

**EVALUATION OF THE STRATEGIC  
INVESTMENTS FOR NORTHERN ECONOMIC  
DEVELOPMENT  
FINAL REPORT**

Evaluation, Performance Measurement and Review  
Audit and Evaluation Sector  
Indian and Northern Affairs Canada

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## **EXECUTIVE SUMMARY**

### **Overview**

The Strategic Investments in Northern Economic Development Program (SINED or “the program”) is a suite of northern economic development initiatives. Its goal is “to promote the economic development of the North, in order to strengthen territorial economies and increase participation by Northerners.”<sup>1</sup>

Under the federal Transfer Payments Policy, the terms and conditions of all federal transfer payment programs must be renewed every five years. Funding for SINED’s main element expires on March 31, 2009, and the program committed to Treasury Board to conduct a process evaluation by the fall of 2008.

The SINED evaluation is a formative evaluation and, as a result, focuses primarily on issues of design and delivery and secondarily on the identification of program outcomes. Because of the short operating time of the SINED program, this formative evaluation was not anticipated to show significant results in the area of impacts.

### **The SINED Program**

SINED is an extension of programming initiated in the mid-eighties and nineties, including the Territorial Economic Development Agreements and the previously stand-alone Innovation and Knowledge Fund (I&K) program, in particular. In fact, the evaluation of the I&K guided the design and delivery of SINED. SINED was approved in May 2005 and funding ends March 2009.

SINED is an umbrella program comprised of three components:

- ▶ The Innovations and Knowledge Fund (I&K) assists northern residents to “participate in, and benefit from, innovation and the knowledge-based economy”
- ▶ The Targeted Investment Program (TIP) supports projects selected in accordance with an investment plan for each territory, which has been developed with input from Territorial and Aboriginal governments, other federal departments, and other diverse stakeholders.
- ▶ The Partnership and Advisory Forums (PAF) funds stakeholder groups to address specific developmental impacts in the Northwest Territories

Overall, the program supports four program objectives or pillars:

- ▶ strengthening the driver sectors of territorial economies
- ▶ broadening the economic base of each territory
- ▶ strengthening Northerners' abilities to take advantage of economic opportunities
- ▶ increasing coordination amongst partners and programs.<sup>2</sup>

The evaluation draws on several lines of evidence including a review of program and project files, site visits to each of the three territories, 41 key informant interviews, 9 case studies of funded projects (3 per territory), and a review of the literature, documents and administrative data and files.

## **Evaluation findings and conclusions**

### **Program rationale**

The evaluation revealed that the Government of Canada has a continuing role to play in easing the boom-bust cycle, correcting market imbalances, and establishing the conditions which allow sustained economic growth to take place. This is especially true in the North where economic development faces a number of challenges including a heavy emphasis on resource extraction and exposure to the cyclical nature of these industries; a climate and remoteness that limits access and raises costs of all forms of economic activity; and issues related to infrastructure and local capacity. SINED plays two roles: first, it funds interventions that support sustainable economic development and second, it invests directly in business.

### **Design and delivery**

SINED investment decisions are driven by Investment Plans in each of the territories. As noted above, these plans are developed with input from Territorial and Aboriginal governments, other federal departments, and other diverse stakeholders. This practice ensures that SINED investments are well coordinated with local economic development efforts. A limitation of the current Investment Plans is that the results chain that links specific investments to sustained economic growth is not well articulated. While the plans are linked to SINED investment areas, the connection to SINED outcomes is not provided.

The delivery of SINED programs has been effectively adapted to fit conditions in the North. The limited capacity of local businesses/NGOs to develop and deliver "fundable" project ideas was not entirely anticipated. In response, Economic Development Officers took on an expanded role in which they worked more closely with project proponents, external consultants and the business community to help project proponents develop and deliver project ideas. Some organizations, such as Territorial governments, loans funds, and Community Futures corporations, have fewer issues with capacity, are viewed as reliable partners, and receive substantial shares of support.

The primary barrier to program delivery identified by key informants was the disbursement of funds. The climate, remoteness, and terrain of the territories create limited windows of opportunity for project development. Proponents often must advance their own funds or delay the start of a project while awaiting approvals. An issue identified on the Program side, is that suitable projects do not arrive in a continuous and even flow. The current funding structure does

not allow SINED to commit funding beyond a two to three year time frame, nor does it have the flexibility to allow the programs to respond to new opportunities or changes in a timely manner.

## **Impacts**

The evaluation demonstrated that SINED has clear long-run objectives as stated in the program documentation. All managers and personnel interviewed understand that the goal of the program is to increase the capacity of residents and businesses in the North, augment their participation in paid employment, and expand markets, especially increasing connections with the rest of Canada and the world. However, the results chain that links specific investments to sustained economic growth is not well articulated. There is no program-specific logic model. In addition, measures of project success are few and difficult to measure.

SINED maintains a number of processes to track projects which allows the program to meet its reporting requirements. However, much of the reporting focuses on ensuring that funding recipients report on outputs and meet rather narrow fiscal accountabilities. While this practice is important, it does not support results-based management. The terms and conditions of project support do not always specify outcomes that align with program goals, and the reporting gives an inconsistent account of outcomes achieved. Existing reports allow regional management to identify individual successes; however there are no mechanisms for region-wide or program-wide roll up. Therefore it is difficult for management to obtain a comprehensive and concise perspective on impact. It was noted that at a regional level, even if such a system was in place, there are insufficient resources to undertake this type of aggregation.

The evaluation case studies reveal some progress on early results. For example, the dāna Näye Ventures Loan Fund case study notes that the additional funding provided through SINED provided for 19 additional loans. The demand for preliminary mapping products in the Yukon has raised hopes for an increase in geological investment. Some trainees from the Mine Training Simulator are now employed with two of three mining companies in the Northwest Territories. The offshore Turbot, Shrimp, and Char Assessment, although only in the early stages, had already identified additional fish stocks.

Everyone acknowledges that economic development in the North is a long-term proposition. For SINED and INAC, this means that contributions and investments need to be monitored well beyond the cessation of funding. The current project information is oriented only to the life of SINED. No plans exist either to follow projects over a longer period or to retrospectively examine earlier investments to validate assumptions about the impact of “traditional” investments in geosciences.

**Evaluation recommendations**

1. Create a program-specific RMAF and logic model which clearly defines the connections between funded activities and expected outcomes. The performance measurement strategy should include indicators and a plan to determine how longer-term results will be measured.
2. Establish closer linkages between individual projects, Investment Plans and SINED outcomes and ensure that they are aligned with SINED strategic objectives.
3. Consider options for aggregating project data for reporting to program management and for use in future evaluations.
4. Review operating resources to ensure effective monitoring and professional development of staff.
5. Explore options that would allow for greater flexibility and strategic investment in multi-year funding activities
6. Continue to work with federal and Territorial governments and other private sector and non-governmental organizations engaged in economic development in the North.

## **1.0 Introduction and guide to the final report**

The Strategic Investments in Northern Economic Development (SINED or “the program”) is a suite of northern economic development initiatives. The goal of SINED is to promote the economic development of the North, in order to strengthen territorial economies and increase participation by Northerners”<sup>3</sup>.

Under the federal Transfer Payments Policy, the terms and conditions of all federal transfer payment programs must be renewed every five years. Funding for SINED’s main element expires on March 31, 2009, and the program committed to Treasury Board to conduct a process evaluation by the fall of 2008. The evaluation was to cover activity between April 2005 and April 2008; however, as investment activity only started in late 2005, the evaluation effectively covers slightly more than two years of activity. This report presents the findings of the evaluation and will be used by INAC to inform program renewal.

It is important to note that a process or formative evaluation focuses more on issues of design and delivery than on the identification of outcomes. The advantage of conducting a formative evaluation in a new or restructured program is that the evaluation findings can allow for improvements in delivery to maximize results as well as improvements in performance measurement and reporting that can enhance the potential of identifying success in future impact evaluations.

### **Guide to the final report**

Section 2 of this report briefly reviews the SINED program in the context of the three Northern economies. The methodology appears in Section 3, while Section 4 presents the findings arranged by evaluation theme and question. Finally, conclusions follow in Section 5.

## **2.0 The SINED program**

### **2.1 Origins**

SINED represents an extension of regional programming initiated in the mid-eighties and nineties in the form of Territorial Economic Development Agreements (EDAs). These agreements reflect an attempt to develop a new direction to regional economic policy in the North (and elsewhere in Canada) and followed open challenges by the MacDonal commission (1985) to pre-existing models of regional economic development. The real antecedent to SINED is the Innovation and Knowledge Fund (I&K) (2000 – 04). The 2004 evaluation of I&K provided a foundation for SINED.

One of the responsibilities of the Northern Affairs Organization (NAO) is Northern economic development pursuant to Section 5 (b) of the Department of Indian Affairs and Northern Development (DIAND) Act. SINED is the main initiative within the Northern Economic Development Directorate of the Northern Strategic Policy Branch of the Northern Affairs Organization. It consists of an umbrella program comprised of two main components.

- ▶ The Innovations and Knowledge Fund (I&K), with an annual budget of \$1.1 million, funds projects designed to assist northern residents to “participate in, and benefit from, innovation and the knowledge-based economy.”

- ▶ The Targeted Investment Program (TIP) makes \$27 million available to each of the three territories over the five years of the agreement. Projects are selected in accordance with an investment plan for each territory. These plans are developed with input from Territorial and Aboriginal governments, other federal departments, and other diverse stakeholders.

A third component, the Partnership and Advisory Forums (PAF), with a total annual budget of \$79,000, funds stakeholder groups to address specific developmental impacts. While it is technically a component of SINED, it is quite small and is only available in the Northwest Territories.

## 2.2 Program goals

Overall the program supports four program objectives or pillars:

- ▶ strengthening the driver sectors of territorial economies
- ▶ broadening the economic base of each territory
- ▶ strengthening Northerners' abilities to take advantage of economic opportunities
- ▶ increasing coordination amongst partners and programs<sup>4</sup>.

Treasury Board approved the program on May 30, 2005. In total, the federal government committed approximately \$85 million in program spending. Table 1 shows the distribution of this funding.

<b>Table 1: SINED Funding 2005–06 to 2009–10</b>					
	<b>2005–06</b>	<b>2006–07</b>	<b>2007–08</b>	<b>2008–09</b>	<b>2009–10</b>
<b>Total INAC Vote 1 Operating Expenditures + PWGSC accommodation</b>					
All expenditures	2,000,000	2,000,000	2,000,000	2,000,000	0
<b>Total Vote 10 Grants and Contributions</b>					
Contributions for promoting regional development					
Targeted Investment Program	18,000,000	18,000,000	18,000,000	18,000,000	
Innovation and Knowledge Fund	1,078,000	1,078,000	1,078,000	1,078,000	1,078,000
Partnership and Advisory Forums	79,000	79,000	79,000	79,000	79,000
<b>Total</b>	<b>21,157,000</b>	<b>21,157,000</b>	<b>21,157,000</b>	<b>21,157,000</b>	<b>1,157,000</b>
Source: Program documentation					
* This includes spending for the Partnership and Advisory Forums for NWT and projects funded under this authority. PAF is not available in the other Territories.					

Original program proposal documentation did not contain a logic model or Results-Based Management Accountability Framework (RMAF) specific to SINED. Instead, SINED was captured under a large departmental level RMAF that is not usable at the program level. SINED staff developed a logic model and RMAF for the associated Regional Development Authority (through which SINED is funded) to provide guidance on results and performance measurements.

The general goal of the Authority is to improve the quality of life of Northerners and enable them to assume increasing responsibility within the Canadian Federation.



Table 2 shows the Authority's four business lines or activities and sub-activities:

<b>Table 2: Business lines and sub-activities of the Regional Development Authority</b>	
<b>Business line</b>	<b>Sub-activity</b>
Building the scientific base (Knowledge)	<ul style="list-style-type: none"> <li>▶ projects centering on science and policy</li> <li>▶ planning</li> <li>▶ consultation</li> <li>▶ dissemination of knowledge</li> </ul>
Economic infrastructure	<ul style="list-style-type: none"> <li>▶ development of multi-user physical infrastructure</li> <li>▶ planning (including business cases for multi-user physical infrastructure)</li> <li>▶ equipment purchase</li> <li>▶ capital investment</li> </ul>
Developing capacity (Individual/organization)	<ul style="list-style-type: none"> <li>▶ consultation mechanisms to improve skills development</li> <li>▶ complementary investments to enhance training</li> <li>▶ research gaps/needs assessments related to organizational and individual capacity</li> <li>▶ advisory/expert services (expertise to support initial project activity)</li> </ul>
Economic diversification	<ul style="list-style-type: none"> <li>▶ research (market, product development, etc.)</li> <li>▶ development of products and markets (feasibility, pre-feasibility, patent-related costs, certification, etc.)</li> <li>▶ marketing</li> <li>▶ loan fund top-ups</li> <li>▶ innovation (cluster development, new solutions)</li> </ul>
Source: Program Documentation	

Table 3 shows the expected outputs and performance measures for this authority as defined in foundational documents of the program.

<b>Table 3: Outputs and performance indicators identified for the Regional Development Authority</b>		
<b>Theme</b>	<b>Outputs</b>	<b>Performance Indicators</b>
Building the knowledge base	<ul style="list-style-type: none"> <li>▶ Increased scientific and policy data and knowledge</li> </ul>	<ul style="list-style-type: none"> <li>▶ Consultation to develop policy positions (community meetings, workshops)</li> <li>▶ Incremental geographic area assessed/sampled for resource potential</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Increased public access to data and knowledge</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of data holdings more readily available to the public (publications, Internet postings presented at meetings, etc)</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Better informed plans and priority setting</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of plans formally adopted</li> <li>▶ Number of plans published</li> </ul>
Economic infrastructure	<ul style="list-style-type: none"> <li>▶ Increased access to affordable telecommunication services and equipment</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of clients benefitting from telecommunication enhancements</li> <li>▶ Reduced cost of telecommunication service as a result of funded projects</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Proponents better positioned to attract governments or private sector investment in major economic infrastructure projects in the North</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of studies and business cases developed</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Appropriate technology – including innovative technology</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of pilot/demonstration projects</li> <li>▶ Number of adaptations publically made available</li> <li>▶ Number of information products/sessions provided for potential users</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Increased multi-user access to equipment</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of clients using/benefitting from equipment enhancements</li> </ul>
Developing capacity	<ul style="list-style-type: none"> <li>▶ Governments / private sector positioned to carry out skills development</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of need analysis studies</li> <li>▶ Number of products developed (e.g. curriculum and training materials)</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Increased availability of northern skilled organizations and workers</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of Northerners benefitting from investments to enhance skill development</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Increased capacity of private and public sector organizations to define their roles and objectives and develop implementation plans</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of organizations who are able to publically communicate roles and objectives</li> <li>▶ Number of organizations funded to carry out work</li> <li>▶ Number of implementation plans adopted</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Improved skills, expert support and information systems in private and public sector organizations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of public/private organizations benefitting from expert support or information systems investments</li> </ul>
	<ul style="list-style-type: none"> <li>▶ Better definition of local and regional priorities for benefitting from major developments</li> </ul>	<ul style="list-style-type: none"> <li>▶ Stakeholder groups</li> </ul>
Economic diversification	<ul style="list-style-type: none"> <li>▶ Governments / private sector positioned to invest in projects that diversify the northern economy</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of businesses benefitting from improved ability to commercialize products or services</li> <li>▶ Number of sectorial plans/strategies produced</li> </ul>

	▶ Development of innovative solutions to promote development in the North	▶ Number of projects that spur or support innovative development (e.g. cluster, innovative products)
	▶ Sale of a wider range of products from more northern sources to more markets	▶ Number of new products, sources and markets developed from investments
Source: Program documentation		

It is important at this juncture to introduce some common evaluation terminology. Items of interest to program evaluations include activities, outputs, and outcomes. Activities are a broad description of what is being done and is always the means to an end and never an end in itself. Outputs are the products and services that result from activities such as workshops, publications, or studies. Outcomes are the impacts, goals, or objectives of a program. Outcomes are the desired change that the program is working towards and are almost always preceded by a clue to the desired direction of the goal, for example, increased entrepreneurship, enhanced awareness, reduced dependence on government transfers. There should be a logical flow or progression from activities to outcomes. This progression is often captured in a logic model.

