

BRIEFING REPORT TO THE MINISTER

FOR APRIL 1, 2004 TO MARCH 31, 2005



INDIRECT COSTS PROGRAM

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TABLE OF CONTENTS

- 1. Message from the Chair
- 2. Indirect Costs Program
- 3. Accountability and Evaluation
- 4. Communications
- **5.** Analysis of Indirect Costs Grants Awarded in 2004-05
- 6. Conclusion
- 7. List of Indirect Costs Grants Awarded in 2004-05



1. MESSAGE FROM THE CHAIR

On behalf of the Indirect Costs program steering committee, I am pleased to provide you with a copy of the Indirect Costs program's Briefing Report to the Minister for 2004-05. Several factors, such as the implementation of new reporting requirements, prevented us from publishing this report in a more timely manner.

In the last few years, the Government of Canada has invested heavily in the three federal granting agencies: the Canada Research Chairs program, the Canada Foundation for Innovation and Genome Canada. Universities have benefited greatly from this increased funding, but at the same time they have seen their operating costs skyrocket. The government has recognized and taken steps to alleviate this financial burden. In the 2004-05 fiscal year, the Indirect Costs program budget was increased by \$20 million to \$245 million per year to reflect the government's recognition that, as the total investment in research increases, so do the indirect costs of carrying out this research.

The government's contribution to defraying the costs associated with federally supported research helps to maintain a sustainable and competitive research environment in universities, colleges and their affiliated hospitals and research institutes. It also helps smaller postsecondary institutions, which cannot benefit from the economies of scale realized by larger universities, to meet the particular challenges they face in their efforts to increase research capacity.

The Indirect Costs program is still in its infancy, but its benefits to the academic community are already apparent. Large universities assign to the program some of the credit for their ability to attract and retain high-quality researchers, for targeted growth in their research enterprise and for increased support from other sources. Medium-sized institutions report that the indirect costs funding helps them maintain their research capacity, and even bolsters their efforts to become more research-intensive. As for small institutions, they have been able to expand their administrative structures and provide support to researchers.

The academic community and the federal granting agencies are grateful for your continued support of this program.

Alan Bernstein

Chair, Indirect Costs Program Steering Committee

2. INDIRECT COSTS PROGRAM

The December 2001 federal budget provided a one-time investment of \$200 million to help alleviate financial pressures associated with federally supported research at universities and research hospitals. The 2001 budget also committed the government to working with the university community to provide ongoing support for the indirect costs of research that would be predictable, affordable, and incremental. The terms and conditions for the one-time payment were approved on February 7, 2002 (TB #829539).

Since the one-time payment consisted of a reimbursement of costs incurred in the past by universities and their affiliated research hospitals, performance measures were not relevant and therefore were not applied.

Budget 2003 provided \$225 million per annum, through the federal granting councils, beginning in 2003–04, to help fund the indirect costs associated with federally supported research at universities, colleges, and research hospitals. The terms and conditions for this new, permanent program were approved on July 23, 2003 (TB #830732).

Budget 2004 provided an additional \$20 million, bringing the annual budget for the program to \$245 million.

The program's second year continued to be eventful and challenging. A total of 112 awards were made to the 114 eligible institutions (two small colleges chose not to submit a request). The eligibility of the Royal Military College continued to be under review.

At the request of the universities, and with their cooperation, the Canadian Association of University Business Officers (CAUBO) and the financial officers of the federal granting agencies developed financial reporting and monitoring procedures. The program's Results-Based Management and Accountability Framework (RMAF) requires that participating institutions submit, each year, an outcomes report and a statement of account. The former must provide both quantitative and qualitative information about the impact that the expenditures have had in each of five priority areas: facilities, resources, management and administration, regulatory requirements and accreditation, and intellectual property. The latter must provide a breakdown of grant expenditures in terms of those five spending areas.

GOVERNANCE AND ADMINISTRATIVE STRUCTURE

The secretariat of the Indirect Costs program is housed within the Canada Research Chairs secretariat which is in turn housed within the Social Sciences and Humanities Research Council (SSHRC). SSHRC, the Natural Sciences and Engineering Research Council (NSERC), the Canadian Institutes of Health Research (CIHR), and the secretariat of the Networks of Centres of Excellence provide data on their annual funding to eligible postsecondary institutions and their affiliated hospitals and institutes and assist the secretariat in responding to requests for that data.

