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# **Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces**



National Estimates 1997 to 2008  
and Provincial Estimates 2002 to 2006



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National Estimates 1997 to 2008  
and Provincial Estimates 2002 to 2006

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- . 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<sup>s</sup> 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

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# Highlights

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## Gross domestic expenditures on research and development, 1997 to 2006 historical, 2007, 2008 intentions

- Total research and development (R&D) spending is anticipated to remain near \$29 billion (current dollars) in 2008, where it has been since 2006. (Table 1-1).
- Since 2006 there has been a downward trend in the reporting of constant dollar gross domestic expenditures. In 2007 there is an anticipated 2.4% decline in spending to \$24.8 billion (constant dollars). (Table 1-1).
- The share of R&D expenditures have remained relatively consistent over time among the six sectors of: federal government, provincial governments, provincial research organizations, business enterprises, higher education, and private non-profit organizations.
- The business enterprise sector continues to hold over half the share of total R&D performance at \$16.3 billion (current dollars), followed by higher education at one-third or \$9.8 billion (Table 1-2). Combined, these two sectors should continue to perform 90% of total R&D in 2008, as they have since 2003.
- Federal government R&D performance is anticipated to remain at \$2.5 billion (current dollars).
- The private non-profit sector continues to be a small R&D performer while increasing its share of R&D funding from 2.2% in 1999 to an expected 2.9% in 2008 (Table 1-2).
- The business enterprise sector is also the largest funding sector of R&D anticipating to spend \$14.4 billion (current dollars) in 2008. Comparatively for the second largest funding sector, the federal government, funding levels are expected to be close to the previous year at \$5.3 billion (current dollars) (Table 1-2).
- Funding of R&D by foreign organizations has levelled off in recent years at 9.0% of total funding down from 17.4% in 2000 (Table 1-2).
- Provincial R&D spending data are available for 2006. R&D expenditures by province can be easily misinterpreted. The expenditures data are associated with the region of location of the R&D activities, however, caution should be used in assuming that all R&D expenditures actually occur in this location. For example, supplies and equipment may be purchased from other locations, and cross-provincial border labour mobility can occur particularly in the National Capital Region (NCR).
- In 2006, 70% of R&D expenditures took place in Ontario (44%) and Quebec (26%) (excludes NCR) (Table 2). Each of these two provinces surpass the national average ratio of 1.98 for gross domestic expenditure on research and development (GERD) to gross domestic product (GDP) (Table 2). The GERD/GDP ratio for Quebec at 2.70 and 2.27 for Ontario places these provinces at or above the 2.26 average for all Organisation for Economic Co-operation and Development (OECD) member countries in 2006 (OECD: *Main Science and Technology Indicators*, Vol 2008/1, p. 18).
- Ontario has maintained the lead with the highest provincial expenditure on R&D of \$12.7 billion in current dollars (excludes NCR). One-half of total foreign funding occurs in Ontario and one-quarter of total Canada R&D funding comes from Ontario's business enterprise sector (Table 4-2).

- There are four leading R&D performing provinces - Quebec, Ontario, Alberta and British Columbia - where the business enterprise sector is the most important R&D performer. The remaining six provinces, with the lowest R&D expenditures, have the higher education sector as the most important R&D performer (Table 4-1).



# Analysis

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## Gross domestic expenditures on research and development

Gross domestic expenditure on research and development (GERD) in Canada represents national and provincial research and development (R&D) expenditures performed by all sectors including governments, business enterprises, non-profit organizations, and higher education institutions. Source of funding data are also available for each of the aforementioned areas in addition to the foreign sector, as payments sent abroad for R&D performed in other countries are not measured. Canadian data are also separated into two fields of science: natural sciences and engineering, and social sciences and humanities.

## International comparisons

The ratio of gross domestic expenditure on research and development (GERD) to gross domestic product (GDP) denotes the degree of R&D intensity within a country and is a commonly used summary statistic for international comparisons. However, this statistic is influenced by a nation's economic structure and propensity to perform R&D in particular sectors which varies from country to country.