As shown in Table 3, *outputs* are expressed as outcomes and a number of the *performance indicators*, such as the number of plans formally adopted and number of business cases developed are actually outputs. As a result of this confusion, the program documentation does not adequately identify the basic underlying connection between program activities, outputs and outcomes needed for program design and performance measurement. The impact of this is explored in section 4.0 Evaluation Findings.

### 2.3 Program design and delivery

The detailed design and delivery of the SINED program occurred on the ground in the regions. TIP provided for regionally-tailored spending priorities within the common national program, through the development of an investment plan for each territory. It was decided that each INAC Regional Office would work with the local Territorial government, in engagement with local stakeholders, to develop the Territorial Investment Plan. The NWT plan was completed in March 2006 followed by the plans for the Yukon and Nunavut in July 2006.

A summary of SINED investments in the Territorial plans is presented in Annex A.

The success of this approach was influenced by the relationship with the Territorial governments. Regional Offices with a good relationship with the Territorial government proceeded rapidly. Where relationships were more unstable, delays in implementation were experienced.

The following tables show how funds were distributed:

Program	Territory			
	Yukon	Northwest Territories	Nunavut	Total
Targeted Investment Program	20	56	74	150
Innovation and Knowledge Fund	0	26	2	28
PAF	0	6	0	6
Total	20	88	76	184
Source: Project database <sup>11</sup>				

<sup>1</sup> This table draws from the PARs and PSRs provided by the Territories to April, 2008. It may not reflect all program activity 2005-09.

	<b>2005–06</b>	<b>2006–07</b>	<b>2007–08</b>	<b>2008–09</b>
Average	\$135,673	\$291,638	\$253,985	\$426,127
Median	\$57,500	\$143,750	\$78,675	\$250,000
Minimum	\$7,910	\$2,900	\$4,200	\$39,000
Maximum	\$1,222,791	\$4,500,000	\$2,000,000	\$2,000,000
Source: Project database				

Table 4 shows that NWT and Nunavut have been able to ramp up activity, while the Yukon is playing "catch-up" arising from its initial years of internal review and challenges with coordination. Table 5 shows that the average project values are considerably greater than the median values, suggesting that SINED has made a few large investments. The maximum values illustrate the nature of these projects. Table 10 in Section 4.1 examines these large projects in more detail.

## **2.4 The northern program context**

Understanding the SINED program requires knowledge of its operational context. Although quite different to southern Canada in many regards, Canada's territories share a number of characteristics with other circumpolar regions of the world, including Alaska, Greenland, Scandinavia, and, to a lesser extent, Siberia in Russia. These regions have four features in common that condition social and economic development opportunities:

- ▶ Strong political, social, and economic links to developed, industrial economies
- ▶ Economies marked by a heavy emphasis on resource extraction with the resulting exposure to cycles in activity
- ▶ A significant indigenous population that historically has been on the margins of economic development and political participation<sup>III</sup>
- ▶ Remoteness that limits access and raises costs of all forms of economic activity.

In addition, two unique features characterize the Canadian North. First, two differing views of the northern economy exist. It is common to speak of the northern territories either as a single unit or as three separate entities. Differences exist among the territories, especially between Yukon/NWT, on the one hand, and Nunavut, on the other. At the same time, the three territories share much in common. Both perspectives are valid, and the federal government attempts to balance its economic development activities in a way that respects a pan-territorial view but also responds to each territory's differing opportunities.

Secondly, each territory has a dual economy<sup>5</sup>. The primary wage economy depends on resource extraction and on the service sector (public and private) which employs many migrants from the south. A secondary economy involves persons largely of Aboriginal ancestry and is supported by

<sup>II</sup> See Section 3 for a description of this line of evidence.

<sup>III</sup> The indigenous population of Siberia has largely disappeared. The indigenous population of Norway, the Sami, have a remarkably similarly social, economic, and political history as Aboriginal groups in Northern Canada.

government transfers and traditional harvesting or land-based activities. As shown in table 6, below, a large fraction of the Aboriginal population remains connected to "the land", underscoring the point made by the Norecon<sup>6</sup> that economic progress for many of these territorial residents depends on increasing their attachment to employment that depends on exports to the southern and global economy.

Common to a dual economy, the primary economy is subject to wide booms and busts driven by external markets, but features high wages, whereas the secondary economy has low incomes, high unemployment, and a significant dependence on transfers in the form of social assistance and other public aid. In addition, although traditional harvesting activities represent an important source of the basic necessities for people living in smaller remote communities, their natural cycle does not align with activities in the primary wage sector making transitions between the two economies or sectors difficult.

<b>Territory</b>	<b>Hunting</b>	<b>Fishing</b>	<b>Gathering</b>	<b>Trapping</b>
Yukon	42%	54%	52%	8%
Northwest Territories	39%	48%	35%	13%
Nunavut	58%	67%	51%	9%

Source: Statistics Canada. (2001). Aboriginal Peoples Survey

### **2.4.1 Territorial economy and demography**

The following three sub-sections discuss the economic and demographic characteristics of each of the three territories in greater detail. It is important to note that the population of the capital city in each territory represents a considerable part of the overall territorial population. For example, slightly more than two-thirds of the population of Yukon resides in Whitehorse and slightly less than half of the population of the Northwest Territories lives in Yellowknife. In Nunavut, a larger percentage of the population tends to be Aboriginal and resides in smaller remote communities; nonetheless, slightly more than one-fifth of the population of Nunavut is located in Iqaluit<sup>7</sup>. It is therefore likely that characteristics of each capital will tend to contribute disproportionately to demographic and labour statistics aggregated at the territorial level.

#### **Nunavut**

Since its founding in 1999, Nunavut's economy has been characterized by increases in output in construction and public administration, and a contraction in the mining industry, primarily due to progressive declines in the production of zinc and the closings of the Polaris, Nanisivik, and Lupin mines<sup>8</sup>. More recently, mining has recovered with the completion and operation of the Jericho diamond mine and expenditures on exploration. These expenditures, according to a preliminary estimate, increased 80% between 2005 and 2007 to \$322 million, more than Yukon and Northwest Territories combined<sup>9</sup>. The recent surge in growth is attributed to a flurry of construction-related activity, including the building of the Meadowbank gold mine, the completion of several health centres and continuing investment in the stock of residential housing<sup>10</sup>.

As shown in Table 7, economic output in Nunavut, valued at \$1,153 million in 2007, has expanded 28.4% since 2001. With regards to recent economic growth, Nunavut has

outperformed Yukon (which grew 11.1% over the same span of time), although it has fallen somewhat short of the recent performance of the Northwest Territories (41.9%)<sup>11</sup>.

Government spending dominates gross domestic product in Nunavut at about 60%; consumer spending accounts for 25%, and business about 15%. This is almost exactly the inverse of Canada, where consumer spending accounts for 60% of GDP and government spending about 20%<sup>12</sup>. The mining exploration, transportation, and hospitality industries dominate Nunavut's non-governmental sector.

In spite of some instances of recent contraction, Nunavut's recent economic performance has been strong, with territorial economic growth exceeding national rates in five years out of the last seven, as shown below in Table 7.

Year	Real GDP	% Growth in Real GDP Over Previous Year (Nunavut)	% Growth in Real GDP Over Previous Year (Canada)
2007(p)	1,153	13.0%	2.7%
2006	1,020	3.4%	2.8%
2005	986	-0.2%	3.1%
2004	988	4.0%	3.1%
2003	950	-0.1%	1.9%
2002	951	5.9%	2.9%
2001	898	5.9%	1.8%

\* The estimates for 2007 are preliminary. GDP in these figures is presented at market prices.  
Source: Statistics Canada, 2008, p. 33.

The main challenges facing the Nunavut economy are a rapidly growing Inuit population; slow job growth outside the public sector; an Inuit business community that has grown but has yet to anchor a sufficient portion of the economy; and an economy that continues to be dominated by the public sector. The territorial development plan speaks to the need to have economic growth consistent with traditional values, a concern of many Inuit leaders. At the same time, general interest remains high in promoting mineral exploration to replicate the fast growth in NWT and Yukon. Balancing these opposing interests reflects the core challenge facing development in Canada's newest territory.

### **Northwest Territories**

In contrast to Nunavut, NWT has experienced rapid private sector led growth due to resource extraction (e.g., diamonds and oil). In fact, diamond mining in NWT has made Canada a world leader in this mineral<sup>13</sup>. The share of consumer and business spending in the NWT is 75% of GDP. The economy is expected to increase at around 3% annually due to strong commodity prices in oil/gas and diamonds; the potential Mackenzie Valley natural gas pipeline is also expected to provide substantial benefits to the territory and to Canada.

Year	Real GDP	Value, Diamond Production (Not deflated)	% Growth in Real GDP Over Previous Year (NWT)	% Growth in Real GDP Over Previous Year (Canada)
2007(p)	4,045	-	13.1%	2.7%
2006	3,575	1,562	2.9%	2.8%
2005	3,473	1,762	-2.5%	3.1%
2004	3,563	2,097	3.6%	3.1%
2003	3,440	1,588	13.4%	1.9%
2002	3,033	801	6.4%	2.9%
2001	2,850	718	21.2%	1.8%

\* The estimates for 2007 are preliminary. GDP in these figures is presented at market prices.  
Sources: Northwest Territories Department of Industry and Tourism, 2008; Statistics Canada, 2008, p. 32.

The NWT economy varies in step with commodity prices. As an example, the gold mining sector, which was a mainstay for many years, has transitioned to a mature state as mine reserves are depleted. The recent price increases have stimulated renewed exploration which, if successful, is expected to lead to another round of development. The jump in commodity prices leads to resource extraction development, commensurate private sector investment, public sector response with infrastructure development/public services, and then additional private sector development to support the population.

The challenge facing the NWT economy is to manage the variation in the pace of economic activity induced by the resource price cycle. A key issue is how to maintain the gains after the peak has passed.

## Yukon

The Yukon economy is the most established in the sense of having experienced the earliest contact with external (southern) influences. The Gold Rush and the construction of the Alaska Highway opened this territory earlier than other parts of the Canadian North. At this time, in 2008, the Yukon economy is recovering from the depressed mineral prices of the last decade. That sector, along with tourism, accounts for the investment and economic growth of the territory. The share of consumer and business spending is about 47% of GDP, which is smaller than the proportion in the NWT, but greater than Nunavut. The Yukon government forecasts that metals trade with Asia will lead to a 12-fold increase in the mining sector over the next decade<sup>14</sup>.

Year	Real GDP	% Growth in Real GDP Over Previous Year (Yukon)	% Growth in Real GDP Over Previous Year (Canada)
2007(p)	1,412	3.8%	2.7%
2006	1,360	2.9%	2.8%
2005	1,322	3.9%	3.1%
2004	1,272	3.3%	3.1%
2003	1,231	-1.8%	1.9%
2002	1,254	-1.3%	2.9%
2001	1,270	4.4%	1.8%

\* The estimates for 2007 are preliminary. GDP in these figures is presented at market prices.  
Source: Statistics Canada, 2008, p. 31

Tourism, the other leading sector, will likely face challenges with a higher Canadian dollar. In addition, the Western Hemisphere Travel Initiative<sup>IV</sup> may have an adverse impact on visitors from the United States.

The challenge facing the Yukon economy is to maintain growth in its two dominant sectors, mining and tourism, while diversifying the economic base to reduce the adverse impacts of the economic cycle on the upswing and downswing. In the boom phase, prices accelerate for all and can constrain margins for businesses outside the high growth sector; in the bust phase, human and physical capital leave the territory.

### **2.4.2 Summary on the North**

In summary, all three territories experience challenges in maintaining economic growth. The core challenge for all territories is a highly cyclical, resource-based economy that experiences inflation in the boom periods and recession when commodity prices drop. This cycle of economic activity creates social and economic stresses on the territorial economies. In addition, the remoteness and sparseness of the population impedes interaction with the southern economy and increases the costs of important final and intermediate goods.

In all three territories, and especially Nunavut, Aboriginal populations often reside in smaller communities away from the main centres. These populations remain connected to a traditional land-based economy and are in many cases largely dependent on transfer payments. This limits capacity to participate in the paid economy as workers or entrepreneurs.

## **3.0 Evaluation Methodology**

It is important to note that this is a formative evaluation. Given that the program funding was approved in May 2005 and the realities of delivery in the territories, specifically the narrow operating window afforded by the climate and its impact on accessibility, as well as the normal time needed to fully implement a program, significant impacts are not expected

As such, while a review of relevance and evidence of early results was included in the study, the evaluation concentrates on design and delivery and assessing mechanisms for measuring and reporting outcomes.

### **3.1 Methods and lines of evidence**

The methodology for the evaluation appears below as a series of discrete tasks comprising two phases.

#### **Phase 1 – Planning – included two tasks:**

1. Initial consultation and study design
2. Development of a program profile and evaluation matrix

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<sup>IV</sup> The Western Hemisphere Travel Initiative refers to the new passport requirements imposed by the US Department of Homeland Security on US citizens returning from non-US territories.

Phase 1 resulted in the development of a program profile and evaluation matrix which were based on a document review and interviews with senior management (SINED and the Audit and Evaluation Sector). The evaluation questions and matrix presented in Section 3.3 have guided all aspects of the evaluation. Generally the questions address the areas of relevance and rationale, design and delivery, and impacts.

Phase 1 was completed between January and March 2008. Phase 2 was completed between April 2008 and August 2008, with data collection mainly taking place from April to June, and site visits in April and May.