The Indirect Costs program is governed by a steering committee the mandate of which is to oversee the management of the program and to provide policy guidance on its general direction. The members of the steering committee are the presidents of NSERC, CIHR, and SSHRC, and the deputy minister of Industry Canada. The president of SSHRC serves as committee chair.

SECRETARIAT

The secretariat of the Canada Research Chairs Program, which reports administratively through the president of SSHRC, administers the Indirect Costs program. The secretariat manages the operations of the program, including grants and operational budgets, and liaises with universities, Industry Canada, and the provincial departments of health and education. The secretariat carries out performance measurements, evaluations, and audits and reports on the program to the minister of industry, Treasury Board secretariat, and ultimately, Parliament. In collaboration with SSHRC, other administrative services, such as communications, are provided.

3. ACCOUNTABILITY AND EVALUATION

CONTEXT

All federal grants and contributions programs introduced since 2000 must meet new requirements before Treasury Board approves funding. The following must be developed and approved before funds are released and the program is announced: specific terms and conditions that outline eligibility policies and key processes; a Results-Based Management and Accountability Framework (RMAF); a Risk-Based Audit Framework (RBAF).

In collaboration with the three federal granting agencies, Industry Canada, and Treasury Board, the Indirect Costs program has developed an integrated RMAF-RBAF that conforms to Treasury Board policies and guidelines.

The RMAF outlines performance measurement and evaluation strategies. The RBAF describes risks that can affect the performance of the program and outlines strategies to mitigate such risks.

The integrated RMAF-RBAF was approved by Treasury Board in June 2003.

MEASURING PROGRAM PERFORMANCE: IMPLEMENTATION OF THE RMAF

The performance measurement strategy identifies key indicators that are measured regularly to monitor the progress of the Indirect Costs program toward its intended results. The RMAF identifies three sources from which this information is collected on an ongoing basis:

- request form—Institutions apply for Indirect Costs grants by submitting a request form which describes the areas in which they plan to invest.
- **annual outcomes report**—This describes how the grant has contributed to improving the institution's capacity in the areas in which it invested.
- **annual statement of expenditures**—This outlines how indirect costs funds are allocated in terms of the five categories of eligible support mentioned above.

The Indirect Costs program has implemented the RMAF by developing and administering the request form, the outcomes report, and the annual statement of expenditures.

EVALUATION ACTIVITIES

The Treasury Board submission on the Indirect Costs program specified the following commitments:

- a review of the operations and structure of the program to be carried out during its third year;
- a comprehensive evaluation of the program to be carried out during its sixth year.

The objectives of the third-year review are to examine the design and the operation of the program in order to identify any potential adjustments, and to assess whether the program is progressing towards its objectives.

The objectives of the comprehensive evaluation are to examine whether there is continued need for the program, and to assess whether the program has met its objectives.

The main focus for fiscal year 2005-06 will be carrying out the third-year review of the program. A preliminary list of issues that the review will address is presented below.

ISSUES FOR THE THIRD-YEAR REVIEW

alternative delivery models and design issues—This rubric includes assessing whether
more effective and efficient models for delivering the program exist or could be developed,
and whether any changes to the design of the program would make it more effective and
efficient. More specifically, design issues include the definition of "indirect costs," the
appropriateness of the formula used to calculate grant amounts, and the relationship
between universities and their affiliates.

success issues—This rubric involves assessing the extent to which the program has achieved its immediate objectives or "outputs." Topics include: provision of well-equipped research facilities and of world-class research resources; effective strategic management and efficient administration of the research enterprise; fulfillment of relevant regulatory requirements and international accreditation standards; and effective management of intellectual property developed through research.

4. COMMUNICATIONS

WEBSITE

The Indirect Costs website (www.indirectcosts.gc.ca) is the program's primary communications vehicle. The site contains detailed program information as well as the electronic request and reporting forms.

5. ANALYSIS OF INDIRECT COSTS GRANTS AWARDED IN 2004-05

QUALITY

The quality of the reports on the second year of the Indirect Costs program continues to vary widely from one institution to another. The funding provided by the program covers only a portion of the real indirect costs of federally funded research. Institutions apply the grant funds they receive to specific expenses or to a portion of all their eligible indirect costs expenses. Because these expenses are, by definition, indirect and because the impact of investments is often diffuse, occurring over the course of years, assessing and then reporting on the impact of this funding is a complex process.

