10

A decade of results through innovation

Canada Foundation for Innovation
Fondation canadienne pour l'innovation

ANNUAL REPORT 2006–2007

Printed on paper certified by the *Forest Stewardship Council of Canada.*

ISBN 978-0-9784394-1-5
ISSN 1712-0608

Contact Us

Canada Foundation for Innovation
450-230 Queen Street
Ottawa ON K1P 5E4
Tel.: 613-947-6496
Fax: 613-943-0923
E-mail: **info@innovation.ca**
Corporate website: **www.innovation.ca**
Online magazine: **www.InnovationCanada.ca**

10

A decade of results through innovation

When the Canada Foundation for Innovation (CFI) was formed by an Act of Parliament in April 1997, its mandate was to strengthen Canada's capability for research. The annual report published the following year stated that this would be accomplished by "committing funds…to develop research infrastructure in Canada."

But what does "research infrastructure" really mean? When most people think of infrastructure, they likely think of roads, bridges, and sewers—the things we all use daily but probably take for granted. The research and development community needs infrastructure as well—the equipment, laboratories, databases, and the buildings necessary to conduct research and to attract some of the best scientific minds in the world to Canada. Without the infrastructure, there would be no research.

That sounds simple enough, but what are the benefits of this research to Canadians? Does it make our lives better, easier, or healthier? Does it make Canada more competitive in today's global knowledge-based economy? Does supporting research infrastructure make Canadians more prosperous? More productive?

The answer at every turn is a resounding YES! It does all of those things and so much more. The research supported by CFI-funded infrastructure also creates the necessary conditions for sustainable, long-term economic growth—including the creation of spin-off ventures and the commercialization of discoveries. As a result, the CFI contributes to improving our quality of life, our health, and our environment.

In the CFI's 2006–2007 annual report, we will showcase not only successes—and there have been many—but also the direct benefits to Canadians.

As we look back on the last 10 years, the connection between CFI funding and the benefits of research becomes crystal clear—a better, more prosperous future for all Canadians.

OVERVIEW

The Canada Foundation for Innovation (CFI) is an independent corporation created by the Government of Canada to fund research infrastructure. The CFI's mandate is to strengthen the capacity of Canadian universities, colleges, research hospitals, and non-profit research institutions to carry out world-class research and technology development that benefits Canadians.

Since its creation in 1997, the CFI has committed more than $3.74 billion in support of approximately 5,300 projects at 129 research institutions in 64 municipalities across Canada.

Although the CFI is not alone in supporting innovation in Canada, it is the only national organization focused on providing the infrastructure required to conduct research, development, and training.

The CFI supports all areas of research and because it works directly with the institutions, it is able to ensure that applications for funding align with an institution's strategic research plans.

The CFI is also a catalyst for the leveraging of federal resources. That, in turn, attracts funding from other partners and enables long-term strategic research planning by the institutions through multi-year funding programs.

The CFI relies on experts from Canada and abroad in its rigorous and independent merit-review process, ensuring that only the very best projects are funded.

What is research infrastructure?

The infrastructure funded by the CFI includes state-of-the-art equipment, laboratories, databases, and the buildings necessary to conduct research. CFI-funded infrastructure fosters collaboration among the academic, private, public, and non-profit sectors in a wide range of research projects—from engineering and health, to economics and the environment.

Infrastructure makes a permanent impact because it builds long-term capacity, leaving a legacy that many researchers—and ultimately Canadians—can benefit from for years to come.

Building on a foundation of success

Foundations have become important and effective instruments for the delivery of public policy for the Government of Canada, particularly in the areas of research and education, where expert knowledge, third-party partnerships, multi-year funding, long-term planning, and independent merit review are critical. The arm's-length nature of the foundation model allows organizations such as the CFI to address specific challenges in a highly effective, non-partisan manner.

Guiding values and principles

The CFI strives to be an organization that is:

Transformative—Choosing investments that have a profound and enduring impact on the research environment.

Accountable—Monitoring impacts and keeping stakeholders informed, while ensuring that funds are used responsibly.

Transparent—Ensuring the integrity of the review processes as well as the fairness and independence of its funding decisions.

Consultative—Maintaining an open dialogue with research institutions, their partners, and other key stakeholders.

Client-focused—Providing effective, efficient, and innovative services to its clientele.

Flexible—Adapting to changing environments, and continually improving its policies, programs, and services.

Innovative—Bringing fresh ideas to program design and business practices, and developing a work environment that fosters creativity.

Funding formula

The CFI funds up to 40 percent of a project's infrastructure costs. The institutions then leverage this funding to attract the remainder from partners in the public, private, and non-profit sectors.

Assessment criteria

Only eligible Canadian institutions may apply to the CFI, and they do this through a suite of unique funding programs. All applications are assessed using three broad criteria:

- Quality of the research and its need for infrastructure;
- Contribution to strengthening the capacity for innovation;
- Potential benefits of the research to Canada.

Supporting national objectives

CFI funding enables institutions to set their own research priorities in response to areas of importance to Canada. This allows researchers to compete with the best from around the world, and helps to solidify Canada's position in the global knowledge-based economy. The CFI supports national

S&T objectives and strengthens Canada's capacity for innovation by:

- supporting economic growth and job creation, as well as health and environmental quality through innovation;
- increasing Canada's capability to carry out important world-class scientific research and technology development;
- expanding research and job opportunities for young Canadians;
- promoting productive networks and collaboration among Canadian post-secondary educational institutions, research hospitals, and the private sector.

State-of-the-art infrastructure helps Canadian research institutions attract, retain, and train highly skilled research personnel. It also leads to the creation of spin-off ventures and the commercialization of discoveries.

The CFI promotes the optimal use of research infrastructure within and among Canadian institutions and creates the necessary conditions for sustainable, long-term economic growth. And the innovative research that results from great minds and solid infrastructure leads to improvements in public policy as well as in our health, environment, and quality of life.

Building a knowledge advantage for Canada

Knowledge-intensive economies and societies of the 21st century are characterized by their commitment to cutting-edge research, their highly educated and skilled workforces, and their ability to foster business, regulatory, and social environments that encourage entrepreneurship and creative thinking.

The CFI remains committed to funding the infrastructure that enables research that improves the lives of Canadians. In the years ahead, the CFI will focus on the following critical challenges:

- Providing the infrastructure to meet new and evolving research demands;
- Sustaining previous investments in infrastructure at state-of-the-art levels;
- Fostering knowledge translation;
- Promoting partnerships between academia and industry;
- Enhancing the international impact of Canada's R&D enterprise.

Although these challenges are formidable, the CFI looks forward to playing a vital role in building on Canada's legacy of research and innovation in the years ahead. With the ongoing support of the Government of Canada and in partnership with other key stakeholders, the CFI will continue to contribute to developing a vibrant, progressive, and sustainable culture of science. It will do this by demonstrating the value of its investments, by engaging Canadians in the importance of research, and by remaining innovative and accountable.

Message from the Chair

It is my honour and privilege to serve as only the second Chair of the CFI's Board of Directors, following Dr. John Evans who served from 1997–2007. His visionary contribution and expert guidance over the CFI's first 10 years have helped transform Canada's research environment into one that is vibrant, collaborative, progressive, and sustainable.

> "The CFI has transformed the Canadian research community and helped create the necessary conditions to advance Canadians' social and economic well-being."

There are many who claim to be "the father of CFI," confirming the old adage that "success has many parents; failure is an orphan." Although John Evans would never make such a claim, there is no question that he could very legitimately do so.

As one of its principal architects and under his leadership, the CFI has become a vital force for positive change in Canada. It combines a proven track record of delivering results with strong accountability and management practices. The CFI has transformed the Canadian research community and helped create the necessary conditions to advance Canadians' social and economic well-being. John Evans has set the stage for an exciting future. As incoming Chair, I am dedicated to continuing his strong legacy and moving the CFI forward.

A decade ago, the nation was faced with a major exodus of its leading researchers and of its brightest young minds as each sought opportunities to conduct leading-edge research that was no longer possible in Canada. In the early years of my Principalship at Queen's University, I watched, powerless and with dismay, as this reality played out at my university and others across the country on an all-too-regular basis. Happily, my fellow presidents and I also witnessed and participated in the reversal of this reality, in large part due to the programs of the CFI.

Today, Canadian universities, colleges, research hospitals, and non-profit institutions are important magnets for outstanding researchers and students from across Canada and around the world—all drawn by the internationally recognized quality of our research infrastructure. The long-term societal benefits of this transformation are now beginning to be felt in many ways: in the quality of the post-secondary education available to our youth; in the important new discoveries in health, science, engineering, the social sciences and humanities; and now, in the direct benefits of these advances to our economy and the welfare of our people.

The Government of Canada is equally committed to sustaining this research excellence. With its Economic and Fiscal Update report, *Advantage Canada*, released in the fall of 2006, and the funds allocated to the CFI in Budget 2007, the Government of Canada strongly reinforces its support of science and technology in Canada. As a consequence, the CFI will continue to play a key role in supporting research excellence, contributing to the government's vision, and helping Canada maintain its leadership for publicly funded R&D among its G7 partners.

Finally, in this the 10th anniversary of the founding of CFI, I offer my sincere appreciation to the Board of Directors, Members, and presidents (past and present) for their leadership; to the thousands of volunteers who have given their valuable expertise to the merit review process; and to the CFI staff over the years for their dedication to the CFI's mission and mandate. Collectively, their commitment and contribution to the advancement of Canadian research is an inspiration.

William C. Leggett

Message from the President and Chief Executive Officer

This past year marked an important milestone for Canadian research: the passage of 10 years since the CFI was created.

In the intervening decade, the CFI's commitment of $3.74 billion to support approximately 5,300 research infrastructure projects has spanned the full spectrum of research—natural sciences, engineering, health sciences, social sciences and humanities—often in projects that bring the disciplines together in highly creative and innovative ventures.