## **Phase 2 – Data collection and analysis – including five lines of evidence.**

### 1. Review of program files (program documents)

The Program documentation which was reviewed included previous economic development programs in the North, documentation on the economies of the three Territories, and the economic development plans of the Territorial governments:

- ▶ Program proposal documentation
- ▶ SINED Targeted Investment Program – Investment Plans for each territory
- ▶ SINED Annual Report (2005–2006)
- ▶ SINED Operation Manual<sup>V</sup>
- ▶ INAC Process Audit SINED (April 2005)
- ▶ INAC SINED Performance Management Framework (October 2005)
- ▶ Information package on SINED Programming (NWT)

Program documents identify the terms and conditions for the program and define the expected results. They also show the planned spending by program component and demonstrate the program logic and results change whereby spending translates into activities, outputs, and outcomes. These documents are the foundation documents for the program and represent the program at its inception. The examination of these program documents allow for the identification of original concepts and allow for an examination of how these concepts were implemented on the ground.

### 2. Review of project files (project database)

It is important to note that SINED maintains various project management systems including an optional file checklist (to track status of projects from first letter from project proponent, through approval process, activity reports, payments, and audit review); Project Assessment Reports (PARs) and Project Synopsis Reports (PSRs) which support the assessment and approval of individual projects, and also contain information on the project goals, funded activities, and expected results that become part of the terms and conditions of the contribution agreement; contribution agreements which set out reporting requirements; the departmental financial management system (FNITP) which shows all transactions related to each project; the departmental website which lists all contributions over a certain amount, and; the annual report to the Minister.

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<sup>V</sup> Note the SINED Manual is process oriented and offered little in terms of providing investment guidance. The information package submitted by the NWT offered detailed program descriptions.



However, these documents were never intended to support on-going tracking of project activity or results and the Program provides no comprehensive information source for examining the alignment of projects to program goals or a convenient summary of the results (outcomes not outputs), expenditures or activities.

Thus, in order to analyze, for the purpose of the evaluation, written documentation in the PARs and the PSRs from over 180 projects, an Access database was created to organize the information. Qualitative data was coded as needed, especially with respect to what was collected by PARs/PSRs in terms of expected outcomes and reporting requirements. This allowed for an overall picture of SINED funding activity and revealed important trends in funding and what information is being collected in terms of results. For example, the database was used to examine the top five projects in each territory (in terms of amount of funding) to understand important themes in the investments made by the Program. The database supports a quantitative view of SINED activity at the time of project inception that supports an analysis of how SINED has allocated its investments and outcomes expected. In addition, it was possible to identify the expected outputs/outcomes included in each project's terms and conditions, which then allowed an analysis of how these projects support SINED's objectives.

### 3. Site visits and key informant interviews

Key informant interviews conducted during site visits to each territory offered critical program context and information on operations. Each site visit included interviews with SINED and INAC management and economic development officers (EDOs), as well as Territorial government representatives, project proponents (those receiving support under the program), Aboriginal organizations, and other stakeholders.

The evaluation issues and questions formed the template for the interview guides which were reviewed by INAC's Audit and Evaluation Sector and senior program management. Interviews at site visits were taped with respondent consent to ensure accuracy.

The site visits to each region lasted two to four days. Where necessary, concurrent interviews with separate evaluation teams took place. A total of 41 interviews were conducted (14 in Yukon, 20 in NWT, and 7 in Nunavut).

### 4. Case studies of funded projects

Since results were not generally expected so early in the program, it was determined that case studies would be used to identify outcomes obtained to date. INAC regional staff were asked to nominate three significant projects in each territory (Table 13 in Section 4.3). The purpose of the case studies was to provide qualitative information on the design and delivery and realization of expected short and medium-term outcomes.

The case studies provide background information on nine projects, the rationale for funding in terms of expected impact on economic development, the outcomes (expected and achieved to date) and reporting. These projects represent the more significant funding undertaken by SINED. Case studies reports followed a template and drew heavily from the PARs and PSRs as well as key informant information collected during the site visits.

The case study process involved development of an initial description of the cases selected by each region. These descriptions were sent to the regions for review. PRA followed up on comments using a conference call and, where possible, the EDOs involved in the case study. The case studies have now been revised according to comments from the region.

## 5. Literature review

A literature review of regional economic development examined the theoretical foundations of regional economic development, including some treatment of Aboriginal economic development and the challenges facing circumpolar regions. Summaries of recent evaluations of Western Economic Diversification (WD) and Federal Economic Development Initiative for Northern Ontario (FedNor) were also reviewed. Lessons learned from this literature were used to review SINED, especially with respect to its role in promoting community economic development, human capital investments, and good governance at the business, community, and territorial levels.

The literature review underpins the review of program rationale and is extensive because few evaluations present an analysis of regional economic policy. For example, none of the evaluations of antecedent programs to SINED analyze regional development theory. Also, it is not widely appreciated that regional development theory has fragmented.

### 3.2 Methodological reliability

Reliability issues relating to some of the lines of evidence include the following:

*The project database* uses coded information from the PARs and PSRs, which always runs the risk of eliminating important nuances. To mitigate this risk, coding categories were carefully reviewed and the analysis was confined to broad program parameters. For important categories such as expected results and performance measures, coding categories were kept broad and close to verbatim to capture the nature of the variable.

*Key informant interviews* represent individual opinion, which is subject to bias. This distortion may be mitigated by interviewing as many respondents as possible and cross-referencing key informant interviews with other evaluation evidence. Where necessary, details were verified through follow-up email communication. In general, key informants offered a high degree of consistency of opinion and the instances of significant minority opinion were rare. This increases the confidence in the key informant data.

*The literature review* reflects its own biases, conditioned by interest in strengthening the theoretical foundations for the program, that is, the literature that would deny the possibility of government influencing regional economies is only acknowledged and is not examined in detail.

### 3.3 Evaluation questions

Phase 1 of the evaluation identified 13 evaluation questions relating to three areas: rationale and relevance, design and delivery and impacts. These questions are captured in the evaluation matrix below.

Because it was formative examination, the evaluation concentrated on processes and organization. Given the relatively recent nature of program initiation, program management does not expect to observe substantial outcomes. However, a central issue for this evaluation was to assess the extent to which the Program had created an information collection processes to track and report on outcomes so as to adequately inform future impact evaluation activities.

<b>Evaluation matrix</b>		
<b>Question</b>	<b>Source/type of data</b>	<b>Line of evidence</b>
<b><i>The rationale and relevance of the department's role in northern economic development</i></b>		
1. What does current theory on regional economic development indicate about how governments should support regional economic development?	<ul style="list-style-type: none"> <li>▶ Findings from the literature review</li> <li>▶ Findings from evaluations of antecedent programs</li> <li>▶ Management and stakeholder observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Literature review</li> </ul>
2. Does a plausible logic/theory exist between the funding activities of SINED and the expected results?	<ul style="list-style-type: none"> <li>▶ Management and stakeholder observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Literature review</li> <li>▶ Program files</li> <li>▶ Key informant interviews</li> </ul>
3. How do the SINED objectives and approach reflect lessons learned from past regional development programs in the North?	<ul style="list-style-type: none"> <li>▶ Findings from the literature review</li> <li>▶ Findings from evaluations of antecedent programs</li> </ul>	<ul style="list-style-type: none"> <li>▶ Literature review</li> <li>▶ Program files</li> <li>▶ Project database</li> </ul>
<b><i>The design and delivery of SINED</i></b>		
4. How well are the public sector programs in the North coordinated?	<ul style="list-style-type: none"> <li>▶ Evidence of meetings, joint memoranda, joint projects, alignment of federal and Territorial government development plans</li> <li>▶ Management and stakeholder observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Program documentation</li> <li>▶ Key informant interviews</li> </ul>
5. Is the coordinative role of SINED and INAC accepted by all stakeholders? If not, how does this affect the outcomes from the contribution funding and other projects funded by SINED?	<ul style="list-style-type: none"> <li>▶ Evidence of meetings, joint memoranda, joint projects, alignment of federal and Territorial government development plans</li> <li>▶ Management and stakeholder observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Document review</li> <li>▶ Key informant interviews</li> </ul>
6. Do SINED regional staff understand their roles and requirements of the program? Do the program guidelines clearly define their roles and decision-making on investments?	<ul style="list-style-type: none"> <li>▶ Staff observations</li> <li>▶ Alignment of guidelines with decision</li> <li>▶ Evidence from audits</li> </ul>	<ul style="list-style-type: none"> <li>▶ Key informant interviews</li> </ul>
7. Does INAC have sufficient resources on the ground to deliver the program?	<ul style="list-style-type: none"> <li>▶ Management and staff observations</li> <li>▶ Evidence of process completion</li> <li>▶ Evidence of timelines in approvals</li> <li>▶ Proponent/stakeholder observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Key informant interviews</li> </ul>
8. What organizational, delivery, and other barriers exist to achieving immediate outcomes?	<ul style="list-style-type: none"> <li>▶ Management and staff observations</li> <li>▶ Proponent/stakeholder observations</li> <li>▶ Economic indicators</li> </ul>	<ul style="list-style-type: none"> <li>▶ Key informant interviews</li> <li>▶ Case studies</li> </ul>
9. Is the program delivered effectively and efficiently?	<ul style="list-style-type: none"> <li>▶ Management and staff observations</li> <li>▶ Evidence of timeliness of decisions, appeals, support for proponents</li> </ul>	<ul style="list-style-type: none"> <li>▶ Key informant interviews</li> <li>▶ Case studies</li> </ul>
<b><i>The impacts of SINED</i></b>		
10. Does the program clearly articulate expected outcomes and their associated performance measures?	<ul style="list-style-type: none"> <li>▶ Objectives as expressed in MC and TBS</li> <li>▶ Management and staff observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Key informant interviews</li> <li>▶ Case studies</li> <li>▶ Project database</li> </ul>
11. Is the program collecting appropriate data to track immediate and intermediate outcomes? Is the reporting sufficient to allow SINED management to understand the progress being made to results fulfillment?	<ul style="list-style-type: none"> <li>▶ Performance measurement in annual reports, alignment of reporting to stated expected results and performance measures</li> <li>▶ Management and staff observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Project database</li> <li>▶ Key informant interviews</li> <li>▶ Case studies</li> </ul>
12. What evidence exists that funded projects have realized early results especially with respect to: <ul style="list-style-type: none"> <li>▶ Creating economic infrastructure</li> <li>▶ Increasing the number and diversity of northern firms, especially in smaller communities</li> <li>▶ Increasing the range and access of data on the Northern resource base</li> <li>▶ Increasing the number of skilled workers, business managers and community leaders</li> <li>▶ Increasing the capacity of Northern organizations to become engaged in economic planning and political decision-making?</li> </ul>	<ul style="list-style-type: none"> <li>▶ Review of project results</li> <li>▶ Management and staff observations</li> <li>▶ Proponent/stakeholder observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Project database</li> <li>▶ Key informant interviews</li> <li>▶ Case studies</li> </ul>
13. How likely is it that SINED will realize its longer term expected results? What is a reasonable time frame to realize those results?	<ul style="list-style-type: none"> <li>▶ Management and staff observations</li> <li>▶ Proponent/stakeholder observations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Project database</li> <li>▶ Key informant interviews</li> </ul>

The evaluation matrix guided the inquiry to the extent possible and findings and recommendations in this report draw on all of the above lines of evidence. Those related to rationale and relevance draw primarily on the literature review and on program documentation, but are supplemented with information from key informant interviews. Findings and recommendations of design and delivery draw on key informant interviews and documentation, with special emphasis on the case studies and database of projects. Finally, those related to the program's impacts draw on the case studies and the project database supplemented by key informant interviews.

## 4.0 Evaluation findings

This section of the report presents findings and conclusions from the evaluation aligned to each of the evaluation questions. The findings are based on multiple lines of evidence as outlined in the preceding section. .

### 4.1 Program rationale

*What does current theory on regional economic development indicate about how governments should support regional economic development?*

The literature review revealed that the idea that large-scale infrastructure and businesses can be located in less developed regions to directly promote growth has been abandoned. The historical acceptance of this policy perspective rested mainly on a foundation of growth pole theory, but it has since been effectively criticized by Savoie<sup>15</sup> and others. The notion that government can effectively identify and promote key sectors in the economy, thereby leading to growth has also been largely abandoned as has the notion that government support of diversification can lead to stability in the economy. Particularly important in the criticism of these latter two perspectives were J.E. Wagner<sup>16</sup> and J.E. Wagner and S.C. Deller<sup>17</sup>.

Current economic theory takes a more nuanced theoretical approach to economic development, drawing on a diversity of theories that support government intervention in the economy. Each sees government as a vehicle for creating the conditions for sustained economic growth rather than driving it. The following examples of government supported activity are characteristic of this work:

- ▶ support for human capital development include education, training, business management, and institutional governance<sup>18</sup>
- ▶ investments in technical innovation and knowledge management<sup>19</sup>
- ▶ support for formal institutions and the development of social capital<sup>20</sup>
- ▶ preservation of private property rights<sup>21</sup>
- ▶ support for entrepreneurship through networking, tax-incentives to business formation, and the rationalization of regulatory structures<sup>22</sup>
- ▶ training of “public entrepreneurs” who are civil servants but that understand and support business development<sup>23</sup>
- ▶ support for network and cluster development to support agglomeration economies<sup>24</sup>

- ▶ reductions of barriers to trade, increasing the flow of resources and correcting market failures<sup>25</sup>
- ▶ investing in public goods such as economic infrastructure including transportation and energy production facilities<sup>26</sup>
- ▶ investments to specific business ventures to encourage private investment by mitigating risk with the understanding that support is not indefinite (DREE, DRIE and WD documentation)

Many of these investments have become subsumed under the "Community economic development (CED) model" that underlies much of the programming of Western Economic Diversification (WD) and the Federal Economic Development Initiative for Northern Ontario (FedNor). This model encompasses a diverse set of initiatives that identify the community as the focus of economic development. (see Shaffer, R., Deller, S., & Marcouiller, D.<sup>27</sup> and covers many forms of programming from basic education, skills upgrading, sector promotion (e.g., tourism and geoscience).

A community approach to economic development is difficult to implement. Identifying communities that will benefit from development is challenging, and some have noted that remote communities impeded by transportation cost barriers simply will not be able to participate in global modern economic development<sup>28</sup>. Sometimes intangibles such as community leadership appear to be decisive, but this is hard to assess before the fact. Other authors suggest that some communities, such as the remote Aboriginal communities of the North, will continue to depend on government transfers since market-based economic activity may not be sustainable in these regions. In some cases, aspects of traditional cultures will act as a barrier to a standard economic development model<sup>29</sup>.

Community economic development is not a fixed recipe, but more a philosophy that argues that government should respond to the communities that demonstrate leadership and entrepreneurial spirit. It is a loose collection of strategies that have found some value in rescuing communities in decline, but success depends on community assets, the most important of those identified is leadership. The WD strategy has elements of CED, but technology clusters form a critical element of their approach. FedNor has more of a community development model approach, with an emphasis on trying to resuscitate communities in decline.

The North presents a unique setting where the challenge is to support remote Aboriginal communities to connect to the market economy for the first time. SINED can adapt elements of the CED model, but the focus should be more than capacity building of local leadership. It has been suggested that other INAC programming assume control over building governance capacity<sup>VI</sup>, and that SINED focus on investing in capital, other infrastructure, and specific projects that have clear links to supporting/expanding economic self-sustaining economic activity.