Of the 112 outcomes reports submitted for 2004-05, 49 were accepted immediately, 22 required clarification, 41 had to be resubmitted, and two required a second resubmission.

SUMMARY INFORMATION: GRANT REQUESTS VERSUS ACTUAL EXPENDITURES

The following table compares, by category, the figures from the 2004-05 grant request forms with the figures on actual expenditures from the statements of account:

2004-2005	Grant Request Form	Statement of Account
Facilities	\$99,519,984	\$89,057,549
	\$40% \$46,808,127	37% \$54,334,294
Resources	19%	22%
Management and	\$72,219,026	\$75,629,929
Administration	30%	31%
Regulatory Requirements and Accreditation	\$11,299,493	\$12,430,449
Intellectual Property	\$14,399,103 6%	\$12,916,843 5%

As the table shows, actual expenditures did not vary significantly from projected expenditures. The facilities and management and administration categories, for example, together accounted for slightly over two-thirds of both projected (70 per cent) and actual (68 per cent) expenditures.

The following table shows 2004-05 expenditures by size of grant:

	Number of Institutions/ % of total IC grants	Facilities	Resources	Management and Administration	Regulatory Requirements and Accreditation	Intellectual Property
Aggregate	112/100%	37%	22%	31%	5%	5%
Less than \$100,000	52/0.4%	9%	21%	65%	4%	1%
\$100,000 - \$1,000,000	24/5%	38%	18%	39%	2%	3%
More than \$1,000,000	36/95%	37%	22%	31%	5%	5%

Because the 36 institutions that received indirect costs grants of over \$1 million account for 95 per cent of the program's budget, the aggregate spending mainly reflects these institutions' spending priorities.

These 36 institutions invested 37 per cent of their funds in facilities and 31 per cent in management and administration. The 24 medium-sized institutions (those with \$100,000 to \$1 million in funding) allocated their funds almost equally in the two aforementioned categories (38 per cent and 39 per cent, respectively). The 52 institutions that received less than \$100,000 spent more than half their indirect costs funds in the management and administration category. Their second largest spending category was resources (21 per cent), with only a small portion (9 per cent) allocated to facilities.

PROGRAM SPENDING TRENDS

In addition to the quantitative information provided in the statements of account, institutions are asked to give qualitative descriptions of how indirect costs grant funds were used in their institutions. This information has allowed the secretariat to identify spending trends from the first year of the program in each of the five priority areas. For the purposes of this report, "large" institutions are those receiving, per annum, over \$1 million of indirect costs funding; "medium-sized" institutions, those receiving between \$100,000 and \$1 million; and "small" institutions, those receiving less than \$100,000.

The following shows the number of institutions that have allocated funds in the five priority areas:

- facilities: 69
- resources: 82
- management and administration: 92
- regulatory requirements and accreditation: 52
- intellectual property: 48

FACILITIES

Within this priority area there are five sub-categories of eligible expenditures:

- renovation and maintenance of research spaces;
- renovation and maintenance of equipment;
- technical support for laboratory, office, animal care, and other facilities;
- custodial, security, utility, leasing, and capital planning costs;
- insurance on research space.

Institutions used grant funds in all the sub-categories, though very little was used for insurance on research space. The majority of institutions spent money on the first and fourth sub-categories.

Renovations of laboratory and research space appears to have been a popular sub-category due to the fact that many institutions have had to defer maintenance of such facilities, particularly larger institutions whose aging facilities required extensive upgrades. This state-of-affairs has even led a few large institutions to lease research space while upgrade and maintenance work was being carried out on existing facilities or while new facilities were under construction. Many universities indicated that their research capacity is directly dependent on the space available to researchers; thus the maintenance and operating costs of these spaces are essential to sustaining and expanding their research capacity. One large university stated that the Indirect Costs program's impact on capacity building is felt particularly in the "facilities" priority area, and particularly at research-intensive institutions. Besides using the grant funds for modest upgrades and maintenance, one small facility was able to extend the operating hours of its main laboratory, since the grant enabled them to afford extra heating, custodial support, and security. A number of institutions reported that, without support from the Indirect Costs program to maintain and improve facilities and to help pay for technical support, it would be difficult to attract and retain high-quality faculty (specifically Canada Research Chairs) and to launch and maintain strategic research initiatives. Other common reasons given for spending in this priority area were rising operational costs and the technical support that ensures the smooth operation of research projects by maintaining specialized equipment and giving efficient and prompt assistance to researchers.

