

Grants Program to Canadian Post-Secondary Institutions to Defray a Portion of the Indirect Costs of Federally Supported Research at Colleges, Universities and their Affiliated Research Hospitals and Institutes

Results-based Management and Accountability Framework and Risk-Based Audit Framework

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1 INTRODUCTION

The Policy on Transfer Payments (PTP) outlines that transfer payments need to be managed in a manner sensitive to risks, complexity, accountability for results and economical use of resources.

In order to fulfil the PTP requirements, the Indirect Costs program has developed the following integrated Results-based Management and Accountability Framework (RMAF) and Results-Based Audit Framework (RBAF). The one-time indirect costs' payment was exempted from the requirement to develop and implement an RMAF. An RBAF for the one-time payment was produced in March 2002.

The RMAF and RBAF are complementary documents. While the RMAF outlines performance measurement and evaluation strategies, the RBAF describes risks that can affect the performance of the program and outlines mitigation strategies. The integrated framework will provide a complete plan that promotes the achievement of program objectives as well as mitigates risks to performance.

2 PROGRAM PROFILE

2.1 Origin and Background

The provincial and federal governments support academic research in Canada jointly, with the former providing the basic physical infrastructure as well as direct and indirect operating costs (supported in part by the Canada Health and Social Transfer), and the latter primarily providing funds to finance the direct costs of research. These are allocated mainly through three federal research granting agencies: the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC), and the Social Sciences and Humanities Research Council (SSHRC).

The term “indirect costs” is a collective one that applies to the central and departmental administration costs that underpin the institution’s research activities, but are not attributable to a single research project. Indirect costs include:

1. Costs to provide well-equipped research facilities, including: the costs of renovation and upgrade of research spaces, equipment and facilities; the costs of providing technical support for laboratories, offices, animal care and other facilities; custodial, security, utility, leasing and capital planning costs.
2. Costs of providing research resources, such as libraries, databases, telecommunications, information technologies, systems and research tools, including acquisition, custodial, security, utility, leasing and capital planning costs.
3. Costs of managing and administering the institution’s research enterprise, including: research planning and promotion; assisting researchers in the preparation of research

proposals; public relations; financial and other administrative services including information systems to track grant applications, certification and awards; human resources and payroll; purchasing, audit, health and safety.

4. Costs of meeting regulatory and accreditation requirements, including: the creation or support of regulatory bodies, and the training of faculty and other personnel in animal care, ethics review, radiation and biohazard; the costs of meeting international accreditation, e.g., accreditation from the American Veterinary Medical Association.
5. Costs to effectively manage the intellectual property generated by research activities, including: costs of creating, expanding or sustaining the Technology Transfer Office or similar function; costs of reports of invention patent applications, licensing, spin-off company creation.

With the exception of the Canada Research Chairs program and certain programs of the Canada Foundation for Innovation, the federal government's academic research funding programs do not provide funding for the indirect costs of research.

Institutions have traditionally financed the indirect costs of federally-funded research from the provincial contribution towards the post-secondary education environment. Because of the recent growth of the academic research enterprise, post-secondary institutions claim that they cannot finance these costs at the same level as in the past without jeopardizing their other missions, particularly education and services to the community.

Canadian institutions are also disadvantaged compared to institutions in the US and other countries where programs to fund the indirect costs of research have been put in place.

In its 2003 budget, the Government of Canada announced new support for the indirect costs associated with the conduct of academic research in institutions receiving research grants funds from any of the three federal research agencies. This measure is intended to recognize the growing indirect costs of conducting publicly funded, academic research. It responds to concerns that the full benefit of research investment cannot be realized without additional support to the indirect costs of conducting the research, or without compromising the teaching or community services mandates of the post-secondary institutions. By financing a portion of the indirect costs incurred by post-secondary institutions and their affiliated research hospitals and institutes, the federal government is helping to support world-class research facilities and responding to the needs of the smaller Canadian post-secondary institutions. This is an ongoing program, with an annual allocation to eligible institutions beginning in 2003/2004 budget. It extends and expands a one-time indirect costs payment of nearly 200\$M made to 79 degree-granting institutions in 2001/2002, following an announcement in the 2001 Budget.

The grants for indirect costs are meant to cover only a portion of the total costs incurred. It is required that these funds be used incrementally, i.e., adding on to and not displacing indirect research support funds provided to institutions by the provincial governments and other federal or private sector sources for indirect costs. The total funds received

from all these sources will not cover the totality of the indirect costs incurred by colleges, universities and their affiliated research hospitals and institutes.

2.2 Eligible Recipients

Any degree, applied degree or diploma granting Canadian post-secondary institution whose researchers have received research grants from at least one of the three granting agencies during the three most recent fiscal years for which data is available may receive a grant for indirect costs, subject to the following:

- the institution must be authorized by a provincial or territorial government to grant university degrees, applied degrees or post-secondary diplomas;
- the institution must offer its own degrees or diplomas, and not simply certify that a student is qualified to receive a degree or diploma from another institution;
- the institution must have awarded degrees or diplomas over the past two years or have students registered in the current calendar year or the three subsequent years;
- the researchers of the institution and the research hospitals and other institutes affiliated with it must have received research funding from at least one of the three granting agencies in the three most recent fiscal years for which data is available; and
- in the case of a public institution, the institution must receive the funds for its operating budget directly from a provincial or federal government, and not through another institution. In the case of a private institution, the institution must be not-for profit and not receive its funding through another institution.