The advent of the CFI—together with the subsequent creation of the Canada Research Chairs Program, the Canadian Institutes of Health Research, and other related initiatives—has transformed Canada's R&D enterprise. Among the most immediate and visible benefits has been the success of Canadian institutions' ability to recruit outstanding researchers despite intense world-wide competition.

These researchers, together with the availability of state-of-the-art infrastructure, have greatly enhanced the research capacity of Canadian institutions. The universities have also increased their ability to train the knowledge workers and highly skilled technical personnel that will be critical to the future of Canada's knowledge-based economy—whether in the academic, private, public, or non-profit sectors.

"As befits an organization whose name includes the word 'innovation,' the CFI has evolved considerably during its first 10 years, reflecting Canada's changing S&T landscape and the emerging needs of the institutions that are carrying out research."

As befits an organization whose name includes the word 'innovation,' the CFI has evolved considerably during its first 10 years, reflecting Canada's changing S&T landscape and the emerging needs of the institutions that are carrying out research.

The CFI's evolution was particularly evident during the past year. The first announcements of awards were made under three new funding programs: the Leading Edge Fund, the National Platforms Fund, and the Leaders Opportunity Fund. Several of these programs required close collaboration with other key stakeholders including institutions, the provinces, the private sector, and other funding agencies—an approach to R&D funding that the CFI will continue to foster as we go forward.

As the 2006–2007 fiscal year drew to a close, the Minister of Finance brought forward Budget 2007 and with it, $510 million in new funding for the CFI. This funding will allow the CFI to undertake another major competition before 2010, and continue its vital role of providing state-of-the-art infrastructure to support research and innovation. The CFI welcomes the Government of Canada's commitment to world-leading research and innovation, and its vote of confidence in Canada's research institutions and community.

Within this mandate, the CFI's objectives and practices will reflect its commitment to the principles outlined in the Government of Canada's S&T strategy, *Mobilizing Science and Technology to Canada's Advantage*:

- A continuing focus on excellence and on areas of Canadian strength and international competitiveness;
- Partnerships between academia, industry, and government that facilitate the transfer of knowledge into new products, services, and policies that will enhance our prosperity and quality of life;
- Collaboration among the research funding agencies that promote coordination and integration;
- Accountability in measuring the impact of research investments and demonstrating to Canadians the resulting economic, social, environmental, and cultural benefits.

Another very important milestone marked 2006–2007, with the appointment of Dr. William C. Leggett by the Government of Canada as the CFI's new Chair of the Board. Dr. Leggett brings with him an impressive track record as both a scientific researcher and academic leader. He is widely recognized for his strong leadership, his commitment to excellence, and his tremendous contribution to the advancement of Canadian academia and research.

Canada's R&D enterprise has made impressive advances during the past 10 years and the rest of the world has taken note. With a renewed commitment by the Government of Canada, the CFI will continue to play a vital role in advancing Canada's science, technology, and innovation agenda in the coming years. I look forward to reporting on our progress as we move into a promising new decade.

Eliot A. Phillipson

2006–2007 ACHIEVEMENTS

1 Invest in State-of-the-Art Infrastructure

Since its creation, the CFI has developed a suite of funding programs that respond to the research infrastructure needs of Canadian universities, colleges, research hospitals, and non-profit research institutions. And since it first opened its doors, the CFI has committed more than $3.74 billion in support of approximately 5,300 projects at 129 research institutions in 64 municipalities across Canada.

While adapting to the new realities and most pressing needs of a changing research environment, the CFI implemented its new funding architecture, which is designed to meet its core mandate. The following are some of the highlights from this past year:

Leading Edge Fund (LEF) and New Initiatives Fund (NIF)

The LEF strengthens highly competitive research and technology development in areas of institutional priority that build on successful and productive initiatives made possible by past CFI investments. It is designed to encourage collaborative, multidisciplinary research and technological development approaches, and to reinforce strategic planning and priority-setting by Canadian institutions.

The NIF supports infrastructure initiatives in which the CFI has not previously invested. Its purpose is to keep the Canadian R&D enterprise creative and dynamic by enabling new research ideas, different teams, and fresh approaches to emerge in promising new areas of research, while improving the institution's research competitiveness and international leadership.

A total of 487 proposals, requesting $1.42 billion from the CFI, was submitted during the LEF and NIF competitions. Of these, 86 proposals valued at $325 million were approved for funding by the Board of Directors.

Dr. Eliot Phillipson announced the results of the competitions at the University of Waterloo in November 2006.

> A collaborative consultation process

In late 2004–2005, the CFI met with academics, researchers, parliamentarians, senior government officials, provincial government representatives, private-sector leaders, public-policy analysts, and the heads of the federal research funding agencies. As a result of the consultations, the CFI developed its new funding architecture based on the pillars of sustainability, performance, merit, partnerships, benefits, and planning.

FUELING BRAIN GAIN

State-of-the-art infrastructure is key to attracting the best researchers from around the world. Since 2001, the availability of such infrastructure has been a major factor in attracting more than 8,000 new faculty members to Canadian universities.

Follow the Light

The Canadian Light Source (CLS), based at the University of Saskatchewan, is one of Canada's top science facilities. The CLS uses powerful magnets and radio frequency waves to accelerate electrons to nearly the speed of light, producing an extremely brilliant, full-spectrum beam of photons known as synchrotron light. Scientists from across Canada and the world have been attracted to the CLS to probe the structure of materials at the molecular level in ways that no other tool allows.

Leaders Opportunity Fund (LOF)

The LOF is designed to assist Canadian universities in attracting and retaining outstanding faculty members and researchers.

The LOF has three streams of infrastructure funding:

- Requests that support leading researchers;
- Requests related to the Canada Research Chairs Program;
- Requests that are submitted along with research support proposals to the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council (SSHRC).

The CFI developed the third stream in collaboration with the federal research funding agencies in an effort to streamline the application process and eliminate redundancy, while continuing to provide an accurate and fair review for both research and infrastructure proposals.

The LOF is an ongoing program with announcements being made three times a year following decisions by the Board of Directors. In 2006–2007, 558 projects were approved for funding, representing an investment of $87 million at 59 institutions.

> *"Scientific research and technological development are essential for higher productivity, and a rising standard of living. These investments will help stimulate research training of young Canadians, ensure Canada's competitiveness in the global knowledge-based economy, and ultimately improve the quality of life in Canada and around the world."*
>
> — The Honourable Maxime Bernier, Minister of Industry

National Platforms Fund

The National Platforms Fund provides funding for high-leverage enabling technologies that serve the needs of many research areas.

High Performance Computing Virtual Network

Having identified high-performance computing (HPC) as a strategic priority for Canada, the CFI brought together all stakeholders—universities, provincial and federal research funding agencies, and private sector partners—to collaborate on the development of an initiative for a shared pan-Canadian HPC resource.

In June 2006, the CFI approved a single proposal from Compute Canada on behalf of 55 Canadian institutions—bringing together the seven regional HPC consortia that had previously been individually funded by the CFI.

Dr. Eliot Phillipson, CFI President and CEO, and the Honourable Peter Van Loan, President of the Queen's Privy Council for Canada, Minister of Intergovernmental Affairs, and Minister for Sport, announced the $60 million award at the University of Toronto in December 2006. NSERC committed an additional $10 million to help fund the operating costs associated with the new HPC infrastructure. This major investment will contribute to the success of more than 6,000 researchers conducting intensive computationally challenging projects at more than 60 institutions across the country.

> *"Today's investment marks the first time that the CFI has identified a research area of strategic priority for the country and brought together all stakeholders—universities, provincial and federal funding agencies, and private sector partners—to collaborate on the development of a purposefully shared pan-Canadian resource."*
>
> — The Honourable Peter Van Loan, President of the Queen's Privy Council for Canada, Minister of Intergovernmental Affairs, and Minister for Sport

Globally renowned expert Bill Thomlinson is one such scientist who "followed the light." Formerly the head of the medical research group at the European Synchrotron Radiation Facility in Grenoble, France, this American researcher was recruited to Canada to become the Executive Director of Canada's first synchrotron. Dr. Thomlinson has steered the CLS to world-class status. And things are only going to get brighter: he and his team are overseeing the installation of seven new beamlines for ground-breaking research in the field of biomedical imaging and therapy.

Knowledge Management Resources for the Human and Social Sciences

A second call for proposals for funding from the National Platforms Fund was issued to address another need of researchers from Canadian institutions across the country: to harness, organize, and distribute the vast amount of information generated by the social sciences and humanities.

Two complementary awards were approved:

- $19.1 million for the *Digital Content Infrastructure for the Human and Social Sciences* project, led by the University of Ottawa;
- $5.8 million for the *Synergies: The Canadian Information Network for Research in the Social Sciences and Humanities* project, led by the Université de Montréal.

Dr. Eliot Phillipson, CFI President and CEO, and the Honourable Maxime Bernier, Minister of Industry, announced the awards at the University of Ottawa in February 2007.

> *"This initiative represents the collaboration and investments of all stakeholders, including the federal government."*
>
> — The Honourable Maxime Bernier, Minister of Industry

International Joint Ventures Project

The International Joint Ventures Project was designed to support a single collaborative research initiative between one or more leading Canadian institutions and at least one leading institution located outside Canada. This fund represents an important collaboration with the federal research funding agencies — CIHR, NSERC, and SSHRC — as well as Genome Canada, and brings together the very best researchers in Canada and around the world.

The Board of Directors approved an award of $35 million for the *Ocean Tracking Network* project submitted by Dalhousie University.

Dr. Eliot Phillipson, CFI President and CEO, and the Hounourable Peter MacKay, Minister of Foreign Affairs and Minister of the Atlantic Canada Opportunities Agency, announced the award at Dalhousie University in Halifax in February 2007.

> *"Today's announcement is in keeping with the objectives outlined in our recent economic plan,* Advantage Canada. *It solidifies our government's commitment to support research excellence and to target new investments in R&D to areas where Canada has the potential to be a world leader."*
>
> — The Honourable Peter MacKay, Minister of Foreign Affairs and Minister of the Atlantic Canada Opportunities Agency

Research Hospital Fund (RHF)

The RHF is a CFI program created by the federal government to contribute to large-scale, hospital-based research. These are initiatives that take full advantage of state-of-the-art equipment, innovative ways of doing research, and increased research capacity as a result of hiring additional highly qualified personnel. The RHF will help address the needs for further investment in research-hospital infrastructure, especially for new and different space, by taking a more integrated and multidisciplinary approach to health research.