It should be noted that, although facilities attracted the highest dollar value investment of the five priority areas, these investments involved only 69 (62 per cent) of the 112 institutions; and facilities ranks third behind the management and administration and resources categories. Of the smaller institutions, only 23 per cent used their funds for facilities.

RESOURCES

Within this priority area there are two sub-categories of eligible expenses:

- acquisition, custodial, security, utility, leasing, and capital planning costs associated with libraries, data bases, telecommunications, information technology systems, and research tools;
- · insurance for research equipment and vehicles.

Seventy-three percent of institutions invested in this priority area, almost exclusively in the acquisitions sub-category. Only one university spent funds on insurance for research vehicles. The majority of funds were used to acquire electronic and/or print journals. Smaller institutions stated that building academic resources using indirect costs funds is helping them become research-intensive institutions by increasing their research capacity. Many of the electronic journals listed in this priority area were acquired through memberships in electronic networks such as CA*net4, Atlantic Scholarly Information Network (ASIN), BCNET, TRELLIS (of the Tri-University Group of Libraries), and the Canadian Research Knowledge Network (CRKN), the last of these being the largest with a member list of 72 universities and colleges. These networks were cited as being vital to institutions' research enterprises, especially smaller, more remote institutions that would have had problems accessing such resources were it not for these electronic networks.

Another frequently cited investment was funds spent on telecommunications infrastructure, specifically wireless networks and internet service delivery. Since so many resources are accessed electronically, institutions have placed great emphasis on being able to access and deliver this information from anywhere on campus. This facility and rapidity of access has bolstered research for students, but even more so for faculty who rely more heavily on these resources to conduct research. Such upgrades were most frequently cited by large institutions, where the indirect costs budget often makes possible the expensive expansion of telecommunications infrastructure. Technological support for these telecommunications resources was also cited as a necessary service.

MANAGEMENT AND ADMINISTRATION

Within this priority area there are eight sub-categories of eligible expenditures:

- research planning and promotion;
- assistance to researchers in the preparation of research proposals;
- public relations;
- training of faculty and research personnel;
- financial and other administrative services;
- acquisition, maintenance, and upgrade of information systems to track grant applications, certifications, and awards;
- human resources and payroll (i.e., salaries and benefits of employees who support the research enterprise but whose work is not already funded through a direct research grant);
- purchasing, audit, health, and safety costs.

Although this area had the second largest amount of money invested in it, it was the one in which the largest number of institutions (82 per cent) chose to use their funds. Funds were used in all sub-categories of this priority area, the majority in personnel for financial and other administrative services. For the smaller universities, administrative personnel were often reported to be performing multiple tasks in the research office, from assisting faculty with grant applications to educating staff about funding opportunities to planning and promotion duties. These institutions reported that hiring new staff in the research office, or expanding of administrative personnel's hours and duties has allowed them to move forward on new research initiatives and will be key in moving them toward more research-oriented activities in the future. Many institutions of all sizes reported that expanding their research office has resulted in an increase in the number of grant applications, has encouraged researchers to apply for additional funding, and has shifted the burden of administrative tasks to the research office so that researchers can spend more time on their projects. Indeed, 60 per cent of institutions had expenditures related to dedicating personnel to the specific task of assisting faculty with their research proposals. Several larger institutions invested funds in electronic grant tracking systems to further ease the burden on researchers and keep records more accurate and up-to-date.

REGULATORY REQUIREMENTS AND ACCREDITATION

Within this priority area there are four sub-categories:

- creation and support of regulatory bodies;
- training of faculty and other research personnel in animal care, ethics review, radiation, and biohazard;
- costs for international accreditation related to research capacity;
- upgrades to facilities and equipment to meet regulations.