Canada's GERD/GDP ratio for 2007 is 1.88, down from 2.08 attained in 2004, indicating that R&D investments in Canada are declining as a percentage of total gross domestic product (Table 1-1).

The Organisation for Economic Co-operation and Development's (OECD) *Main Science and Technology Indicators* (Vol 2008/1, p. 18) has published data for year 2006 which show a GERD/GDP ratio of 1.94 for Canada, 2.62 for the United States, and 1.76 for twenty-seven countries in the European Union (EU-27). Canada's 2006 investments in R&D as a percentage of GDP were below that of the neighbouring United States, but greater than the EU-27.

All R&D expenditures for the business enterprise sector, the largest performing R&D sector are undertaken in the natural sciences and engineering. Therefore, R&D expenditures are mainly concentrated in natural sciences and engineering; in 2008 \$26.9 billion (current dollars) were allocated to this field of science (Table 7). However, since 2001 the share of R&D allocated to social sciences and humanities has been increasing, albeit slightly, from 6.0% to 7.5% in 2008 with a value of \$2.2 billion (current dollars) (Table 9).

## Regional data

The definition of GERD in a provincial context is similar to that provided above. The expenditures are assigned to the province in which the performing establishment is located. The funding shown is of R&D carried out in a province; it is not R&D funding from a province. For example, when the federal government is shown as the funder for R&D in a province, the funds are received from the central government and are to be spent on R&D in an establishment in that province. The federal government, of course, raises funds from many sources outside of that province. Similarly, when R&D is shown as being funded by the business enterprise sector, the funds are not necessarily raised from activities within the province.

It would be misleading to assume all of the expenditures of a performer are spent in the region of location. Supplies and equipment can be purchased from other provinces or countries. Furthermore, in cases such as the National Capital Region (NCR), labour moves freely between Quebec and Ontario so that even wages and salaries paid by an R&D performer are partly spent outside the reference province. Expenditures for R&D performed by the federal government in the NCR are excluded from the provincial totals and are reported separately. However, for the first time in this publication, NCR expenditures are allocated between the provinces of Ontario and Quebec. In 2006 total

NCR expenditures on R&D were \$1.1 billion (current dollars), of which Ontario held 92% and Quebec 8% (Table 4-1 and 4-2).

The private non-profit (PNP) sector appears in both the performing and funding sector of GERD for Canada. Commencing with reference year 2000, the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region. However, data for the private non-profit sector funding research and development continue to be distributed by provinces and territories. For example, in 2006 the province with the highest percentage of funding attributed to PNP was Manitoba at 6.8% (Table 4-2).

Data on provincial distribution of R&D spending are available up to 2006. The ratio of provincial GERD to provincial GDP in 2006 remained the highest in Quebec at 2.70 followed by a ratio of 2.27 in Ontario (excludes NCR). The lowest provincial GERD to provincial GDP ratios were reported in Saskatchewan (1.00), Newfoundland and Labrador (1.01), and Alberta (1.01) (Table 2). Although Alberta's spending on R&D ranks 4<sup>th</sup> in terms of expenditures among all provinces and territories, in comparison to its large provincial GDP, R&D outlays in Alberta are minimal.

In 2006, Ontario expenditures on R&D reached \$12.7 billion in current dollars or 44% of national R&D performance followed by Quebec at \$7.6 billion or 26% of national R&D performance (excludes NCR). British Columbia represented 9% of gross domestic expenditures on R&D at \$2.6 billion while the neighbouring Prairie provinces made up 12% or \$3.4 billion. The Atlantic provinces represented 4% or \$1.1 billion of total national GERD. (Table 2).

