



# Corporate Plan 2016-17

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## 1.0 THE ROLE OF THE CANADA FOUNDATION FOR INNOVATION

The Canada Foundation for Innovation (CFI) is a non-profit corporation created by the Government of Canada through the *1997 Budget Implementation Act*. Its mission is to benefit Canadians by strengthening the capability of Canadian universities, colleges, research hospitals and non-profit research institutions to carry out world-class research and technology development.

The CFI invests in state-of-the-art research infrastructure, funding up to 40 percent of a project's costs. Institutions, in partnership with provincial governments and other public, private and non-profit organizations, must secure the remaining 60 percent of the required funding.

Canada's prosperity depends on its ability to generate knowledge and ideas that result in new products and services, create wealth, enhance social foundations, sustain the environment and ultimately improve the quality of life for all Canadians. By supporting the country's capacity for world-class research, we play a vital role in producing social, economic, environment and health benefits for Canadians.

### 1.1 Organizational context

As the CFI approaches its 20<sup>th</sup> year, the context in which it operates is characterized by both change and continuity. The newly elected government has introduced a number of initiatives related to Canadian research, including the creation of a Minister of Science and the establishment of the Department of Innovation, Science and Economic Development.

The short-term stability of the CFI, however, has been secured through the latest contribution agreement, completed in the autumn of 2015. This contribution agreement will allow continued investment in research infrastructure over the next few years and provides the CFI with the resources necessary to fulfil its mandate of enhancing the capability of Canadian researchers to conduct world-class research and technology development.

The impacts of CFI investments in research infrastructure on the capabilities of Canadian research institutions are now greater than ever. As a result, the Canadian research community has made a number of major scientific achievements of the calibre of those that earned Queen's University's Dr. Arthur McDonald the 2015 Nobel Prize in Physics. Excellent Canadian research continues to attract international collaborations of unprecedented number and prestige. For example, German research organizations such as the Fraunhofer Society, the Helmholtz Association and the Max Planck Institute have now established seven major collaborative research facilities in Canada. These facilities enable research in a wide variety of both fundamental and applied areas, including quantum materials and photonics, environmental and ocean technologies, composite material manufacturing, biomedical engineering, and sustainable energy systems.

While the quality and breadth of research and technology development in Canada's universities and colleges continues to increase and achieve levels of global competitiveness, investment in R&D by the Canadian private sector continues to decline. The 2014 state of the nation report recently issued by the federal Science, Technology and Innovation Council concludes that Canada has fallen further behind comparator countries on key business innovation performance indicators, and the gap between Canada and the world's top five performers has widened.

## 1.2 The CFI's funding and contribution agreements

The CFI currently operates under two funding agreements and two contribution agreements with the Government of Canada as represented by, and under the authority of, the Minister of Industry. All four agreements are currently active.

- The first funding agreement specifies the conditions under which all funds allocated to the CFI between 1997 and 2009, totaling \$4.39 billion, were distributed to eligible recipients. As well, these sums generated \$1.385 billion in interest income that has been directed to project funding.
- The 2009 Federal Budget allocated \$150 million to the CFI under the first funding agreement and \$600 million to be distributed under a second funding agreement, which was signed in July 2010.
- In March 2014, we signed a contribution agreement with the Government of Canada for \$499.85 million allocated through Economic Action Plan 2012. We are now delivering funding competitions according to this contribution agreement.
- In September 2015, we signed our most recent contribution agreement with the Government of Canada for \$1.33 billion. As these funds are not available for use until 2017-18, we are now in the process of consulting on, and refining, our funding competitions according to this contribution agreement.

As with the 2014 Contribution Agreement, the 2015 Contribution Agreement states that the CFI will pursue the following objectives:

- Support economic growth and job creation, as well as health and environmental quality through innovation;
- Increase Canada's capability to carry out important world-class scientific research and technology development;
- Expand research and job opportunities by providing support through research infrastructure for the development of highly qualified personnel;
- Promote productive networks and collaboration among Canadian universities, colleges, research hospitals, non-profit research institutions and the private sector.

As well, the contribution agreements state that the funds disbursed by CFI are expected to help enhance the capacity of ultimate recipients to:

- Attract and retain the world's top research talent;
- Train the next generation of researchers;
- Enable researchers to undertake world-class research and technology development that lead to social, economic and environmental benefits for Canada; and,
- Support private sector innovation and commercialization.

In 2014-15, as announced in the Government of Canada's Economic Action Plan 2013, the CFI also launched competitions in connection with the \$225 million of interest income accrued under the first funding agreement. These funds are being used to augment the 2015 Innovation Fund competition, augment the Major Science Initiatives Fund, sustain our operations, and support the Cyberinfrastructure Initiative.

### 1.3 The CFI's strategic directions

In 2011, the CFI Board of Directors engaged in a process to update our 2009 strategic plan in light of the 2010 Funding Agreement. The updated strategic plan was approved by the Board of Directors in March 2012 and subsequently issued as the *CFI Strategic Roadmap 2012-17*.

The Board identified three specific areas of opportunity where the CFI's funding activities can contribute to a better understanding of the world in which we live; address social, economic and environmental challenges; and improve the health and well-being of Canadians. They are:

- Sustaining and enhancing the world-class capacity of Canada's research institutions;
- Fostering collaboration and integration between academic research and the private and non-profit sectors; and,
- Increasing the global influence of Canadian research in ways that benefit Canadian society.

We address these opportunities through our funding initiatives by applying the principle of excellence to a range of research and research management activities, including the governance of large-scale research facilities, the quality of the relationships between research collaborators in both the public and private sectors, and institutional planning. We also focus our programs and policies to support the full range of activities across the research spectrum, from discovery to innovation.

In delivering on our core mandate to support and enhance world-class research, world-class talent and world-class innovation, our Board of Directors defined six specific strategic directions:

1. Invest in the highest levels of excellence to ensure that Canadian researchers are internationally competitive and that innovators benefit from their research.
2. Sustain and enhance Canada's research capacity to ensure that Canada's research enterprise continues to have the capacity to perform at world-class levels.
3. Forge productive partnerships to ensure that CFI infrastructure investments achieve maximum leverage and impact through partnerships.
4. Build global influence to ensure that Canadian researchers have access to the infrastructure necessary to make important and influential contributions to the global research enterprise while maximizing the benefits for Canada.
5. Establish a trusted voice to ensure that the CFI shares its unique expertise in matters related to research infrastructure; to communicate the results of its extensive consultation efforts; to explain the value and impact generated by its infrastructure investments; and,
6. Track impacts in a way that ensures that the CFI is a trail-blazing organization by developing innovative ways of assessing the outcomes and impacts of its infrastructure investments.

In 2016-17, we will undertake an organization-wide initiative to refresh and update our strategic roadmap. A series of activities involving the Board of Directors, the senior management team and staff members will be organized and implemented from early 2016 through to November. The goal is to revise the current strategic roadmap in light of the progress being made by the Canadian research community and changes in policy made by the Government of Canada.

