

# Natural Sciences and Engineering Research Council

2014-15

## **Report on Plans and Priorities**

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The Honourable James Moore  
Minister of Industry

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## 2014-15 ESTIMATES

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### PART III – Departmental Expenditure Plans: Reports on Plans and Priorities

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#### **Purpose**

Reports on Plans and Priorities (RPP) are individual expenditure plans for each department and agency. These reports provide increased levels of detail over a three-year period on an organization's main priorities by strategic outcome, program and planned/expected results, including links to related resource requirements presented in the Main Estimates. In conjunction with the Main Estimates, Reports on Plans and Priorities serve to inform members of Parliament on planned expenditures of departments and agencies, and support Parliament's consideration of supply bills. The RPPs are typically tabled soon after the Main Estimates by the President of the Treasury Board.

#### **Estimates Documents**

The Estimates are comprised of three parts:

Part I - Government Expenditure Plan - provides an overview of the Government's requirements and changes in estimated expenditures from previous fiscal years.

Part II - Main Estimates - supports the appropriation acts with detailed information on the estimated spending and authorities being sought by each federal organization requesting appropriations.

In accordance with Standing Orders of the House of Commons, Parts I and II must be tabled on or before March 1.

Part III - Departmental Expenditure Plans - consists of two components:

- Report on Plans and Priorities (RPP)
- Departmental Performance Report (DPR)

DPRs are individual department and agency accounts of results achieved against planned performance expectations as set out in respective RPPs.

The DPRs for the most recently completed fiscal year are tabled in the fall by the President of the Treasury Board.

Supplementary Estimates support Appropriation Acts presented later in the fiscal year. Supplementary Estimates present information on spending requirements that were either not sufficiently developed in time for inclusion in the Main Estimates or have subsequently been refined to account for developments in particular programs and services. Supplementary Estimates also provide information on changes to expenditure forecasts of major statutory items as well as on such items as: transfers of funds between votes; debt deletion; loan guarantees; and new or increased grants.

For more information on the Estimates, please consult the [Treasury Board Secretariat website](#).<sup>i</sup>

### **Links to the Estimates**

As shown above, RPPs make up part of the Part III of the Estimates documents. Whereas Part II emphasizes the financial aspect of the Estimates, Part III focuses on financial and non-financial performance information, both from a planning and priorities standpoint (RPP), and an achievements and results perspective (DPR).

The Management Resources and Results Structure (MRRS) establishes a structure for display of financial information in the Estimates and reporting to Parliament via RPPs and DPRs. When displaying planned spending, RPPs rely on the Estimates as a basic source of financial information.

Main Estimates expenditure figures are based on the Annual Reference Level Update which is prepared in the fall. In comparison, planned spending found in RPPs includes the Estimates as well as any other amounts that have been approved through a Treasury Board submission up to February 1<sup>st</sup> (See Definitions section). This readjusting of the financial figures allows for a more up-to-date portrait of planned spending by program.

### **Changes to the presentation of the Report on Plans and Priorities**

Several changes have been made to the presentation of the RPP partially to respond to a number of requests – from the House of Commons Standing Committees on Public Accounts (PAC - [Report 15](#)<sup>ii</sup>), in 2010; and on Government and Operations Estimates (OGGO - [Report 7](#)<sup>iii</sup>), in 2012 – to provide more detailed financial and non-financial performance information about programs within RPPs and DPRs, thus improving the ease of their study to support appropriations approval.

- In Section II, financial, human resources and performance information is now presented at the Program and Sub-program levels for more granularity.
- The report's general format and terminology have been reviewed for clarity and consistency purposes.
- Other efforts aimed at making the report more intuitive and focused on Estimates information were made to strengthen alignment with the Main Estimates.

### **How to read this document**

RPPs are divided into four sections:

#### Section I: Organizational Expenditure Overview

This Organizational Expenditure Overview allows the reader to get a general glance at the organization. It provides a description of the organization's purpose, as well as basic financial and human resources information. This section opens with the new Organizational Profile, which displays general information about the department, including the names of the minister and the deputy head, the ministerial portfolio, the year the department was established, and the main legislative authorities. This subsection is followed by a new subsection entitled Organizational Context, which includes the *Raison d'être*, the Responsibilities, the Strategic Outcomes and Program Alignment Architecture, the Organizational Priorities and the Risk Analysis. This section ends with the Planned Expenditures, the Alignment to Government of Canada Outcomes, the Estimates by Votes and the Contribution to the Federal Sustainable Development Strategy. It should be noted that this section does not display any non-financial performance information related to programs (please see Section II).

#### Section II: Analysis of Program(s) by Strategic Outcome(s)

This Section provides detailed financial and non-financial performance information for strategic outcomes, Programs and sub-programs. This section allows the reader to learn more about programs by reading their respective description and narrative entitled "Planning Highlights". This narrative speaks to key services or initiatives which support the plans and priorities presented in Section I; it also describes how performance information supports the department's strategic outcome or parent program.

### Section III: Supplementary Information

This section provides supporting information related to departmental plans and priorities. In this section, the reader will find future-oriented statement of operations and a link to supplementary information tables regarding transfer payments, as well as information related to the greening government operations, internal audits and evaluations, horizontal initiatives, user fees, major crown and transformational projects, and up-front multi-year funding, where applicable to individual organizations. The reader will also find a link to the *Tax Expenditures and Evaluations Report*, produced annually by the Minister of Finance, which provides estimates and projections of the revenue impacts of federal tax measures designed to support the economic and social priorities of the Government of Canada.

### Section IV: Organizational Contact Information

In this last section, the reader will have access to organizational contact information.

#### **Definitions**

##### *Appropriation*

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

##### *Budgetary Vs. Non-budgetary Expenditures*

Budgetary expenditures – operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to crown corporations.

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

##### *Expected Result*

An outcome that a program is designed to achieve.

##### *Full-Time Equivalent (FTE)*

A measure of the extent to which an employee represents a full person-year charge against a departmental budget. FTEs 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 high-level objectives defined for the government as a whole.

*Management Resources and Results Structure (MRRS)*

A common approach and structure to the collection, management and reporting of financial and non-financial performance information.

An MRRS provides detailed information on all departmental programs (e.g.: program costs, program expected results and their associated targets, how they align to the government's priorities and intended outcomes, etc.) and establishes the same structure for both internal decision making and external accountability.

*Planned Spending*

For the purpose of the RPP, planned spending refers to those amounts for which a Treasury Board (TB) submission approval has been received by no later than February 1, 2014. This cut-off date differs from the Main Estimates process. Therefore, planned spending may include amounts incremental to planned expenditure levels presented in the 2014-15 Main Estimates.

*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 a department's programs, where programs are arranged in a hierarchical manner to depict the logical relationship between each program and the Strategic Outcome(s) to which they contribute.

*Spending Areas*

Government of Canada categories of expenditures. There are: [four spending areas](#)<sup>iv</sup> (social affairs, economic affairs, international affairs and government affairs) each comprised of three to five Government of Canada outcomes.

