NOVA SCOTIA RESEARCH AND INNOVATION TRUST

BACKGROUND

- 5.1 The Nova Scotia Research and Innovation Trust (NSRIT) is a fund which was established by the Province to support Nova Scotia research by providing funds for research infrastructure. NSRIT was established March 29, 2001 by a Trust Agreement between the Province and Royal Trust Corporation (RTC). RTC was established as the Trustee and \$15 million was deposited in the Fund.
- In 1997, the Government of Canada created the Canada Foundation for Innovation (CFI). CFI funds up to 40% of a project's infrastructure cost. Institutions must obtain remaining project funding from other government sources or the private sector. NSRIT provides Nova Scotia with a source of matching funds for CFI approved projects.
- NSRIT is managed by the Beneficiaries Committee (see Exhibit 5.2). This Committee consists of representatives from the various universities and colleges as well as three non-voting representatives from the Province (Office of Economic Development, Department of Education, Department of Finance). The Beneficiaries Committee oversees the Trust and awards funding to eligible projects. Funding recipients are researchers who work at one of the universities or colleges that comprise the Beneficiaries Committee. NSRIT is administered by the Council of Nova Scotia University Presidents (CONSUP), on behalf of the Office of Economic Development (OED). See Exhibit 5.1 for a summary of these relationships.
- On March 28, 2001, a Memorandum of Agreement (MOA) was signed between the Beneficiaries and the Province. The MOA states that all applicants for NSRIT funding must already have received CFI approval for the project and must include this approval with their application to NSRIT. NSRIT will match up to 40% of funding for CFI approved projects. Funding recipients must obtain the remaining 20% from other sources.
- The original Beneficiaries Committee also included two research organizations
 Genome Atlantic and Life Sciences Development Association (LSDA). The
 Memorandum of Agreement included funding, not to exceed \$3 million over the
 life of the Trust, for projects by Genome and LSDA which are not eligible for CFI
 funding. At the time of our audit, the maximum \$3 million had been awarded.
 Genome Atlantic is still a member of the Beneficiaries Committee. LSDA is no
 longer in existence.
- As of August 2004, all monies in the Trust Fund, including interest earned, had been expended. During 2003-04, the Office of Economic Development provided \$4.2 million directly to researchers for seven CFI approved projects. A Memorandum of Understanding between the Province and Nova Scotia

universities, signed July 2004 states "The parties will review the mandate of the Nova Scotia Research and Innovation Trust Fund, and the government will make every effort to replenish the fund annually." During 2004-05 and 2005-06, an additional \$18 million was provided to replenish the trust fund.

OED has indicated that NSRIT funding has enabled Nova Scotia universities to compete for staff with larger institutions because facilities are now better equipped for research work. Research is also seen as an important economic development initiative. Since its inception, NSRIT has awarded \$25.8 million in funding to 143 projects and OED has funded seven projects directly (see Exhibit 5.3).

RESULTS IN BRIEF

- **5.8** The following are our principal observations from this audit.
 - We reviewed NSRIT's policies and procedures for funding approval and noted that NSRIT relies on CFI processes for application review and requires applicants to submit copies of their CFI application and approval. CFI's approval process was outside the scope of this assignment. We examined ten project files at NSRIT and found no problems with documentation.
 - We reviewed NSRIT's monitoring of funding to research projects. There is no requirement for reporting of project status and outcomes to NSRIT. Recipients are not required to sign agreements with NSRIT regarding use of funds. We have made recommendations for improvements in accountability, including requiring funding recipients to sign agreements and annual project reporting.
 - We assessed the Office of Economic Development's accountability structure with respect to NSRIT. OED does not have any requirement for periodic reporting from NSRIT regarding the success of NSRIT or achievement of project outcomes. We have recommended the establishment of annual reports and the provision of audited financial statements from NSRIT to OED to improve the accountability for Provincial funds provided through the Trust.
 - Subsequent to the completion of our fieldwork, management at OED informed us that a new Memorandum of Agreement is being drafted between OED and the Beneficiaries. They indicated that this agreement will include ongoing monitoring of projects and reporting back to NSRIT and the Province regarding success of projects. Although this draft agreement was outside the scope of our audit, we understand it is expected to be signed in 2006-07 and we encourage the parties involved to move this forward as soon as possible.
 - We assessed whether there was an adequate investment policy to ensure appropriate management of funds. We noted that NSRIT has no approved investment policy and recommended that one be established to ensure funds are invested appropriately.

