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Federal government expenditures on scientific activities, 2005/2006^P

This bulletin presents recent statistical information on the performance and funding of federal government expenditures on scientific activities, 2005/2006. The statistics presented are derived from the survey of science and technology (S&T) activities of federal departments and agencies. The data in this publication are consistent with expenditures of departments and agencies as reported in the Main Estimates 2005/2006, but do not reflect changes to 2005/2006 spending plans which may result from supplementary estimates or other departmental planning decisions.

Highlights

- ▶ The federal government's S&T spending intentions for 2005/2006 are \$9.1 billion. For each dollar spent by the federal government, 4.9 cents are spent on scientific and technological (S&T) activities including 3.1 cents spent on research and development (R&D). This compares to 3.6 cents spent on S&T and 2.3 cents on R&D for every dollar back in 1994/1995.
- ▶ Compared to 2004/2005, there is no increase in total S&T expenditures, however funding to the higher education sector is expected to increase by 16%. Decreases in intramural expenditures, funding to business enterprises and Canadian non-profit institutions counterbalance the increase.
- ▶ In 2005/2006, 63 cents of every S&T dollar was spent on R&D, the second highest proportion of the past 10 years. An expected \$5.8 billion will be devoted to R&D in 2005/2006. This includes intramural performance (activities carried out primarily by the federal government) and extramural funding (activities managed and performed by non-federal organizations) of research and development.
- ▶ In 2005/2006, 52% of the total S&T expenditures will be spent on activities performed by the federal government itself. Of total planned government R&D spending, the federal government will perform \$2.1 billion or 37%.
- ▶ The federal government departments with the largest estimated expenditures on S&T activities in 2005/2006 are the Natural Sciences and Engineering Research Council, the National Research Council, the Canadian Institutes of Health Research and Statistics Canada, which together account for one-third of the government's total expenditures.

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- ▶ Federal government R&D funding to the higher education sector is expected to exceed \$2.5 billion for 2005/2006. Of this amount, the three granting councils, the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council will account for almost three-quarters.

The questionnaire on scientific activities is designed to correspond as much as possible to the system of budgetary estimates used by the federal government. This is done to ease the response burden, assist in editing and, most importantly, to produce comparable data for policy planning and program evaluation. Thus the questionnaire covers the same time span as the Estimates including: proposed estimates for the coming fiscal year, i.e. 2005/2006; forecast expenditures for the current fiscal year, i.e. 2004/2005 and, actual expenditures for the past fiscal year, i.e. 2003/2004 (also reported in the Public Accounts).

As well as the expenditures attributable to program budgets, there are additional costs attributable to scientific activities which must be included if a full picture of the resources devoted to science activities is to be obtained. These include other sources of funds and other S&T costs which are defined below:

Budgetary sources - as expressed in the Main Estimates:

- Own departmental budget.
- Other federal agencies - transfers into the program from other federal government departments and agencies, net of transfers out.

External sources:

Income from other sources such as industry and provincial governments.

Other S&T costs:

Non-program costs (indirect costs) are costs that are not part of the budgets of scientific programs and include services provided by other departments, such as:

