### **Canada Foundation for Innovation**

### **Policy and Program Guide**

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#### Section 1—Mandate

The Canada Foundation for Innovation (CFI) is an independent corporation established by the Government of Canada to strengthen Canadian capability for research. The CFI will achieve this objective by investing funds over the next five to ten years in the development of research infrastructure in Canadian universities, colleges, hospitals, and eligible not-for-profit organizations. The amount that the CFI will invest in research infrastructure is \$800 million (plus accruing interest), minus administrative expenses.

The CFI's activities are guided by a 1997 Act of Parliament, the *Budget Implementation Act*, and by a funding agreement with the Government of Canada. The CFI's Board of Directors is responsible for designing programs and setting policies to achieve the Foundation's objectives.

The CFI's mandate is to increase the capability of Canadian universities, colleges, hospitals, and other eligible institutions to carry out world-class scientific research and technology development. To implement this mandate, the CFI will promote innovation by investing in research infrastructure, jointly with funding partners.

The Act defines **research** as the "attempt to discover new facts, knowledge, and information, to develop new interpretations of facts, knowledge or information, or to discover new means of applying existing knowledge, relating to (a) a science (b) health (c) engineering or (d) the environment."

For the Foundation, innovation is a process that begins with the creation of knowledge in research and continues through its applications for the benefit of Canadian society.

The CFI's policies and funding mechanisms will support the strategic development of research at Canadian institutions. They have been designed to:

- build capacity for innovation;
- strengthen research training of Canadians for research and other careers;
- attract and retain able research workers in Canada;
- promote networks and collaboration among researchers; and
- ensure the optimal use of Canadian research infrastructure by promoting sharing within and among institutions.

This, in turn, will contribute to economic growth and job creation as well as to improvements in health, environment, and quality of life.

By research training, the Foundation means the training through research of highly qualified personnel (technicians and technologists, undergraduate and graduate students, postdoctoral fellows and other trainees, etc.), not only the training of future researchers.

The CFI will support infrastructure projects that meet its criteria for eligibility and assessment, regardless of the disciplines or areas of interest of the researchers who will use the proposed infrastructure.

### Section 2—Eligibility

#### 2.1 Eligible Recipients

Universities, colleges, and hospitals that have demonstrated their capability to support and conduct research may be eligible for CFI funding. Colleges and not-for-profit organizations that are federated or associated with universities will be regarded as integral parts of their parent institutions.

Not-for-profit organizations that have demonstrated their capability to support and conduct research may be eligible, as long as they are not agencies of governments or of for-profit corporations. The Networks of Centres of Excellence sponsored by the federal government, and similar organizations sponsored by provincial governments, are not eligible recipients. However, their projects may be considered if they are submitted to the Foundation by one or more of the participating universities.

Eligible recipients will have the ownership of infrastructure purchased or developed with CFI funding. Therefore, only institutions that have the financial and managerial capability to receive and administer CFI and partner funding and to install, operate, and use the proposed infrastructure on an on-going basis will be considered for eligibility.

Any institution that is not sure if it is eligible should consult the detailed eligibility conditions (Appendix 1) and contact the CFI to request a ruling on its eligibility. The institution will be required to demonstrate that it is capable of conducting and supporting research, and of administering any funding awarded in accordance with CFI guidelines.

#### 2.2 Eligible Infrastructure Projects

An eligible project is a project carried on, or to be carried on, by an eligible recipient for the modernization, acquisition or development of research infrastructure.

Infrastructure is defined as equipment, specimens, scientific collections, computer software, information databases, communication linkages, and other intangible properties used or to be used primarily for carrying on research including housing and installations essential for the use and servicing of those things.

#### 2.3 Eligible Costs

Eligible costs include all goods and services required to bring the new infrastructure into service, and maintenance costs that are included in the purchase price (e.g., normal warranties). They do not, however, include any part of the ongoing costs of operating a facility.

Eligible infrastructure projects are considered capital projects. Whether they are modernized, purchased, leased or developed, when completed, they represent a new capital asset and provide a new or improved research capability, research tool, or research facility.

Eligible costs include incremental costs associated with establishing the infrastructure as a turn-key project. Details of eligible and non-eligible costs are found in the following subsections, 2.3.1 and 2.3.2. Appendix 2 provides guidelines on the eligibility of the costs of developing databases.

When a particular cost item is not clearly defined as either eligible or ineligible, the CFI will decide the eligibility on a case-by-case basis.

#### 2.3.1 Examples of Eligible Costs

The **capital costs** of modernizing, acquiring, leasing or developing research infrastructure are eligible.

- In the case of an option to either upgrade or modernize an existing building, or to construct or assemble a new building, the most cost-effective option will be included in the eligible costs; and
- In the case of leasing, the application will have to show that leasing is at least as costeffective as purchasing and to justify the proposed term of the lease. As in the case of
  purchasing, the ongoing operating costs are not eligible.

The cost of constructing or renovating a building that houses research infrastructure may be fully or partially eligible.

Related costs may also be eligible for CFI funding. They include the cost to:

- retain professional and technical personnel, consultants, and contractors directly involved in the design, engineering, manufacturing, or construction of the infrastructure project;
- travel to a manufacturer, dealer, or supplier to select the research infrastructure or other material to use in modernizing or constructing the infrastructure;
- negotiate the terms and conditions to purchase the research infrastructure or any other material to use in modernizing or constructing the infrastructure;
- ship or transport the research infrastructure, including brokerage fees, excise taxes, and duties;

- purchase an extended warranty, service contract (for a maximum period of three years), or supportive embodied software for the research infrastructure, or any other material to use in modernizing or constructing the infrastructure;
- modernize or construct research space essential for using the infrastructure safely and effectively;
- train the institution's staff to operate and use the research infrastructure; and
- construct or modernize office space directly related to using the research infrastructure.

In determining eligible costs, the financial requirements of an eligible infrastructure project may be based on the full cost of providing the new research capability, i.e. each infrastructure project should be viewed as a turn-key project.

#### 2.3.2 Examples of Non-Eligible Costs

- the wages, salaries, and benefits of professional and technical personnel, consultants, and contractors not directly involved in designing, engineering, manufacturing, or constructing the infrastructure;
- the cost to construct or modernize libraries, or to maintain library collections (except when the infrastructure undertaking falls within the definition of research infrastructure);
- administrative expenses not specifically listed as eligible costs;
- operating costs and costs related to the general maintenance and overhead for the research infrastructure and the building or other facility in which the research infrastructure is situated;
- the cost to construct, maintain, or modernize buildings or facilities used primarily for teaching;
- the cost to construct, maintain, or modernize space not directly related to research infrastructure:
- the cost to construct, maintain, or modernize health-care buildings or facilities that patients primarily use;
- the cost to conduct research (research will, of course, be conducted with the infrastructure, but the operating costs of such research are not eligible); and

• the cost to purchase or lease real property (note that donations of real property may, however, constitute an eligible partner contribution, as explained in section 2.5).

#### 2.4 Eligible Partners

In total, the CFI will provide funding for up to 40% of the eligible costs of the projects it supports. CFI funding for any one project may not exceed 50% of eligible costs, and will only rarely exceed 40%. The balance of the project's costs must come from other sources. The CFI considers any of the following possible sources (Canadian or foreign) as acceptable:

- funds or trust funds held by the institution itself;
- departments and agencies of the federal government, excluding the Medical Research Council, the Natural Sciences and Engineering Research Council, the Social Sciences and Humanities Research Council and the Networks of Centres of Excellence:
- departments and agencies of provincial and municipal governments;
- · corporations;
- · voluntary organizations and foundations; and
- individuals.

#### 2.5 Eligible Partner Contributions

The definition of an eligible cost applies to funding by partners as well as by the CFI, i.e. only contributions to the eligible costs of projects can be counted as matching funding<sup>1</sup>. Partners may contribute to projects for purposes other than those included in the definition of infrastructure. However, these contributions will not be counted as part of the funding of infrastructure when the sharing formula is applied. Although they will not be matched by the CFI, contributions by partners to operating costs will help institutions make effective use of the infrastructure.

The CFI will recognize, at fair value, in-kind contributions from partners that are likely to be important additions to the infrastructure of the respective projects. As a rule, in-kind contributions of real property (i.e., land and buildings) will not be recognized if they have already been transferred to the recipient institution at the time the application process is initiated. In competitions held in 1998, other in-kind contributions (e.g., equipment) may be recognized if they have been transferred to the institution on or after July 2, 1997.

There is one exception: for the initial (April 1,1998) competition for New Opportunities, contributions to eligible costs made by the university itself between July 1, 1995 and

<sup>&</sup>lt;sup>1</sup> There is one exception: the costs of acquiring or purchasing real property are not eligible for CFI funding. However, partner donations of real property may constitute eligible matching funding.

July 2, 1997 may be accepted, even if some of the funding has already been spent to acquire or develop infrastructure (see Section 3.5.3 for details).

Information on the types of in-kind contributions that may be eligible is found in Appendix 3.

For projects with eligible costs (from the CFI and partners) of **less** than \$350,000, the matching funds must be in hand or committed before the CFI reviews the application.