There are two components under the RHF:

1) **Large-Scale Institutional Endeavours**
This component is designed for large-scale, hospital-based projects that require mostly space to support outstanding research, training, and knowledge translation.

2) **Clinical Research Initiatives (CRI)**
The CRI is a collaboration with CIHR that seeks to build and enhance Canada's capacity for clinical research. This component provides the opportunity to seek funding for infrastructure from the CFI and funding for research, training, and operations from CIHR. Through the CRI, it is also possible to apply for funding for clinical research, training, and operations without an infrastructure component.

Proposals submitted under the RHF are eligible for an Infrastructure Operating Fund contribution from the CFI.

Fantastic Voyage

Forty years after the release of the sci-fi classic *Fantastic Voyage*, a Canadian team of pioneering researchers has made the seemingly impossible dream of travelling through a living animal's bloodstream a reality.

Led by Sylvain Martel at the École Polytechnique de Montréal, the group is the first in the world to successfully

The official call for proposals was issued on February 19, 2007. It is expected that final funding decisions on the infrastructure component will be made by the Board of Directors in 2008.

Exceptional Opportunities Fund

The Exceptional Opportunities Fund was created to allow for the rare and urgent funding of a project that cannot be deferred to a normal competition cycle. It is a rapid-response mechanism designed to further assist institutions and their partners in participating in a unique, time-sensitive research opportunity where the infrastructure component is an indispensable element of the project.

One such opportunity this past year involved the *ATLAS Data Centre*, led by Simon Fraser University on behalf of a consortium of Canadian universities. This opportunity proposed a computing facility that would allow Canadian researchers to continue to play a lead role in the *ATLAS* project — a particle physics experiment that will explore the fundamental nature of matter and the basic forces that shape our universe. *ATLAS* will allow Canada to stay at the forefront of particle physics research, and facilitate Canadian participation in the largest international computing grid constructed to date.

Given a strict decision deadline, the proposal was reviewed promptly by both an expert committee and a special assessment committee. Both levels of review recommended funding. The Board of Directors approved the project with an award of $10 million, announced in April 2006.

> *"This facility will give us the tools to be leaders in the extraction of ground-breaking scientific results from the* ATLAS *data. It will also make Canada a full participant in the largest deployment of grid computing world-wide."*
>
> — Professor Michel Vetterli of Simon Frasier University, Coordinator of *ATLAS* computing in Canada

Infrastructure Operating Fund (IOF)

The IOF contributes to the incremental operating and maintenance costs of infrastructure projects funded by the CFI. Eligible institutions receive an IOF allocation representing 30 percent of the finalized CFI contribution.

The CFI disbursed a total of $51.4 million to 72 institutions through the IOF in 2006–2007.

> Volunteers — Ensuring excellence

The CFI relies on more than 500 experts in various fields to guide its funding decisions. Its independent merit-review process — which involves world-class researchers, research administrators, and users of research results from Canada and abroad — ensures that only the very best projects are funded.

navigate a microscopic magnetic bead through the artery of a living pig using MRI — opening the door to revolutionary new cancer treatments, including non-invasive cures.

But the miniature bead is not the only one to have made a fantastic voyage. Sylvain Martel was recruited back to his home country of Canada from the Massachusetts Institute of Technology in 2001 thanks to an appointment as Canada Research Chair in Micro/Nanosystem Development, Construction and Validation, and accompanying infrastructure funding from the CFI.

Committed and Projected Amounts, 1998–2010

(Figures in millions)

Fund	98–99	99–00	00–01	01–02	02–03	03–04	04–05	05–06	06–07	07–08	08–09	09–10	Total
New Opportunities	38	23	37	38	53	75	55	34	—				353
Canada Research Chairs Infrastructure			5	54	35	42	34	30	—				200
Leaders Opportunity								20	79	114	114	114	441
Career Awards					2	2	1	2	—				7
Innovation	143	225	356	590		453	4		13				1,784
University Research Development	19	10	3	2	1				—				35
College Research Development		7	9						—				16
New Initiatives/ Leading Edge									325				325
International					159				43				202
Research Hospital							67		—	433			500
Exceptional Opportunities						7		8	6				21
National Platforms									84				84
Infrastructure Operating				182	16	158	17	37	143	160	34	34	781
Unallocated											101		101
Total ($M)	200	265	410	866	266	737	178	131	693		1,104		4,850

MEETING CANADA'S NEED FOR KNOWLEDGE WORKERS

Since 2001, 41,300 post-doctoral and graduate students have undertaken research projects that were enabled by CFI-funded infrastructure. These trainees will become the knowledge workers for Canada's S&T-based businesses, a need that is expressed by many sectors of society, including the private, public, and non-profit sectors.

Small Science, Big Impact

With estimated worldwide annual industrial production exceeding $1 trillion US by 2015, highly qualified personnel in the nanotechnology and nanosystems sectors are in big demand.

The Nano-Systems Fabrication Laboratory at the University of Manitoba is a state-of-the-art training facility and a full-service "machine shop"—one of only a handful in Canada—capable of producing custom-made, high-precision micro devices for the automotive, information and communications technologies, and healthcare sectors.

> Leveraging impact — A unique funding formula

The CFI funds up to 40 percent of a project's infrastructure costs. The institutions then leverage this funding to attract the remainder from partners in the public, private, and non-profit sectors. As at March 31, 2007, the CFI had committed more than $3.74 billion. This amount, combined with partner funding, brings the total investment in state-of-the-art research infrastructure in Canada to more than $8 billion.

Fish and Cut Bait

Every year, Canada's fishing and aquaculture industries produce large quantities of processing refuse. With more stringent environmental regulations and mounting waste-management costs, producers are looking for commercial uses for their discarded materials.

The Atlantic Canada Fishery By-Products Research Centre at Memorial University in Newfoundland is helping one of Canada's longest-standing industries to be more competitive by developing new talent and expertise that will yield significant benefits for Canada. Biochemists, process engineers, lab technicians, and students are working with industry and government to develop innovative ways of converting the waste into products with economic value. These products — which range from nutraceuticals to biodiesel — will have applications in the health, food, and oil and gas industries.

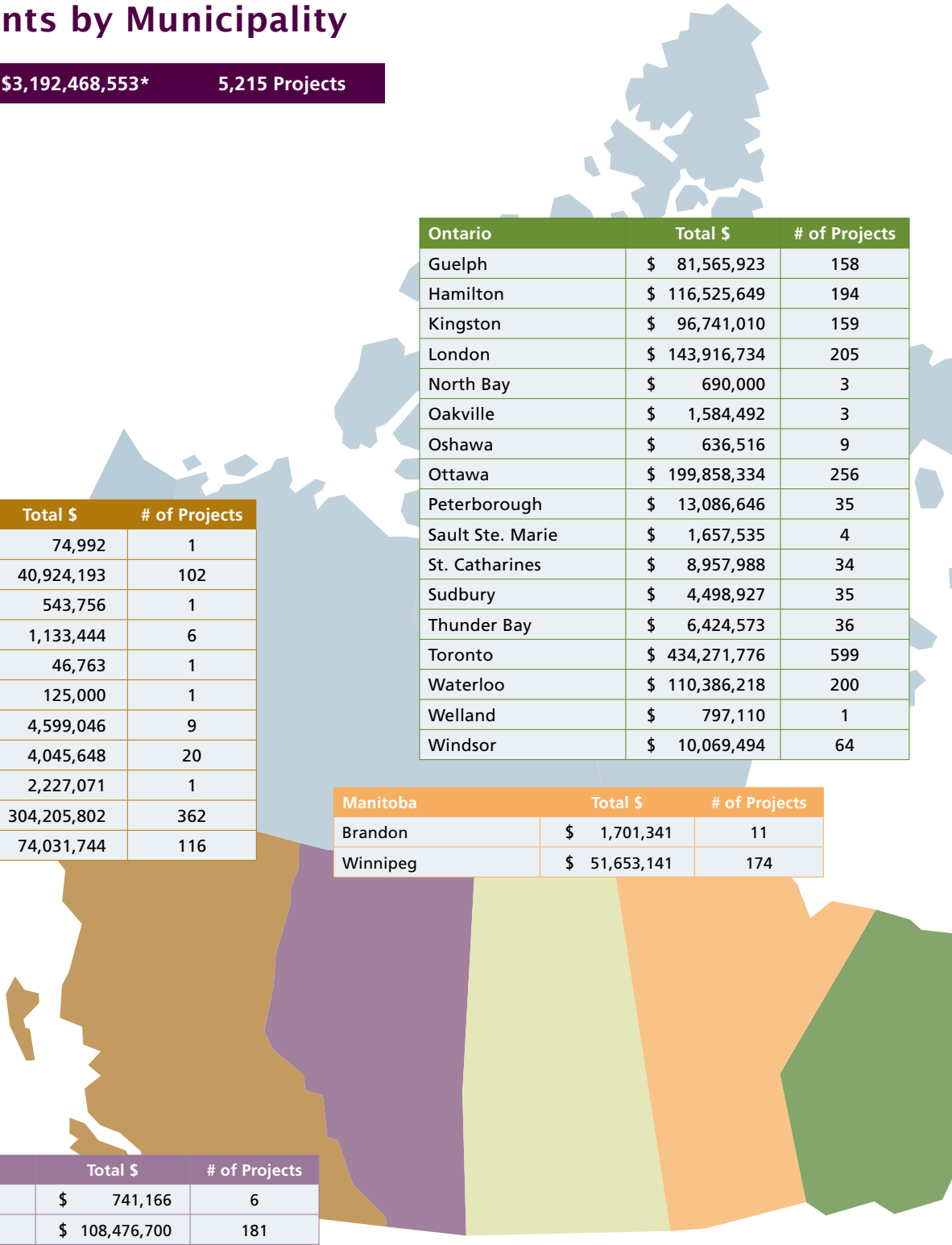
In addition to improving the environment, the centre is leading to rural job creation, reduced seasonality of employment in the fishing industry, increased economic stability and profitability of seafood-processing companies, and the development of knowledge-based biotechnology and functional food companies.