*Strategic Outcome*

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

*Sunset Program*

A time-limited program that does not have on-going funding or policy authority. When the program is set to expire, a decision must be made as to whether to continue the program. (In the case of a renewal, the decision specifies the scope, funding level and duration).

*Whole-of-Government Framework*

A map of the financial and non-financial contributions of federal organizations receiving appropriations that aligns their Programs to a set of high level outcome areas defined for the government as a whole.



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## Minister's Message

Canada is poised to enjoy continued economic stability in 2014–15, with a focus on balanced budgets. The country's strong consumer-driven marketplace, world-class research hubs, educated and productive workforce, strong financial institutions, and transparent and predictable regulatory environment are just a few of its many competitive advantages.



As Minister of Industry, I am pleased that the Industry Portfolio is building on these strengths by encouraging innovation, modernizing Canada's marketplace policies, and effectively managing programs and services.

In further developing the federal Science, Technology and Innovation Strategy, the Industry Portfolio aims to strengthen the private sector's participation in Canadian science and technology, knowledge and innovation. This year, small and medium-sized enterprises will also be better served by improved access to information, programs and services offered by Industry Canada, the portfolio partners and the Government of Canada.

In 2014–15, the Natural Sciences and Engineering Research Council of Canada (NSERC) will focus on supporting world-class discovery research, which is the foundation for innovation, and research and development growth that benefits Canadians. This research promotes a strong economy and contributes to job creation. NSERC will continue to find innovative ways to connect more Canadian companies to post-secondary research and training. The agency will build on collaborations with stakeholders to develop and strengthen research opportunities in the fields of natural sciences and engineering, so Canada can compete and succeed on the world stage.

In support of the government's efforts to return to fiscal balance, the Industry Portfolio will continue to ensure financial and human resources are managed responsibly and efficiently.

This year's *Report on Plans and Priorities* defines our approach to supporting a competitive marketplace; facilitating advancements in science, technology and innovation, and their

resulting economic and social benefits; and driving the competitiveness of Canadian businesses and communities. On behalf of the Industry Portfolio, I am confident we will meet our objectives and fulfill the promise of another successful year.

The Honourable James Moore  
Minister of Industry

## Minister of State's Message

As the Minister of State for Science and Technology, I am pleased to present the 2014–15 Report on Plans and Priorities for the Natural Sciences and Engineering Research Council of Canada (NSERC).

Our government remains committed to science, technology and innovation because we understand that the country's long-term prosperity depends on building a wealth of knowledge by reinforcing strengths today and providing the right tools by which to grow.



Recent reports show that science and technology (S&T) in Canada is indeed healthy, growing and recognized around the globe for its excellence. Canada is attracting some of the world's greatest minds—leaders in their fields—and keeping homegrown talent right here. And this is fundamental because scientific curiosity leads to discovery, increases the wealth of information, inspires change in how people see and do things and, ultimately, improves the quality of life of Canadians.

This year, our government is once again committed to encouraging innovation in Canada's industrial core and further enhancing the country's strengths. We will do this in various ways, including through the transformed National Research Council and through other important investments and key measures.

As we renew the federal science, technology and innovation strategy, it is crucial that we strengthen relationships between researchers and the private sector, to further bridge the gap between ideas and the new products and processes that enter Canadian businesses and homes. Building new partnerships and reinforcing existing ones will clearly lead to more innovations getting to market. Businesses often see fast and long-lasting returns when academic research is integrated with private sector know-how.

In 2014–15, NSERC will continue to engage the country's renowned academic research community to contribute to a stronger and more prosperous Canada. In an increasingly competitive global economy, NSERC will work with the research community to expand Canada's knowledge-based economy through investments to give scientists and engineers the tools they need to push the boundaries of scientific research. NSERC will continue to provide students and graduates with the right training to build the necessary skills to secure Canada's competitive advantage in today's and tomorrow's economy.

With the significant S&T investments our government has made since 2006, Canada has become a beacon of light on the world stage—positioning itself as an ideal country for cutting-edge research. Canada is truly seizing its moment, for the benefit of all Canadians. In 2014–15, we will continue working with our academic, industry, and provincial and territorial partners to meet the objectives outlined in this report and keep Canada on the forefront of innovation.

The Honourable Greg Rickford  
Minister of State (Science and Technology) (Federal Economic Development Initiative for Northern Ontario)

## Section I: Organizational Expenditure Overview

### Organizational Profile

**Minister:** The Honourable James Moore, Minister of Industry  
The Honourable Greg Rickford, Minister of State (Science and Technology and Federal Development Initiative for Northern Ontario)

**Deputy Head:**

- The Honourable James S. Edwards (Vice-President and Chair of Council)
- Janet Walden (Chief Operating Officer)

**Ministerial portfolio:** Natural Sciences and Engineering Research Council of Canada

**Year established:** May 1, 1978

**Main legislative authorities:** [\*Natural Sciences and Engineering Research Council Act\*](#)<sup>v</sup>

## Organizational Context

### Raison d'être

The Natural Sciences and Engineering Research Council of Canada (NSERC) is a key actor 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 key 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 promotional activities and 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 Industry. NSERC's Council is composed of a President and up to 18 other distinguished members selected from the private



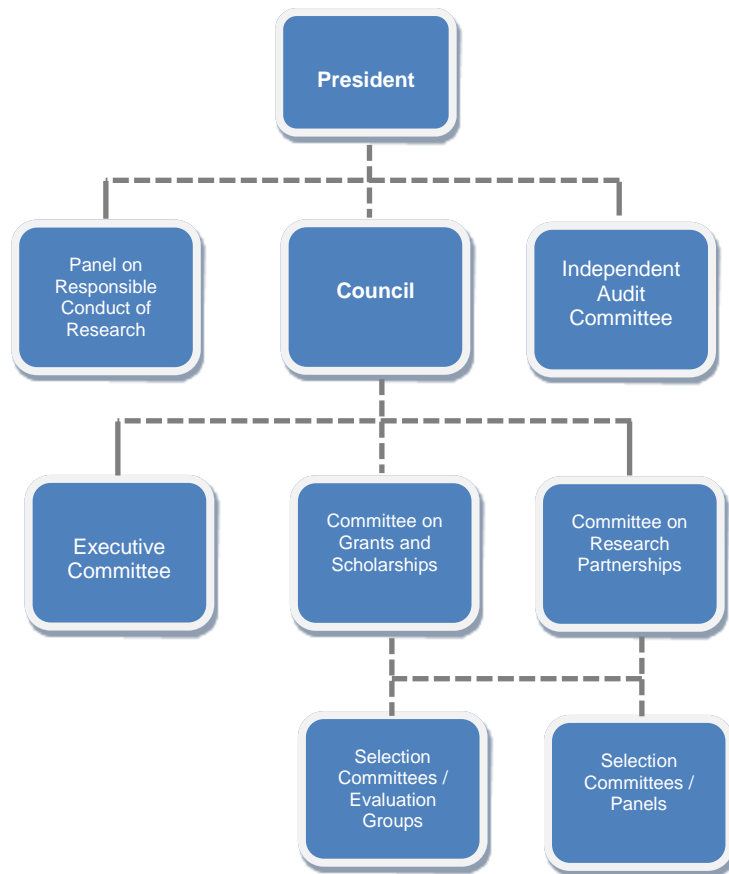
and public sectors. NSERC's President is the Chief Executive Officer.<sup>1</sup> The elected Vice-President is the Chair of the Council and of its Executive Committee. NSERC's Council is advised on policy matters by various standing committees. Funding decisions are made by the President, or designate, 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.