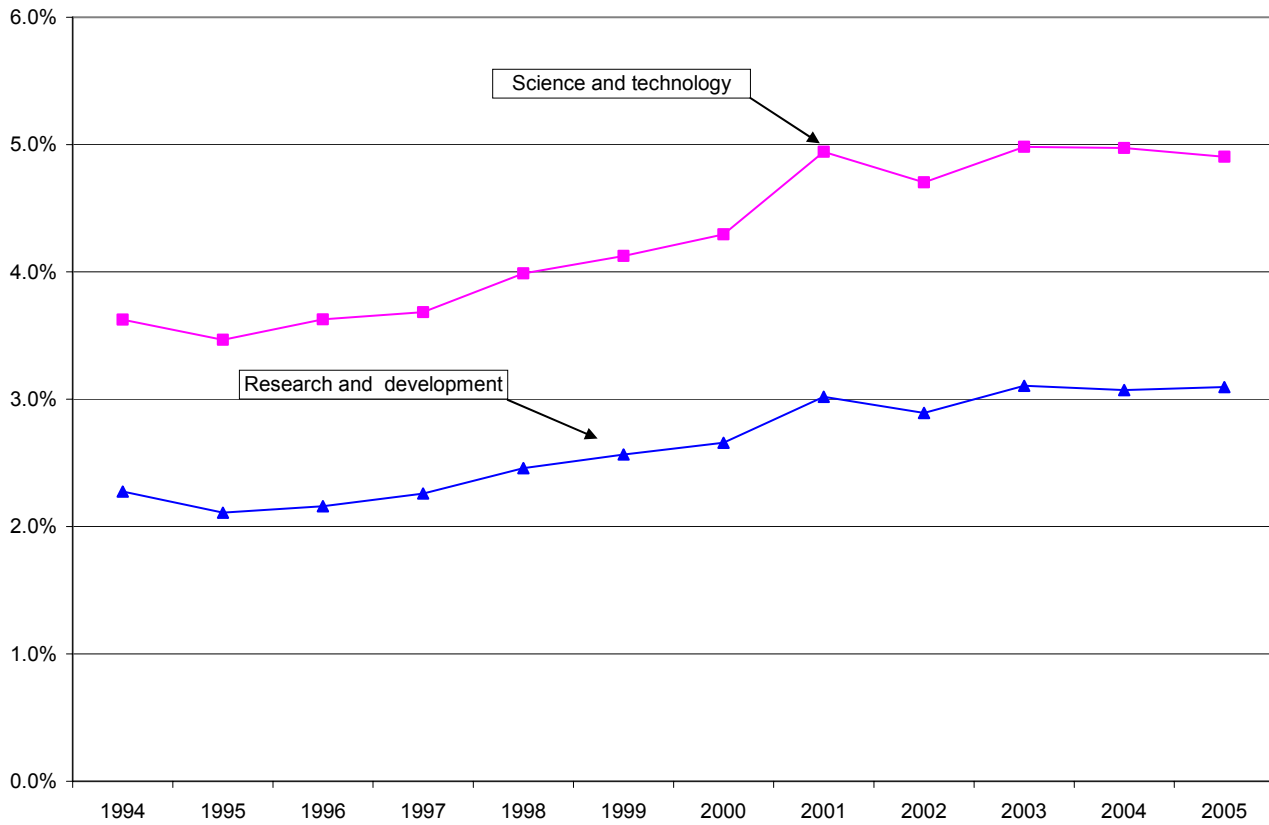
- accommodation by Public Works and Government Services Canada and own department
- employer's share of health and employment insurance premiums paid by Treasury Board
- employee compensation under Workers Compensation Acts paid by Social Development Canada
- cost of legal services provided by the Department of Justice Canada
- cheques issue cost by Public Works and Government Services Canada
- overhead - portion of a central administration program costs attributable to scientific activities

Table 1 Federal expenditures on R&D and S&T in current dollars and in constant 1997 dollars, 1994 to 2005								
Year	Current Dollars			GDP implicit price index ²	Constant 1997 Dollars			
	Budgetary Main Estimates ¹	S&T	R&D		Budgetary Main Estimates ¹	S&T	R&D	
in millions of dollars				in millions of dollars				
1994/95	160,738	5,827	3,657	95.1	169,020	6,127	3,845	
1995/96	164,191	5,693	3,465	97.2	168,921	5,857	3,565	
1996/97	156,985	5,694	3,391	98.8	158,892	5,763	3,432	
1997/98	149,555	5,509	3,379	100.0	149,555	5,509	3,379	
1998/99	145,457	5,802	3,578	99.6	146,041	5,825	3,592	
1999/00	151,559	6,252	3,890	101.3	149,614	6,172	3,840	
2000/01 ^f	156,157	6,707	4,150	105.5	148,016	6,357	3,934	
2001/02 ^f	165,234	8,169	4,989	106.7	154,858	7,656	4,676	
2002/03 ^f	170,367	8,014	4,927	107.8	158,040	7,434	4,571	
2003/04 ^f	175,937	8,767	5,462	111.3	158,075	7,877	4,907	
2004/05 ^p	183,290	9,114	5,631	114.7	159,799	7,946	4,909	
2005/06 ^p	185,863	9,115	5,753	..	..	..	..