In addition to micro devices, the lab is also turning out an impressive number of experts with advanced skills and expertise in micro fabrication. The infrastructure provided by the CFI has already supported the work of over 50 faculty members and students, and has enabled partnerships between researchers and industry for prototype development.

CFI Investments by Municipality

64 Municipalities	$3,192,468,553*	5,215 Projects

As at March 31, 2007



British Columbia	Total $	# of Projects
Abbottsford	$ 74,992	1
Burnaby	$ 40,924,193	102
Castlegar	$ 543,756	1
Kamloops	$ 1,133,444	6
Kelowna	$ 46,763	1
Langley	$ 125,000	1
Nanaimo	$ 4,599,046	9
Prince George	$ 4,045,648	20
Surrey	$ 2,227,071	1
Vancouver	$ 304,205,802	362
Victoria	$ 74,031,744	116

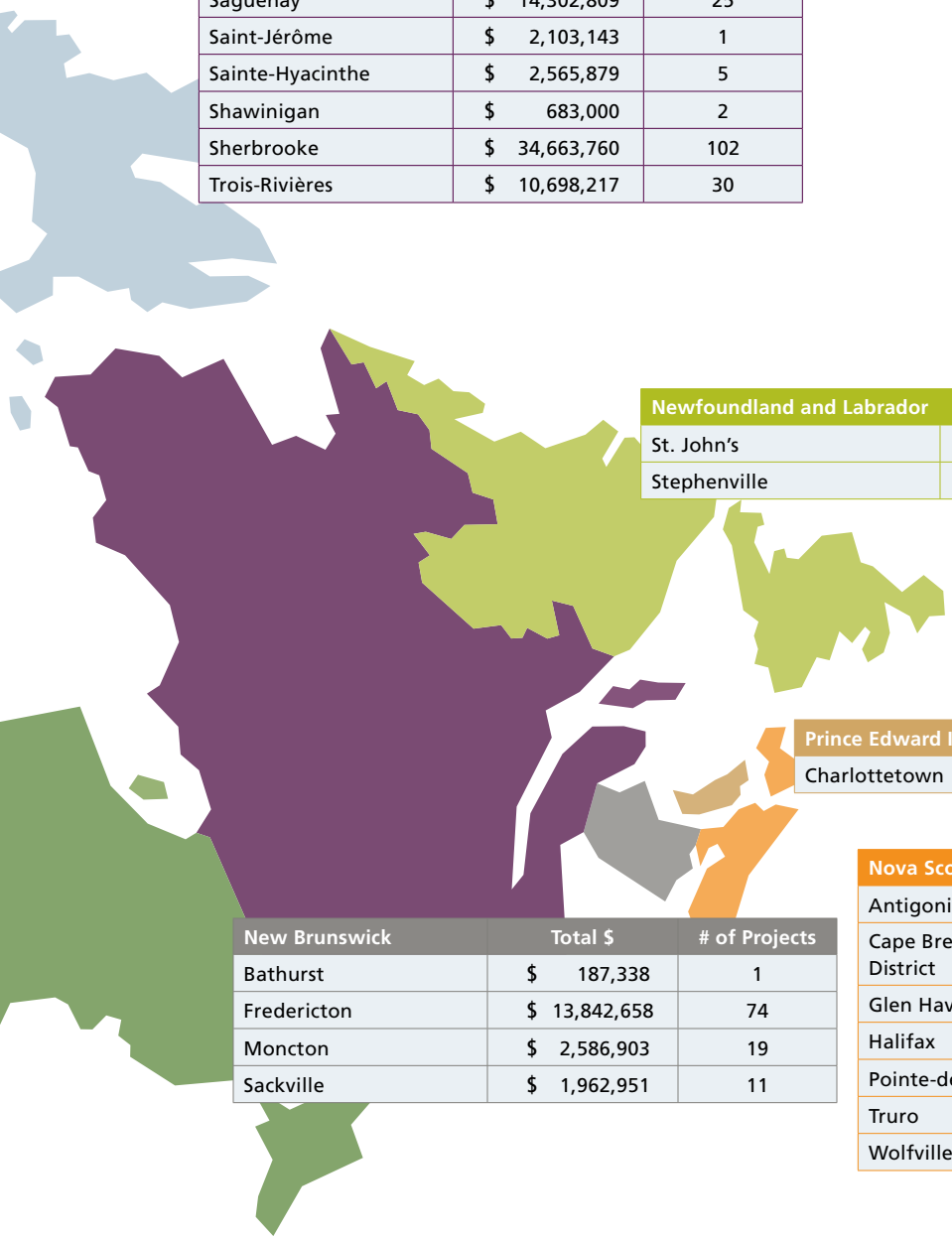
Ontario	Total $	# of Projects
Guelph	$ 81,565,923	158
Hamilton	$ 116,525,649	194
Kingston	$ 96,741,010	159
London	$ 143,916,734	205
North Bay	$ 690,000	3
Oakville	$ 1,584,492	3
Oshawa	$ 636,516	9
Ottawa	$ 199,858,334	256
Peterborough	$ 13,086,646	35
Sault Ste. Marie	$ 1,657,535	4
St. Catharines	$ 8,957,988	34
Sudbury	$ 4,498,927	35
Thunder Bay	$ 6,424,573	36
Toronto	$ 434,271,776	599
Waterloo	$ 110,386,218	200
Welland	$ 797,110	1
Windsor	$ 10,069,494	64

Manitoba	Total $	# of Projects
Brandon	$ 1,701,341	11
Winnipeg	$ 51,653,141	174

Alberta	Total $	# of Projects
Athabasca	$ 741,166	6
Calgary	$ 108,476,700	181
Edmonton	$ 205,634,542	269
Lethbridge	$ 4,952,457	18
Olds	$ 2,908,727	5

Saskatchewan	Total $	# of Projects
Regina	$ 8,165,907	37
Saskatoon	$ 152,532,820	132

Quebec	Total $	# of Projects
Gatineau	$ 3,582,718	11
La Pocatière	$ 1,010,060	3
Lévis	$ 1,017,104	2
Montréal	$ 534,808,173	823
Québec	$ 220,125,902	268
Rimouski	$ 9,670,967	19
Rouyn-Noranda	$ 3,852,798	12
Saguenay	$ 14,302,809	25
Saint-Jérôme	$ 2,103,143	1
Sainte-Hyacinthe	$ 2,565,879	5
Shawinigan	$ 683,000	2
Sherbrooke	$ 34,663,760	102
Trois-Rivières	$ 10,698,217	30



Newfoundland and Labrador	Total $	# of Projects
St. John's	$ 31,754,705	89
Stephenville	$ 670,060	1

Prince Edward Island	Total $	# of Projects
Charlottetown	$ 8,063,676	20

New Brunswick	Total $	# of Projects
Bathurst	$ 187,338	1
Fredericton	$ 13,842,658	74
Moncton	$ 2,586,903	19
Sackville	$ 1,962,951	11

Nova Scotia	Total $	# of Projects
Antigonish	$ 1,995,165	18
Cape Breton Regional District	$ 1,135,590	12
Glen Haven	$ 126,000	1
Halifax	$ 82,824,551	184
Pointe-de-l'Église	$ 72,081	1
Truro	$ 5,025,426	18
Wolfville	$ 2,743,734	14

*Does not include Infrastructure Operating Fund allocations or the Compute Canada project under the National Platforms Fund.

2006–2007 ACHIEVEMENTS

2 Plan and Monitor Investments

> "The CFI recognizes the importance of making strategic decisions based on where the funding is needed most, where it will have the greatest impact, and how we can help ensure Canada's place at the forefront of a given sector or technology."

The CFI has always taken great care in selecting where and how its investments in research infrastructure are made. With so much at stake, the CFI recognizes the importance of making strategic decisions based on where the funding is needed most, where it will have the greatest impact, and how we can help ensure Canada's place at the forefront of a given sector or technology.

The CFI continued to monitor its investments closely this past year. And through its Audit and Finance Committee, the CFI continued to employ sound financial methods and governance practices in the management of the funds received from the Government of Canada.

Financial highlights

The CFI maintains proper financial controls to ensure the best use of public funds. External auditors issued an unqualified audit opinion about the CFI financial statements, which appear at the end of this report.

As at March 31, 2007, the CFI had received a total of $3.65 billion, as well as $964,384 in accrued interest in 1997, from the Government of Canada. The following are highlights of the CFI's audited financial statements:

- Total funds under management (investments as per the balance sheet) amounted to $2.435 billion.
- Since 1997, the average annual rate of return on the invested amount has been 5.58 percent.
- CFI investments are subject to strict guidelines. To ensure diversification and compliance with its Funding Agreement, the funds have been placed in a variety of secure investment vehicles:
    - $73 million in money market funds
    - $325 million in mortgage-backed securities
    - $1.944 billion in bonds
    - $93 million in amortizing bonds

Since 1997, $2.276 billion has been disbursed to fund research infrastructure. This reflects the proportional share of the CFI contribution and the level of completion of the project (most construction projects span many months or years).

ENHANCING CANADA'S INTERNATIONAL REPUTATION

In the last year alone, more than 7,600 visiting researchers from around the world made use of state-of-the-art infrastructure at Canadian universities, research hospitals, and colleges. Canada's investments in research have attracted international attention and there is a growing sense that when it comes to science, Canada matters.

Under the Sea

Dalhousie University in Halifax, Nova Scotia, has become the epicenter for an international oceans research project that will change how scientists and world leaders understand and manage the pressing global concerns of fisheries management in the face of climate change.