Overall, the literature review supports an approach to economic development where investments should promote sustained economic growth<sup>30</sup>. The test for sustainability is that government must be able to withdraw support from specific investments, after creating conditions that attract continued private sector funding. Of course, some activities will always be the domain of government such as the provision of public goods (e.g., police, fire, effective civil and criminal courts, education, and roads). The key idea is that government creates the institutions (rule of

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<sup>VI</sup> [http://www.anorthernvision.ca/pdf/newvision\\_english.pdf](http://www.anorthernvision.ca/pdf/newvision_english.pdf)

law, property rights systems, and public goods) and takes the lead on risky investments to address possible market failures in capitalization. If the private sector fails to follow, then the investment has not resulted in sustained activity and marks a failure in programming. Again Porter<sup>31</sup> is a useful reference on this.

However, there are important caveats. As the literature notes and as many key informants stressed, these investments and interventions tend to have long-term payoffs. This makes establishing their ultimate effectiveness in the short-term very difficult. This is one of the reasons why cause and effect is so hard to establish and why period evaluations have been so inconclusive on the impacts of regional economic policy and programming.<sup>VII</sup> Other shortcomings in current economic theory are that few theories have a strong empirical base to support all aspects of the theoretical link between activities and outcomes. Also lacking is a process to identify what deficiencies exist in each region and anecdotes for growth that can produce consistent outcomes in different regions.

SINED program documents still contain references to "economic drivers" and "broadening the economic base", terminology that reflects regional economic development theories from some years ago. However, in practice, the program focuses more on a portfolio of programs, investments and policies that support the capacity of individuals, organizations and communities, which is in line with emerging trends in economic theory. The use of Territorial Investment Plans helps identify local needs and priorities, and allow for a more focussed regional approach to economic development than would otherwise be the case.

SINED faces constraints in directing resources to specific communities. It has to remain open to all communities and cannot really push more funding in one area regardless of promise, since much of the onus remains with the business community, non-governmental and Territorial governments to identify projects that could eventually support sustained economic growth. However, at the same time, project proponents are rooted in communities, and those who are the most assertive and energetic about pursuing business opportunities are likely to attract the most support. In this way, SINED can be said to support communities.

An example of an investment directed to communities is the case study on the turbot fishery which reveals a planning process that will generate benefits for coastal communities. Investments in technology clusters would also represent a community based investment, but that has yet to start. The support for the loans funds is intended flow financial support that will benefit specific businesses and communities. On the other hand, transportation upgrades and hydro expansion are regional investments that, while they will benefit some communities, they are not directed to individual communities, but instead are intended to benefit communities in general.

***Does a plausible logic/theory exist between the funding activities of SINED and the expected results?***

Funding activities in SINED are driven by the Territorial Investment Plans which provide an allocation of the funding over five years towards a range of investment activity. These Plans not only guide investment decisions but are important for consensus building and coordination:

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<sup>VII</sup> Polèse (1999) has a concise review of the problems with regional development theory and establishing cause and effect.

- ▶ The Nunavut plan defines sectoral investments in fisheries, geosciences, tourism, and cultural industries, and pan-sectoral investments in broadband, trade, community and organizational capacity.
- ▶ The NWT plan identifies key areas such as geosciences, tourism, business support services, legacy infrastructure (e.g., roads and hydro), and general planning support.
- ▶ The Yukon plan calls for investment in economic infrastructure (e.g., fiber optics), cold climate clusters, small business loans fund support, capacity development, geoscience, socio-economic data collection, key sector investments, regional development, and business support services.

These investments may be plausibly linked to the areas of government activity that support regional economic development identified in the bullets in the answer to the first question under section 4.1. In addition, the Territorial Plans (Appendix A) align to the four pillars of the Targeted Investment Program, which are the same as the four pillars of SINED: strengthening driver sectors; broadening economic bases; strengthening abilities; and increasing coordination (see also section 2.2, above). While there is clarity in the types of activities to be funded, the link between these activities and expected results is not adequately defined. The plans identify areas of investment, the general projects that may be supported, and present expected results that tend to be one of the following:

- ▶ highly specific (e.g., knowledge in geoscience and feasibility studies)
- ▶ short term rather than longer term ; and/or
- ▶ very general and vague (e.g., increasing knowledge of community economic resources).

The expected results outlined above do not point to a coherent vision of how SINED is supporting territorial development. While the link between activities and outputs is clearly articulated, there appears to be a significant gap between program outputs and very intermediate and long-term goals.

The SINED programs lack a RMAF and program-specific logic model detailing how specific investments will produce results so the link between funded areas and expected results have not been clearly articulated. For example, the development of economic infrastructure is couched in terms of providing access to resources and linking communities, but there is no analysis that details the expected results in terms of reduced travel time, cost reductions in transporting ore, or other factors that will support sustained growth. In the area of “capacity building”, activities need to be translated into measurable outcomes so that management can assess whether the preconditions for longer term growth are being met. To demonstrate a successful investment in a business venture, the program should be able to demonstrate increasing levels of private sector investment and sustainability in the second year and beyond, and not just record the number of new employees in the first year after the investment. In this way the link between outputs and the chain of immediate, intermediate, and ultimate outcomes may be constructed.

Some of the theories underlying program activities and territorial plans are unproven. For example, EDOs justified funding of loans funds because it is argued that commercial banks and other private lenders will not lend in remote communities. What is not understood by EDOs is that this assertion has not been proven; SINED and INAC have not produced evidence to



demonstrate that a market failure in banking actually exists, yet this assumption underpins a large share of SINED's funding.

Although the economic literature provides a number of theoretical rationales for government investment activities, few of these are specifically outlined in the program documentation. Further, the logical links between outputs, outcomes, and sustained regional growth are rarely discussed in the program documentation or by key informants. Some staff members understand and offer sound rationales for specific investments, suggesting an on-the-ground implementation of the program rooted in current economic theory. However, key informant interviews and the evaluation case studies show that this implementation is mixed, and heavily dependent on the knowledge of the EDOs and regional staff. The more experienced EDOs understand issues such as market failure and how investments in public goods such as training can support long-term development. However, hard evidence of the need for the specific market corrections discussed remains limited, particularly at the program level.

***How do the SINED objectives and approach reflect lessons learned from past regional development programs in the North?***

Lessons learned from previous evaluations of Economic Development Agreements in the North (1984-1996) and of the Innovation Knowledge Fund (the antecedent to SINED) in 2004, and, as documented in the literature review, include the following:

- ▶ Development activities take longer in the North than the south because of distance, the existence of an undeveloped business and commercial infrastructure (business organizations), and other factors.
- ▶ There is a need to clarify program objectives, expected impacts, and expected beneficiaries.
- ▶ I&K projects leveraged other public funds, which makes it more difficult to attribute outcomes to I&K funds.
- ▶ Leveraging other public funds was not seen as desirable in creating an environment to induce funding from private sources.

The literature review also revealed the following findings from evaluations of the Canada-Yukon Economic Development Agreements and Canada-NWT Economic Development Agreements from the mid-eighties:

- ▶ Regional development policy must attract investment and consumption outside the region, which is the key to sustainability.
- ▶ Most success was achieved through subsidiary agreements with mining, greenhouses, and fish processing. Natural resource exploitation formed the core of economic activity.
- ▶ Project proponents reported difficulties re-profiling funds from year to year which led to inefficiencies in the form of lapsed funding.
- ▶ Investment in geosciences reduced uncertainties and costs of private sector development, in turn, stimulating business investment.

- ▶ Finally, many Economic Development Officers did not have a sufficient level of experience and technical expertise to do their jobs.

The SINED Territorial Plans clearly reflect learnings from these past evaluations and represent a natural extension of the Economic Development Agreements and the Innovation and Knowledge Fund.

The support for geosciences and other natural resources in the form of mapping, feasibility studies, and data management remains central to SINED and the Territorial Plans, indicating that this finding from these previous evaluations at least remains pertinent. Investment in these areas remain a traditional and safe investment for SINED as evidenced by Table 10 from the project database.

<b>Table 10: Top five projects — Single awards in 2005–06 to 2008–09</b>		
<b>Name</b>		<b>Amount (2005–06 to 2008–09)</b>
<b>Yukon</b>		
dāna Näye Loans fund	Capital and loans fund	\$2,450,000 <sup>VIII</sup>
Yukon Geological Survey	Multidisciplinary bedrock and surficial mapping	\$1,285,800
Great River Journey	Development of adventure tourism	\$1,030,000
Council of Yukon First Nations	Log home capacity building projects	\$700,000
Kwanlin Dun First nations	Kwanlin Dun FN culture centre study	\$657,590
Yukon Bureau of Statistics	Business and community Omnibus Labour Demand Study	\$550,000
<b>Northwest Territories</b>		
Community Futures Association	CFDC Pooled Capital Pool	\$2,000,000
Métis Dene Loan Fund	Addressing the Developmental Lending Capital Gap	\$1,600,000
NWT Hydro	Taltson Hydro Expansion	\$1,200,000
Aurora College	Mining simulators	\$799,200
Department of Transportation	Engineering and Environmental Scoping Studies for Road Improvements in the Tlicho	\$460,000
<b>Nunavut</b>		
Department of Economic Development and Transportation	Nunavut geoscience projects	\$4,500,000
Department of Community and Government Services	Community land survey	\$1,980,000
Nunavut Tunngavik Inc.	Topographic surveys	\$2,000,000
Baffin Island Business Development Corp	CFDC Loan Top-up	\$1,321,971
Nunavut Tourism	New marketing initiatives	\$1,100,000
Source: Project database		

One of the notable features of Table 10 (which generally reflects the intent of the territorial plans) is that many of the large investments SINED makes are to Territorial governments directly, to traditional northern investment areas (geoscience and tourism marketing), and to loans funds (including the community futures corporation). Only two of these large investments represent direct capacity building (the mining simulator) or a business investment (Great River Journey).

It is very important that government investments reduce uncertainty of private funding. Leveraging must not be confused with various public funds pooling their resources, which is not sustainable. The taxpayer is then assuming all the risk. The only exception is infrastructure development, which should be a separate form of public sector activity. Therefore SINED plays

<sup>VIII</sup> This reflects a three year commitment.

two roles: first, it funds interventions that support sustainable economic development and second it invests directly in business.

While the evaluation of the Innovation Knowledge Fund promoted a movement away from public sector development towards private sector investment, this is difficult to achieve in the North where private and non-governmental organizations that promote economic development (such as business/industry associations or Chambers of Commerce) are either non-existent or in their infancy. SINED deliberately invests in organizations of a size and capacity to maximize reach. In many cases, it is the Territorial government that meets these criteria, and in the absence of private sector led or non-governmental organizations, the Territorial governments often assume similar roles and activities. SINED is not a business development program and was not intended or designed to deal with individual small businesses. Individual business investments are uncommon and are typically made where there are wider spin-off benefits to others.

Still, some SINED investments in the public sector may raise concerns. SINED supported a feasibility study for the expansion of a utility that would normally use its rate base to finance this activity. If the goal is to lower the price of electricity as a development strategy, then some logic exists; however, it could also be seen as representing a subsidy from the Canadian taxpayer to energy users in the Northwest Territories (via the grant by SINED).

Other issues raised in the evaluations of the Canada-Yukon Economic Development Agreements and the Innovation Knowledge Fund still remain including: the need for long-term investment plans, clear program objectives and expected impacts, policies that attract investment and consumption outside the region, improved flow of funds, and staff training.

The need for a longer-term perspective in economic development in the North was identified in the 2004 evaluation of the Innovation Knowledge Fund. This issue remains as revealed through the Key Informant Interviews and the aspects of the literature review discussed above which confirm that economic development in the North should be recognized as a long-term endeavor. Generally, those involved in program delivery and SINED stakeholders agree that the impact of funding may only be assessed in a long time frame which in some cases can be ten or more years. The related issue of clear program objectives and expected impacts, raised in the same evaluation also remains unaddressed, as discussed under the previous question. The current SINED does address the finding from the evaluations of the Economic Development Agreements that policies should attract investment and consumption from outside the region by allowing proponents from outside the territories to submit proposals for funding. In addition, proponents continue to contribute to projects undertaken with SINED funding and shown in the following table (from PAR and PSR information):

<b>Table 11: SINED Projects — Contributions from proponents (2005–06 to 2008–09)</b>				
<b>Territory</b>	<b>Territory</b>			
	<b>Yukon</b>	<b>Northwest Territories</b>	<b>Nunavut</b>	<b>Total</b>
	<b>Percent contribute by proponents</b>			
Average	17%	29%	27%	25%
Median	11%	22%	23%	21%
Minimum	2%	1%	4%	1%
Maximum	68%	91%	67%	91%
	<b>Amounts contributed by proponents</b>			
Average	273,260	600,555	312,804	447,076
Median	363,797	25,500	63,410	46,353
Maximum	3,400,000	4,487,300	2,030,000	4,487,300
Source: Projects database.				

In the evaluations of the Canada-Yukon Economic Development Agreements, difficulties reprofiling funds resulted in lapsed funding. When SINED encountered some early difficulties in program roll-out they were successful in reprofiling funds, and senior management stated that it believes that the program does have the flexibility to carry over funding and reports that it will support reasonable cases for moving funds across fiscal years.

However, new issues relating to the timing of the receipt of funds have emerged. The most commonly cited organizational barrier to SINED delivery cited by key informants relates to the timing of payments. Proponents stated that their funding was often delayed, requiring them to pay for many if not all of their project activities well before receiving SINED funding. Others reported that the geographic and climatic conditions in the North made coping with these delays even more acute. Federal contribution policy bars advance payments in order to assure that payment is tied to performance in achieving results. Solutions to timeliness would need to take this into account.

The final outstanding recommendation from the evaluations of the Canada-Yukon Economic Development Agreements relates to staff training. These past evaluations concluded that Economic Development Officers (EDOs) should have business experience and/or training. Interviews with SINED staff revealed that some EDOs had acquired significant relevant on the job experience and had a very solid understanding of the development opportunities and constraints in the North. However, it was equally apparent from the interviews that some important skill deficits exist. As an example (and echoing the findings of the literature review related to previous evaluations), some regional staff are reportedly unable to deal with a *pro forma* business plan or read and interpret financial statements, something that program management readily admitted and stated that they were addressing.

While the current design of SINED clearly reflects some of the lessons learned from the evaluations of previous Northern development programs, some issues raised in the evaluations of the EDA and the I&K continue today. The need for long-term investment plans and clear program objectives and expected impacts still remains. Attracting investment and consumption outside the region are still needed. In addition, new issues relating to the flow of funds and staff training have emerged.