1. Part 1, Government Expenditure Plan, Estimates.

2. Cansim II Table 384-0036.

S&T and R&D share of Budgetary Main Estimates



S&T and R&D growth rates

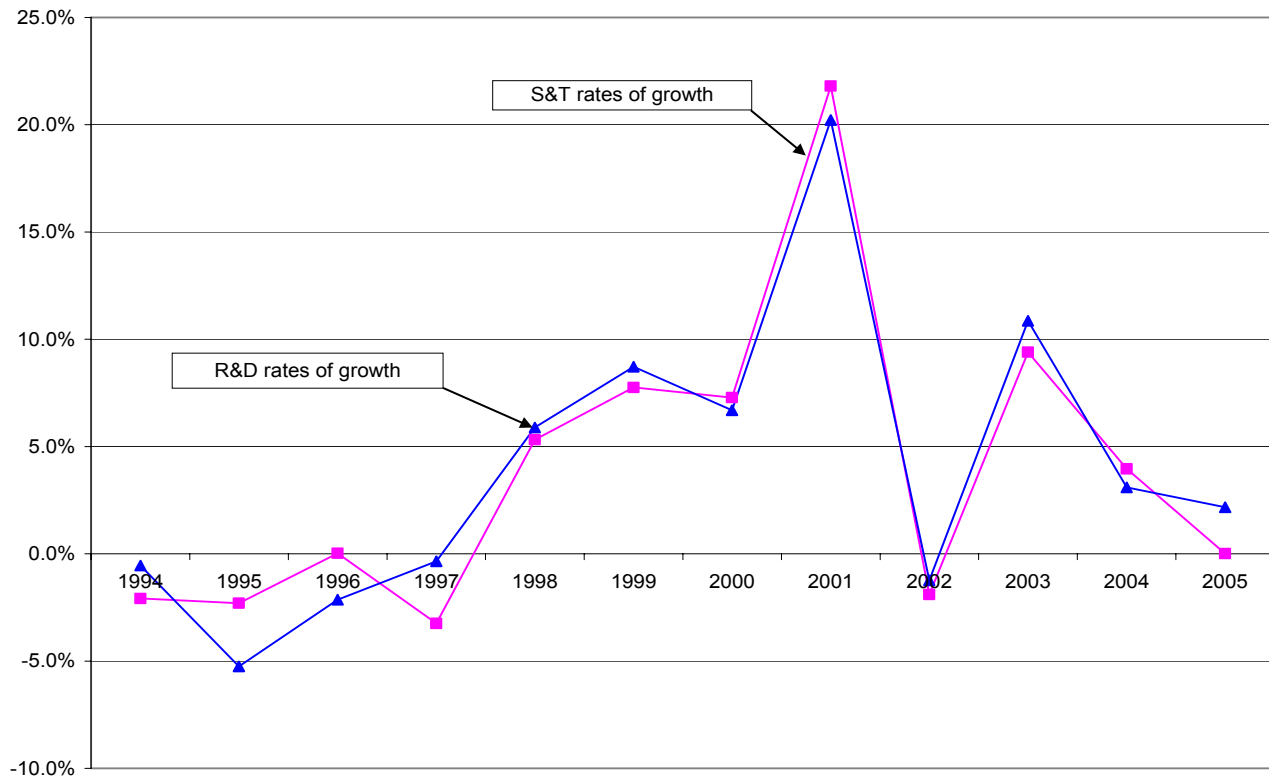


Table 2 Total S&T expenditures of major departments or agencies, 2005/06							
Department or agency	Sources of expenditures on science						
	Total estimated expenditures on science	External sources	Other S&T costs		Budgetary sources		Own department
			Indirect non-program costs	Administrative costs of department	Other federal agencies		
in millions of dollars							
Agriculture and Agri-Food Canada	334	0	18	0	-13		329
Atomic Energy of Canada Limited	190	23	0	0	8		159
Canadian Space Agency	338	0	4	0	-8		342
Environment Canada	636	63	41	41	31		460
Fisheries and Oceans Canada	271	17	17	0	7		230
Health Canada	286	9	23	0	0		254
Industry Canada	356	0	13	0	-8		351
National Defence	419	8	13	0	-3		401
National Research Council	718	18	19	0	39		642
Natural Resources Canada	511	2	30	0	-21		500
Statistics Canada	705	50	64	0	80		511

* Negative amounts denote net transfer from budget for S&T.

