

Natural Sciences and Engineering Research Council of Canada

2018–19

Departmental Plan

The Honorable Kirsty Duncan, P.C., M.P.
Minister of Science and Minister of Sport and
Persons with Disabilities

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Minister's message



The Honourable Kirsty Duncan
Minister of Science and Minister of
Sport and Persons with Disabilities

The work of the Innovation, Science and Economic Development Portfolio is as diverse as it is expansive. We are involved in many important areas of our economy, including: making critical investments in innovation and science; supporting the commercialization of research and ideas; providing Canadians with the skills to excel in the digital economy; helping small businesses grow; promoting Canada as a world-leading tourism destination; and integrating science into our investment and policy decisions.

2018–19 will be an exciting year for all of this important work as we seek to make Canada a global innovation leader. We are continuing to implement the next steps of the Innovation and Skills Plan, which will build an economy that works for everyone. Through Budget 2018, we are making the single-largest investment in fundamental science in Canadian history to ensure that Canada remains a world leader in research and commercialization. And we are delivering

Canada's first Women Entrepreneurship Strategy, to support women entrepreneurs as they start, grow and scale their businesses.

We believe our economy should work for all Canadians. We want to see Canadian businesses, large and small, create high-quality jobs, and we want them compete in the knowledge economy, driven by creative, boundary-pushing ideas.

Budget 2018 provides the Natural Sciences and Engineering Research Council (NSERC) with an increase of \$354.7 million over five years (\$90.1 million per year ongoing) to support fundamental research. The budget also proposes new funding of \$140 million over five years to increase support for collaborative innovation projects involving businesses, colleges and polytechnics through the College and Community Innovation Program. In addition, Budget 2018 commits to advancing equality and diversity through the adoption of the Athena SWAN (Scientific Women's Academic Network) program. The program's goals include structural and cultural changes, such as increased support for women's careers and efforts to challenge discrimination and bias.

It is my pleasure to present the 2018–19 Departmental Plan for the Natural Sciences and Engineering Research Council of Canada.

Plans at a glance

Discovery Research

NSERC will continue to support scientists, engineers and research trainees at post-secondary institutions across Canada through its funding opportunities under the Discovery Research Program. In an effort to promote and maintain a diversified base of high-quality research in small universities across Canada, and provide a stimulating environment for research in small universities, NSERC will continue its [Discovery Development Grantsⁱ](#) pilot program. At the global level, NSERC will participate in the [Belmont Forum-BiodivERsA joint call on Scenarios of biodiversity and ecosystem servicesⁱⁱ](#) along with 22 other member countries.

Research Training and Talent Development

Through its scholarship, fellowship and grant funding opportunities, NSERC will continue to support the development of highly qualified people who are “marketplace-ready” in the natural sciences and engineering. To encourage Canadian youth engagement in science and engineering, NSERC will continue to invest and promote initiatives such as [Science Odysseyⁱⁱⁱ](#), the [STEAM Horizon Awards^{iv}](#), the [Science Literacy Week^v](#) and [PromoScience^{vi}](#). NSERC will also use the micro-funding instrument promoted by Treasury Board to experiment with an innovative approach to distribute grants to individuals and not-for-profit organizations. Increasing diversity and equity in the research enterprise are key priorities for NSERC. The agency will continue to implement its [Framework on Equity, Diversity and Inclusion^{vii}](#) to increase equity in all its programs and awards, and to enhance research excellence.

Driving innovation through Research Partnerships

Building on strong discovery investments and a track record of successful academic and industry partnership programs, NSERC will continue to help connect businesses to Canada’s world-class research enterprise through its various funding opportunities under the Research Partnerships Program. NSERC will continue to build its online end-of-grant reporting system that identifies the impact of research funded by NSERC. NSERC will also provide more opportunities for multinational organizations to partner with Canadian academic researchers.

Internal Services

NSERC will continue to work in collaboration with the Social Sciences and Humanities Research Council (SSHRC) and the Canadian Institutes of Health Research (CIHR) in order to contribute to the government’s science and innovation agenda.

For more information on NSERC’s plans, priorities and planned results, see the “Planned results” section of this report.

Planned results: what we want to achieve this year and beyond

Core Responsibility

Funding Natural Sciences and Engineering Research and Training.

Description

The Natural Sciences and Engineering Research Council of Canada (NSERC), through grants, fellowships and scholarships, promotes and supports research and research training in the natural sciences and engineering to develop talent, generate discoveries, and support innovation in pursuit of economic and social outcomes for Canadians.

Planning highlights

Departmental Result: Canada's natural sciences and engineering research is internationally competitive.

This result is aligned with the Government of Canada's Innovation and Skills Plan under the Minister of Science's mandate to examine options to strengthen the recognition of, and support for, fundamental research to support new discoveries. NSERC contributes to the Innovation and Skills Plan priority of developing and adopting world-class leading discoveries and innovation while promoting research excellence. The levers to influence this result and its indicators will be primarily delivered through NSERC's existing funding envelopes and mechanisms.