The *Ocean Tracking Network* unites the finest marine scientists in the world, in the most comprehensive and

Financial monitoring practices

The CFI conducts monitoring visits at research institutions to ensure that funds are used effectively, economically, and in the best interest of Canada's research enterprise. The objectives of the monitoring visits are to:

- assess the adequacy of policies, controls, and systems in place at the institution to ensure that the CFI's policies and guidelines are followed, and that the funds awarded are being well managed;
- review a sample of expenditures and awards to ensure that they were made in accordance with the terms and conditions of applicable award agreements, and that they comply with CFI policies and guidelines;
- disseminate information on CFI policies, guidelines, and expectations for financial accountability and integrity.

The top 85 to 90 percent of CFI-funded institutions (based on funding received from the CFI) are subject to a monitoring visit. Since 2002, the CFI has conducted 46 monitoring visits at 29 institutions. On average, these visits are performed every three years.

In addition, a risk-based audit approach is used to determine which funded projects are subject to a contribution audit. These audits are conducted using either external auditors or internal resources. In 2006–2007, 24 contribution audits—either interim or final—were performed.

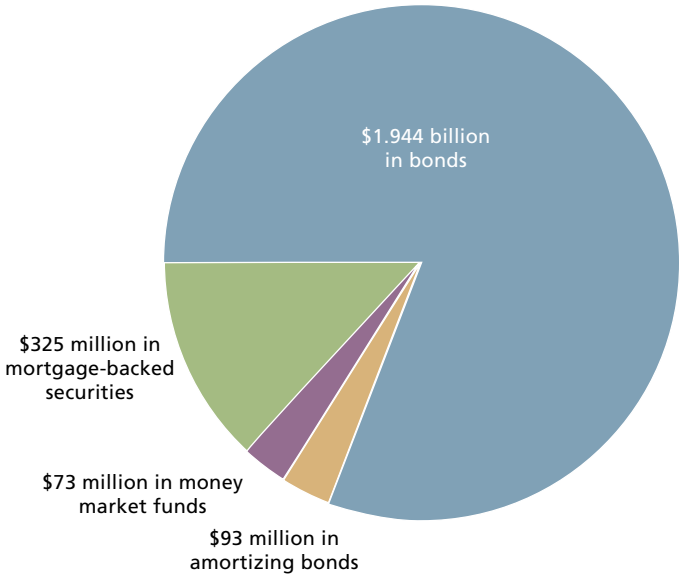
Responsible management of investments

The Investment Committee continued to oversee all matters related to managing the investment of the CFI's funds. A buy-and-hold strategy is deployed to achieve investment objectives and remain compliant with its Funding Agreement. The CFI will hold only investments permitted under that agreement.

Although investment guidelines only allow for liquid, low-risk investment instruments, the CFI's investment practices achieve the principal objective of preserving the capital to meet future disbursement requirements.

The CFI investment strategy and investment policy are reviewed annually, and the portfolio is reviewed regularly.

CFI Funds Under Management



revolutionary examination of marine life and ocean conditions ever undertaken. Cutting-edge Canadian sensor technology installed at strategic locations in 14 ocean regions around the world will allow researchers to record the movement and behaviour of fish and other marine life, as well as monitor ocean characteristics, such as water depth, temperatures, and chemistry. Collecting oceanic data on such a grand scale has never before been undertaken.

2006–2007 ACHIEVEMENTS

3 Maintain Strong Accountability Mechanisms

The CFI is committed to the principle of accountability and has many mechanisms in place to help it operate in a highly transparent manner. In 2006–2007, the CFI continued to implement measures to ensure its accountability to both the Government of Canada and to the Canadian public through a wide range of activities.

The following are a few of the important highlights of the CFI's accountability activities in the past year:

- An annual report was presented to the Minister of Industry in October 2006;
- A corporate plan was submitted to the Minister of Industry in January 2007;
- CFI representatives made four appearances in front of parliamentary committees;
- The Board of Directors met three times: June 2006 in Calgary, Alberta; November 2006 in Fredericton, New Brunswick; and March 2007 in Ottawa, Ontario;
- The CFI held its annual public meeting in October 2006;
- The CFI made eight funding announcements.

The CFI was also the subject of the following audits that, once again, confirmed that it is managed in a responsible and accountable manner:

Industry Canada Compliance Audit

Following an audit requested by Industry Canada in 2006, the CFI was found to be in compliance with the requirements of its Funding Agreement.

Treasury Board Evaluation of Foundations

The evaluation carried out between September 2006 and March 2007 by KPMG concluded that foundations, including the CFI, provide an appropriate means of addressing public policy.

> "...the foundation approach is appropriate in situations when there is a combination of specific multi-year needs, capacity for independent non-partisan decision making, flexible multi-year funding of supported activites and, ideally, opportunities to obtain additional funding for activities from third parties."
>
> — KPMG, Evaluation of Foundations

Mining Matters

More than two kilometers underground, deep within the Creighton Nickel mine in Sudbury, resides one of Canada's most exotic scientific laboratories. Protected from the radiation at the earth's surface, SNOLAB could put Canada on the map as the first country to identify dark matter particles, believed to make up a quarter of our universe.

Connecting with Canadians

The CFI is committed to demonstrating the importance, benefits, and relevance of research made possible with CFI funding. In the last year, the CFI reached millions of Canadians through a wide range of communication activities:

- The CFI worked closely with funded institutions and the Government of Canada on 56 **special events** to celebrate the impacts and benefits of research infrastructure funding.
- The CFI published six issues of its online magazine ***InnovationCanada.ca***, and received 18 million hits (or almost 500,000 unique visits) in 2006–2007. It was also awarded the Canadian Public Relations Society's National Award of Excellence in the category of Electronic and Interactive Communication.
- The CFI's **corporate website**, which provides information on its programs, awards, and the results of evaluations, received more than 12 million hits (or almost 700,000 unique visits) in 2006–2007. The CFI introduced an updated Media Room to the website, including a Real Simple Syndication (RSS) feed. It received more than 12,000 page views between November 2006 and March 2007 and has since become the most visited area of the website.

- The CFI's **Superstars of Innovation Writer's Award** recognizes excellence in Canadian science writing. The 2006 recipient was Brian Bergman, a freelance writer from Calgary, for an article on stem cell research. The winner was selected by a distinguished panel of judges chaired by Jay Ingram, host and producer of the popular television show Daily Planet on Discovery Channel Canada.
- In February 2007, the CFI participated in the **American Association for the Advancement of Science (AAAS)** annual meeting in San Fransisco, California. This provided an excellent opportunity for international profile and collaboration.
- The CFI hosted a networking session at the annual conference of the **Federation of Canadian Municipalities** held in Montreal in June 2006. More than 150 delegates attended the water management session.
- The CFI held its **annual public meeting** in Ottawa at the Canadian War Museum in October 2006. The CFI Chair tabled the 2005–2006 annual report and welcomed special guest Dr. Alan Leshner, President and CEO of AAAS — who shared his insight on the changing relationship between science and society. He also spoke about the importance of true dialogue on the complex socio-economic, environmental, political, and ethical issues raised by advances in science. More than 200 people representing a wide range of sectors attended the meeting.
- As part of its youth strategy, the CFI collaborated with several national organizations, including the Sanofi-Aventis Biotech Challenge, the Youth Science Foundation, Schad Valley, and Actua to communicate positive messages about science to thousands of teachers and students across Canada.

A team of 200 scientists from 15 countries has begun the search by measuring neutrinos — tiny and transparent sub-atomic particles produced by the sun — captured by the Sudbury Neutrino Observatory, SNOLAB's sister facility. Already, the results of their research have prompted a revision of the Standard Model — the theory describing the elementary particles that form the building blocks of all matter. More answers are sure to come as even more researchers from around the world continue to probe the universe's deepest mysteries.

Evaluation, outcomes, and impacts

Over the past year, evaluation and outcome assessment activities at the CFI have undergone renewal and growth—both in terms of resources invested and the tools used to capture data on the effectiveness of CFI programs and the impact of its investments. Providing consistent, solid information is required both as part of the CFI's accountability to government and to support future directions and program planning.

Drawing on its current evaluation framework, the CFI collects and analyzes information using the following mechanisms:

Third-party program evaluations

CFI completes interim and cumulative evaluations of its individual programs on a priority basis. In September 2006, a consulting firm was chosen to carry out the final evaluation of the New Opportunities Fund. The evaluation report is posted on the CFI's corporate website.

Annual progress report analysis

The information that the CFI collects annually in progress reports provides a rich, multi-year information resource for quantitative and qualitative analysis of a number of factors—from attracting, training, and retaining highly qualified personnel, to infrastructure operating and maintenance requirements. All reports—including those from 2006—are available on the CFI's corporate website.

Outcome measurement studies

The Outcome Measurement Study (OMS) was developed from design to pilot phase over the past year to strengthen insight on several measures of change at institutions that could not be studied adequately through existing evaluation tools. The OMS assesses the impact of CFI funding at selected institutions in specific thematic areas, using a questionnaire followed by a site visit by an expert panel. Three pilot studies were conducted in collaboration with provincial government representatives and were reviewed by an expert panel during a workshop in early 2007.

BUILDING TECHNOLOGY-BASED CLUSTERS

CFI-funded infrastructure projects are located in 64 municipalities across Canada. Increasingly, researchers from elsewhere in the host province and abroad are using this infrastructure, which serves as a magnet for investment and talent.

The Green House

The world's urban population is set to double by 2050. How will the world deal with this "urban tsunami"?

A multidisciplinary team of researchers at the Centre for Interactive Research in Sustainability (CIRS) in British Columbia believes the answer to that question lies in finding workable solutions to the challenges of urban sustainability.

As a building, the CIRS will be a living laboratory that pushes the frontiers of sustainable construction materials and building techniques, requiring almost no off-site energy, water, or wastewater systems to function. As a research program, it will create new knowledge and new

> Social and economic benefits

Since 2001, the availability of infrastructure has helped with the:

- creation of 155 spin-off companies;
- generation of 528 new intellectual property rights;
- development of 653 new or improved public policies and programs;
- creation of 504 new public- or private-sector jobs;
- development of 837 new or improved products, processes, or services.