Table 3 Federal government expenditures by activity, 1996/97 to 2005/06										
Scientific activity	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 ¹	2003/04 ¹	2004/05 ^p	2005/06 ^p
in millions of dollars										
Research & Development (R&D):										
Current expenditures	3,086	3,062	3,241	3,559	3,770	4,571	4,492	5,033	5,159	5,302
Administration of extramural programs	164	163	200	186	182	213	227	257	299	281
Capital expenditures	141	154	137	144	198	205	208	172	173	170
<i>Sub-total R&D</i>	<i>3,391</i>	<i>3,379</i>	<i>3,578</i>	<i>3,890</i>	<i>4,150</i>	<i>4,989</i>	<i>4,927</i>	<i>5,462</i>	<i>5,631</i>	<i>5,753</i>
Related Scientific Activities (RSA):										
Data collection	1,007	964	1,022	1,105	1,231	1,611	1,498	1,620	1,664	1,608
Information services	523	465	469	486	484	618	679	663	742	728
Special services and studies	463	436	452	485	531	513	588	615	629	606
Education support	139	142	157	168	163	286 ¹	177	206	236	260
Administration of extramural programs	33	32	35	40	46	49	54	56	61	61
Capital expenditures	139	91	89	77	102	103	91	145	151	99
<i>Sub-total RSA</i>	<i>2,303</i>	<i>2,130</i>	<i>2,224</i>	<i>2,362</i>	<i>2,557</i>	<i>3,180</i>	<i>3,087</i>	<i>3,305</i>	<i>3,483</i>	<i>3,362</i>
Total	5,694	5,509	5,802	6,252	6,707	8,169	8,014	8,767	9,114	9,115

1. Includes a \$125 million grant to the Pierre Elliott Trudeau Foundation.

Table 4 Federal government intramural expenditures on S&T, by activity, 1996/97 to 2005/06

Scientific activity	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 ^f	2003/04 ^f	2004/05 ^p	2005/06 ^p
in millions of dollars										
Research & Development (R&D):										
Current expenditures	1,486	1,403	1,406	1,528	1,700	1,684	1,754	1,654	1,785	1,687
Administration of extramural programs	164	163	200	186	182	213	227	257	299	281
Capital expenditures	141	154	137	144	198	205	208	172	173	170
<i>Sub-total R&D</i>	<i>1,792</i>	<i>1,720</i>	<i>1,743</i>	<i>1,859</i>	<i>2,080</i>	<i>2,102</i>	<i>2,190</i>	<i>2,083</i>	<i>2,257</i>	<i>2,138</i>
Related Scientific Activities (RSA):										
Data collection	931	886	942	1,022	1,152	1,518	1,392	1,393	1,452	1,501
Information services	449	404	408	420	417	522	595	584	658	648
Special services and studies	221	207	223	231	238	253	295	311	297	296
Education support	11	11	15	9	8	8	13	7	14	14
Administration of extramural programs	33	32	35	40	46	49	54	56	61	61
Capital expenditures	139	91	89	77	102	103	91	145	151	99
<i>Sub-total RSA</i>	<i>1,783</i>	<i>1,631</i>	<i>1,712</i>	<i>1,799</i>	<i>1,963</i>	<i>2,453</i>	<i>2,440</i>	<i>2,496</i>	<i>2,633</i>	<i>2,619</i>
Total	3,575	3,351	3,455	3,658	4,043	4,555	4,630	4,579	4,890	4,757

Table 5 Federal expenditures on S&T, by science and by performing sector¹, 1996/97 to 2005/06										
Sector of performance	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 ^f	2003/04 ^f	2004/05 ^p	2005/06 ^p
in millions of dollars										
Total sciences:										
Intramural	3,575	3,351	3,455	3,658	4,043	4,555	4,630	4,579	4,890	4,757
Canadian business enterprises	801	927	952	926	847	1,109	998	1,039	1,065	1,000
Higher education	894	860	989	1,173	1,320	1,739	1,803	2,256	2,419	2,805
Canadian non-profit institutions	112	110	122	181	154	400	200	515	328	154
Other Canadian performers ²	65	39	51	85	93	84	99	90	113	95
Foreign	247	222	233	229	250	282	284	288	299	304
Total	5,694	5,509	5,802	6,252	6,707	8,169	8,014	8,767	9,114	9,115
Natural sciences:										
Intramural	2,507	2,417	2,459	2,648	2,872	3,166	3,308	3,277	3,494	3,375
Canadian business enterprises	767	892	924	896	816	1,071	965	998	1,025	963
Higher education	737	702	836	1,002	1,139	1,341	1,583	1,761	1,834	2,176
Canadian non-profit institutions	66	57	56	128	98	226 ³	130	459 ⁶	272 ⁸	104
Other Canadian performers ²	56	28	42	57	55	44	71	60	88	75
Foreign	140	126	134	134	144	157	168	168	173	182
Total	4,273	4,222	4,450	4,866	5,124	6,005	6,225	6,723	6,886	6,875
Social sciences:										
Intramural	1,068	934	996	1,010	1,171	1,389	1,322	1,302	1,396	1,382
Canadian business enterprises	34	35	29	30	31	38	33	41	40	38
Higher education	157	158	153	171	181	398 ⁴	220	495 ⁷	584 ⁹	629 ¹⁰
Canadian non-profit institutions	46	53	65	52	56	174 ⁵	70	56	57	49
Other Canadian performers ²	9	11	9	28	38	40	28	30	24	20
Foreign	107	96	99	95	106	125	116	120	127	122
Total	1,421	1,287	1,352	1,386	1,583	2,164	1,789	2,044	2,228	2,240

