

Report on Plans and Priorities

Natural Sciences and Engineering
Research Council of Canada

2016-17

The Honourable Navdeep Bains, P.C., M.P.
Minister of Innovation, Science and Economic
Development

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Ministers' Message

As Canada begins a new chapter in 2016–17, creating a culture of innovation is more important than ever in driving economic growth.

The recent name change of our Innovation, Science and Economic Development Portfolio recognizes this, placing a deliberate emphasis both on innovation and scientific discovery, and their equal importance for economic development nationally and throughout all of Canada's diverse regions.

We have promised Canadians a government that will bring real change—in both what we do and how we do it. We will invest in growing our economy, increase transparency and use the best evidence available to inform decision making.

Through the programs of the Innovation, Science and Economic Development Portfolio, we will work to develop and deliver an innovation agenda for Canada that will help improve our productivity performance, grow the economy and enhance our prosperity and well-being.

This 2016-17 *Report on Plans and Priorities* of the Natural Sciences and Engineering Research Council of Canada provides information on how the Council will support the Government on achieving our agenda in the coming year and we are fully confident that the Natural Sciences and Engineering Research Council of Canada is prepared to successfully support us and work with our partners inside and outside government to deliver for Canadians. However, given our commitment to more effective reporting, this year's report will be the final submission using the existing reporting framework.

The Prime Minister and the President of the Treasury Board are working to develop new, simplified and more effective reporting processes that will better allow Parliament and Canadians to monitor our Government's progress on delivering real change to Canadians. In the future, the Natural Sciences and Engineering Research Council of Canada's reports to Parliament will focus more transparently on how we are using our resources to fulfill our commitments and achieve results for Canadians.



The Honourable Navdeep Bains
Minister of Innovation, Science
and Economic Development



The Honourable Kirsty Duncan
Minister of Science



**The Honourable Bardish
Chagger**
Minister of Small Business and
Tourism

These new reporting mechanisms will allow Canadians to more easily follow our Council’s progress towards delivering on our priorities, which were outlined in the Prime Minister’s mandate letters to us.ⁱ

It is our pleasure to present the *Report on Plans and Priorities* for the Natural Sciences and Engineering Research Council of Canada for 2016–17, which sets out how the Council’s work will contribute to attaining these shared objectives.

The Honourable
Navdeep Bains
Minister of Innovation,
and Economic
Development

The Honourable
Kirsty Duncan
Minister of Science

The Honourable
Bardish Chagger
Minister of Small Business Science
and Tourism

Mandate Letterⁱⁱ

Mandate Letterⁱⁱⁱ

Mandate Letter^{iv}

Section I: Organizational Expenditure Overview

Organizational Profile

Appropriate Minister: **Minister of Innovation, Science and Economic Development:**
The Honourable Navdeep Bains, P.C., M.P.

Minister of Science:
The Honourable Kirsty Duncan, P.C., M.P.

Minister of Small Business and Tourism:
The Honourable Bardish Chagger, P.C., M.P.

Institutional Head: Dr. B. Mario Pinto (President)

Ministerial Portfolio: Innovation, Science and Economic Development

Enabling Instrument(s): *Natural Sciences and Engineering Research Council Act^v*

Year of Incorporation / Commencement: May 1, 1978

Organizational Context

Raison d'être

The Natural Sciences and Engineering Research Council of Canada (NSERC) is a key factor in making Canada a leading country of discovery and innovation. NSERC aims to maximize the value of public investments in research and development (R&D) and to advance the prosperity and quality of life of all Canadians.

In today's highly competitive global economy, NSERC plays a central role in supporting Canada's innovation ecosystem. NSERC supports research that benefits all Canadians. By connecting this innovative research to industry through its partnership initiatives, NSERC also makes it easier for the private sector to collaborate with academia and access the wealth of resources Canada's first-rate academic system has to offer.

Canada's future discoverers and innovators can realize their full potential with the support of NSERC's scholarships and fellowships programs, along with funding provided through discovery and partnership awards.

NSERC is also actively working to enhance the profile of Canadian research through national and international promotional activities and by connecting with industry.

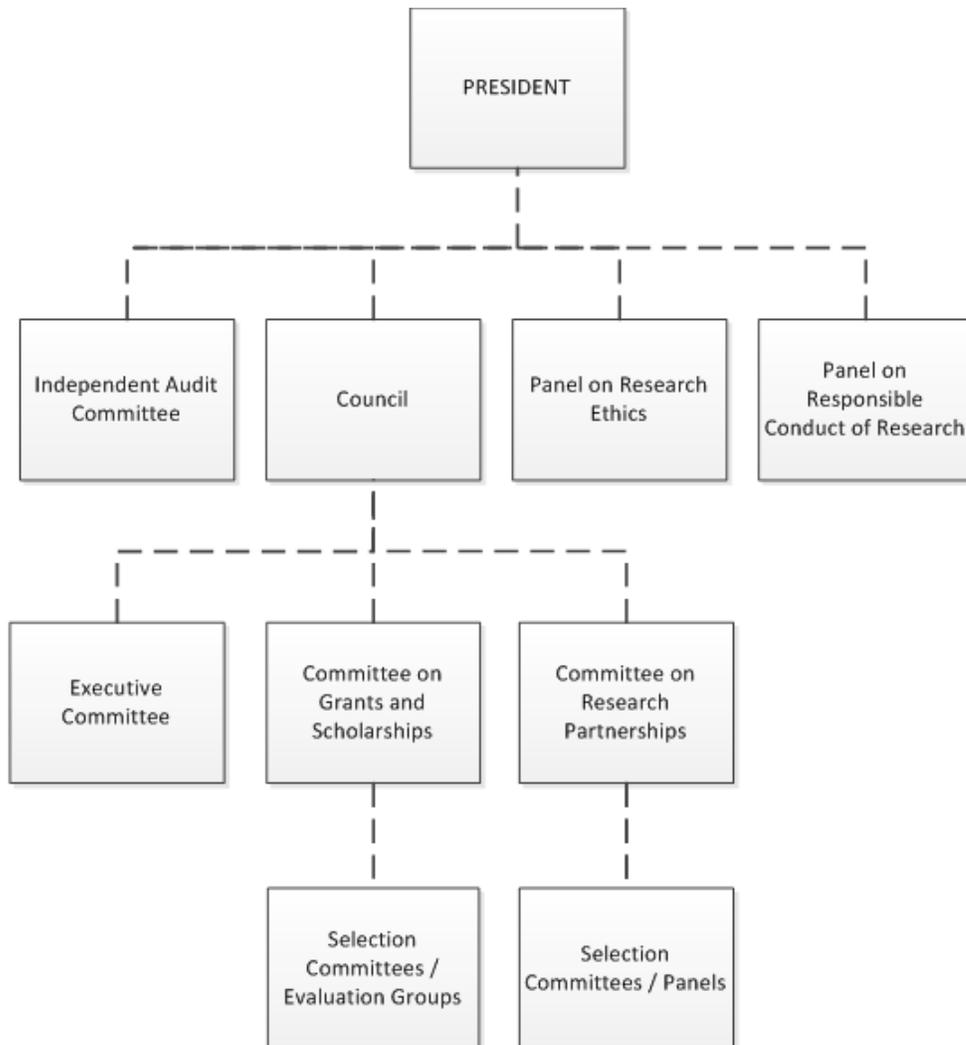
Responsibilities

NSERC is a departmental corporation of the Government of Canada created in 1978. It is funded directly by Parliament and reports to it through the Minister of Innovation, Science and Economic Development. NSERC's Council is composed of a President and up to 18 other distinguished members selected from the private and public sectors. NSERC's President is the Chief Executive Officer. The elected Vice-President is the Chair of the Council and of its Executive Committee. NSERC's Council is advised on policy matters by various standing committees. Funding decisions are made by the President, or designate, on the basis of recommendations made by peer review committees. The functions of NSERC, based on the authority and responsibility assigned to it under the Natural Sciences and Engineering Research Council Act (1976-1977, c.24), are to:

- promote and assist research in the natural sciences and engineering, other than the health sciences; and
- advise the Minister in respect of such matters relating to such research as the Minister may refer to the Council for its consideration.