For projects with eligible costs (from the CFI and partners) **greater** than \$350,000, the CFI is prepared to review the project if it includes a persuasive plan for securing the matching funds, including statements from prospective partners. Applications that present plans acceptable to the Foundation and that demonstrate the eligibility of such a project may be given a six-month conditional approval if they meet all the CFI's evaluation criteria, except for the required commitment for matching funds. The CFI's Board will not approve any funding until the final formal commitments are in place.

### Section 3—Program

#### 3.1 Program Overview

The CFI's emphasis on strategic development of research at Canadian institutions is designed to enable eligible organizations to realize plans for launching new research programs and strengthening existing programs through the acquisition or renewal of infrastructure. The support mechanisms are shown in Table 1. These mechanisms challenge institutions to develop plans and strategies, to collaborate with each other, and to seek partner support. The support mechanisms may evolve as the CFI gains more experience. In the future, the CFI may complement these mechanisms by inviting institutions to develop infrastructure projects in targeted areas of research and training deemed important by the CFI and its partners.

Table 1—Mechanisms for strategic development

	Range of project costs	Initial expenditure forecast <sup>2</sup>
Institutional Innovation Fund	no limit	\$300 million to \$450 million
Regional/National Facilities	more than \$350,000	\$60 million to \$150 million
New Opportunities	up to \$500,000	\$100 million to \$150 million
Research Development Fund	variable	\$40 million

- 1. Project costs include total eligible costs sought from the CFI and partners.
- 2. Expenditure forecast is for CFI funding over five to ten years.

The expenditure forecast is a guideline and does not represent firm policy. The CFI will review allocations to the various mechanisms from time to time in light of its experience. Substantial funds will remain uncommitted in the early years in order to accommodate possible new mechanisms.

If there is a very high proportion of projects in any particular sector or sectors at first, the CFI may decide on separate budget allocations for these sectors. This would ensure that early funding from the CFI is not excessively steered by the fact that some sectors may need less time than others to secure partner funding.

The CFI will use four different funding mechanisms to support strategic development in Canadian research institutions:

- The Institutional Innovation Fund will be the CFI's principal support mechanism. This fund will enable eligible institutions, alone or in groups, to strengthen their research infrastructure in priority areas identified in their institutional research plans. The CFI hopes that institutions will take advantage of this mechanism to seek support for infrastructure that will enable researchers to work on groundbreaking topics that are currently beyond their means. Often, such research would require interdisciplinary approaches and contributions from individuals from a variety of institutions and sectors.
- Regional/National Facilities are designed to encourage institutions to come together in regional or national consortia and to plan co-operatively for the acquisition or development of infrastructure.
- New Opportunities will provide infrastructure support to new academic staff in areas
  that are essential to the institution's research development. Initially, the CFI will
  welcome applications on behalf of researchers who took up their first full-time
  academic appointment between July 1, 1995, and April 1, 1998. Effective
  May 1, 1998, institutions will have the opportunity to submit, at any time, infrastructure
  projects even if the candidate is not known at the time of application.
- The Research Development Fund is identical in purpose to the Institutional Innovation Fund and New Opportunities, but is designed to help eligible smaller universities to strengthen their research infrastructure.

#### 3.2 Assessment Criteria

After verifying projects for eligibility and completeness, the CFI will evaluate them on the basis of the following three criteria that reflect its mandate:

#### a) Quality of research and suitability of the infrastructure

- quality, significance, originality, and innovative potential of the research;
- track record of the principal investigators and their commitment to the infrastructure;
- the extent to which the proposed infrastructure is effective and efficient, given the complexity, volume, and nature of the research activity being planned, and in light of the existing or planned infrastructure in the institution or in other institutions; and
- the effective management, operation, and maintenance of the infrastructure on an ongoing basis.

#### b) Contribution to strengthening the capacity for innovation

- importance of the infrastructure to the institution(s);
- contribution to building the regional or national capacity for innovation;
- contribution to attracting and retaining highly qualified personnel;
- the extent to which the proposed infrastructure will provide opportunities for excellent training in research for Canadians who will embark on research and other careers;
- the extent to which the infrastructure will be shared between institutions and with other partners; and
- the extent to which the proposed infrastructure will promote interaction among research personnel across disciplines and institutions.

#### c) The potential benefits of the research to Canada

- potential contributions to the Foundation's goals of job creation and economic growth as well as improvement of the environment, health, and quality of life through innovation; and
- interactions and partnerships with industry, provincial organizations, other intended users of the infrastructure, eventual receptors of the research results and potential employers of the personnel trained using the infrastructure.

To be recommended for funding, the proposed infrastructure will have to satisfy all three criteria to a degree appropriate to the size and complexity of the project.

#### 3.3 Overview of Assessment Process

The CFI intends to assess applications fairly and consistently without imposing an undue workload on an already overworked research community. In most instances, applications will be in direct competition with each other. When applications are assessed on a case-by-case basis, comparable standards will apply. The depth of the review will vary with the complexity of the proposal and the size of the requested investment.

The number and complexity of projects under each program mechanism will influence both the committee structure and the review process.

In many instances, to simplify the process and avoid duplication of efforts, the CFI intends to collaborate with other funding agencies interested in and competent to participate in the review, such as federal, provincial, and voluntary agencies involved in research funding. With the permission of researchers and institutions, the CFI may also consult relevant files of other agencies in instances when this would simplify the review process.

The review process will normally involve an assessment by expert reviewers, followed by a review by CFI multidisciplinary assessment committees. Committee recommendations will be transmitted to the Board of Directors of the Foundation. All awards will be approved by the Board.

The experts consulted in the various phases of the review will include, as appropriate, researchers from various sectors, university and business administrators, research procurement officers, and potential users of the research results. Quality and experience will be the prime consideration in the selection of individual expert reviewers and committee members. Attempts will be made to ensure that committees/panels have a reasonable balance with respect to language, gender, region, sector of the economy, discipline and type of institution. Committees will have the ability to review proposals in Canada's both official languages.

Each project will be reviewed by individuals who do not find themselves in a position of conflict of interest. (The CFI is developing guidelines on ethics and conflicts of interest for reviewers and committees, based on those of the federal granting councils.)

#### 3.4 Application Process and Deadline Dates

Only institutions may submit applications to the CFI. Individual researchers are not eligible.

A two-to-five page summary of the institutional research plan must be submitted with the institution's first application, except for the April 1, 1998 competition for New Opportunities (see Section 3.5.1).

The CFI Application Form consists of Instructions and five modules:

- Project Description and Assessment against CFI Criteria
- Financial Information
- CV
- Suggestions of Reviewers
- Release of files from other agencies.

Table 2 summarizes the application process.

Table 2—Process and dates

Mechanism	Project summaries (May 1, 1998)	Complete applications (deadline date)
Institutional Innovation Fund		
Under \$350,000 in total eligible costs from the CFI and partners		May 1, 1998
Over \$350,000 in total eligible costs from the CFI and partners	✓	October 1, 1998 (if invited to apply)
Regional/National Facilities	✓	October 1, 1998 (if invited to apply)
New Opportunities Initial Competition After May 1, 1998		April 1, 1998 Accepted at any time
Research Development Fund		Accepted at any time

#### 3.5 Program Mechanisms

#### 3.5.1 Institutional Research Plans

All applications will have to be linked to institutional plans. A two- to five-page summary of the institutional research and training development plan must accompany an institution's first application to the CFI, except for applications submitted to the April 1, 1998 competition for New Opportunities. Therefore, institutions taking part in the Institutional Innovation Fund or Regional/National Facilities must submit the summary of their plan by May 1, 1998. Smaller institutions opting for the Research Development Fund can submit their summary at any time after March 1, 1998.

The plan summary will be submitted only once, using the form *Summary of Institutional Research Plan* (Appendix 4). The plan summary will outline the institution's major thrusts for research and research training, focussing on those areas for which it intends to seek CFI support.

When a university and one or more hospitals or research institutes are affiliated or linked, sharing human and material resources as well as programs, the CFI expects concerted planning. Therefore, institutions linked with one or more other organizations in this

manner must provide evidence of concerted planning in the summary of their plan (additional space is provided for this purpose).

The Foundation will not assess the plans themselves, but will ascertain that planning for research and research training is given careful attention by institutions. If concerted planning and co-ordination appear insufficient, institutions will be advised of the Foundation's concerns.

Since most institutions will have rolling plans, the CFI will accept revised summaries once a year throughout the life of the Foundation.

#### 3.5.2 Institutional Innovation Fund and Regional/National Facilities

Institutional Innovation Fund projects proposed by one institution may include elements of support for infrastructure for the related work of co-operating researchers at other institutions in Canada—either within the same region or at a distance. When two or more institutions are parties to a project, one of them should be designated as the lead institution. The proposed infrastructure should be reflected in the plans of the institutions that will be major participants.

The Institutional Innovation Fund and Regional/National Facilities are similar in terms of eligible costs. The major difference between the two is the degree of collaboration by various institutions, and the expected regional or national impact. The two competitions will be carried out simultaneously to ensure that projects for similar types of infrastructure are reviewed in a similar manner. The CFI reserves the right to move applications from one mechanism to the other to ensure that similar applications compete against each other.