The eligibility of each post-secondary institution with respect to the criteria above will be verified with the appropriate federal, provincial or territorial authority. Only post-secondary institutions, i.e., colleges and universities, can be recipients of indirect costs funds. However, funds could flow from eligible institutions to the research hospitals and research institutes with which they have formal affiliation agreements.

To maintain their eligibility to receive funds, post-secondary institutions must provide annual financial statements of accounts and outcomes reports, which describe how the program objective is being met.

Each agency will maintain and provide data on their annual funding to eligible post-secondary institutions and their affiliated hospitals and institutes and assist the Secretariat in responding to information requests about the data.

2.3 Resources

	2003-2004	2004-2005	2005-2006
Total budget (\$millions)	225	225	225
Operational budget (\$millions)	0.589	0.478	0.578

2.4 Planned Results and Final Outcomes

In recent years, the government of Canada has made significant investments in academic research through the three granting agencies - Social Sciences and Humanities Research Council, Natural Sciences and Engineering Research Council, and through the Canadian Institutes for Health Research. Even though the research community has welcomed these investments, it has raised concerns about the increasing indirect costs to support federally funded research. The Indirect Costs program was created to respond to these concerns. Its goal is to help universities, colleges and their affiliated research hospitals and institutes provide a research environment, which will enable them to make optimal use of the total federal investment in academic research.

In particular, the program has been designed to help smaller Canadian post-secondary institutions which face particular challenges in their efforts to increase their research capacity, and which cannot benefit from the economies of scale realized by large institutions.

The program is aligned with the Government's Innovation agenda and with the strategic outcomes and objectives of the three federal granting agencies and Industry Canada. The strategic outcomes of the three granting agencies and Industry Canada are summarised as follows:

- Production of excellent research leading to advances in knowledge and expertise
- Development of world-class research capacity
- Training of highly-qualified personnel
- Transfer of knowledge; and
- Full contribution to the economic and social development of their communities.

There is a natural link between the Indirect Costs program and the strategic outcomes of the three agencies and Industry Canada. As such, the program will contribute to:

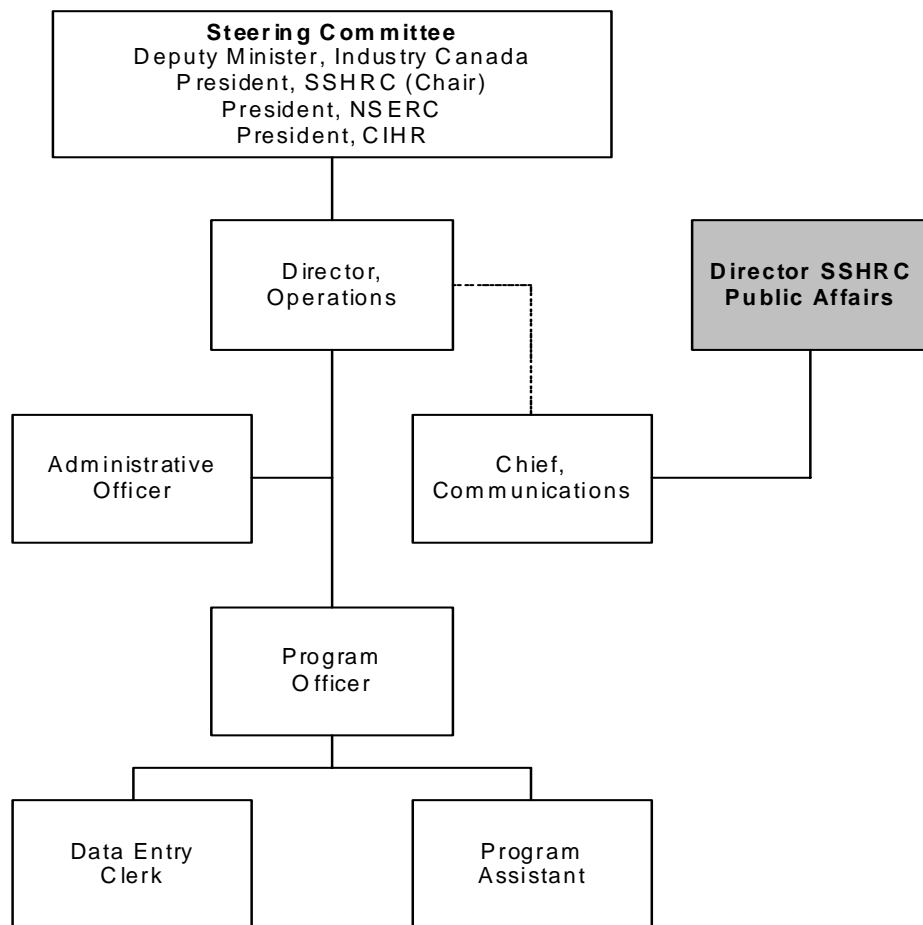
- the attractiveness of the Canadian research environment;
- compliance with regulatory requirements;
- transfer of knowledge and commercialization; and
- ultimately to Canada's economic growth, improved quality of life, and Canadian research excellence and capacity.