Specifically, in 2018–19, NSERC will continue to support scientists, engineers and research trainees at post-secondary institutions across Canada through its funding opportunities under the Discovery Research Program as well as the Research Training and Talent Development and Research Partnerships Programs. The publication of research results in peer-reviewed journals provides a good measure of discovery and knowledge generated in the natural sciences and engineering (NSE) in Canada, while the citation of these publications provide a measure of knowledge flow and the influence of Canadian researchers in the NSE. The ranking of Canada among OECD nations on the average citation in the NSE illustrates Canada's international competitive strength in NSE research. Based on the most recent data available (2015), Canada ranked 22nd among the 35 OECD countries with an Average Relative Citation (ARC) score of 1.27 (Iceland ranked first with an ARC of 1.71). It is anticipated that, by the end of 2018–19, this ranking will be maintained. It should be noted that a small change in the ARC value can lead to a large shift in the ranking of a country.

To strengthen the international competitiveness of Canadian NSE research, all NSERC grant holders are encouraged to establish international collaborations where appropriate. International collaboration enables Canadian researchers to keep abreast of the latest research results and to

leverage international research capacity. It is expected that, by the end of 2018–19, 57% of NSERC funded research will involve international collaboration.

In an effort to promote and maintain a diversified base of high-quality research in small universities across Canada, and provide a stimulating environment for research in small universities, in 2015, NSERC launched a pilot program, the Discovery Development Grants, a complementary program element to the Discovery Grants program. The first cohort of applicants who received this supplement submitted their application for the 2017 Discovery Grant competition, and more than 50% were successful. NSERC will continue with this pilot program in 2018–19.

In 2018–19, NSERC will continue to seek opportunities to participate in international funding opportunities and leverage NSERC's investments by providing opportunities for international collaboration. More specifically, in 2018–19, NSERC, along with 22 other members of the [Belmont Forum^{viii}](#), will be participating in the Belmont Forum-BiodivERsA joint call on Scenarios of biodiversity and ecosystem services. The Belmont Forum and BiodivERsA partners, together with the European Commission, have provisionally reserved more than 25 million Euros for this call. NSERC has set aside up to \$300,000 per year over three years for this initiative. This initiative encourages integrated teams of natural and social scientists, as well as stakeholders, to develop projects that promote innovative research for wiser decision-making by developing scenarios of biodiversity change and its associated ecosystem services, resulting from the complex interaction of socio-economic changes and global environmental changes.

As a promoter of gender equity, NSERC will be participating in the [GENDER-NET Plus European Research Area Network \(ERA-NET\) Cofund^{ix}](#) in 2018. This international consortium was established with the aim of strengthening transnational collaborations between research program owners and managers, and providing support to the promotion of gender equality through institutional change. The GENDER-NET Plus consortium also aims to promote the integration of sex- and gender-based analysis into research and funding. NSERC has set aside \$700,000 to fund at least two grants for up to three years.

In 2018–19, NSERC will also work in collaboration with the Social Sciences and Humanities Research Council (SSHRC) and the Canadian Institutes of Health Research (CIHR) in order to contribute to the Government of Canada's science and innovation agenda, including implementing key actions emerging from the government's response to the Fundamental Science Review. For example, NSERC, in collaboration with SSHRC and CIHR, will implement the changes brought to the tri-agency [Canada Research Chairs^x](#) program in order to foster greater equity, diversity and inclusion in the sciences. NSERC will also support the work of the newly created [Canada Research Coordinating Committee^{xi}](#), which aims to improve collaboration, coordination and harmonization among the granting councils and the Canada Foundation for Innovation (CFI) to the benefit of researchers and research trainees across Canada. As part of the government's response to the recommendations of the Fundamental Science Review, NSERC will collaborate with SSHRC and CIHR to develop a harmonized approach to supporting

interdisciplinary, international, risky and rapid-response research. In Budget 2018, the three granting councils have been tasked with developing new plans, strategies and targets to ensure greater collaborations and support for interdisciplinary research.

As part of the federal government's commitment to openness and transparency, Canada participates in the international [Open Government Partnership](#)^{xii}. NSERC will continue to work towards increasing the openness of federal science activities through the development of a tri-agency policy on data management and the monitoring of open access to scholarly publications.

Departmental Result: Canada has a pool of highly skilled people in the natural sciences and engineering.

This result is also aligned with the Government of Canada's Innovation and Skills Plan, as NSERC seeks to foster an entrepreneurial and highly skilled workforce.

Through its funding opportunities, NSERC supports the attraction, retention and development of highly qualified and skilled people in the NSE in Canada. 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, scholarship and award funding, which supports postsecondary university research as well as some outreach activities at universities, museums, science centres, and community-based organizations. While NSERC currently supports some 33,400 students, it is anticipated that, by the end of 2018–19, the number will fall to 33,000 due to the sunset of the Industrial Postgraduate Scholarships and Industrial R&D Fellowships sub-programs. However, with increased support from Budget 2018 investments, this number will rise in the near future. Over the course of the coming year, NSERC, in collaboration with CIHR and SSHRC, will explore new measures to contribute to the development of early career research talent in Canada as part of the Canada Research Coordinating Committee (CRCC)'s mandate.