On May 1, 1998, institutions participating in the first competition for these mechanisms must submit completed *CFI Application Forms* for:

- project summary for infrastructure projects greater than \$350,000 in total eligible costs sought from the CFI and partners; and
- complete applications for infrastructure projects under \$350,000 in total eligible costs sought from the CFI and partners.

Each institution may submit several projects. However, the CFI will not usually expect to see a separate request for each item of equipment or infrastructure. Rather, if appropriate, each project should include several items linked in a cohesive package and related to institutional priorities and plans.

Institutions submitting more than one application should also send a list of all the project summaries and complete applications sent to the CFI in the competition.

#### a) Projects under \$350,000 (total eligible costs)

Projects under \$350,000 will be reviewed separately in a one-step competition. Expert reviewers will be consulted as needed and a multidisciplinary assessment committee will make recommendations on funding. The Board of Directors of the Foundation will make the final decisions on awards.

#### b) Projects over \$350,000 (total eligible costs)

Project summaries replace the traditional "letter of intent" stage for larger projects. The CFI will use this process to screen applications. Project summaries are submitted by completing only some sections of the *CFI Application Form*.

Reviewers and multidisciplinary committees will assess project summaries against the CFI criteria and make recommendations to the CFI on whether or not the project should be invited to enter the second stage of the competition.

Only highly rated projects will be selected for the second stage of the competition. The CFI will inform institutions of the reasons why projects have not been selected.

Applicants invited to enter the second stage will be advised individually of the additional material required. They will also be given the opportunity to update the information provided initially in each of the modules of the *CFI Application Form*.

Review mechanisms will vary from application to application and will involve a variety of methods (e.g. written external reviews, site visits or interviews), depending on the complexity of the infrastructure project and on the amount of additional information requested from the applicant. Some of the reviews may be carried out by the CFI, some may be carried out jointly with other agencies and some may be carried out by other agencies (on behalf of the CFI). In some cases, existing recent reviews may be used.

Multidisciplinary assessment committee(s) will then make recommendations on funding and the Board of Directors of the Foundation will make the final decision.

#### c) Future competitions

There will be two or three competitions for Institutional Innovation Fund and Regional/National Facilities during the next five years. The CFI will make a decision on future competition dates after it assesses the demand and quality of applications in the first competition.

#### 3.5.3 New Opportunities

An important part of the CFI's mandate is to provide infrastructure to train future generations of researchers and other highly qualified individuals who will embark on related careers. By providing research infrastructure to new faculty members, funding for

New Opportunities will help newly recruited faculty members reach their full potential and assist institutions in recruiting academic staff of exceptional quality in priority areas for research and training at the institution. Funding will provide support for infrastructure costs, not for salaries of investigators or operating costs of their research. See section 2.5 for eligible contributions.

Universities are invited to seek infrastructure support for persons who are taking up their first full-time academic position in Canadian degree-granting institutions. Teaching hospitals and affiliated institutes may apply only through the university with which they are associated. A New Opportunity infrastructure project may involve more than one new researcher. It can include a group or team of researchers with complementary skills and expertise, or researchers working in related fields of research that are a high priority for the university and which the university wishes to develop to enhance its training and research mandates.

#### a) Initial competition

The deadline for this competition is April 1, 1998. The candidates must have accepted and/or taken up their first full-time academic position between July 1, 1995, and April 1, 1998. A maximum of 200 awards will be made in this competition. There is no institutional quota for this competition.

For this initial competition only, contributions to eligible costs made by the university itself between July 1, 1995 and July 2, 1997may be accepted, even if some of the funding has already been spent to acquire or develop infrastructure. The eligible portion is the portion used for research infrastructure, not funds spent on the operating costs of research of the new researcher(s). This exception is made to ensure that new researchers have the opportunity to obtain the infrastructure necessary to initiate their research program. In addition to meeting program criteria, the application will have to demonstrate infrastructure needs above and beyond the start-up infrastructure funding received by these researchers. In making this exception, the CFI recognizes the investment made by universities who offer start-up funding to their new academic staff.

In the review of proposals, the CFI assessment criteria will apply, but emphasis will be placed on the excellence of the candidates and the contribution they will make to the training of highly qualified personnel. The CFI will also take into account the strategic importance of the positions for the development of research and research training at the institution.

CFI multidisciplinary assessment committees will make recommendations for funding. The Board of Directors of the Foundation will approve awards.

#### b) Ongoing process

After May 1, 1998, a university may request funding to provide infrastructure to candidates who:

- have yet to be recruited;
- have been recruited but have not yet taken up their positions; or
- have taken up their positions six months or less before the date of the application but after April 1,1998.

The CFI will accept applications at any time, and will review them on a case-by-case basis. Expert reviewers (some of whom could be members of the multidisciplinary assessment committee(s) used for the initial competition) assess applications against the CFI criteria. Awards will be approved by the Board of Directors of the Foundation. Conditional approval will be given when the candidates have yet to be recruited.

The maximum number of awards initially available to institutions is based on a three-year average of total sponsored research revenue, as shown in Table 3. Data collected by the Canadian Association of University Business Officers (CAUBO) will be used to determine the sponsored research revenue.

The initial maximum number of awards will be reconsidered once the CFI assesses the demand for New Opportunities awards and for other support mechanisms. Appendix 5 lists the universities falling in each of the category.

For successful applications, the CFI will hold the approved funds in reserve for up to one year. The Foundation may grant extensions on reasonable grounds.

Table 3—Research revenue vs. number of awards

Average sponsored research 1994-96	Maximum number of awards initially allocated to universities
Less than \$20 million <sup>1</sup>	3
\$20 million to \$40 million	5
\$40 million to \$60 million	8
\$60 million to \$80 million	10
\$80 million to \$100 million	12
\$100 million to \$120 million	14
\$120 million to \$140 million	16
More than \$140 million	18

 Institutions opting for the Research Development Fund will become eligible for New Opportunities only after they have used up all their research development allocation.

The CFI will limit the number of "pending" awards per institution, at any one time, to 50% of its maximum number of awards (two and three respectively in the case of institutions with a maximum of three or five awards). For example, an institution with a maximum of 10 awards will not be authorized to submit a sixth application until it has recruited the first selected candidate.

The CFI will review the qualifications of the candidates recruited before it gives final approval. Institutions will have to submit a revised list of infrastructure needs (within the initial budget) and an updated research plan to take into account the selected candidate's specific requirements.

#### 3.5.4 Research Development Fund

The Research Development Fund is a mechanism designed to help smaller universities strengthen their research infrastructure. The CFI is developing a comparable mechanism intended for eligible colleges and other postsecondary educational institutions.

Eligible institutions are universities that meet the CFI's general eligibility conditions and that received, during the 1994-96 period, less than 1% of the total sponsored research funding in Canadian universities. The CFI will use the data collected by CAUBO to determine eligibility.

Before they bring their first applications to the CFI, eligible universities will be asked to decide whether they would like to participate in the Research Development Fund. Eligible universities that do so will not initially be eligible to take advantage of other CFI funding mechanisms. Any university that is successful in claiming the full amount of its fund will be eligible to compete in other mechanisms afterwards. However, all universities, at all times, are eligible as participants or users in Institutional Innovation Fund applications led by other institutions, and in applications for Regional/National Facilities that are relevant to their research programs.

There is no deadline for accessing the Research Development Fund. The CFI will receive applications at any time after it has accepted institutional plans for research and research training.

Applications are expected to relate to institutional research plans and to be similar to those for the Institutional Innovation Fund and New Opportunities. Assessment criteria will be the same as for these other mechanisms, and funding will be approved only for applications that conform to the same standards in terms of quality, institutional impact,

and relevance to the Foundation's mandate.

Expert reviews will be sought as needed. A multidisciplinary assessment committee will make recommendations for funding. The Board of Directors of the Foundation will approve awards.

Initially, a sum of approximately \$40 million has been set aside for the eligible institutions; the Fund will be reduced proportionally if some of the eligible institutions decline to participate. Conversely, the Fund will be augmented if some institutions that were not in the original list are successful in demonstrating that they meet the eligibility criteria. The Fund has been apportioned among institutions using a formula that gives equal weight to the following factors:

- total sponsored research funding;
- total sponsored research funding per full-time faculty member;
- rate of increase in sponsored research over the most recent five-year period;
- degrees granted per annum; and
- number of full-time faculty

For each factor, the average over the most recent three-year period was used.

Each university is assigned an index for each factor which is the ratio of that university's factor to the median. Indices greater than 4.0 are assigned a value of 4.0. The sum of the five indices for an institution indicates the share of the Research Development Fund pool that is available to that institution. Appendix 6, which provides more information on the indices, lists the institutions eligible as of January 1998 and the amount of their Research Development Fund.

# Section 4—Policies and Guidelines on the Use and Administration of Funds

This Section (especially sections 4.6 to 4.12) includes more details on the use and administration of funds than the original edition of the Guide. Changes are in bold face or are marked as "new or revised".