3 Roles, Responsibilities and Relationships

3.1 Governance Structure and Program Administration

The main deliverers of the Indirect Costs' program are the three granting agencies: the Natural Sciences and Engineering Research Council, the Canadian Institutes of Health Research (CIHR), the Social Sciences and Humanities Research Council (SSHRC) and Industry Canada.

INDIRECT COSTS - Organizational Chart



Program funding flows through the SSHRC which is responsible for program delivery

As shown in the program's organizational chart, a Steering Committee, composed of Presidents of the three granting agencies and the Deputy Minister of Industry Canada (or

his/her replacement) will oversee the administration process for the Indirect Costs program and provide guidance on the general direction of the program.

The Steering Committee:

- in the start-up phase of the Program, monitors the launch of the program;
- receives annual budget reports for the Program;
- oversees the formula used to calculate the grants as well as the eligibility requirements for institutions;
- Decides on any changes to the basic program tenets and makes recommendations to the Ministers of Industry and Health on changes that require Treasury Board or Cabinet approval;
- approves the terms and conditions of any performance audit or program evaluation. It receives the report and directs staff to implement recommendations;
- will carry out a review of the program in its third year of operations in order to examine the design and operations of the program, identify any potential adjustments and assess whether the program is progressing toward meeting its objectives;
- will carry out a summative evaluation in the sixth year of the program's operations in order to assess whether the program is achieving its objectives;

The Secretariat of the Canada Research Chairs program, housed at SSHRC, will be responsible for the administration of the Indirect Costs program including:

- the review of applications and the calculation and distribution of the grants;
- provision of advice and guidance to recipients;
- ongoing financial and operational monitoring of compliance of recipients with the terms and conditions of the program; and
- the collection of performance and financial data.

Each agency will maintain and provide data on their annual funding to eligible post-secondary institutions and their affiliated hospitals and institutes and assist the Secretariat in responding to information requests about the data.

The Secretariat will report to the Steering Committee on the progress of the program on an on-going basis. An organisational chart of program is shown above.

3.2 Internal Audit

SSHRC internal Audit conducts internal audits for all of its programs in order to ensure that the risk management practices, management control frameworks and information used for decision-making and reporting are adequate. The Indirect Costs program will be administered by SSHRC. Therefore, its internal audits will be the responsibility of SSHRC internal audit.

3.3 Financial Monitoring

A tri-Agency Review and Investigations team, composed of representatives from SSHRC, NSERC and CIHR, is responsible for financial controls.

This team will conduct periodic visits to Canadian institutions receiving funding from the Indirect Costs program. The main objective of these visits is to ensure that funded institutions follow the Agencies' guidelines and that they have implemented appropriate and sound financial practices.