NSERC supports more than 11,000 of the most creative and productive Canadian university professors, over 30,000 highly qualified postgraduate students and fellows, and partners with more than 3,500 Canadian firms to transfer knowledge that creates economic wealth.

NSERC Governance Structure



Strategic Outcome(s) and Program Alignment Architecture

1 Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.

1.1 People: Research, Talent

1.1.1 Science and Engineering Promotion

1.1.2 Scholarships and Fellowships

1.1.3 Alexander Graham Bell Canada Graduate Scholarships*

1.1.4 Vanier Canada Graduate Scholarships*

1.1.5 Banting Postdoctoral Fellowships*

1.1.6 Canada Research Chairs*

1.1.7 Canada Excellence Research Chairs*

1.2 Discovery: Advancement of Knowledge

1.2.1 Discovery Research

1.2.2 Research Equipment and Resources

1.2.3 Canada First Research Excellence Fund*

1.3 Innovation: Research Partnerships

1.3.1 Research in Strategic Areas

1.3.2 Industry-driven Collaborative Research and Development

1.3.3 Networks of Centres of Excellence*

1.3.4 Training in Industry*

1.3.5 Commercialization of Research*

1.3.6 College and Community Innovation

1.4 Internal Services

*Programs involving more than one granting agency.

Organizational Priorities

In December 2015, NSERC released its latest Strategic Plan, *NSERC 2020*. The plan outlines five clear goals that NSERC will pursue to position Canada for the future.

Priority: Fostering a science and engineering culture in Canada

Description

Promoting science and understanding how scientific inquiry works are critical to the creation of a vibrant science culture in Canada. To ensure that Canadians continue to create a highly skilled workforce, to generate new knowledge globally, and to accelerate the development of knowledge-based industries, we must cultivate a science culture in this country.

Efforts to raise awareness and interest in science and engineering need to focus on young people and underrepresented groups to give them the foundation for the knowledge-based jobs of the future. Likewise, curious and engaged Canadians, including policy and decision makers, can benefit from greater understanding of the societal and economic role of science and technology in the world.

*Priority Type*¹
New

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Link to Department's Program Alignment Architecture
<ul style="list-style-type: none"> In 2016-17, NSERC will take a national leadership role and provide a focal point for science promotion efforts in Canada. 	To be determined	To be determined	Sub-program 1.1.1

1. Type is defined as follows: previously committed to—committed to in the first or second fiscal year prior to the subject year of the report; ongoing—committed to at least three fiscal years prior to the subject year of the report; and new—newly committed to in the reporting year of the Report on Plans and Priorities or the Departmental Performance Report.

Priority: Launching the new generation

Description

We now have a clearly identifiable cohort of early-career scientists with tremendous potential: the leaders of tomorrow. They represent a new generation of research-motivated individuals: creative, team spirited, socially minded and entrepreneurial champions of open science who think globally.

They are well trained and prepared to make their mark, but they are stalled by the lack of opportunities and resources to make meaningful independent contributions to science. This represents a major threat to the future of the research enterprise in Canada. They need the means, the independence and the flexibility to create their own place in research-intensive and innovative work settings. NSERC will explore mechanisms and approaches to support the launch of independent research careers for young investigators in academia and in industry.

Priority Type

New

Planned Initiatives	Start Date	End Date	Link to Department's Program Alignment Architecture
<ul style="list-style-type: none"> NSERC will continue to offer globally competitive scholarships and fellowships which foster a high level of scientific excellence in Canada and enhance Canada's reputation as a magnet for talent. To ensure that NSERC's scholarships and fellowships remain relevant and effective, NSERC will position these programs, as well as other training initiatives, so that they are in line with the emerging realities of the job market. NSERC will continue to regularly monitor and evaluate program performance. 	To be determined	To be determined	Sub-programs 1.1.2 to 1.1.5
<ul style="list-style-type: none"> NSERC will enhance its programs that provide students with relevant industry experience and help them develop entrepreneurial skills. Actions will include working with other organizations to enhance cooperative education and similar programs. 	To be determined	To be determined	Sub-program 1.3.4

Priority: Building a diversified and competitive research base**Description**

Breakthrough science will also occur in response to emerging needs and opportunities. It takes vision to forecast where these possibilities will occur and to develop the ability to mobilize many different partners to pursue them. Diversity increases our power of sight by providing multiple points of view. Diversity lets participants challenge each other to produce the best course of action. Diversity increases our ability to successfully navigate cultural differences that can often create roadblocks to progress.

The ability to build a diversified and high-quality research base across regions, institutions, disciplines, populations, and sectors is central to research excellence and will allow Canada to be more competitive. NSERC will provide the support and flexibility required for researchers to pursue scholarly, scientific and engaging inquiry that will promote a dynamic, diversified and interdisciplinary research enterprise in Canada.

Priority Type

New

Planned Initiatives	Start Date	End Date	Link to Department's Program Alignment Architecture
<ul style="list-style-type: none"> NSERC will continue to promote and maintain a diversified base of high-quality advanced research capability as well as supporting the development of early stage researchers through the Discovery Grants Program and complementary initiatives such as the Discovery Accelerator Supplements and the Discovery Development Grants pilot. 	To be determined	To be determined	Program 1.2
<ul style="list-style-type: none"> Following the approval of the Tri-Agency Statement of Principles on Digital Data Management, promote readiness for data management within the research community and identify an approach to renewed data management requirements for grantees.² 	To be determined	To be determined	Strategic Outcome 1
<ul style="list-style-type: none"> Plan for the implementation of chairs in sustainable technologies³ 	To be determined	To be determined	Sub-program 1.1.6
<ul style="list-style-type: none"> NSERC will continue to optimize its support of Discovery research through refinements to its policies and programs. This includes work towards new and enhanced mechanisms designed to increase efficiency and reduce administrative workload. NSERC will explore changes to the method of allocating funds for Discovery research in order to ensure that the sub-program remains effective and that the budget is used responsibly and optimally. 	To be determined	To be determined	Sub-program 1.2.1
<ul style="list-style-type: none"> NSERC will look for opportunities to better engage under-represented groups and institutions and increase their participation in NSERC programming. Aboriginals, women, early career researchers, small universities and colleges are examples of some of the groups and institutions that NSERC will examine. 	To be determined	To be determined	Strategic Outcome 1

² This planned initiative is directly linked to one of the priorities highlighted in the Minister of Innovation, Science and Economic Development Mandate Letter

³ This planned initiative is directly linked to one of the priorities highlighted in the Minister of Science Mandate Letter.