#### New preamble

The CFI operates on the principle that its funds must be used effectively, economically, and in the best interest of Canada's research enterprise. In order to maximize the purchasing power of its investment, the CFI strongly encourages institutions to seek the best possible prices when purchasing equipment or developing infrastructure projects.

The CFI recognizes that, as part of the discussions and negotiations leading to the purchase of equipment, suppliers may offer (or institutions may request) that instead of a discount on equipment, which is considered by the CFI as an in-kind contribution, the equivalent in cash be returned to the institution (i.e., cash back). The CFI does not endorse or recognize the procurement of equipment that would be predicated by, or linked to, a promise of cash back or cash rebate to the benefit of the institution.

The CFI considers that accepting an offer to acquire additional or improved equipment for the amount originally approved is tantamount to a decrease in eligible costs or a change to the project. Therefore, the conditions outlined in section 4.10 apply: as long as the additional infrastructure is directly related to the project, the institution needs to seek prior written approval from the CFI only if there is a change in excess of 10 percent of the CFI's contribution, or \$50,000, whichever is lower.

#### 4.1 Funding Ratio

The CFI funds projects on a cost-shared basis, in partnership with other sectors and participants in the research system (see section 2.4). Institutions and their partners must collectively contribute at least 60 percent of the required funds for a project, with the CFI providing a maximum of 40 percent.

In exceptional circumstances, the CFI is authorized to contribute more than 40 percent of the funds for a project, to a maximum of 50 percent of the funds. However, since the CFI must maintain an average maximum contribution of 40 percent, the CFI does not plan to contribute more than 40 percent. The matching percentage will be confirmed in the award agreement and will be called the "agreed CFI share of eligible costs" in the following sections of this guide.

#### 4.2 Agreement with Eligible Recipients

CFI funding is administered in partnership by the recipient institution and the CFI.

The recipient institution is the institution that submitted the application unless the applicant institution and another eligible institution involved in the project request (and obtain CFI's permission), in writing, that the other eligible institution receive the funds directly and assume all responsibilities related to the award.

Before releasing any funds, the CFI will ensure that the recipient institution has signed an institutional agreement which defines the conditions under which eligible recipients can use CFI funding. A sample *Institutional Agreement* is found in Appendix 7.

In the *Institutional Agreement*, the institution's President or CEO may designate individuals who will act on his or her behalf:

- a CFI account administrator who will have custody of the CFI funds and will be accountable for the institutional CFI financial accounts and related records;
- one or two persons authorized to sign applications to the CFI on behalf of the institution.

The institution has the responsibility to monitor expenditures and ensure that they comply with CFI regulations and policies as outlined in this Guide or other CFI publications, as specified in the *Institutional Agreement*, or as imposed as a condition of funding.

The institutions must notify the CFI immediately if there is any evidence that CFI funds have been used inappropriately.

CFI's authorized representatives may periodically visit institutions to provide information on the administration of CFI funds and monitor a sample of project accounts. If the recipient institution forwarded funds to another institution (e.g., an affiliated hospital or another participant in a regional or national facility), the CFI may monitor the project account at the location where the funds are spent.

#### 4.3 Ownership and Location of Infrastructure

The ownership of CFI funded infrastructure will be vested with the eligible institution (alone or as member of a group composed mainly of eligible institutions), as per the *Funding Agreement* between the CFI and the Government of Canada. The Funding Agreement stipulates that institutions own and control the equipment, as follows:

- alone, or as a member of a group (a majority of which fall within the definition of Eligible Recipient), the Eligible Recipient shall operate and use the Research Infrastructure contemplated by the Eligible Project;
- alone, or as a member of a group (a majority of which fall within the definition of Eligible Recipient), the Eligible Recipient shall hold a majority interest in and exercise de facto control over the Research Infrastructure contemplated by the Eligible Project;

- for a period of five years from the date of acquisition and installation of the Research Infrastructure, or such other period as may be deemed appropriate by the Foundation:
  - 1. the Eligible Recipient, either alone or as a member of a group (a majority of which fall within the definition of Eligible Recipient), shall irrevocably commit to hold the majority interest and the de facto control of the Research Infrastructure referred to in the preceding paragraph; or
  - 2. the Eligible Recipient, with the consent of the Foundation, may transfer the majority interest and de facto control of the Research Infrastructure referred to in the preceding paragraph to another Eligible Recipient or to a group, a majority of which fall within the definition of Eligible Recipient.

The infrastructure will be located at the eligible institution or at any other place in Canada, as specified in the application. Any change in location requires CFI's permission.

#### 4.4 Conflict of Interest

A person directly involved in a project funded by the CFI must not have any financial or personal interest—directly or indirectly—in any project transactions. Should a real or perceived conflict of interest situation develop, institutions should seek a ruling from the CFI.

#### 4.5 Rights to Intellectual Property

The CFI does not keep or claim any ownership of, or exploitation rights to, any intellectual property arising from the infrastructure project. The recipient institution will determine these rights, in accordance with current institutional policies.

# 4.6 Special Requirements for Certain Types of Research Facilities and Infrastructure Projects

Appendix 8 outlines CFI's policies with respect to requirements for certification for certain research or facilities :

- facilities for the care and treatment of animals;
- research with human subjects;
- research involving biohazards;
- research involving radioactive materials;
- research involving a possible adverse impact on the environment, hazardous substances, field work, or field or marine stations; and
- facilities in the Yukon and the Northwest Territories.

The CFI has adopted the 1998 *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*.

It has also adopted the 1998 statement of the granting councils regarding the Year 2000 computer problem.

#### 4.7 Notification of Decision and Award Agreement (revised)

Institutions will be informed of competition results shortly after the decisions of the Board of Directors. Lists of successful applications will be published.

The CFI will contact each institution to finalize the award amount and the payment schedule for each approved project (see section 4.9 for more details). An award may be approved subject to certain conditions; funds will not be paid until conditions are met.

The award agreement will indicate the final amount agreed upon, as well as the amount and frequency of planned instalments (the schedule will vary depending on the size and complexity of the projects).

#### 4.8 Account Administration, Monitoring, and Audit (revised)

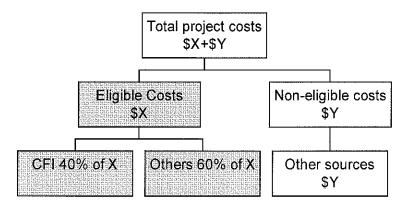
The CFI will send funds to the recipient institution to be administered on the institution's behalf by the CFI account administrator. Financial records and project accounts with revenues identifying the various funding sources and costs adding up to 100 percent of eligible costs should be maintained for each CFI award.

The CFI will make periodic electronic deposits to a pre-arranged bank account, or issue cheque payments on an exceptional basis (see 4.9 for payment schedule). Lists of projects for which payments are made will be sent to the account administrator and to the CFI liaison. At the institution's request, a person designated by a hospital will also be notified of the payment when the award is for infrastructure at a hospital (or research institute) that applied to the CFI through its affiliated university.

The account administrator is responsible for ensuring that the CFI is not charged more than the agreed CFI share of eligible costs for each project. As shown in the following diagram, it is necessary to maintain a verifiable audit trail for all eligible cost transactions (including in-kind contributions), and to assign them to the appropriate project accounts on a regular basis (at least once annually). To ensure that the CFI contributes the right proportion, the auditable tracking system must, at the minimum, apply to the shaded boxes in the diagram.

Administration and accounting procedures for each project must conform to the institution's standards, practices, and policies.

The account administrator will provide the CFI with periodic reports on the status of each CFI project account (see section 4.11).



Institutions must keep all supporting documentation for at least five years following completion of the project. They do not have to submit it to the CFI unless they are asked to do so.

An audit will be performed for all projects with total eligible costs of more than \$10 million. Audit costs are not eligible costs, and cannot be charged against the project. Within certain guidelines, the CFI will pay for the audit costs out of its administrative budget. The CFI reserves the right to review and audit any project (a representative sample will be reviewed every year). Clear instructions will be prepared for auditors and a standard form will be available. The institution will be notified when one of its projects is selected for an audit.

#### 4.9 Payment Schedule (revised)

Once the amount of its contribution is finalized, the CFI will release the initial payment after it receives official certification that:

- partner funding has been, or will be, received within the period specified (and no later than the following March 31);
- resources are available for the ongoing operation and maintenance of the infrastructure; and
- all other conditions specified in the award agreement have been met.

Awards of less than \$400,000 (total eligible cost of \$1 million) will be paid in one instalment less the holdback amount (see the information in the following paragraphs), if:

- the project is to be completed before the following March 31; and
- the matching funding has been received (or the institution certifies that it will be received before the following March 31).

Otherwise, CFI payments will be made over two or more fiscal years (April 1 to March 31).

For other awards, the initial payment will represent the agreed CFI share of the eligible costs that the institution has incurred to date (including in-kind contributions received).

The second and subsequent payments will be made quarterly, on January 15, April 15, July 15, and October 15 (whichever comes first). These quarterly payments will be of an equal amount for the given fiscal year, and will be determined on a year-by-year basis from the cash flow projections submitted by the institution in the Financial Report (see Appendix 9).