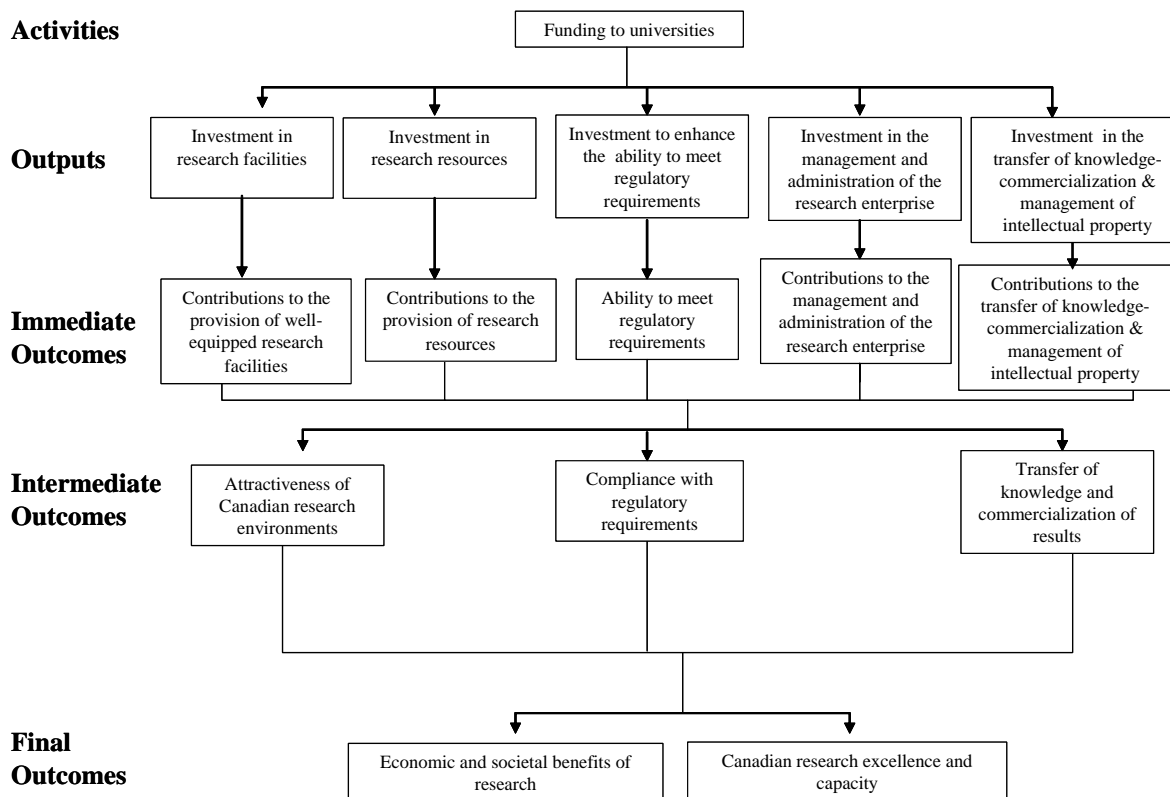
3.4 Canadian Institutions

Institutions are responsible for the financial accountability and for the management of the grant, in line with the guidelines outlined in the Memorandum of Understanding between the Agencies and recipient institutions.

4 Logic Model

The following logic model outlines how the activities of the Indirect Costs program lead to the achievement of final outcomes.

Support for Indirect Costs of Research - Logic Model



4.1 Activities

The main activity of the program is to provide funding to institutions. The funds available for the Indirect Costs program each year, \$225 M less the operating funds required for the program, will be distributed among the eligible institutions using a progressive funding formula, shown in Table 1.

Publicly available data is used to determine allocations. For each fiscal year, the allocation is based on the amount of research funding awarded to eligible institutions by the three granting agencies, averaged over the three most recent years for which data is available.

Eligible institutions will be required to submit an application form every year requesting consideration for an indirect costs grant. Institutions will be required to provide an overview of their current capacity in the eligible categories (i.e. research facilities, research resources, management and administration of research enterprise, ability to meet regulatory requirements, and transfer of knowledge), in which they plan to invest the indirect costs grant. Also, they need to describe their specific needs in relation to these categories. In addition, they are required to outline how they plan to allocate the grant to any of the five categories.

The application form will be accompanied by a statement confirming whether or not the institution has affiliated research hospitals. Institutions which meet the eligibility criteria and which are affiliated with one or more research hospitals will be required to demonstrate that they have a formal agreement with their affiliated hospitals, dealing with the distribution of the indirect costs grant between the different responsibility centres.

The Secretariat will review these applications and ensure that they conform to the policies and guidelines of the program. It will provide institutions with advice and guidance in order to ensure the effective use of funds as outlined in the program's terms and conditions, policies and guidelines.

Table 1: Indirect Costs program funding formula

Average revenues from research grants received from NSERC, SSHRC or CIHR	Funding for indirect costs
First 100 000 \$	80%
Next 900 000 \$	50%
Next \$6 million	40%
Balance	Percentage to be calculated annually based on the total amount available

4.2 Outputs

Institutions will allocate the grant to the five categories of eligible support (described in detail in section 2.1) in line with program policies and guidelines:

- Research facilities
- Research resources
- Management and administration of research enterprise
- Ability to meet regulatory requirements
- Transfer of knowledge including commercialization and management of intellectual property

4.3 Outcomes

The Indirect Costs program represents only a portion of the overall investment in academic research. Therefore, it will not be possible to clearly attribute outcomes or results uniquely to this program. Rather, it is expected that in the short term, the program will contribute, along with and inseparably from other sources of indirect support, to a set of global outcomes.

4.3.1 Immediate Outcomes

In the short-term, the program will contribute to:

- the provision of well-equipped research facilities; including the operation and maintenance of these facilities, and the technical support of equipment.
- the provision of research resources, including support for multidisciplinary research and international collaboration. This includes the provision of library infrastructure and services, archiving services, telecommunications services, data computing infrastructure and services, and data storage facilities.
- the management and administration of the research enterprise. This includes research planning and promotion, public relations, human resources management, financial services and departmental services in support of the institution's research activities.
- the ability to meet regulatory requirements related to international accreditation standards in research. This includes standards that govern ethical treatment of human subjects in medical and social sciences research; animal care; the handling of hazardous materials, and environmental protection.
- the transfer of knowledge including commercialization and the management of intellectual property generated by research activities. This includes enhanced capacity to facilitate the disclosure of research discoveries and mechanisms to transfer the knowledge for commercialisation, for the benefit of Canadians.

4.3.2 Intermediate Outcomes

The Indirect Costs program -- along with, and inseparably from, the other sources of direct and indirect support to research --- is expected to contribute to:

- Attractiveness of Canadian research environments
 - Capacity to recruit high quality researchers
 - Capacity to retain high quality researchers
 - Capacity to attract other sources of infrastructure support: foundations, endowments, private sector
- Compliance with regulatory requirements
 - Particularly in the areas of animal care, human subjects research ethics, and radiation and biohazard
- Transfer of knowledge and commercialization of results
 - Rates of transfer and commercialization
 - Spin-off companies, patent applications and licences

4.3.3 Final Outcomes

In the long term, these short-term outcomes are expected to contribute to two broad types of final outcomes:

- Economic and societal benefits of research (job creation, improved quality of life), and
- Canadian research excellence and capacity.