## **4.2 Design and delivery**

*How well are the public sector programs in the North coordinated?*

Under the Indian and Northern Affairs Act, the Minister for Indian and Northern Affairs is responsible for coordinating economic development in the North. Program documents identify a number of federal programs available to Aboriginal and non-Aboriginal northerners:

- ▶ The Community Economic Development Program is directed to First Nations and Inuit organizations and organizations carrying out the mandate of First Nations and Inuit organizations. It funds activities in support of community economic planning, capacity development, employment, research, and planning. (INAC)
- ▶ The Community Economic Opportunities Program financially supports First Nations and Inuit communities with opportunities for public services in economic development. (INAC)
- ▶ The First Nations Water Management Strategy supports infrastructure upgrades, staff training, and operations/maintenance of water and wastewater in high-risk First Nations Communities. (INAC)
- ▶ The Aboriginal Workforce Participation Initiative attempts to increase the workforce participation of Aboriginal residents of Yukon. (HRSDC)
- ▶ Aboriginal Business Canada provides financial support to eligible Aboriginal organizations (majority-owned Aboriginal enterprises) through financial assistance, business information and resource materials, and referrals to other possible sources of financing or business support. (INAC)
- ▶ The First Nations Infrastructure Fund offers financial support to First Nations and Inuit communities for health and safety; environmental investments; and support for delivery of public services and collaboration among First Nations communities, municipalities, provincial and federal governments, and the private sector. (INAC on behalf of Infrastructure Canada)
- ▶ The Canada–Yukon/NWT/Nunavut Municipal Rural Infrastructure Funds support major infrastructure projects that “sustain economic growth.” (INAC on behalf of Infrastructure Canada)
- ▶ The Canada Strategic Infrastructure Fund supports large projects that “improve the quality of life and further economic growth,” such as water quality, trade corridors, and connectivity. (Infrastructure Canada)

Almost all of these programs are delivered by INAC in the North. They are also often managed by the same manager in order to achieve greater coordination and all of the programs support goals similar to those of SINED. As such, SINED is well coordinated with other Federal programming related to economic development. In addition, the program has made considerable effort to coordinate its activities with Territorial governments through the development of Territorial Investment Plans. Intergovernmental strategic planning also appears to be linked to territorial or SINED investment planning. For example, the Nunavut plan included input from two Government of Nunavut departments and the Nunavut Economic Forum. The Northwest Territories plan resulted from engagement over two years with economic development organizations and sector advisors. Also, the first draft of the Yukon plan involved input from

the government of Yukon and the Council of Yukon First Nations. Coordination with local organizations continues beyond the planning stage as there is project-by-project cooperation between governments.

Examination of the contribution made by other levels of government to SINED projects provides further evidence of intergovernmental support and cooperation. Based on an analysis of PAR and PSR data, other government funding represents an average of 41% and a median of 38% of SINED project budgets.

<b>Table 12: SINED Projects — Average contributions from other government sources* (2005–06 to 2008–09)</b>				
Territory	Territory			
	Yukon	Northwest Territories	Nunavut	Total
<b>Percent contribute by other sources (%)</b>				
Mean	31%	37%	49%	41%
Median	29%	28%	50%	38%
Minimum	10%	4%	3%	3%
Maximum	49%	94%	86%	94%
<b>Amounts contributed by other sources (%)</b>				
Average	\$530,568	292,000	487,544	402,021
Median	\$135,000	\$25,000	\$95,000	\$69,500
Maximum	\$4,250,000	\$1,750,000	\$10,327,000	\$10,327,000

\*Other government excludes proponent and SINED funding.  
Source: Project database<sup>IX</sup>

Looking at the Yukon in the table above, for example, other government sources (not SINED, but other Federal, Territorial and Municipal) averaged 31% of project funding. The lowest level for any project was 10% of total budget and the maximum was 49%. On average non-SINED government funding contributed \$530,568. This average dollar value was clearly influenced by a few very large projects since the median is \$135,000, which is reflected in the highest level of contribution by other government at \$4,250,000 over the four year period. .

The SINED Territorial Plans do not refer to other Federal programs in capacity development, infrastructure, or Aboriginal development. These plans only focus on SINED suggesting that there needs to be greater coordination with other Federal programs. Key informants also suggest that the Federal restrictions on intra-governmental funds transfers limit program success. For example, it is not officially possible to pay for specialized federal geological services through the SINED program.

Looking beyond SINED, key informants cite instances where federal programming has worked counter-productively to economic development in the territories. In particular, they note that selective funding for Aboriginal programming can undermine various economic development efforts. One example cited involved federal funding being given to a start-up company that was in direct competition with an established firm, despite insufficient business to support both. Another example offered by key informants involved federal funding for Aboriginal organizations in order to provide honoraria to community members to participate in boards and committees; however, the honoraria provided sufficient income to eliminate the need to participate in the market economy.

This type of disincentive to labour force participation appears to be a problem in other areas as well. Key informants mentioned that a “welfare wall” arises from the income transfers (social assistance) that are sufficiently large as to create disincentives to participate in training and labour force participation. This works against all developmental activity meant to promote participation in the private sector economy. One example that was mentioned is that a family of

<sup>IX</sup> See Section 3 for a description of this line of evidence.

four in one region could receive as much as \$84,000 in transfers if no members were employed. This is well above territorial and national family income averages.

These transfers reflect the lack of private sector alternatives in many communities and the application of well-intentioned policies designed to assist families to manage the transition from a country based lifestyle to one supported by a market economy.

***Is the coordinative role of SINED and INAC accepted by all stakeholders?***

The coordinative role of SINED is generally accepted by stakeholders. As described above, SINED invested considerable effort towards the development of Territorial Investment Plans which resulted in a high degree of consensus, coordination and buy-in by Territorial governments. The success of this approach depended heavily on the relationships between federal, Territorial, municipal, and First Nations governments. Early tensions between these organizations resulted in some delays in the roll-out of SINED, however the regional offices managed to address issues in the introduction of the programs. Also important to the relationship between the SINED and territorial organizations was the capacity in the Territorial and federal-regional offices.

***Do SINED regional staff understand their roles and requirements of the program?***

The regional staff members understand their roles in *process-related* SINED activities. In particular, they are conscious of the programs financial and reporting requirements. However, many key informants noted that these requirements relate to program outputs rather than outcomes; these measures usually do not support conclusions about how projects are contributing to economic development.

Site visits highlighted that beyond selected funding parameters (e.g., funding certain capital projects, etc.), EDOs report few restrictions on the scope of projects. Most regional staff members note that decisions are made based on regional knowledge of the economy and on individual experience with economic development. EDOs appear to review each project or proposal using a range of information, such as the experience of proponents and the face plausibility of the project. Assessment forms provide very high level guidance on areas to assess, and operational funds are available to Regions to contract specialist advice in assessing projects, however, no one can refer to a manual or ‘playbook’ for guidance on what defines a good investment. On the one hand, such a guide would offer a structure for decisions and may be useful in excluding proponents whose ideas are not “fundable.” On the other hand, a guidebook may exclude innovative projects that have potential but whose parameters do not align with preset parameters. Approaches to selecting projects in each region remain tailor-made and the final decision regarding funding falls mainly to regional staff.

Over time, it appears that the role of the regional staff has expanded. Rather than merely reviewing project proposals, providing funding, and overseeing project completion, most staff members now report being actively involved in identifying appropriate projects, seeking out project proponents, and supporting proposal writing and submissions. Comments from staff indicate that this support is necessary given that few project proponents can manage the proposal writing and submission process stipulated under the SINED project. They also indicate that, in some cases, capable proponents do not think SINED is a possible source of funding for their ideas, and part of their role as EDOs is to promote the availability and applicability of funds to a wide circle of potential organizations. Despite, the need to be actively involved in supporting project proponents, it is important to note that SINED officers cannot and do not drive the



agenda. The Territorial government, non-governmental organizations and the business community are the ultimate source of fundable investment ideas.

The line between economic development officer and project proponent has become less distinct. One important feature of the North, stressed by many key informants, is that the business community does not present a sufficient flow of fully developed project proposals. In one case, a senior manager stated that projects with important potential had to be temporarily shelved because the specific entrepreneur became too busy with businesses elsewhere. This being the case, having an economic development officer materially assist proponents to develop ideas may be a useful way to generate viable projects. It would appear that these EDOs are behaving like “public entrepreneurs”, as described in the literature. A public entrepreneur is a public servant who has an acute understanding of the needs of business and can work effectively through the following types of activity:

- ▶ assisting the business owner to navigate regulations and other requirements for business activity
- ▶ supporting the development of fundable proposals
- ▶ providing expertise on business development
- ▶ identifying other investment resources and business services.

Two cautions should be noted. First, senior key informants noted that EDOs cannot operate in a vacuum. It is easy to cross the line from advisor to advocate; the economic development officer is a public servant with a fiduciary responsibility to manage public funds. Peer and management oversight exists in each territory as a challenge function for projects presented by proponents/EDOs. No SINED officer can authorize any investment solely on his/her authority and each investment does move through a process of management approval. Second, with the increased role and responsibilities of EDOs in all aspects of program delivery from the identification of project ideas to implementation, we heard from project proponents and some managers that staff would benefit greatly from increased training in business development.

Overall, SINED staff have a clear understanding of the process aspects of their work. However, there is little to guide individual investment decisions within the broad scope of the program beyond regional knowledge. This contributes to the need for an expanded role of many program staff and the need for continued professional development.

***Does INAC have sufficient resources on the ground to deliver the program?***

Key informants stated that resources under Vote 1 (Table 1) are insufficient to deliver the program. This is in large part due to the number of additional activities required with respect to proposal development and applicant coaching. Some noted that the level of funding for program delivery seemed arbitrary and did not reflect regional need. One region noted that to deliver the program, they needed to “borrow” the full-time commitment of two FTEs not formally associated with SINED. Furthermore, the program could benefit from additional IT support.

The key to understanding the perceived resource shortage is the nature of the EDO position. On paper, SINED appears to be a grants and contribution program that responds to requests from project proponents, assesses applications, makes financial awards, receives and reviews reports from project proponents, and reports results to regional and HQ management. In reality, effective EDOs perform differently and offer active support to project proponents to shape

general ideas into fundable projects. One resource that SINED does not have is a project database that would support the day-to-day management of projects and results reporting.

Generally, the evaluation found that SINEDs proposal-based nature provides the flexibility required to address the limited ability of many proponents to propose and implement projects. But the cost of this flexibility is that SINED staff has had to expand their job activities to provide technical support to proponents, not only to get projects off the ground, but to ensure the disbursement of the annual funding allotments, as well as to ensure the completion of projects. This places resource stresses on regional offices charged with delivering the SINED program.

***What organizational, delivery, and other barriers exist to achieving immediate outcomes?***

As outlined earlier, the most commonly cited organizational barrier to SINED delivery identified by key informants relates to the timing of payments. Many project proponents reported covering the costs of their activities well before receiving SINED funding. Proponents who needed to ship materials from the south said that if they did not get their funding prior to the last barge shipment, there was no way they could complete their projects. As a result, they lapsed on the funding agreement commitments. Every EDO and stakeholder stressed that in the remote communities, the weather constrains the time when construction can occur. Coastal communities become ice-bound for at least 6 months. If the funding is not released quickly, a project can encounter a substantial delay until the following year. Advancing funds prior to receiving a deliverable is very hard to do in the context of a grants and contributions program, which is one reason why capitalizing loans funds represent an alternative model for SINED.

The SINED project approval process compounds these difficulties. Regions typically identify projects for a fiscal year to ensure that funds exist and that none lapse. While flexibility exists in transcending fiscal years, key informants believe that even more discretion would be useful in altering the timing of project initiation and process, which would increase efficiency and effectiveness. In addition, key informants complained that once approved, insufficient flexibility exists to change projects or respond to immediate need. They argued that the SINED program cannot respond to a critical project issue, new opportunity, or any project change late in the fiscal year. At the same time, senior management believes that program guidelines do allow the flexibility needed to accommodate project exigencies. This may indicate that EDOs could benefit from increased instruction on how existing guidelines accommodate project timing requirements.

The venture capital organizations and loans funds in the North demonstrate how it is possible to overcome these barriers. As they are not tied to an annual fiscal cycle, they can lend and request repayments at times that coincide with economic cycles and the emergence of viable proposals. Ironically, this raises the prospect that SINED could become more efficient simply by assigning more of their funding to these venture capital organizations. Alternatively, using the concept of a fund and reducing the influence of fiscal year requirements would seem to offer some prospect for reducing project barriers. The extensive placement of funds with the *dāna Nāye* Loans Fund in Yukon and the Métis Dene Loan Fund in NWT illustrates the perceived value of this vehicle in promoting economic development. SINED essentially participates in the capitalization of these entities that operate as banks.

Some proponents argued that the reporting requirements stipulated under SINED, and that are specified in the terms and conditions for projects, made requesting funding a “losing proposition” for smaller projects and organizations. These requirements include submission of regular quarterly reports on activities and expenditures. The burden often increases when a

project has several funders, each with different format and timing with respect to reporting. Key informants confirmed that smaller organizations expressed concern about the reporting burden. Some EDOs noted that some smaller proponents, although identifying viable economic development projects, did not have the capacity to deliver on their own ideas. Although consultants from the “south” are used to assist with project development, a significant “cottage” industry of business consultants has emerged in Yukon and NWT who assist with all aspects of project development from proposal to reporting. Key informants saw nothing wrong with this because it increases the quality of applications and reporting. However, it does underscore that the business community in the North has limited capacity to develop projects suitable for funding by SINED.

Some key informants noted that the funding caps on the SINED program limit program success. They argued that although the various funding levels may appear high to people from the south, in the North projects are much more costly to undertake. As such, many smaller northern projects must go to Ottawa for approval (at the highest level, to the Minister). Given the possibility for delayed decision making influencing economic development plans at the highest level, some staff members questioned this requirement in its entirety.

The five-year funding cycle for the SINED program may itself be insufficient for long-term economic planning and may be a barrier to economic development. From a general perspective, key informants noted that the five-year funding cycle associated with the SINED program limits the ability to engage in long-term strategic development activities or planning. They believe that uncertainty about the status of the funding past the five-year point, particularly in the context of the elimination of the EDAs and the long delay before the start of the SINED program, precludes funding for projects with long time frames.

More generally, beyond the influence of SINED, structural barriers and human capital impede economic development in the North. Many of these are the result of otherwise well-intentioned programs that, when operating in concert, create a disincentive to economic development:

- ▶ For example, key informants reported that some small communities have many economic development organizations, each with boards charged with directing planning. In one example, five economic development organizations operated in a community of approximately five hundred people. Board membership became an important source of income for the members who have an incentive to maintain these agencies regardless of their actual contribution to economic development.
- ▶ In other communities, the housing and other subsidies paid to the unemployed reportedly (according to key informants) acts as a strong disincentive to work. The transfer economy, which all key informants believe represents an undesirable feature in the North, especially for Aboriginal populations, actually creates a “welfare wall” degrading incentives to train and form entrepreneurial ventures.
- ▶ On a related point, some key informants commented that the high wages and benefits paid to public servants can create problems for businesses seeking to attract employees. At the same time, high incomes earned by public servants create a demand for a range of goods and services that support the local economy.

- ▶ In some communities, proponents lack the knowledge to deliver on their own proposals. As the case studies show, this means relying on hired consultants for the delivery of projects.