NSERC will continue to extend its national leadership of science and engineering promotion in Canada. Promoting an understanding of science, technology, engineering and mathematics to young Canadians may encourage them to study the natural sciences and engineering at the postsecondary level. NSERC will continue its partnerships with likeminded organizations to support Science Odyssey, the Science Literacy Week and the STEAM Horizon Awards.

NSERC will continue to deliver its PromoScience grants, with an increased focus on science teachers and on underrepresented groups in science, technology, engineering, mathematics (STEM) fields (particularly to groups such as girls and indigenous youth). In 2017, 81 organizations received more than \$6.1 million over three years through this program. It is estimated that about 1 million youth will be reached on an annual basis. Following the evaluation of the PromoScience program in 2016, it was recommended that an improved reporting template

be developed to ensure that awardees' final report suits the needs for future evaluations. In response, NSERC has developed a new template which will also be available for online reporting. This will reduce administrative burden and improve the quality and accuracy of gathered information. NSERC plans to release this online Final Activity Report (FAR) in early 2019.

To strengthen the promotion of STEM fields to Canadian youth, in 2018–19, NSERC will use the micro-funding instrument promoted by Treasury Board to experiment with an innovative approach to distribute grants (low-value payments of up to \$1,000) to individuals and not-for-profit organizations. NSERC will launch two new funding streams, the NSERC Student Ambassadors and NSERC Young Innovators awards, to address a gap in engaging youth to mentor other youth, or participate in STEM-related competitions. Under this five-year pilot initiative, NSERC will dedicate \$400,000 annually to fund up to 400 young Canadian STEM ambassadors in their communities and support their participation in STEM competitions at regional, national and international levels. These awards will enhance citizen engagement, empower targeted communities, and expand the current range of grant and contribution recipients.

Through its scholarship, fellowship and grant funding opportunities, NSERC will continue to support the development of highly qualified people who are “marketplace-ready” in the NSE. NSERC aims for 30–35% of its supported research trainees to gain industrial experience in 2018–19. NSERC will continue to deliver its [Collaborative Research and Training Experience^{xiii}](#) (CREATE) funding opportunity, which provides enhanced opportunities for research trainees to develop technical and professional skills, and to gain experience in enriched and varied research environments. These actions align with the government priority of helping employers create more co-op placements for students in STEM fields.

Increasing diversity and equity in the research enterprise are key priorities for NSERC. The agency is committed to the implementation of its Framework on Equity, Diversity and Inclusion (EDI) to increase equity in all its programs and awards, and to enhance research excellence. NSERC's EDI Framework includes implementation of Gender-Based Analysis Plus (GBA+) NSERC-wide; collection of equity-group data for all stakeholders engaging in NSERC funding opportunities; increasing equity, diversity and inclusion on all committees and panels and among applicants and funded researchers; training and tools on unconscious bias; and integration of EDI considerations into funded research and awards. In relation to its science promotion programs and activities, the Framework objectives include increasing the recognition of effective science promotion, outreach and mentorship. All the actions being implemented under the EDI Framework contribute to achieving NSERC's Departmental Results. It is expected that, by the end of 2018–19, the proportion of award holders who are underrepresented individuals will reach 29% for women. In 2018–19, NSERC will work in collaboration with CIHR and SSHRC to identify more specific targets for other underrepresented groups as part of CRCC's mandate. Moreover, additional investments are proposed in Budget 2018 for the granting councils to

achieve greater diversity among research funding recipients, including improved support for women, underrepresented groups and early-career researchers.

Departmental Result: Canada’s natural sciences and engineering research knowledge is used.

This result is meaningful to Canadians as it demonstrates the transfer of knowledge and skills to the user sector leading to the commercialization of Canada’s NSE research through new products, services, and processes for the benefit of all Canadians.

NSERC supports the Innovation and Skills Plan’s goal of promoting strong and productive R&D collaborations. NSERC-funded researchers currently work with over 3,600 industrial partners. This number is expected to increase to 3,700 in 2018–19.

Building on strong discovery investments and a track record of successful academic and industry partnership programs, NSERC will continue to help connect businesses to Canada’s research enterprise through its various funding opportunities under the Research Partnerships Program. Through this program, NSERC plans to leverage \$225 million dollars of Canadian business R&D funding in 2018–19. Collaborative R&D partnerships help companies grow, enable academic researchers to advance scientific knowledge, and provide an excellent experiential training environment for students and new researchers. As proposed in Budget 2018, NSERC will consolidate its various Collaborative R&D grants to modernize, simplify and improve programs that bring together postsecondary researchers and businesses. As a result, it is anticipated that the participation of small and medium enterprises (SMEs) will be facilitated.

Budget 2018 indicates that, ultimately, oversight of the Centres of Excellence for Commercialization and Research (CECR) and the Business-led Networks of Centres of Excellence programs will be transferred to ISED’s Strategic Innovation Fund. NSERC will develop a transition plan with ISED with a view of supporting the modernizing of these programs and making them more accessible for businesses.

