carried out after December 31, 2008, and before January 1, 2020.⁸³

The Alberta Investor Tax Credit (AITC)

The Alberta Investor Tax Credit offered a 30% tax credit certificate to investors who provided equity capital to Alberta small businesses doing research, development, or commercialization of new technology, products, or processes. The credit was also available to businesses engaged in interactive digital media development, video post-production, digital animation, or tourism.

Tax credits were available on eligible investments made between April 14, 2016 and December 31, 2019. The program was discontinued effective March 30, 2020.⁸⁴

Interactive Digital Media Tax Credit (IDMTC)

The IDMTC was a refundable tax credit equivalent to 25% of the labour costs associated with an interactive digital media activity. Eligible corporations hiring from under-represented groups were also able to claim an additional tax credit of up to 5% of all eligible costs through the diversity and inclusion program component.⁸⁵

The provincial government announced the termination of the program in October of 2019. Interactive Arts Alberta reported that the loss of the program was keenly felt in the sector and that potential investors saw the program closure as a warning sign. East Side Games stated that they had been actively considering an expansion to Edmonton or Calgary but decided to search elsewhere once the program was terminated. Prior program successes include a doubling of employment (to 50 employees) by the video game developer Beamdog, and the growth of technology company Improbable's new Alberta-based branch from 4 employees to 70.⁸⁶

⁸³ "Summary of Provincial and Territorial Research and Development (R&D) Tax Credits." Government of Canada. Accessed October 1, 2021. <https://www.canada.ca/en/revenue-agency/services/scientific-research-experimental-development-tax-incentive-program/summary-provincial-territorial-research-development-tax-credits-december-31-2016.html#lbrt>

⁸⁴ "Alberta Investor Tax Credit (AITC)." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/alberta-investor-tax-credit.aspx>

⁸⁵ "Interactive Digital Media Tax Credit (IDMTC) Program Guidelines." Government of Alberta, January 2019.

⁸⁶ "Loss of Interactive Digital Media Tax Credit Will Cost Albertan Jobs." Interactive Arts Alberta. October 28, 2019. <https://interactiveartsalberta.org/2019/10/28/loss-of-interactive-digital-media-tax-credit-will-cost-albertan-jobs/>

Bibliography

"Air Products Announces Multi-Billion Dollar Net-Zero Hydrogen Energy Complex in Edmonton, Alberta, Canada". June 6, 2021. Accessed November 5, 2021
<https://www.airproducts.com/news-center/2021/06/0609-air-products-net-zero-hydrogen-energy-complex-in-edmonton-alberta-canada>

"Alberta Investor Tax Credit (AITC)." Government of Alberta. Accessed October 1, 2021.
<https://www.alberta.ca/alberta-investor-tax-credit.aspx>

"Alberta Petrochemicals Incentive Program." Government of Alberta. Accessed October 1, 2021.
<https://www.alberta.ca/alberta-petrochemicals-incentive-program.aspx>

Barovick, Barry and Steele, Christopher "The Location and Site Selection Decision Process: Meeting the Strategic and Tactical Needs of the Users of Corporate Real Estate", *Journal of Corporate Real Estate*, Vol. 3 No. 4. September 2001.

"Bay Area Houston Economic Partnership Incentives." Bay Area Houston Economic Partnership. Accessed October 13, 2021. https://www.bayareahouston.com/content/Business_Assistance/incentives

"Business in Costa Rica: Intel Outside." 2014. Economist, April 19

"Bylaw NO. 1970-20 of the City of Wetaskiwin in the Province of Alberta: A Bylaw to Provide Non-Residential Property Tax Incentives for New Industrial and Commercial Development and Expansions." City of Wetaskiwin.

"Calgary in the New Economy." Calgary Economic Development. Accessed January 1, 2022.
<https://www.calgaryeconomicdevelopment.com/assets/Reports/Research/Calgary-in-the-New-Economy-Sept-2019.pdf>.

"Canada-Alberta Job Grant." Government of Alberta. Accessed October 1, 2021.
<https://www.alberta.ca/canada-alberta-job-grant.aspx>

"Capital Investment Tax Credit (CITC)." Government of Alberta. Accessed October 1, 2021.
<https://www.alberta.ca/capital-investment-tax-credit.aspx>

Chapman, Jeff. "How to Inform Policy Choices - Evaluating State Tax Incentives." Pew Charitable Trusts, April 2014.

"Choose Topeka." Greater Topeka Partnership. Accessed October 14, 2021. <https://choosetopeka.com/>

CIAC. "CIAC welcomes CKPC's \$4.5 billion investment in Alberta." Chemistry Industry Association of Canada. February 4, 2019. <https://canadianchemistry.ca/ciac-welcomes-ckpcs-4-5-billion-investment-in-alberta>.

CINDE. 2015. Costa Rican Investment Promotion Agency, accessed September 15, 2015,
<http://www.cinde.org/en>

"Corporation Income Tax Rebate for Primary Steel Production." Government of Saskatchewan. Accessed October 12, 2021. <https://www.saskatchewan.ca/business/taxes-licensing-and-reporting/tax-incentives/corporation-income-tax-rebate-for-primary-steel-production>.