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<sup>1</sup> The Chair of NSERC currently serves as President, with the Chief Operating Officer undertaking day-to-day functions, while a selection process is underway to determine the incoming President.

### NSERC's Governance Structure



--- Advisory committees

## Strategic Outcome and Program Alignment Architecture (PAA)

### **1.0 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 Infrastructure

#### **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

NSERC's role is to make strategic investments in people, discovery and innovation to increase Canada's scientific and technological capabilities for the benefit of all Canadians. NSERC invests in people by supporting postsecondary students, graduate students, researchers, and postdoctoral fellows in their advanced studies. NSERC promotes discovery by funding research conducted by postsecondary professors. NSERC fosters innovation by encouraging Canadian companies to participate and invest in postsecondary research and training. The vast majority of NSERC's expenditures are in areas that fall under the science and technology priorities established by the federal government.

Priority	Type	Strategic Outcome
<b>People Advantage</b>	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering
<p><b>Why is this a priority?</b></p> <p>An innovative and competitive society relies on the creativity and skills of highly trained people. In order to maintain Canadian research excellence, it must be ensured that the next generation of Canadians have the necessary skills in science and technology, to meet the demands of today's global realities.</p> <p>NSERC contributes to building a stronger culture of science, technology and innovation in Canada by providing university students and fellows support for their education and providing opportunities for students and fellows to train in a variety of research environments that help them develop professional, job-ready skills for their future careers.</p> <p><b>Plans for meeting the priority:</b></p> <ul style="list-style-type: none"> <li>• 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 remain relevant and effective, NSERC will build upon and continue to regularly monitor and evaluate program performance.</li> <li>• In 2014-15 and beyond, NSERC will continue to develop plans, in collaboration with key</li> </ul>		

partners, to increase the promotion of the participation of women in science and engineering as students, professionals, and leaders.

- To ensure Canada attracts and retains top levels of talent, NSERC, in collaboration with Canada's other granting agencies, will conduct the first evaluation of the Banting Postdoctoral Fellowships Program.
- In 2014-15, NSERC will increase the supply of highly qualified personnel who are "marketplace-ready" and can make immediate contributions after graduation by providing enhanced opportunities to develop technical and professional skills and to experience enriched and varied research environments.

Priority	Type	Strategic Outcome
Knowledge Advantage	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering

#### Why is this a priority?

To further position Canada as a hub of knowledge and discovery, Canada must build upon research and engineering strengths, generate new ideas and innovations, and achieve excellence by global standards.

NSERC sustains Canada's capacity to conduct world-class research in the broad areas of natural sciences and engineering by supporting scientific excellence, by seeding the creativity that leads to future innovations, and by supporting Canadian researchers so they can be global leaders and key players in international research collaborations. NSERC's Discovery Grants Program supports ongoing programs of research and recognizes the creativity and innovation that are at the heart of all research advances, whether made individually or in teams.

#### Plans for meeting the priority:

- NSERC will continue to promote and maintain a diversified base of high-quality research capability.

- In 2014-15, NSERC will continue to work with Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research on a harmonized Tri-Agency Policy on Open Access designed to improve access to the published results of publically-funded research, and to increase the dissemination and exchange of research results.
- NSERC will continue to support the involvement of Canadian researchers and students in international collaborations by focusing participation and engagement on initiatives and partnerships aligned with NSERC's strategic objectives. NSERC will continue to be active in international research fora, including the 2014 Global Research Council Annual Meeting.
- NSERC will continue to support advanced research and the development of early career researchers through the Discovery Grants Program. NSERC will complete and carefully consider results of an ongoing evaluation of the Program, being conducted in 2014, in order to ensure the program is operating effectively.

Priority	Type	Strategic Outcome
<b>Entrepreneurial Advantage</b>	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering

#### **Why is this a priority?**

Private sector innovation is integral to improving productivity and sustaining long-term economic prosperity in an increasingly competitive global marketplace. To remain competitive in today's global economy, Canada must ensure that postsecondary research strengths are able to respond to future increases in demands for S&T innovation from the private sector. This is consistent with the recommendations of the 2011 [Expert Panel on the Review of Federal Support to Research and Development](#)<sup>vi</sup>. As outlined in the October 16, 2013 [Speech from the Throne](#)<sup>vii</sup>, the Government of Canada "will continue making targeted investments in science and innovation chains from laboratory to market in order to position Canada as a leader in the knowledge economy."

NSERC helps businesses to access, develop and share the most innovative ideas and approaches by connecting them with the research strength in Canada's universities and colleges. These collaborative R&D partnerships also provide an excellent experiential training environment for students to gain skills working with business.

#### **Plans for meeting the priority:**

- In 2014-15, NSERC will continue to increase the number of companies NSERC works

with, in order to increase the impact of its suite of Research Partnerships Programs. As outlined in the NSERC Strategy for Partnerships launched in 2009, NSERC is on track to double the number of companies it works with from 1,500 in 2009 to over 3,000 in 2014-15.

- In 2014-15, NSERC will plan an update to the Strategy for Partnerships and Innovation to better connect and apply research capabilities at Canadian postsecondary institutions with business innovation needs.
- NSERC will work to remove barriers and reduce complexities of programs. For example, NSERC will create shorter processing times for Collaborative Research and Development grants.
- In 2014-15, NSERC will conduct a planned audit of the College and Community Innovation Program to ensure that it continues to enable Canadian colleges and polytechnics to increase their capacity to work with local companies, particularly small and medium-sized enterprises.
- NSERC will enhance internal tools and processes for performance monitoring of partnered grants in order to better measure contributions to private sector innovation.

Priority	Type	Strategic Outcome
Accountability	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering

**Why is this a priority?**

NSERC is committed to ensuring and demonstrating that the results of its investments in Canadian research and training are of benefit to Canadians.

NSERC is taking a proactive stance to demonstrate its stewardship in the management of Canada's investments in natural sciences and engineering by measuring and reporting on the results and impacts of its programs, finding efficiencies, working with other departments and agencies, and promoting a culture of business excellence within the organization.

