

ISSN: 1706-8967 ISBN: 0-662-44631-3

Working Paper

Science, Innovation and Electronic Information Division

Provincial Distribution of Federal Expenditures and Personnel on Science and Technology, 2000/2001 to 2004/2005

by Lloyd Lizotte and Karim El Hassani

Science, Innovation and Electronic Information Division (SIEID) 7-A, R.H. Coats Building, Ottawa, K1A 0T6

Telephone: 1-800-263-1136





Statistics Canada Statistique Canada



How to obtain more information

Specific inquiries about this product and related statistics or services should be directed to: Science, Innovation and Electronic Information Division, Statistics Canada, Ottawa, Ontario, K1A 0T6 (e-mail: sieidinfo@statcan.ca).

For information on the wide range of data available from Statistics Canada, you can contact us by calling one of our toll-free numbers. You can also contact us by e-mail or by visiting our website at www.statcan.ca.

National inquiries line

1-800-263-1136

National telecommunications device for the hearing impaired

1-800-363-7629

Depository Services Program inquiries

Fax line for Depository Services Program

1-800-889-9734

E-mail inquiries

Website

1-800-889-9734

infostats@statcan.ca

www.statcan.ca

Information to access the product

This product, catalogue no. 88F0006XIE, is available for free in electronic format. To obtain a single issue, visit our website at www.statcan.ca and select Publications.

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable, courteous, and fair manner. To this end, the Agency has developed standards of service that its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.ca under About us > Providing services to Canadians.

Symbols

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the Statistics Act
- E use with caution
- F too unreliable to be published

Note

Due to rounding, components may not add to the totals.

Statistics Canada

Science and Technology Surveys Section
Science, Innovation and Electronic Information Division (SIEID)

Provincial Distribution of Federal Expenditures and Personnel on Science and Technology, 2000/2001 to 2004/2005

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2006

All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

December 2006

Catalogue no. 88F0006XIE, no. 012

ISSN: 1706-8967 ISBN: 0-662-44631-3

Frequency: occasional

Ottawa

La version française de cette publication est disponible sur demande (nº 88F0006XIF au catalogue).

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses and governments. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Table of contents

Overview	
Highlights	
Federal expenditures	
Federal government personnel	
Catalogueu publications	44
List of tables	
Table 1 Federal government expenditures on science and technology (S&T), by province and territories	15
Table 2 Federal government expenditures on research and experimental development (R&D), by province and territories.	16
Table 3 Federal government expenditures on related scientific activities (RSA), by province and territories	17
Table 4 Intramural expenditures of federal scientific establishments, by science, activity ¹ and by province and territories, 2004/2005	.18
Table 5 Federal government expenditures on intramural science and technology (S&T), by province and territories	19
Table 6 Federal government expenditures on intramural research and experimental development (R&D), by province and territories	
Table 7 Federal government expenditures on intramural related scientific activities (RSA), by province and territories	21
Table 8 Intramural expenditures of federal scientific establishments, by department or agency ¹ , activity and by province at territories, 2004/2005	
Table 9 Intramural expenditures of federal scientific establishments performing natural science activities, by department o agency ¹ , activity and by province and territories, 2004/2005	or .23
Table 10 Federal government expenditures on extramural science and technology (S&T), by province and territories	24
Table 11 Federal government expenditures on extramural research and experimental development (R&D), by province ar territories	
Table 12 Federal government expenditures on extramural related scientific activities (RSA), by province and territories	26
Table 13 Federal government expenditures on extramural science and technology (S&T), by science, activity ¹ and by province and territories, 2004/2005	.27
Table 14 Federal government expenditures on extramural science and technology (S&T), by department or agency ¹ and be province and territories, 2004/2005	by .28
Table 15 Federal government expenditures on extramural research and experimental development (R&D), by department or agency and by province and territories, 2004/2005	t .28
Table 16 Federal government research and experimental development (R&D) payments to Canadian business enterprise sector, by province and territories	
Table 17 Federal government research and experimental development (R&D) payments to the higher education sector, b province and territories	-
Table 18 Federal expenditures on extramural science and technology (S&T) ¹ , by selected census metropolitan areas and activity	

Table 19	Personnel of federal establishments performing science and technology (S&T) activities, by science, activity, category and by province and territories, 2004/2005	33
Table 20	Personnel of federal establishments performing science and technology (S&T) activities, by department or agency ¹ and by province and territories, 2004/2005	34
Table 21	Scientific and professional personnel of federal establishments performing science and technology (S&T) activities, by department or agency ¹ and by province and territories, 2004/2005	35
Table 22	Personnel of federal establishments performing research and experimental development (R&D) activities, by department or agency ¹ and by province and territories, 2004/2005	36
Table 23	Scientific and professional personnel of federal establishments performing research and experimental development (R&D) activites, by department or agency ¹ and by province and territories, 2004/2005	37
Table 24	Personnel of federal establishments performing related scientific activities (RSA), by department or agency ¹ and by province and territories, 2004/2005	
Table 25	Scientific and professional personnel of federal establishments performing science and technology (S&T) activities in the natural sciences, by department or agency ¹ and by province and territories, 2004/2005	
Table 26	Personnel of federal establishments performing science and technology (S&T) activities in the natural sciences, department or agency ¹ and by province and territories, 2004/2005	by 40
Table 27	Scientific and professional personnel of federal establishments performing science and technology (S&T) activities in the natural sciences, by department or agency ¹ and by province and territories, 2004/2005	
Table 28	Personnel of federal establishments performing research and experimental development (R&D) activities in the natural sciences, by department or agency ¹ and by province and territories, 2004/2005	42
Table 29	Scientific and professional personnel of federal establishments performing research and experimental development (R&D) activities in the natural sciences, by department or agency ¹ and by province and territories, 2004/2005	43

Overview

This document presents the provincial and territorial distribution of federal expenditures and personnel on science and technology (S&T). The statistics presented in this report supplement data published in the Service Bulletin "Science Statistics," Vol. 30, No. 9, Catalogue No. 88-001XIE. S&T expenditures can be divided into research and development (R&D) and related scientific activities (RSA). In this document, there are two other divisions which can be applied to any expenditure. They are science type (natural and social) and sector of performance (intramural versus extramural).

The terms "natural sciences" and "social sciences" are to be regarded as synonymous with "natural sciences and engineering" and "social sciences and humanities" respectively. "Total sciences" includes data for both "natural sciences" and "social sciences". Any information for "social sciences" that is not displayed in this report can be derived by subtracting the figures for "natural sciences" from those for "total sciences". Similiarly, any information for "technical personnel and other" that is not presented in this report can be divided by subtracting the figures for "scientific and professional" from those for "total personnel".

Included in this report are tables presenting expenditures and staff of federal government scientific establishments for the fiscal year 2004/2005:

- Of the total of \$8,935 million spent by the federal government on S&T in 2004/2005, \$8,156 million could be
 distributed geographically. The federal spending that was not distributed geographically amounted to
 \$779 million, including \$358 million in federal payments made abroad and \$421 million in payments that could
 not be distributed geographically.
- In 2004/2005, personnel performing S&T activities in federal establishments amounted to 34,339 full-time equivalents (FTE). The majority of these personnel were located in the National Capital Region (20,491 FTEs or 60%). Of the remaining 13,848 FTEs employed outside of the NCR, 3,242 FTEs were employed in Quebec and 3,668 FTEs in Ontario.

Expenditures and personnel for S&T performed by the federal government in the National Capital Region (NCR) are excluded from the provincial totals and are reported separately. The NCR is, in effect, treated as a separate entity, however, these data distributed geographically are presented.

Estimates of S&T activities by region may be easily misunderstood. For example, the financial data are identified with the region of the physical location of an S&T unit. It would be wrong to assume all of the expenditures of a unit are spent in the region of location. Supplies and equipment can be purchased from other regions or countries. In the National Capital Region, labour moves freely between the two provinces so that even wages and salaries paid by a unit are partly spent outside the area of location.

We are grateful to the departments and agencies that completed our questionnaires. Without their cooperation a provincial representation such as this could not be prepared.

This publication was prepared by **Karim El Hassani** under the direction of **Lloyd Lizotte**, Subject Matter Manager, Science and Technology Surveys Section, Science, Innovation and Electronic Information Division.

List of departments, agencies and abbreviations

ACOA - Atlantic Canada Opportunities Agency
 AECL - Atomic Energy of Canada Limited
 AGR - Agriculture and Agri-Food Canada

BOC - Bank of Canada

C&I - Citizenship and Immigration

CCMD - Canadian Centre for Management DevelopmentCEAA - Canadian Environmental Assessment Agency

CED(QUÉ) - Canada Economic Development (Quebec Regions)

CFI - Canada Foundation for InnovationCFIA - Canadian Food Inspection Agency

CH - Canadian Heritage

CHRC - Canadian Human Rights Commission

CIDA - Canadian International Development Agency

CIHR - Canadian Institutes of Health Research

CMC - Canadian Museum of Civilization

CMHC - Canada Mortgage and Housing Corporation

CMN - Canadian Museum of Nature

CNSC - Canadian Nuclear Safety Commission
COL - Commissioner of Official Languages

CRA - Canadian Revenue Agency
CSA - Canadian Space Agency

CSPS - Canada School of Public Service

CSTM - Canada Science and Technology Museum

DFAIT - Department of Foreign Affairs and International Trade

EC - Environment CanadaF&O - Fisheries and Oceans

FIN - Finance

GC - Genome Canada HC - Health Canada

HRSDC - Human Resources and Skills Development Canada

IAND - Indian Affairs and Northern DevelopmentIDRC - International Development Research Centre

IND - Industry Canada

JUS - Justice

LAC - Library and Archives Canada

NDEF - National Defence

NEB - National Energy Board

NFB - National Film Board

NGC - National Gallery of CanadaNRC - National Research CouncilNRCan - Natural Resources Canada

NSERC - Natural Sciences and Engineering Research Council

PCO - Privy Council Office
PCA - Parks Canada Agency

PHAC - Public Health Agency of Canada

PSC - Public Service Commission of Canada

PSEPC - Public Safety and Emergency Preparedness Canada

PSHRMAC - Public Service Human Resource Management Agency of Canada

PW&GS - Public Works and Government Services

RCMP - Royal Canadian Mounted Police
SDC - Social Development Canada

SGEN - Solicitor General

SSHRC - Social Sciences and Humanities Research Council

STC - Statistics Canada

TB - Treasury Board

TC - Transport Canada

WEDC - Western Economic Diversification Canada

S&P - Scientific and Professional

S&T - Science and Technology (R&D plus RSA = S&T)

R&D - Research and Development
RSA - Related Scientific Activities

NSE - Natural Sciences and EngineeringSSH - Social Sciences and Humanities

NCR - National Capital Region

Catalogue no. 88F0006XIE

Definitions

Science and technology

Science and technology activities are the sum of research and development (R&D) plus related scientific activities (RSA). S&T activities are required for the generation, dissemination or initial application of new science and technology knowledge.

Scientific research and experimental development (R&D)

Creative work undertaken on a systematic basis in order to increase the stock of scientific and technical knowledge and to use this knowledge in new applications.

An R&D project generally has three characteristics:

- a substantial element of uncertainty, novelty and innovation;
- a well-defined project design;
- a report on the procedures and results of the projects

Related scientific activities (RSA)

Those activities which complement and extend R&D by contributing to the generation, dissemination and application of scientific and technological knowledge.

Natural sciences and engineering

The natural sciences and engineering (NSE) field embraces the disciplines of study concerned with understanding, exploring, developing or utilizing the natural world. Included are the engineering, mathematical, life and physical sciences.