Every year, the CFI will hold back a portion of the funding for each project (usually 10 percent of each payment, but negotiable on a case-by-case basis for very complex projects of a longer duration). The minimum holdback amount for each project is \$10,000. The purpose of the holdback amount is to ensure that the CFI's contribution in any given year remains as close as possible to the agreed CFI share of eligible costs. The holdback for a given year, after adjustments to reflect actual expenditures, will be released with the October 15 payment of the subsequent year.

The amount advanced for each project will be based on a review of forecast cash disbursements (see section 4.11 for reporting requirements) to ensure that:

- instalments match, as closely as possible, the expected disbursements;
- matching funding has been received as planned;
- future matching funding has been committed and will be received during the specified period; and
- there is satisfactory progress in the development and acquisition of the infrastructure, as proposed in the application and in the award agreement.

The final payment will be made once the final financial report has been received, after completion of the project. As noted in section 4.8, an auditor's certificate will be required for projects with eligible costs of \$10 million or more. The amount of the final payment will be calculated to ensure that the CFI's contribution does not exceed its agreed share of eligible costs.

Upon completion of the project, if total project costs are less than originally anticipated, the CFI's contribution will be limited to its agreed share of the revised total eligible costs of the project (See section 4.10 for changes to eligible costs).

# 4.10 Changes to the Infrastructure Project and to Eligible Costs (new)

The CFI must be notified immediately if:

- the institution is unable to carry out or complete the project;
- there is material deviation in cash-flow projection, or in budget or project costs; and
- there are changes in the nature of infrastructure being developed or acquired.

Material deviation is defined as deviations exceeding 10 percent of the CFI contribution or \$50,000, whichever amount is lower.

An institution can only use CFI funds to purchase or develop the specific infrastructure for which the CFI provided the funds. Prior authorization from the CFI is required for changes in the nature of the infrastructure (as opposed to a change in model in the case of scientific instrumentation, for example).

If total eligible costs exceed the costs anticipated in the award agreement, the CFI is not responsible for expenditures in excess of the funds approved.

If eligible costs are lower than the costs estimated in the award agreement, and if other funding partners contribute their agreed share, institutions may use up to 10 percent of the CFI's contribution or \$50,000 (whichever amount is lower) to acquire elements of infrastructure directly related to the project approved by the CFI, even if these elements were not included in the original budget. The institution must keep proper documentation for audit purposes.

#### 4.11 Reporting Requirements (new)

#### 4.11.1 Financial Reports

Until the project is completed, a Financial Report (see Appendix 9 for a copy of the form) will be due on June 15 of every year for the previous April 1 to March 31 period. The **final** Financial Report (or request for last payment) will be due within six months of the end of the project.

The Financial Report includes information on:

- actual expenditures and cash-flow projections (for ongoing projects);
- funding sources (actual and forecast); and
- contributions to eligible costs from eligible partners, including assurance that matching funds have been received and spent (or will be received during the forecast period).

Significant changes from the original budget approved by the CFI should be noted.

For multi-year projects, the amount of future instalments (starting with the subsequent October 15 payment) will be based on revised cash-flow projections. (The October 15 payment will also include the funds held back in the previous fiscal year, after adjustments for actual expenditures).

The request for final payment will use the same Financial Report form, but will be labelled **final report.** It will state the final, total eligible costs and will also include certification that:

- the project has been completed;
- matching funds have been received and spent; and
- CFI's contribution does not exceed the agreed CFI share of eligible costs.

Financial reports will be signed by the Account Administrator and the designate for the President of the institution.

#### 4.11.2 Project Reports and Institutional Reports

In addition to providing financial reports, recipient institutions will be expected to provide the CFI with data that will contribute to the evaluation of the Foundation's activities. This will allow the CFI to assess its impact on Canada's capacity for innovation.

Reporting requirements and their frequency will vary with the complexity and size of infrastructure projects. Special requirements for large and complex projects will be outlined in the award agreement.

Project leaders will be expected to report on the research conducted with the infrastructure. Institutions will be asked to document the impact of CFI contributions on the institution's research and training activities.

#### 4.12 Termination Procedures

The institution should promptly advise the CFI if it is unable, for any reason, to carry out or complete the project for which the award was approved, or if it is unable to comply with award conditions. Termination procedures will be negotiated on a case-by-case basis.

# Appendix 1—Guidelines for Accepting Eligible Recipients

#### 1. Definition of an Eligible Recipient

- a university, hospital, or post-secondary college or educational institution that is situated in Canada and that has demonstrated its capability to support and conduct research; or
- a not-for-profit organization or a trust, the activities of which are primarily carried on in Canada that has demonstrated its capability to support and conduct research.

Educational institutions that are federated or closely associated with a university will have to apply through that university, except if they receive their operating budget directly from the provincial government and have their own board of directors.

#### 2. Mandatory or Legal Exclusions

Are excluded:

- for profit organizations and agencies of "for profit" entities;
- federal departments, departmental corporations, parent Crown Corporations or wholly owned subsidiary of parent Crown Corporations;
- not-for-profit corporations or trusts that have been established by any of the above;
- provincial departments, agencies, or Crown Corporations (except for universities, colleges, other educational institutions, or hospitals);
- Networks of Centres of Excellence (and similar organizations sponsored by provincial governments) cannot apply directly and their proposals must be included in those of a participating university; (This latter point flows logically from the mandatory criterion which requires that institutions own the majority interest for five years from the date of installation of the infrastructure.); and
- consortia of eligible institutions are not eligible to apply (in group applications, one of the institutions must apply on behalf of others); however, a group or consortium composed in majority of eligible institutions, may use, own, and control the research infrastructure.

In cases of not-for-profit entities requesting eligibility, a review of the statutes of the institution will be required to ensure that no exclusion applies. Legal advice will be

sought in cases that are not clear cut, especially in the early days when each decision could create a precedent.

## 3. How to determine the eligibility of an organization which has the right kind of statutes

#### 3.1 Universities

Universities may be approved by the Canada Foundation for Innovation as eligible recipients if they can demonstrate their capability to support and conduct research. Universities that reported to the Canadian Association of University Business Officers (CAUBO) a minimum of \$500,000 of sponsored research funding per annum in at least two of the years between 1994 and 1996 will be approved automatically. To establish their eligibility, a university that does not meet this minimum threshold must meet the following conditions:

- the institution grants degrees, at least at the bachelor's level;
- it is a normal expectation of faculty members that they engage in research and the institution provides them with time to conduct research;
- a large majority of faculty members are fully qualified to carry out independent research and have a track record in research;
- there are no institutional constraints on publication of research results;
- the institution must be capable of providing the basic facilities and services to enable such persons to carry out research; and
- the institution must be able and willing to administer grants in a manner that meets the CFI's requirements.

An institution affiliated with another institution that is already eligible will not be accorded its own independent authority, except if it receives its operating budget directly from the provincial government and has its own board of directors.

Any university that would like to determine its eligibility must submit to the CFI an official statement of policy regarding the role of research vis-à-vis education at the institution. The university must demonstrate that it meets the above conditions. Examples of research conducted, lists of publications, and lists of grants and contracts would constitute useful information in this regard.

#### 3.2 Colleges and Other Post-Secondary Educational Institutions

The CFI may approve colleges as eligible recipients if they can demonstrate their capability to support and conduct research. To establish its eligibility, a college must meet the following conditions:

- the institution grants diplomas or DEC, as per the standards of the province or territory;
- · the college has an approved research mission and the resources to carry it out;
- the teachers proposed as principal investigators are fully qualified to carry out independent research, have a track record in research, and the institution provides them with time to conduct research:
- there are no institutional constraints on publication of research results;
- the institution must be capable of providing the basic facilities and services to enable such persons to carry out research; and
- the institution must be able and willing to administer grants in a manner that meets the Foundation's requirements.

Any institution that would like to determine its eligibility must submit to the CFI an official statement of policy regarding the role of research vis-à-vis education at the institution. The institution must demonstrate that it meets the above conditions. Examples of research conducted, lists of publications, and lists of grants and contracts would constitute useful information in this regard.

#### 3.3 Hospitals

The CFI may approve hospitals as eligible recipients if they can demonstrate their capability to support and conduct research. Hospitals that received at least \$500,000 of sponsored research funding per annum in at least two of the years between 1994 and 1996 will be approved automatically, provided they are engaged in research training. To establish their eligibility, a hospital that does not meet this minimum threshold must meet the following conditions:

- the hospital has a research and training mission and the resources to carry it out;
- the researchers proposed as principal investigators are fully qualified to carry out independent research, have a track record in research, and the institution provides them with time to conduct research:
- there are no institutional constraints on publication of research results;

- the institution must be capable of providing the basic facilities and services to enable such persons to carry out research; and
- the institution must be able and willing to administer grants in a manner that meets the CFI's requirements.

Any hospital that would like to determine its eligibility must submit to the CFI an official statement of policy regarding the role of research and training at the institution, and demonstrating that the above conditions are satisfied. Examples of research conducted, lists of publications, lists of grants and contracts, and information on individuals trained would constitute useful information in this regard.