In 2018–19, NSERC will continue to build its online end-of-grant reporting system that identifies the impact of the research funded by NSERC. Since 2016, over 1,000 reports from partners have been received in seven different sub-programs. It is expected that all of the major sub-programs under the Research Partnerships program will be on-boarded by the end of 2018–19. Following the success of this reporting system for the Research Partnerships program, a pilot end-of-grant report was also developed in late 2017–18 to capture outcomes for a small number of Discovery grants; this experimentation will be further expanded in the coming year.

In 2017, NSERC implemented more rigorous diversity requirements within its Strategic Networks Grants. Strategic Networks are expected to promote approaches that increase the

inclusion and advancement of women and other underrepresented groups in the NSE. Network applicants must strive for diversity and increased gender equity when developing their group of co-applicants, collaborators and trainees. Examples include strategies for the following:

- increasing diversity and gender equity in the composition of the research team and group of trainees;
- ensuring equitable mentorship of all trainees;
- initiatives aimed at ensuring an equitable and inclusive research and work environment;
- the implementation of networking and leadership training events within the network that highlight diversity and gender equity.

In 2018–19, NSERC plans to include these requirements in other programs that support partnered research.

In 2018–19, NSERC will provide more opportunities for multinational organizations to partner with Canadian academic researchers. For example, in 2018–19, NSERC will allow multinational companies to partner directly with Canadian researchers on a Collaborative Research and Development grant. This opportunity is designed to introduce multinational companies to Canadian researchers with an aim to foster deeper international collaborations with Canadian organizations and encourage foreign direct investment and transfer of knowledge to Canada.

In 2018–19, NSERC will deliver the [Community and College Social Innovation Fund^{xiv}](#) (CCSIF) pilot initiative in support of social innovation research projects at colleges. The pilot will be delivered under the College and Community Innovation (CCI) Program managed by NSERC, in collaboration with SSHRC and CIHR. It aims to enable colleges to increase their capacity to work with communities, with the goal of developing partnerships that foster innovation in areas such as education, delivery of social services, integration of vulnerable populations, and community development.

Planned results

Departmental results	Departmental result indicators	Target	Date to achieve target	2014–15 Actual results	2015–16 Actual results	2016–17 Actual results
Canada's natural sciences and engineering research is internationally competitive	Canada's rank among OECD nations on the citation score of natural sciences and engineering research publications	22	March 31, 2019	18th	22nd	NA
	Percentage of funded research involving international collaboration	57	March 31, 2019	55	56	NA
Canada has a pool of highly skilled people in the natural sciences and engineering	Proportion of award holders who are underrepresented individuals	29	March 31, 2019	27.2	28.1	28.4
	Number of research trainees supported	33,000*	March 31, 2019	31,000	31,900	33,400
	Percentage of research trainees supported gaining industrial experience	30*–35	March 31, 2019	35.5	34.6	31.4
	Percentage of previously funded research trainees that go on to work in a research position	67	March 31, 2019	66	NA	66
Canada's natural sciences and engineering research knowledge is used	Partner funding for research projects	\$225M	March 31, 2019	\$205M	\$207M	\$220M
	Number of partners on research projects	3,700	March 31, 2019	3,420	3,520	3,610
	Percentage of funded projects reporting socioeconomic outcomes for Canadians	55	March 31, 2019	NA	NA	47

* Targets are lower than previous results due to the sunsetting of the Industrial Postgraduate Scholarships and the Industrial R&D Fellowships sub-programs.

Note: Targets do not reflect the impact of Budget 2018 announcements. More information will be provided in the 2018–19 Supplementary Estimates and Departmental Results Report, as applicable.

Budgetary financial resources

2018–19 Main Estimates	2018–19 Planned spending	2019–20 Planned spending	2020–21 Planned spending
\$1,235,503,824	\$1,235,503,824	\$1,227,588,166	\$1,230,184,231

Human resources

2018–19 Planned full-time equivalents	2019–20 Planned full-time equivalents	2020–21 Planned full-time equivalents
282	282	282

Main Estimates, Planned spending and Full-time equivalents figures do not include Budget 2018 announcements. More information will be provided in the 2018–19 Supplementary Estimates and Departmental Results Report, as applicable.

Financial, human resources and performance information for NSERC's Program Inventory is available in the [GC InfoBase^{xv}](#).

Internal Services

Description

Internal Services are those groups of related activities and resources that the federal government considers to be services in support of programs and/or required to meet corporate obligations of an organization. Internal Services refer to the activities and resources of the 10 distinct service categories that support program delivery in the organization, regardless of the Internal Services delivery model in a department. The 10 service categories 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; and Acquisition Services.

Budgetary financial resources

2018–19 Main Estimates	2018–19 Planned spending	2019–20 Planned spending	2020–21 Planned spending
\$18,976,393	\$18,976,393	\$18,510,721	\$18,721,990

Human resources

2018–19 Planned full-time equivalents	2019–20 Planned full-time equivalents	2020–21 Planned full-time equivalents
132	132	132

Main Estimates, Planned spending and Full-time equivalents figures do not include Budget 2018 announcements. More information will be provided in the 2018–19 Supplementary Estimates and Departmental Results Report, as applicable.