AUDIT SCOPE

- **5.9** The objectives of this assignment were to:
 - assess OED's accountability structure with respect to the Nova Scotia Research and Innovation Trust Fund and determine whether OED receives sufficient, appropriate information from NSRIT to allow OED to discharge its responsibilities with respect to the Trust Fund;
 - assess Nova Scotia Research and Innovation Trust Fund's administration of the Trust Fund and accountability structure to determine:
 - adequacy of policies and procedures in place for approval of funding to recipients;
 - appropriateness of monitoring and reporting by recipients, while projects are in progress and upon completion, to allow NSRIT to ensure funds are expended based on the approved project guidelines; and
 - existence of an investment policy to ensure appropriate management of NSRIT's funds; and
 - test a sample of research grants awarded by NSRIT to determine whether:
 - there is appropriate monitoring by NSRIT and reporting by recipients while funded research projects are in progress and upon completion;
 - NSRIT has evidence that funds were spent in accordance with approvals and signed agreements;
 - expenditures of grant funds are included in the university's financial management and control systems to ensure adequacy of financial controls; and
 - purchases under research projects follow appropriate procurement guidelines.
- Our approach was based on interviews, review of documentation and testing of a sample of approved projects. The CFI approval and monitoring process was not included in the scope of this assignment. Audit criteria were taken from recognized sources such as the Office of the Auditor General of Canada's Financial Management Capability Model, Audits of Grant or Contribution Programs and A Framework for Identifying Risk in Grant and Contribution Programs; Treasury Board of Canada Secretariat's Policy on Transfer Payments; Province of Nova Scotia's Government Procurement Process ASH Sector as well as criteria which were internally developed by our Office for this assignment. Criteria were discussed with management at OED and NSRIT and accepted as appropriate for the engagement.

PRINCIPAL FINDINGS

5.11 We examined the application and approval process at NSRIT and concluded that NSRIT ensures only CFI approved projects are funded, and documents eligibility

of recipients. We also assessed monitoring of approved projects by NSRIT and reporting back to OED, concluded that additional work is required to ensure adequate accountability and made recommendations in this regard. Additionally, we tested ten approved projects. In all cases, research project expenditures were recorded in the institution's internal financial management system. We noted no problems with the selected project expenditures we examined.

Application Process and Approval

- NSRIT funds CFI approved projects only (except for non-CFI projects as noted in paragraph 5.19 below). Once the beneficiary has received CFI approval, it can apply for NSRIT funding. Applicants are required to submit:
 - a copy of the CFI application (which includes project budget, rationale, etc.);
 - CFI approval letter; and
 - confirmation of additional funding (CFI and NSRIT provide maximum of 40% each).
- 5.13 The additional 20% funding originates from other sources and may include donations-in-kind such as discounts from the company providing the research equipment. NSRIT relies on the CFI application approval process for peer review of applications to ensure reasons for the research are adequately documented.
- The Beneficiaries Committee meets as needed to consider applications for funding. To date, all funding applications from CFI approved projects have received funding from NSRIT (with the exception of seven projects which were funded directly by OED). Once a project has been approved by the Committee, all NSRIT funds are paid in full since CFI requires proof of this payment before releasing CFI funding. There is no requirement for the beneficiary to sign an agreement with NSRIT regarding how the funds will be used or to report results to NSRIT. (See Recommendation 5.1 below.)