Social sciences and humanities

The social sciences and humanities (SSH) field embraces all disciplines involved in studying human actions and conditions and the social, economic and institutional mechanisms affecting humans. Included are such disciplines as anthropology, demography, economics, geography, history, languages, literature and linguistics, law, library science, philosophy, political science, psychology, religious studies, social work, sociology, and urban and regional studies.

Intramural performance

Where the S&T activities are managed and carried out primarily by federal government employees they are classified as intramural S&T. Even where major components of the project are provided by outside agencies, such as computer services, laboratory construction, testing of prototype equipment, if the planning, supervision, reporting, and key operating functions are performed by federal personnel, then the activity is considered to be intramural. This also applies to S&T activities carried out by a department or agency on behalf of another federal department or agency on a cost recovery basis.

The intramural expenditures reported for scientific activities are those direct costs, including salaries, associated with scientific programs. These costs include that portion of a program's contribution to employee benefit plans (e.g. superannuation) which is applicable to the scientific personnel within the program. Non-program ("in direct") costs, such as the value of services provided by other departments without charge and accommodation provided by the reporting program are also included.

Extramural performance

The management and conduct of an S&T activity is entrusted to a non-federal organization. The six extramural performance sectors used in surveying S&T expenditures by the federal government are:

- (i) Canadian business enterprises. This sector is composed of business and government enterprises, including public utilities and government owned firms and is frequently referred to as the industry sector. Incorporated consultants providing scientific and engineering services are also included. Industrial research institutes located at Canadian universities are considered to be in the higher education sector.
- (ii) **Higher education.** This sector is made up of all Canadian universities, including affiliated institutes owned, administered or staffed by universities.
- (iii) Canadian private non profit institutions. Charitable foundations, voluntary health organizations, scientific and professional societies, and other organizations not established to earn profits comprise this sector. Private non-profit institutions primarily serving or controlled by another sector should be included in that sector (e.g., the Pulp and Paper Research Institute is in Canadian business enterprises).
- (iv) Canadian provincial and municipal governments. Departments and agencies of these governments form this sector. Government enterprises, such as provincial utilities are included in the Canadian business enterprises sector, and hospitals in the Canadian non-profit institutions or higher education sector.
- (v) **Other Canadian performers.** This sector includes all individuals or organizations not belonging to any of the above sectors. In particular, it includes provincial research councils and foundations.
- (vi) **Foreign performers.** All foreign governments, foreign companies (including foreign subsidiaries of Canadian firms), international organizations, non resident foreign nationals and Canadians studying or teaching abroad, are included in this sector.

Type of payment

- (i) **Contracts.** These are payments to organizations or individuals outside the federal government for the conduct of S&T by the recipient or to provide support for the federal government's in-house S&T programs.
- (ii) **Grants and contributions.** Awards to organizations or individuals for the conduct of S&T and intended to benefit the recipients rather than provide the program with goods, services or information.
- (iii) **Research fellowships.** Awards to individuals for advanced research training and experience. Such payments are included as expenditures for R&D activities. Awards intended primarily to support the education of the recipients are reported as education support.

Personnel

Intramural expenditure data should be supported by data on the personnel devoted to scientific activities by all the employees engaged in these activities.

Scientific and professional - people in jobs that require at least one academic degree or nationally recognized professional qualification (e.g., Professional Engineer P.Eng.), as well as those with equivalent experience.

Technical - people in jobs that require specialized vocational or technical training beyond the secondary level (e.g., community colleges and technical institutes) as well as those with experience equivalent to this training.

Other - clerical, secretarial, administrative, operational andother support personnel.

R&D personnel: Calculated in full-time equivalent (FTE). R&D may be carried out by persons who work solely on R&D projects or by persons who devote only part of their time to R&D, and the balance to other activities such as testing, quality control and production engineering. To arrive at the total effort devoted to R&D in terms of full-time equivalent, it is necessary to estimate the full-time equivalent (FTE) of those persons working only part-time in R&D.

Full-time equivalent (FTE)

Full-time equivalent is a number of persons who work solely on R&D projects + estimate of time of persons working only part of their time on R&D.

Example calculation:

If out of five scientists engaged in R&D work, one works solely on R&D projects and the remaining four devote only one quarter of their working time to R&D, then: FTE = 1 + 1/4 + 1/4 + 1/4 + 1/4 = 2 scientists.

Higher education research and development (HERD)

HERD is equal to intramural expenditures on research and development in the higher education sector which includes all Canadian universities and colleges as well as affiliated institutes owned, administered or staffed by universities and colleges.

Business enterprise research and development (BERD)

BERD is equal to intramural expenditures on research and development in the Canadian business enterprises sector which is comprised of business and government enterprises, including public utilities and government-owned firms.

Census metropolitan area

Census metropolitan area is defined by Statistics Canada as one or more adjacent municipalities centered on a large urban area. The census population count of a CMA is at least 100,000 persons.

Federal scientific establishment

A federal scientific establishment is a laboratory, research station or regional office belonging to the federal government, with its own budget, which performs scientific and technological activities.

Highlights

The federal government's S&T expenditures distributed geographically for the year 2004/2005 amounted to \$8,156 million, or a 34.1% increase over the year 2000/2001. This growth is essentially due to an increase in spending for the year 2001/2002, when it rose by \$1,392 million or 22.9%. Furthermore, the growth rate of expenses for 2004/2005 was only 2.3%.

The National Capital Region (NCR) received \$2,708 million or 33% of the total expenditures distributed geographically in 2004/2005. In the past few years, the NCR's share has continually decreased, falling from 37% in 1997/1998¹ to 33% in 2004/2005. This can be explained by the strong growth of federal expenditures in the other provinces and territories compared to the NCR. Most of the provinces and territories saw higher average growth rates than the NCR.

Since 2000, most regions have had average annual expenditure growth rates higher than 6%, except Manitoba and Saskatchewan. New Brunswick and Alberta had the highest annual growth rates of federal S&T expenditures, at 16.3% and 12.1% respectively.

The portion of federal S&T expenditures for natural science activities was close to \$6,263 million in 2004/2005 or 77% of the total geographically distributed spending. This fell from a record 79% in 2002/2003. Only 30% of the \$1,893 million for social science activities was assigned to R&D, and the rest was spent on related scientific activities such as general purpose data collection, maintenance of national standards and testing, feasibility studies and policy-related studies.

Federal spending on experimental R&D rose to nearly \$5,097 million or around 62% of the total geographically distributed expenditures. In the same period, we note a drop in the percentage of experimental R&D expenditures in the NCR, from 23% in 2000/2001 to 19% in 2004/2005.

The province of Ontario received 30% of the geographically distributed federal experimental R&D expenditures, or \$1,522 million, to move ahead of Quebec (\$1,109 million). In the last five years, Quebec's portion has remained stable (22%) while Ontario's has increased slightly from 27% in 2000/2001 to 30% in 2004/2005.

Federal expenditures on intramural science and technology, defined as those activities primarily conducted by federal government employees, represented 57% of the geographically distributed federal S&T spending. This proportion was 66% in 2000/2001. The NCR received 58% of federal expenditures on intramural S&T and 46% of federal expenditures on intramural experimental R&D.

Federal extramural expenditures on S&T and R&D for the NCR are distributed in the provinces of Quebec and Ontario. Extramural expenditures include federal support for S&T activities performed by Canadian business enterprises, institutions of higher education, the non-profit sector and other sectors.

Between 2000 and 2005, federal extramural expenditures on S&T rose by \$1,430 million, around \$879 million of which were chargeable to the year 2001/2002. In all the provinces and territories, the portion of federal extramural expenditures on S&T remained unchanged. Ontario and Quebec had the highest percentages (42% and 25% respectively).

The higher education sector received the biggest portion of total federal spending in experimental R&D. In 2004/2005, it had received nearly 40% of total R&D enterprises spending and more than around two-thirds of federal extramural spending in experimental R&D (68%). The business sector had close to 23% of federal extramural spending in experimental R&D and over 13% of total R&D spending. Note that most of this spending was distributed in Ontario and Quebec, with their combined portion representing more than 67% of expenditures.

Of the 21 census metropolitan areas for which federal extramural S&T expenditures are available, the most (\$602 million) was spent in Montréal. Ottawa-Gatineau received \$476 million, Toronto \$550 million and Vancouver \$363 million in 2004/2005.

Statistics Canada 12 Catalogue no. 88F0006XIE

Gisèle Bellefeuille. "Provincial Distribution of Federal Expenditures and Personnel on Science and Technology, 1997/1998 to 2003/2004," Catalogue No. 88F0006XIE – No. 001, April 2006.

In 2004/2005, personnel performing S&T activities in federal establishments amounted to 34,339 full-time equivalents (FTE). The majority of these personnel were located in the NCR (20,491 FTEs or 60%). Of the remaining 13,848 FTEs employed outside of the NCR, 3,242 FTEs were employed in Quebec and 3,668 FTEs in Ontario. Atomic Energy of Canada Limited employed 1,175 FTEs in Ontario. The second largest employer in Ontario was Environment Canada, with 1,088 FTEs assigned to S&T activities.

In Quebec, the federal departments employing the most personnel to perform S&T activities were Environment Canada (522 FTEs), the Canadian Space Agency (520 FTEs) and the National Research Council (503 FTEs).

In three of the four Atlantic provinces, Fisheries and Oceans Canada had the highest number of personnel performing S&T activities with 201 FTEs in Newfoundland and Labrador, 383 FTEs in Nova Scotia, and 96 FTEs in New Brunswick. In Prince Edward Island, Agriculture Canada had the highest number of FTEs with 62 performing S&T activities.

In Manitoba, Environment Canada led the other federal departments with 182 FTEs performing S&T activities in 2004/2005. In Saskatchewan and Alberta, Agriculture Canada led the other federal departments, with 260 and 354 FTEs performing S&T activities, respectively. Fisheries and Oceans Canada once again was the largest employer of personnel performing S&T activities on the west coast, with 411 FTEs in British Columbia and 113 FTEs in the Yukon Territory the Northwest Territories and Nunavut.