Priority: Strengthening the dynamic between discovery and innovation

We can help motivated researchers move forward with inventions that surface from discovery research by taking advantage of previous investments in innovation enablers–incubators, accelerator programs and entrepreneurship programs.

We can add value to discoveries and de-risk them for future investment. With these approaches, we can increase the range and, ultimately, the longevity and productivity of researcher industry interactions. At the same time, we are committed to ensuring that, when it comes to discovery research, researchers continue to aim high, looking as far ahead as possible and pushing the frontiers of knowledge.

Priority Type

New

Planned Initiatives	Start Date	End Date	Link to Department's Program Alignment Architecture
<ul style="list-style-type: none"> NSERC will look for new opportunities to convene businesses and other partners to the academic research enterprise by forming new strategic partnerships with other organizations. This includes organizations such as regional development agencies, government departments at the federal, provincial and municipal levels and non-profit organizations. This activity will allow businesses to build synergies with Canada's R&D capacity in a more seamless manner and provide more opportunities for academic researchers to mobilize their discoveries. 	To be determined	To be determined	Program 1.3
<ul style="list-style-type: none"> NSERC will revamp its performance management and measurement tools in an effort to better measure the impact of some of its grants. This will include the implementation of an online reporting system for companies who have participated in NSERC funded projects to better track outcomes. 	To be determined	To be determined	Program 1.3
<ul style="list-style-type: none"> NSERC will develop a new approach to communicating and engaging stakeholders to foster the discovery to innovation continuum. 	To be determined	To be determined	Programs 1.2 and 1.3

Priority: Going global

Going global involves making international linkages the norm in each and every sector of Canada’s research ecosystem. Going global will create new two-way connections for Canadian research to help draw international talent to Canada and to encourage mobility of Canadian students abroad. These international ambassadors will be the network builders of the future. Going global also involves the responsibility to help solve shared global challenges such as climate change, clean energy, and water quality and food security.

Priority Type

New

Planned Initiatives	Start Date	End Date	Link to Department’s Program Alignment Architecture
<ul style="list-style-type: none">NSERC will examine its programs to find opportunities that facilitate international collaborations, including support to Canadian students to work abroad.	To be determined	To be determined	Strategic Outcome 1

For more information on organizational priorities, see the Ministers’ mandate letter on the [Prime Minister of Canada’s website](#)¹.

Risk Analysis

NSERC’s strategic and operational priorities are managed and monitored according to NSERC’s Corporate Risk Profile. Based on an annual review of corporate risk which is currently underway, three areas are emerging as priorities for risk mitigation in 2016-17.

Key Risks

Risk	Risk Response Strategy	Link to Program Alignment Architecture
<p>Business Transformation</p> <p>NSERC might be unable to adapt to and capitalize on technological, policy, and process changes.</p>	<p>NSERC will develop a roadmap to support the implementation of the NSERC 2020 Strategic Plan, to align with broader Government of Canada initiatives and policies, and to ensure that the development of harmonized, simplified, and client-focused business processes is leveraged by a new grants management system.</p>	<p>Strategic Outcome 1 Expected results of all program activities depend on the successful implementation of new technologies and the associated business transformations and communications with stakeholders (internal and external).</p>
<p>Demonstrating Results and Relevance</p> <p>NSERC might be unable to demonstrate its relevance by measuring and reporting on the outcomes of its programs.</p>	<p>NSERC will further develop its performance alignment architecture and performance measurement framework to support the NSERC 2020 Strategic Plan implementation.</p>	
<p>Stakeholder Relations</p> <p>NSERC might not effectively manage diverse stakeholder relationships and challenges to its reputation.</p>	<p>Implementation of the NSERC 2020 Strategic Plan will continue to involve consultations with external stakeholders and NSERC management and staff to ensure that it remains responsive to Canadian stakeholder needs and aligns Government priorities and strategic directions.</p>	

Planned Expenditures

Budgetary Financial Resources (dollars)

2016–17 Main Estimates	2016–17 Planned Spending	2017–18 Planned Spending	2019–19 Planned Spending
\$1,120,184,669	\$1,120,184,669	\$1,098,784,458	\$1,088,178,032

Human Resources (Full-Time Equivalents [FTEs])

2015–16	2016–17	2017–18
394	394	394

Budgetary Planning Summary for Strategic Outcome and Programs*
(millions of dollars)

Strategic Outcome, Programs and Internal Services	2013–14 Expenditures	2014–15 Expenditures	2015–16 Forecast Spending	2016–17 Main Estimates	2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
Strategic Outcome 1: Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.							
People: Research Talent	\$268,221,394	\$272,162,729	\$284,953,058	\$287,561,563	\$287,561,563	\$278,754,716	\$269,084,052
Discovery: Advancement of Knowledge	\$404,299,452	\$417,812,704	\$436,296,971	\$435,524,043	\$435,524,043	\$429,632,661	\$431,512,661
Innovation: Research Partnerships	\$370,061,947	\$371,301,195	\$375,624,589	\$375,358,464	\$375,358,464	\$368,846,687	\$366,030,925
Strategic Outcome 1 Subtotal	\$1,042,582,793	\$1,061,276,628	\$1,096,874,618	\$1,098,444,070	\$1,098,444,070	\$1,077,234,064	\$1,066,627,638
Internal Services Subtotal	\$24,096,237	\$24,168,828	\$22,906,069	\$21,740,599	\$21,740,599	\$21,550,394	\$21,550,394
Total	\$1,066,679,030	\$1,085,445,456	\$1,119,780,687	\$1,120,184,669	\$1,120,184,669	\$1,098,784,458	\$1,088,178,032

*Planned spending does not reflect all budget decisions or new investments beginning in 2016-17 for the Canada First Research Excellence Fund, as announced in Canada's Economic Action Plan 2014.

Alignment of Spending With the Whole-of-Government Framework

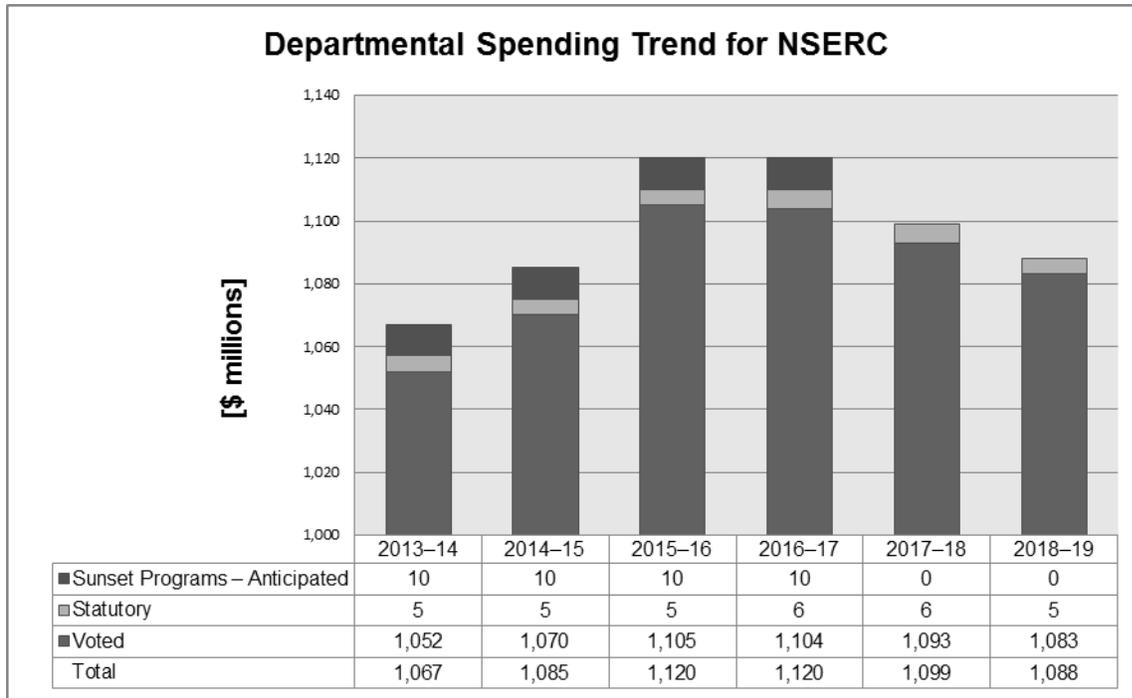
Alignment of 2016–17 Planned Spending With the Whole-of-Government Framework^{vi} (dollars)