Planning highlights

Recognizing that achieving results depends on the organization's skilled and dedicated staff, NSERC will continue the implementation of its People Strategy Action Plan for 2016–20. This will include ongoing attention to issues of workplace wellness and mental health, as well as the results of the Public Service Employee Survey (PSES) 2017.

In 2018–19, NSERC, in collaboration with SSHRC and CIHR, will continue the planning for the renewal of IT support systems for grant application and management and engage with stakeholders to validate the needs of the research community and bring more efficient services to them.

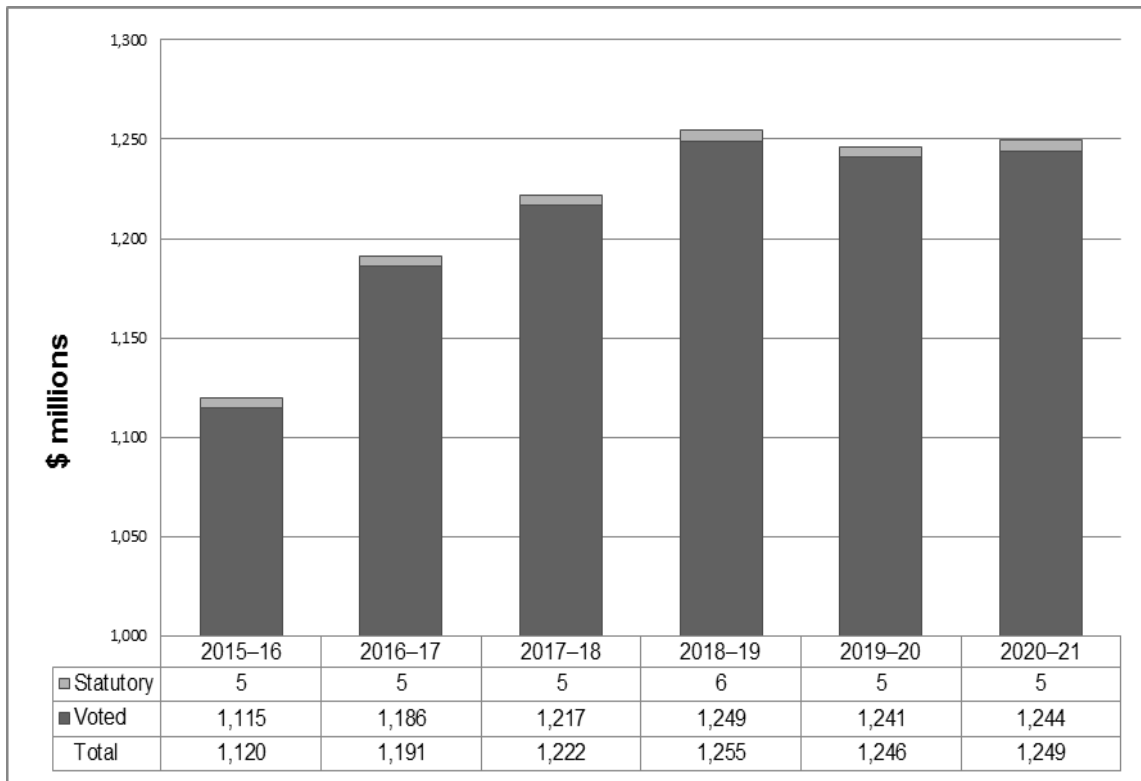
NSERC will also ensure alignment and compliance with Government of Canada priorities, policy requirements and transformative initiatives by developing an implementation plan for the migration to the new financial management system, to be implemented in 2020, and for the

assessment of impacts and the implementation of changes related to Treasury Board of Canada Secretariat's Policy Reset Initiative.

Spending and human resources

Planned spending

Departmental spending trend graph



Main Estimates, Planned spending and Full-time equivalents figures do not include Budget 2018 announcements. More information will be provided in the 2018–19 Supplementary Estimates and Departmental Results Report, as applicable.

Budgetary planning summary for Core Responsibilities and Internal Services

Core Responsibilities and Internal Services	2015–16 Expenditures	2016–17 Expenditures	2017–18 Forecast spending	2018–19 Main Estimates	2018–19 Planned spending	2019–20 Planned spending	2020–21 Planned spending
Funding Natural Sciences and Engineering Research and Training	\$1,097,670,782	\$1,171,723,852	\$1,200,924,393	\$1,235,503,824	\$1,235,503,824	\$1,227,588,166	\$1,230,184,231
Subtotal	\$1,097,670,782	\$1,171,723,852	\$1,200,924,393	\$1,235,503,824	\$1,235,503,824	\$1,227,588,166	\$1,230,184,231
Internal Services	\$17,982,412	\$19,537,041	\$21,278,834	\$18,976,393	\$18,976,393	\$18,510,721	\$18,721,990
Total	\$1,115,653,194	\$1,191,260,893	\$1,222,203,227	\$1,254,480,217	\$1,254,480,217	\$1,246,098,887	\$1,248,906,221

The increase is mainly due to the implementation of the new program, Canada First Research Excellence Fund (Budget 2014), which involves \$137,800,000 in grants in 2018–19. The decrease in 2019–20 is mainly due to ending of the Community and College Social Innovation Fund.