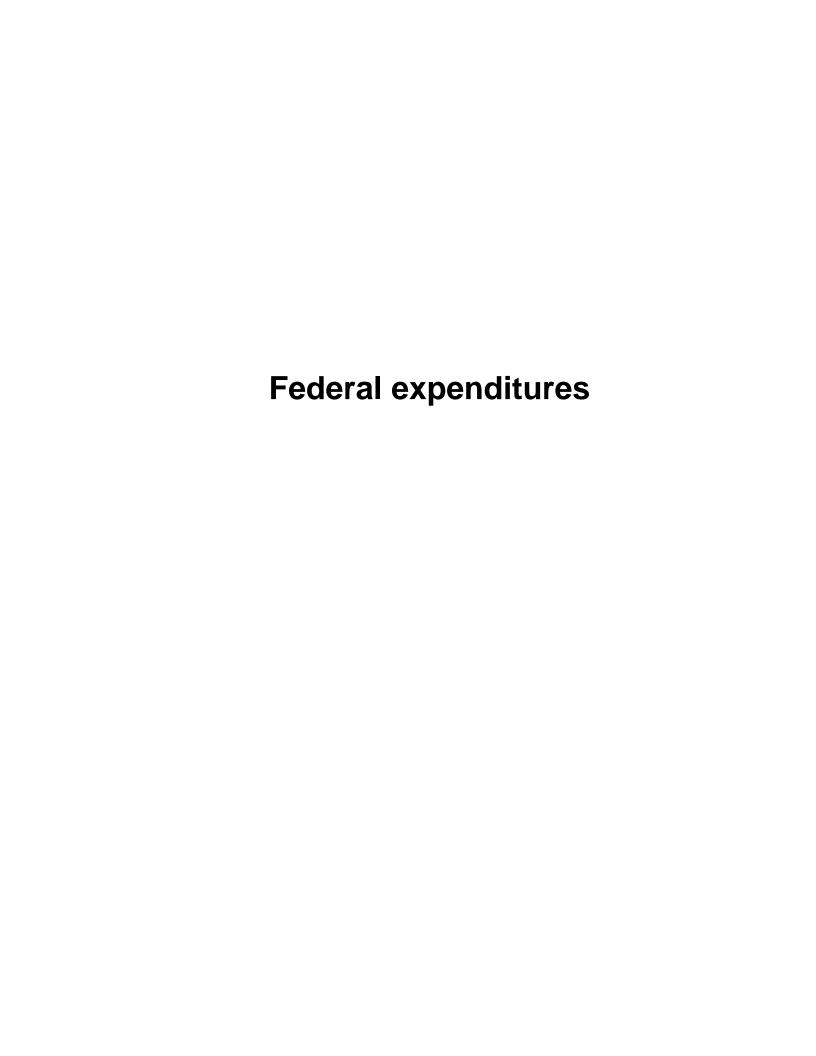


Table 1 Federal government expenditures on science and technology (S&T), by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
_		mil	llions of dollars		
Total Sciences					
Newfoundland and Labrador	101	95	117	121	137
Prince Edward Island	29	26	24	33	39
Nova Scotia	220	225	247	257	294
New Brunswick	68	82	102	100	122
Quebec ²	1,017	1,381	1,243	1,328	1,352
Ontario ²	1,347	1,653	1,582	2,038	1,967
Manitoba	190	211	214	194	226
Saskatchewan	148	165	151	159	157
Alberta	327	476	395	469	474
British Columbia	479	525	582	588	645
Yukon Territory, Northwest Territories		2.4	0.5	40	0.5
and Nunavut	28	34	35	46	35
Canada (Excluding NCR)*	3,954	4,873	4,692	5,333	5,448
National Capital Region ¹	2,130	2,603	2,608	2,642	2,708
Canada* (Including NCR)	6,084	7,476	7,300	7,976	8,156
Natural sciences					
Newfoundland and Labrador	93	86	111	112	126
Prince Edward Island	27	23	22	30	37
Nova Scotia	186	194	227	225	260
New Brunswick	64	64	96	89	112
Quebec ²	944	1,116	1,168	1,181	1,186
Ontario ²	1,210	1,428	1,441	1,798	1,699
Manitoba	172	191	201	174	203
Saskatchewan	140	151	144	146	143
Alberta	301	430	372	419	414
British Columbia	439	463	548	521	567
Yukon Territory, Northwest Territories					
and Nunavut	21	29	31	41	31
Canada (Excluding NCR)*	3,597	4,175	4,361	4,736	4,778
National Capital Region ¹	1,089	1,345	1,382	1,457	1,485
Canada* (Including NCR) * Due to rounding, components may not add to	4,686	5,520	5,743	6,191	6,263

<sup>Due to rounding, components may not add to the totals.
Federal intramural expenditures only.
Includes extramural expenditures in the National Capital Region performed by the province.</sup>

Table 2 Federal government expenditures on research and experimental development (R&D), by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
_		mil	llions of dollars		
Total sciences					
Newfoundland and Labrador	64	58	76	81	96
Prince Edward Island	24	22	17	25	32
Nova Scotia	135	137	152	151	182
New Brunswick	50	59	76	72	76
Quebec ²	843	1,068	1,028	1,091	1,109
Ontario ²	1,058	1,396	1,276	1,633	1,522
Manitoba	122	134	135	121	146
Saskatchewan	118	133	116	118	121
Alberta	264	398	297	364	364
British Columbia	320	382	426	426	481
Yukon Territory, Northwest Territories and Nunavut	12	5	5	6	8
Canada (Excluding NCR)*	3,010	3,792	3,604	4,088	4,137
National Capital Region ¹	889	925	1,015	999	960
Canada*(Including NCR)	3,899	4,717	4,619	5,085	5,097
Natural sciences					
Newfoundland and Labrador	61	51	74	75	89
Prince Edward Island	23	21	16	24	30
Nova Scotia	130	125	148	138	167
New Brunswick	48	43	74	66	68
Quebec ²	809	973	984	981	986
Ontario ²	994	1,247	1,195	1,465	1,342
Manitoba	118	124	131	110	134
Saskatchewan	116	124	112	109	110
Alberta	253	364	284	326	323
British Columbia	302	341	406	376	424
Yukon Territory, Northwest Territories					
and Nunavut	11	4	5	6	8
Canada (Excluding NCR)*	2,865	3,417	3,429	3,676	3,681
National Capital Region ¹	805	835	900	882	844
Canada*	3,670	4,252	4,329	4,557	4,525

^{*} Due to rounding, components may not add to the totals.

1. Federal intramural expenditures only.

2. Includes extramural expenditures in the National Capital Region performed by the province.

Table 3 Federal government expenditures on related scientific activities (RSA), by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
		mil	lions of dollars		
Total sciences					
Newfoundland and Labrador	37	37	41	40	41
Prince Edward Island	5	4	7	8	7
Nova Scotia	85	88	95	106	112
New Brunswick	18	23	26	28	46
Quebec ²	174	313	215	237	243
Ontario ²	289	257	306	405	445
Manitoba	68	77	79	73	80
Saskatchewan	30	32	35	41	36
Alberta	63	78	98	105	110
British Columbia Yukon Territory, Northwest Territories	159	143	156	162	164
and Nunavut	16	29	30	40	27
Canada (Excluding NCR)*	944	1,081	1,088	1,245	1,311
National Capital Region ¹	1,241	1,678	1,593	1,643	1,748
Canada*	2,185	2,759	2,681	2,891	3,059
Natural sciences					
Newfoundland and Labrador	32	35	37	37	37
Prince Edward Island	4	2	6	6	7
Nova Scotia	56	69	79	87	93
New Brunswick	16	21	22	23	44
Quebec ²	135	143	184	200	200
Ontario ²	216	181	246	333	357
Manitoba	54	67	70	64	69
Saskatchewan	24	27	32	37	33
Alberta	48	66	88	93	91
British Columbia Yukon Territory, Northwest Territories	137	122	142	145	143
and Nunavut	10	25	26	35	23
Canada (Excluding NCR)*	732	758	932	1,060	1,097
National Capital Region ¹	284	510	482	575	641
Canada*	1,016	1,268	1,414	1,634	1,738

^{*} Due to rounding, components may not add to the totals.

1. Federal intramural expenditures only.

2. Includes extramural expenditures in the National Capital Region performed by the province.

Table 4 Intramural expenditures of federal scientific establishments, by science, activity¹ and by province and territories, 2004/2005

	Natural sciences			So	cial science	s	Total sciences		
	R&D ¹	RSA ¹	S&T ¹	R&D ¹	RSA ¹	S&T ¹	R&D ¹	RSA ¹	S&T ¹
				milli	ions of dolla	ırs			
Newfoundland and Labrador	23	33	56	0	3	3	23	36	59
Prince Edward Island	10	6	16	0	1	1	10	7	17
Nova Scotia	81	85	166	0	18	18	81	103	184
New Brunswick	26	41	67	0	1	1	26	42	68
Quebec	320	141	461	0	24	24	320	165	485
Ontario	327	138	465	2	36	38	329	173	502
Manitoba	73	51	124	0	8	8	73	59	132
Saskatchewan	54	29	83	0	2	2	54	31	85
Alberta	110	69	179	0	12	12	110	81	191
British Columbia Yukon Territory, Northwest	91	121	212	0	10	10	91	131	222
Territories and Nunavut	6	22	28	0	3	3	6	25	31
Canada (Excluding NCR)*	1,122	734	1,856	2	118	120	1,124	853	1,977
National Capital Region									,
Quebec	38	110	148	9	153	162	48	262	310
Ontario	805	532	1,337	107	953	1,060	912	1,485	2,397
Canada*	1,965	1,376	3,341	118	1,226	1,344	2,084	2,601	4,685

^{*} Due to rounding, components may not add to the totals.

1. See list available at the beginning of publication.

Table 5 Federal government expenditures on intramural science and technology (S&T), by province and territories 2004/2005 2000/2001 2001/2002 2002/2003 2003/2004^r millions of dollars **Total sciences** Newfoundland and 63 61 67 61 59 Labrador Prince Edward Island 20 19 14 19 17 Nova Scotia 168 153 162 158 184 **New Brunswick** 42 46 69 54 68 Quebec 488 527 480 485 525 Ontario 516 500 523 516 502 Manitoba 128 148 146 128 132 Saskatchewan 87 90 84 89 85 Alberta 160 172 191 159 172 British Columbia 218 219 228 216 222 Yukon Territory, Northwest Territories and 23 30 32 43 31 Nunavut Canada (Excluding NCR)* 1,913 1,952 2,022 1,937 1,977 National Capital Region 2,130 2,603 2,608 2,642 2,708 Canada* 4,043 4,555 4,630 4,579 4,685 **Natural sciences** Newfoundland and 59 59 65 59 56 Labrador Prince Edward Island 19 18 13 18 16 Nova Scotia 166 140 136 148 141 **New Brunswick** 41 45 66 51 67 Quebec 460 493 505 456 461 Ontario 465 492 465 495 481 Manitoba 118 139 139 120 124 Saskatchewan 83 87 82 87 83 Alberta 179 150 165 164 149 British Columbia 203 204 219 206 212 Yukon Territory, Northwest Territories and 18 26 29 39 28 Nunavut

1,783

1,089

2,872

Canada (Excluding NCR)*

National Capital Region

Canada*

1,821

1,345

3,166

1,926

1,382

3,308

1,820

1,457

3,277

1,856

1,485

3,341

^{*} Due to rounding, components may not add to the totals.

Table 6 Federal government expenditures on intramural research and experimental development (R&D), by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
			millions of dollars	1	
Total sciences					
Newfoundland and Labrador	30	27	32	23	23
Prince Edward Island	16	16	8	12	10
Nova Scotia	88	70	76	66	81
New Brunswick	27	26	46	30	26
Quebec	350	372	370	314	320
Ontario	314	328	324	351	329
Manitoba	68	77	72	63	73
Saskatchewan	62	63	52	54	54
Alberta	116	98	92	87	110
British Columbia Yukon Territory, Northwest	111	97	99	80	91
Territories and Nunavut	9	3	4	5	6
Canada (Excluding NCR)*	1,191	1,177	1,175	1,085	1,124
National Capital Region	889	926	1,015	999	960
Canada*	2,080	2,103	2,190	2,083	2,084
Natural sciences					
Newfoundland and Labrador	30	27	32	23	23
Prince Edward Island	16	16	8	12	10
Nova Scotia	88	70	76	66	8
New Brunswick	27	26	46	30	26
Quebec	349	372	370	314	320
Ontario	314	326	322	348	327
Manitoba	68	77	72	63	7:
Saskatchewan	62	63	52	54	54
Alberta	116	98	92	87	110
British Columbia	111	97	99	80	9
Yukon Territory, Northwest Ferritories and Nunavut	9	3	4	5	
Canada (Excluding NCR)*	1,190	1,175	1,173	1,082	1,12
National Capital Region	805	836	900	882	844
Canada*	1,995	2,011	2,073	1,964	1,965

^{*} Due to rounding, components may not add to the totals.