5 PERFORMANCE MEASUREMENT STRATEGY

The aim of ongoing performance measurement is to monitor the progress of programs toward their expected results. Key indicators are measured regularly and the results compared to expectations, in order to provide program managers with information that can be used to adjust the program in order to ensure optimal performance and attainment of program objectives.

The ongoing measurement strategy for the Indirect Costs program uses a set of key indicators for the several types of expected outcomes identified in the program's logic model. The main sources of information for the indicators will be:

- ***Application forms*** – as stated above, the application forms will describe the institution's current capacity in the areas in which they plan to invest. This data will be the baseline for assessing the program's progress toward achieving its objectives.
- ***Annual reports (outcomes reports)*** - institutions will be required to provide annual outcomes reports, which describe how the program objectives are being met. Institutions need to describe how the grant has improved their capacity in the areas in which they invested. This data will then be compared to the baseline data captured in the application forms. One would expect that these reports would differ from one institution to the other based on the amount of the grant and on the priorities of the institution.
- ***Annual statements of expenditures*** – these statements outline how the Indirect Costs funds will be allocated under the five categories of eligible support.

Standardized reporting forms will be developed by the Secretariat for these purposes. The qualitative and quantitative data from these reports will be entered into a database maintained by the Secretariat, with appropriate data entry and quality control protocols. This database will be designed to permit easy, ongoing extraction of information for performance reports and as well as more complex cross-tabular and statistical analyses for the evaluation.

The indicators and performance measurement strategy are summarized in the table below.

5.1 Immediate Outcomes

Performance area	Examples of Indicators	Data Source/ Collection method	Responsibility for data collection	Timing/frequency
Contributions to the provision of well-equipped research facilities	<p>Research space per active researcher</p> <p>Proportion of grant spent on research facilities</p> <p>Qualitative description of the adequacy and condition of the research facilities</p>	<p>Outcomes report</p> <p>Financial reports</p>	Secretariat	Annual
Contributions to the provision of research resources	<p>Proportion of researchers involved in international projects</p> <p>Proportion of grant allocated to research resources</p> <p>Qualitative description of contributions of the program to the provision of research resources</p>	<p>Outcomes report</p> <p>financial reports</p>	Secretariat	Annual
Contributions to the management and administration of the research enterprise	<p>Number of FTEs devoted to the management and administration of the research enterprise</p> <p>Proportion of grant allocated to the management and administration of the research enterprise</p> <p>Number of applications to Granting Agencies</p> <p>Qualitative description of the contributions of the program to the management and administration of the research enterprise</p>	<p>Outcomes report</p> <p>financial reports</p> <p>Granting Agencies' database</p>	Secretariat	Annual

Performance area	Examples of Indicators	Data Source/ Collection method	Responsibility for data collection	Timing/frequency
Ability to meet regulatory requirements and international accreditation standards in research.	<p>Status of compliance with the ethics policies of federal granting agencies, the Canadian Council on Animal Care, and the American Veterinary Medical Association</p> <p>Number of FTEs devoted to meeting regulatory and accreditation requirements</p> <p>Proportion of grant devoted to the ability to meet regulatory and accreditation requirements</p> <p>Qualitative description of how the program helped the recipients meet the regulatory and accreditation requirements</p>	Outcomes report financial reports	Secretariat	Annual
Contributions to the transfer of knowledge including commercialization and management of the intellectual property generated by research activities	<p>Number of FTEs devoted to the transfer of knowledge per active researcher</p> <p>Proportion of grant devoted to the transfer of knowledge</p> <p>Qualitative description of the program's contributions to the transfer of knowledge including commercialization and management of the intellectual property generated by the research activities</p>	Outcomes report financial reports	Secretariat	Annual

5.2 Intermediate Outcomes

Performance area	Examples of Indicators	Data Source/ Collection method	Responsibility for data collection	Timing/frequency
Contributions to the attractiveness of Canadian research environments	<p>Number of active researchers</p> <p>Total research revenue from all sources</p> <p>Qualitative assessment of the program's contribution to the attraction and retention of high quality researchers and to the leverage of funds</p>	<p>CAUBO Stats Can</p> <p>Outcomes report</p> <p>Survey of recipients</p>	<p>Secretariat</p> <p>SSHRC</p>	<p>Annual</p> <p>Summative evaluation (sixth year of the program)</p>
Compliance with regulatory requirements	<p>Status of compliance with the ethics policies of federal granting agencies, the Canadian Council on Animal Care, and the American Veterinary Medical Association</p> <p>Qualitative description of how the program helped the recipients meet the regulatory and accreditation requirements</p>	Outcomes report	Secretariat	Annual
Contributions to the transfer of knowledge and commercialization of results	<p>Number of patent applications</p> <p>Number of patents issued</p> <p>Number of license agreements</p> <p>Number of disclosures</p> <p>Estimated licensing revenues</p> <p>Number of spin-off companies</p> <p>Qualitative assessment of how the program contributed to the transfer of knowledge and commercialization of results</p>	<p>Stats Can</p> <p>Survey of recipients</p> <p>Structured interviews with a selected sample of recipients and their partners</p>	<p>Secretariat</p> <p>SSHRC</p>	<p>Annual</p> <p>Summative evaluation (sixth year of the program)</p>

6 Evaluation strategy

Indirect Costs is an ongoing program. A review of the program will be carried out at the third year of its operations in order to:

- examine the design and the operations of the program and identify any potential adjustments; and
- assess whether the program is progressing toward meeting its objectives and the extent to which it has resulted in immediate outcomes.