#### 3.4 Not-for-Profit Organizations

The CFI may approve not-for-profit organizations as eligible recipients if they are not excluded recipients as outlined in Section 2, "Mandatory or legal exclusions" and if they can demonstrate to the CFI their capability to support and conduct research. To establish its eligibility, a not-for-profit organization must first submit information on its legal statutes and by-laws (including a certification that it is considered as not-for-profit for income tax purposes) for the Foundation to ensure that the organization is not an excluded recipient. In the opinion of the CFI, if a non-excluded organization meets the following conditions it could be declared eligible:

- the institution has a research and training mission and the resources to carry it out;
- the researchers proposed as principal investigators are fully qualified to carry out independent research, have a track record in research and the institution provides them with time to conduct research;
- there are no institutional constraints on publication of research results;
- the institution must be capable of providing the basic facilities and services to enable such persons to carry out research; and
- the institution must be able and willing to administer grants in a manner that meets the CFI's requirements.

Any institution that would like to determine its eligibility must submit to the CFI an official statement of policy regarding the role of research and training at the institution. The institution must demonstrate that it meets the above conditions. Examples of research conducted, lists of publications, annual research and training budgets, and information on individuals trained would constitute useful information in this regard.

Approved by the Board of Directors, December 1997.

# Appendix 2—Guidelines on Eligible Costs for Research Databases

A database is a systematic collection of information that is designed and structured for access and exploitation as a research tool or for diverse uses including research.

Databases are included in the definition of infrastructure and are eligible for CFI support, provided they will be used mainly for research purposes. Eligible costs will be prorated if a database is to be used for research and other purposes.

As is the case for all other infrastructure projects, CFI's funding of databases is limited to capital costs and other costs needed for the research tool to become operational. Therefore, CFI funding will focus on a time-limited design, development, or acquisition of a research database to the point that it is ready for exploitation by a designated research community. The ongoing operating costs of research, routine data collection, the costs of research projects that use the established database, and on-going maintenance are not eligible.

#### Eligible components (adapted from section 2.3.1 of this Guide)

- Personnel, travel, and communications costs involved in the conceptual design, development and integration;
- development, leasing or purchase of the core data, software (e.g. database management systems software), computers, communications hardware and related materials involved in the technical operation of a database, and personnel costs associated with system integration;
- acquisition and preparation of the data, including primary data collection that is not appropriate for peer-reviewed funding;
- personnel and materiel costs of merging and organizing existing studies and surveys that are not currently in readily accessible "reference units" that can be used efficiently and effectively;
- development of documentation, user manuals and guides designed to facilitate effective use of the database;
- where cost effective and not available from other sources, contracts to reputable organizations for the development of a database; and
- beta testing of the database.

#### Non-eligible components (see also section 2.3.2 of this Guide)

- Following initial development of a database, incremental additions to extend the
  collection beyond the initial configuration (e.g. routine longitudinal components).
   Such components may, however, form the base for a future "modernization"
  application if they are of sufficient magnitude;
- the cost to construct or modernize libraries, or to maintain library collections (except when the infrastructure undertaking falls within the definition of research infrastructure);and
- ongoing maintenance and access costs.

#### Assessment considerations

The following considerations will be employed in assessing proposals against the CFI criteria (and, if appropriate, in assessing some elements of eligibility):

- the data have a unique character;
- the data have specific Canadian significance;
- the database will support high quality research projects which would be subject to peer review; and
- the data collection component of the development would be conducted through activities that are not the normal ongoing costs of research supported by the standard operating grants of research councils or other funding agencies.

The data collection component of the development of a database may be subject to a time limit.

Approved by the Board of Directors, January 1998.

# Appendix 3—Guidelines for Assessing the Eligibility and Value of In-Kind Contributions (revised)

#### a) Eligibility

In-kind contributions may be eligible as matching funds from the CFI if they are essential to the infrastructure project. In-kind contributions must be <u>eligible costs</u> (i.e., they must be contributions to infrastructure, not to the operating costs of research). In-kind contributions of real property may be recognized, although they are not included in the definition of eligible costs. In-kind contributions of real property will not be recognized if ownership has already been transferred to the recipient institution at the time the application process is initiated. Other in-kind contributions (e.g., equipment) could be recognized if they were transferred to the institution on or after July 2, 1997 (or July 1, 1995 for the initial New Opportunities competition).

In-kind contributions may include, in whole or in part, the value of capital items that applicants and their partners provide, such as:

- project-specific research instrumentation and equipment;
- ancillary research equipment;
- · supporting facilities; and
- space essential to house and service the new infrastructure resource.

Other types of in-kind contributions essential to the development or acquisition of infrastructure may be considered eligible.

#### b) Valuation by assessing fair value or fair market value

The value of in-kind contributions must be supported by confirmation of the valuation method used, signed by one of the individuals authorized by the President of the institution to sign on behalf of the institution. Normal purchasing or contracting policies of the institution must be followed. Confirmation and any relevant supporting documents must be retained for audit purposes. For valuation purposes, in-kind contributions can usefully be divided into contributions from external partners and internal contributions.

- 1. Contributions from external partners, including:
  - New and used assets, (e. g., real property, equipment, software);
  - Services, (e. g., design, development or consulting); and,
  - Licenses.

#### Fair value may be determined:

 as the net price at which the asset or service would normally be purchased by the institution at the time the asset or service is provided, i.e. regular or list

- price reduced by all trade or other discounts or other considerations normally available to the institution, as supported by records of the supplier and normal practices within the trade;
- by an appraisal in the absence of a readily available fair market value. For CFI eligibility, an appraisal must be obtained for assets with a value greater than \$50,000. For assets with a value of less than \$50,000, certification by a supplier and/or confirmation of the method used to arrive at the fair value by the signing authority of the institution will be accepted. Reasonable costs of appraisals are eligible costs. CFI should be asked to waive the requirement for an appraisal if its cost appears unreasonable in relation to the value of the contribution.

Where the contribution is for a portion of the fair value (e.g., a special discount), the eligible contribution is the difference between the fair value and the price paid by the institution.

Contributions by external partners that are treated as donations in kind or charitable donations for income tax purposes will normally be subject to existing policies and procedures of the institution. CFI will accept values determined using these policies and procedures.

#### 2. Internal Institutional Contributions:

The following costs are normally operating in nature. They would be considered eligible only if they are necessary for the development of the designated infrastructure to the point at which it is ready for research use (see section 2.3).

- Personnel services: Actual payroll costs (salaries or wages and benefits) or standard internal rates already in effect. Internal rates are those charged to other educational or research units within the institution. For audit purposes, time records must be maintained to support all charges.
- Travel costs: actual costs as prescribed in the research policies and guidelines
  of the institution.

Existing assets are not eligible for contribution by the institution, except equipment acquired after July 2, 1997 (or after July 1, 1995 for the initial New Opportunities competition).

The following table provides examples (keeping in mind that contributions are eligible only if they contribute to capital costs or directly related costs as per section 2.3).

### Example of in-kind contributions

Category	<u>Accepted</u>	Not accepted
Professional and other Services provided during construction	Internal rates     Incremental cost of providing service	Commercial rates     Institutional services that are normally provided
Labour	Internal rates	Commercial rates
Equipment	Donated – Used  fair market value  company book value  price for internal transfers   Donated – New  selling price to most- favoured customer (if stock item)  cost of manufacture (if one-of-a-kind)  Loaned (long term, capitalized)  rental equivalent based on depreciation  rental equivalent to highest- volume rate  Sold  difference between price charged to most favoured customer and price sold	<ul> <li>List price or discounted list price for normal discounts</li> <li>Rental equivalents exceeding accepted values if the equipment had been donated or sold</li> <li>Development costs</li> </ul>
Materials, components, used to construct/develop the infrastructure	<ul> <li>Unit cost of production</li> <li>Selling price to most favoured customer</li> <li>Price for internal transfers</li> <li>Cost of prototype or sample production</li> </ul>	Development costs
Patents and licenses	Licenses acquired from third parties for use by the institution	<ul><li>Patent protection</li><li>Licensing fees paid to the university</li></ul>

Salaries of employees of contributing partners provided during construction /development	Typical salary cost (including benefits plus overhead) at internal rates	<ul> <li>External charge-out or consultant rate</li> <li>Costs relating to administrative support where overhead has been included in salary costs</li> </ul>
Software	<ul> <li>Copying costs</li> <li>Licensing cost</li> <li>Documentation cost</li> <li>Cost of training and support of software</li> <li>Cost of equivalent commercial product (where donated software is not commercially available)</li> </ul>	Development costs
Travel	Travel costs (economy) to vendor, institution or project site	
Use of contributing partner's equipment and facilities during the construction and development of the infrastructure	<ul> <li>Internal rates for logistical support, and food and lodging for personnel working on a partner's premises</li> <li>Internal rates for use of specialized equipment or use of process or production lines</li> <li>Internal rates for value of lost production resulting from down-time</li> </ul>	<ul> <li>Use of equipment by the partner's personnel if overhead is attributed to salaries of the personnel</li> <li>Space for a partner's activities outside the scope of the specific proposal</li> <li>Equivalent commercial rates</li> </ul>

The list is not all-inclusive. For clarification about whether or not a particular item is acceptable, consult with the CFI.