Strategic Outcome	Program	Spending Area	Government of Canada Outcome	2016–17 Planned Spending
Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.	1.1 People	Economic Affairs	An innovative and knowledge based economy.	\$287,561,563
	1.2 Discovery	Economic Affairs	An innovative and knowledge based economy.	\$435,524,043
	1.3 Innovation	Economic Affairs	An innovative and knowledge based economy.	\$375,358,464

Total Spending by Spending Area (dollars)

Spending Area	Total Planned Spending
Economic affairs	\$1,120,184,669
Social affairs	
International affairs	
Government affairs	

Departmental Spending Trend



Estimates by Vote

For information on the Natural Sciences and Engineering Research Council’s organizational appropriations, consult the [2016–17 Main Estimates on the Treasury Board of Canada Secretariat website](#).^{vii}

Section II: Analysis of Programs by Strategic Outcome

Strategic Outcome:

Canada is a world leader in advancing, connecting and applying new knowledge in the natural sciences and engineering.

Program 1.1: People: Research Talent

Description

This Program supports the attraction, retention and development of highly qualified people in the natural sciences and engineering in Canada through Chairs programs, fellowships, scholarships and stipends. These activities are essential to building the human capital required to enable a strong, globally competitive research and innovation system in Canada. Researchers, students and young people benefit from the grant funding which supports postsecondary university research as well as some outreach activities at universities, museums, science centres, and community based organizations.

Budgetary Financial Resources (dollars)

2016–17 Main Estimates	2016-17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$287,561,563	\$287,561,563	\$278,754,716	\$269,084,052

Human Resources (Full-Time Equivalents [FTEs])

2016–17	2017–18	2018–19
36	36	36

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Canada's workforce has the required talented and skilled researchers in natural sciences and engineering	Total researchers per thousand employed	8.3	March 2017
	Percentage difference in unemployment rate for occupations in the natural sciences and engineering vs. national unemployment rate.	1%	
	Number of earned doctoral degrees in the natural sciences and engineering per capita	15th	

Planning Highlights

NSERC will continue to strengthen gender equity considerations among all of its funding initiatives. In 2016-17, NSERC will begin the implementation of the NSERC Gender Equity Action Plan, which was developed in collaboration with its tri-agency partners, SSHRC and CIHR. NSERC will also expand the Chairs for Women in Science and Engineering funding initiative.

In 2016-17, NSERC will continue to support the development of highly qualified personnel who are “marketplace-ready” in natural sciences and engineering through the Collaborative Research and Training Experience program (CREATE). The program provides enhanced opportunities for students to develop technical and professional skills, and to gain experience in enriched and varied research environments. Close to half of the approximately 100 active training programs feature a formal link with industry. In addition, NSERC will also develop an action plan to follow-up on the evaluation of the CREATE program.

In the 2016-17, NSERC will look at how it can expand its suite of scholarships and fellowships funding opportunities by strengthening focus of these awards on professional skills development as well as outreach and mentoring activities.

Sub-Program 1.1.1: Science and Engineering Promotion Description

This Sub Program stimulates the public's interest in science, math, and engineering and encourages the next generation of students to consider careers in these fields, helping to ensure that Canada has an ongoing supply of future discoverers and innovators. These activities are necessary as Canada has fewer university students enrolled in the natural sciences and engineering disciplines and fewer doctoral students graduating and working in these fields, relative to most Organization for Economic Cooperation and Development countries. NSERC awards grants to support activities of community based organizations, museums, science centres and universities that stimulate the interest of young people and students and improve school performance in science and mathematics, notably groups that are underrepresented in the natural sciences and engineering, such as women and Aboriginals. In addition, NSERC offers several prizes that recognize and highlight Canadian achievements in training, research, and innovation. This sub program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$7,083,210	\$8,165,946	\$8,715,946

Human Resources (FTEs)

2016–17	2017–18	2018–19
6	6	6

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
The next generation of university students select the natural sciences and engineering as a field of study	Percentage growth in bachelor's enrolment in the NSE at Canadian universities.	1%	March 2017
	Percentage of science promotion projects that successfully complete the planned activity.	80%	

Planning Highlights

In 2016-17, NSERC will focus on fostering a science and engineering culture through promotion and partnership as outlined in the NSERC 2020 strategic plan. Planned actions include increasing the emphasis on activities for girls and Aboriginal youth through the PromoScience program, exploring mechanisms to engage a wider range of partners to deliver youth outreach and public engagement activities, leading the coordination of a new version of National Science and Technology Week and guiding national science promotion by collaborating with partners to address gaps in science promotion.

In 2016-17, the PromoScience program will hold a competition to award approximately 50 multi-year grants, anticipated to be selected from among close to 200 requests. Annual competitions enable NSERC to maintain a complement of over 100 active PromoScience grants that support outreach activities aimed at youth and under-represented groups. In addition, NSERC will also develop an action plan to follow-up on the evaluation of the PromoScience program to assess its effectiveness at meeting its objectives.

NSERC will continue to honour Canada's top researchers by awarding prestigious prizes, including the Gerhard Herzberg Canada Gold Medal for Science and Engineering. These prizes celebrate the talent fostered by NSERC through students and seasoned researchers, in addition to their contributions and impacts in their fields and on Canadians. In addition, NSERC will also develop an action plan to follow-up on the joint evaluation of the Prizes programs to assess their effectiveness at meeting their objectives.