**Plans for meeting the priority:**

- NSERC will continue to advance a culture of business excellence in the delivery of its services and its enabling infrastructure in order to optimize operational effectiveness and improve client services.
- In 2014-15, NSERC will continue to generate, disseminate, and publish performance data in a timely and informative matter.
- NSERC will continue to develop the Research Portal, a grants management system, in order to simplify the application process by providing a single point of access for applicants, reviewers, committee members, institutions and partners.
- NSERC will work with the Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research, through the Secretariat on the Responsible Conduct of Research and the Panel on Research Ethics, to revise the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (2<sup>nd</sup> edition), based on consultations undertaken with the community in 2013-14.
- NSERC will continue to conduct regularly scheduled audits of its operations and management to ensure efficiency and accountability. Whenever appropriate, the Corporate Internal Audit Division will conduct follow up audits to ensure recommended measures have been taken.

Priority	Type	Strategic Outcome
Visibility	On-going	Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering

**Why is this a priority?**

Showcasing and promoting the accomplishments of Canadian researchers allows NSERC to demonstrate the value and social and economic benefits of the federal government's investments in science and technology. Promoting Canadian research increases the dissemination and application of cutting edge Canadian knowledge and research worldwide.



**Plans for meeting the priority:**

- NSERC will continue to work with like-minded organizations and those that have similar objectives to sustain and create new partnerships and to reach new audiences.
- In 2014-15, NSERC will continue to leverage relationships with partners from the academic and business communities, as well as from key government departments. In addition, NSERC will establish new ways to connect with industry and key opinion leaders in Canada.

## Risk Analysis

Based on a review of corporate risks, three areas have been identified as priorities for risk mitigation strategies.

NSERC's strategic and operational priorities are managed and monitored according to NSERC's Corporate Risk Profile which is updated annually. The risks that were identified in the most recent Corporate Risk Profile are reflective of the current fiscal context which requires innovative approaches and new technologies to improve efficiency within organizations and across Government.

### Key Risks

Risks	Risk Mitigation Strategy	Link to Program Alignment Architecture
<p><b>Implementing Information Technology Innovation</b></p> <p>The risk that the organizational investments in information technology are not leveraged or adequately resourced.</p>	<p>NSERC mitigates this risk area by continuing its commitment to the Information Management and Information Technology Strategy, which has been updated to reflect changes in technology, industry best practices, and NSERC business requirements. It serves to proactively lever technology to improve the efficiency of internal operations and client service. NSERC will continue regular review, assurance and evaluation to ensure accountability.</p>	<p>S.O.1</p> <p>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><b>Managing Business Transformation</b></p> <p>The risk that the organization is unable to adapt to, and</p>	<p>NSERC mitigates this risk area by continuing its commitment to positioning NSERC's Internal Working</p>	

<p>capitalize on, technological and process changes.</p>	<p>Groups to manage risk:</p> <ul style="list-style-type: none"> <li>• Internal Working Groups will continue to liaise with the research community to gain feedback and offer guidance on new tools such as the Common C.V.</li> <li>• Internal Work Groups will continue to provide strong governance to support the implementation of the Research Portal.</li> </ul> <p>NSERC will ensure that integrated planning, proactive training of staff, and internal communications prepare staff for change and mitigate business transformation risk.</p>	
<p><b>Stakeholder Management</b> (Government, Research Community, Media)</p> <p>The risk that the organizational planning process does not effectively address evolving and diverse stakeholder relationships and challenges to its reputation as a result of controversial/sensitive issues.</p>	<p>NSERC mitigates this risk area by continuing its commitment to ensuring that NSERC is proactive in its communications and consultations with its stakeholders:</p> <ul style="list-style-type: none"> <li>• NSERC’s annual communication plan will involve stakeholder engagement, communication strategies for major initiatives, and media outreach to build strong relationships. The plan also addresses issue management, involves weekly meetings with Industry Canada’s Communication and Marketing Branch, a social</li> </ul>	

	<p>media strategy, and a response protocol.</p> <ul style="list-style-type: none"> <li>• Tri-agency harmonized policies and processes will be in place, including the Tri-agency Memorandum of Understanding on the Roles and Responsibilities in the Management of Federal Grants and Awards.</li> <li>• NSERC will continue to work with the Tri-Agency <a href="#">Secretariat on the Responsible Conduct of Research</a>, established in 2011.<sup>viii</sup></li> </ul>	
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While NSERC administers a significant budget, the Council’s overall risk level compared to other government entities is considered low in terms of the continuity of government operations and the maintenance of services to, and the protection of the interests of, the Canadian public.

## Planned Expenditures

### Budgetary Financial Resources (Planned Spending )

2014-15 Main Estimates	2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$1,063,174,249	\$1,063,174,249	\$1,060,768,391	\$1,058,904,355

### Human Resources (Full-Time Equivalents—FTEs)

2014-15	2015-16	2016-17
378	378	378

Note: Planned spending does not reflect future budget decisions.

**Budgetary Planning Summary for Strategic Outcome and Program(s)**

Strategic Outcome(s), Program(s) and Internal Services	2011–12 Expenditures	2012–13 Expenditures	2013–14 Forecast Spending	2014–15 Main Estimates	2014–15 Planned Spending *	2015–16 Planned Spending *	2016–17 Planned Spending *
<b>Strategic Outcome 1: Canada is a world leader in advancing, connecting and applying new knowledge in the natural sciences and engineering</b>							
People: Research Talent	\$278,364,856	\$271,422,544.000	\$275,887,937	\$276,073,435	\$276,073,435	\$276,067,376	\$276,067,886
Discovery: Advancement of Knowledge	\$423,942,775	\$430,509,978	\$392,890,459	\$394,168,765	\$394,168,765	\$392,544,674	\$391,810,895
Innovation: Research Partnerships	\$358,414,585	\$346,895,745	\$375,348,820	\$369,062,488	\$369,062,488	\$368,177,666	\$367,031,263
<b>Strategic Outcome 1 Subtotal</b>	\$1,060,722,216	\$1,048,828,267	\$1,044,127,216	\$1,039,304,688	\$1,039,304,688	\$1,036,789,716	\$1,034,910,044
<b>Internal Services Subtotal</b>	\$25,014,240	\$27,152,242	\$25,996,613	\$23,869,561	\$23,869,561	\$23,978,675	\$23,994,311
<b>Total</b>	\$1,085,736,456	\$1,075,980,509	\$1,070,123,829	\$1,063,174,249	\$1,063,174,249	\$1,060,768,391	\$1,058,904,355

\*Planned spending does not reflect future budget decisions.