Table 7 Federal government expenditures on intramural related scientific activities (RSA), by province and territories

33 4 80 15 138 202 60 25 44 107 14 722 1,241 1,963	34 3 83 20 155 172 71 27 61 122 27 775 1,677 2,452	35 6 86 23 155 199 74 32 80 129 28 847 1,593 2,440	38 7 92 24 166 165 65 35 85 136 38 852 1,643 2,496	36 7 103 42 165 173 59 31 81 131 25 853 1,748 2,601
4 80 15 138 202 60 25 44 107 14 722	3 83 20 155 172 71 27 61 122 27 775	6 86 23 155 199 74 32 80 129 28 847 1,593	7 92 24 166 165 65 35 85 136 38 852	7 103 42 165 173 59 31 81 131 25 853
4 80 15 138 202 60 25 44 107 14 722	3 83 20 155 172 71 27 61 122 27 775	6 86 23 155 199 74 32 80 129 28 847 1,593	7 92 24 166 165 65 35 85 136 38 852	7 103 42 165 173 59 31 81 131 25 853
80 15 138 202 60 25 44 107 14 722 1,241	83 20 155 172 71 27 61 122 27 775	86 23 155 199 74 32 80 129 28 847 1,593	92 24 166 165 65 35 85 136 38 852 1,643	103 42 165 173 59 31 81 131 25 853
15 138 202 60 25 44 107 14 722 1,241	20 155 172 71 27 61 122 27 775	23 155 199 74 32 80 129 28 847 1,593	24 166 165 65 35 85 136 38 852 1,643	42 165 173 59 31 81 131 25 853
138 202 60 25 44 107 14 722 1,241	155 172 71 27 61 122 27 775	155 199 74 32 80 129 28 847 1,593	166 165 65 35 85 136 38 852 1,643	165 173 59 31 81 131 25 853
202 60 25 44 107 14 722 1,241	172 71 27 61 122 27 775 1,677	199 74 32 80 129 28 847 1,593	165 65 35 85 136 38 852 1,643	173 59 31 81 131 25 85 3 1,748
60 25 44 107 14 722 1,241	71 27 61 122 27 775 1,677	74 32 80 129 28 847 1,593	65 35 85 136 38 852 1,643	59 31 81 131 25 85 3 1,748
25 44 107 14 722 1,241	27 61 122 27 775 1,677	32 80 129 28 847 1,593	35 85 136 38 852 1,643	31 81 131 25 85 3 1,748
44 107 14 722 1,241	61 122 27 775 1,677	80 129 28 847 1,593	85 136 38 852 1,643	81 131 25 85 3 1,748
107 14 722 1,241	122 27 775 1,677	129 28 847 1,593	136 38 852 1,643	131 25 85 3 1,748
14 722 1,241	27 775 1,677	28 847 1,593	38 852 1,643	25 85 3 1,748
722 1,241	775 1,677	847 1,593	852 1,643	85 3
1,241	1,677	1,593	1,643	1,748
1,963	2,452	2,440	2,496	2,601
				_,501
29	32	33	36	33
3	2	5	6	6
52	66	72	75	85
14	19	20	21	4
111	121	135	142	141
178	139	173	133	138
50	62	67	57	51
21	24	30	33	29
34	51	73	77	69
92	107	120	126	121
9	23	25	34	22
593	646	753	738	734
				641
	EUU		3/3	1,376
	21 34 92 9	21 24 34 51 92 107 9 23 593 646	21 24 30 34 51 73 92 107 120 9 23 25	21 24 30 33 34 51 73 77 92 107 120 126 9 23 25 34 593 646 753 738

^{*} Due to rounding, components may not add to the totals.

Table 8 Intramural expenditures of federal scientific establishments, by department or agency¹, activity and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt.	NCR	Canada
						milli	ions of do	ollars					
Science and te	chnology												
AECL	0	0	0	0	0	135	6	0	0	0	0	0	141
AGR	2	7	12	8	36	53	26	34	54	19	0	77	328
CSA	0	0	0	0	103	0	0	0	0	0	0	9	112
EC	3	0	15	6	88	181	30	24	25	43	6	86	506
F&O	35	3	57	11	34	12	13	1	1	67	16	27	276
HC	0	0	1	1	10	11	4	1	1	6	0	224	258
NDEF	0	0	32	0	51	21	0	0	35	0	0	107	246
NRC	12	4	21	28	79	25	17	18	11	38	0	402	656
NRCan	2	0	22	12	44	21	0	1	41	33	4	279	458
STC	0	0	6	0	7	11	2	1	6	4	0	572	609
Other	5	3	18	2	33	32	34	5	17	12	5	925	1,091
Total*	59	17	184	68	485	502	132	85	191	222	31	2,708	4,685
Research and	developm	ent											
AECL	0	0	0	0	0	135	6	0	0	0	0	0	141
AGR	1	5	9	6	29	41	23	27	46	13	0	36	236
CSA	0	0	0	0	100	0	0	0	0	0	0	1	101
EC	1	0	4	2	23	94	4	7	4	10	0	33	181
F&O	9	1	15	3	9	3	3	0	0	17	4	7	72
NDEF	0	0	28	0	51	21	0	0	27	0	0	74	201
NRC	10	4	19	8	69	10	16	16	8	32	0	362	554
NRCan	1	0	5	7	22	20	0	1	23	14	1	118	213
Other	1	0	1	0	17	5	21	3	2	5	1	329	385
Total*	23	10	81	26	320	329	73	54	110	91	6	960	2,084

22

^{*} Due to rounding, components may not add to the totals.
1. List of participating departments and agencies available at the beginning of publication.
2. Excluding the National Capital Region.

Table 9 Intramural expenditures of federal scientific establishments performing natural science activities, by department or agency¹, activity and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
						mill	ions of de	ollars					
Science and	technolo	gy											
AECL	0	0	0	0	0	135	6	0	0	0	0	0	141
AGR	2	7	12	8	36	53	26	34	54	19	0	69	320
CSA	0	0	0	0	103	0	0	0	0	0	0	9	112
EC	3	0	15	6	85	181	30	24	25	43	6	84	501
F&O	34	3	55	10	32	12	13	1	1	65	16	23	264
HC	0	0	1	1	9	11	4	1	1	6	0	214	247
NDEF	0	0	32	0	51	19	0	0	35	0	0	106	244
NRC	12	4	21	28	79	25	17	18	11	38	0	402	656
NRCan	2	0	22	12	44	21	0	1	41	33	4	279	458
Other	3	2	8	2	22	8	28	4	11	8	2	299	398
Total*	56	16	166	67	461	465	124	83	179	212	28	1,485	3,341

Research and	developm	ent											
AECL	0	0	0	0	0	135	6	0	0	0	0	0	141
AGR	1	5	9	6	29	41	23	27	46	13	0	36	236
CSA	0	0	0	0	100	0	0	0	0	0	0	1	101
EC	1	0	4	2	23	94	4	7	4	10	0	33	181
F&O	9	1	15	3	9	3	3	0	0	17	4	7	72
HC	0	0	0	0	3	3	2	0	0	2	0	41	50
NDEF	0	0	28	0	51	19	0	0	27	0	0	74	200
NRC	10	4	19	8	69	10	16	16	8	32	0	362	554
NRCan	1	0	5	7	22	20	0	1	23	14	1	118	213
Other	1	0	1	0	14	2	19	3	2	3	1	172	217
Total*	23	10	81	26	320	327	73	54	110	91	6	844	1,965

^{*} Due to rounding, components may not add to the totals.

1. List of participating departments and agencies available at the beginning of publication.

2. Excluding the National Capital Region.

Table 10 Federal government expenditures on extramural science and technology (S&T), by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
		mi	llions of dollars		
Total sciences					
Newfoundland and Labrador	38	34	50	60	78
Prince Edward Island	9	7	10	14	22
Nova Scotia	52	72	85	99	110
New Brunswick	26	36	33	46	54
Quebec	529	854	718	848	867
Ontario	831	1,153	1,059	1,522	1,464
Manitoba	62	63	68	66	94
Saskatchewan	61	75	67	70	72
Alberta	167	317	223	297	283
British Columbia	261	306	354	372	423
Yukon Territory, Northwest					
Territories and Nunavut	5	3	3	3	4
Canada*	2,041	2,920	2,670	3,397	3,471
Natural sciences					
Newfoundland and Labrador	35	27	46	53	70
Prince Edward Island	8	5	9	12	21
Nova Scotia	45	59	79	84	94
New Brunswick	23	19	30	38	45
Quebec	484	623	663	725	725
Ontario	718	963	946	1,317	1,234
Manitoba	53	52	62	54	79
Saskatchewan	57	65	62	59	60
Alberta	151	280	206	255	235
British Columbia	237	259	329	315	355
Yukon Territory, Northwest					
Territories and Nunavut	3	2	3	2	3
Canada*	1,814	2,354	2,435	2,914	2,922

^{*} Due to rounding, components may not add to the totals.

Table 11 Federal government expenditures on extramural research and experimental development (R&D), by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
_		mi	illions of dollars		
Total sciences					
Newfoundland and Labrador	34	30	45	58	73
Prince Edward Island	8	6	9	13	22
Nova Scotia	47	67	76	85	101
New Brunswick	23	33	30	42	50
Quebec	493	696	658	777	789
Ontario	744	1,068	952	1,282	1,193
Manitoba	54	57	63	58	73
Saskatchewan	56	70	63	64	67
Alberta	148	300	205	277	254
British Columbia Yukon Territory, Northwest	209	285	327	346	390
Territories and Nunavut	3	2	1	1	2
Canada*	1,819	2,614	2,429	3,002	3,013
Natural sciences					
Newfoundland and Labrador	31	23	43	52	66
Prince Edward Island	7	5	8	12	20
Nova Scotia	42	55	72	72	86
New Brunswick	21	17	28	36	42
Quebec	460	602	614	667	666
Ontario	680	921	873	1,117	1,015
Manitoba	50	47	59	47	61
Saskatchewan	54	61	59	55	56
Alberta	137	266	192	239	213
British Columbia	191	244	307	296	333
Yukon Territory, Northwest	_				_
Territories and Nunavut	2	1	1	1	2
Canada*	1,675	2,242	2,256	2,593	2,560

^{*} Due to rounding, components may not add to the totals.

Table 12 Federal government expenditures on extramural related scientific activities (RSA), by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
_		m	illions of dollars		
Total sciences					
Newfoundland and Labrador	4	4	5	2	5
Prince Edward Island	1	1	1	1	0
Nova Scotia	5	5	9	14	9
New Brunswick	3	3	3	4	4
Quebec	36	158	60	71	78
Ontario	87	85	107	240	271
Manitoba	8	6	5	8	21
Saskatchewan	5	5	4	6	5
Alberta	19	17	18	20	29
British Columbia	52	21	27	26	33
Yukon Territory, Northwest					
Territories and Nunavut	2	1	2	2	2
Canada*	222	306	241	395	458
Natural sciences					
Newfoundland and Labrador	4	4	3	1	4
Prince Edward Island	1	0	1	0	1
Nova Scotia	3	4	7	12	8
New Brunswick	2	2	2	2	3
Quebec	24	21	49	58	59
Ontario	38	42	73	200	219
Manitoba	3	5	3	7	18
Saskatchewan	3	4	3	4	4
Alberta	14	14	14	16	22
British Columbia	46	15	22	19	22
Yukon Territory, Northwest					
Territories and Nunavut	1	1	2	1	1
Canada*	139	112	179	321	362

^{*} Due to rounding, components may not add to the totals.

Table 13 Federal government expenditures on extramural science and technology (S&T), by science, activity¹ and by province and territories, 2004/2005

B.C. Canada N.L. P.E.I. N.S. N.B. Que. Ont. Man. Sask. Alta.