### *Is the program delivered effectively and efficiently?*

Despite the constraints on the program, regions appear to have identified many areas for economic development and can identify anecdotal evidence of success. Many investments have strong rationales developed at the regional level and will likely show outcomes over the long term. One example common to all regions is the geoscientific work, where the collection and dissemination of basic mineral and oil/gas mapping data provides a public good critical to natural resources development and stewardship. These maps are used by the private sector to identify areas for detailed exploration. Both key informants and indeed the record of over 25 years of investment by EDAs and the I&K show this consistent belief that if government does not do such “basic” science, the private sector will not. The returns from such general investigations are too diffuse for any private sector firm to capture and represent a classic area for public sector investment.

Investment in geosciences has become an unambiguous success, but why it is done through SINED and INAC and not Natural Resources Canada (NRCan)? One rationale is that SINED can prioritize Northern interests and accelerate the timing of the exploration through incremental investments which, if left to NRCan, would be slower as NRCan must also focus on funding mining opportunities in other parts of Canada. This is an example of how the legislation empowers the Minister (INAC) and SINED to accelerate a pro-development agenda for the North, which could otherwise be slow as the territories wait for funding from other departments.

The contributions to loans funds represent another major class of activity supported by SINED, and here the determination of efficiency and effectiveness is more complex. First, it certainly is efficient to transfer funding to a pooled capital fund. If the fund is well established, with a sound track record, as appears to be the case with the dāna Nāye Loans Fund, Baffin Island Business Development Corporation, and the Métis Dene Loans Fund, then the awards can be made with some confidence and less investigation may be required. The issue of effectiveness is more complex, since pooling contributions means that the contributors can only assess the impact of their funding based on the success of the fund in general. It is noteworthy that the SINED contributions managed by the Baffin Island Development Corporation and the Métis Dene Development Fund are kept in a separate account, which will support tracking of results. The case studies speak to all of these examples.

Funding the loans funds represents an “out-sourcing” of business investment activity and may reflect an efficient use of funding if SINED staff does not have the capacity or contacts to investigate all viable business opportunities. However, noted below, this means that the investments made by SINED in this case cannot presently be attached to end outcomes. The SINED funding commingles with funding received from other sources, which limits an inference from the success of projects supported by the loans funds to the investment made by SINED. Further, the directors of the loans funds make investments according to the goals of the fund, which may not necessarily reflect the priorities of SINED or its territorial funds. In effect, this form of funding limits the ability to attribute SINED funding to the results obtained by loans fund. However, based on the descriptions in the PAR/PSRs and key informant interviews, it would appear that the loans funds and community futures corporations have mandates and investment activities that are consistent with SINED objectives.

Within the constraints discussed above, the program appears to be delivered effectively and efficiently. Regional innovations including contracting out project work and expanding job activities have contributed to overcoming many of the structural barriers, such as local capacity issues or interdepartmental relations, inherent in the program.

### 4.3 Program impacts

As the SINED evaluation is formative, it is focused on design and delivery and is not expected to record substantial impacts or outcomes from funded projects. However, an important aspect of design and delivery relates to the identification, measurement and attainment of SINED outcomes.

Program impacts or outcomes are the desired changes that the program is working towards. Outcomes can be short-term, intermediate or long-term. For example, in the case of economic development, a desirable long-term outcome might be sustained economic growth and increased community well-being. Intermediate outcomes might be increased employment, entrepreneurship, investment attraction or access to capital.

It is important to distinguish outcomes from outputs. Outputs refer to completed tasks that contribute to change or outcomes. A clear connection between activities, outputs and outcomes is essential for program design and performance measurement.

This evaluation introduces four questions designed to explore program impacts and their measurement: The first question examines whether expected outcomes and associated performance measures are clearly articulated. The second question looks at the type of data being collected and the appropriateness of this data to the desired outcomes. Early evidence of results and the likelihood that long-term results will be realized are examined in the third and fourth questions.

#### *Does the program clearly articulate expected outcomes and their associated performance measures?*

Table 3 in Section 2 outlines expected outcomes and performance measures for the four business lines for the Regional Development Authority which underlies SINED. As discussed earlier, the Regional Development Authority enumerates a range of outcomes, however, many resemble outputs. As a result, program staff lack program-specific documentation which clearly demonstrates the flow of logic from activity to outcome.

At the project level there are varying degrees of information on expected project outcomes and no clear indication of how funded projects and their associated outcomes will lead to sustained economic development. The result is that program management has little information on how and why various levels of project funding are assigned and allocated. These points clearly emerge in the case studies as summarized in Table 13.

<b>Table 13: Case studies – Expected outcomes and performance measures</b>		
<b>Yukon</b>	<b>Expected outcomes</b>	<b>Performance measures</b>
dāna Nāye Ventures Loan Fund	<ul style="list-style-type: none"> <li>▶ Increase in business start-ups that will be needed for broad and sustainable economic development</li> <li>▶ Increase in employment</li> <li>▶ Increase in incomes</li> </ul>	<ul style="list-style-type: none"> <li>▶ For a period of five years from disbursement, collect information on:               <ul style="list-style-type: none"> <li>– Number of value of loans disbursed</li> <li>– Value of capital repaid</li> <li>– Number of businesses receiving loans per industrial sector</li> <li>– Estimated number of jobs created or maintained</li> <li>– Estimated value of sales for first year of activity</li> <li>– Revenues</li> <li>– Expenses</li> <li>– Number and value of write-offs</li> <li>– Outstanding number and value of loans</li> <li>– Available capital for loans</li> </ul> </li> </ul>
Yukon Geosciences – Yukon Geological Survey	<ul style="list-style-type: none"> <li>▶ Positive economic impact on Yukon through increased mineral exploration expenditures and discovery of mineral deposits</li> <li>▶ Better informed plans and policy making, including the planning and engineering of natural gas pipelines and railroad along the Alaskan Highway corridor / data to evaluate hydrocarbon and mineral potential</li> <li>▶ Updated regional mineral and hydrocarbon potential assessments</li> <li>▶ Increased industry certainty which helps maintain economic activity throughout the Yukon</li> <li>▶ Quicker environmental assessments and construction planning for mega projects</li> </ul>	<ul style="list-style-type: none"> <li>▶ None</li> </ul>
Great River Journey – GNJI & FNIC	<ul style="list-style-type: none"> <li>▶ Strengthening driver sectors of the territorial economy (tourism)</li> <li>▶ Broadening economic base of the territory</li> <li>▶ Strengthening Northerners' abilities to take advantage of economic opportunities</li> <li>▶ Increasing coordination amongst partners and programs</li> <li>▶ Increasing the number of small and medium-sized business in the tourism sector</li> <li>▶ Increasing the sustainability of businesses</li> <li>▶ Expanding product development</li> <li>▶ Expanding domestic and export market access</li> <li>▶ Generating new sustainable jobs in small communities</li> </ul>	<ul style="list-style-type: none"> <li>▶ Evaluate the project to determine if it is a commercial success and is profitable</li> </ul>
<b>Northwest Territories</b>	<b>Expected outcomes</b>	<b>Performance measures</b>
Northwest Territories Métis-Dene Development Fund	<ul style="list-style-type: none"> <li>▶ First two years - fund will create 63 additional jobs and assist 27 SMEs</li> <li>▶ Over five years - fund will create 168 jobs and assist 71 businesses</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number and value of pending loan applications</li> <li>▶ Number and value of loans disbursed during period</li> <li>▶ Value of capital repaid during period</li> <li>▶ Number of businesses receiving loans during the period, per industrial sector</li> <li>▶ Estimated number of jobs created or maintained</li> <li>▶ Estimated value of sales for first year of activity</li> <li>▶ Revenues (INAC, interest, others) during period</li> <li>▶ Expenses (related to the operation of the fund only)</li> <li>▶ Number and value of write-offs during period</li> <li>▶ Outstanding number and value of loans</li> <li>▶ Available capital for loans</li> </ul>
Mine Training Simulator – Aurora College	<ul style="list-style-type: none"> <li>▶ Increased income and employment for Northern residents</li> <li>▶ Opportunity for the mining industry to access trained and available Northerners for underground mining positions</li> <li>▶ Capability to deliver top quality underground mine training programs</li> </ul>	<ul style="list-style-type: none"> <li>▶ Keep up-to-date human resource, financial and contractual records</li> <li>▶ Number of participants that use the full-scale simulator on an annual basis</li> <li>▶ Number of participants that use the desk-top simulators on an annual basis</li> <li>▶ Number of communities where training and demonstration events take place</li> <li>▶ Number of participants who complete the underground mining program</li> <li>▶ Number of participants who gain employment in underground mining</li> </ul>

<b>Table 13: Case studies – Expected outcomes and performance measures</b>		
Long-Term Strategic Planning – Norman Wells Land Corporation	<ul style="list-style-type: none"> <li>▶ “Road map/blueprint” for future Board of Directors to follow, ensuring continuity in leadership</li> <li>▶ Better understanding and support by general membership of Board strategy</li> <li>▶ Use of software ensures that deliverables remain relevant</li> <li>▶ Increased recruitment and retention of support staff</li> <li>▶ Improved integration of experts/consultants, better definition and coordination of project deliverables from external resources</li> <li>▶ Improved organizational capacity to negotiate, plan, and manage projects</li> <li>▶ Better communication of Board activities and support by general membership</li> <li>▶ Increased economic benefits to the membership</li> </ul>	<ul style="list-style-type: none"> <li>▶ Solicit feedback from the membership immediately after the presentation of the strategic/business plan and ensuing discussion</li> <li>▶ Development of a single-page commentary questionnaire to be filled out by the membership after the strategic/business plan presentation</li> <li>▶ The questionnaire will document the effectiveness of the presentation format, solicit suggestions on information recommended be included/excluded in the plan and on how to improve the presentation</li> </ul>
<b>Nunavut</b>	<b>Expected outcomes</b>	<b>Performance measures</b>
Loan Fund Top-Up – Baffin Business Development Centre	<ul style="list-style-type: none"> <li>▶ Increased business development</li> <li>▶ Increase in the number of employment opportunities at the community level</li> </ul>	<ul style="list-style-type: none"> <li>▶ Financial accounting for administration setup costs</li> <li>▶ For a period of five years from disbursement, collect information on: <ul style="list-style-type: none"> <li>– Purpose of each loan</li> <li>– Amount of each loan</li> <li>– Leveraging of other financing</li> <li>– Industry sectors supported</li> <li>– Ownership statistics</li> <li>– Demographic analysis</li> <li>– Repayment tracking</li> <li>– Interest revenues</li> <li>– Number of loans approved</li> <li>– Total value of loans approved plus funds still available from INAC loan fund</li> </ul> </li> <li>▶ Reporting by individual businesses on results of project funding</li> </ul>
Nunavut Community Skills Inventory System – GN Department of Education	<ul style="list-style-type: none"> <li>▶ Contribution to ensuring Inuit obtain employment</li> <li>▶ Creation of Partnership Agreements between the Department of Education and the three regional Inuit organizations and Hamlets</li> <li>▶ Simply the benefits of the system being available</li> <li>▶ Development of a model that could be applied repeatedly to a variety of different labour force development issues in Nunavut</li> <li>▶ Development of capacity within the three regions to link labour market assessment, essential skills assessment, and employment and training programs to economic development activities and available Territorial and federal support</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of partnership agreements established</li> <li>▶ Stage 1 activity report</li> <li>▶ Copy of Stage 1 conceptual approach to employment and training for the three regions</li> <li>▶ Copy of the outline of a general approach for moving forward</li> <li>▶ 07/08 Kivalliq and Kitikmeot population report</li> <li>▶ Stage 2 activity report</li> <li>▶ Stage 3 activity report</li> <li>▶ Stage 4 activity and evaluation report</li> <li>▶ 07/08 final project evaluation report</li> <li>▶ 08/09 Baffin NCSIS population report</li> <li>▶ Final project evaluation report</li> </ul>
Offshore Turbot, Shrimp, and Char Assessments – GN Fisheries and Sealing	<ul style="list-style-type: none"> <li>▶ Ensure the sustainability of the fishing stock</li> <li>▶ Large increase in returns since a large proportion of the benefits associated with Nunavut’s fisheries remain in Nunavut</li> </ul>	<ul style="list-style-type: none"> <li>▶ Interim revenue and expense report</li> <li>▶ Report on fieldwork</li> <li>▶ Post survey report</li> <li>▶ Paper and digital copies of any maps, reports, etc.</li> <li>▶ Copies of any scientific papers/reports produced from the fieldwork</li> <li>▶ Signed financial statements</li> </ul>
Source: Case studies		

Outcome indicators for individual projects are variably recorded, and when they are, they include a wide range of performance measures. Often the terms and conditions for projects embed some expected results that also serve as performance measures. However, in many cases these performance measures consist of a report or reports on the progress of the project, which is closer to an output than an outcome. While these provide an indication of the success of project implementation, they do not provide information on the impact of the project on economic development. When there is an indication of the impact of a project on economic development,

as in the case of the Nunavut Community Skills Inventory System, clear measures of outcomes are not readily apparent, making performance measurement and assessments difficult.

The PAR and PSR review also supports the contention that there is little information related to program outcomes. As Tables 14 and 15 note, both the terms and conditions for the individual projects and the expected results are not readily identifiable as outcomes related to economic development. In addition, many are unrelated to the measures outlined in the program documentation, making it difficult to link project results to overall program goals.

<b>Table 14: Terms and Conditions identified at the project approval stage</b>	
<b>Type of condition</b>	<b>Percent**</b>
None specified	5%
Provide reports (interim, progress, and final)	40%
All cost overruns	36%
Recognizing the contribution of Canada in all public documents	29%
Provide financial and expenditure reports	27%
Other deliverables/initial documents, feasibility and planning studies	17%
Funding not to exceed a specified amount	13%
Maintain appropriate documentation	11%
Confirmation that applicant and partner(s) will adhere to conditions	13%
Other expenditures to be disbursed as approved by minister	12%
Other (miscellaneous)*	52%
*This includes 15 discrete items, none exceeding 6%	
** Multiple items in Terms and Conditions. Total exceeds 100%	
Source: Projects database	

<b>Table 15: Expected results as found in the PARs and PSRs</b>	
<b>Results</b>	<b>Percent**</b>
Reports (final report, project outlook report, activity report)	59%
Conduct survey/obtain feedback (from participants, trainees, etc.)	18%
General deliverables (feasibility study, communications plan, etc.)	16%
Evaluation of project (including evidence of evaluation strategy)	12%
Tracking monitoring of project progress	9%
Maintain records	8%
Detailed work plan	6%
Financial reports	6%
Consulting reports	6%
Other (miscellaneous)*	38%
*This includes 12 discrete items, none exceeding 5%	
** Multiple items cited in results. Total exceeds 100%	
Source: Projects database	

Identifying project- related outcomes is further complicated by varying standards of completion among the PARs and PSRs. Although a general template exists for these documents, wide variations exist in the details and the level of analysis provided (particularly with respect to how investments support activities that produce outputs leading to outcomes related to economic growth). Furthermore, no information on expected results from the project proponents' reports appears in the PARs and PSRs. Key informants confirmed that this information remains in the reports provided as part of the terms and conditions and does not appear in any form that supports program-wide synthesis and analysis.