## Alignment to Government of Canada Outcomes

2014-15 Budgetary Planned Spending by: [Whole-of-Government-Framework Spending Area<sup>ix</sup>](#)

Strategic Outcome	Program	Government of Canada Outcome	Spending Area	2014-15 Planned Spending
Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering	1.1 People	An innovative and knowledge based economy	Economic Affairs	\$276,073,435
	1.2 Discovery	An innovative and knowledge based economy	Economic Affairs	\$394,168,765
	1.3 Innovation	An innovative and knowledge based economy	Economic Affairs	\$369,062,488

### Total Planned Spending by Spending Area (dollars)<sup>2</sup>

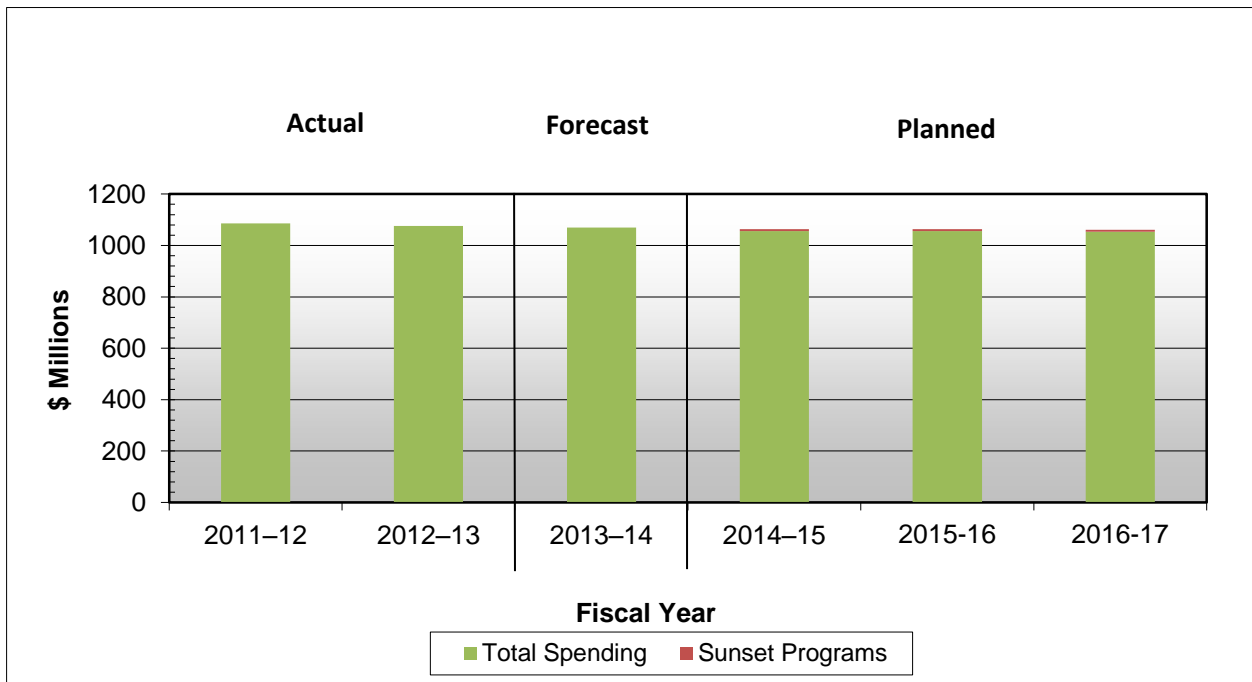
Spending Area	Total Planned Spending
Economic Affairs	\$1,039,304,688
Social Affairs	N/A

<sup>2</sup> While NSERC funding spans multiple categories, as per official Treasury Board guidelines it is primarily categorized under the spending area of Economic affairs

International Affairs	N/A
Government Affairs	N/A

## Departmental Spending Trend

### Departmental Spending Trend Graph



Note: Planned spending does not reflect future budget decisions.

## Estimates by Vote

For information on NSERC's organizational appropriations, please see the [2014-15 Main Estimates publication](#).<sup>x</sup>



## Section II: Analysis of Programs by Strategic Outcomes

### Strategic Outcome:

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

### Program 1.1 - *People: Research Talent*

#### Program Description:

This Program supports the attraction, retention and development of highly qualified people in 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 and outreach activities at universities, museums, science centres, and community-based organizations.

#### Budgetary Financial Resources

2014-15 Main Estimates	2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$276,073,435	\$276,073,435	\$276,067,376	\$276,067,886

Note: Planned spending does not reflect future budget decisions.

#### Human Resources (FTEs)

2014-15	2015-16	2016-17
33	33	33

**Performance Measurement**

Program Expected Results	Performance Indicators	Targets	Fiscal Year Achieved
Canada's workforce has the required talented and skilled researchers in natural sciences and engineering.	Total researchers per thousand employed	8.3%	2014-15
	Percentage difference in unemployment rate for occupations in natural sciences and engineering vs. national unemployment rate.	1%	
	Number of earned doctoral degrees in natural sciences and engineering per capita	15 <sup>th</sup>	

**Planning Highlights:**

- NSERC continues to work with the Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research to harmonize the agencies' policies on Women in Science and Engineering. In 2014-15, the agencies will develop a detailed implementation plan which will involve consultations with stakeholder groups. The implementation plan will also be informed by recommended action plans from a series of international Gender Summits. These summits provide a forum for stakeholders to develop innovative approaches to advance gender considerations in research.
- In 2014-15, NSERC will continue to increase the supply of highly qualified personnel who are "marketplace-ready" in natural sciences and engineering through the innovative Collaborative Research and Training Experience Program (CREATE) that was launched in 2009. The program provides enhanced opportunities for students to develop technical and professional skills, and to gain experience in enriched and varied research environments. Up to half of the 90 active training programs feature a formal link with industry.

## Sub-program 1.1.1: Science and Engineering Promotion

### Sub-program Description:

This Sub-Program stimulates the public's interest in science, mathematics, 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. 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 under-represented groups in 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.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$6,315,892	\$6,315,618	\$6,315,641

Note: Planned spending does not reflect future budget decisions.

### Human Resources (FTEs)

2014-15	2015-16	2016-17
1	1	1

### Performance Measurement

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year Achieved
The next generation of university students select the natural sciences and engineering as a field	Percentage growth in bachelor's enrolment in natural sciences and engineering at Canadian universities.	1%	2014-15

of study.	Percentage of science promotion projects that successfully complete the planned activity.	80%	
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### Planning Highlights

- In 2014-15, the PromoScience program will hold a competition to award between 40 and 50 multi-year grants, anticipated to be selected from among over 100 requests. Annual competitions enable NSERC to maintain a complement of over 125 active PromoScience grants that support outreach activities aimed at youth and under-represented groups.
- NSERC will honour Canada's top researchers by awarding eight prestigious prizes in 2014-15; 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.

## Sub-program 1.1.2: Scholarships and Fellowships

### Sub-program 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 stimulate students' interest in research in 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 an academic or industrial setting or in a foreign institution. NSERC Fellowships provide support to promising Doctoral graduates to further their research training in Canada or abroad.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$77,554,283	\$77,550,919	\$77,551,202

Note: Planned spending does not reflect future budget decisions.

**Human Resources (FTE)**

2014-15	2015-16	2016-17
19	19	19

**Performance Measurement**

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year 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 natural sciences and engineering supported (directly or indirectly) by NSERC.	25%	2014-15
	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 2014-15, NSERC will carry out a joint evaluation of the Postgraduate Scholarships, Industrial Postgraduate Scholarships, and Collaborative Research and Training Experience (CREATE) programs to assess their effectiveness at meeting their objectives.

- NSERC will make improvements to the NSERC Postdoctoral Fellowships program, including moving toward offering awards to selected recipients earlier in the year, in response to input from fellows and universities.