### The CFI suite of funds

#### Core funds

**Innovation Fund:** This flagship support mechanism provides a broad range of awards for leading-edge research infrastructure across all disciplines and areas of research.

**John R. Evans Leaders Fund:** A responsive funding mechanism that provides support to ensure that institutions have the infrastructure resources necessary to attract and retain top research talent.

**Major Science Initiatives Fund:** Provides unique, large-scale national research facilities with the operating support necessary to produce excellent, world-class science and technology development.

**College-Industry Innovation Fund:** Supports emerging applied research capacity in Canada's colleges and polytechnics, with the goal of assisting business innovation.

**Exceptional Opportunities Fund:** Provides institutions with an opportunity to seek funding for exceptional and time-sensitive initiatives that would be missed within the regular CFI competition cycles.

**Infrastructure Operating Fund:** Provides a 30 percent supplement to CFI capital awards to cover a portion of the operating and maintenance costs of CFI-funded projects to help ensure their optimal use.

#### Ongoing special initiative

**Cyberinfrastructure Initiative:** Supports Canada's advanced research computing network through Compute Canada, as well as cutting-edge, domain-specific research data management projects.

## 1.4 Short and medium term outputs and outcomes from 2015-16

In 2015-16, the CFI achieved a broad and substantial range of short and medium term outputs and outcomes. These include:

- **The successful completion of the 2015 Innovation Fund competition.** Through this large-scale national competition, the CFI invested \$259 million in infrastructure projects at 52 research institutions across the country, with an additional \$77 million to operate and maintain research infrastructure. The multi-stage adjudication process for the 2015 Innovation Fund competition involved 562 review committee members from across Canada and around the world. Almost one half of these reviewers came from outside the country, thus helping to hold Canadian researchers and their institutions to a global standard of excellence.
- **Design and launch of the CFI Cyberinfrastructure Initiative.** The overarching objective of the CFI's 2015 Cyberinfrastructure Initiative is to enhance the capacity of Canadian institutions and researchers to conduct leading-edge research in areas of demonstrated strength by supporting the infrastructure needs of computationally- and data-intensive research. This objective is being achieved by investments in:
  - A limited number of research data infrastructure projects that, in collaboration with Compute Canada, enable communities of researchers, along with data scientists, data analysts, software developers and other experts to devise optimal ways of organizing and using research data resources; and,
  - Upgrading and modernizing the computational and data storage capacities of the pan-Canadian advanced research computing platform, managed by Compute Canada.

Through the first competition, the CFI invested \$30 million in cyberinfrastructure projects.

- **Finalization of 2014 Major Science Initiatives Fund (MSI) special competition, launch of the third MSI competition and continuation of governance and management oversight activities.** Throughout 2015-16, we worked with the 12 MSI's funded to date to review and share best practices on facility governance and management, while at the same time launching the third MSI competition. This competition will see an additional investment of \$400 million in Canada's national research facilities for a period of five years starting in 2017. Funding decisions are expected in September 2016.
- **Continuation of the John R. Evans Leaders Fund competitions.** Throughout 2015-16, we continued to receive and adjudicate funding applications to the John R. Evans Leaders Fund. This process continues the distribution of the allocation to the Fund provided through the 2014 Contribution Agreement. In 2015-16, \$63 million in project funding, plus \$19 million in infrastructure operating funding has been distributed.
- **Design of the Governor General's Innovation Awards program and adjudication of the first annual round of nominations.** At the request of His Excellency the Right Honourable David Johnston, we assisted in designing and implementing the new Governor General's Awards for Innovation. This highly prestigious national awards competition will honour outstanding Canadian individuals and organizations whose innovation has been truly exceptional, transformative and positive in their impact on the quality of life in Canada. The goals of the awards are to celebrate excellence in innovation across all sectors of Canadian society; to inspire Canadians, and in particular Canadian youth, to be entrepreneurial innovators; and, to foster an active culture of innovation that produces meaningful impacts on our lives. The adjudication of the first round of nominations is scheduled for early spring 2016 and the awards will be issued by the Governor General in early fiscal year 2016-17.



- **Community consultation on CFI's funding architecture.** The 2015 pan-Canadian consultation highlighted the Canadian research community's ongoing deep commitment and continued interest in ensuring our funding architecture remains relevant and responsive. After holding 18 town hall meetings involving nearly 500 participants from 85 different institutions, meetings with representatives from nine provinces, 12 meetings with associations and organizations, and receiving nearly 50 written formal submissions, we have a wealth of invaluable advice, insights and suggestions for improvements to our funds, policies and future directions. The four overarching key messages received through the consultation are:
  - Overall, our funding architecture continues to be well-aligned with needs of institutions and their researchers. Suggestions for improvements to our funds, policies and application forms will be reviewed and acted on accordingly.
  - We should continue to explore ways to minimize application, review and administrative burden, including streamlining and simplifying proposal requirements and relying on institutions to confirm that the proposals they submit fit with their strategic research plan.
  - We should consider ways to maximize the impact of the John R. Evans Leaders Fund as a key strategic tool to build and enhance research capacity for the full spectrum of institutions across the country.
  - Through continued interaction and consultation, we must continue to be alert to emerging trends and changes in our environment that present opportunities in pursuit of (or threats against) further strengthening and securing Canada's research and innovation capacity.
- **2015 Overall performance and value-for-money audit.** Under our previous funding agreements with the Government of Canada, we were required to have an independent third party carry out an overall performance evaluation of our activities and funded projects every five years. Since 2007, the Government also required that a performance or value-for-money audit be completed. In order to make the best use of human and financial resources, we conducted the two requirements simultaneously. The evaluation examined achievements of the CFI against our objectives and expected results and considered global questions regarding relevance, results, and design and delivery. The audit examined the CFI's management practices and processes, and whether they have been carried out with regard to economy, efficiency and effectiveness. Bell Browne Molnar & Delicate Consulting Inc. (BBMD) conducted the 2015 overall performance evaluation and value-for-money audit. BBMD analyzed the activities of the CFI from 2009 to 2013, using a meta-analysis of internal documents, interviews with stakeholders and a survey of principal users of CFI-funded infrastructure. The [Overall performance evaluation and value-for-money audit](#) is available on the CFI web site.
- **Halifax Symposium on Arctic and Marine Research Infrastructure.** In September 2015, the CFI, in conjunction with the ERA-Can+ Project and the European Commission, hosted a major tri-lateral symposium on Arctic and marine research infrastructure. Held in Halifax, this was the second international symposium on the subject and brought together over 80 participants from Europe, the United States and Canada to discuss the current state of Arctic and marine research and how best to meet the research infrastructure requirements of the future. The symposium featured presentations by John Risley, CEO of Clearwater Fine Foods Inc., Canada's largest and most scientifically-focused seafood company, and Jim Balsillie, founder of the Arctic Research Foundation and chair of the board of Sustainable Development Technology Canada.
- **Canadian Science Policy Conference session and roundtable on Big Science.** In November 2015, we organized a series of discussions on the question of how best to foresee, identify and support Canadian participation in very large-scale research facilities. These discussions included a panel session at the Canadian Science Policy Conference, a meeting with senior, deputy minister level representatives of the Government of Canada, and a roundtable with participants from the various federal research funding agencies. The discussions were informed by three international

experts Rolf Heuer, Director General of CERN, Nigel Lockyer, Director of the U.S.'s FermiLab, and Catherine Ewart, Director of International Relations at the U.K. Science and Technology Facilities Council. The outcomes of these discussions indicate that the CFI is well positioned to take on an expanded role in facilitating Canadian investment and involvement in Big Science projects, both within Canada and abroad.