Planned human resources

Human resources planning summary for Core Responsibilities and Internal Services (full-time equivalents)

Core Responsibilities and Internal Services	2015–16 Actual	2016–17 Actual	2017–18 Forecast	2018–19 Planned	2019–20 Planned	2020–21 Planned
Funding Natural Sciences and Engineering Research and Training	272	275	278	282	282	282
Subtotal	272	275	278	282	282	282
Internal Services	131	137	132	132	132	132
Total	403	412	410	414	414	414

The variance in FTEs is explained by the increase of programs, communication and support services in delivering of funds for the implementation of Budget 2015 (Research Partnerships programs and College and Community Innovation), Budget 2016 (Discovery Research) and Budget 2017 (PromoScience).

Main Estimates, Planned spending and Full-time equivalents figures do not include Budget 2018 announcements. More information will be provided in the 2018–19 Supplementary Estimates and Departmental Results Report, as applicable.

Estimates by vote

For information on NSERC’s organizational appropriations, consult the [2018–19 Main Estimates](#).^{xvi}

Unaudited Future-Oriented Condensed Statement of Operations

The unaudited Future-Oriented Condensed 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 forecast and planned spending amounts presented in other sections of the Departmental Plan are prepared on an expenditure basis, amounts may 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, are available on the [Natural Sciences and Engineering Research Council of Canada's website^{xvii}](#).

Unaudited Future-Oriented Condensed Statement of Operations
for the year ended March 31, 2019 (dollars)

Financial information	2017–18 Forecast results	2018–19 Planned results	Difference (2018–19 Planned results minus 2017–18 Forecast results)
Total expenses	1,227,460,872	1,261,370,000	33,909,128
Total revenues	578,779	178,779	400,000
Net cost of operations before government funding and transfers	1,226,882,093	1,261,191,221	34,309,128

Total expenses are expected to increase by 2.8% (\$33.9 million). The change is mainly attributable to the expected increase of \$35.3 million for the Canada First Research Excellence Fund, a tri-agency initiative to help institutions excel globally in research areas that create long-term economic advantages for Canada.

Total revenue is expected to decrease by \$400,000 due to non-recurring partner contributions for two events hosted by NSERC in 2017–18.

Supplementary information

Corporate information

Organizational profile

Appropriate minister: Minister of Science and Minister of Sport and Persons with Disabilities
The Honourable Kirsty Duncan, P.C., M.P.

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

Ministerial portfolio: Innovation, Science and Economic Development

Enabling instrument: [Natural Sciences and Engineering Research Council Act^{xviii}](#)

Year of incorporation / commencement: May 1, 1978

Raison d'être, mandate and role

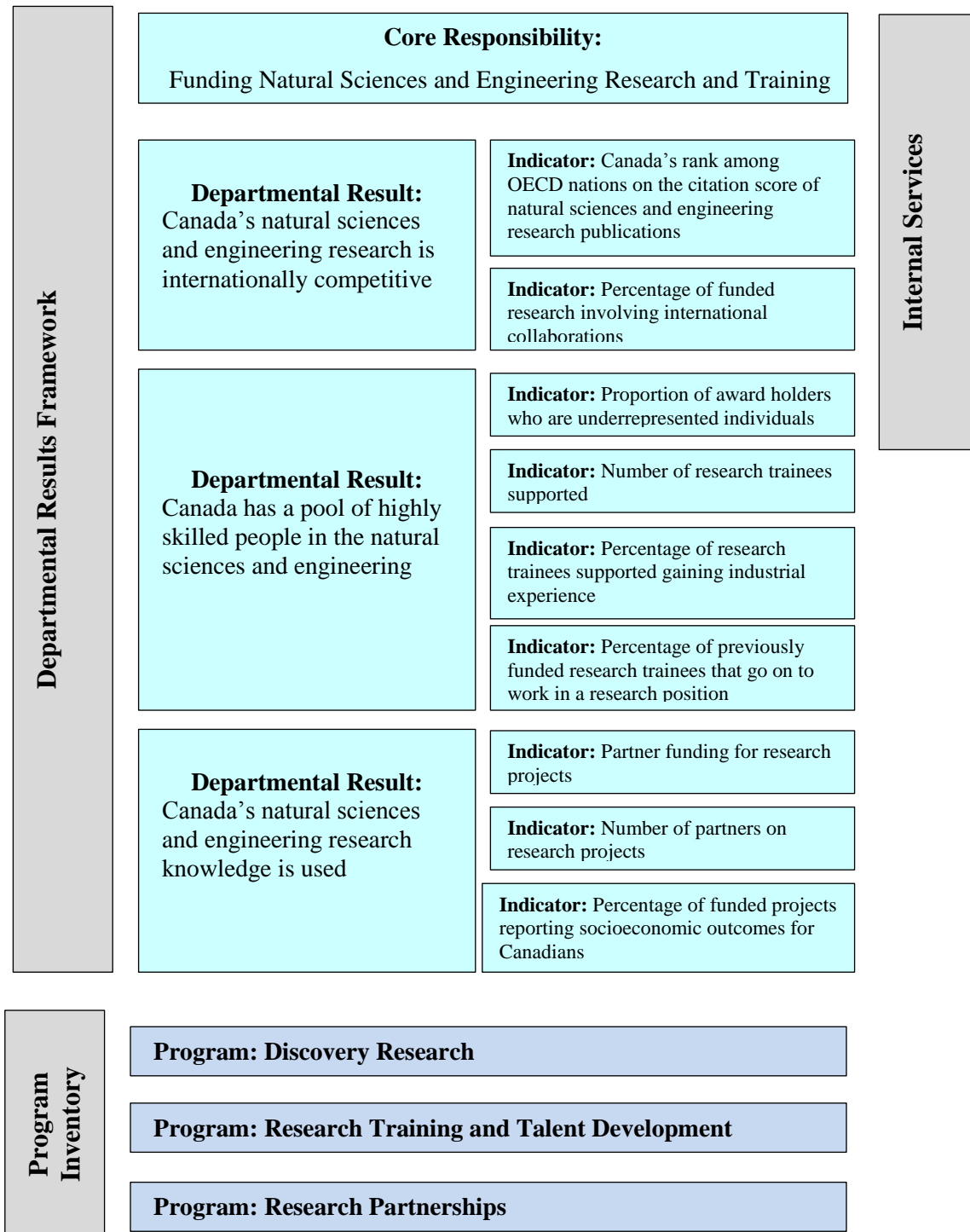
“Raison d'être, mandate and role: who we are and what we do” is available on the [Natural Sciences and Engineering Research Council of Canada's website](#).