<u>,-</u>						millions o	f dollars					
Total sciences												
Total R&D ¹	73	22	101	50	789	1,193	73	67	254	390	2	3,013
Grants	72	21	93	49	745	1,075	69	59	240	379	1	2,803
Contracts	1	0	8	1	44	118	4	8	14	11	0	210
Total RSA ¹	5	0	9	4	78	271	21	5	29	33	2	458
Grants	2	0	6	3	40	219	6	5	24	26	1	332
Contracts	3	1	3	1	38	52	15	0	5	7	2	126
Total S&T1	78	22	110	54	867	1,464	94	72	283	423	4	3,471
Grants	74	21	99	52	785	1,294	75	64	264	405	2	3,135
Contracts	4	1	11	2	82	170	19	8	19	18	2	336
Natural sciences												
Total R&D ¹	66	20	86	42	666	1,015	61	56	212	333	2	2,560
Grants	65	20	78	41	622	900	57	49	199	322	1	2,354
Contracts	1	0	8	1	44	115	4	7	14	11	0	205
Total RSA ¹	4	1	8	3	59	219	18	4	24	22	1	362
Grants	2	0	5	2	22	174	4	4	18	16	1	247
Contracts	3	1	3	1	37	45	14	0	5	6	1	117
Total S&T1	70	21	94	45	725	1,234	79	60	236	355	3	2,922
Grants	67	20	83	43	644	1,074	61	53	217	338	2	2,601
Contracts	4	1	11	2	81	160	18	7	19	17	1	322
Social sciences												
Total R&D¹	7	1	15	8	123	178	12	11	42	57	0	453
Grants	6	1	15	8	123	176	12	10	41	57	0	449
Contracts	0	0	0	0	0	2	0	1	0	0	0	4
Total RSA ¹	1	0	1	1	19	52	3	1	5	11	1	97
Grants	1	0	1	1	18	44	2	1	6	10	0	85
Contracts	0	0	0	0	1	8	1	0	0	1	1	11
Total S&T1	8	1	16	9	142	230	15	12	47	68	1	550
Grants	7	1	16	9	141	220	14	11	47	67	0	534
Contracts	0	0	0	0	1	10	1	1	0	1	1	15

^{*} Due to rounding, components may not add to the totals.

1. See List available at the beginning of publication.

Table 14 Federal government expenditures on extramural science and technology (S&T), by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.1., N.W.T., & Nvt	Canada
						millions o	f dollars					
ACOA	31	15	28	23	0	1	0	0	0	0	0	97
CED (QUÉ)	0	0	0	0	36	0	0	0	0	0	0	36
CFI	2	0	7	2	75	103	5	5	26	38	0	263
CIHR	5	1	15	1	182	240	18	9	72	71	0	613
CSA	1	0	0	0	24	66	3	6	6	22	0	129
EC	0	0	2	0	4	107	1	1	6	3	1	125
F&O	3	0	2	1	2	1	1	0	0	3	0	14
GC	0	0	2	0	24	55	0	0	0	0	0	81
HC	0	0	0	0	1	12	0	0	0	1	0	16
IND	12	0	0	0	121	142	0	0	7	35	0	316
NDEF	0	0	8	0	44	73	14	0	12	2	0	152
NRC	4	2	5	3	15	23	3	2	9	56	1	124
NRCan	1	1	2	3	16	118	2	4	8	18	0	173
NSERC	12	1	23	11	173	285	20	28	76	95	0	723
SSHRC	7	1	16	9	136	189	14	11	46	64	0	493
TC	0	0	0	0	2	5	0	0	1	1	0	10
WEDC	0	0	0	0	0	0	6	4	10	8	0	28
Others	0	1	0	1	12	44	7	2	4	6	2	79
Total*	78	22	110	54	867	1,464	94	72	283	423	4	3,471

^{*} Due to rounding, components may not add to the totals.

Table 15 Federal government expenditures on extramural research and experimental development (R&D), by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	Canada
						millions o	f dollars					
ACOA	31	15	28	23	0	1	0	0	0	0	0	97
CED (QUÉ)	0	0	0	0	36	0	0	0	0	0	0	36
CFI	2	0	7	2	75	103	5	5	26	38	0	263
CIHR	5	1	14	1	179	237	18	9	70	70	0	604
CSA	1	0	0	0	23	66	3	6	6	22	0	128
EC	0	0	0	0	0	4	0	0	1	0	0	7
F&O	0	0	0	0	1	0	0	0	0	0	0	2
GC	0	0	2	0	24	55	0	0	0	0	0	81
HC	0	0	0	0	1	1	0	0	0	1	0	3
IND	12	0	0	0	121	112	0	0	7	35	0	286
NDEF	0	0	7	0	19	40	1	0	9	2	0	77
NRC	4	2	5	3	15	23	3	2	9	56	1	124
NRCan	1	1	2	3	15	117	1	3	5	16	0	164
NSERC	11	1	20	9	155	250	18	26	65	83	0	637
SSHRC	6	1	14	8	120	160	12	10	41	56	0	428
TC	0	0	0	0	0	3	0	0	1	1	0	5
WEDC	0	0	0	0	0	0	6	4	10	8	0	28
Others	0	1	2	1	5	22	6	2	4	2	1	43
Total*	73	22	101	50	789	1,193	73	67	254	390	2	3,013

^{*} Due to rounding, components may not add to the totals.

^{1.} List of participating departments and agencies available at the beginning of publication.

^{1.} List of participating departments and agencies available at the beginning of publication.

Table 16 Federal government research and experimental development (R&D) payments to Canadian business enterprises sector, by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
		mi	llions of dollars		
Total sciences					
Newfoundland and Labrador	11	8	17	23	28
Prince Edward Island	5	3	5	6	7
Nova Scotia	12	20	23	19	29
New Brunswick	5	7	9	10	14
Quebec	187	252	239	221	214
Ontario	235	423	301	318	245
Manitoba	11	13	13	8	14
Saskatchewan	8	9	9	9	10
Alberta	21	26	21	36	33
British Columbia	49	54	64	65	93
Yukon Territory, Northwest Territories and Nunavut	1	1	0	0	0
Canada*	545	816	701	716	687
Natural sciences					
Newfoundland and Labrador	11	8	17	23	28
Prince Edward Island	5	3	5	6	7
Nova Scotia	12	20	23	19	29
New Brunswick	5	7	9	10	14
Quebec	186	252	239	221	213
Ontario	235	421	298	317	244
Manitoba	11	13	13	8	14
Saskatchewan	8	9	8	9	10
Alberta	21	26	21	36	33
British Columbia	49	54	64	65	93
Yukon Territory, Northwest Territories and Nunavut	1	1	0	0	0
Canada*	544	814	697	715	685

^{*} Due to rounding, components may not add to the totals.

Table 17 Federal government research and experimental development (R&D) payments to the higher education sector, by province and territories

	2000/2001	2001/2002	2002/2003	2003/2004 ^r	2004/2005
		mi	illions of dollars		
Total sciences					
Newfoundland and Labrador	18	19	20	31	41
Prince Edward Island	2	2	3	7	14
Nova Scotia	31	43	42	58	64
New Brunswick	11	23	16	23	28
Quebec	291	421	399	513	545
Ontario	456	561	591	716	737
Manitoba	34	40	46	44	58
Saskatchewan	41	55	50	51	54
Alberta	114	164	161	221	211
British Columbia Yukon Territory, Northwest	152	202	228	261	288
Territories and Nunavut	0	0	0	0	0
Canada*	1,150	1,530	1,556	1,925	2,043
Natural sciences					
Newfoundland and Labrador	16	14	18	25	35
Prince Edward Island	2	1	3	6	13
Nova Scotia	28	32	39	45	50
New Brunswick	10	8	14	17	21
Quebec	264	334	359	405	425
Ontario	419	445	539	573	579
Manitoba	32	31	43	34	46
Saskatchewan	40	47	47	42	44
Alberta	105	132	149	183	170
British Columbia	138	165	211	213	233
Yukon Territory, Northwest Territories and Nunavut	0	0	0	0	0
Canada*	1,054	1,209	1,422	1,544	1,616

^{*} Due to rounding, components may not add to the totals.

Table 18 Federal expenditures on extramural science and technology (S&T)¹, by selected census metropolitan areas and activity

	2002/20	03	2003/20	004	2004/2005		
	Total RSA ¹	Total R&D ¹	Total RSA ¹	Total R&D ¹	Total RSA ¹	Total R&D ¹	
			millions of	dollars			
Calgary	8	85	9	117	13	99	
Edmonton	9	110	10	150	15	140	
Greater Sudbury / Grand Sudbury	0	4	1	4	1	7	
Guelph	3	35	2	42	4	44	
Halifax	7	65	12	70	6	81	
Hamilton	4	60	4	76	5	69	
Kingston	4	61	5	73	6	64	
Kitchener	5	84	8	95	9	93	
London	5	62	6	77	7	70	
Montreal	44	472	54	558	54	548	
Ottawa-Gatineau	35	239	162	419	183	293	
Quebec	8	115	9	144	11	151	
Regina	1	9	1	13	1	14	
Saskatoon	3	52	4	50	3	52	
Sherbrooke	2	23	3	30	3	32	
St. Catharines - Niagara	1	8	3	9	3	15	
St-John's	4	41	2	54	4	69	
Toronto	44	364	40	452	45	505	
Trois-Rivières	1	17	0	9	6	11	
Vancouver	19	286	19	301	24	339	
Victoria	4	25	4	32	5	33	
Windsor	1	15	1	16	1	18	
Winnipeg	4	61	7	55	19	65	
Others	25	136	29	156	30	201	
Total*	241	2,429	395	3,002	458	3,013	

^{*} Due to rounding, components may not add to the totals.

1. See List available at the beginning of publication.

Federal government personnel

Table 19 Personnel of federal establishments performing science and technology (S&T) activities, by science, activity, category and by province and territories, 2004/2005 Y.T., N.W.T., Ont.1 NCR N.L. P.E.I. N.S. N.B. Que.1 Man. Sask. Alta. B.C. Canada & Nvt number 2 **Total sciences** Scientific and professionnal personnel R&D³ 53 22 234 68 877 997 170 141 303 266 20 2,826 5,977 RSA^3 123 28 370 494 487 187 92 299 433 87 6,236 8,951 115 S&T3 176 50 604 183 1,371 1,484 357 233 602 699 107 9,062 14,928 Total personnel R&D3 136 70 543 180 1,979 2,344 483 355 771 618 37 6,205 13,719 RSA³ 263 65 751 1,263 1,324 481 275 892 191 14,286 20,620 210 617 S&T3 399 390 964 34,339 135 1,294 3,242 3,668 630 1,388 1,510 228 20,491

22

24

46

70

55

125

234

341

575

543

608

1,151

68

109

177

180

197

377

875

449

1,324

1,974

1,085

3,059

987

447

1,434

2,327

1,103

3,430

170

168

338

483

406

889

141

91

232

355

260

615

303

275

578

771

521

1,292

266

404

670

618

815

1,433

20

83

103

37

168

205

2,477

3,180

5,657

5,508

5,512

11,020

5,617

5,674

11,291

13,001

10,948

23,949

Scientific and professionnal personnel

53

104

157

136

217

353

Natural sciences

Total personnel

R&D3

RSA³

 $S&T^3$

R&D3

 RSA^3

S&T3

Due to rounding, components may not add to the totals.

^{1.} Excluding the National Capital Region.

^{2.} Full-time equivalent includes Administration of Extramural Programs Personnel.

^{3.} See List available at the beginning of publication.