Sub-Program 1.1.2: Scholarships and Fellowships

Description

This Sub Program supports a significant number of students at various stages of their university studies. At the undergraduate level, support for 16 week research internships in universities aims to nurture and develop students' aptitudes towards research in the natural sciences and engineering and encourage them to undertake graduate studies and pursue a research career in these fields. At the postgraduate level, students earn a Master's or Doctoral degree in a domestic and/or foreign institution, after having spent time in an academic and/or industrial setting. The Council also supports the development of innovative training programs that encourage collaborative and integrative approaches, address significant scientific challenges associated to Canada's research priorities, include the acquisition of professional skills, and facilitate the transition of new researchers from trainees to productive employees in the Canadian workforce. Postdoctoral Fellowships provide support to promising Doctoral graduates to further their research training in Canada or abroad. This program uses funding from the following transfer payments: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$81,661,756	\$80,705,372	\$78,534,708

Human Resources (FTEs)

2016–17	2017–18	2018–19
19	19	19

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Bachelors, Masters and Doctoral students gain research experience in natural sciences and engineering that provides them with a competitive advantage in their careers.	Percentage of student population in the natural sciences and engineering supported (directly or indirectly) by NSERC.	25%	March 2017
	Percentage of students supported that are motivated to pursue further studies or training.	20%	
	Percentage of postgraduate students and postdoctoral fellows supported engaged in R&D in their jobs (7 to 9 years after their award).	50%	

Planning Highlights

In 2016-17, NSERC will work towards modernizing training initiatives by strengthening professional skills development and outreach and mentoring, as well as increasing international exposure among trainees through its Scholarships and Fellowships programs. An action plan will also be developed, in collaboration with the other granting agencies, to follow-up on the evaluation of the Canada Graduate Scholarships Program.

Sub-Program 1.1.3: Alexander Graham Bell Canada Graduate Scholarships

Description

This Sub Program provides financial support to outstanding eligible scholars pursuing Master's or Doctoral studies in a Canadian university. This program is necessary to ensure a reliable supply of highly qualified personnel to meet the needs of Canada's knowledge economy. Supplementary funding is available in the form of Foreign Study Supplements to select recipients of Canada Graduate Scholarships to build global linkages and international networks through the pursuit of exceptional, short term research experiences at research institutions outside of Canada. This program uses funding from the following transfer payment: Canada Graduate Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$43,517,979	\$43,556,841	\$43,556,841

Human Resources (FTEs)

2016–17	2017–18	2018–19
9	9	9

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Increased capacity to supply highly qualified personnel to the academic, public and private sectors	Percentage of Canada Graduate Scholarship students supported completing their degree	90%	March 2017
	Time to degree completion of doctoral recipients of a Canada Graduate Scholarship	< 6 years	

Planning Highlights

In 2016-17, NSERC will continue to work with SSHRC and CIHR to harmonize the program following the evaluation of the Canada Graduate Scholarships program and the management response.

Sub-Program 1.1.4: Vanier Canada Graduate Scholarships

Description

This Sub Program provides financial support to students who have achieved exceptional success in their studies and who demonstrate high potential in the pursuit of a doctoral program in a Canadian university. Both Canadian and international students are eligible for a Vanier Canada Graduate Scholarship. This program is necessary to attract and retain world class doctoral students by supporting students who demonstrate a high standard of scholarly achievement in graduate studies, as well as leadership skills. A high level steering committee, assisted by international review committees, ensures that the best and brightest students are chosen as recipients of the scholarships. Awards allow students to fully concentrate on their studies and work with the best research mentors in their chosen field in Canada. This program uses funding from the following transfer payment: Vanier Canada Graduate Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$8,482,648	\$8,488,149	\$8,488,149

Human Resources (FTEs)*

2016–17	2017–18	2018–19
1	1	1

*This program is managed by a tri-agency secretariat, led by the Canadian Institutes of Health Research.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Compete worldwide for premier doctoral students to build world-class research capacity in Canada	Expert review of quality of the pool of applicants as measured by percent of fundable applications for a given competition year	40%	March 2017
	Number of international students who were awarded a Vanier Canada Graduate Scholarship	50	

Planning Highlights

In 2016-17, NSERC will continue to work with SSHRC and CIHR to implement the action plan addressing the results of the formal evaluation of the Vanier Canada Graduate Scholarships.

Sub-Program 1.1.5: Banting Postdoctoral Fellowships

Description

This Sub Program supports postdoctoral researchers from Canada and abroad in order to attract the very best postdoctoral fellows to further their training and carry out research in Canada. Up to 25 percent of these awards can be held abroad to allow Canadian postdoctoral fellows the opportunity to gain valuable international experience. This program helps reinforce Canada's standing as a global player in research excellence and higher learning and as a destination of choice for the most gifted students and researchers. The high level of support provided ensures that these fellowships are internationally competitive. Awards provide a two-year stipend to the recipient. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$3,405,170	\$3,410,941	\$3,410,941

Human Resources (FTEs)*

2016–17	2017–18	2018–19
1	1	1

*This program is managed by a tri-agency secretariat.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Compete worldwide for premier postdoctoral researchers to build world class research capacity in Canada	Expert review of quality of the pool of applicants as measured by percent of fundable applications (for a given competition year)	25%	March 2017
	Number of international postdoctoral researchers or equivalent who were awarded a Banting Postdoctoral Fellowship	22	

Planning Highlights

In 2016-17, NSERC, in collaboration with SSHRC and CIHR, will continue to implement the management response to the evaluation of the Banting Postdoctoral Fellowships.

Sub-Program 1.1.6: Canada Research Chairs

Description

This Sub Program provides support to research chairs in the form of salary and research funding to attract and retain some of the world's most accomplished and promising minds. This program assists Canadian universities, together with their affiliated research institutes and hospitals, achieve the highest levels of research excellence and to become world class research centres in today's global, knowledge based economy. Eligible nominees are full professors or associate professors and emerging scholars who may range from recent Doctoral graduates to associate professors. National and international researchers can be chair holders. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$118,210,800	\$118,210,800	\$118,210,800

Human Resources (FTEs)*

2016–17	2017–18	2018–19
0	0	0

*The low level of FTE's and lack of operating funding for this sub-program is because the program is managed by SSHRC.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
World-class research is enhanced in Canadian universities through the attraction and retention of excellent researchers	Percentage of institutions that found the Canada Research Chair program important or very important in their ability to support the existing research teams/ research clusters/ research centres	90%	March 2017

Planning Highlights

In 2016-17, NSERC will work with CIHR and SSHRC to address the recommendations from the 15th-year evaluation of the program.

Sub-Program 1.1.7: Canada Excellence Research Chairs Description

This Sub Program offers eligible Canadian degree granting institutions the opportunity to establish highly remunerated research chairs at their institutions in research areas of strategic importance to Canada, including but not limited to: environmental sciences and technologies; natural resources and energy; health and related life sciences and technologies; and information and communication technologies, including the digital economy. This program is necessary to attract the highest calibre of researchers for Canada's future prosperity. This program uses funding from the following transfer payment: Canada Excellence Research Chairs.

Budgetary Financial Resources (dollars)*

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$25,200,000	\$16,216,667	\$8,166,667

Human Resources (FTEs)**

2016–17	2017–18	2018–19
0	0	0

* Changes in planned spending reflect the program's peer reviewed competition cycle. Planned spending does not reflect future budget decisions.

**This program is managed by SSHRC.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
The attraction of the world's most accomplished researchers to help Canada build a critical mass of expertise in areas of strategic importance to Canada.	Percentage of institutions that have reported significant growth, over the course of the term of the award, in areas of strategic importance to Canada due to CERC award	75%	March 2017
	Percentage of Chairs that have provided expert advice/opinion to target end-user groups at a moderate/significant level	75%	

Planning Highlights

NSERC will continue to support advanced research and the development of researchers through the Canada Excellence Research Chairs. In 2016-17, planning for the new competition is projected while the administration of Phase 1 applications continues.