Approximately 80 percent of project leaders indicate that their research infrastructure has helped in the generation of social and economic benefits in areas such as health, chemical engineering, information technology, astronomy and astrophysics, earth sciences, animal biology, manufacturing, and material sciences.

From Outer Space to Inner Space

Imagine an operating room where the surgeon performs a procedure of unmatched accuracy and precision without ever having to touch you. Sound impossible? Not in Calgary. The launch of NeuroArm is putting the University of Calgary and the Calgary Health Region at the forefront of the emerging field of biomedical engineering, and is helping to establish Canada's leadership role in image-guided robotic surgery.

One of the most advanced robotic systems ever developed, NeuroArm was designed and built in collaboration with MDA, the Canadian company world-renowned for building the Canadarm used on the space shuttle and the international space station. Of course, world-class innovation like this doesn't happen in isolation. NeuroArm was made possible thanks to a powerful collaboration between numerous universities, multidisciplinary research teams, industry partners, and the Calgary community. Together, they've transferred technologies developed for space into the operating room — providing unprecedented care and safety to patients in Canada.

solutions by enabling collaboration between disciplines, among academic institutions, and among the public, private, and non-profit sectors. Most importantly, the Centre will apply its research through community engagement, collectively identifying the key social, economic, ecological, and cultural issues that are relevant to the local community, the region, and the province.

2006–2007 ACHIEVEMENTS

4 Collaborate with Stakeholders

Through its funding programs, evaluations, and international partnerships, the CFI continues to work with federal research funding agencies, research institutions, associations, provincial and municipal governments, and the private and non-profit sectors to address long-term strategic directions for research funding in Canada.

Collaboration with federal research funding agencies

The CFI and the three federal research funding agencies—the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council (SSHRC)—worked together to create a more streamlined funding application process for one of its core funding programs—the **Leader's Opportunity Fund**. The goal of these collaborations is to reduce the applicant and reviewer workload while continuing to provide an accurate and fair review process.

The **International Joint Venture Project** represents another important collaboration with the federal research funding agencies and Genome Canada. Headquartered at Dalhousie University in Halifax, the *Ocean Tracking Network* will ensure Canada's leadership role in an international research initiative, and will promote a distinctive Canadian contribution through partnerships with the very best researchers and institutions in the world.

Recognizing the need and opportunity to strengthen clinical research in Canada, the CFI and CIHR are working together to foster collaboration across institutions, regions, and various research sectors through the **Clinical Research Initiatives**. The CFI and CIHR are coordinating their efforts and resources to achieve enhanced national impact as well as increased value and efficiencies in the application process for institutions, investigators, and reviewers.

The CFI led a collaborative initiative through the **National Platforms Fund** with the three federal research funding agencies, the provinces, and several other partners to create a national high-performance computing (HPC) network across Canada. This network builds upon seven regional HPC consortia in which the CFI has previously invested, and takes advantage of the exceptional capabilities provided by CANARIE, the world's first national fibre optic Internet research and education network. This system will link all of Canada's universities, and will do for Canada's knowledge-intensive economy what the building of a transcontinental railway did for the natural resource and industrial economies of the 19th and 20th centuries.

FOSTERING COLLABORATION

In the last year alone, nearly 5,600 individuals from the private, public, and non-profit sectors used CFI-funded research infrastructure. Since 2001, nearly 2,100 research collaborations between research institutions and other sectors have benefited from CFI-funded infrastructure.

It's a Wired World

From e-mail and cellphones, to YouTube and Facebook, technology has revolutionized the way we communicate with one another. But how does

International collaboration

The CFI is one of eight Canadian federal partners involved at the international level to promote the exchange of knowledge and expertise through the **ERA-Can** initiative. Its goal is to increase the profile and impact of science and technology cooperation between Canada and the European Research Area. As well, it will:

- provide an opportunity for the Canadian and European research communities to exchange information so they can better understand each other;
- provide information about opportunities for research collaboration and researcher mobility;
- enable international knowledge sharing of best practices with respect to the planning and implementation of policies and practices supporting S&T and innovation;
- facilitate knowledge translation into technological applications and policy developments.

Collaboration with research institutions and provincal governments

Assessing the effects of CFI investments is critical as we continue to evolve our funding programs to meet the needs of the research community. Over the past year, the CFI continued to work with consultants, the provinces, and institutions to design mechanisms to evaluate the impact of its funding programs. This collaboration helps the CFI to better measure its expected outputs and outcomes, as well as its progress in supporting national objectives.

Seeing Oil the Possibilities

The University of New Brunswick's (UNB) Institute for Materials Visualization and Analysis is a nucleus for research expertise in the visualization and analysis of materials at the nanometer scale. The cutting-edge facility brings together a variety of state-of-the-art imaging technologies — ranging from magnetic resonance imaging (MRI) and electron microscopy, to electron-probe microanalysis and radiation tomography.

Partners are lining up from around the globe and from all sectors — academia, government, and industry — to tap into the Institute's expertise. UNB and Green Imaging Technologies Inc. (GIT) — the first of several commercial spin-offs from the Institute — signed an agreement that provides GIT with exclusive rights to new testing methods developed at the Institute's MRI Centre. Based on more than a decade of research, this new technology offers a faster and more accurate method of testing rock samples to determine when, where, and how to exploit hidden reserves.

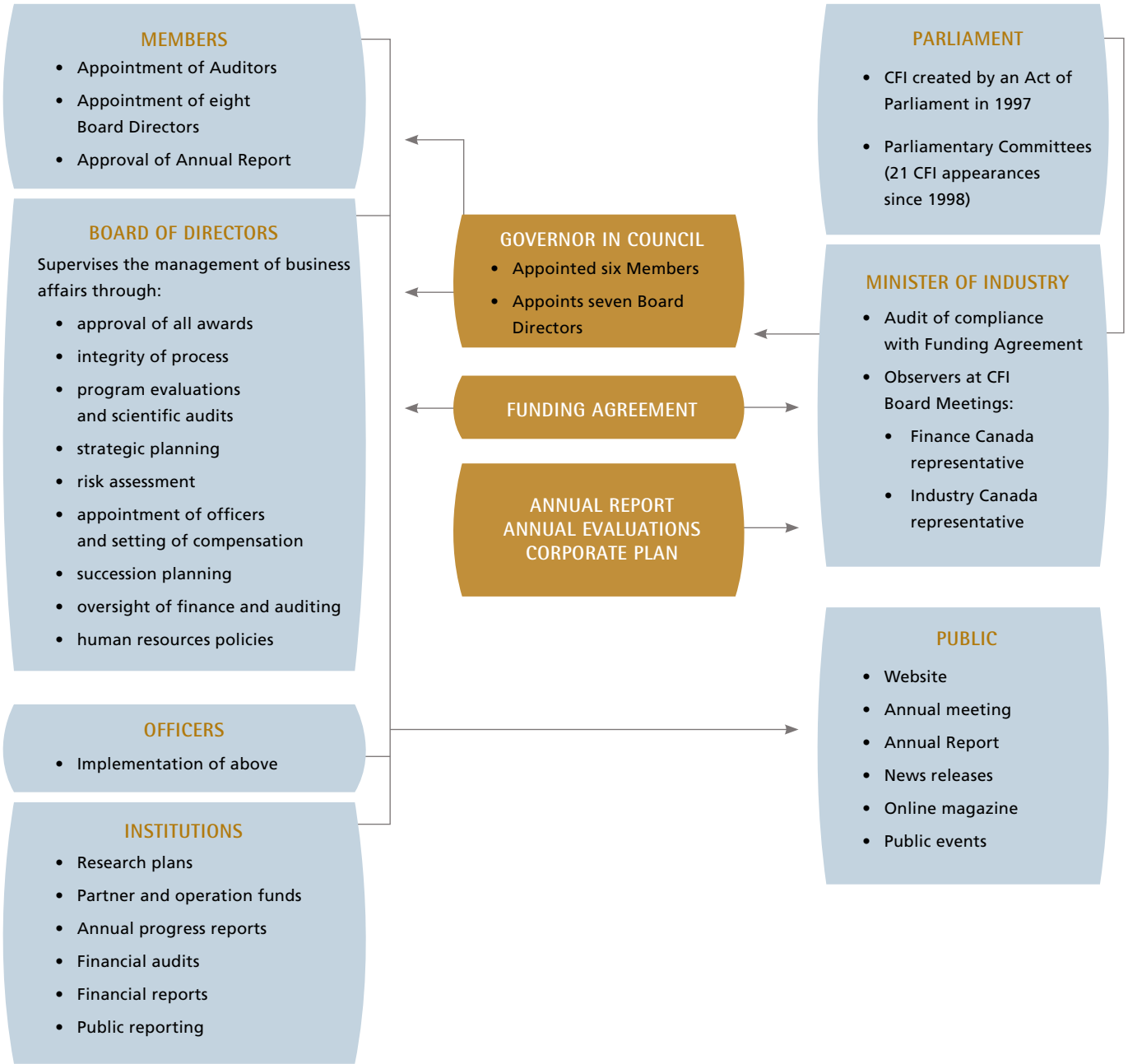
living in a high-tech world impact the way we learn? Researchers at the Institute for Interdisciplinary Research in Culture, Multimedia, Technology, and Cognition hope to answer this important question by looking at how multimedia, like language, affects the brain.

The research at the Institute is a collaboration between three maritime universities: the University of Prince Edward Island, the University of New Brunswick, and l'Université de Moncton. A multidisciplinary group of researchers — from education, linguistics, musicology, computer science, artificial intelligence, and psychology — are working together on a new model that can guide decisions about how to best use multimedia for education, information delivery, and entertainment. The work of these three universities could give Canada a competitive advantage in the commercialization of rich media-learning tools in the international marketplace.

GOVERNANCE

There is high expectation in Canada for public agencies to carry on their activities in ways that are open, transparent, and accountable. The CFI's governance structure assures constant oversight, invites public scrutiny, and relies on the wise governance of expert Canadians who uphold governance practices, and protect the public interest in every undertaking.