Table 20 Personnel of federal establishments performing science and technology (S&T) activities, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
-							nur	mber ³					
ACOA	11	4	16	20	0	0	0	0	0	0	0	0	50
AECL	0	0	0	0	0	1,175	75	0	0	0	0	0	1,250
AGR	18	62	79	49	257	356	172	260	354	137	0	565	2,309
BOC	0	0	3	0	3	8	0	0	2	2	0	249	267
CED (QUÉ)	0	0	0	0	96	0	0	0	0	0	0	0	96
CFIA	16	7	40	8	55	19	10	68	56	55	0	140	473
CIDA	0	0	0	0	0	0	0	0	0	0	0	256	256
CIHR	0	0	0	0	0	0	0	0	0	0	0	282	282
CMC	0	0	0	0	0	0	0	0	0	0	0	459	459
CMHC	0	0	8	0	16	28	0	0	14	16	0	65	147
CMN	0	0	0	0	0	0	0	0	0	0	0	172	172
CNSC	0	0	0	0	0	0	0	0	0	0	0	7	7
COL	0	0	0	0	0	0	0	0	0	0	0	17	17
CRA	8	0	0	0	8	0	10	0	0	8	0	112	146
CSA	0	0	0	0	520	0	0	0	0	0	0	53	573
CSTM	0	0	0	0	0	0	0	0	0	0	0	220	220
DFAIT	0	0	0	0	0	0	0	0	0	0	0	60	60
EC	28	2	131	50	522	1,088	182	153	173	311	56	542	3,238
F&O	201	28	383	96	236	89	92	5	10	411	113	194	1,857
FIN	0	0	0	0	0	0	0	0	0	0	0	301	301
GC	0	0	0	0	0	0	0	0	0	0	0	37	37
HC	0	0	11	7	92	104	36	6	7	57	0	2,152	2,472
HRSDC	0	0	0	0	0	0	0	0	0	0	0	36	36
IAND	0	0	0	0	0	0	0	0	0	0	0	6	6
IDRC	0			0		0			0		0	158	158
IND	0	0 0	0 0	0	0 0	0	0 0	0 0	0	0	0	972	972
						0			0			972 54	
JUS	0	0	0 0	0	0	0	0	0	0	0	0		54
LAC	0	0		0	0	-	0	0	_	0	0	816	816
NDEF	0	0	251	0	480	217	0	0	302	0	0	840	2,089
NEB	0	0	0	0	0	0	0	0	23	0	0	0	23
NGC	0 75	0	0	0	0	0 450	0	0	0	0	0	267	267
NRC	75 40	27	137	58	503	159	111	115	73	243	0	2,677	4,178
NRCan	19	0	117	96	303	163	0	1	289	222	19	1,994	3,223
NSERC	0	0	0	0	0	0	0	0	0	0	0	311	311
PCA	23	6	63	6	45	105	57	15	22	16	40	277	674
PSEPC	0	0	0	0	0	0	0	0	0	0	0	28	28
PW&GS	0	0	0	0	0	0	0	0	0	0	0	23	23
SSHRC	0	0	0	0	0	0	0	0	0	0	0	177	177
STC	0	0	55	0	66	99	20	8	54	32	0	5,102	5,436
TB	0	0	0	0	0	0	0	0	0	0	0	293	293
TC	0	0	0	0	22	1	0	0	0	0	0	50	73
WEDC	0	0	0	0	0	0	0	0	5	0	0	0	5
Others	0	0	0	0	18	57	199	0	4	0	0	527	808
Total*	399	135	1,294	390	3,242	3,668	964	630	1,388	1,510	228	20,491	34,339

<sup>Due to rounding, components may not add to the totals.
1. List of participating departments and agencies available at the beginning of publication.
2. Excluding the National Capital Region.
3. Full-time equivalent includes Administration of Extramural Programs Personnel.</sup>

Table 21 Scientific and professional personnel of federal establishments performing science and technology (S&T) activities, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
							nur	nber ³					
AECL	0	0	0	0	0	462	30	0	0	0	0	0	492
AGR	8	21	27	15	89	112	55	79	110	51	0	227	794
BOC	0	0	1	0	1	6	0	0	1	1	0	106	116
CED (QUÉ)	0	0	0	0	2	0	0	0	0	0	0	0	2
CFIA	4	2	11	2	20	10	5	23	14	22	0	50	162
CIDA	0	0	0	0	0	0	0	0	0	0	0	56	56
CIHR	0	0	0	0	0	0	0	0	0	0	0	45	45
CMC	0	0	0	0	0	0	0	0	0	0	0	85	85
CMHC	0	0	5	0	11	17	0	0	10	11	0	51	106
CMN	0	0	0	0	0	0	0	0	0	0	0	98	98
CNSC	0	0	0	0	0	0	0	0	0	0	0	6	6
COL	0	0	0	0	0	0	0	0	0	0	0	3	3
CRA	8	0	0	0	8	0	10	0	0	8	0	112	146
CSA	0	0	0	0	241	0	0	0	0	0	0	15	256
CSTM	0	0	0	0	0	0	0	0	0	0	0	77	77
DFAIT	0	0	0	0	0	0	0	0	0	0	0	35	35
EC	22	1	102	38	236	499	88	74	85	132	27	280	1,584
F&O	88	14	188	46	120	35	37	2	4	202	53	101	890
FIN	0	0	0	0	0	0	0	0	0	0	0	245	245
HC	0	0	10	7	57	71	19	6	7	33	0	1,506	1,716
HRSDC	0	0	0	0	0	0	0	0	0	0	0	30	30
IAND	0	0	0	0	0	0	0	0	0	0	0	5	5
IDRC	0	0	0	0	0	0	0	0	0	0	0	108	108
IND	0	0	0	0	0	0	0	0	0	0	0	702	702
JUS	0	0	0	0	0	0	0	0	0	0	0	52	52
LAC	0	0	0	0	0	0	0	0	0	0	0	314	314
NDEF	0	0	117	0	180	89	0	0	154	0	0	519	1,060
NEB	0	0	0	0	0	0	0	0	23	0	0	0	23
NGC	0	0	0	0	0	0	0	0	0	0	0	78	78
NRC	27	10	50	21	183	58	40	42	27	88	0	973	1,519
NRCan	10	0	77	51	181	66	0	1	160	144	13	1,186	1,889
NSERC	0	0	0	0	0	0	0	0	0	0	0	16 70	16
PCA	9	2	15	3	16	27	17	6	5	6	14	72	190
PSEPC	0	0	0	0	0	0	0	0	0	0	0	23	23
PW&GS	0	0	0	0	0	0	0	0	0	0	0	14	14
SSHRC	0	0	0	0	0	0	0	0	0	0	0	17	17
STC TB	0	0	0	0	0	0	0	0	0	0	0	1,389	1,389
TC	0 0	0 0	0	0	0 17	0	0	0	0	0	0	68 37	68 54
WEDC			0	0		1	0	0	0	0	0		54
	0	0	0	0	0	0	0 56	0	1 1	0	0	0 261	1
Others	0	0	1	0	9	31	56	0		1	0	361	462
Total*	176	50	604	183	1,371	1,484	357	233	602	699	107	9,062	14,928

Due to rounding, components may not add to the totals.

^{1.} List of participating departments and agencies available at the beginning of publication.

^{2.} Excluding the National Capital Region.

^{3.} Full-time equivalent includes Administration of Extramural Programs Personnel.

Table 22 Personnel of federal establishments performing research and experimental development (R&D) activities, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
							nur	mber ³					
ACOA	11	4	16	20	0	0	0	0	0	0	0	0	50
AECL	0	0	0	0	0	1,175	75	0	0	0	0	0	1,250
AGR	9	33	58	34	184	265	145	187	291	87	0	354	1,647
BOC	0	0	0	0	0	0	0	0	0	0	0	79	79
CED (QUÉ)	0	0	0	0	66	0	0	0	0	0	0	0	66
CFIA	0	7	1	0	18	0	5	27	18	16	0	37	128
CIDA	0	0	0	0	0	0	0	0	0	0	0	28	28
CIHR	0	0	0	0	0	0	0	0	0	0	0	278	278
CMC	0	0	0	0	0	0	0	0	0	0	0	56	56
CMHC	0	0	0	0	0	0	0	0	0	0	0	40	40
CMN	0	0	0	0	0	0	0	0	0	0	0	23	23
CNSC	0	0	0	0	0	0	0	0	0	0	0	3	3
CSA	0	0	0	0	492	0	0	0	0	0	0	6	498
EC	2	0	8	3	171	430	17	56	14	52	0	153	906
F&O	50	7	111	27	66	20	22	1	2	122	33	47	510
GC	0	0	0	0	0	0	0	0	0	0	0	37	37
HC	0	0	0	0	16	13	8	0	0	14	0	348	399
HRSDC	0	0	0	0	0	0	0	0	0	0	0	9	9
IDRC	0	0	0	0	0	0	0	0	0	0	0	118	118
IND	0	0	0	0	0	0	0	0	0	0	0	349	349
NDEF	0	0	225	0	408	178	0	0	227	0	0	525	1,563
NGC	0	0	0	0	0	0	0	0	0	0	0	52	52
NRC	54	19	98	42	361	114	80	83	53	175	0	1,921	3,000
NRCan	11	0	26	54	169	124	0	1	158	151	4	958	1,656
NSERC	0	0	0	0	0	0	0	0	0	0	0	272	272
PSEPC	0	0	0	0	0	0	0	0	0	0	0	28	28
PW&GS	0	0	0	0	0	0	0	0	0	0	0	15	15
SSHRC	0	0	0	0	0	0	0	0	0	0	0	101	101
STC	0	0	0	0	0	0	0	0	0	0	0	181	181
TC	0	0	0	0	17	1	0	0	0	0	0	4	22
WEDC	0	0	0	0	0	0	0	0	5	0	0	0	5
Others	0	0	0	0	11	24	131	0	3	1	0	183	350
Total*	136	70	543	180	1,979	2,344	483	355	771	618	37	6,205	13,719

Catalogue no. 88F0006XIE

<sup>Due to rounding, components may not add to the totals.
1. List of participating departments and agencies available at the beginning of publication.
2. Excluding the National Capital Region.
3. Full-time equivalent includes Administration of Extramural Programs Personnel.</sup>

Table 23 Scientific and professional personnel of federal establishments performing research and experimental development (R&D) activites, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
							nun	nber ³					
AECL	0	0	0	0	0	462	30	0	0	0	0	0	492
AGR	3	10	18	10	58	80	44	56	87	28	0	109	503
BOC	0	0	0	0	0	0	0	0	0	0	0	32	32
CED (QUÉ)	0	0	0	0	2	0	0	0	0	0	0	0	2
CFIA	0	2	0	0	9	0	2	12	8	5	0	16	54
CIDA	0	0	0	0	0	0	0	0	0	0	0	4	4
CIHR	0	0	0	0	0	0	0	0	0	0	0	44	44
CMC	0	0	0	0	0	0	0	0	0	0	0	10	10
CMHC	0	0	0	0	0	0	0	0	0	0	0	32	32
CMN	0	0	0	0	0	0	0	0	0	0	0	23	23
CNSC	0	0	0	0	0	0	0	0	0	0	0	2	2
CSA	0	0	0	0	238	0	0	0	0	0	0	5	243
EC	2	0	8	3	91	252	17	41	13	28	0	97	552
F&O	23	3	53	13	31	9	9	1	1	58	17	22	240
HC	0	0	0	0	13	13	5	0	0	9	0	184	224
HRSDC	0	0	0	0	0	0	0	0	0	0	0	8	8
IDRC	0	0	0	0	0	0	0	0	0	0	0	80	80
IND	0	0	0	0	0	0	0	0	0	0	0	251	251
NDEF	0	0	101	0	180	71	0	0	84	0	0	349	785
NGC	0	0	0	0	0	0	0	0	0	0	0	15	15
NRC	19	7	35	15	128	41	28	30	19	62	0	684	1,068
NRCan	6	0	19	27	103	63	0	1	88	76	3	548	934
NSERC	0	0	0	0	0	0	0	0	0	0	0	14	14
PSEPC	0	0	0	0	0	0	0	0	0	0	0	23	23
PW&GS	0	0	0	0	0	0	0	0	0	0	0	11	11
SSHRC	0	0	0	0	0	0	0	0	0	0	0	10	10
STC	0	0	0	0	0	0	0	0	0	0	0	119	119
TC	0	0	0	0	17	1	0	0	0	0	0	4	22
WEDC	0	0	0	0	0	0	0	0	1	0	0	0	1
Others	0	0	0	0	7	5	35	0	2	0	0	130	179
Total*	53	22	234	68	877	997	170	141	303	266	20	2,826	5,977

Catalogue no. 88F0006XIE

^{*} Due to rounding, components may not add to the totals.