# Appendix 4—Summary of Institutional Research Plan

Summary of Ins	titutional Research Plan	
Date:		
Institution:	President/CEO	
Affiliated Institutions. List colleges and not-for-associated with the institution and included in the		
Designated Contact for this Plan Summary.		
Name:		
Telephone Number:	Fax Number:	
E-mail:		
Submission of Plan Summary to CFI:		
$\Gamma$ First submission to CFI $\Gamma$ U	Jpdate of previous submission	
<ul> <li>has done to support the development of rese future strategic directions.</li> <li>If the institution is linked with one or more resprovide evidence of concerted planning. (One</li> </ul>	ocess at the institution. The training. It seek CFI support. Briefly describe what the instance areas and of arch and research training in these areas and of search institutions through shared staff and proges additional page per institution may be appended	stitution outline grams, ed.)
<b>Signature.</b> The attached summary of the institut represents the planning framework for the CFI ap		
President or CEO of Institution (or Authorized Re	presentative)	Date

# **Appendix 5—New Opportunities: Maximum Number of Awards per University**

The following table gives the initial number of awards allocated to universities that are not eligible for the Research Development Fund. Smaller institutions that opt out of the Fund will be allocated an initial maximum of three awards.

Although this initial allocation is for the lifetime of CFI's programs, the number may be adjusted in light of the demand on this and other program mechanisms.

### New Opportunities: Initial Maximum Number of Awards

Initial maximum for range of average sponsored research 1994-96	Institution
3 awards	Concordia University
(less than \$20 million) <sup>1</sup>	University of New Brunswick
5 awards	Carleton University
	Dalhousie University
(\$20 million to \$40 million)	École Polytechnique
	INRS
	Memorial University of Newfoundland
	Université du Québec à Montréal
	Université de Sherbrooke
	Simon Fraser University
	University of Victoria
	York University
8 awards	University of Manitoba
	University of Ottawa
(\$40 million to \$60 million)	University of Saskatchewan
	University of Waterloo
	University of Western Ontario
10 awards	The University of Calgary
(\$60 million to \$80 million)	University of Guelph
	Queen's University

Initial maximum for range of average sponsored research 1994-96	Institution	
12 awards	Université Laval	
(\$80 million to \$100 million)	McMaster University	
14 awards	University of Alberta	
(\$100 million to \$120 million)	McGill University	
16 awards		
(\$120 million to \$140 million)		
18 awards	University of British Columbia	
(more than \$140 million)	Université de Montréal	
	University of Toronto	

1. Institutions opting for the Research Development Fund will become eligible for New Opportunities only after they have used up all their research development allocation.

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# Appendix 6—Research Development Fund: Methodology for the Allocation of Grants

The Research Development Fund is designed to help smaller universities strengthen their research infrastructure. To determine which institutions are included in this group, Canadian Association of University Business Officers (CAUBO) data was used to calculate the average annual amount of sponsored research revenue received by each university during the period from 1993-94 to 1995-96.

Eligible institutions are universities that meet the CFI's general eligibility conditions (Appendix 1) and that received, during that period, less than 1% of the total sponsored research funding in Canadian universities. Thirty such institutions meet the eligibility conditions at this time. Universities that received less than \$500,000 per year in sponsored research funding must ask the CFI for a ruling on their eligibility. If they are declared eligible, they will be authorized to apply to the Research Development Fund. Their share will be calculated using the same algorithm, but their inclusion would not change the allocation to institutions included in the list. An algorithm was developed to allocate the Fund to smaller institutions based on five indicators of their research and teaching activities. The five factors are the following:

- Research scale as measured by the average of sponsored research revenue per year received during the period from 1993-94 to 1995-96;
- Number of full-time faculty as determined by the average number of full, associate
  and assistant professors per year during the period from 1993-94 to 1995-96;
- Number of graduates as given by the average number of Bachelor's, Master's and PhD degrees granted per year during the period from 1993-94 to 1995-96;
- Research intensity as approximated by the ratio of sponsored research revenue to the number of full-time faculty during the period from 1993-94 to 1995-96. This is calculated by dividing factor (1) by factor (2);
- Research advancement as estimated by the ratio of average sponsored research
  revenue during the three year period from 1993-94 to 1995-96 to the same average
  for the preceding three year period (1990-91-1992-93). This ratio was calculated
  using only the years for which institutions report receiving sponsored research
  revenue.

For each institution, five indices were calculated -- one for each of the five factors. For example, the research scale factor had a median value of \$2,225,333. The research scale index for each institution was calculated to be its own value divided by this median. Thus, an institution whose average sponsored research revenue is twice as much as the median will have an index of 2 for this factor, and so forth. The indices for the other four factors were calculated in a similar manner. The indices were capped at 4.0 to avoid exaggerating differences between universities that are due to the unique characteristics of a few institutions.

The sum of the five indices for each university was used to determine the university's share of the Institutional Reserve program budget. The following table lists the institutions and the amount allocated to each.

## RESEARCH DEVELOPMENT FUND ALLOCATION OF FUND

SUM	OF IND	ICES	MAXIMUM AVAILABLE
Univ. of Prince Edward Island		3.9	\$730,000
Acadia University		4.4	830,000
University College of Cape Breton		4.6	855,000
Mount Saint Vincent University		3.5	665,000
N.S. Agricultural College		7.1	1,335,000
St. Francis Xavier University		4.5	835,000
Saint Mary's University		5.3	1,000,000
Université de Moncton		7.5	1,410,000
Mount Allison University		4.7	880,000
Institut Armand-Frappier		8.0	1,490,000
Hautes études commerciales		8.3	1,560,000
École nationale d'admin. publique		6.3	1,180,000
École de technologie supérieure		7.4	1,390,000
C.E.U. Abitibi Témiscamingue		4.6	860,000
Univ. du Québec à Chicoutimi	1	0.7	1,995,000
Univ. du Québec à Hull		4.0	750,000
Univ. du Québec à Rimouski		5.7	1,065,000
Univ. du Québec à Trois-Rivières		1.8	2,210,000
Brock University		8.2	1,545,000
Lakehead University		9.5	1,790,000
Laurentian University		0.3	1,920,000
Ryerson Polytechnical University		8.8	1,650,000
Trent University		6.8	1,280,000
Wilfrid Laurier University		6.9	1,290,000
University of Windsor	1	3.4	2,505,000
Brandon University		3.6	675,000
University of Winnipeg		4.5	850,000
University of Regina	9.6		1,790,000
University of Lethbridge		5.3	1,000,000
University of Northern B.C.	6.0		1,115,000

January 1998

# Appendix 7—Institutional Agreement with Eligible Recipients

Before releasing any funds, the CFI will ask each eligible institution to sign the following agreement:

The institution certifies that, for each project funded by the CFI:

- 1. the required financial contributions to the eligible project have been committed by other sources or made by the institution itself;
- 2. such contributions constitute the institution's financial contribution (matching funding) to the eligible costs of the project;
- CFI funds will be used only to pay a pre-agreed proportion of the eligible costs of the approved project;
- 4. the institution will administer the funds in accordance with CFI rules and regulations and it will use accounting procedures that conform to the institution's standards, practices, and policies;
- 5. the institution has the ability to operate and use the research infrastructure in an effective and efficient manner;
- 6. alone, or as a member of a group (a majority of which are eligible recipients), the institution will hold a majority interest in and exercise de facto control over the research infrastructure proposed in the project for a period of five years from the date of acquisition and installation, or such other period as may be deemed appropriate by the CFI;
- 7. if the project involves several institutions, the lead institution and other participating institutions and partners will sign an inter-institutional agreement with respect to the joint project, outlining the roles and responsibilities of each participating institution with respect to the infrastructure project and the long term operation and maintenance of the infrastructure; this agreement is subject to CFI approval.
- 8. the institution(s) will obtain adequate insurance for all equipment and assets acquired with CFI funding:
- 9. the institution will respect CFI policies with respect to
  - · conflicts of interest and ethics;
  - facilities for the care and treatment of animals;
  - infrastructure involving research with human subjects;
  - infrastructure or facilities for research involving biohazards;
  - infrastructure used for research involving radioactive materials;
  - facilities involving a possible adverse impact on the environment, hazardous substances, field work, or field or marine stations; and
  - infrastructure for research in the Yukon and the Northwest Territories;
- 10. the institution will conform with CFI reporting requirements and will monitor the use of grant funds to ensure expenditures are in accordance with CFI guidelines.

With the written consent of the Foundation, an institution may transfer the majority interest and de facto control of the research infrastructure to another eligible recipient or to a group, a majority of which are eligible recipients.