### Sub-program 1.1.3: Alexander Graham Bell Canada Graduate Scholarships

#### Sub - Program 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.

#### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$43,608,026	\$43,606,134	\$43,606,293

Note: Planned spending does not reflect future budget decisions.

#### Human Resources (FTE)

2014-15	2015-16	2016-17
10	10	10

#### Performance Measurement

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year 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%	2014-15

	Time to degree completion of Doctoral recipients of a Canada Graduate Scholarship	< 6 years	
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### Planning Highlights

- In 2014-15 and beyond, NSERC will continue to work with the Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research to plan for a harmonized administration and delivery of the Alexander Graham Bell Canada Graduate Scholarships, focusing specifically on the model and delivery of Doctoral awards. This multi-year harmonization is part of a commitment to streamline services across the agencies, reduce duplication of efforts, and minimize the administrative burden for applicants and their institutions.
- The agencies will also complete an evaluation of the Canada Graduate Scholarship program in 2014-15 to provide tri-agency senior management with valid, insightful and actionable findings about the performance and relevance of the program. This will include determining the extent to which the program has met its objectives, along with conclusions and recommendations for future development and improvement, including the ongoing project to harmonize the administration and delivery of the program.

## Sub-program 1.1.4: Vanier Canada Graduate Scholarships

### Sub - Program 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 Vanier Canada Graduate Scholarships. This program helps attract and retain world-class Doctoral students by supporting individuals who demonstrate a high standard of scholarly achievement in graduate studies, as well as leadership skills. A high-level steering committee, assisted by an international review committee ensures that the most intelligent and gifted 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(s): Vanier Canada Graduate Scholarships.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$8,551,597	\$8,551,226	\$8,551,258

### Human Resources (FTE)

2014-15	2015-16	2016-17
2	2	2

### Performance Measurement

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year 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%	2014-15
	Number of international students who were awarded a Vanier Canada Graduate Scholarship	50	

### Planning Highlights

- In 2014-15, NSERC will work with the Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research, to carry out the renewal of the Terms and Conditions of the Vanier Canada Graduate Scholarships program.



## Sub-program 1.1.5: Banting Postdoctoral Fellowships

### Sub - Program 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% 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.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$3,632,637	\$3,632,479	\$3,632,492

### Human Resources (FTE)

2014-15	2015-16	2016-17
1	1	1

### Performance Measurement

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year Achieved
Compete worldwide for premier postdoctoral researchers to build world class research capacity in Canada.	Expert review of the quality of the pool of applicants as measured by percent of fundable applications (for a given competition year).	25%	2014-15
	Number of international postdoctoral	22	

	researchers or equivalent who were awarded a Banting Postdoctoral Fellowship		
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### Planning Highlights

- In 2014-15, NSERC, in collaboration with the Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research, will carry out the first summative evaluation of the Banting Postdoctoral Fellowships program, in order to maintain strong design, performance, and efficiency of the Banting program. Out of the 70 new awards available each year, approximately 27 are awarded in natural sciences and engineering.

## Sub-program 1.1.6: Canada Research Chairs

### Sub - Program 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.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$118,211,000	\$118,211,000	\$118,211,000

### Human Resources (FTE)

2014-15	2015-16	2016-17
N/A*	N/A*	N/A*

\*The program is managed by SSHRC.

**Performance Measurement**

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year 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 Chairs program important or very important in their ability to support the existing research teams/ research clusters/ research centres.	90%	2014-15

**Planning Highlights**

- In 2014-15, NSERC will work with its fellow funding agencies to complete the repatriation of the Chairs Information Management System. In particular, it will ensure the security and integrity of the program's data, addressing recommendations for improvements to internal controls made in the 2012 audit of the Canada Research Chairs Program.

**Sub-program 1.1.7: Canada Excellence Research Chairs****Sub - program Description**

This Sub-Program offers eligible Canadian degree-granting institutions the opportunity to establish highly remunerated research chairs at their institutions in research areas in one or more of the four priority research areas that are of strategic importance to Canada: environmental sciences and technologies, natural resources and energy, health and related life sciences and technologies, and information and communication technologies. This program is necessary to attract the highest calibre of researchers for Canada's future prosperity.

**Budgetary Financial Resources**

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$18,200,000	\$18,200,000	\$18,200,000

**Human Resources (FTE)**

2014-15	2015-16	2016-17
N/A*	N/A*	N/A*

\*The program is managed by SSHRC.

**Performance Measurement**

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year 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 the award.	75%	2014-15
	Percentage of Chairs that have provided expert advice/opinion to target end-user groups at a moderate/significant level	75%	

**Planning Highlights**

- In 2014-15, NSERC will work with the Chairs Secretariat to respond to the recommendations of the Canada Excellence Research Chairs program evaluation, to be completed in 2014-15, and implement changes as required.

## Program 1.2 – *Discovery: Advancement of Knowledge*

### Program Description:

This Program supports the creation of new knowledge and maintenance of a high quality Canadian-based research capacity in 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 support the timely acceleration of research programs, the purchase or development of research equipment, or the facilitation of effective access to major and unique research resources.

### Budgetary Financial Resources

2014-15 Main Estimates	2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$394,168,765	\$394,168,765	\$392,544,674	\$391,810,895

Note: Planned spending does not reflect future budget decisions.

### Human Resources (FTEs)

2014-15	2015-16	2016-17
50	50	50

### Performance Measurement

Program Expected Results	Performance Indicators	Targets	Fiscal Year Achieved
Researchers at Canadian universities advance knowledge in natural sciences and engineering.	Ranking in the per capita output of publications in natural sciences and engineering vs. G20 countries.	8 <sup>th</sup>	2014-15

	Ranking in the number of natural sciences and engineering publications vs. G20 countries.	9 <sup>th</sup>	
	Average relative citation factor of Canadian publications in natural sciences and engineering vs. G20 countries.	15 <sup>th</sup>	

### Planning Highlights

- In 2014-15, NSERC will continue the implementation of a new technology platform for the delivery of the Discovery Grants and Subatomic Physics elements of the Discovery suite of programs. The Research Portal, Canadian Common C.V. and Client Relationship Management System will modernize the systems and processes used to manage all stages of NSERC's grant management business.

## Sub-program 1.2.1: Discovery Research

### Sub - program 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. In addition, NSERC offers substantial and timely additional resources to select researchers in order to accelerate progress and maximize the impact of their research program. 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 training the next generation of scientists and engineers.

**Budgetary Financial Resources**

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$379,408,043	\$377,783,481	\$377,049,284

Note: Planned spending does not reflect future budget decisions.

**Human Resources (FTE)**

2014-15	2015-16	2016-17
48	48	48

**Performance Measurement**

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year 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%	2014-15
	Percentage of funds spent on training students and postdoctoral fellows	35%	
	Percentage of Canadian publications in natural sciences and engineering coauthored with foreign researchers.	40%	

**Planning Highlights**

- In 2014-15, NSERC will develop an action plan to follow-up on the program evaluation and international review carried out in 2013-14. The evaluation provided a strong endorsement

for the program, its impacts, and the results of changes implemented in 2009 and 2010. Recommendations from the International Review Panel consist of enhancements to the current program direction, rather than major changes. NSERC will consider the recommendations and set priorities for follow-up actions to address any areas for improvement with regard to the program design and delivery.