Program 1.2: Discovery: Advancement of Knowledge

Description

This Program supports the creation of new knowledge and maintenance of a high quality Canadian broad based research capacity in the natural sciences and engineering through grants to researchers. The advancement of knowledge generated by these grants is necessary to fuel a strong research and innovation system in Canada that is globally competitive. Academic researchers receive funding to carry out research, to support the timely acceleration of research programs, to purchase or develop research equipment, or to facilitate their effective access to major and unique research resources.

Budgetary Financial Resources (dollars)

2016–17 Main Estimates	2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$435,524,043	\$435,524,043	\$429,632,661	\$431,512,661

Human Resources (Full-Time Equivalents [FTEs])

2016–17	2017–18	2018–19
62	62	62

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Researchers at Canadian universities advance knowledge in the natural sciences and engineering	Ranking in the per capita output of publications in the natural sciences and engineering vs. G20 countries.	8 th	March 2017
	Ranking in the number of natural sciences and engineering publications vs. G20 countries.	9 th	
	Average relative citation factor of Canadian publications in the natural sciences and engineering vs. G20 countries.	15 th	

Planning Highlights

NSERC will continue reviewing its approach to allocating funding for Discovery research across the natural sciences and engineering disciplines. By periodically examining the allocation of funds between disciplines and across program elements in a systematic manner, NSERC aims to ensure that programs remain effective, dynamic and responsive to changes in disciplines and in the Canadian and global research landscape, and that funds are used optimally. In 2016-17, the international Advisory Committee will continue to work to provide advice to NSERC on the principles by which new funding for Discovery should be allocated.

Sub-Program 1.2.1: Discovery Research

Description

This Sub Program promotes and enables global excellence in discovery research in Canada. NSERC's discovery based grants support long term, ongoing programs of research as well as shorter term research projects. The Council also offers substantial and timely additional resources to select researchers in order to accelerate progress and maximize the impact of their research program. In addition, the Council supports a limited number of large international activities, opportunities, or projects that are of high priority in the context of advanced research in Canada. These are led by world class Canadian researchers and are comprised of teams that will generate substantial impact for the benefit of Canada. Having a solid capacity for basic research across a broad spectrum of natural sciences and engineering disciplines is necessary to ensure that Canada remains at the leading edge of knowledge creation. It ensures that Canada can access and exploit science and technology developments from other countries, and forms the foundation for innovation and the training of the next generation of scientists and engineers. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$392,951,453	\$391,603,361	\$392,151,846

Human Resources (FTEs)

2016–17	2017–18	2018–19
51	51	51

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
The discovery, innovation and training capability of university researchers in natural sciences and engineering is enhanced by the provision of support for on-going programs of basic research.	Percentage of the Discovery Grants program budget spent on early career researchers.	10%	March 2017
	Percentage of funds spent on training students and postdoctoral fellows	35%	
	Percentage of Canadian publications in the natural sciences and engineering coauthored with foreign researchers.	40%	

Planning Highlights

NSERC will continue to optimize its support of Discovery research through refinements to its policies and programs. This includes work towards new and enhanced mechanisms designed to increase efficiency and reduce administrative workload. NSERC will also be exploring enhanced opportunities for Discovery research that crosses disciplinary boundaries.

In 2016-17, NSERC will complete a formal evaluation of the Climate Change and Atmospheric Research program to provide senior management with valid, insightful and actionable findings about the performance and relevance of the program.

Sub-Program 1.2.2: Research Equipment and Resources Description

This Sub-Program supports the purchase or development of research equipment and the maintenance of unique research resources. Funds are also used to facilitate researchers' access to major and unique research resources in Canada and abroad. Grants are awarded through a competitive peer review process. This activity is necessary because, in addition to funds to carry out research, top scientists, and engineers need state of the art equipment and resources to conduct research at world class levels. Access to equipment and resources plays an important role in attracting the best minds to Canada and keeping them here. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)*

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$10,965,313	\$6,422,024	\$7,753,539

Human Resources (FTEs)

2016–17	2017–18	2018–19
11	11	11

*Planned spending does not reflect transfers from other programs or future budget decisions.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
The discovery, innovation and training capability of university researchers in natural sciences and engineering is supported by access to research equipment and major regional or national research facilities	Percentage growth in number of users conducting research at supported facilities.	5%	March 2017
	Average number of researchers benefiting from equipment awards.	100	

Planning Highlights

In 2016-17, through the Research Tools and Instruments Grants, NSERC will continue to foster and enhance the discovery, innovation, and training capability of university research in natural sciences and engineering by supporting the purchase of research equipment and installations that are smaller in scale than those funded by the Canada Foundation for Innovation.

Sub-Program 1.2.3: Canada First Research Excellence Fund⁴

The program provides financial support in the form of grants to Canadian universities and colleges to excel globally in research areas that create long-term economic advantages for Canada. The program helps competitively-selected institutions implement ambitious and focused strategies to attract and retain talent, develop partnerships across sectors nationally and internationally, and undertake cutting-edge research. Consequently, the program will contribute to enhancing Canada's competitiveness in the global, knowledge-based economy, improving Canadians' health, and enriching our social and cultural life. The program is administered by the Social Sciences and Humanities Research Council on behalf of the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council. This program uses funding from the following transfer payment: Canada First Research Excellence Fund.

Budgetary Financial Resources (dollars)*

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$31,607,277	\$31,607,276	\$31,607,276

Human Resources (FTEs)

2016–17	2017–18	2018–19
0	0	0

*Planned spending does not reflect transfers from other programs or future budget decisions.

⁴ Programs involving more than one granting agency.

Performance Measurement

Expected Results	Performance Indicator(s)	Targets	Date to Be Achieved
Competitively-selected postsecondary institutions excel globally in research areas that create long term economic advantages for Canada.	Percentage of institutions demonstrating progress toward global leadership targets.	100%	June , 2019

Planning Highlights

NSERC will work with CIHR and SSHRC to complete the second competition, including adjudication of full proposals and announcement of results.

Program 1.3: Innovation: Research Partnerships

Description

This Program fosters partnerships in natural sciences and engineering that facilitates the transfer of knowledge and skills to the user sector through awards that support research projects and network activities intended for socioeconomic impact. The partnerships encouraged and enabled by these awards also increase the commercialization of Canada's research through new products, services, and processes for the benefit of all Canadians.

Budgetary Financial Resources (dollars)

2016–17 Main Estimates	2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$375,358,464	\$375,358,464	\$368,846,687	\$366,030,925

Human Resources (Full-Time Equivalents [FTEs])

2016–17	2017–18	2018–19
132	132	132

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Canada builds more research partnerships between businesses, universities and colleges.	Percentage growth in the number of business partners annually.	5%	March 2017
	Minimum percentage growth in most of the indicators of knowledge/ technology transfer (new and/or improved products/services, enhanced skills/knowledge of partner personnel, invention disclosures, university spin-offs, university licensing revenue, university R&D contract revenue, university patents).	0.5%	

Planning Highlights

NSERC will look for new opportunities to convene businesses and other partners to the academic research enterprise by forming new strategic partnerships with other organizations. This includes organizations such as regional development agencies, government departments at the federal, provincial and municipal levels and non-profit organizations. This activity will allow businesses to build synergies with Canada's R&D capacity in a more seamless manner and provide more opportunities for academic researchers to mobilize their discoveries.