Monitoring of Approved Projects

- The Memorandum of Agreement signed by the Beneficiaries and the Province does not include any provisions for monitoring progress of projects or reporting on results of completed research, or requirements for submission of audited statements from NSRIT to the Province. There are no reviews of project expenditures to ensure funds were used as intended. A review of CFI's website indicates that CFI requires annual reporting of project results as well as additional reports for five years after a project is completed. CFI also has the right to audit projects for which the Foundation has provided funding. At the time of our audit, NSRIT was relying on CFI's monitoring processes with no reporting of results from CFI to either NSRIT or the Province. Staff responsible for the administration of NSRIT informed us that although there is still no annual project reporting, NSRIT now asks recipients to provide copies of their CFI final project reports.
- 5.16 Since NSRIT's inception, OED has funded seven projects directly at a time when the Trust did not have adequate funds to match CFI approved projects (see Exhibit

- 5.3). Although there were requirements for recipients to provide financial information and results reporting on completion of the projects, no reports were requested or received by OED.
- The Memorandum of Agreement includes a provision for the Beneficiaries Committee to file an annual report with the Department of Education (DOE) providing a brief description of projects funded including the amount of funding and the balance of the Trust Fund at year end. At the time of our audit, only one annual report had been filed. However, DOE's representative on the Committee indicated that DOE was satisfied with the information it was receiving through its membership and felt this provided necessary funding and project information. There is no reporting back to the Province regarding project outcomes and overall success of NSRIT.
- As of 2005-06, OED now has a line item in its budget for replenishing the NSRIT fund. Management at OED informed us that a new MOA is being drafted between OED and the Beneficiaries. They indicated that this agreement will include ongoing monitoring of projects and reporting back to NSRIT and the Province regarding success of projects. Although the draft agreement was outside the scope of our audit, we understand it is expected to be signed in 2006-07 and we encourage the parties involved to move this forward as soon as possible.

Recommendation 5.1

We recommend that the Office of Economic Development ensure there is adequate accountability to NSRIT and the Province for project funding provided, whether the funds are disbursed by NSRIT or by OED directly. Improved accountability would be achieved by requiring funding recipients to sign agreements with specific requirements regarding use of funds, periodic reporting on project status at least annually, preparation of final project reports to show whether project outcomes were achieved, and review of project files by NSRIT or the Province to ensure compliance with the agreements. NSRIT should provide OED with annual audited financial statements for the Trust and annually report results of projects funded.

Non-CFI Projects

5.19 The Memorandum of Agreement with the Beneficiaries provided for a maximum of \$3 million in funding to two research groups in Nova Scotia – Genome Atlantic and Life Sciences Development Association (LSDA). These organizations were not eligible for funding from CFI. As a result, their applications would not have been subjected to the CFI peer review process which NSRIT relies on. The recipients were not required to provide any reporting on achievement of project outcomes or proof that funds were spent as intended. We conducted sample testing at Genome and LSDA and did not note any problems. LSDA has since been disbanded and the Life Sciences Research Institute – the project for which it received funding – has been taken over by Dalhousie University.

Sample Testing

- We tested ten projects which had received funding from NSRIT or directly from OED. We reviewed documentation on file at NSRIT as well as project records maintained by the researcher. We did not note any problems with NSRIT's documentation. In all cases, the CFI application and approval were on file with NSRIT and approved funding was within the 40% maximum as established by the MOA.
- Of the ten projects selected, eight had incurred expenditures at the time of our site visits. We tested certain of those expenditures and found they were in accordance with the approved budget. In all cases, project expenditures went through the entity's regular financial management system and followed appropriate procurement guidelines. Two projects (totaling \$527,580) had funds remaining at the end of the project (\$2,633 and \$722) which were returned to NSRIT. Since there is no ongoing monitoring and no requirement to show how funds were expended, NSRIT and the Province only became aware that these projects had funds remaining on completion when the beneficiary institution chose to return the unspent funds. Although the amounts in these cases were not large, they point to the need for final reporting, including proof of expenditures, so recipients can demonstrate all funds were used as intended.