Also, a summative evaluation will be carried at the sixth year of the program in order to assess whether the program has achieved its objectives.

The table below provides a preliminary set of evaluation issues to be examined at the third-year review and/or at the summative evaluation. It also outlines the indicators and data sources, which will address these evaluation issues.

6.1 Continued need for and relevance of the program

Performance area	Examples of Indicators	Data Source/ Collection method	Responsibility for data collection	Timing/frequency	
				Third- year review	Summative evaluation
To what extent is the Indirect Costs program still needed given the changes in the recipients' rates of indirect costs as a proportion of direct costs and given the level of support of other sources for indirect research costs?	<p>Information on whether and how the recipients' rates of indirect costs as a proportion of direct costs changed (increased or decreased)</p> <p>Proportion of indirect costs covered by the Indirect Costs program vs proportion covered by other sources</p> <p>Informed opinions of stakeholders</p>	<p>Survey of recipients</p> <p>Interviews with program management</p> <p>Interviews with key stakeholders (e.g. AUCC)</p>	SSHRC		3

6.2 Success of the program

Performance area	Examples of Indicators	Data Source/ Collection method	Responsibility for data collection	Timing/frequency	
				Third-year review	Summative evaluation
How successfully has the Indirect Costs program resulted in investments in research infrastructure and environment that are contributing to: the provision of well-equipped research facilities and of world-class research resources; the effective strategic management and efficient administration of the research enterprise; the ability to meet regulatory requirements related to international accreditation standards in research; and the effective management of the intellectual property generated by research activities?	<p>Please refer to the list of indicators used to measure outcomes under the performance measurement strategy section</p> <p>Informed opinions of stakeholders</p> <p>Qualitative assessments of the extent to which the program has contributed to the immediate outcomes</p>	<p>Outcomes reports</p> <p>Financial reports</p> <p>Interviews with program management</p> <p>Interviews with key stakeholders (e.g. AUCC)</p> <p>Case studies demonstrating the contribution of the program to immediate outcomes</p> <p>Survey of recipients</p>	<p>Secretariat</p> <p>SSHRC</p>	3	3
To what extent has the Indirect Costs program contributed to : the attractiveness of the Canadian research environment, the compliance of institutions with regulatory requirements, and to the transfer of knowledge and commercialization of results?	<p>Please refer to the list of indicators used to measure outcomes under the performance measurement strategy section</p> <p>Informed opinions of stakeholders</p> <p>Qualitative assessments of the extent to which the program has contributed to the intermediate outcomes</p> <p>Qualitative assessments of the extent to which the program has achieved its objectives</p>	<p>CAUBO</p> <p>Stats Canada</p> <p>Outcomes reports</p> <p>Interviews with program management</p> <p>Interviews with key stakeholders (e.g. AUCC)</p> <p>Survey of recipients</p> <p>Case studies demonstrating the contribution of the program to intermediate outcomes</p>	<p>Secretariat</p> <p>SSHRC</p>		3

Performance area	Examples of Indicators	Data Source/ Collection method	Responsibility for data collection	Timing/frequency	
				Third-year review	Summative evaluation
What are the incremental impacts of the program?	Informed opinions of stakeholders Qualitative assessment of incremental impacts of the program	Interviews with program management Interviews with key stakeholders (e.g. AUCC) Case studies demonstrating the incrementality of the program Survey of recipients	SSHRC		3

6.3 Alternative Delivery Models

Performance area	Indicators	Data Source/ Collection method	Responsibility for data collection	Timing/frequency	
				Third-year review	Summative evaluation
Are there more efficient or cost-effective models of delivering the program while meeting the objectives of helping institutions benefit more fully from federal research funds and responding to the needs of smaller institutions?	Qualitative assessment of the advantages and disadvantages of alternative delivery models Informed opinions of stakeholders	Literature review of alternative delivery models Interviews with program management Interviews with key stakeholders (e.g. AUCC) Survey of recipients	SSHRC	3	
What changes to the design of the program would make it more effective and efficient?	Informed opinions of stakeholders	Interviews with program management Interviews with key stakeholders (e.g. AUCC) Survey of recipients	SSHRC	3	

7 RISK ASSESSMENT AND MANAGEMENT STRATEGY

7.1 Methodology

As defined in the Risk-Based Audit Framework Guide, risk refers to the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event with the potential to influence the achievement of the program’s objectives.

The steps of the risk assessment included: (A) risk identification, (B) risk assessment and (C) Development of risk response and summary.

These risks will be re-evaluated annually in order to reflect any new developments/changes in the program’s environment.