1. As reported by the funder, the federal government, not by the performers.

2. Other Canadian performers includes provincial and municipal governments.

3. Includes \$100 million for the Sustainable Development Technology Fund (Environment Canada and Natural Resources Canada each provided \$50 million).

4. Includes \$200 million for indirect costs of university research funded by the Social Sciences and Humanities Research Council.

5. Includes a \$125 million grant to the Pierre Elliott Trudeau Foundation.

6. Includes \$50 million for the Canadian Foundation for Climate and Atmospheric Sciences and \$125 million for the Sustainable Development Technology Fund funded by Environment Canada.

7. Includes \$225 million for indirect costs of university research funded by the Social Sciences and Humanities Research Council.

8. Includes \$100 million for the Sustainable Development Technology Fund funded by Environment Canada.

9. Includes \$245 million for indirect costs of university research funded by the Social Sciences and Humanities Research Council.

10. Includes \$260 million for indirect costs of university research funded by the Social Sciences and Humanities Research Council.

Table 6 Federal expenditures on R&D by science and by performing sector¹, 1996/97 to 2005/06

Sector of performance	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 ^f	2003/04 ^f	2004/05 ^p	2005/06 ^p
in millions of dollars										
Total sciences:										
Intramural	1,792	1,720	1,743	1,859	2,080	2,102	2,190	2,083	2,257	2,138
Canadian business enterprises	573	721	749	713	624	862	726	770	753	705
Higher education	761	725	842	1,010	1,170	1,595	1,644	2,059	2,195	2,554
Canadian non-profit institutions	75	71	82	130	76	233	142	340	181	111
Other Canadian performers ²	50	22	38	59	69	61	72	66	91	76
Foreign	141	120	124	118	131	136	153	144	154	168
Total	3,391	3,379	3,578	3,890	4,150	4,989	4,927	5,462	5,631	5,753
Natural sciences:										
Intramural	1,724	1,651	1,667	1,774	1,995	2,010	2,073	1,964	2,134	2,019
Canadian business enterprises	570	720	747	711	622	857	722	766	749	703
Higher education	680	644	762	913	1,063	1,265	1,495	1,661	1,727	2,058
Canadian non-profit institutions	52	47	43	109	48	202 ³	107	310 ⁵	155	88
Other Canadian performers ²	46	19	35	50	46	34	61	47	78	64
Foreign	110	94	97	95	104	112	123	112	116	130
Total	3,181	3,174	3,350	3,653	3,879	4,480	4,581	4,860	4,959	5,063
Social sciences:										
Intramural	68	69	76	85	85	92	117	120	123	119
Canadian business enterprises	3	2	3	2	2	5	4	4	4	2
Higher education	81	80	80	97	107	330 ⁴	149	398 ⁶	468 ⁷	496 ⁸
Canadian non-profit institutions	24	24	39	21	28	31	35	30	26	24
Other Canadian performers ²	4	3	3	10	23	27	11	18	13	11
Foreign	31	27	27	23	27	24	30	32	38	38
Total	210	205	228	237	271	509	346	602	672	690

1. As reported by the funder, the federal government, not by the performers.

2. Other Canadian performers includes provincial and municipal governments.

3. Includes \$100 million for the Sustainable Development Technology Fund (Environment Canada and Natural Resources Canada each provided \$50 million).

4. Includes \$200 million for indirect costs of university research funded by the Social Sciences and Humanities Research Council.