1. List of participating departments and agencies available at the beginning of publication.

2. Excluding the National Capital Region.

^{3.} Full-time equivalent includes Administration of Extramural Programs Personnel.

Table 24 Personnel of federal establishments performing related scientific activities (RSA), by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
							nur	nber ³					
ACOA	0	0	0	0	0	0	0	0	0	0	0	0	0
AECL	0	0	0	0	0	0	0	0	0	0	0	0	0
AGR	9	29	21	15	73	91	27	73	63	50	0	211	662
BOC	0	0	3	0	3	8	0	0	2	2	0	170	188
CED (QUÉ)	0	0	0	0	30	0	0	0	0	0	0	0	30
CFIA	16	0	39	8	37	19	5	41	38	39	0	103	345
CIDA	0	0	0	0	0	0	0	0	0	0	0	228	228
CIHR	0	0	0	0	0	0	0	0	0	0	0	4	4
CMC	0	0	0	0	0	0	0	0	0	0	0	403	403
CMHC	0	0	8	0	16	28	0	0	14	16	0	25	107
CMN	0	0	0	0	0	0	0	0	0	0	0	149	149
CNSC	0	0	0	0	0	0	0	0	0	0	0	4	4
CSA	0	0	0	0	28	0	0	0	0	0	0	47	75
EC	26	2	123	47	351	658	165	97	159	259	56	389	2,332
F&O	151	21	272	69	170	69	70	4	8	289	80	147	1,347
GC	0	0	0	0	0	0	0	0	0	0	0	0	0
HC	0	0	11	7	76	91	28	6	7	43	0	1,804	2,073
HRSDC	0	0	0	0	0	0	0	0	0	0	0	27	27
IDRC	0	0	0	0	0	0	0	0	0	0	0	40	40
IND	0	0	0	0	0	0	0	0	0	0	0	623	623
NDEF	0	0	26	0	72	39	0	0	75	0	0	315	526
NGC	0	0	0	0	0	0	0	0	0	0	0	215	215
NRC	21	8	39	16	142	45	31	32	20	68	0	756	1,178
NRCan	8	0	91	42	134	39	0	0	131	71	15	1,036	1,567
NSERC	0	0	0	0	0	0	0	0	0	0	0	39	39
PSEPC	0	0	0	0	0	0	0	0	0	0	0	0	0
PW&GS	0	0	0	0	0	0	0	0	0	0	0	8	8
SSHRC	0	0	0	0	0	0	0	0	0	0	0	76	76
STC	0	0	55	0	66	99	20	8	54	32	0	4,921	5,255
TC	0	0	0	0	5	0	0	0	0	0	0	46	51
WEDC	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	31	5	63	6	60	138	135	14	46	23	40	2,500	3,068
Total*	263	65	751	210	1,263	1,324	481	275	617	892	191	14,286	20,620

<sup>Due to rounding, components may not add to the totals.
1. List of participating departments and agencies available at the beginning of publication.
2. Excluding the National Capital Region.
3. Full-time equivalent includes Administration of Extramural Programs Personnel.</sup>

Table 25 Scientific and professional personnel of federal establishments performing related scientific activities (RSA) in the natural sciences, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
							nun	nber ³					
AECL	0	0	0	0	0	0	0	0	0	0	0	0	0
AGR	5	11	9	5	31	32	11	23	23	23	0	118	291
BOC	0	0	1	0	1	6	0	0	1	1	0	74	84
CED (QUÉ)	0	0	0	0	0	0	0	0	0	0	0	0	0
CFIA	4	0	11	2	11	10	3	11	6	17	0	34	108
CIDA	0	0	0	0	0	0	0	0	0	0	0	52	52
CIHR	0	0	0	0	0	0	0	0	0	0	0	1	1
CMC	0	0	0	0	0	0	0	0	0	0	0	75	75
CMHC	0	0	5	0	11	17	0	0	10	11	0	19	74
CMN	0	0	0	0	0	0	0	0	0	0	0	75	75
CNSC	0	0	0	0	0	0	0	0	0	0	0	4	4
CSA	0	0	0	0	3	0	0	0	0	0	0	10	13
EC	20	1	94	35	145	247	71	33	72	104	27	183	1,032
F&O	65	11	135	33	89	26	28	1	3	144	36	79	650
HC	0	0	10	7	44	58	14	6	7	24	0	1,322	1,492
HRSDC	0	0	0	0	0	0	0	0	0	0	0	22	22
IDRC	0	0	0	0	0	0	0	0	0	0	0	28	28
IND	0	0	0	0	0	0	0	0	0	0	0	451	451
NDEF	0	0	16	0	0	18	0	0	70	0	0	170	275
NGC	0	0	0	0	0	0	0	0	0	0	0	63	63
NRC	8	3	15	6	55	17	12	12	8	26	0	289	451
NRCan	4	0	58	24	78	3	0	0	72	68	10	638	955
NSERC	0	0	0	0	0	0	0	0	0	0	0	2	2
PSEPC	0	0	0	0	0	0	0	0	0	0	0	0	0
PW&GS	0	0	0	0	0	0	0	0	0	0	0	3	3
SSHRCRR	0	0	0	0	0	0	0	0	0	0	0	7	7
STC	0	0	0	0	0	0	0	0	0	0	0	1,270	1,270
TC	0	0	0	0	0	0	0	0	0	0	0	33	32
WEDC	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	17	2	16	3	26	53	48	6	27	15	14	1,214	1,441
Total*	123	28	370	115	494	487	187	92	299	433	87	6,236	8,951

Due to rounding, components may not add to the totals.

List of participating departments and agencies available at the beginning of publication.
 Excluding the National Capital Region.

^{3.} Full-time equivalent includes Administration of Extramural Programs Personnel.

Table 26 Personnel of federal establishments performing science and technology (S&T) activities in the natural sciences, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
							nur	mber ³					
ACOA	11	4	16	20	0	0	0	0	0	0	0	0	50
AECL	0	0	0	0	0	1,175	75	0	0	0	0	0	1,250
AGR	18	62	79	49	257	356	172	260	354	137	0	480	2,224
CEAA	0	0	0	0	0	0	0	0	0	0	0	1	1
CED (QUE)	0	0	0	0	66	0	0	0	0	0	0	0	66
CFI	0	0	0	0	0	0	0	0	0	0	0	46	46
CFIA	16	7	40	8	55	19	10	68	56	55	0	140	473
CIDA	0	0	0	0	0	0	0	0	0	0	0	149	149
CIHR	0	0	0	0	0	0	0	0	0	0	0	282	282
CMHC	0	0	2	0	4	8	0	0	4	4	0	18	40
CMN	0	0	0	0	0	0	0	0	0	0	0	172	172
CNSC	0	0	0	0	0	0	0	0	0	0	0	7	7
CSA	0	0	0	0	520	0	0	0	0	0	0	53	573
EC	28	2	131	50	506	1,088	182	153	173	311	56	528	3,208
F&O	176	22	359	85	217	85	90	5	10	397	113	157	1,715
GC	0	0	0	0	0	0	0	0	0	0	0	36	36
HC	0	0	11	7	90	100	36	6	7	57	0	2,032	2,346
IAND	0	0	0	0	0	0	0	0	0	0	0	6	6
IDRC	0	0	0	0	0	0	0	0	0	0	0	28	28
IND	0	0	0	0	0	0	0	0	0	0	0	825	825
NDEF	0	0	251	0	480	200	0	0	302	0	0	825	2,058
NEB	0	0	0	0	0	0	0	0	11	0	0	0	11
NFB	0	0	0	0	4	0	0	0	0	0	0	0	4
NRC	75	27	137	58	503	159	111	115	73	243	0	2,677	4,178
NRCan	19	0	117	96	303	163	0	1	289	222	19	1,994	3,223
NSERC	0	0	0	0	0	0	0	0	0	0	0	311	311
PCA	11	2	8	4	18	18	15	8	3	8	16	50	159
PHAC	0	0	0	0	15	58	199	0	6	0	0	119	396
PSEPC	0	0	0	0	0	0	0	0	0	0	0	2	2
PW&GS	0	0	0	0	0	0	0	0	0	0	0	23	23
RCMP	0	0	0	0	0	0	0	0	0	0	0	24	24
TC	0	0	0	0	22	1	0	0	0	0	0	35	58
WEDC	0	0	0	0	0	0	0	0	5	0	0	0	5
Total*	353	125	1,151	377	3,059	3,430	889	615	1,292	1,433	205	11,020	23,949

<sup>Due to rounding, components may not add to the totals.
1. List of participating departments and agencies available at the beginning of publication.</sup>

Excluding the National Capital Region.
 Full-time equivalent includes Administration of Extramural Programs Personnel.

Table 27 Scientific and professional personnel of federal establishments performing science and technology (S&T) activities in the natural sciences, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
							nun	nber ³					
AECL	0	0	0	0	0	462	30	0	0	0	0	0	492
AGR	8	21	27	15	89	112	55	79	110	51	0	167	734
CEAA	0	0	0	0	0	0	0	0	0	0	0	1	1
CED (QUE)	0	0	0	0	2	0	0	0	0	0	0	0	2
CFI	0	0	0	0	0	0	0	0	0	0	0	17	17
CFIA	4	2	11	2	20	10	5	23	14	22	0	50	162
CIDA	0	0	0	0	0	0	0	0	0	0	0	23	23
CIHR	0	0	0	0	0	0	0	0	0	0	0	45	45
CMHC	0	0	1	0	2	2	0	0	2	3	0	14	24
CMN	0	0	0	0	0	0	0	0	0	0	0	98	98
CNSC	0	0	0	0	0	0	0	0	0	0	0	6	6
CSA	0	0	0	0	241	0	0	0	0	0	0	15	256
EC	22	1	102	38	229	499	88	74	85	132	27	267	1,564
F&O	80	11	175	41	104	34	36	2	4	192	53	75	808
HC	0	0	10	7	55	68	19	6	7	33	0	1,418	1,624
IAND	0	0	0	0	0	0	0	0	0	0	0	5	5
IDRC	0	0	0	0	0	0	0	0	0	0	0	19	19
IND	0	0	0	0	0	0	0	0	0	0	0	583	583
NDEF	0	0	117	0	180	79	0	0	154	0	0	504	1,035
NEB	0	0	0	0	0	0	0	0	11	0	0	0	11
NFB	0	0	0	0	4	0	0	0	0	0	0	0	4
NRC	27	10	50	21	183	58	40	42	27	88	0	973	1,519
NRCan	10	0	77	51	181	66	0	1	160	144	13	1,186	1,889
NSERC	0	0	0	0	0	0	0	0	0	0	0	16	16
PCA	6	1	5	2	11	11	9	5	2	4	10	29	93
PHAC	0	0	0	0	5	32	57	0	2	0	0	93	189
PSEPC	0	0	0	0	0	0	0	0	0	0	0	2	2
PW&GS	0	0	0	0	0	0	0	0	0	0	0	14	14
RCMP	0	0	0	0	0	0	0	0	0	0	0	16	16
TC	0	0	0	0	17	1	0	0	0	0	0	22	39
WEDC	0	0	0	0	0	0	0	0	1	0	0	0	1
Total*	157	46	575	177	1,324	1,434	338	232	578	670	103	5,657	11,291

^{*} Due to rounding, components may not add to the totals.