Over the past year, the Board of Directors has made difficult funding decisions involving more than $700 million in the context of an evolving S&T environment. And it is in this context that the Board continues to devote considerable time to strategic planning and consultation, leading to more informed decisions, better program design and delivery, and even more robust communications initiatives with its stakeholders.



Members

The Board of Directors reports to Members—a governing body similar to a company's shareholders but representing the Canadian public. Members are nominated and appointed for a five-year term and are responsible for:

- the appointment of eight of the 15 Board Directors;
- the appointment of auditors;
- the review of audited financial statements;
- the approval of the annual report at the annual public meeting.

Gail Dinter-Gottlieb
President and Vice-Chancellor,
Acadia University

Jim Friesen
Professor, Banting and Best Chair,
Department of Medical Research,
University of Toronto

David Fung
Chairman and Chief Executive Officer,
ACDEG Group

Gail Gabel
Executive Vice-President, Corporate Affairs,
Environmental Sensors Inc.

Jean-Paul Gourdeau
Past Chairman, École Polytechnique
de Montréal

Arthur Hanson
Distinguished Fellow and Senior Scientist,
International Institute for Sustainable
Development

Murray Knuttila
Professor, Department of Sociology
and Social Studies; Research Faculty,
Saskatchewan Population Health and
Evaluation Research Unit, University
of Regina

Marie-Andrée Mallette
Director, Farm Credit Canada;
Vice-President, Strategic Development,
Adnutrio International Ltd.

Rick Miner
President, Seneca College of
Applied Arts and Technology

Michel Nadeau
Corporate Director and Strategic
Management Consultant

Dee Parkinson-Marcoux
Consultant and Strategic Advisor,
Ensyn Petroleum Inc.

Martha Piper
Past President and Vice-Chancellor,
University of British Columbia

Donald J. Savoie
Clément-Cormier Chair in Economic
Development, Université de Moncton; Simon
Reisman Fellow, Treasury Board of Canada

Matt Spence
Past President and Chief Executive
Officer, Alberta Heritage Foundation
for Medical Research

William G. Tholl
Secretary General and Chief Executive
Officer, Canadian Medical Association

Board of Directors

The Board of Directors meets a minimum of three times per year and is composed of 15 individuals from a variety of backgrounds. Each Director has a unique perspective and understanding of the research world, and brings expertise from one or more of the private, institutional, academic, research, or government sectors. Seven Directors are appointed by the Government of Canada, one of whom is a representative from one of the federal research funding agencies, on a rotational basis. Directors are nominated and then appointed for a three-year term.

William C. Leggett, Chair
Principal Emeritus, Professor Emeritus of Biology, Queen's University

Kevin O'Brien Fehr, Vice-Chair
Director, R&D Alliances, GlaxoSmithKline Inc.

Lorne A. Babiuk
Director, Vaccine and Infectious Disease Organization, University of Saskatchewan

Claude Benoît
President and Chief Executive Officer, Old Port of Montreal; Director, Montreal Science Centre

Alan Bernstein
President, Canadian Institutes of Health Research

Aldée Cabana
Corporate Board Director; Former Rector, Université de Sherbrooke

Elizabeth Cannon
Dean, Schulich School of Engineering, University of Calgary

David Dolphin
University Killam Professor Emeritus, University of British Columbia

Michel Gervais
Director General, Centre Hospitalier Robert-Giffard

Robert J. Giroux
Chair, Canadian Council on Learning; Consultant in public management; Part-time member of the Federal Public Service Staffing Tribunal

Gary Glavin
Professor, Faculty of Medicine Departments of Pharmacology and Therapeutics and Community Health Science, University of Manitoba

Linda Hohol
President, TSX Venture Exchange

Ross McCurdy
Executive Vice President and Chief Operating Officer, Ocean Nutrition Canada

Gerri Sinclair
Executive Director, World Center for Digital Media

Ronald Whelan
Chairman, Archive Committee, Canadian Medical Association

Committees

Audit and Finance
Aldée Cabana, Chair
Claude Benoît
Kevin O'Brien Fehr
William C. Leggett
Ross McCurdy
Ronald Whelan

Investment
Lorne A. Babiuk, Chair
Aldée Cabana
William C. Leggett

Governance and Nominating
David Dolphin, Chair
Elizabeth Cannon
Michel Gervais
Gary Glavin
William C. Leggett
Gerri Sinclair

Ranges of remuneration
For the fiscal year ending March 31, 2007, compensation was within the following annual salary ranges:

CFI Management (Officers)
Eliot A. Phillipson
President and Chief Executive Officer
$188,000 to $235,000

Carmen Charette
Senior Vice-President
$139,900 to $186,600

Suzanne Corbeil
Vice-President, External Relations and Communications
$125,000 to $173,000

Manon Harvey
Vice-President,
Finance and Corporate Services
$125,000 to $173,000

Employees
(whose remuneration exceeds $100,000, including any fee, allowance, or other benefit paid in year)

Director, Programs and Planning
$98,900 to $131,900

Director, Corporate Services
$76,800 to $102,300

Senior Advisor, External Relations and Communications
$76,800 to $102,300

Coordinators, Institutional Relations
$76,800 to $102,300

Board Directors and Members
To determine remuneration, the Board uses the guidelines established by the Government of Canada entitled *Remuneration Guidelines for Part-Time Governor in Council Appointees in Crown Corporations*. Directors who opt to receive remuneration from the CFI are entitled to an annual retainer of $5,000, while committee Chairs receive $7,500, and the Board Chair is entitled to $10,000. They are also entitled to receive a per-diem fee of $750 for attending Board or committee meetings, and a $500 fee for attending a committee meeting associated with a Board meeting. Members are not entitled to any remuneration. They may, however, be reimbursed for any reasonable out-of-pocket expenses they incur while performing their duties or attending CFI meetings. The remuneration of Board Directors was in the range of $0 to $11,500.

Retiring Board Directors, Members, and senior employees
Much of the CFI's success can be attributed to the outstanding direction provided by its Board of Directors, Members, and senior employees. The CFI would like to thank them for their expertise, hard work, and dedication.

Members
Angus Bruneau	1997–2006
Monique Lefebvre	1997–2006
Judith Maxwell	1997–2006
Ronald Steer	1997–2006
Jean-Paul Gourdeau	2004–2007

Board Directors
John Evans, Chair	1997–2007
Robert Phillips	1997–2006
Stella Thompson	1997–2006

Senior Employees
Carmen Charette	1997–2006

PLANNING FOR THE FUTURE
2007–2008

Given the rapidly evolving research and innovation environment (both nationally and internationally), the pace of emerging new technologies, and the highly competitive global demand for new ideas and highly qualified personnel, the need for state-of-the-art research infrastructure has never been higher or more pressing.

In the year ahead, the CFI will continue to play a critical role in the implementation of government policy by providing state-of the-art infrastructure. The CFI will contribute to a knowledge advantage for Canada through the following key objectives:

1 Promote world-class excellence by sustaining and evolving the infrastructure to meet new research demands

Investments in research infrastructure will be planned and implemented within the context of the overall S&T strategy *Mobilizing Science and Technology to Canada's Advantage* in which the needs of all sectors (academic, business, and government) are considered, and in which an appropriate balance of investments is maintained among the elements of the R&D enterprise—the direct and indirect costs, the human resources, and the infrastructure. The CFI will continue to sustain, enhance, and support Canada's research infrastructure needs by:

- initiating the implementation of the estimated 560 new projects approved by the Board of Directors last year, while continuing to administer 4,500 projects funded previously;
- committing an estimated $85 million through its Leaders Opportunity Fund to assist universities to attract and retain high-quality researchers;
- conducting a final $450 million competition under the Research Hospital Fund, including $100 million for the joint Clinical Research Initiatives with the Canadian Institutes for Health Research;
- consulting with our key stakeholders to design a major funding competition.

2 Encourage partnerships between academia and industry

Investments in infrastructure through research institutions enhance local and regional technology and business clusters. Such clusters often coalesce around major or unique infrastructure facilities or technology platforms, bringing together a network of interrelated industrial, financial, and academic enterprises and their respective talent pools.

Through its infrastructure investments, the CFI will continue to encourage and foster the R&D networks and interactions that contribute to innovation and knowledge translation, and enhance the international impact of Canada's research institutions.

The CFI will also continue to look for opportunities to work with federal research funding agencies, the provinces, industry, and other stakeholders to develop and refine its programs and evaluation practices, and further reduce redundant workloads through joint programming and timing.

3 Remain accountable and transparent

The CFI will continue to implement measures to ensure its accountability to the Government of Canada and to the Canadian public.

The CFI will submit two key documents to the Government of Canada: an annual report—containing information on financial performance, funded projects, and the achievement of objectives—and a corporate plan, including planned expenditures, objectives, and performance expectations.

The Board of Directors will meet a minimum of three times in 2007–2008 to make funding decisions and provide strategic direction to the organization.

The CFI will use a variety of communication vehicles to inform the Canadian public about the impact of investments in research infrastructure, including the annual public meeting and its online magazine *InnovationCanada.ca*.

As part of its accountability mechanism, the CFI will conduct outcome assessment visits—including expert reviews on a range of infrastructure projects in specific thematic areas—as well as monitoring visits and contribution audits of funded institutions. It will also undertake the annual analysis of project progress and institutional reports of more than 5,000 projects, as well as analyses of previous competitions.