5. Includes \$50 million for the Canadian Foundation for Climate and Atmospheric Sciences funded by Environment Canada.

6. Includes \$225 million for indirect costs of university research funded by the Social Sciences and Humanities Research Council.

7. Includes \$245 million for indirect costs of university research funded by the Social Sciences and Humanities Research Council.

8. Includes \$260 million for indirect costs of university research funded by the Social Sciences and Humanities Research Council.

Table 7 Federal expenditures on S&T, by major department or agency, 1996/97 to 2005/06

Department or agency	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 ^f	2003/04 ^f	2004/05 ^p	2005/06 ^p
in millions of dollars										
Agriculture and Agri-Food Canada	368	359	351	387	363	337	320	334	352	334
Atomic Energy of Canada Limited	240	174	135	132	136	178	147	179	162	190
Canada Foundation for Innovation	...	2	31	118	188	239	332	365	309	561
Canadian Institutes of Health Research	...	...	...	317	392	529	628	693	719	772
Canadian International Development Agency	339	303	314	335	358	387	352	366	427	389
Canadian Space Agency	253	230	343	305	310	330	320	269	315	338
Environment Canada ¹	456	453	427	538	479	626	574	776	750	636
Fisheries and Oceans Canada	246	204	281	287	367	319	363	283	274	271
Genome Canada	...	...	...	...	...	34	62	86	89	28
Health Canada	214	210	204	236	229	311	342	332	284	286
Industry Canada	291	407	343	301	336	687	424	434	419	356
International Development Research Centre	88	78	85	82	84	76	86	89	106	110
Medical Research Council	242	238	277	...	...	...	...	...	...	...
National Defence	253	311	304	335	315	315	358	403	480	419
National Research Council	479	524	554	597	655	719	793	778	790	718
Natural Resources Canada	430	396	386	421	437	554	511	651	520	511
Natural Sciences and Engineering Research Council	453	436	499	549	568	588	653	732	814	867
Social Sciences and Humanities Research Council	93	96	104	127	145	362 ²	188	460 ³	529 ⁴	576 ⁵
Statistics Canada	535	400	437	461	576	727	579	581	642	705
Other	714	688	727	724	769	851	982	956	1,133	1,048
Total	5,694	5,509	5,802	6,252	6,707	8,169	8,014	8,767	9,114	9,115

1. Environment Canada resources include large one-time grants and contributions to initiatives outside of the department which did not result in increases in departmental expenditures (\$60M for Climate and Atmospheric Sciences in 1999/00, \$50M for the Sustainable Development Technology Fund in 2001/02, \$50M for the Canadian Foundation for Climate and Atmospheric Sciences and \$125M for the Sustainable Development Technology Fund in 2003/04 and \$100M forecasted for the Sustainable Development Technology Fund in 2004/05).

2. Includes \$200 million for indirect costs of university research.

3. Includes \$225 million for indirect costs of university research.

4. Includes \$245 million for indirect costs of university research.

5. Includes \$260 million for indirect costs of university research.

Table 8 Federal government intramural expenditures on S&T, by department or agency, 1996/97 to 2005/06

Department or agency	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 ^f	2003/04 ^f	2004/05 ^p	2005/06 ^p
in millions of dollars										
Atomic Energy of Canada Limited	219	154	114	123	128	168	136	168	147	178
Agriculture and Agri-Food Canada	362	354	348	366	347	325	298	316	311	311
Bank of Canada	39	41	45	41	42	48	67	69	68	67
Canadian Food Inspection Agency	28	30	30	32	37	38	54	47	47	50
Canadian Museum of Civilization	56	55	54	55	58	64	83	127	140	81
Canadian Museum of Nature	33	25	23	23	26	28	30	31	63	58
Canadian Space Agency	64	55	86	55	174	162	162	105	159	134
Environment Canada	399	404	369	419	427	506	508	532	576	564
Fisheries and Oceans Canada	238	196	271	277	327	307	348	280	271	268
Health Canada	163	170	174	209	193	269	297	280	257	260
International Development Research Centre	39	41	45	48	43	39	38	42	50	52
Industry Canada	103	99	108	100	90	107	102	98	111	116
Library and Archives Canada	...	...	...	...	...	...	...	...	88	83
National Archives of Canada	44	34	33	33	38	55	53	35	...	...
National Defence	153	164	163	193	175	142	188	205	280	223
National Gallery of Canada	33	46	49	42	44	45	51	54	52	53
National Library	43	42	40	42	48	53	60	42	...	...
National Research Council	350	394	403	456	506	570	645	643	654	602
Natural Resources Canada	370	347	334	343	374	455	449	456	443	436
Parks Canada Agency	...	...	80	65	87	93	99	101	101	102
Statistics Canada	534	400	437	461	575	726	579	581	641	705
Other	305	300	249	275	304	355	383	367	431	414
Total	3,575	3,351	3,455	3,658	4,043	4,555	4,630	4,579	4,890	4,757