Five per cent of indirect costs funds were used in this priority area. The vast majority of schools invested money in regulatory bodies and training. Since an institution's ability to conduct research depends in large part on compliance with ethical standards for both human and animal experimentation, as well as on safety issues related to biohazards and other dangerous materials, regulatory infrastructure and proper administration and support of ethics committees are essential. Nearly all the schools complied with national (and, in a few cases, international) ethical standards, therefore most of the funds were used for ongoing training of research and ethics personnel as well as support of the ethics office; significant changes, hirings, and updates were unnecessary. Approximately 11 institutions made upgrades to their animal facilities to meet expansion demands and Canadian Council on Animal Care (CCAC) regulations.

INTELLECTUAL PROPERTY

Within this priority area there are four sub-categories of eligible expenditures:

- costs of creating, expanding, and sustaining a technology transfer office or one with a similar function;
- · reports of invention patent applications, licensing, and creation of spin-off companies;
- research promotion, communications costs, and outreach activities undertaken to transfer knowledge through venues not eligible for funding under other federal programs;
- marketing of teaching materials, scientific photo libraries, survey instruments, statistical packages, data sets and data bases, and software and computer models.

Funds in this area were spent almost exclusively in the first two sub-categories. In the medium and large universities, funds were used for staffing the technology transfer office, as well as for memberships in intellectual property and technology commercialization networks, such as Springboard in the Atlantic provinces and C4, which includes four universities in central and western Ontario. It was also observed that the majority of the intellectual property activities involved maintaining a technology transfer office, rather than expanding or creating one. Of the small institutions, only one (of 52) spent funds in this category. This indicates that these institutions are first building their research

capacity through facilities and management and administration—things that will eventually lead to commercialization after targeted research initiatives are established. One university also mentioned that funds for the support of intellectual property were acquired from other federal initiatives, which might explain why the amount spent in this category was only 5 per cent of the total.

6. CONCLUSION

Overall, there was a general consensus that the \$245 million of indirect costs funds was beneficial to the research enterprise of the Canadian universities, colleges, and affiliates to which they were awarded.

Many large institutions stated that the grant provided them with approximately half the funds required to support actual indirect costs, and stressed that the program not only be continued, but that funds be increased to match the actual indirect costs of research (estimated to be approximately 40 cents on every dollar received from the three agencies for research grants). Despite this, institutions reported recruitment and retention of high-quality researchers, especially Canada Research Chairs, targeted growths in their research enterprise, and increased financial support from other sources. One large university mentioned that their hospital-based affiliates would not be able to grow without indirect costs funding. With so much of the funds going towards deferred maintenance, one might predict a shift in the future to other priority areas once older buildings have been upgraded. Displaced funds were used for various purposes including offering more competitive start-up packages for potential researchers, buying core lab equipment and computers, and funding construction of new research facilities.

Medium-sized institutions reported that the indirect costs funds helped them maintain or bolster their move toward becoming more research-intensive. This appeared to be due to their attraction and retention of high-quality researchers, the support and enhancement of the administrative structure, and the leveraging of outside funds. One institution stated that IC funds were crucial if they were to continue as a "small, research-intensive" university.

Small institutions mentioned that the specific impact of the grant was difficult to assess at this time, but that the long-term effects would certainly be felt, and that the program is therefore important. Since facilities upgrades are expensive, small universities with modest grant amounts chose to use their funds to expand and improve their administrative structure, giving researchers more time to spend on their projects. It was said that this is needed so that faculty could make external connections and networks, and develop new research initiatives, thus moving the institution into a position where it can leverage more funding from various sources. Still others indicated that without the Indirect Costs Program, a decline in staff, students, and research activities would have resulted.

In this second year of the program, a change in reporting was observed. Where last year, many described the grant as "financial relief", this year it was more often described as fostering "capacity building". Institutions consider indirect costs a high-priority issue, and are looking forward to assess the potential impact it may have on their research enterprise, the research environment in Canada, and international collaboration. One very strong indication of this is the number of institutions who wish to see the budget double. The program was also commended on its structure; which allows not only for the rates of funding to be adjusted according to the size of the institution, but also for a flexible use of funds, with the end result that the program makes an impact at every level of research.