The institution must notify the CFI immediately if the project cannot be completed or if there is any evidence that CFI funds have been used inappropriately. If the institution does not comply with CFI regulations as spelled out in this agreement, in the *CFI Policy and Program Guide* or other publications or in the conditions of award, the CFI can freeze or close the CFI account for a specific project or for all of the institution's projects. If the institution uses CFI funds to pay for expenditures that are contrary to CFI policies, the institution will have to repay the money to the CFI account or directly to the CFI.

The institution's President or CEO may designate individuals to act on his or her behalf:

a CFI account administrator who will have custody of the CFI fund and will be

accountable for the institutional CFI a	account;
Name and title	 Signature
	n applications to the CFI on behalf of the
Name and title	Signature
Name and title	Signature

In signing this agreement, the Chief Executive Officer of the institution agrees to administer any fund awarded by the CFI through the institution's own administration system. He or she also agrees to conform with the Foundation's policies, rules and regulations.			
President and CEO	Signature		
Institution	Date		

Canada Foundation for Innovation, January 1998.

## Appendix 8—Special Requirements for Certain Types of Research Facilities and Infrastructure Projects

This appendix outlines the guidelines institutions must follow when they are involved with applications that propose certain types of infrastructure projects. Each institution must ensure that researchers follow these guidelines, and adhere to the requirements for the facilities where the research takes place.

The CFI has not developed guidelines of its own, but has adopted those of the federal granting councils, including the *Tri-Council Policy Statement on Integrity in Research and Scholarship* (1994).

In signing the institutional agreement with the CFI, eligible institutions agree to conform to these guidelines.

#### Facilities for the care and treatment of animals

Infrastructure projects that involve the care and treatment of animals for research must adhere to the guidelines of the Canadian Council on Animal Care (CCAC).

In signing the agreement with the CFI, eligible institutions agree to:

- conform to CCAC guidelines for providing facilities to house and care for animals;
- maintain local animal care committees to assess and control animal experimentation;
- obtain certification from that committee at the institution stating that the proposed facility complies with the principles outlined in the CCAC guide.

### Infrastructure for research involving human subjects

The CFI requires that institutions monitor the ethical acceptability of all research that uses the proposed infrastructure for research involving human subjects. Institutions must adhere to one of the following sets of guidelines (or to any revised guidelines adopted by the granting councils):

- The guidelines adopted by Social Sciences and Humanities Research Council on ethical acceptability for research involving human subjects, published in the Ethics Guidelines: Research With Human Subjects, available at <a href="http://www.sshrc.ca">http://www.sshrc.ca</a>; or
- The Guidelines on Research Involving Human Subjects, issued by the Medical Research Council in March, 1988, available from MRC at <a href="http://www.mrc.gc.ca">http://www.mrc.gc.ca</a>.

### Research involving biohazards

Infrastructure for research that may involve biohazards must adhere to the standards outlined in the *Laboratory Biosafety Guidelines*, published by the Medical Research Council in 1990. The guidelines are available from MRC at <a href="http://www.mrc.gc.ca">http://www.mrc.gc.ca</a>.

### Research involving radioactive materials

Facilities that are used for conducting research involving radioactive materials must comply with all Atomic Energy Control Board regulations, recommended procedures, and safety precautions governing the use of such materials in Canada.

## Facilities involving a possible adverse impact on the environment, hazardous substances, field work, or field or marine stations

The CFI adheres to federal government regulations pertaining to the environmental assessment review process (EARP). All infrastructure projects that the CFI funds are covered by this regulation.

#### Licences for facilities in the Yukon and the Northwest Territories

All facilities for research in the Yukon and the Northwest Territories must be licensed.

- Licence requirements for research in the Northwest Territories are available from the Science Institute of the Northwest Territories, P.O. Box 1617, Yellowknife, Northwest Territories, X1A 2P2.
- Licence requirements for research in the Yukon are available from the Director of Heritage Branch, Department of Tourism, Government of Yukon, P.O. 2703, Whitehorse, Yukon, Y1A 2C6.

# Appendix 9—Financial Report and Request for Next Instalments (new)

#### **Financial Report and Request for Next Instalments**

		(R	ounded to the near	rest dollar)		
Institution (or lead institution):					Project No.	
Sh	ort title of project:					
Na	me of project leader:					
Ma	ximum CFI amount approved per a	award agreement:				
ls t	his the final report?	No		Yes		
	Start date (yy	/mm):	End date (yy/m	m):		
	Actual or forecast contribution	Total forecast per award agreement	Revised total forecast	Actual to 1999-03-31 (Cumulative)	Forecast for 1999-04-01 to 2000-03-31	next two years 2000-04-01 to 2001-03-31
1	Total eligible contributions from partners					
2	CFI contribution awarded/rec'd CFI holdback outstanding					
3	Total eligible contributions (line 3 = lines 1 + 2)					
4	CFI funding as % of total eligible contributions					

Total forecast Revised total Actual to Forecast for next two years						
Source	per award agreement	forecast	1999-03-31 (Cumulative)	1999-04-01 to 2000-03-31	2000-04-01 to 2001-03-31	
C=Cash I=In Kind T=Total	C/I Amount	C/I Amount	C/I Amount	C/I Amount	C/I Amount	
5 Institutional Funds or trust funds				C 1		
6 Federal government agencies (not MRC, NSERC, SSHRC)		C L				
7 Provincial governments		C Leuresandones anche		C Paramagrasi navasan		
8 Other governmental sources (specify)		C Industración de la completion de la co				
9 Corporations/firms		C prolected and the property of the		C Trace and the second second		
10 Voluntary organizations and foundations						
11 Other (specify)		C C C C C C C C C C C C C C C C C C C	C C C C C C C	C C C C	C C C	
12 Total eligible contributions from partners (Total line 12 = line 1)						

Institution and project leader:	Project No.	

Total eligible costs (actual and forecast).

Give the totals for each type of expenditure on this page and provide, on a separate page, the costs of individual items (make reference to the specific line number), using the same format as the itemized list provided to finalize the award agreement.

	Eligible Expenditures	Total forecast	Revised total	Actual to	Forecast for next two years
		per award	forecast	1999-03-31	1999-04-01 to 2000-04-01 to
	C=Cash l=In Kind T=Total	agreement		(Cumulative)	2000-03-31 2001-03-31
18	Purchase of	С	С	С	
	equipment or facility				
12	Capital lease of	С	С	С	
	equipment or facility				
15	Personnel costs (for	С	С	C	
	development only)	i Parangangangang	Line is solved the first		
16	Components,	С	С	С	
	materials/supplies	Paga kang mangang kang kang kang kang kang kang kan			
17	Travel	С	С	С	
				Carlo Maria Construction Control	
18	Communications	C	С	C	
		្រីខេត្តនៅមែលខ្លួញដងសម្រើសនាមួយនេះ	traucharinen en einen alegen		
18	Extended warranty and/or	C	С	C	
	embodied software		Lunius enter (1988) opri		
20	Construction/renovation	C	C	C	
	costs (research related)		ETRICO ISTANDANTANTANTANTANTANTANTANTANTANTANTANTANTA		
21	Training of	[C	С	C	
	infrastructure personnel		Androber reported by the		
22	Other (specify)	[C	С	C	
		legggerenter		kara di kagalan kara i	
23	Total eligible costs	С	С	C	C
				Essella el colonial de la colonial d	
	(Total line 23 = line 3)	T	Τ	Τ	T T

List in-kind contributions (from lines 5 to 11 on page 1) received during the most recent year and forecasted to				
be received in the next two years. Use additional pages as required. Describe if significantly different from what				
was provided in the itemized list used to finalize the award agreement.				

Institution and project leader:			Project No.	
Details of eligible funding from eligible partners (to be completed for final reports only).  List all funding from eligible partners. Add additional pages if required.				
Eligible Partner	Source type (5 to 11)	Total forecast per award agreement	Actual to end of project	

five-year period of operation of the project. Actual to Total forecast Revised total Forecast for next two years Sources of operating funds 1999-03-31 1999-04-01 to 2000-04-01 to per award forecast (Cumulative) 2000-03-31 2001-03-31 agreement Institutional contributions Direct support from funding agencies (specify which agency or agencies) User fees and/or contributions from research grants of institutional users Private sector (user fees and direct contributions) Government (user fees and direct contributions; specify if provincial and/or federal) Other (specify) Total

Financial Resources for Operations (to be completed only if specifically required in the award agreement). Outline the sources and amounts of support for the maintenance and operation of the infrastructure over the first

Institution and project leader:		Project No.
Use this page and additional ones if required to exproject and the actual or forecast plan. Also explain following headings should be used (if relevant to the street of t	ain how identified problems have been or he specific project): ween contributions expected per the awar res and actual expenditures; ment/acquisition/installation of infrastruct rastructure if it is used both for research a	will be corrected. The d agreement and ure; und for other purposes;
o. unjerences in actual and forecast operating co	osis and idinging available for operating c	U313.
We certify that the information provided in this infrastructure and that the funding requested f and conditions of awards as specified in the arof the infrastructure project have been acquire project is now complete.	rom the CFI is in accordance with the Insward agreement. In the case of a final re	titutional Agreement, CFI Guides port, we certify that all elements
Account Administrator	Name (please type)	Date
CEO or authorized representative	Name (please type)	 Date