- **Expansion of the CFI Research Facilities Navigator.** Throughout 2015-16, we continued to expand the size and scope of the CFI Research Facilities Navigator; a searchable directory of participating research labs and facilities across Canada that are open to working with business. The Navigator now contains details on over 450 laboratories and research facilities. The Navigator was created to help businesses and other organizations connect with universities, colleges and research hospitals as a first step towards establishing research partnerships and collaborations.
- **Increase in the public visibility of the CFI through regular and social media.** Throughout the year, we made significant advances in our public visibility through a wide variety of media, including building a substantial and consistent social media presence.

### 1.5 Successes and remaining challenges from 2015-16

In 2015-16 the CFI achieved considerable success in meeting its core mandate to improve the research and technology development capabilities of Canada's research institutions and in meeting the strategic directions articulated in the *CFI Strategic Roadmap 2012-17*. Through the Innovation Fund and other program activities, our adjudication processes continue to set a world standard for selecting excellent research infrastructure proposals. The sustainability of Canada's research capacity has been strengthened through the MSI Fund and the John R. Evans Leaders Fund. The global influence of the Canadian research enterprise has been enhanced through the funding of a number of cutting-edge research facilities and through activities such as the CFI presence at the world's most prestigious science conference, the Annual Meeting of the American Association for the Advancement of Science. The CFI has continued to be a trusted voice through numerous consultations, publications and outreach activities and has broken new ground in evaluation through such vehicles such as the *Platform outcome measurement study* and the current *National outcome study in agriculture research*.

The principal challenges remaining from 2015-16 include:

- **Digital research infrastructure:** Although the Cyberinfrastructure Initiative is beginning to address the digital infrastructure requirements of the Canadian research community, it is only a start. As research moves more and more towards the use of very large-scale data, new challenges in supporting various aspects will emerge. These include software development and the related human resource elements; the curation and archiving of research data; the next generation of advanced computing resources; and the organization of national-level data management capabilities.
- **Large-scale research infrastructures:** Over the past year, we have sought excellent advice from some of the world's top experts on dealing with proposals for very large-scale research infrastructures. Translating this advice into concrete recommendations to the Government of Canada that meet the particular requirements of the Canadian context remains a challenge for 2016-17. More investigation and consultation will be necessary before we can move forward effectively.
- **Implementing the recommendations from the 2015 community consultation:** While the 2015 consultation produced many useful and feasible recommendations, due to both financial and operational constraints, not all can or should be implemented. Determining priorities will be a significant challenge for senior management.
- **Securing stable and predictable funding:** The CFI receives allocations of funding from the Government of Canada in a periodic fashion that does not provide recipients with a sufficient degree

of stability and predictability to allow for long-term planning. Although the funding received under the 2015 Contribution Agreement addresses this challenge to some extent, it remains a challenge for CFI award recipient institutions and for the CFI itself.

- **Application and review burden:** The workload involved in both applying for CFI funding and adjudicating applications to is substantial for all parties involved. Reducing this burden, while at the same time ensuring accountability and maintaining the high quality of our review processes, is a constant challenge. Over the past few years we have undertaken a number of measures to address this challenge, such as streamlining applications and reporting requirements. Still, more can be done to make sure that we strike the right balance between workload and producing credible, high-quality outcomes.

## 2.0 PLANNED ACTIVITIES AND IMPLEMENTATION SCHEDULE FOR 2016-17

### 2.1 Delivering CFI's funds and initiatives

#### 2017 Innovation Fund

The 2017 Innovation Fund competition will be launched in the spring of 2016. As specified in the 2015 Contribution Agreement, the budget for this competition \$425 million, plus \$127 million in associated IOF funding. The three-stage merit-review process will occur between fall 2016 and spring 2017. Funding decisions will be made by the Board of Directors in June 2017.

For our tenth nationwide research infrastructure competition, we will encourage eligible institutions and their researchers to craft ambitious proposals that focus on excellence, build on research strengths, and incorporate collaboration as a means to ensure the long-term sustainability of the Canadian research enterprise. The objectives of the 2017 Innovation Fund competition are to enable institutions and their best researchers to:

- Strive for global leadership by conducting world-class research or technology development activities in areas of institutional strategic priority;
- Enhance research capacity by forging productive partnerships within and among institutions, sectors and disciplines for the effective and sustainable use of research infrastructure and facilities; and,
- Generate social, health, environmental and/or economic benefits for Canadians, including better training and improved skills for highly qualified personnel, through appropriate pathways.

#### John R. Evans Leaders Fund

At a time of intense international competition, the John R. Evans Leaders Fund assists institutions to attract and retain the very best of today's and tomorrow's researchers. The John R. Evans Leaders Fund offers institutions the opportunity to:

- Acquire infrastructure for their leading researchers to undertake cutting-edge research; and,
- Create competitive research support packages in the form of infrastructure and a portion of the operating and maintenance costs from the CFI, coupled with direct research costs from partner organizations.

The John R. Evans Leaders Fund receives proposals from eligible institutions three times per year. It is anticipated that up to \$87 million, plus associated IOF funding, will be awarded from the fund for the next three years.

### **Major Science Initiatives Fund**

In 2010, the Government of Canada mandated the CFI to design a systematic approach for evaluating and addressing the operating and maintenance (O&M) funding needs of research facilities that serve a critical mass of Canadian researchers from across the country, as well as their scientific performance, and to ensure they have in place robust management and governance policies and practices. To meet this mandate, we created a funding mechanism called the Major Science Initiatives Fund. The Fund and the associated oversight activities are intended to:

- Secure and strengthen state-of-the-art national research facilities that enable Canadian researchers to undertake world-class research and technology development that leads to social, health, economic, or environmental benefits to Canadians;
- Enable funded facilities to operate at an optimal level and to have their scientific and technical capabilities fully exploited; and,
- Promote the adoption of best practices in governance and management, including long-term strategic and operational planning in keeping with the scale and complexity of the facility.

In October 2015, we launched the third competition of the Major Science Initiatives Fund. Through this competition, we will invest up to \$400 million. These funds will be used to cover a portion of the total eligible operating and maintenance costs of such major research facilities. The funds awarded are to be used over five years, from 2017 to 2022. The submission deadline for full proposals is April 21, 2016 and funding decisions will be made by the Board of Directors in September 2016.