In 2016-17, NSERC will revamp its performance management and measurement tools in an effort to better measure impact of Research Partnership grants. This will include the implementation of an online reporting system for companies who have participated in NSERC funded projects to better track and report project outcomes.

NSERC will look for opportunities to better engage under-represented groups and institutions and increase their participation in NSERC programming. Aboriginals, women, small universities and colleges are examples of some of the groups and institutions that NSERC Research Partnerships will examine.

NSERC will examine its Research Partnership programs to find opportunities that facilitate international collaborations, including support to Canadian students to work abroad.

Sub-Program 1.3.1: Research in Strategic Areas

Description

This Sub Program supports research projects and activities in selected areas of national importance and in emerging areas that are of potential significance to Canada. This program is necessary to take advantage of Canada’s established excellence in research and innovation, and to build capacity in areas that are critical to the Canadian economy. NSERC invests in research areas that have been carefully selected as strategic priorities for the country. These investments support a range of activities such as research projects and networks. Funded activities share the common goal of connecting researchers with end users in order to enable the transfer of knowledge/technology and expertise that increases Canadian prosperity. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)*

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$76,838,134	\$73,385,844	\$68,730,338

Human Resources (FTEs)

2015–16	2016–17	2017–18
15	15	15

*Financial resources re-allocated to Industry-driven Collaborative Research and Development sub-program.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Research and training in targeted and emerging areas of national importance is accelerated.	Percentage of projects demonstrating knowledge transfer in strategic areas.	50%	March 2017
	Number of students and fellows carrying out research in strategic areas.	1500	

Planning Highlights

In 2016-17, NSERC will implement new strategic target areas within its Research Partnership programs. The new strategic target areas were established in 2015-16 through extensive consultations with stakeholders and align with the Government of Canada’s mandate to support research in priority areas such as climate change and clean and sustainable technology.

Sub-Program 1.3.2: Industry-driven Collaborative Research and Development

Description

This Sub Program fosters collaborations between university researchers and industry, as well as other sectors, to develop and transfer new knowledge to Canadian based organizations. It offers a range of industry driven programs that stimulate innovation in the Canadian economy and encourage greater science and technology investment by the private sector. These partnership programs and projects address real world challenges that are relevant to industry, help build sustainable relationships between the two sectors, and connect people and skills. This program uses funding from the following transfer payment: Grants and Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$168,132,913	\$174,309,451	\$179,034,957

Human Resources (FTEs)

2016–17	2017–18	2018–19
74	74	74

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Mutually beneficial collaborations between the private sector and researchers in universities result in industrial or economic benefits to Canada.	Percentage growth in total amount of research funds (cash and in-kind) leveraged from industrial partners.	2%	March 2017
	Number of students and fellows solving industrial problems through collaboration.	2500	
	Percentage of industrial partners indicating satisfaction with research results.	75%	

Planning Highlights

In 2016-17, NSERC will look to enhance its regional office capacity to accelerate industry-academic connections taking into account regional priorities as part of its NSERC 2020 strategy.

Sub-Program 1.3.3: Networks of Centres of Excellence

Description

This Sub Program fosters partnerships among universities, industry, government, and not for profit organizations. This program helps to harness the creativity and inventiveness of the best minds in various disciplines and sectors to find solutions to critical issues of importance to Canada using internationally competitive research, building on multi sectoral partnerships; and, accelerating the use of multidisciplinary research results by organizations that can use them for economic, social, and environmental benefit. The program is jointly administered by the three federal granting agencies through the Network Centres of Excellence Secretariat. The networks supported through this program operate as virtual institutes to carry out research and knowledge/technology transfer activities among the participating organizations. The networks put in place well defined strategies to transfer knowledge to users, ensuring that discoveries and technological advances are turned into social and economic benefits for all Canadians. The networks supported by this activity are designed to develop Canada's economy and improve the quality of life of Canadians. This program uses funding from the following transfer payments: Networks of Centres of Excellence and Business Led Networks of Centres of Excellence.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$41,459,768	\$38,965,306	\$41,083,556

Human Resources (FTEs)

2016–17	2017–18	2018–19
10	10	10

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Strong linkages and partnerships between university, government and industry, and other users (NGOs) and the research knowledge and technology produced by the networks and centres is transferred and used with economic and societal benefits to Canada.	Percentage of established networks and centres demonstrating knowledge and technology transfer (e.g. number of patents, licenses, copyrights, number of new products or processes, policies created, new capacities established and/or processes or practices affected)	100%	March 2017

Planning Highlights

Networks of Centres of Excellence renewal competition: Launch the renewal competition for the 2012 Networks of Centres of Excellence cohort.

Sub-Program 1.3.4: Training in Industry

Description

This Sub Program supports students and recent graduates during short or longer term research internships in Canadian companies. The support allows them to gain Research and Development experience in industry and encourages them to consider careers in industry. Canadian companies benefit from the advanced research skills of these trainees and gain access to new knowledge in their area of activity. The awards are leveraged by the host company, which contributes to the salary of the student or fellow. The program supports an increase in the number of highly qualified people in Canadian industry to strengthen Canadian innovation. This program uses funding from the following transfer payments: Industrial Research and Development Internship Program and Grants and Scholarships.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$19,112,361	\$14,976,207	\$14,146,871

Human Resources (FTEs)

2016–17	2017–18	2018–19
5	5	5

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Students and fellows gain research experience in an industrial setting	Percentage of Industrial R&D Fellows continuing to work in industry after their fellowship.	50%	March 2017
	Percentage of undergraduate students considering an industrial R&D career (after their USRA).	50%	
	Percentage of firms realizing benefits from internships.	75%	

Planning Highlights

In 2016-17, NSERC will enhance its programs that provide students with relevant industry experience and help them develop entrepreneurial skills. Actions including working with other organizations to enhance cooperative education and similar programs.

Sub-Program 1.3.5: Commercialization of Research

Description

This Sub Program supports the development of commercially promising technologies and promotes the transfer of knowledge and technologies to Canadian companies for commercialization. Strengthening Canada’s record in commercialization is necessary to achieve business growth, job creation, and a stronger, more resilient economy. By means of grants awarded through competitive peer review processes, the Natural Sciences and Engineering Research Council aims to support the development of pre competitive technologies and to help build the capacity of Canadian universities and colleges to work with industry and fuel economic growth. Federal investments serve to leverage significant amounts of private funding. This program uses funding from the following transfer payments: Grants and Scholarships and the Centres of Excellence for Commercialization and Research.

Budgetary Financial Resources (dollars)*

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$20,105,576	\$17,176,902	\$12,922,226

Human Resources (FTEs)

2016–17	2017–18	2018–19
10	10	10

*Future competitions not reflected in planned spending.

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Pre-competitive development of promising technology and the promotion of its transfer to new or established Canadian companies is facilitated.	Percentage of established centres in which technologies were commercially developed or projects resulting in creation or support of spin-offs, licensing revenue and/or agreements, venture capital funding or patents, copyrights, trademarks, registered industrial designs.	100%	March 2017
	Percentage of projects resulting in intellectual property protection (patents, copyrights, trademarks, registered industrial designs).	25%	

Planning Highlights

In 2016-17, the Centres of Excellence for Commercialization and Research will continue to build on existing infrastructure, networks, and resources to enhance capacity by investing in a portfolio of commercialization centres that will open up new opportunities for Canadian researchers and firms to access world-class equipment, facilities, and business networks.