Operating context and key risks

Information on operating context and key risks is available on the [Natural Sciences and Engineering Research Council of Canada's website](#).

Reporting framework

The Natural Sciences and Engineering Research Council of Canada’s Departmental Results Framework and Program Inventory of record for 2018–19 are shown below:



Concordance between the Departmental Results Framework and the Program Inventory, 2018–19, and the Program Alignment Architecture, 2017–18

2018–19 Core Responsibilities and Program Inventory	2017–18 Lowest-level program of the Program Alignment Architecture	Percentage of lowest-level Program Alignment Architecture program (dollars) corresponding to the program in the Program Inventory
Core Responsibility : Funding Natural Sciences and Engineering Research and Training		
Discovery Research	1.2.1 Discovery Research	100%
	1.2.2 Research Equipment and Resources	100%
	1.2.3 Canada First Research Excellence Fund*	100%
	1.1.6 Canada Research Chairs*	100%
	1.1.7 Canada Excellence Research Chairs*	100%
Research Training and Talent Development	1.1.1 Science and Engineering Promotion	100%
	1.1.2 Scholarships and Fellowships	100%
	1.1.3 Alexander Graham Bell Canada Graduate Scholarships*	100%
	1.1.4 Vanier Canada Graduate Scholarships*	100%
	1.1.5 Banting Postdoctoral Fellowships*	100%
	1.3.4 Training in Industry	100%
Research Partnerships	1.3.1 Research in Strategic Areas	100%
	1.3.2 Industry-driven Collaborative Research and Development	100%
	1.3.3 Networks of Centres of Excellence*	100%
	1.3.5 Commercialization of Research*	100%
	1.3.6 College and Community Innovation*	100%

* Programs involving more than one granting agency.

Supporting information on the Program Inventory

Supporting information on planned expenditures, human resources, and results related to the NSERC's Program Inventory is available in the [GC InfoBase](#).^{xix}

Supplementary information tables

The following supplementary information tables are available on the [NSERC website](#)^{xx}:

- ▶ Departmental Sustainable Development Strategy
- ▶ Details on transfer payment programs of \$5 million or more
- ▶ Gender-Based Analysis Plus (GBA+)
- ▶ Planned evaluation coverage over the next five fiscal years
- ▶ Upcoming internal audits for the coming fiscal year

Federal tax expenditures

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 each year in the [Report on Federal Tax Expenditures](#)^{xxi}. This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to related federal spending programs. The tax measures presented in this report are the responsibility of the Minister of Finance.

Organizational contact information

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Appendix: definitions

appropriation (crédit)

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

budgetary expenditures (dépenses budgétaires)

Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

Core Responsibility (responsabilité essentielle)

An enduring function or role performed by a department. The intentions of the department with respect to a Core Responsibility are reflected in one or more related Departmental Results that the department seeks to contribute to or influence.

Departmental Plan (plan ministériel)

A report on the plans and expected performance of appropriated departments over a three-year period. Departmental Plans are tabled in Parliament each spring.

Departmental Result (résultat ministériel)

Any change or changes that the department seeks to influence. A Departmental Result is often outside departments' immediate control, but it should be influenced by program-level outcomes.

Departmental Result Indicator (indicateur de résultat ministériel)

A factor or variable that provides a valid and reliable means to measure or describe progress on a Departmental Result.