Cronin, Lionel. "Relocating Your Business: Upsides and Downsides." April 6, 2021.
<https://www.commercialriskeurope.com/relocating-your-business/>

Davidson, Charles, "Economic Development Incentives Keep Flowing, Despite Uncertain Benefits." November 2018. <https://www.atlantafed.org/economy-matters/regional-economics/2018/11/13/economic-development-incentives-keep-flowing-despite-uncertain-benefits>.

Edmonton Global. *Edmonton Global Sector Strategies*. Edmonton: Edmonton Global, September 2020.

"Edmonton's hydrogen economy will catapult Canada into a clean energy powerhouse." Edmonton Global, June 17, 2021, Accessed November 5, 2021. <https://edmontonglobal.ca/edmontons-hydrogen-economy-will-catapult-canada-into-a-clean-energy-powerhouse/>

"Energy Petrochemical Diversification Factsheet." Government of Alberta, November 2018.

"Enterprise Zone Tax Credit." State of Louisiana. Accessed October 13, 2021. <https://www.opportunitylouisiana.com/business-incentives/enterprise-zone>

Expansion Management. "Top 10 Reasons Why Businesses Relocate." November 11, 2014. <https://mixedusemasterplancommunity.com/top-10-reasons-why-businesses-relocate/>

"Film and Television Tax Credit." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/film-television-tax-credit.aspx>

Francis, Norton. "The Perils of Tax Incentives for Economic Development." Accessed September 21, 2021. <https://www.taxpolicycenter.org/taxvox/perils-tax-incentives-economic-development>

Gambale, Geraldine. "35th Annual Corporate Survey: Effects of Global Pandemic Reflected in Executives' Site and Facility Plans." Area Development Magazine. Q1 2021. <https://www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2021/35th-annual-corporate-survey.shtml>

Gonzales, Christian; Kerlin, Mike; Schaff, Rachel; and Tucker-Ray, Sarah. "How State and Local Governments Win at Attracting Companies." Accessed September 21, 2021. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/how-state-and-local-governments-win-at-attracting-companies>

Greyhill Advisors "The Site Selection Process" Accessed September 21, 2021. <http://www.greyhilladvisors.com/site-selection-process>

Hickey, David. "How are Uncertain Times Altering Company Location Strategies?" Area Development Magazine. Q3 2020. <https://www.areadevelopment.com/corporate-site-selection-factors/Q3-2020/changing-markets-in-uncertain-times.shtml>.

"Industrial Tax Exemption Program." State of Louisiana. Accessed October 13, 2021. <https://www.opportunitylouisiana.com/business-incentives/industrial-tax-exemption>

"Innovation Employment Grant." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/innovation-employment-grant.aspx>

"Interactive Digital Media Tax Credit (IDMTC) Program Guidelines." Government of Alberta, January 2019.

Jensen, Nathan "The Effect of Economic Development Incentives and Clawback Provisions on Job Creation: A Pre-registered Evaluation of Maryland and Virginia Programs." Research and Politics. Austin, TX: April-June 2017.

"Job Creation Tax Cut." Government of Alberta. Accessed October 10, 2021. <https://www.alberta.ca/job-creation-tax-cut.aspx>

Johnson, Lise and Toledano, Perrine. *Background Paper for the Eighth Columbia International Investment Conference on Investment Incentives: The good, the bad and the ugly, Assessing the costs, benefits and options for policy reform*. New York: Columbia University, 2013

Krakoff, Charles. "Good Money After Bad: Why Government Should Not Fund Private Business." Emerging Markets Outlook, Accessed May 30, 2015. <http://www.emergingmarketsoutlook.com/?p=1854>

LeRoy, Greg. "Good Jobs First Analysis, Governmental Accounting Standards Board (GASB) Statement No. 77 on Tax Abatement Disclosures [a.k.a. Economic Development Tax Breaks]." Updated April 28, 2017. <https://www.goodjobsfirst.org/GASB77Analysis>

"Loss of Interactive Digital Media Tax Credit Will Cost Albertan Jobs." Interactive Arts Alberta. October 28, 2019. <https://interactiveartsalberta.org/2019/10/28/loss-of-interactive-digital-media-tax-credit-will-cost-albertan-jobs/>

"Louisiana Quality Jobs Rebate." State of Louisiana, Accessed October 13, 2021. <https://www.opportunitylouisiana.com/business-incentives/quality-jobs>

Magill, Chris. "Understanding Economic Incentives in Site Selection" Area Development Magazine, Q2 2015. <https://www.areadevelopment.com/taxesIncentives/Q2-2015/site-selectors-understanding-available-incentives-272721.shtml>

OECD. *Checklist for Foreign Direct Investment Policies*. Paris: Organisation for Economic Cooperation and Development, 2003.