### **Cyberinfrastructure Initiative**

Through 2016-17, the CFI will continue to deliver the Cyberinfrastructure Initiative with the overarching objective to enhance the capacity of Canadian institutions and researchers to conduct leading-edge research in areas of demonstrated strength by supporting the infrastructure needs of computationally and data-intensive research.

This initiative consists of two funding streams, or “challenges.” Challenge 1 provides contributions to data infrastructure projects that, in collaboration with Compute Canada, enable communities of researchers, along with data scientists, data analysts, software developers and other experts to devise optimal ways of organizing and using research data resources. Challenge 2 provides contributions for upgrading and modernizing the computational and data storage capacities of the pan-Canadian advanced research computing platform, managed by Compute Canada.

We plan to launch the next Cyberinfrastructure Initiative Challenge 1 competition in spring or early summer 2016. Final funding decisions would be made by the Board of Directors in June 2017. The CFI has nominally allocated \$12.5 million in capital and IOF funding for this competition. The actual amount will depend on the outcomes of the first Challenge 1 competition which is taking place in 2015-16.

The next Challenge 2 competition has been intentionally linked to the Major Science Initiatives Fund competition in order to provide the applicants with an opportunity to request both capital and operating

funding. Building on the 2015 investments made in advanced computing resources, the Challenge 2 competition will provide up to \$20 million for advanced computing infrastructure.

We will continue to work closely with Compute Canada, institutions, the research community and other key stakeholders to best address the future needs of the research communities within the available budget. The submission deadline is May 2016 and funding decisions will be made by the CFI Board of Directors in September 2016.

### **College-Industry Innovation Fund**

The College-Industry Innovation Fund is designed to enhance the capacity of colleges to support business innovation in Canada. The fund provides colleges with state-of-the-art, industry-relevant research infrastructure, allowing them to foster partnerships with the private sector in a specific area of strategic priority to the institution.

The purpose is to stimulate competitive college-industry applied research and technology development partnerships that lead to business innovation by:

- Encouraging interactions between the college and its industrial partners;
- Enabling the college to respond to specific technological challenges of their industrial partners;
- Allowing the college to undertake large-scale collaborative projects with industrial partners;
- Enhancing applied research and technology development capacity at the college in an area of institutional strategic priority;
- Providing highly qualified personnel with opportunities to participate and gain know-how in applied research and technology transfer activities through direct hands-on experience with state-of-the-art instrumentation; and,
- Generating regional and national socioeconomic benefits through partnerships with the private sector and other relevant stakeholders.

The College-Industry Innovation Fund allows eligible colleges to submit research infrastructure funding proposals through two separate streams: Stream 1: proposals are submitted directly to the CFI from colleges that have established partnerships with private-sector organizations; and, Stream 2: Proposals are submitted from colleges jointly to the CFI and to the Natural Sciences and Engineering Research Council's College and Community Innovation Program – Innovation Enhancement Grants.

We have allocated up to \$40 million, plus up to \$12 million in infrastructure operating funding, for the various College-Industry Innovation Fund competitions that are scheduled to take place between 2015 and 2019.

The fourth Stream 1 competition was launched in December 2015. The Board of Directors will make final funding decisions on this stream in November 2016. The deadline for submission to the current Stream 2 competition is October 2016 and funding decisions will be made by the Board of Directors in March 2017.

### **Infrastructure Operating Fund**

In accordance with our current contribution agreements, the CFI will continue to contribute towards the operating and maintenance costs of CFI-funded research infrastructure through the Infrastructure Operating Fund. This fund helps cover a portion of the operating and maintenance costs to ensure optimal use of CFI-funded infrastructure. The funds are committed at the rate of 30 percent of the original

CFI award under the John R. Evans Leaders Fund, the Innovation Fund, the College-Industry Innovation Fund and the Cyberinfrastructure Initiative (for Challenge 1 awards only).

### **Governor General's Innovation Awards**

At the request of His Excellency the Right Honourable David Johnston, the CFI has agreed to act as the adjudication agency for the newly-created Governor General's Innovation Awards. The purpose of the Governor General's Innovation Awards is to inspire Canadians to embrace innovation and to emulate innovative, entrepreneurial risk-takers that have developed new or better ways of creating value and that are having a meaningful impact on our quality of life.

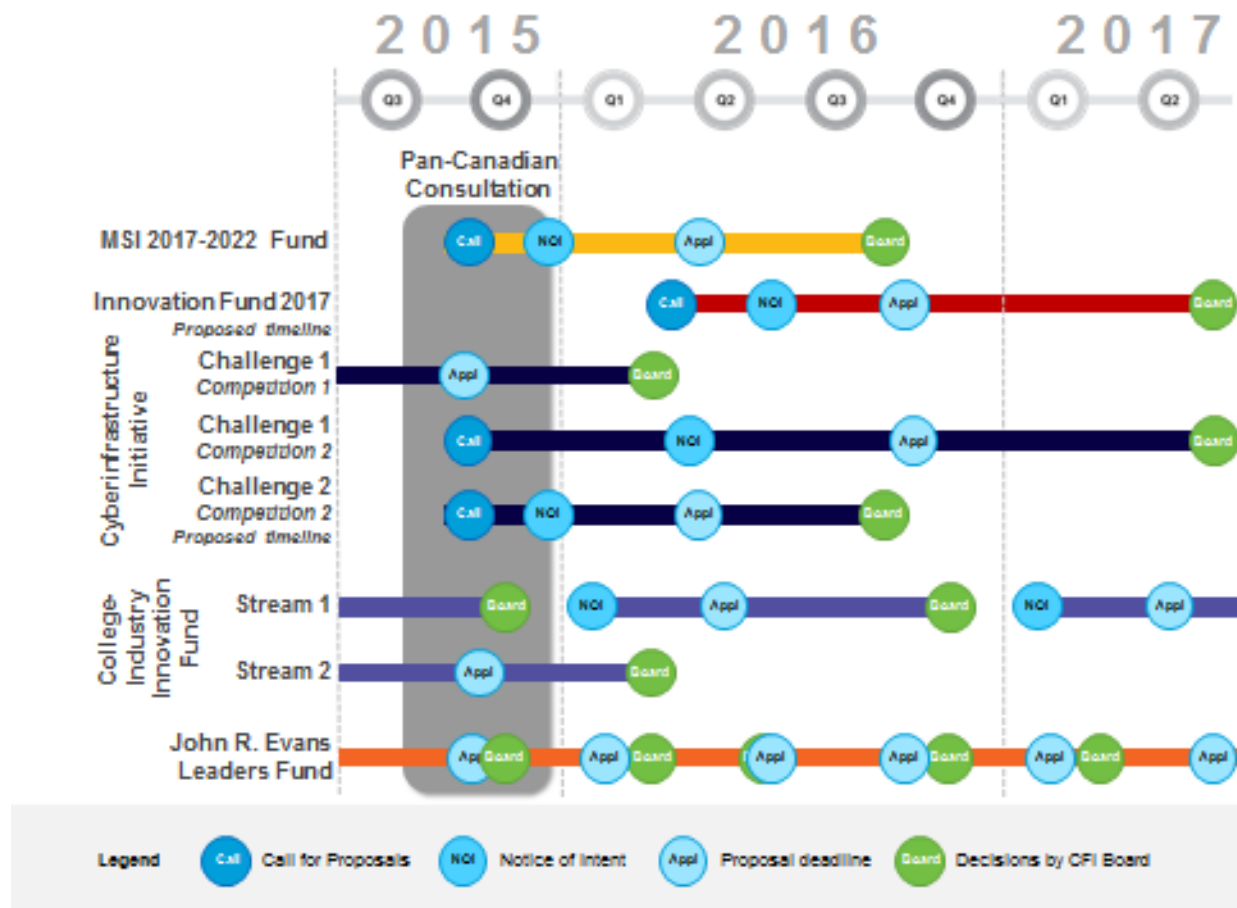
On an annual basis, we will receive and review nominations for the Innovation Awards. The adjudication will follow our two-stage process, using an expert committee to identify a short list of 20 finalists, and a high-level multidisciplinary committee to select the final six that will be recommended to the Governor General.