Departmental Results Framework (cadre ministériel des résultats)

The department's Core Responsibilities, Departmental Results and Departmental Result Indicators.

Departmental Results Report (rapport sur les résultats ministériels)

A report on the actual accomplishments against the plans, priorities and expected results set out in the corresponding Departmental Plan.

experimentation (expérimentation)

Activities that seek to explore, test and compare the effects and impacts of policies, interventions and approaches, to inform evidence-based decision-making, by learning what works and what does not.

full-time equivalent (équivalent temps plein)

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.

gender-based analysis plus (GBA+) (analyse comparative entre les sexes plus [ACS+])

An analytical process used to help identify the potential impacts of policies, Programs and services on diverse groups of women, men and gender-diverse people. The “plus” acknowledges that GBA goes beyond sex and gender differences to consider multiple identity factors that intersect to make people who they are (such as race, ethnicity, religion, age, and mental or physical disability).

government-wide priorities (priorités pangouvernementales)

For the purpose of the 2018–19 Departmental Plan, government-wide priorities refers to those high-level themes outlining the government’s agenda in the 2015 Speech from the Throne, namely: Growth for the Middle Class; Open and Transparent Government; A Clean Environment and a Strong Economy; Diversity is Canada’s Strength; and Security and Opportunity.

horizontal initiative (initiative horizontale)

An initiative in which two or more federal organizations, through an approved funding agreement, work toward achieving clearly defined shared outcomes, and which has been designated (by Cabinet, a central agency, etc.) as a horizontal initiative for managing and reporting purposes.

non-budgetary expenditures (dépenses non budgétaires)

Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance (rendement)

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 (indicateur de rendement)

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 (production de rapports sur le rendement)

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

planned spending (dépenses prévues)

For Departmental Plans and Departmental Results Reports, planned spending refers to those amounts 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 Departmental Plans and Departmental Results Reports.

plan (plan)

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.

priority (priorité)

A plan or project 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 Departmental Results.

Program (programme)

Individual or groups of services, activities or combinations thereof that are managed together within the department and focus on a specific set of outputs, outcomes or service levels.

Program Alignment Architecture (architecture d'alignement des programmes)¹

A structured inventory of an organization's programs depicting the hierarchical relationship between programs and the Strategic Outcome(s) to which they contribute.

results (résultat)

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.

statutory expenditures (dépenses législatives)

Expenditures that Parliament has approved through legislation other than Appropriation Acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

Strategic Outcome (résultat stratégique)

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

1. Under the Policy on Results, the Program Alignment Architecture has been replaced by the Program Inventory.

sunset program (programme temporisé)

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 (cible)

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.

voted expenditures (dépenses votées)

Expenditures that Parliament approves annually through an Appropriation Act. The Vote wording becomes the governing conditions under which these expenditures may be made.

Endnotes

- i Discovery Development Grants, http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/DiscoveryPilot-DecouvertePilote_eng.asp
- ii Belmont Forum – BiodivERsA Call on Scenarios of Biodiversity and Ecosystem Services, http://nserc.gc.ca/Professors-Professeurs/Grants-Subs/Belmont-Belmont_eng.asp
- iii Science Odyssey, <http://www.sciod.ca/>
- iv STEAM Horizon Awards, <https://steamhorizonawards.ca/>
- v Science Literacy Week, <http://scienceliteracy.ca/>
- vi PromoScience Program, http://www.nserc-crsng.gc.ca/Promoter-Promotion/PromoScience-PromoScience/About-Apropos_eng.asp
- vii Framework on Equity, Diversity and Inclusion, http://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/framework_cadre-de-reference_eng.asp
- viii Belmont Forum, <http://www.belmontforum.org/>
- ix GENDER-NET, <http://www.gender-net.eu/>
- x Changes to the Canada Research Chairs Program, http://www.chairs-chaieres.gc.ca/media-medias/releases-communicues/2017/tier_1-niveau_1-eng.aspx
- xi Canada Research Coordinating Committee, <http://www.ic.gc.ca/eic/site/icgc.nsf/eng/07620.html>
- xii Open Government Partnership, <https://www.opengovpartnership.org/>
- xiii Collaborative Research and Training Experience Program, http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/CREATE-FONCER_eng.asp
- xiv College and Community Innovation Program – College and Community Social Innovation Fund, http://www.nserc-crsng.gc.ca/Professors-Professeurs/RPP-PP/CCSIF-ICC_eng.asp
- xv GC Infobase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
- xvi. 2017–18 Main Estimates, <https://www.canada.ca/en/treasury-board-secretariat/services/planned-government-spending/government-expenditure-plan-main-estimates.html>
- xvii Natural Sciences and Engineering Research Council of Canada, http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp
- xviii Natural Sciences and Engineering Research Council Act, <http://laws.justice.gc.ca/eng/acts/N-21/>
- xix. GC InfoBase, <https://www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start>
- xx Natural Sciences and Engineering Research Council of Canada, http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp
- xxi. Report on Federal Tax Expenditures, <http://www.fin.gc.ca/purl/taxexp-eng.asp>