7.1.1 Risk Identification

Representatives from the three Agencies, Industry Canada, and the Secretariat were consulted in the identification of possible significant risks of this program. In addition, the Risk-Based Audit Framework for the one-time allocations was used as a reference in the identification of risks. For each risk identified, a preliminary analysis of the risk level (high/medium/low) was conducted to determine the main risks that might require further analysis.

7.1.2 Risk Assessment

The impact and likelihood of each identified risk were then assessed based on the following definitions.

Definition of Impact

Level	Impact	Damage & Liability	Operational Effects	Reputational Loss
3	Severe	<ul style="list-style-type: none"> Loss or disclosure of highly sensitive client or Agency information Loss of major asset(s) >\$250K Serious injury 	<ul style="list-style-type: none"> Disruption of all essential programs >7days for large number of clients Significant underachievement of objectives Cancellation of major projects without products Loss of key corporate knowledge 	<ul style="list-style-type: none"> Significant loss of client group trust Public outcry for removal of Minister and/or departmental official Media outcry for removal of Minister and/or departmental official Strong criticism by review agencies
2	Moderate	<ul style="list-style-type: none"> Loss or disclosure of sensitive client or Agency information Loss of asset(s) \$50K - \$250K 	<ul style="list-style-type: none"> Disruption of some essential program services < 7 days Schedule delays to major projects Some loss of corporate knowledge Some underachievement of objectives 	<ul style="list-style-type: none"> Some loss of client group trust Negative media attention Criticism by review groups
1	Minor	<ul style="list-style-type: none"> Loss of asset(s) < \$50K 	<ul style="list-style-type: none"> Schedule delays to minor projects 	<ul style="list-style-type: none"> Setback in building of client group trust Some unfavourable media attention Some unfavourable observations by review groups

Definition of likelihood

Level	Likelihood	Description
3	High	The event is expected to occur in most circumstances
2	Medium	The event should occur at sometime
1	Low	The event occurring is unlikely

7.1.3 Risk response and summary

The most significant risks were identified. Then, mitigating strategies were developed in response to these risks. Following is a summary of the results.

7.2 Key risks and mitigating strategies

The program responds to a clearly identified need, is strongly welcomed by the recipient community and is in line with other federal initiatives to support research. It has been discussed and endorsed by provincial counterparts during a consultation process. Moreover, the one-time allocations can be considered a pilot phase. Although no evaluation was conducted of that phase, the letters sent by each recipient’s institution summarizing their utilization of the funds, as well as their marked interest in an ongoing program, attest to the feasibility and potential success of the program. Even though the program is perceived to be low risk (for the above mentioned reasons), the amount of money invested in this program is high, thus increasing the stakes of the program. Therefore, the program is rated as **moderate risk**.

7.2.1 Risks associated with meeting objectives

Risks	Risks Mitigation	Level of Risk
<p>Inability to show incremental use of funds and their outcomes</p> <p>As noted above, recipients are required to use the funding as incremental to existing indirect research support. However, the nature of the program’s expected expenditures may mean that both incrementality and outcomes of the funding will be invisible in the larger picture of research support, making it difficult to quantitatively assess the return on this investment.</p>	<ul style="list-style-type: none"> • Reporting requirements for the program should emphasize the need to provide: <ul style="list-style-type: none"> ▪ Evidence of incrementality; and ▪ qualitative enquiry to help establish the parameters of the federal contribution to indirect costs 	Moderate
<p>Unrealistic expectations for the program</p> <p>The indirect costs of research are known to be greater than the amounts available through the program, and there is a risk that the program allocations may in some cases be too small to meet real needs and hence to achieve the program’s objectives.</p>	Monitoring the significance of the federal contribution to indirect costs as part of the overall cost of supporting university research	Moderate

7.2.2 Risks associated with the design of the program

Risks	Risks Mitigation	Level of Risk
<p>Inadequate determination of eligibility /perceptions of inequity</p> <p>While the determination of eligibility for Canadian institutions is a straightforward process, it may be more complex for other types of research institutions. In addition, allocation may be difficult to calculate in situations where investigators have multiple affiliations. The fact that training programs are excluded from the calculations may suggest to some that degree and diploma granting status is of no relevance to eligibility for the program. Some recent agency programs allow awarding of funds to community organizations (e.g. CURA) and some agencies make large direct payments to non-post-secondary institutions such as hospitals. This may also stimulate arguments for entitlement. All of the above may create perceptions of inequity and significant pressure to expand the notion of research institution in the eligibility requirements, and therefore pressure to expand the funding envelope.</p>	<ul style="list-style-type: none"> • Communications about the eligibility requirements for the program must be clear as to its boundaries. • Provincial and territorial governments should be appropriately involved in the validation of eligibility. • Potential implications for the total funding envelope should be assessed as soon as possible so that there are clear arguments about eligibility. • A communications strategy should be developed to address any concerns 	Low