The selection of award winners will be based on the following criteria:

- Extent to which the individual, team or organization has shown initiative and leadership to be agents of change in addressing a current issue about which they are passionate.
- Creative use of new knowledge and/or technology to develop ideas aimed at addressing social, economic or cultural challenges and solving real-world problems.
- Evidence of the successful implementation of these ideas, resulting in a positive impact beyond the nominee's own community or organization.
- The degree to which the nominee and the activities undertaken have demonstrated the following skills, attitudes and behaviors of innovation: inspiration, creativity, collaboration, risk-taking and problem solving.

The annual cycle of the Innovation Awards Program will culminate in a presentation ceremony, hosted by the Governor General of Canada.

Figure 1: 2016-17 program delivery timelines, with major milestones and decision points



## 2.2 Building external relations and communicating CFI's activities

To communicate effectively in an age of information overload, we have undertaken to reconfigure and refresh our website, Innovation.ca. While the bulk of the planning and building of the website will be completed in 2015-16, the site will go live in September 2016 as part of the launch of our 20th anniversary celebrations.

Many of our communications activities in 2016-17 will center on the celebration of the organization's 20th anniversary. The launch of our refreshed website in September will mark the beginning of our celebrations, and over the rest of the fiscal year, we will roll out various activities that will highlight how the CFI was built on the ideals of thinking big and investing in areas that matter to Canadians. Under the theme "Research builds my community," the celebration will focus on telling the story of the origins of the CFI and how the outcomes of the research we have enabled are touching the lives of individuals in different communities across the country. We will also support Government of Canada efforts in celebrating Canadian science, research and innovation as part of the country's sesquicentennial in 2017.

In April, we will work with the Office of the Governor General of Canada to promote the first winners of the Governor General's Innovation Awards and to help disseminate the importance of the goal of those awards: to inspire Canadians to embrace innovation and to emulate innovative, entrepreneurial risk-takers that have developed new or better ways of creating value and that are having a meaningful impact on our quality of life.

Throughout the year, we will employ our relaunched website, opinion pieces and speaking engagements to continue to engage in public and policy discussions to remain a trusted voice in Canada's research community. Our communications will highlight how the country's brightest minds are contributing to better health outcomes, a cleaner, greener environment, evidence-based decision making and the competitiveness of Canadian business. We will look to increase our international visibility by participating in the International Conference on Research Infrastructures in October in Cape Town, South Africa, to highlight our mandate and collaborative opportunities to an international audience.

In the coming fiscal year, we will expand our promotion around the CFI Research Facilities Navigator — the online database of facilities that are open to working with business — to help support business innovation in Canada. We will seek opportunities to reach out to the private sector through various media, related conferences and paid advertising, and we will work with institutions to grow the listings in the Navigator and to share best practices on working with industry.

We will also collaborate with the federal granting agencies — NSERC, SSHRC and CIHR — to organize a "summit" in Ottawa in the spring with communications colleagues at our funded institutions. This annual event allows the CFI and granting agencies to share Government of Canada communications needs and best practices with those responsible for promoting the Government's contributions to the country's research community.

### **2.3 Managing the financial aspects of CFI's activities**

All of the financial aspects of the organization's activities are under the responsibility of the finance team. This team is composed of two groups:

- Corporate finance group that is responsible for the general accounting functions of the CFI, including bookkeeping, payments, budgeting and cash flow management, as well as award finalization processes and payments to institutions that receive CFI awards; and,
- Financial monitoring group that ensures that funds forwarded to institutions are spent appropriately and that institutions have appropriate processes and controls in place for the management of CFI funds.

#### **The CFI investment portfolio**

Following standard practice, the CFI's investment strategy and investment policy will be reviewed by senior management and the Board of Directors Finance Committee in autumn 2016. The results of this review, and any subsequent recommendations, will be presented to the full Board of Directors in autumn 2016.

#### **Institutional monitoring visits**

Over the course of fiscal year 2016-17, the finance team will perform between seven and 10 monitoring visits. The purpose of these monitoring visits is to ensure that institutions receiving funding have the proper practices and processes in place, and to share best practices on how to effectively and



consistently administer awards. These monitoring visits will include both large and small institutions to ensure full coverage of institution types and to broadly share information on best practices.

### **Contribution audits**

The finance team is planning to conduct between 10 and 15 contribution audits of CFI-funded projects where fieldwork will be performed over the course of 2016-17. These audits will include a mix of both low and high risk projects, including those where the CFI investment is \$10 million or more.

### **Financial reports**

In addition to its other activities, the finance team expects to review approximately 800 financial reports in 2016-17. These include both interim and final financial reports, and annual reports on expenditures of Infrastructure Operating Funds.

### **Sharing good practices in the management of CFI awards**

We have heard from many institutions that it is useful to share good practices between recipient institutions on how to best manage CFI awards. Although we often share good practices during monitoring visits, at conferences, and through daily interactions with institutions, we are seeking better ways to collect and disseminate these to all institutions.

In 2005, we created a document entitled *Sharing of good practices: Administration of CFI awards*. This document is in need of updating, which gives us an excellent opportunity to modernize our approach by incorporating good practices that go beyond just financial aspects to include those that span the full lifecycle of an award. These include, for example, strategic planning, proposal development, project implementation, sustainability, risk management, tracking and communication of impacts and outcomes and governance and management of large initiatives. Initial work is expected to be largely completed by autumn 2016.

### **Revisiting our approach to monitoring visits**

Three years ago, the CFI introduced significant changes to our approach to monitoring visits, making it risk-based and more holistic by including the review of activities performed by institutions over the full lifecycle of an award. The feedback received from institutions was positive. After performing several visits using the new approach, we examined whether any further improvements could be made. As a result of this exercise, the following changes were implemented in September 2015:

1. In response to feedback received from institutions, we will soon start monitoring visits at smaller institutions. These visits will be a scaled-down version of those performed at larger institutions, tailored to the size and nature of the institution's projects. These visits will allow us to interact more closely with smaller institutions, disseminate information on the organization's policies and guidelines, and share examples of good practices.
2. We will now perform review activities related to the tracking and communication of outcomes and impacts associated with CFI funding. These are important aspects of the lifecycle of a CFI award.
3. We are committing to issuing preliminary monitoring visit reports more quickly after each visit in order to provide timely feedback to institutions.
4. We will now provide more detailed conclusions in the monitoring visit report that addresses proposal development and portfolio implementation. This comes as a result of having a better understanding of practices in these areas.