Canada Foundation for Innovation

FINANCIAL STATEMENTS

March 31, 2007

Auditors' Report

To the Members of the
Canada Foundation for Innovation

We have audited the balance sheet of the **Canada Foundation for Innovation** as at March 31, 2007 and the statements of operations and cash flows for the year then ended. These financial statements are the responsibility of the Foundation's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Foundation as at March 31, 2007 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Ernst & Young LLP

Chartered Accountants
Licensed Public Accountants

Ottawa, Canada
May 11, 2007

Canada Foundation for Innovation

Balance Sheet

As at March 31

	2007 $	2006 $
Assets		
Cash	**2,434,373**	7,959,296
Interest and other receivables	**37,184,133**	25,869,552
Investments [*note 3*]	**2,435,105,736**	2,681,097,962
Prepaid expenses	**93,686**	250,161
Capital assets [*note 4*]	**1,205,677**	1,556,415
	2,476,023,605	2,716,733,386
Liabilities and Net Assets		
Accounts payable and accrued charges	**457,107**	794,199
ERA-Can project deposits	**333,519**	287,139
	790,626	1,081,338
Deferred contributions: [*note 5*]		
Expenses of future periods	**2,474,027,302**	2,714,095,633
Capital assets	**1,205,677**	1,556,415
	2,475,232,979	2,715,652,048
Commitments [*note 7*]		
Net assets [*note 6*]	**—**	—
	2,476,023,605	2,716,733,386

See accompanying notes

Canada Foundation for Innovation

Statement Of Operations

Year ended March 31

	2007 $	2006 $
Revenues		
Recognition of deferred contributions relating to amounts granted to eligible recipients	**355,347,745**	427,425,936
Recognition of deferred contributions relating to current year operations	**10,950,261**	9,085,628
Amortization of deferred contributions relating to capital assets	**393,574**	430,810
	366,691,580	436,942,374
Expenses		
Grants to eligible recipients	**355,347,745**	427,425,936
General and administration	**10,950,261**	9,085,628
Amortization of capital assets	**393,574**	430,810
	366,691,580	436,942,374
Excess of revenues over expenses	**—**	—

See accompanying notes

Canada Foundation for Innovation

Statement Of Cash Flows

Year ended March 31

	2007 $	2006 $
Operating activities		
Excess of revenues over expenses	—	—
Items not involving cash:		
Amortization of capital assets	**393,574**	430,810
Amortization of deferred contributions related to capital assets	**(393,574)**	(430,810)
Loss on equipment disposals and write-offs	—	3,118
Decrease of deferred contributions related to equipment disposal	—	(3,118)
Net decrease in deferred contributions related to expenses of future periods	**(240,068,331)**	(289,079,295)
Change in non-cash operating working capital	**(11,448,818)**	6,154,412
Cash used in operating activities	**(251,517,149)**	(282,924,883)
Financing and investing activities		
Purchase of capital assets	**(42,836)**	(170,250)
Increase in deferred contributions related to capital assets	**42,836**	170,250
Proceeds on equipment disposals	—	1,450
Decrease in deferred contributions related to capital assets	—	(1,450)
Net sale of investments	**245,992,226**	288,588,794
Cash provided by financing and investing activities	**245,992,226**	288,588,794
Net increase (decrease) in cash	**(5,524,923)**	5,663,911
Cash, beginning of year	**7,959,296**	2,295,385
Cash, end of year	**2,434,373**	7,959,296

See accompanying notes

Canada Foundation for Innovation

Notes to Financial Statements

March 31, 2007

1. General

The Canada Foundation for Innovation ["the Foundation"] was incorporated under Part 1 of the *Budget Implementation Act*, 1997 on April 25, 1997 for the purpose of making research infrastructure grants to Canadian universities, colleges, hospitals, and other not-for-profit research institutions to increase the capability of carrying on high quality research.

2. Significant Accounting Policies

The financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles. The following are the significant accounting policies:

Revenue recognition

The Foundation follows the deferral method of accounting for contributions which include government grants and, potentially, donations from other sources.

Under the *Budget Implementation Act*, 1997 ["the Act"], the Foundation has, since inception, received grants from the Government of Canada totaling $3.65 billion plus accrued interest of $964,384 on the initial contribution to be held, invested, administered and disbursed in accordance with the Act and the related Funding Agreement between the Foundation and the Government of Canada. All grants and related interest have been received and recorded in prior fiscal years.

In March 2007, it was announced in the 2007 Budget that the Government of Canada would provide an additional $510 million to the Foundation to be used to enhance the support the Foundation provides for eligible costs specified in the Funding Agreement. An additional sum of $80 million for the purposes of the Leaders Opportunity Fund was provided for in the 2006 Budget. These amounts are pending final approval of an updated Funding Agreement. The Foundation has not recorded these amounts as at March 31, 2007 which are to be received in future years.

Grants received, together with future investment revenue, are directed to the granting of amounts to eligible recipients and the payment of the Foundation's operating expenses and acquisition of capital assets in accordance with the requirements of the Act and the terms of the Funding Agreement. Grants received and future restricted interest earned on the invested amounts will be deferred and recognized as income as expenditures are incurred by the Foundation.

Contributions applied toward the purchase of capital assets are deferred and amortized to revenue on a straight-line basis, at a rate corresponding with the amortization rate for the related capital assets.

Grants to eligible recipients

Grants to eligible recipients are recognized as expenses as the awarded funds are disbursed.

Investments

Investments are recorded at cost. Premiums or discounts are amortized over the remaining term of the investments. If the market value of investments becomes lower than cost and this decline in value is considered to be other than temporary, the investments are written down to market value.

Capital assets

Purchased capital assets are recorded at cost. Contributed capital assets, if any, are recorded at fair value at the date of contribution. Repairs and maintenance costs are charged to expense. When a capital asset no longer contributes to the Foundation's ability to provide services, its carrying amount is written down to its residual value.

Capital assets are amortized on a straight-line basis using the following annual rates:

Leasehold improvements	term of the lease
Furniture and other equipment	20%
Computers and software	3–5 years

Use of estimates

The preparation of financial statements requires management to make estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities in the financial statements and accompanying notes. These have been made using careful judgment.

Canada Foundation for Innovation

Notes to Financial Statements

March 31, 2007

3. Investments

Investments comprise the following financial instruments:

	2007		2006	
	Cost $	**Market Value $**	Cost $	Market Value $
Money-market funds	**72,933,451**	**72,931,173**	139,786,414	139,775,468
Bonds	**1,943,866,785**	**1,975,648,338**	2,113,517,733	2,154,510,075
NHA Mortgage backed securities	**325,643,341**	**324,261,351**	306,554,995	304,615,665
Amortizing bonds	**92,662,159**	**90,848,204**	121,238,820	118,239,658
	2,435,105,736	**2,463,689,066**	2,681,097,962	2,717,140,866

4. Capital Assets

Capital assets consist of the following:

	2007		2006	
	Cost $	**Accumulated Amortization $**	Cost $	Accumulated Amortization $
Leasehold improvements	**1,996,364**	**974,868**	1,991,708	740,105
Furniture and other equipment	**1,366,592**	**1,182,411**	1,328,412	1,023,600
	3,362,956	**2,157,279**	3,320,120	1,763,705
Accumulated amortization	**(2,157,279)**		(1,763,705)	
Net book value	**1,205,677**		1,556,415	

5. Deferred Contributions

Expenses of future periods

Deferred contributions related to expenses of future periods represent unspent externally restricted grants, together with investment revenue earned, for the purpose of providing grants to eligible recipients and the payment of operating and capital expenditures in future periods.

	2007 $	2006 $
Balance, beginning of year	**2,714,095,633**	3,003,174,928
Add grants received [*note 2*]	**—**	—
Add restricted investment revenue earned	**126,272,511**	147,597,951
Less amount recognized as revenue	**(366,298,006)**	(436,511,564)
Less amount applied toward capital assets acquired	**(42,836)**	(170,250)
Loss (gain) on equipment disposals	**—**	3,118
Proceeds on equipment disposals	**—**	1,450
Balance, end of year	**2,474,027,302**	2,714,095,633

Canada Foundation for Innovation

Notes to Financial Statements

March 31, 2007

Capital assets

Deferred contributions related to capital assets represent the unamortized amount of restricted grants received and applied toward the purchase of capital assets. The amortization of capital contributions is recorded as revenue in the statement of operations on the same basis as the amortization of the related capital assets.

	2007 $	2006 $
Balance, beginning of year	**1,556,415**	1,821,543
Restricted grants applied toward the purchase of capital assets	**42,836**	170,250
Loss on equipment disposals and write-offs	**—**	(3,118)
Proceeds on equipment disposals	**—**	(1,450)
Less amount amortized to revenue	**(393,574)**	(430,810)
Balance, end of year	**1,205,677**	1,556,415

6. Restricted Contributions and Net Assets

All of the net assets of the Foundation are subject to externally imposed restrictions as per the requirements of the *Budget Implementation Act*, 1997 which governs the Foundation and the terms of the related Funding Agreement between the Foundation and the Government of Canada. Investment revenue to be earned on the grants received from the Government of Canada is also restricted. Accordingly, the entire net assets of the Foundation are deferred and taken into revenue as expenditures are made with no net asset balance outstanding at any time. A statement of changes in net assets has therefore not been prepared since it would not provide additional useful information.

7. Commitments

During the year, the Foundation awarded grants for a maximum amount of $692.6 million [2006—$100.5 million]. Total disbursements to eligible recipients during the fiscal year were $355.3 million [2006—$427.4 million]. To date, the Foundation has awarded grants for a maximum amount of $3,745.6 million, of which $2,276.1 million has been disbursed as of the end of the fiscal year. The balance of the awarded grants will be recorded as expenses in subsequent years as funds are disbursed.

The Foundation entered into a lease agreement in 2001 for its premises at 230 Queen Street [Ottawa, Ontario] for a ten-year period starting August 2001. The minimum annual lease payments related to these premises are approximately $1,205,000.

8. Pension Plan

The employees of the Foundation may elect to become members of the Association of Universities and Colleges of Canada (AUCC) Pension Plan, a defined contribution plan managed by Sun Life Financial Inc. The employer contributions made to the Plan during the year ended March 31, 2007 amounted to $319,932 [2006—$289,095].

9. Fair Value of Financial Instruments

The carrying value of amounts receivable and payable approximate their fair value given the relatively short period to maturity of the instruments. The fair values of the investments, which are based on the year-end quoted market prices, are disclosed in [note 3].

10. Tax Status

The Foundation is a non-taxable entity under paragraph 149(1)(1) of the *Income Tax Act*.