1. List of participating departments and agencies available at the beginning of publication.

Excluding the National Capital Region.
 Full-time equivalent includes Administration of Extramural Programs Personnel.

Table 28 Personnel of federal establishments performing research and experimental development (R&D) activities in the natural sciences, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
							nur	nber ³					
ACOA	11	4	16	20	0	0	0	0	0	0	0	0	50
AECL	0	0	0	0	0	1,175	75	0	0	0	0	0	1,250
AGR	9	33	58	34	184	265	145	187	291	87	0	354	1,647
CEAA	0	0	0	0	0	0	0	0	0	0	0	1	1
CED (QUE)	0	0	0	0	66	0	0	0	0	0	0	0	66
CFI	0	0	0	0	0	0	0	0	0	0	0	46	46
CFIA	0	7	1	0	18	0	5	27	18	16	0	37	128
CIDA	0	0	0	0	0	0	0	0	0	0	0	22	22
CIHR	0	0	0	0	0	0	0	0	0	0	0	278	278
CMHC	0	0	0	0	0	0	0	0	0	0	0	17	17
CMN	0	0	0	0	0	0	0	0	0	0	0	23	23
CNSC	0	0	0	0	0	0	0	0	0	0	0	3	3
CSA	0	0	0	0	492	0	0	0	0	0	0	6	498
EC	2	0	8	3	166	430	17	56	14	52	0	153	901
F&O	50	7	111	27	66	20	22	1	2	122	33	47	510
GC	0	0	0	0	0	0	0	0	0	0	0	36	36
HC	0	0	0	0	16	13	8	0	0	14	0	342	393
IDRC	0	0	0	0	0	0	0	0	0	0	0	21	21
IND	0	0	0	0	0	0	0	0	0	0	0	349	349
NDEF	0	0	225	0	408	161	0	0	227	0	0	525	1,547
NFB	0	0	0	0	4	0	0	0	0	0	0	0	4
NRC	54	19	98	42	361	114	80	83	53	175	0	1,921	3,000
NRCan	11	0	26	54	169	124	0	1	158	151	4	958	1,656
NSERC	0	0	0	0	0	0	0	0	0	0	0	272	272
PHAC	0	0	0	0	7	23	131	0	3	0	0	54	218
PSEPC	0	0	0	0	0	0	0	0	0	0	0	2	2
PW&GS	0	0	0	0	0	0	0	0	0	0	0	15	15
RCMP	0	0	0	0	0	0	0	0	0	0	0	22	22
TC	0	0	0	0	17	1	0	0	0	0	0	4	22
WEDC	0	0	0	0	0	0	0	0	5	0	0	0	5
Total*	136	70	543	180	1,974	2,327	483	355	771	618	37	5,508	13,001

Due to rounding, components may not add to the totals.

List of participating departments and agencies available at the beginning of publication.
 Excluding the National Capital Region.

^{3.} Full-time equivalent includes Administration of Extramural Programs Personnel.

Table 29 Scientific and professional personnel of federal establishments performing research and experimental development (R&D) activities in the natural sciences, by department or agency¹ and by province and territories, 2004/2005

	N.L.	P.E.I.	N.S.	N.B.	Que. ²	Ont. ²	Man.	Sask.	Alta.	B.C.	Y.T., N.W.T., & Nvt	NCR	Canada
_							nur	mber ³					
AECL	0	0	0	0	0	462	30	0	0	0	0	0	492
AGR	3	10	18	10	58	80	44	56	87	28	0	109	503
CEAA	0	0	0	0	0	0	0	0	0	0	0	1	1
CED (QUE)	0	0	0	0	2	0	0	0	0	0	0	0	2
CFI	0	0	0	0	0	0	0	0	0	0	0	17	17
CFIA	0	2	0	0	9	0	2	12	8	5	0	16	54
CIDA	0	0	0	0	0	0	0	0	0	0	0	3	3
CIHR	0	0	0	0	0	0	0	0	0	0	0	44	44
CMHC	0	0	0	0	0	0	0	0	0	0	0	14	14
CMN	0	0	0	0	0	0	0	0	0	0	0	23	23
CNSC	0	0	0	0	0	0	0	0	0	0	0	2	2
CSA	0	0	0	0	238	0	0	0	0	0	0	5	243
EC	2	0	8	3	89	252	17	41	13	28	0	97	550
F&O	23	3	53	13	31	9	9	1	1	58	17	22	240
HC	0	0	0	0	13	13	5	0	0	9	0	182	222
IDRC	0	0	0	0	0	0	0	0	0	0	0	14	14
IND	0	0	0	0	0	0	0	0	0	0	0	251	251
NDEF	0	0	101	0	180	61	0	0	84	0	0	349	775
NFB	0	0	0	0	4	0	0	0	0	0	0	0	4
NRC	19	7	35	15	128	41	28	30	19	62	0	684	1,068
NRCan	6	0	19	27	103	63	0	1	88	76	3	548	934
NSERC	0	0	0	0	0	0	0	0	0	0	0	14	14
PHAC	0	0	0	0	3	6	35	0	2	0	0	50	96
PSEPC	0	0	0	0	0	0	0	0	0	0	0	2	2
PW&GS	0	0	0	0	0	0	0	0	0	0	0	11	11
RCMP	0	0	0	0	0	0	0	0	0	0	0	15	15
TC	0	0	0	0	17	1	0	0	0	0	0	4	22
WEDC	0	0	0	0	0	0	0	0	1	0	0	0	1
Total*	53	22	234	68	875	987	170	141	303	266	20	2,477	5,617

Due to rounding, components may not add to the totals.

List of participating departments and agencies available at the beginning of publication.
 Excluding the National Capital Region.

^{3.} Full-time equivalent includes Administration of Extramural Programs Personnel.

Catalogued publications

Science, Technology and Innovation statistical publications

88-003-XIE Innovation analysis bulletin

88-202-XIE Industrial research and development, intentions (with 2004 preliminary estimates and 2003 actual

expenditures) (annual)

88-204-XIE Federal scientific activities (annual)

88F0006XIE Science, Innovation and Electronic Information Division working papers **88F0017MIE** Science, Innovation and Electronic Information Division research papers

88-001-X Volume 30 - 2006

- No. 1 Distribution of federal expenditures on science and technology, by province and territories, 2003/2004 (February)
- No. 2 Biotechnology scientific activities in federal government departments and agencies, 2004/2005 (March)
- No. 3 Estimates of total spending on research and development in the health field in Canada, 1988 to 2005 (May)
- No. 4 Industrial Research and Development, 2002 to 2006 (August)
- No. 5 Estimation of research and development expenditures in the higher education sector, 2004/2005 (August)
- No. 6 Federal government expenditures on scientific activities, 2006/2007 (September)
- No. 7 Total spending on research and development in Canada, 1990 to 2006, and provinces, 1990 to 2004 (September)
- No. 8 Nature of Research and Development, 2000 to 2004 (December)
- No. 9 Distribution of federal expenditures on science and technology by province and territories, 2004/2005 (December)

88-001-X Volume 29 - 2005

- No. 1 Distribution of federal expenditures on science and technology by province and territories, 2002-2003 (January)
- No. 2 Research and development (R&D) personnel in Canada, 1993 to 2002 (May)
- No. 3 Biotechnology scientific activities in federal government departments and agencies, 2003-2004 (May)
- No. 4 Industrial research and development, 2001 to 2005 (June)
- No. 5 Estimates of total spending on research and development in the health field in Canada, 1988 to 2004 (July)
- No. 6 Estimation of research and development expenditures in the higher education sector, 2003-04 (December)
- No. 7 Federal government expenditures on scientific activities, 2005/2006^p (December)

Statistics Canada 44 Catalogue no. 88F0006XIE

No. 8 Total spending on research and development in Canada, 1990 to 2005^p, and provinces, 1990 to 2003 (December)

88F0006XIE Working papers - 2006

No. 1	Provincial distribution of federal expenditures and personnel on science and technology, 1997/1998 to 2003/2004 (April)
No. 2	Buying and selling research and development services, 1997 to 2002 (May)
No. 3	Characteristics of Growth Firms, 2004/2005 (May)
No. 4	Scientific and Technological Activities of Provincial Governments and Provincial Research Organizations, 2000/2001 to 2004/2005 (July)
No. 5	Research and Development in the Field of Advanced Materials, 2001 to 2003 (July)
No. 6	Conceptualizing and Measuring Business Incubation (July)
No. 7	Characteristics of Business Incubation in Canada, 2005 (July)
No. 8	Size and Persistence of R&D Performance in Canadian Firms, 1994 to 2002 (August)
No. 9	Estimates of Canadian Research and Development Expenditures (GERD), Canada, 1995 to 2006, and by Province 1995 to 2004 (September)
No. 10	Are Small Businesses Positioning Themselves for Growth? A Comparative Look at the Use of Selected Management Practices by Firm Size (October)
No. 11	Survey of Intellectual Property Commercialization in the Higher Education Sector, 2004 (October)
88F0006	XIE Working papers – 2005
No. 1	Federal government expenditures and personnel in the natural and social sciences, 1995/96 to 2004/05 (January)
No. 2	Provincial distribution of federal expenditures and personnel on science and technology, 1996-97 to 2002-03 (January)
No. 3	Industrial R&D statistics by region, 1994 to 2002 (January)
No. 4	Knowledge sharing succeeds: how selected service industries rated the importance of using knowledge management practices to their success (February)
No. 5	Characteristics of firms that grow from small to medium size: Industrial and geographic distribution of small high-growth firms (February)
No. 6	<u>Summary: Joint Statistics Canada – University of Windsor workshop on intellectual property commercialization indicators, Windsor, November 2004 (March)</u>
No. 7	Summary: Meeting on commercialization measurement, indicators, gaps and frameworks, Ottawa, December 2004 (March)
No. 8	Estimates of research and development personnel in Canada, 1979 to 2002 (May)
No. 9	Overview of the biotechnology use and development survey – 2003 (April)

Statistics Canada 45 Catalogue no. 88F0006XIE

No. 10	Access to financing capital by Canadian innovative biotechnology firms (April)
No. 11	Scientific and technological activities of provincial governments and provincial research organizations, 1995-96 to 2003-04 (September)
No. 12	Innovation in Information and Communication Technology (ICT) sector service industries: Results from the Survey of Innovation 2003 (October)
No. 13	Innovation in selected professional, scientific and technical services: Results from the Survey of Innovation 2003 (October)
No. 14	Innovation in selected transportation industries: Results from the Survey of Innovation 2003 (November)
No. 15	Innovation in selected industries serving the mining and forestry sectors: Results from the Survey of Innovation 2003 (November)
No. 16	Functional foods and nutraceuticals: The development of value-added food by Canadian firms (September)
No. 17	Industrial R&D statistics by region 1994 to 2003 (November)
No. 18	Survey of intellectual property commercialization in the higher education sector, 2003 (November)
No. 19	Estimation of research and development expenditures in the higher education sector, 2003-2004 (December)
No. 20	Estimates of Canadian research and development expenditures (GERD), Canada, 1994 to 2005, and by province 1994 to 2003 (December)