7. LIST OF INDIRECT COSTS GRANTS AWARDED IN 2004-05

NAME OF INSTITUTION	PAYMENT (\$)
Acadia University	625,210
University of Alberta	14,177,422
Athabasca University	120,427
Augustana University College	18,029
Bishop's University	106,799
Brandon University	294,084
University of British Columbia	17,123,943
Brock University	1,112,588
University of Calgary	9,521,594
Canadian University College	5,733
Thompson Rivers University	149,270
Carleton University	4,088,608
Collège dominicain de philosophie et de théologie	9,574
Concordia University	3,466,510
Concordia University College of Alberta	2,400
Dalhousie University	6,667,633
École Polytechnique de Montréal	4,047,694
École nationale d'administration publique	61,413

NAME OF INSTITUTION	PAYMENT (\$)
École de technologie supérieure	773,361
University College of the Fraser Valley	32,283
University of Guelph	5,117,404
HEC-Montréal	607,545
Institut national de la recherche scientifique	2,737,994
The King's University College	6,667
Lakehead University	849,454
Laurentian University	1,225,535
Université Laval	10,518,882
The University of Lethbridge	1,057,980
Malaspina University College	90,216
University of Manitoba	6,633,377
McGill University	18,631,156
McMaster University	8,871,819
Memorial University of Newfoundland	4,007,076
Université de Moncton	583,422
Université de Montréal	13,294,332
Mount Allison University	443,175
Mount Saint Vincent University	182,858
University of New Brunswick	3,186,893
Nipissing University College	36,845
University of Northern British Columbia	626,568
Nova Scotia College of Art & Design	10,033
Nova Scotia Agricultural College	207,205

NAME OF INSTITUTION	PAYMENT (\$)
Okanagan University College	224,416
University of Ottawa	7,970,020
University of Prince Edward Island	764,585
Queen's University	7,008,278
Redeemer College	23,175
University of Regina	1,617,506
Royal Roads University	29,745
Ryerson University	1,122,942
Collège universitaire de Saint-Boniface	1,067
Université Sainte-Anne-Collège de l'Acadie	28,809
Saint Mary's University	615,966
University of Saskatchewan	4,845,722
Université de Sherbrooke	5,097,613
Simon Fraser University	5,337,916
St. Francis Xavier University	809,018
St. Thomas University	95,297
Télé-Université	388,505
University of Toronto	29,328,746
Trent University	1,086,856
Trinity Western University	70,251
University of King's College	6,187
Cape Breton University	182,359
Université du Québec en Abitibi-Témis.	307,221
Université du Québec à Chicoutimi	1,078,579

NAME OF INSTITUTION	PAYMENT (\$)
Université du Québec à Montréal	3,783,094
Université du Québec en Outaouais	422,818
Université du Québec à Rimouski	692,053
Université du Québec à Trois-Rivières	1,377,617
University of Victoria	4,700,322
University of Waterloo	6,742,122
University of Western Ontario	8,829,753
Wilfrid Laurier University	863,711
University of Windsor	2,442,700
University of Winnipeg	565,090
York University	4,272,893
Alberta College of Art and Design	26,547
Aurora College (including Aurora Research Institute)	10,267
B.C.Institute of Technology	2,500
Camosun College	17,692
Alliance University College	5,630
Capilano College	2,500
Cégep de Bois-de-Boulogne	2,720
Cégep de Jonquière	53,911
Cégep de Sainte-Foy	13,200
Cégep John Abbott (Ste-Anne de Bellevue)	4,720
Cégep Régional de Lanaudière à Joliette	15,863
Centennial College	6,400
Collège Ahuntsic	6,773

NAME OF INSTITUTION	PAYMENT (\$)
Collège de l'Outaouais	5,889
Collège de Maisonneuve (Montréal)	16,879
Collège de Valleyfield	7,925
Dawson College	60,804
George Brown College	12,086
Georgian College of Applied Arts and Technology	8,047
Grande Prairie Regional College	1,928
Humber CAAT	2,342
Langara College (BC)	3,687
Mount Royal College	4,242
Northern Alberta Institute of Technology	1,247
Nova Scotia Community College	9,093
Nunavut Arctic College	27,519
Red Deer College	2,133
Seneca College for Applied Arts and Technology	23,485
Sheridan College (Ontario)	6,640
St. Mary's College	4,242
Vanier College	6,402
Yukon Community College	9,167
Collège de Sherbrooke	2,489
Emily Carr Institute of Art and Design	13,333
Algoma University College	1,733