"Ontario Government Incentives." Toronto Global. Accessed October 1, 2021. <https://torontoglobal.ca/A-Competitive-Edge/Incentives>

"Opportunity Calgary Investment Fund." Calgary Economic Development. Accessed October 1, 2021. <https://calgaryeconomicdevelopment.com/about-us/initiatives/opportunity-calgary-investment-fund>

"Opportunity Calgary Investment Fund Selects Attabotics for Funding." Calgary Economic Development. December 12, 2018. <https://calgaryeconomicdevelopment.com/assets/Uploads/OCIF-Media-Release-ATTAbotics2.pdf>

"Opportunity Calgary Investment Fund Supports AltaML Initiative to Create AI/ML Talent Pipeline." Calgary Economic Development. July 22, 2020. <https://calgaryeconomicdevelopment.com/assets/Uploads/0722-OCIF-AltaML-News-Release.pdf>

Parilla, Joseph and Liu, Sifan. "Examining the Local Value of Economic Development Incentives: Evidence from four U.S. cities." Brookings Institution, March 2018.

"Petrochemicals Diversification Program." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/petrochemicals-diversification-program.aspx>

Pew Trusts. "What Factors Influence the Effectiveness of Business Incentives?" Pew Charitable Trusts issue brief, April 4, 2019. <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/04/what-factors-influence-the-effectiveness-of-business-incentives>.

"Product2Market: Value-Added." Government of Saskatchewan. Accessed October 12, 2021. <https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/agribusiness-farmers-and-ranchers/canadian-agricultural-partnership-cap/value-added-agriculture-and-agri-food-processing/product-2-market-value-added>.

"Property Tax Abatement Act, Tax Code Chapter 312 Overview" State of Texas. <https://comptroller.texas.gov/economy/local/ch312/>.

"Property Tax Incentives." Government of Alberta. Accessed October 1, 2021. <https://www.alberta.ca/property-tax-incentives.aspx>

"Research and Development Tax Credit." Government of Saskatchewan. Accessed October 12, 2021. <https://www.saskatchewan.ca/business/taxes-licensing-and-reporting/tax-incentives/research-and-development-tax-credit>

“Review the Business Climate.” City of Wetaskiwin. Accessed October 1, 2021. <https://wetaskiwin.ecdev.org/business-climate>

Sallee, C. M. *Review of Kentucky’s Economic Development Incentives*. Chicago: Anderson Economic Group, 2012.

“Saskatchewan Chemical Fertilizer Incentive (SCFI).” Government of Saskatchewan. Accessed October 12, 2021. <https://www.saskatchewan.ca/business/investment-and-economic-development/business-incentives-and-tax-credits/saskatchewan-chemical-fertilizer-incentive>.

“Saskatchewan Commercial Innovation Incentive (SCII).” Government of Saskatchewan. Accessed October 12, 2021. <https://www.saskatchewan.ca/business/investment-and-economic-development/business-incentives-and-tax-credits/saskatchewan-commercial-innovation-incentive>.

“Saskatchewan Value-added Agriculture Incentive.” Government of Saskatchewan. Accessed October 12, 2021. <https://www.saskatchewan.ca/business/investment-and-economic-development/business-incentives-and-tax-credits/saskatchewan-value-added-agriculture-incentive>.

Schmidt, Ulrich. “Of This You Can Be Certain: Why Location Does Matter for Business Operations.” *Site Selection Magazine*. November, 2015. <https://siteselection.com/issues/2015/nov/incentives.cfm>

Spar, D. “Attracting High Technology Investment: Intel’s Costa Rican Plant.” *Foreign Investment Advisory Service Occasional Paper No. 11*. Washington DC: World Bank, 1998

“Summary of Provincial and Territorial Research and Development (R&D) Tax Credits.” Government of Canada. Accessed October 1, 2021. <https://www.canada.ca/en/revenue-agency/services/scientific-research-experimental-development-tax-incentive-program/summary-provincial-territorial-research-development-tax-credits-december-31-2016.html#lbrt>

“Tax Incentives.” Investissement Quebec. Accessed October 4, 2021. <https://www.investquebec.com/international/en/why-quebec/tax-incentives.html>

Tavares-Lehmann, Teresa; Toledano, Perrine; Johnson, Lise; and Sachs, Lisa. *Rethinking Investment Incentives: Trends and Policy Options*. New York: Columbia University Press, 2016

“Texas Enterprise Fund.” Accessed October 13, 2021. State of Texas. <https://gov.texas.gov/business/page/texas-enterprise-fund>.

The Conference Board of Canada. *Edmonton Metropolitan Region Scorecard on Prosperity 2019*. Edmonton: The Conference Board of Canada, 2019.

“The Opportunity – Investor Overview.” Alberta’s Industrial Heartland Association. Accessed October 1, 2021. <https://industrialheartland.com/opportunity/>

“Wetaskiwin Initiative to Boost New Industrial Developments and Expansions.” *Pipestone Flyer*. August 10, 2020. <https://www.pipestoneflyer.ca/marketplace/tax-incentives-by-law-aims-to-attract-new-industrial-developments-and-expansions-in-wetaskiwin/>



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