## 2.4 Improving CFI's information management capabilities

We completed an information technology strategy in 2013. In 2015-16, we launched an information management initiative to address the last outstanding recommendation from the 2013 strategy. The initiative has three main business objectives:

- Ensuring the efficiency and effectiveness of business operations;
- Ensuring the integrity and quality of data, information and reporting; and,
- Addressing gaps in data and information.

Within the initiative, a multitude of projects spanning several years have been identified, prioritized and scheduled. In 2016-17, we will address the following projects:

- Data governance, data quality, data gaps related to performance measurement activities;
- Corporate integration tools including case management and contact management; and,
- Business reporting improvements through changes to our business information environment including user training, user competency group, data dictionary, and data model validation.

The information services team will also maintain our CFI Awards Management System (CAMS). In 2016-17 we will deploy new features and functionality including:

- **Report repository** — we currently produce reports for institutions upon request and then forward the reports via email or other resources to the institution. Following consultations with institutions, and as part of an enhancement to the overview module available through CAMS, the report repository will provide institutions the ability to run up-to-date reports accessed through their online dashboard;
- **Institutional user access** — CAMS will be enhanced to allow institutions online self-management of user roles and privileges including the update of key institutional representatives and authorities; and,
- **John R. Evans Leaders Fund allocations** — a centralized online functionality will be introduced to CAMS to track, manage and report on institutional allocations.

Other planned activities for CAMS include a review of the common CV and CFI CV functionality. We will also review CAMS business processes, with a focus on user accountabilities related to key action points and data entry points in the system.

The information services team will also support the website creative refresh project. With our 20th anniversary on the horizon, the CFI website is undergoing a creative refresh which will introduce new design and organization to the site. The project will also include a search for funded projects feature, and improved CFI Navigator search functionality.

## 2.5 Analyzing corporate performance, outcomes and impacts

The CFI is committed to the principle of public accountability. As a result, it places great importance on evaluating the impact of its investments in research infrastructure.

In 2016-17, we will continue to track performance data as outlined in our *2015 Performance evaluation, risk and audit framework*. These include data relating to:

- **Capacity:**
  - World's top researchers attracted and retained — investment in research infrastructure enables eligible institutions to attract and retain researchers who are highly productive and recognized in their respective fields.
  - Capacity to conduct world-class research and technology development enhanced — investment in state-of-the-art infrastructure, along with planning for its optimal use, enhances the ability of eligible institutions to compete globally in research and technology development.
  - Training environment enriched — availability of high-quality infrastructure, together with top researchers, creates the optimal conditions to train the next generation of researchers and highly skilled technical personnel.
- **Capability:**
  - Productive teams, networks and collaborations established — the provision and use of infrastructure supports eligible institutions in bringing together a diverse and multi-sectoral community of users and enhancing networks and collaborative arrangements.
  - Skills and expertise acquired by highly qualified personnel — the use of infrastructure allows students, post-doctoral fellows, other trainees and technical staff to develop skills in a world-class research environment and gain knowledge from leading researchers in their fields.
  - Knowledge advanced — the use of infrastructure allows researchers to produce, collect, analyze and interpret data that advances scientific and technological knowledge.
- **Uptake:**
  - Innovation supported — the undertaking of activities that facilitate the comprehension, uptake and implementation of research knowledge acquired through the use of CFI-funded infrastructure allows researchers and institutions to encourage their adoption into practice and policy, and ultimately contribute to the innovation system.
  - Canada benefits socially, economically and environmentally — the innovative research that results from the confluence of world-class infrastructure and great minds leads to discoveries and better public policy, and fosters the commercialization of discoveries, all of which improve the overall quality of life for Canadians.

In keeping with best practices, we will continue to explore areas for improvement and efficiency, both related to reporting as well as related to the underlying performance data.

We will also, in light of our approaching 20th anniversary and in preparation for the renewal of the organization's strategic roadmap, undertake an examination of the existing portfolio of funded projects. This exercise will help us gain deeper insight into our past investments and the benefits that have accrued, understand how infrastructure projects have built upon one another, and identify areas of future opportunity.

### **Project progress reports**

The CFI will prepare and release its annual *Report on results* based on annual *Project progress report* data. The purpose of the *Reports on results* is to provide timely, strategically focused, objective and evidence-based information on outputs and outcomes of the CFI-funded infrastructure as they relate to our overall objectives. Institutions we fund are required to submit project progress reports for each funded project by June 30 of each year. Project reports are required to be submitted for every project for four to five years following the finalization of the award.

In 2016-17 we will fully implement a new strategy to maximize the usefulness of the qualitative data collected through the *Project progress reports*. We will continue to exploit the project progress report data throughout corporate publications.

### **Outcome assessment**

Work will continue in 2016-17 on the *National outcome study on agriculture research*. Agricultural research has a long and illustrious history in Canada and has contributed significantly to the success of the Canadian agriculture sector. Agriculture is also one of the priority research areas listed in the Government of Canada's 2014 Science, Technology and Innovation Strategy. Knowing more about the role that CFI funding has played in increasing the capacity for agriculture research in Canada will deepen our understanding of the value of research to this crucial area of the Canadian economy.

Through this study we have and will continue to work with colleagues at the other federal research funding organizations, our provincial counterparts and the researchers and research administrators involved in the thematic area.

Work will also begin in 2016-17 on a number of projects focused specifically on our four expected results. These include enhancing the ability of research infrastructure funding recipients to:

- Attract and retain the world's top research talent;
- Train the next generation of researchers;
- Enable researchers to undertake world-class research and technology development that lead to social, economic and environmental benefits for Canada; and,
- Support private sector innovation and commercialization.

In 2016-17, we will deliver a report that examines all aspects of the CFI's role in enabling recipient organizations to support private sector innovation and commercialization.