A formal evaluation of the CECR Program will be conducted in 2016-17. The evaluation will be informed by an environmental scan for the CECR Program planned for the end of the 2015-16 fiscal year, and on the outcome of discussions on the program's design and impacts by the NCE Steering and Management Committees in the context of the January 2016 Strategic Retreat.

Sub-Program 1.3.6: College and Community Innovation Description

This Sub Program increases the capacity of colleges and polytechnics to support innovation at the community and/or regional level. The program design and funding stimulate new partnerships and increased entrepreneurship and assist colleges and polytechnics to take risks and be nimble in developing new ways of working with local businesses and industries to spur innovation and economic growth. This program uses funding from the following transfer payments: College and Community Innovation Program, College University Idea to Innovation, and the Industrial Research Chairs for colleges.

Budgetary Financial Resources (dollars)

2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$49,709,712	\$50,032,977	\$50,112,977

Human Resources (FTEs)

2016–17	2017–18	2018–19
18	18	18

Performance Measurement

Expected Results	Performance Indicators	Targets	Date to Be Achieved
Increased capacity of colleges to support innovation at the community and/or regional level.	Percentage growth in number of partnerships with companies and other organizations.	5%	March 2017
	Percentage of companies indicating development of new and/or improved products, services, and/or processes.	25%	

Planning Highlights

NSERC will work with colleges to strengthen the national network of Technology Access Centres.

Internal Services

Description

Internal Services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. These groups are: Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; Acquisition Services; and Travel and Other Administrative Services. Internal Services include only those activities and resources that apply across an organization and not to those provided specifically to a program.

Budgetary Financial Resources (dollars)

2016–17 Main Estimates	2016–17 Planned Spending	2017–18 Planned Spending	2018–19 Planned Spending
\$21,740,599	\$21,740,599	\$21,550,394	\$21,550,394

Human Resources (FTEs)

2016–17	2017–18	2018–19
164	164	164

Planning Highlights

In 2016-17, NSERC will continue to enhance its business processes by participating in the federal government's shared systems and services initiative, implementing a Systems Application and Products platform, and transitioning to the PeopleSoft platform (SAP).

NSERC will also facilitate the development of a new grants management system by streamlining and harmonizing business processes and replacing aging technologies to provide program delivery services in the most cost-effective manner and optimize the user experience.

In 2016-17, NSERC will continue to support the Government's Open Data initiative. NSERC will be reviewing its data and information resources to increase the number of data sets published in accessible and open formats via federal Open Government websites.

Section III: Supplementary Information

Future-Oriented Statement of Operations

The future-oriented statement of operations provides a general overview of NSERC's operations. The forecast of financial information on expenses and revenues is prepared on an accrual accounting basis to strengthen accountability and to improve transparency and financial management.

Because the future-oriented condensed statement of operations is prepared on an accrual accounting basis, and the forecast and planned spending amounts presented in other sections of the Report on Plans and Priorities are prepared on an expenditure basis, amounts differ.

A more detailed future-oriented statement of operations and associated notes, including a reconciliation of the net cost of operations to the requested authorities, can be found on [NSERC's website](#)^{viii}.

Future-Oriented Condensed Statement of Operations For the Year Ended March 31, 2016 (dollars)

Financial Information	2015–16 Estimated Results	2016–17 Planned Results	Difference
Total expenses	\$1,125,044,912	\$1,127,797,947	\$2,753,035
Total revenues	\$178,779	\$378,779	\$200,000
Net cost of operations	\$1,124,866,133	\$1,127,419,168	\$2,553,035

Total expenses year-over-year is expected to increase by less than 1% (\$2.8 million). The change is attributable to expected increases in transfer payments, particularly for the Centres of Excellence for Commercialization and Research. Operating expenses, including salaries, are expected to remain constant in the next fiscal year.

Supplementary Information Tables

The supplementary information tables listed in the *2015–16 Report on Plans and Priorities* can be found on the Natural Sciences and Engineering Research Council’s [website](#)^{ix}.

- ▶ Departmental Sustainable Development Strategy;
- ▶ Details on Transfer Payment Programs of \$5 Million or More;
- ▶ Disclosure of Transfer Payment Programs Under \$5 Million;
- ▶ Upcoming Internal Audits and Evaluations Over the Next Three Fiscal Years;

Tax Expenditures and Evaluations

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures annually in the *Tax Expenditures and Evaluations*^x publication. The tax measures presented in the *Tax Expenditures and Evaluations* publication are the responsibility of the Minister of Finance.

Section IV: Organizational Contact Information

For further information about this report, please contact:

Barney Laciak

Manager, Corporate Planning and Reporting

Natural Sciences and Engineering Research Council of Canada

Telephone: 613-996-1079

E-mail: barney.laciak@nserc-crsng.gc.ca

Appendix: Definitions

appropriation: Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures: Include operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

Departmental Performance Report: Reports on an appropriated organization's actual accomplishments against the plans, priorities and expected results set out in the corresponding Reports on Plans and Priorities. These reports are tabled in Parliament in the fall.

full-time equivalent: Is a measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

Government of Canada outcomes: A set of 16 high-level objectives defined for the government as a whole, grouped in four spending areas: economic affairs, social affairs, international affairs and government affairs.

Management, Resources and Results Structure: A comprehensive framework that consists of an organization's inventory of programs, resources, results, performance indicators and governance information. Programs and results are depicted in their hierarchical relationship to each other and to the Strategic Outcome to which they contribute. The Management, Resources and Results Structure is developed from the Program Alignment Architecture.

non-budgetary expenditures: Include net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance: What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve and how well lessons learned have been identified.

performance indicator: A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

performance reporting: The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

planned spending: For Reports on Plans and Priorities (RPPs) and Departmental Performance Reports (DPRs), planned spending refers to those amounts that receive Treasury Board approval by February 1. Therefore, planned spending may include amounts incremental to planned expenditures presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their RPPs and DPRs.

plans: The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead up to the expected result.

priorities: Plans or projects that an organization has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired Strategic Outcome.

program: A group of related resource inputs and activities that are managed to meet specific needs and to achieve intended results and that are treated as a budgetary unit.

Program Alignment Architecture: A structured inventory of an organization's programs depicting the hierarchical relationship between programs and the Strategic Outcome to which they contribute.

Report on Plans and Priorities: Provides information on the plans and expected performance of appropriated organizations over a three-year period. These reports are tabled in Parliament each spring.

results: An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

Strategic Outcome: A long-term and enduring benefit to Canadians that is linked to the organization's mandate, vision and core functions.

sunset program: A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

target: A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

whole-of-government framework: Maps the financial contributions of federal organizations receiving appropriations by aligning their Programs to a set of 16 government-wide, high-level outcome areas, grouped under four spending areas.

Endnotes

- i Ministerial Mandate Letters, <http://pm.gc.ca/eng/ministerial-mandate-letters>
- ii Minister of Innovation, Science and Economic Development Mandate Letter, <http://pm.gc.ca/eng/minister-innovation-science-and-economic-development-mandate-letter>
- iii Minister of Science Mandate Letter, <http://pm.gc.ca/eng/minister-science-mandate-letter>
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