Table 9 Federal expenditures on R&D, by major department or agency, 1996/97 to 2005/06										
Department or agency	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 ^f	2003/04 ^f	2004/05 ^p	2005/06 ^p
in millions of dollars										
Agriculture and Agri-Food Canada	350	340	335	370	354	329	267	252	265	247
Atomic Energy of Canada Limited	240	174	135	132	136	178	147	179	162	190
Canadian Economic Development for Quebec Regions	28	22	23	12	10	17	25	28	33	29
Canada Foundation for Innovation	...	2	31	118	188	239	332	365	309	561
Canadian Institutes of Health Research	...	...	...	304	384	522	622	687	712	765
Canadian International Development Agency	52	48	49	50	57	56	53	62	76	73
Canadian Space Agency	245	224	337	300	298	317	309	256	300	324
Environment Canada ¹	135	127	116	196	144	222	207	264	231	226
Fisheries and Oceans Canada	95	78	109	110	130	123	140	71	70	69
Genome Canada	...	...	...	...	...	34	62	86	89	28
Health Canada	74	65	54	55	65	102	105	103	62	57
Industry Canada	230	345	274	239	288	503	371	375	352	282
International Development Research Centre	76	64	67	71	76	65	67	66	79	81
Medical Research Council	234	229	266	...	...	...	...	...	...	...
National Defence	223	264	262	294	274	281	261	282	357	291
National Research Council	429	470	499	530	591	644	718	698	706	634
Natural Resources Canada ²	373	351	345	376	388	335	285	420	336	330
Natural Sciences and Engineering Research Council	410	393	443	481	500	517	573	638	713	755
Social Sciences and Humanities Research Council	64	65	68	92	105	325 ³	148	402 ⁴	466 ⁵	495 ⁶
Statistics Canada	9	11	12	13	13	16	19	20	16	18
Other	124	107	153	147	149	164	216	208	297	298
Total	3,391	3,379	3,578	3,890	4,150	4,989	4,927	5,462	5,631	5,753

1. Environment Canada resources include large one-time grants and contributions to initiatives outside of the department which did not result in increases in departmental expenditures (\$60M for Climate and Atmospheric Sciences in 1999/00, \$50M for the Sustainable Development Technology Fund in 2001/02, \$50M for the Canadian Foundation for Climate and Atmospheric Sciences in 2003/04).

2. New program structures combined with stricter interpretation of the definitions of R&D and RSA, have led to a significant change in Natural Resources Canada's reporting of resources as compared to previous years (effective as of 2001/02).

3. Includes \$200 million for indirect costs of university research.

4. Includes \$225 million for indirect costs of university research.

5. Includes \$245 million for indirect costs of university research.

6. Includes \$260 million for indirect costs of university research.

Table 10 Federal government expenditures on intramural R&D, by department or agency, 1996/97 to 2005/06

Department or agency	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 ^r	2003/04 ^r	2004/05 ^p	2005/06 ^p
in millions of dollars										
Atomic Energy of Canada Limited	219	154	114	123	128	168	136	168	147	178
Agriculture and Agri-Food Canada	346	338	332	351	339	318	246	238	227	229
Canadian Institutes of Health Research	...	...	...	15	21	32	39	45	49	47
Canadian Space Agency	57	49	81	51	166	152	154	95	146	122
Environment Canada	113	106	93	115	125	147	182	187	203	198
Fisheries and Oceans	92	75	105	108	128	119	138	68	67	67
Health Canada	41	40	39	43	41	72	80	75	54	50
Industry Canada	43	38	39	39	42	48	49	43	47	45
Medical Research Council	9	10	12	...	...	...	...	...	...	...
National Defence	136	140	142	173	154	139	161	167	246	185
National Research Council	300	340	349	389	442	496	570	564	570	519
Natural Resources Canada ¹	320	309	303	307	334	243	233	231	264	259
Other	116	121	134	145	160	168	202	202	237	239
Total	1,792	1,720	1,743	1,859	2,080	2,102	2,190	2,083	2,257	2,138

1. New program structures combined with stricter interpretation of the definitions of R&D and RSA, have led to a significant change in Natural Resources Canada's reporting of resources as compared to previous years (effective as of 2001/02).