**APPENDIX 1: CFI FINANCIAL CHARTS**

**Table 1: Investment Plan (Commitments) for the Contributions under each Agreement**

<b>First Funding Agreement (\$4,390M)*</b>						
	<b>Cumulative March 31, 2015 (\$M)</b>	<b>2015-16 (\$M)</b>	<b>2016-17 (\$M)</b>	<b>2017-18 (\$M)</b>	<b>2018 and later (\$M)</b>	<b>Total (\$M)</b>
<b>Fund</b>	<b>Commitments** (Actual)</b>	<b>Commitments (Projected)</b>	<b>Commitments (Projected)</b>	<b>Commitments (Projected)</b>	<b>Commitments (Projected)</b>	
Automotive Partnerships Canada	9					9
Canada Research Chairs	194					194
Career Awards	6					6
College Research Development	16					16
Cyberinfrastructure initiative		40	29			69
Digging into Data / Discovery Frontiers	1					1
Exceptional Opportunities and other	21	2	9	8	8	48
Infrastructure Operating	1,013	3	22			1,038
Innovation (1998-2005)	1,760					1,760
Innovation Fund 2015	53					53
International	202					202
John R. Evans Leaders (and Leaders Opportunity/New Opportunities)	826		62			888
Leading Edge/New Initiatives	831					831
Major Science Initiatives 2014 Special Competition	25					25
National Platforms	84					84
Research Development	35					35
Research Hospital	491					491
Thirty Meter Telescope	25					25
<b>Total</b>	<b>5,592</b>	<b>45</b>	<b>122</b>	<b>8</b>	<b>8</b>	<b>5,775</b>
<b>2010 Funding Agreement (\$600M)*</b>						
College-Industry Innovation	24	1				25
Infrastructure Operating	98					98
John R. Evans Leaders	140					140
Leading Edge/New Initiatives	162					162
Major Science Initiatives	170	6				176
<b>Total</b>	<b>594</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>601</b>

2014 Contribution Agreement (\$499.85M)*						
College-Industry Innovation		7	8	8	16	39
Infrastructure Operating	76	21	11	3	4	115
Innovation Fund 2015	206					206
John R. Evans Leaders	50	63	27			140
<b>Total</b>	<b>332</b>	<b>91</b>	<b>46</b>	<b>11</b>	<b>20</b>	<b>500</b>
2015 Contribution Agreement (\$1,330M)*						
College-Industry Innovation					35	35
Cyberinfrastructure initiative				8	61	69
Infrastructure Operating				149	53	202
Innovation Fund 2017				425		425
John R. Evans Leaders				67	132	199
Major Science Initiatives (MSI)			400			400
<b>Total</b>	<b>0</b>	<b>0</b>	<b>400</b>	<b>649</b>	<b>281</b>	<b>1,330</b>

\* The first Funding Agreement and the 2010 Funding Agreement have respectively generated \$1.385 billion and \$1 million of interest income directed to project funding. There are no anticipated revenues from other sources expected in future years other than interest income.

\*\* Actual committed amounts are net of amounts that will be unused by eligible recipients, as confirmed through final financial reports for infrastructure projects submitted as of December 2015.

**Table 2: Planned expenditures (disbursements) detailed by fund**

<b>First Funding Agreement (\$4,390M)*</b>						
	<b>Cumulative March 31, 2015 (\$M)</b>	<b>2015-16 (\$M)</b>	<b>2016-17 (\$M)</b>	<b>2017-18 (\$M)</b>	<b>2018 and later (\$M)</b>	<b>Total (\$M)</b>
<b>Fund</b>	<b>Expenditures (Actual)</b>	<b>Expenditures (Projected)</b>	<b>Expenditures (Projected)</b>	<b>Expenditures (Projected)</b>	<b>Expenditures (Projected)</b>	
Automotive Partnerships Canada	9					9
Canada Research Chairs	194					194
Career Awards	6					6
College Research Development	16					16
Cyberinfrastructure initiative		10	12	25	22	69
Digging into Data / Discovery Frontiers	1					1
Exceptional Opportunities and other	16	2	5	8	17	48
Infrastructure Operating	778	75	66	27	92	1,038
Innovation (1998-2005)	1,757	3				1,760
Innovation Fund 2015		5	19	17	12	53
International	202					202
John R. Evans Leaders (and Leaders Opportunity/New Opportunities)	820	3	2	21	42	888
Leading Edge/New Initiatives	765	42	9	9	6	831
Major Science Initiatives 2014 Special Competition	13	9		3		25
National Platforms	82	2				84
Research Development	35					35
Research Hospital	483	3	5			491
Thirty Meter Telescope	25					25
<b>Total</b>	<b>5,202</b>	<b>154</b>	<b>118</b>	<b>110</b>	<b>191</b>	<b>5,775</b>
<b>2010 Funding Agreement (\$600M)</b>						
College-Industry Innovation	20	3	2	0		25
Infrastructure Operating	1	15	19	19	44	98
John R. Evans Leaders Fund	123	8	7	2		140
Leading Edge/New Initiatives	109	15	19	19		162
Major Science Initiatives (MSI)	89	53	34			176
<b>Total</b>	<b>342</b>	<b>94</b>	<b>81</b>	<b>40</b>	<b>44</b>	<b>601</b>



2014 Contribution Agreement (\$499.85M)						
College-Industry Innovation		1	6	7	25	39
Infrastructure Operating				15	100	115
Innovation Fund 2015		35	68	62	41	206
John R. Evans Leaders	16	41	57	17	9	140
<b>Total</b>	<b>16</b>	<b>77</b>	<b>131</b>	<b>101</b>	<b>175</b>	<b>500</b>
2015 Contribution Agreement (\$1,330M)						
College-Industry Innovation					35	35
Cyberinfrastructure initiative					69	69
Infrastructure Operating					202	202
Innovation Fund 2017				8	417	425
John R. Evans Leaders				16	183	199
Major Science Initiatives				70	330	400
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>94</b>	<b>1,236</b>	<b>1,330</b>

\* In addition to disbursements to eligible recipients, a total of \$172.7 million had been disbursed as of March 31, 2015 for operating expenses of the Foundation. These expenses are forecasted to be approximately \$15 million per year in the next two years.

**Table 3: Annual cash flow requirements**

<b>Cash Flow Requirements*</b>						
	Cumulative March 31, 2015	2015-16	2016-17	2017-18	2018 and later	Total (\$M)
	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	
<b>Disbursements</b>	Actual	Projected	Projected	Projected	Projected	
2010 Funding Agreement	342	94	81	40	44	601
2014 Contribution Agreement	16	77	131	101	175	500
2015 Contribution Agreement				94	1,236	1,330
<b>Total disbursements</b>	<b>358</b>	<b>171</b>	<b>212</b>	<b>235</b>	<b>1,455</b>	<b>2,431</b>
Received from the Government	376	177				553
Generated interest income		1				1
Future government payments necessary to meet cashflow needs **			187	235	1,455	1,877
<b>Difference for the period</b>	<b>18</b>	<b>7</b>	<b>-25</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cumulative Difference</b>	<b>18</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\* Funds for the first Funding Agreement have all been received from the Government of Canada. Therefore, there are no future cash flow requirements for this agreement.

\*\* Of the amount of \$187M for 2016-17, \$77M is needed in early April 2016 to cover expenses of April 2016 to September 2016. The balance of \$110M can be paid during summer 2016. Of the amount of \$235M for 2017-18, \$112M is needed in early April 2017 to cover expenses of April 2017 to September 2017. The balance of \$123M can be paid during summer 2017. There are currently no amounts owing by the CFI to the Government of Canada.