Recommendation 5.2

We recommend that recipients be required to provide proof of project expenses to verify expenses were within NSRIT approved parameters and that all funds received were expended on that project.

Investment Management

Prior to project approvals, NSRIT's funds are invested with the fund manager.

Management of the Trust's funds is left to the manager's discretion. There is no approved investment policy for the Trust and no monitoring of fund performance to ensure adequate returns on investment.

Recommendation 5.3

We recommend that NSRIT develop an investment policy to ensure appropriate management of NSRIT's funds.

CONCLUDING REMARKS

5.23 Since its inception, NSRIT has provided significant matching funds to allow Nova Scotia to take advantage of federal funding available for research projects. For ten

project files tested, NSRIT had maintained adequate supporting documentation for the applications. From those ten projects, we tested selected project expenditures. There were also no problems noted from that testing. In all cases, research project expenditures were recorded in the institution's internal financial management system.

Improvements are required to ensure recipients are held accountable for funds received and provide regular reporting of appropriateness of expenditures and achievement of project outcomes. Management has informed us that a new Memorandum of Agreement with the Beneficiaries, which OED expects will be signed in early 2006-07, will address these concerns.

Exhibit 5.1 Nova Scotia Research and Innovation Trust - Key Parties

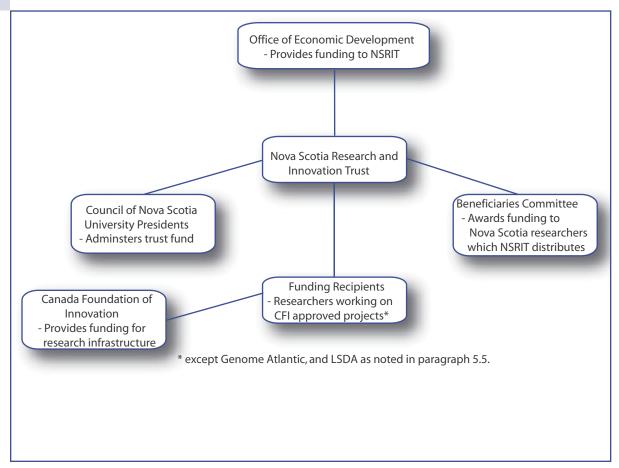


Exhibit 5.2 **Beneficiaries Committee Members**

Acadia University

Cape Breton University

Dalhousie University

Genome Atlantic

Mount Saint Vincent University

Nova Scotia Agricultural College

NSCAD University

Saint Mary's University

St. Francis Xavier University

Université Sainte-Anne

Nova Scotia Community College

University of King's College

Note: Life Sciences Development Association was a member of the original Beneficiaries Committee. The organization is no longer in existence.

Beneficiary	Number of Projects	Amount
Dalhousie University	83	\$14,124,679
Mount Saint Vincent	6	432,045
N.S. Community College	2	909,000
St. Francis Xavier University	9	835,456
Saint Mary's University	12	1,521,621
Cape Breton University	9	695,782
N.S. Agricultural College	8	3,148,387
Acadia University	7	891,416
Life Sciences Development Association	3	1,000,000
Genome Atlantic	4	2,268,000
Total	143	\$25,827,026

Note: In addition to above projects, OED provided \$4.2 million directly to researchers for seven CFI approved projects.

OFFICE OF ECONOMIC DEVELOPMENT'S RESPONSE

The Office of Economic Development acknowledges the need for more accountability and follow-up on the funding provided by the department to NSRIT and has already begun work on a new Memorandum of Agreement (MOA) which we expect will address many of the issues outlined in the audit. As noted in the report, OED has been working with the NSRIT and an advisory committee was struck in November 2005 to review and revise the MOA with the Beneficiaries. OED is working as part of this committee which includes Education and Finance to finalize the new MOA in a timely manner.