Table 11 S&T expenditures by socio-economic objective, 2001/02 to 2003/04						
Socio-economic objective	2001/02		2002/03		2003/04	
	Intramural ²	Extramural ³	Intramural ²	Extramural ³	Intramural ²	Extramural ³
in millions of dollars						
Exploration and exploitation of the earth	454	90	466	83	382	123
Infrastructure and general planning of Land use:						
- Transport	120	27	65	28	112	33
- Telecommunication	48	23	89	25	40	29
- Other	146	28	162	32	162	35
Pollution and protection of the environment	337	195	360	188	393	313
Public Health	288	739	344	906	362	1,006
Production, distribution and rational utilization of energy	252	121	217	80	249	215
Agricultural production and technology:						
- Agriculture	427	82	415	98	396	97
- Fishing	124	19	141	23	172	26
- Forestry	90	29	91	44	92	62
Industrial production and technology	242	894	246	685	270	810
Social structures and relationships	1,067	203	979	241	999	264
Exploration and exploitation of space	190	199	210	184	135	202
Non-oriented research	249	393	270	242	275	406
Other civil research	18	17	17	3	17	1
Defence	137	173	177	169	193	198
Other	18	382	22	353	26	368
Total S&T expenditures	4,207¹	3,614	4,271¹	3,384	4,275¹	4,188

1. Non-program (indirect costs) are excluded.

2. Activities carried out primarily by the federal government.

3. Activities managed and performed by non-federal organizations.

Table 12 R&D expenditures by socio-economic objective, 2001/02 to 2003/04

Socio-Economic Objective	2001/02		2002/03		2003/04	
	Intramural ²	Extramural ³	Intramural ²	Extramural ³	Intramural ²	Extramural ³
in millions of dollars						
Exploration and exploitation of the earth	125	69	141	59	85	75
Infrastructure and general planning of land use:						
- Transport	71	24	54	25	56	19
- Telecommunication	44	23	48	24	35	28
- Other	30	25	39	28	38	31
Pollution and protection of the environment	142	148	174	141	178	171
Public health	152	709	186	866	196	960
Production, distribution and rational utilization of energy	248	117	214	75	246	210
Agricultural production and technology :						
- Agriculture	345	75	287	90	275	86
- Fishing	47	15	55	16	42	23
- Forestry	75	27	74	41	72	56
Industrial production and technology	164	741	189	657	189	778
Social structures and relationships	47	130	60	149	60	170
Exploration and exploitation of space	175	193	181	179	121	197
Non-oriented research	181	365	202	213	206	376
Other civil research	15	17	14	2	14	1
Defence	134	142	152	100	157	116
Other	5	67	5	72	6	82
Total R&D expenditures	2,000¹	2,887	2,075¹	2,737	1,976¹	3,379

1. Non-program (indirect costs) are excluded.

2. Activities carried out primarily by the federal government.

3. Activities managed and performed by non-federal organizations.

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
- 0^s 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

Science and technology (S&T) = research and development (R&D) + related scientific activities (RSA)

Note: Due to rounding, components may not add to totals.

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<http://www.statcan.ca:8096/bsolc/english/bsolc?catno=88-001-X>

Current publications of the Science and Innovation Surveys Section include:

Industrial Research and Development, 2005 Intentions, (with 2004 preliminary estimates and 2003 actual expenditures) to be released in December of 2005, catalogue No. 88-202-XIE, annual. It presents statistics on research and development (R&D) activities performed and funded by Canadian business enterprises. The report covers current and capital expenditures on R&D, R&D as a percent of performing company revenues, R&D expenditures by province, country of control of company, personnel engaged in R&D and payments for technological services.

<http://www.statcan.ca:8096/bsolc/english/bsolc?catno=88-202-X>

Federal Scientific Activities, 2004/2005, Catalogue No. 88-204-XIE, annual. It presents statistics on the federal government's activities in science and technology (S&T). It covers expenditures and person-years by type of science, performing sectors, provinces, Federal departments and agencies.

<http://www.statcan.ca:8096/bsolc/english/bsolc?catno=88-204-X>

Note of appreciation

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