## APPENDIX 2 – THE CFI’S KEY RISKS AND MITIGATION MEASURES

In 2014, the CFI engaged KPMG LLP to assist with the update of the key risks facing the organization. As a result of this exercise, we have identified seven primary risks and related mitigation measures. These are summarized in the table below. Senior management and the Board of Directors have reviewed these key risks in 2015 and believe that they still represent the major risks facing the organization at the present time. Information on secondary risks is available upon request.

The risks identified below are ordered according to their potential impact on the CFI.

STRATEGIC RISKS	
<b>1</b>	<p><b>Risk that the CFI is unable to maintain and/or secure ongoing political support at the federal level</b></p> <p><b>Mitigation measures:</b></p> <ul style="list-style-type: none"> <li>• The CFI undertakes regular ongoing discussions with Government of Canada officials in ministerial offices and senior department managers on the requirements for research infrastructure, the leveraging of benefits, the multidisciplinary reach and impacts of CFI investments and ideas for the future of the CFI and the research and innovation ecosystem.</li> <li>• The CFI regularly provides parliamentarians with evidence on the ways that infrastructure assists in attracting and retaining top research talent, enables world-class research and supports innovation.</li> <li>• The CFI leads and participates in outreach and communications activities specifically targeted to parliamentarians.</li> <li>• The CFI consistently demonstrates value-for-money and how infrastructure funding has been and continues to be responsive to government priorities and research community requirements.</li> <li>• The CFI disseminates success stories and evaluation assessments to demonstrate the results of CFI investments.</li> <li>• The CFI seeks to capitalize on the strength of its solid reputation as a world-class funding agency.</li> <li>• The CFI includes elected officials and media in celebrations and public events.</li> </ul>
<b>2</b>	<p><b>Risk that the fiscal realities of the provinces will result in reduced and/or delayed support for CFI projects (e.g. via matching funds, S&amp;T funding in the province)</b></p> <p><b>Mitigation measures:</b></p> <ul style="list-style-type: none"> <li>• Provincial partners are given opportunities to provide input on activities, processes and funding mechanisms.</li> </ul>

	<ul style="list-style-type: none"> <li>• The priorities of provincial partners are taken into consideration in the application review process.</li> <li>• The CFI conducts ongoing monitoring of provincial research and innovation activities.</li> <li>• The CFI communicates the value of the 40 percent funding provided by the CFI.</li> <li>• The CFI communicates with provinces on funding parameters and competition schedules to assist them in their planning.</li> <li>• While the CFI endeavours to accommodate provinces with cash flow challenges, CFI funding is provided only when partner funding has been secured.</li> </ul>
<p><b>3</b></p>	<p><b>Risk that key stakeholders, including federal funders at both the administrative and political levels, do not understand the activities, outcomes and impacts associated with CFI funding</b></p>
	<p><b>Mitigation measures:</b></p> <ul style="list-style-type: none"> <li>• The CFI consistently sends the message that world-class research requires state-of-the-art infrastructure.</li> <li>• The CFI reports on and communicates to all stakeholders the outputs, outcomes and impacts of the research enabled by infrastructure.</li> <li>• The CFI maintains a dialogue with the Government of Canada and with other funding agencies on its role and programs and on the level of funding provided.</li> <li>• The CFI's communications strategy focuses on highlighting the key results and social and economic outcomes of the research enabled by CFI investments.</li> <li>• The CFI Navigator fosters and enables communication and linkages between CFI-funded institutions and external stakeholders in the private and public sectors.</li> <li>• The CFI encourages the research community to communicate with government about the value of CFI funding.</li> <li>• The CFI continues to explore new ways of telling the stories of the impacts of research enabled by CFI-funded infrastructure.</li> </ul>
<p><b>4</b></p>	<p><b>Risk that overall funding cannot be balanced to support different stakeholder needs (e.g. between capital and operating and maintenance investments)</b></p>
	<p><b>Mitigation measures:</b></p> <ul style="list-style-type: none"> <li>• The CFI conducts ongoing consultations with the research community and government to determine the balance of funding types for major science initiatives and multi-institutional facilities.</li> <li>• The CFI undertakes discussions with government and other funding organizations on funding pressures and how best to optimize the overall funding system.</li> <li>• Latest Innovation Fund competition provides additional operating and maintenance funding for projects with greater needs for operational support.</li> <li>• The Infrastructure Operating Fund provides institutions with flexibility to address projects with</li> </ul>

	<p>varying needs.</p> <ul style="list-style-type: none"> <li>The CFI continues to advocate for a national strategy to best address the requirements for large-scale research infrastructures.</li> </ul>
<b>5</b>	<b>Risk that contribution agreement requirements impair the ability of the CFI to be responsive to stakeholder needs in a timely and flexible manner (e.g. through new programs)</b>
	<p><b>Mitigation measures:</b></p> <ul style="list-style-type: none"> <li>The CFI regularly consults with institutions to understand their needs and explain the specifics of federal funding programs and opportunities.</li> <li>The CFI briefs parliamentarians and senior government officials on the value of a flexible model, alignment of funding mechanisms with the federal Science, Technology and Innovation Strategy and the granting agencies and on the needs of institutions.</li> <li>Communication and outreach activities underscore the need for flexibility as a means to enable the CFI to achieve the expected results specified in its contribution agreements.</li> <li>The CFI encourages the research community to work with the CFI to communicate its needs to key decision-makers.</li> <li>The CFI periodically assesses whether funding mechanisms are addressing stakeholder needs and, when necessary, makes appropriate adjustments in the program architecture and fund delivery mechanisms.</li> </ul>
<b>HUMAN RESOURCES RISKS</b>	
<b>6</b>	<b>Risk of turnover and/or loss of corporate memory among critical leadership positions</b>
	<p><b>Mitigation measures:</b></p> <ul style="list-style-type: none"> <li>The horizontal structure of the CFI facilitates the effective transfer of corporate knowledge throughout the organization and in periods of leadership turnover.</li> <li>The CFI maintains a competitive compensation structure and a balanced work environment that help attract and retain top talent.</li> <li>The CFI succession plan is reviewed and updated every two years.</li> </ul>

## INFORMATION TECHNOLOGY/INFORMATION MANAGEMENT RISKS

7

**Risk that information is not managed and/or accessible in a manner to support and enable effective and timely decision making**

**Mitigation measures:**

- The CFI's business units consistently review and update the information captured for both structured data (i.e. corporate database systems) and unstructured data (i.e. business unit specific activity) to support their operational and strategic business decisions.
- The Performance, evaluation, risk and audit framework (PERAF) exercise periodically reviews and updates information requirements needed to inform strategic business decisions and directions.
- Information access follows a decentralized approach. Business units have staff with advanced-level expertise using the CFI business information tools to effectively support decision making. All users are supported by the information management team. Training is available on an ongoing basis, and specialized training sessions are provided as needed.
- All information captured at the CFI occurs within a secure and protected environment using up-to-date, industry-standard technology and infrastructure and software supported by contracted experts. Regular data backup schedules and maintenance operations are in place.
- The information management initiative undertaken in 2015 will optimize the value of data within the organization, produce repeatable results, enrich analytical capabilities and provide tools for the CFI to be a trusted voice.



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