## Sub-program 1.2.2: Research Equipment and Infrastructure

### Sub - program Description

This Sub-Program helps to support the acquisition, maintenance and operation of research equipment and major research resources. Funds are also used to facilitate researchers' access to major and unique research facilities in Canada and abroad. Grants are awarded through a competitive peer review process. This, in addition to funds to carry out research, helps support top scientists and engineers' access to state-of-the-art equipment and facilities to carry out research at world-class levels. Access to top facilities plays an important role in attracting the best minds to Canada and keeping them here.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$14,760,722	\$14,761,193	\$14,761,611

Note: Planned spending does not reflect future budget decisions.

### Human Resources (FTE)

2014-15	2015-16	2016-17
2	2	2

### Performance Measurement

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year Achieved
The discovery, innovation, and training capability of university researchers	Percentage growth in number of users conducting research at supported facilities.	5%	2014-15



in natural sciences and engineering is supported by access to research equipment and major regional or national research facilities.	Average number of researchers benefiting from equipment awards.	100	
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### Planning Highlights

- In 2014-15, 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 or smaller in scale than those funded by the Canada Foundation for Innovation.
- In 2014-15, NSERC will award the first grants for [Collaborative and Thematic Resources Support in Mathematics and Statistics](#)<sup>xi</sup>. These grants will assist resources that have broad reach and provide significant value in advancing knowledge in mathematics and statistics and related interdisciplinary research. Collaborative and thematic resources will promote national and international interactions within the mathematical and statistical sciences and provide a place where researchers from these fields can meet, collaborate and exchange ideas.
- In 2014-15, NSERC will continue to collaborate with key partners including the Canada Foundation for Innovation and the university and college community in support of major research infrastructure.

## Program 1.3 – *Innovation: Research Partnerships*

### Program 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

2014-15 Main Estimates	2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$369,062,488	\$369,062,488	\$368,177,666	\$367,031,263

Note: Planned spending does not reflect future budget decisions.

### Human Resources (FTEs)

2014-15	2015-16	2016-17
123	123	123

### Performance Measurement

Program Expected Results	Performance Indicators	Targets	Fiscal Year Achieved
Canada builds more research partnerships between businesses, universities and colleges.	Percentage growth in the number of business partners annually.	5%	2014-15

	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%	
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## Planning Highlights

- In 2014-15, NSERC will plan, develop and look to implement updates to a renewed Strategy for Partnerships and Innovation. In November 2009, NSERC launched the Strategy for Partnerships and Innovation with an anticipated horizon of 5-years. NSERC has had success in implementing actions that address the themes of the strategy. The context for partnered research in Canada continues to evolve, and NSERC must analyze its strategic directions in order to better “connect and apply” NSERC funded research.

## Sub-program 1.3.1: Research in Strategic Areas

### Sub- program 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.

**Budgetary Financial Resources**

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$98,841,253	\$98,897,576	\$98,913,126

**Human Resources (FTE)**

2014-15	2015-16	2016-17
33	33	33

**Performance Measurement**

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year Achieved
Research and training in targeted and emerging areas of national importance is accelerated.	Percentage of projects demonstrating knowledge transfer in strategic areas.	50%	2014-15
	Number of students and fellows carrying out research in strategic areas.	1,500	

**Planning Highlights**

- In 2014-15, NSERC will develop Sector Outreach Strategies to increase awareness in companies of NSERC's funding opportunities and effectively leverage partnerships in sectors of national priority.

**Sub-program 1.3.2: Industry-driven Collaborative Research and Development****Sub - program Description**

This Sub-Program fosters collaborations between university researchers and industry, as well as other sectors, to develop and apply new knowledge with 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.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$141,109,980	\$140,451,235	\$140,431,577

Note: Planned spending does not reflect future budget decisions.

### Human Resources (FTE)

2014-15	2015-16	2016-17
47	47	47

### Performance Measurement

Sub- program Expected Results	Performance Indicators	Targets	Fiscal Year Achieved
Mutually beneficial collaborations between the private sector and researchers in universities, resulting in industrial or economic benefits to Canada.	Percentage growth in total amount of research funds (cash and in-kind) leveraged from industrial partners.	2%	2014-15
	Number of students and fellows solving industrial problems through collaboration.	2,500	
	Percentage of industrial partners indicating satisfaction with research results.	75%	

**Planning Highlights**

- In 2014-15 NSERC will further improve tools and processes to collect final report data from select industry-driven grants in order to improve on performance monitoring and reporting.
- In 2014-15, NSERC will look at new approaches for marketing its academic advantage including open innovation, social media, and reinforcing its brand.

**Sub-program 1.3.3: Networks of Centres of Excellence****Sub- program 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 to Canada. 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.

**Budgetary Financial Resources**

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$41,879,201	\$42,097,482	\$41,722,162

Note: Planned spending does not reflect future budget decisions.

**Human Resources (FTE)**

2014-15	2015-16	2016-17
14	14	14

**Performance Measurement**

Sub-program Expected Results	Performance Indicators	Targets	Fiscal Year 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%	2014-15

**Planning Highlights**

- In 2014-15, the Networks of Centres of Excellence (NCE) programs will deliver additional support to networks and centres, including sharing best practices in governance, in order to support strong management and governance within these organizations and to improve the efficiency of their reporting on results.
- In 2014-15, the Networks of Centres of Excellence and NCE-Knowledge Mobilization programs will be launching new networks and will share best practices on governance, management, reporting, and delivery of milestones in the partnerships with new grantees.
- The Business-Led Networks of Centres of Excellence (BL-NCE) program will be launching four new networks and will share best practices on governance, management, reporting, delivery, as well as the types of expertise and resources required to implement a business-led network. As per the NCE Management response to the 2012 BL-NCE program evaluation, specific assistance around the development and implementation of network agreements will be provided by the NCE Secretariat.

## Sub-program 1.3.4: Training in Industry

### Sub- program 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 R&D 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.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$27,933,431	\$27,934,605	\$27,938,997

### Human Resources (FTE)

2014-15	2015-16	2016-17
9	9	9

### Performance Measurement

Sub- program Expected Results	Performance Indicators	Targets	Fiscal Year 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%	2014-15
	Percentage of undergraduate students considering an industrial R&D career (after their Undergraduate Student Research Award).	50%	



## Planning Highlights

- In 2014-15, NSERC will fully implement the Fellowship Innovation Platform, which is aimed at innovative approaches to building a critical mass of highly qualified personnel with information and communications technology and industrial experience through the clustering of training opportunities.
- The Industrial R&D Internships program will address program evaluation recommendations in preparation for new competitions for delivery agents and enhance the impact of the program.