Many key informants note that even in the presence of clear outcome measures, determining the impact of SINED funding would remain difficult. They indicate that many of the long-term



projects are not expected to show results for many years. In some cases this places their outcomes and impacts on economic development outside the five year cycle of the SINED program.

Overall the SINED program provides only a general indication of expected outcomes; in most cases identifying a number of specific outputs instead. At the project level, the link between project activities and economic development remains vague, with little indication of how to measure impacts conclusively and systematically. These difficulties are compounded by variations across project terms and conditions and expected results and the length of time required to see results. Further, the fact that project level outcomes do not align closely with higher-level expected outcomes articulated in the program documentation makes linking project level activity to the program goals difficult.

***Is the program collecting appropriate data to track immediate and intermediate outcomes? Is the reporting sufficient to allow SINED management to understand the progress being made to results fulfillment?***

To date SINED has worked to create a results tracking system within the departmental system rather than developing a stand-alone system. SINED arranged for the development of a SINED module under a departmental Project Information Management System (PIMS), when the department shifted to a financial management system (FNITP) which was expected to have project tracking capabilities. SINED was never able to make use of PIMS as intended, and FNITP does not yet offer project tracking functions. In the absence of PIMS, SINED attempted to capture some of the results for paper reporting through the Annual Reports to Ministers, but encountered resource limitations in Regions to compile information.

The information from the case studies and the PARs and PSRs presented earlier highlights some important facts about the ability of SINED to track immediate and intermediate outcomes. As noted in Table 14, the project terms and conditions tend to specify purely contractual obligations and not expected results associated with measures of sustained economic growth, or even increased activity in “driver” sectors or “broadening the economic base.” Table 15, which notes expected results, suggests that most pertain solely to outputs rather than outcomes. One can construct a reasonable hypothesis about probable outcomes for each of the case study projects but this type of information does not appear to be systematically articulated in summary form.

Key informants state that immediate results in terms of jobs created or trainees trained are normally included in project proponent reports. They receive these reports at quarterly or annual intervals from proponents. The reports allow the regional management to identify successful and unsuccessful projects based on specific project criteria, allowing them to speak anecdotally of project success. However, they do not appear to be compiled in a way that supports aggregation or an overall picture of how SINED funds are being used to promote economic growth. Further, key informants recognize that at the regional level there are insufficient resources to undertake this type of aggregation activity.

Much of the information gathered over the course of the evaluation respecting immediate outcomes emerged from conversations. Key informants can cite examples of their projects that promote capacity building and economic development such as the support for the mining simulator. The key informant data suggests that SINED investments are making a useful contribution to territorial development. However, these cases or anecdotes do not represent a

coordinated reporting process that allows program management to assess overall progress and results.

*What evidence exists that funded projects have realized early results, especially with respect to:*

- ▶ *Creating economic infrastructure*
- ▶ *Increasing the number and diversity of northern firms, especially in smaller communities*
- ▶ *Increasing the range and access of data on the Northern resource base*
- ▶ *Increasing the number of skilled workers, business managers and community leaders*
- ▶ *Increasing the capacity of Northern organizations to become engaged in economic planning and political decision-making?*

Again, as noted in Table 14 and Table 15, little systematically recorded information exists to allow any conclusion on the realization of any of the program indicators. There appears to be little in the PARs and PSRs to specify if reports from proponents contribute information on these results. Further, based on key informant information, reports from proponents appear to be used only to verify fulfillment for the terms and conditions and not to assess outcomes, even if indicators are present. As alluded to above, it is important to stress that EDOs could all speak about “their” projects in terms of status and progress. Each could also link the projects’ goals to SINED criteria, yet this information does not find its way into regular reporting, largely because a convenient vehicle for such reporting does not exist. Table 16 presents an analysis of the results to date for the nine case studies based on the evidence available.

<b>Table 16: Case studies – Discussion of results to date</b>	
<b>Yukon</b>	<b>Evidence of results to date</b>
däna Näye Ventures Loan Fund (DNVLF)	According to SINED staff, this fund has a good record of making investments in businesses and other sustainable activities. SINED is relying on the expertise and community level knowledge of project officers within the loan fund. Further, the extent to which DNVLF receives funding from other sources (and we could not obtain details in this point), SINED must share the credit for successes with the other funders. SINED expects that DNVLF will recover its loans, but this grant to the fund is non-repayable. A reasonable expectation exists that this investment will support sustainable activity in territory, but as yet, no evidence exists.
Yukon Geosciences – Yukon Geological Survey	This investment represents traditional economic development activity in the North. With increasing metals prices this represents investment with high potential for long-term economic outcomes. The mining industry has always supported these investments. However, by their nature these are long term and no immediate results in the form of new properties being developed have resulted.
Great River Journey – GNJI & FNIC	This is one of SINED’s high profile investments in geo-tourism. Currently the website is functional and “patron” tours are being booked into the Fall. The success of this project will be determined through the 2009 season at the end of which sustainability will be confirmed. Key challenges for this project will be the recession in North America and the high Canadian dollar. At this point, the project development appears to be on schedule.
<b>Northwest Territories</b>	
Northwest Territories Métis-Dene Development Fund (NWTMDDF)	The same comments apply to this fund as the DNVLF. This fund also has an excellent reputation according to EDOs, and so the investment by SINED appears to meet its goals for sustainability.

<b>Table 16: Case studies – Discussion of results to date</b>	
Mine Training Simulator – Aurora College	This project has had good early results. The training simulator has produced graduates that have been employed in the industry. This investment is likely to have continuing benefits for the industry in NWT.
Long-Term Strategic Planning – Norman Wells Land Corporation	This investment is hard to align with any future benefit. In principle, good strategic planning will support long-term growth, but attribution is difficult. Presumably, the Territorial government identified this need; the more specific the plan the more beneficial will be the impact on economic development. According to SINED staff this project has been completed and all deliverables/reports have been received.
<b>Nunavut</b>	
Loan Fund Top-Up – Baffin Business Development Centre	This represents a similar type of investment as the DNVLF and the Métis-Dene Development Fund.
Nunavut Community Skills Inventory System (NCSIS)– GN Department of Education	The first project was successful in translating the NCSIS user interface into Nunavut's recognized languages; therefore, making it more accessible. It was also implemented in pilot studies in various communities. The second project, <i>Building Nunavut's Labour Market</i> , has been successful in obtaining support and cooperation from a coalition of partners. Investment in labour market information is widely seen as a support to long-term investments in the human resource base for an economy.
Offshore Turbot, Shrimp, and Char Assessments – GN Fisheries and Sealing	The assessment is presently ongoing. While it continued through 2007/08 without INAC assistance, INAC contributed to the assessment in 2008/09. There has been no increase in quotas up to this point in time, however, the assessment has resulted in the finding of new fish stocks in one area, and commercial turbot fishing is being undertaken in this area.
Source: Case studies	

The evaluation case studies demonstrate that some progress on results may be inferred. For example, the Däna Näye Ventures Loan Fund case study notes that the additional funding provided through SINED was to increase small business capital to small business. The case study shows that since May 2007, the fund was able to provide 19 additional loans for a total value of \$960,000. However, there is little information on how these additional loans have contributed to economic development. Similarly, the Yukon Geosciences project identifies an increase in geological investment as one of the main goals of the mapping activity discussed. The case study shows that key informants think the demand for preliminary mapping products is a clear indication that the project will eventually lead to the planned outcomes.

Case studies from other regions also suggest that individual projects have delivered their planned outputs and may eventually show short to medium term outcomes. The Mine Training Simulator, for example, planned to train individuals with the eventual intent of increasing local incomes. The case study notes that 11 students trained on the simulator completed their programming, were offered work, and are now employed with two of three mining companies in the Northwest Territories. This is clearly a useful result that aligns closely to both SINED and what economic theory indicates is useful support for economic development. The offshore Turbot, Shrimp, and Char Assessment, although only in the early stages, had already identified additional fish stocks. If, as the case study notes, the quotas are distributed so the benefits of these additional stocks accrue to northerners, the additional stocks will eventually lead to economic development in the North.

Beyond the lack of available data, the listed outcomes are also problematic because while they appear clear and seem to express intuitive indicators of economic progress, they are difficult to

measure. For example, a measure such as an “increase in the number and diversity of northern firms especially in smaller communities” would ideally have, as a baseline, an inventory of firms and their position within the industrial classification exists for the North. It does not. Further, such an inventory is very hard to construct even for highly developed parts of Canada.

*How likely is it that SINED will realize its longer term expected results? What is a reasonable time frame to realize those results?*

Key informant interviews and the aspects of the literature review discussed above confirm that economic development in the North is a long-term issue. Even though the federal government has funded development initiatives in the North for several decades, progress is slow. Generally, those involved in program delivery and SINED stakeholders agree that the impact of funding may only be assessed in a long time frame which in some cases can be 10 or more years. Nonetheless, no plan exists to track individual projects or the program as a whole for this length of time. Key informants also confirm that resources are not available at the regional level for this type of extended follow-up activity.

The difficulty of assessing these long-term impacts was confirmed during the literature review. This confirmation came in large part by the inability of evaluations to assess the long-term impacts of previous economic development funding agreements. Further, no retrospective research on the I&K or the EDAs of the last decade exists that follows up on projects funded at that time, nor as a result do we have information on what the longer-term outcomes have been.

The investments made by SINED plausibly link support for long-term economic development. But like the EDAs and the I&K, it is not possible to track exactly how spending relates to longer term changes in the income and wealth of the territories. The GDP and other measures of economic prosperity for each of the territories continues to increase, however, no link can be drawn between these changes and SINED activity. Since SINED investments represent a fraction of a percent of GDP in each territory, it may be too ambitious to specify or measure a linkage to longer-term outcomes.

However, the challenge for SINED is that outcome reporting depends on territorial plans that link more to regional/territorial goals as opposed to SINED goals. Further, many investments are to entities such as loans funds where outcomes cannot be linked to SINED or for feasibility studies that produce very long-run results. The completion of a study is effectively an output, but any outcome is both intangible and far removed from the investment. Finally, SINED project terms and conditions do not specify outcomes that link to its goals or track results.

## **5.0 Conclusions and recommendations**

This report has presented the findings of the formative evaluation of INAC’s Strategic Investments for Northern Economic Development. As noted in the introduction to the report, the advantage of conducting a formative evaluation in a new or restructured program is that the evaluation findings can allow for improvements in delivery to maximize results as well as improvements in performance measurement and reporting that can enhance the potential of identifying success in future impact evaluations.

## 5.1 Conclusions

There are many challenges to economic development in the North. The resource-based territorial economies are characterized by periods of rapid growth and inflation followed by a recession when commodity prices drop. The remoteness and sparseness of the population impedes interaction with the southern economy, increases the cost of doing business and limits the capacity of workers and entrepreneurs to participate in the market economy. The literature review revealed that Government of Canada has a role to play in easing the impact of the boom-bust cycle, correcting market imbalances and establishing the conditions which will allow economic development to take place.

SINED is a suite of programs designed to address some of the challenges to economic development in the North. The programs are governed by clear long-run objectives as stated in the program documentation. All managers and personnel interviewed understand that the goal is to increase the opportunities for residents and businesses in the North, and their capacity to respond to those opportunities; to increase their participation in paid employment; and to expand markets, especially with respect to increasing connections to the rest of Canada and the world. The program works towards these goals through investments in knowledge and innovation, capacity building, economic infrastructure and diversification.

Investment decisions are driven by Territorial Investment Plans in each of the territories which identify local needs and priorities, and allow for a more focused regional approach to economic development. The Plans also help build consensus and coordination among key players in territorial economic development. A major limitation of the current Investment Plans is that the results chain that links specific investments to sustained economic growth is not well articulated. While the plans are linked to SINED's investment areas, the connection to SINED outcomes is not provided.

Regional management reporting efforts centre on meeting narrow fiscal accountability requirements. These are important management tools and should be maintained. Beyond this, however, the current reporting system does not provide any ready means for managers to obtain a comprehensive and concise perspective on impacts. The PARs and PSRs are weak in linking expected project results to program goals. The FNITP electronic tracking system for contribution agreements verifies only that reporting has been received. Existing reports allow the regional management to make comparisons on a project-by-project basis, but there are no mechanisms for region-wide or program-wide roll-up. It was noted that, at the regional level, even if such a system was in place, there are insufficient resources to undertake this type of aggregation.

Since everyone acknowledges that economic development in the North is a long-term proposition, SINED needs to find a way to follow its investments beyond the cessation of its funding. No plans exist to follow projects over a longer period, or to retrospectively examine earlier investments to validate assumptions about the impact of "traditional" investments in geosciences.

The growing complexity of the EDOs role has also contributed to the need for additional resources. SINED staff invest considerable effort in ongoing cooperation and coordination with the Territorial governments which has been key to the development of the Territorial Investment Plans and the efficient delivery of SINED programs. EDOs have also spent more time working

closely with project proponents to help them develop and deliver project ideas than originally anticipated. This expanded role for EDOs was an effective response to the initial shortage of fundable projects.

The current funding structure does not allow SINED to commit funding beyond a two to three year time frame (where the Territorial governments have longer-term plans), nor does it have the flexibility to allow the programs to respond to new opportunities or changes in a timely manner. It would be useful if the program had greater flexibility in its funding to respond to these issues.

The evaluation case studies demonstrate that some progress on results may be inferred. For example, the Däna Näye Ventures Loan Fund case study notes that the additional funding provided through SINED provided for 19 additional loans. The demand for preliminary mapping products in the Yukon has raised hopes for an increase in geological investment. Some trainees from the Mine Training Simulator are now employed with two of three mining companies in the Northwest Territories. The offshore Turbot, Shrimp, and Char Assessment, although only in the early stages, had already identified additional fish stocks.

## **5.2 Recommendations**

1. Create a program-specific RMAF and logic model which clearly defines the connections between funded activities and expected outcomes. The performance measurement strategy should include indicators and a plan to determine how longer-term results will be measured.
2. Establish closer linkages between individual projects, Investment Plans and SINED outcomes and ensure that they are aligned with SINED strategic objectives.
3. Consider options for aggregating project data for reporting to program management and for use in future evaluations.
4. Review operating resources to ensure effective monitoring and professional development of staff.
5. Explore options that would allow for greater flexibility and strategic investment in multi-year funding activities
6. Continue to work with federal and Territorial governments and other private sector and non-governmental organizations engaged in economic development in the North.