7.2.3 Financial Risks

Risks	Risks Mitigation	Level of Risk
<p>Financial/Program Management Risk</p>	<ul style="list-style-type: none"> • Program is managed in accordance with its Terms and Conditions and Transfer Payment Policy • Program has published rules, policies and requirements • Internal audits • Subject to Conflict of Interest Policy Framework • Governance structure in place 	Low
<p>Risk in the inappropriate use of funds</p>	<ul style="list-style-type: none"> • Grants are administered according to the rules and policies of SSHRC as well as the regulations and administrative policies specific to the Indirect Costs program. • Ongoing monitoring of program activities, outputs and outcomes 	Low

7.2.4 Legal Risks

Risks	Risks Mitigation	Level of Risk
<p>Access to Information Act and Privacy Act</p> <p>Liability</p>	<p>Use of funds is subject to the same legal framework and liabilities as that of other institutions.</p>	Low

8 Program Monitoring and Recipient Auditing

8.1 Program Monitoring

The secretariat of the Indirect Costs program will monitor the use of funds on an ongoing basis in order to ensure achievement of the expected outcomes. These monitoring activities will be linked to the Performance Measurement Strategy. Data collected will also feed into the year-three evaluation of the program.

All monitoring and evaluation activities are aligned with program monitoring processes. The main tools include outcomes' reports and financial reports. The secretariat will compile, revise and analyse data collected through these monitoring activities. It will also present these analyses to the program's Steering Committee to highlight any trends and ensure that the program will meet its objectives.

The activities of the Indirect Costs program are subject to general overview and monitoring by the Steering Committee, through the Secretariat.

8.2 Monitoring of Institutions

The Finance Division (Review and Investigations), Common Administrative Directorate at NSERC/SSHRC and the Finance Division at CIHR will periodically monitor the control framework at recipient institutions. This monitoring is carried out on a rotational basis within a general risk assessment framework. This activity will also cover the management of the indirect costs awards.

The main objectives of these periodic visits include:

- Review the effectiveness of the policies, controls and systems in place at the institutions to ensure that CIHR, NSERC and SSHRC policies and regulations are followed and that research funds are well managed;
- Review the control framework in place at the institution to administer CIHR, NSERC and SSHRC funds and to ensure that these funds are administered according to the Agencies' guidelines;
- Assess whether the various departments supporting the research activities are well supported; and
- Share and disseminate information on guidelines and expectations for financial and scientific accountability and integrity.

Selection process for the visits

A risk-based framework is in place for the selection of recipients for the visits. A 5 year plan is established based on questionnaires completed by the recipient institutions and information gathered by the Review and Investigations unit.

Approximately 12 organizations are visited annually by the Review and Investigations group. On a 5 year cycle all organizations are visited. This will cost the Indirect Costs program \$40,000 per year.

9 Internal Auditing

SSHRC has created a separate division responsible for corporate performance, evaluation, and audit. The division is currently building its internal audit function. The recruitment of a Senior Internal Auditor is underway. SSHRC's internal audit function will be responsible for the internal audit of the Indirect Costs program.

9.1 Audit Plan

SSHRC is currently undergoing a modern management practices assessment, which will be the basis for the development of a risk-based management framework in line with the directives of Treasury Board. This exercise will also be the basis for identifying the priorities of the internal audit plan.

The Corporate Performance, Evaluation and Audit division plans to develop a three-year internal audit plan and to submit this plan to the Audit Committee in 2003-2004 for approval. This audit plan will be revised annually to re-evaluate risks.

It is anticipated that the Indirect Costs program will be included in SSHRC's audit plan since it is a moderate-risk program.

9.2 Audit Management

All audits will be conducted in accordance with generally accepted audit standards, and in accordance with the current Treasury Board guidance and policy. Audits will be performed by the Senior Internal Auditor, and might include an independent auditor or auditing firm.

Generally audits are conducted in three phases: Planning, Execution and Reporting:

The Planning phase includes an orientation with mandate, definition of the statement of work, gathering of information and documentation, and developing audit program.

The Execution phase consists mainly of undertaking the detailed audit program to gather evidence to support the audit opinion, findings and conclusions.

The Reporting phase involves an analysis of the findings, formulation of opinion, and provides relevant recommendations.

10 Reporting and implementation strategy

The Steering Committee will oversee the implementation of the RMAF-RBAF and all reporting requirements. This implies that the Steering Committee and the Secretariat staff are responsible for ensuring adequate data collection (particularly compliance with annual reporting from recipient institutions), and for launching the year-three evaluation.

The table below summarizes the Implementation and Reporting Plan for the Performance Measurement and Evaluation Strategies.

Implementation and Reporting Plan Summary

Activity	Report	Dates completed
Implementation of performance measurement	With acceptance of Terms and Conditions of award	Late 2003
Ongoing performance measurement	Outcomes reports Financial reports	May 2004 March 2005 March 2006
Year—three evaluation	Evaluation report on Indirect Costs program	September 2006

SSHRC Internal Audit Reports

The mandate of SSHRC's Audit Committee has recently been expanded to include approval of conclusions and recommendations of internal audit reports and to ensure follow-up by management. Once approved by SSHRC's Audit Committee, audit reports will be made public (in both official languages) in keeping with the spirit, intent, and restrictions of the Access to Information and Privacy Acts.