## Sub-program 1.3.5: Commercialization of Research

### Sub- program 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, NSERC 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.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$9,562,730	\$8,951,442	\$8,174,709

Note: Planned spending does not reflect future budget decisions.

### Human Resources (FTE)

2014-15	2015-16	2016-17
3	3	3

**Performance Measurement**

<b>Sub-program Expected Results</b>	<b>Performance Indicators</b>	<b>Targets</b>	<b>Fiscal Year Achieved</b>
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%	2014-15
	Percentage of projects resulting in intellectual property protection (patents, copyrights, trademarks, registered industrial designs).	25%	

**Planning Highlights**

- In 2014-15, 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.
- The Centres of Excellence for Commercialization and Research programs will use the launch of new Centres as a platform for sharing best practices on governance, reporting, and delivery of milestones in partnerships and commercialization.

## Sub-program 1.3.6: College and Community Innovation

### Sub- program 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.

### Budgetary Financial Resources

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$49,735,893	\$49,845,326	\$49,850,692

### Human Resources (FTE)

2014-15	2015-16	2016-17
17	17	17

### Performance Measurement

Sub- program Expected Results	Performance Indicators	Targets	Fiscal Year 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%	2014-15
	Percentage of companies indicating development of new and/or improved products, services, and/or processes.	25%	

### **Planning Highlights**

- In 2014-15, NSERC will continue to encourage college-university-business partnerships through College-University Idea to Innovation grants and streamlined grant processes where other project grants are sought (i.e., a joint Applied Research and Development grant (colleges) and Collaborative Research and Development grant (universities) process).
- In 2014-15, NSERC plans to continue implementing the \$12M funding increment as announced in the 2013 Economic Action Plan to further support “research and development projects that focus on company needs, helping firms to become more innovative and productive.” NSERC will also include college-university-business partnerships through College-University Idea to Innovation grants and streamlined grant processes where other project grants are sought (i.e., a joint Applied Research and Development grant (colleges) and Collaborative Research and Development grant (universities) process).

## 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. For NSERC 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 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

2014-15 Planned Spending	2015-16 Planned Spending	2016-17 Planned Spending
\$23,869,561	\$23,978,675	\$23,994,311

### Human Resources (FTE)

2014-15	2015-16	2016-17
172	172	172

### Planning Highlights

- In 2014-15, NSERC will continue to strengthen its functional accountabilities and improve its business processes and systems. Examples of such measures include a management accreditation training program, an updated delegation instruments, and improvements to existing internal business processes.
- In 2014-15, NSERC will 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. NSERC will continue the implementation of a modernized Grants Management System by transitioning the application process for its programs to this platform. These initiatives will help improve NSERC's service delivery models for both internal and external clients.

## Section III: Supplementary Information

### Future-Oriented Statement of Operations

The future-oriented condensed statement of operations presented in this subsection is intended to serve as a general overview of the Natural Sciences and Engineering Research Council's operations. The forecasted financial information on expenses and revenues are prepared on an accrual accounting basis to strengthen accountability and to improve transparency and financial management.

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

A more detailed future-oriented statement of operations and associated notes, including a reconciliation of the net costs of operations to the requested authorities, can be found on the Natural Sciences and Engineering Research Council's [website](#).<sup>xii</sup>

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

Financial information	Estimated Results 2013–14	Planned Results 2014–15	Change
Total expenses	1,075,955,294	1,068,437,155	(7,518,139)
Total revenues			
Net cost of operations	1,075,955,294	1,068,437,155	(7,518,139)

Note: Year-to-year variance reflects funding for the Centres of Excellence for Commercialization and Research program, which is included in 2013-14 but only a portion of the funds obtained from fiscal framework are in 2014-15. The remaining funds available in fiscal framework for this program in 2014-15 will be sought based on the results of a merit review process.

## List of Supplementary Information Tables

The supplementary information tables listed in the *2014–15 Report on Plans and Priorities* can be found on the NSERC [website](#)<sup>xiii</sup>.

- Details on Transfer Payment Programs;
- Disclosures of Transfer Payment Programs under \$5 Million
- Upcoming Internal Audits and Evaluations over the next three fiscal years
- Greening Governmental Operations

## 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 publishes cost estimates and projections for these measures annually in the [Tax Expenditures and Evaluations](#)<sup>xiv</sup> publication. The tax measures presented in the Tax Expenditures and Evaluations publication are the sole 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: 613-996-1076

E-mail: [barney.laciak@nserc-crsng.gc.ca](mailto:barney.laciak@nserc-crsng.gc.ca)

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# Endnotes

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- i. Treasury Board Secretariat Estimates Publications and Appropriation Acts, <http://publiservice.tbs-sct.gc.ca/ems-sgd/esp-pbc/esp-pbc-eng.asp>.
- ii. Selected Departmental Performance Reports for 2008-2009 – Department of Industry, Department of Transport. Report of the Standing Committee on Public Accounts, September 2010, <http://www.parl.gc.ca/HousePublications/Publication.aspx?Mode=1&Parl=40&Ses=3&Language=E&DocId=4653561&File=0>.
- iii. Strengthening Parliamentary Scrutiny of Estimates and Supply. Report of the Standing Committee on Government and Operations Estimates, June 2012, <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=5690996&Language=E&Mode=1&Parl=41&Ses=1>.
- iv. Whole-of-government framework, <http://publiservice.tbs-sct.gc.ca/ppg-cpr/frame-cadre-eng.aspx>
- v. Natural Sciences and Engineering Research Council Act, <http://laws.justice.gc.ca/eng/acts/N-21/page-1.html#docCont>
- vi. *Expert Panel on the Review of Federal Support to Research and Development*: [http://www.acctcanada.ca/Documents/Fed\\_Review\\_R&D\\_2011.pdf](http://www.acctcanada.ca/Documents/Fed_Review_R&D_2011.pdf)
- vii. Speech from the Throne: <http://speech.gc.ca/>
- viii. Panel on Responsible Conduct of Research <http://www.rcr.ethics.gc.ca/eng/srcr-scr/tor-cdr/>
- ix. Whole-of-Government-Framework Spending Area: <http://www.tbs-sct.gc.ca/ppg-cpr/frame-cadre-eng.aspx>
- x. 2014-15 Main Estimates, <http://www.tbs-sct.gc.ca/ems-sgd/esp-pbc/esp-pbc-eng.asp>
- xi. Collaborative and Thematic Resources Support in Mathematics and Statistics (CTRMS) Program [http://www.nserc-crsng.gc.ca/Professors-Professeurs/RTII-OIRI/CTMRS-ARTCMS\\_eng.asp](http://www.nserc-crsng.gc.ca/Professors-Professeurs/RTII-OIRI/CTMRS-ARTCMS_eng.asp)

xii. Future- Oriented Financial Statements: [http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans\\_eng.asp](http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp)

xiii. Supplementary Information tables [http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans\\_eng.asp](http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp)

xiv. Government of Canada Tax Expenditures, <http://www.fin.gc.ca/purl/taxexp-eng.asp>