## Management Response / Action Plan

**Evaluation Project Title:** SINED Formative Evaluation - September 2008

**Evaluation Project #:** 07/51

**Region or Sector:** Northern Economic Development Directorate, Northern Affairs

Recommendations	Actions	Responsible Manager (Title)	Planned Implementation Date
1. Create a program-specific RMAF and logic model which clearly defines the connections between funded activities and expected outcomes. The performance measurement strategy should include indicators and a plan to determine how longer-term results will be measured.	INAC HQ will create a SINED-specific performance measurement and reporting framework as part of the SINED renewal process. The performance measurement strategy will include a plan to measure the longer-term impact of SINED investments.	Director General, Northern Strategic Policy Branch and Director, Northern Economic Development	April 2009, subject to program renewal.
2. Establish closer linkages between individual projects, Investment Plans and SINED outcomes and ensure that they are aligned with SINED strategic objectives.	(a) INAC HQ will work with Regional Director-Generals in Nunavut, NWT and Yukon to update Investment Plans and incorporate them into an improved logic model.  (b) INAC HQ and Regional Director Generals will document intended impacts of individual projects on SINED strategic outcomes.	Director General, Northern Strategic Policy Branch, Director, Northern Economic Development, and Regional Directors-General, Nunavut, NWT and Yukon	April 2009
3. Consider options for aggregating project data for reporting to management and for use in future evaluations.	INAC HQ will work to aggregate data in the context of the performance measurement strategy (above).	Director General, Northern Strategic Policy Branch and Director, Northern Economic Development	April 2010
4. Review operating resources to ensure effective monitoring and professional development of staff.	INAC HQ will develop a business case for increased operating resources in the context of renewal.	Assistant Deputy Minister, Northern Affairs and Director, Northern Economic Development.	April 2009
5. Explore options that would allow for greater flexibility and strategic investment in multi-year funding activities.	INAC HQ will explore options for increasing flexibility in the disbursement of project funding while strengthening accountability.	Director General, Northern Strategic Policy Branch and Director, Northern Economic Development	April 2009

Recommendations	Actions	Responsible Manager (Title)	Planned Implementation Date
6. Continue to work with federal and territorial governments and other private sector and non-governmental organizations engaged in economic development in the North.	INAC HQ and Regional Director-Generals in Nunavut, NWT and Yukon will work to improve engagement with a network of stakeholders including government, private sector, and non-governmental organizations in the economic development of the territories.	Director General, Northern Strategic Policy Branch, ,Director, Northern Economic Development, and Regional Directors-General, Nunavut, NWT and Yukon	April 2009

I approve the Management Response / Action Plan

*Original signed by:*

Name Patrick Borbey  
 Title ADM  
 Sector Northern Affairs  
 Indian and Northern Affairs

Date:



## **Appendix A**

Territorial Plans: Planned Spending

<b>Table 1: Investment Plan for Yukon Targeted Investment Program</b>			
<b>Major project investments</b>	<b>Potential categories of recipients</b>	<b>Description of investment and targeted results</b>	<b>Projected investment level 2006–2007 to 2008–2009 (\$ millions)</b>
<b>Economic Infrastructure</b>			
Fibre Optic Connection to southern Canada	Yukon based public governments, including First Nation governments, non-profit organizations, or corporations owned, operated or mandated by a public government (applicant to TIP)	<p><b>Description:</b> Development of an open access business model and deployment of multi-use telecommunications infrastructure such as fibre optic cable to and within the Yukon that will provide the capability of high speed communications to and within Yukon at a rate and capacity similar to that commonly found in southern Canada.</p> <p><b>Targeted Results:</b> Increased capability and cost effectiveness for residents and organizations within the Yukon to communicate and do business over the Internet with each other, nationally and internationally.</p> <p>Increased competitiveness and choice on the delivery of Internet based services for and to Yukon.</p>	\$4.000
<b>Economic Diversification</b>			
Cold Climate Cluster: northern innovation research	Yukon-based non-profit organizations and associations (applicant to TIP)	<p><b>Description:</b> Creation and implementation of an investment-ready business plan, with intent to gain industry and other partner commitments, to develop a world-recognized construction and innovation facility for the development, commercialization and export of sustainable cold weather technologies and related solutions for cold climate regions around the world.</p> <p><b>Targeted Results:</b> Verification of business case and transition to project development stage for a Yukon based innovation cluster that will increase business and economic development in the Yukon.</p>	\$ .600

<b>Table 1: Investment Plan for Yukon Targeted Investment Program</b>			
<b>Major project investments</b>	<b>Potential categories of recipients</b>	<b>Description of investment and targeted results</b>	<b>Projected investment level 2006–2007 to 2008–2009 (\$ millions)</b>
Small Business Loan Fund	Yukon-based Community Futures like entities (applicants to TIP)	<p><b>Description:</b> Small and Medium Size Enterprises/Entrepreneurs (SME) Loan Fund providing loans to Yukon SMEs (both YFN and non-YFN) to establish and/or expand their business ventures.</p> <p><b>Targeted Results:</b> Increased capacity among SMEs to establish and/or expand businesses and take advantage of economic opportunities in their regions in turn creating employment and adding to the overall economy in their region.</p> <p>An increasing number of flourishing SMEs throughout the Yukon.</p>	\$2.500
<b>Capacity Development</b>			
Training for emerging opportunities	Yukon-based public governments, including First Nation governments, and non-profit organizations and associations	<p><b>Description:</b> Funding for initial, multi-partnered (public and private sector) efforts to establish, organize and deliver a mine training strategy so Yukon people have the opportunity to be fully qualified for the projected employment opportunities from emerging mineral development opportunities.</p> <p><b>Targeted Results:</b> Increased capacity of Yukoners to draw benefit from emerging mineral development opportunities.</p>	\$1.000

<b>Table 1: Investment Plan for Yukon Targeted Investment Program</b>			
<b>Major project investments</b>	<b>Potential categories of recipients</b>	<b>Description of investment and targeted results</b>	<b>Projected investment level 2006–2007 to 2008–2009 (\$ millions)</b>
<b>Knowledge Base</b>			
Increasing the information base for Yukon's natural resources	Yukon-based public governments, including First Nation governments, and non-profit organizations and associations	<p><b>Description:</b> Identification, prioritization and collection of baseline data and/or inventories for Yukon natural resources which are likely to attract private sector investment for further exploration and/or development of major projects. Assessment would be targeted at priority industries for mining, oil and gas and forestry, including YFN Settlement Lands.</p> <p><b>Targeted Results:</b> Increased data and information available on Yukon's natural resources for use by the public and private sector and the general public for economic and business planning, development and investment attraction.</p>	\$3.000
Social and economic data collection	Yukon-based public governments, including First Nation governments	<p><b>Description:</b> Funding for surveys and other data collection activities with an emphasis on filling gaps in socio-economic information that would provide governments, communities, for-profit and not-for-profit organizations with up-to-date information on current socio-economic circumstances</p> <p><b>Targeted Results:</b> Increased understanding of economic circumstances and opportunities in Yukon and increased ability to measure economic performance</p>	\$.750
Source: SINED Targeted Investment Program. (2006, July). Investment Plan for Yukon 2006–2007 to 2008–2009. Table 1.			

<b>Table 2: Summary of primary targets, results, and projected investment levels for NWT</b>							
<b>Target areas</b>	<b>Targeted results</b>	<b>Potential categories of recipients</b>	<b>2005–2006 (\$ Millions)</b>	<b>2006–2007 (\$ Millions)</b>	<b>2007–2008 (\$ Millions)</b>	<b>2008–2009 (\$ Millions)</b>	<b>Total TIP (\$ Millions)</b>
Geoscience	<ul style="list-style-type: none"> <li>• New knowledge base that will support the development and release of publicly accessible digitized maps, including surficial geology</li> <li>• Increasing the NWT's geoscience base with respect to minerals and petroleum resources with a focus on the collection, interpretation and distribution of new data</li> <li>• Improving the management of digital spatial data and related distribution systems in order to effectively deliver this information to all end users in general and to industry in particular</li> <li>• "Data Mining" which will create new "predictive geology" maps and compilation and synthesis of industry reports information</li> <li>• Improved access by the public and industry through enhanced internet delivery such as creation of "geoportal"</li> </ul>	NWT Geoscience Office in collaboration with their network of partners	\$2.000	\$2.000	\$2.000	\$2.000	\$8.000
Growing the tourism industry	<ul style="list-style-type: none"> <li>• Tourism marketing, particularly into the leisure travel segment</li> <li>• Product development increasing the range of products and services including awareness of NWT and its tourism products</li> <li>• Increasing the quality and availability of public infrastructure serving visitors</li> <li>• Increasing business capacity of tourism operators including the skills and knowledge of the labour force for this industry sector</li> <li>• The Territorial Investment Plan also includes provisions for major promotional activities around high-profile events like International Polar Year and the Canada Winter Games</li> </ul>	NWT based public governments, including Aboriginal governments, non-profit organizations, and corporations	\$.801	\$2.400	\$2.800	\$.950	\$6.951

Table 2: Summary of primary targets, results, and projected investment levels for NWT							
Target areas	Targeted results	Potential categories of recipients	2005–2006 (\$ Millions)	2006–2007 (\$ Millions)	2007–2008 (\$ Millions)	2008–2009 (\$ Millions)	Total TIP (\$ Millions)
Enhanced support for growth of small and medium sized northern businesses (SMEs)	<p>The success of small and medium sized businesses has a number of capacity considerations if they are to successfully connect with opportunities. Some of these elements are:</p> <ul style="list-style-type: none"> <li>• Technical capacity to do the job</li> <li>• Management capacity</li> <li>• Access to opportunity</li> <li>• Access to capital and equipment in a timely manner</li> </ul>	NWT based Community Futures like entities or other agencies / organizations who provide services to business as part of their mandates	N/A	\$ .500	\$ .750	\$ .750	\$2.000
Support infrastructure and industrial initiatives – the “Legacy” initiatives*	<ul style="list-style-type: none"> <li>• There is currently no Industrial Strategy for the NWT. This investment area looks at some of the large-scale initiatives that could address some of the key infrastructure gaps and the opportunities which are opened up to address these gaps by “piggy backing” on the current wealth and resulting from large scale resource development activities happening in the mineral and the oil and gas sectors including the pipeline development.</li> <li>• These so-called “legacy” projects would be undertaken to benefit the economy throughout the NWT and benefits would extend beyond the life of the individual resource projects.</li> <li>• Key to the larger scale projects is finding “anchor” clients.</li> <li>• Examples are: <ul style="list-style-type: none"> <li>(i) <i>Transportation Infrastructure – Roads</i> Tlcho Region: All weather road linking up mines and communities Mackenzie Valley Corridor – “piggy backing” on pipeline right of way to construct all weather road from Wrigley to Beaufort Sea</li> <li>(ii) <i>Energy Development – Hydro</i> One of the biggest inhibitors to operating businesses in the North is the high cost of utilities, including diesel generated electricity. Hydroelectricity could allow power rates to drop by 25% almost immediately.</li> </ul> </li> </ul>	NWT based public governments, including Aborginal governments, non-profit organizations, and corporations owned, operated or mandated by a public government	N/A	\$1.500	\$1.500	\$1.000	\$4.000

<b>Table 2: Summary of primary targets, results, and projected investment levels for NWT</b>							
<b>Target areas</b>	<b>Targeted results</b>	<b>Potential categories of recipients</b>	<b>2005–2006 (\$ Millions)</b>	<b>2006–2007 (\$ Millions)</b>	<b>2007–2008 (\$ Millions)</b>	<b>2008–2009 (\$ Millions)</b>	<b>Total TIP (\$ Millions)</b>
Emerging and new opportunities – increasing northern capacity to seize on opportunities**	<p>The business community and non-government representative organizations need to better understand their development-related needs and increase their capacity to capture economic opportunities if the NWT economy is to become more diversified. Investment in knowledge and capacity development will focus on:</p> <ul style="list-style-type: none"> <li>• increasing knowledge of community economic circumstances and opportunities and development needs/potential through the generation, analysis or consolidation of information</li> <li>• increasing the ability of communities and organizations to use information and undertake coordinated planning locally and collectively at the regional level</li> <li>• increasing the ability of individuals, organizations and entrepreneurs to plan and administer and manage activities or initiatives linked to economic development.</li> </ul> <p>Examples of some of the proposals which would be considered in this investment target area might be provide existing “representative” sectoral institutions such as chambers of commerce, construction associations, etc. with seed money to undertake initiatives that promise to improve sectoral practices and/or enhance economic opportunities.</p>	NWT based public governments, including Aboriginal governments, non-profit organizations, and corporations	\$500	\$1.500	\$1.500	\$1.500	\$5.000

Source: SINED Targeted Investment Program. (2006, March). Investment Plan for the Northwest Territories 2005–2006 to 2008–2009. Table 1, pp. 7–9.

\*Note: TIP does not fund capital infrastructure; however funding can assist to offset some of the developmental costs which are of high risk nature and unlikely to qualify for private financing

\*\*Note: Funds allocated for activities within this area will generally be allocated on an annual basis and done by “public” solicitation as opposed to “invitational solicitation”

<b>Table 3: Plan summary by investment and thematic area (notional allocations) in Nunavut</b>			
<b>Targeted investment area</b>	<b>Proposed funding 2005–06 to 2008–09 (\$ millions)</b>	<b>Solicitation method</b>	<b>Targeted recipients</b>
Fisheries – Commercial Harvesting <ul style="list-style-type: none"> <li>• Commercial species surveys</li> <li>• Test fisheries</li> <li>• Training</li> </ul>	\$2.548	Direct invitation	Government of Nunavut (Economic Development & Transportation), Nunavut Fisheries Training Consortium, Nunavut Fisheries Coalition
Mining – Geoscience <ul style="list-style-type: none"> <li>• Mapping: digital, topographical</li> </ul>	\$7.505	Direct invitation	Government of Nunavut (Economic Development & Transportation) in collaboration with the Nunavut Geoscience Office, Nunavut Tunngavik Inc.
Tourism/Parks <ul style="list-style-type: none"> <li>• Marketing</li> <li>• Exit survey; sector information</li> <li>• Product development</li> </ul>	\$3.420	Direct invitation	Government of Nunavut (Environment, Economic Development & Transportation), Nunavut Tourism
Cultural industries <ul style="list-style-type: none"> <li>• Market development</li> <li>• Skills enhancement</li> <li>• Carving stone access</li> </ul>	\$1.855	Direct invitation	Government of Nunavut (Economic Development & Transportation, Arctic College), Nunavut Arts and Craft Association, Nunavut Film Commission
Broadband <ul style="list-style-type: none"> <li>• Product development</li> <li>• Community access</li> </ul>	\$1.925	Direct invitation	Nunavut Broadband Development Corporation, Nunavut Community Access Program
Trade <ul style="list-style-type: none"> <li>• Market development</li> <li>• Promote economic diversification: small business financing (CFDCs)</li> <li>• Capacity development: export readiness, product development, market development</li> </ul>	\$3.556	Solicitation of applications via sectoral consultations	<u>Eligible applicants:</u> public governments, Chambers of Commerce, Economic Developers Association, Community Economic Development Organizations, Territorial Economic Development Fora, Community Futures Development Corporations
Community and organizational capacity <ul style="list-style-type: none"> <li>• CED awareness</li> <li>• Community planning</li> <li>• Capacity development (EDOs, CEDOs, municipal government)</li> </ul>	\$4.29	Solicitation of applications via sectoral consultations	<u>Eligible applicants:</u> public governments, Chambers of Commerce, Economic Developers Association, Community Economic Development Organizations, Territorial Economic Development Fora, Community Futures Development Corporations

Source: SINED Targeted Investment Program. (2006, July). Investment Plan for Nunavut 2005–2006 to 2008–2009 [revised version]. Annex 1, Table 1.



## **Appendix B**

Endnotes

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