# Statistical tables

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Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

Table 1-1

Gross domestic expenditures on research and development — In current dollars, in 2002 constant dollars and as a percentage of gross domestic product

	Current dollars		Gross domestic expenditure on research and development over Gross domestic product	Gross domestic product implicit price index <sup>2</sup>	2002 constant dollars, Gross domestic expenditure on research and development <sup>3</sup>
	Gross domestic expenditure on research and development	Gross domestic product <sup>1</sup>			
	millions of dollars		ratio	index=2002	millions of dollars
1994	13,341	770,873	1.73	88.2	15,126
1995	13,754	810,426	1.70	90.2	15,249
1996 r	13,817	836,864	1.65	91.6	15,084
1997 r	14,635	882,733	1.66	92.7	15,787
1998 r	16,088	914,973	1.76	92.3	17,430
1999 r	17,638	982,441	1.80	93.9	18,784
2000 r	20,556	1,076,577	1.91	97.8	21,018
2001 r	23,132	1,108,048	2.09	98.9	23,390
2002 r	23,531	1,152,905	2.04	100.0	23,531
2003 r	24,719	1,213,175	2.04	103.3	23,930
2004 r	26,833	1,290,906	2.08	106.6	25,172
2005 r	28,142	1,372,626	2.05	110.2	25,537
2006 r	28,715	1,450,490	1.98	112.9	25,434
2007 p	28,881	1,535,646	1.88	116.4	24,812
2008 p	29,071	..	..	..	..

1. CANSIM, table 380-0017

2. CANSIM, table 384-0036

3. Gross domestic expenditure on research and development data are deflated by the gross domestic product implicit price index.

Note(s): Components may not add to totals due to rounding.

Table 1-2

Gross domestic expenditures on research and development — By performing sector and funding sector

	Federal government	Provincial governments	Business enterprise	Higher education	Private non-profit organizations	Foreign	Total, all funding sectors
	millions of dollars						
<b>Performing sector</b>							
1999 r	1,859	233	10,399	5,082	63	...	17,638
2000 r	2,080	230	12,395	5,793	58	...	20,556
2001 r	2,103	276	14,266	6,424	63	...	23,132
2002 r	2,190	282	13,540	7,455	63	...	23,531
2003 r	2,083	278	14,123	8,143	92	...	24,719
2004 r	2,084	290	15,299	9,058	103	...	26,833
2005 r	2,414	303	15,791	9,518	117	...	28,142
2006 r	2,496	333	16,137	9,624	125	...	28,715
2007 p	2,535	319	16,159	9,740	128	...	28,881
2008 p	2,467	319	16,316	9,837	132	...	29,071
<b>Funding sector</b>							
1999 r	3,216	767	7,917	2,649	380	2,705	17,638
2000 r	3,560	853	9,223	2,892	445	3,582	20,556
2001 r	4,095	1,023	11,636	2,928	536	2,915	23,132
2002 r	4,251	1,152	12,112	3,462	628	1,925	23,531
2003 r	4,526	1,354	12,447	3,589	637	2,167	24,719
2004 r	4,651	1,370	13,404	4,147	735	2,526	26,833
2005 r	5,248	1,341	13,756	4,341	777	2,676	28,142
2006 r	5,225	1,407	14,234	4,434	830	2,585	28,715
2007 p	5,291	1,404	14,267	4,487	835	2,596	28,881
2008 p	5,272	1,414	14,386	4,532	850	2,616	29,071

Note(s): Components may not add to totals due to rounding.

Source(s): CANSIM, table 380-0001

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 2**  
**Provincial statistics and their relationship to gross domestic expenditures on research and development, 2006**

	Provincial gross domestic product <sup>1</sup>		Gross domestic expenditures on research and development		Population <sup>2</sup>		Gross domestic expenditures on research and development	
	millions of dollars	percent	millions of dollars	percent	thousands	percent	Ratio	Per capita
<b>Canada <sup>3</sup></b>	<b>1,450,490</b>	<b>100</b>	<b>28,715</b>	<b>100</b>	<b>32,395</b>	<b>100</b>	<b>1.98</b>	<b>886</b>
Newfoundland and Labrador	25,994	2	262	1	513	2	1.01	511
Prince Edward Island	4,321	0	70	0	138	0	1.62	508
Nova Scotia	31,737	2	502	2	938	3	1.58	535
New Brunswick	25,825	2	271	1	747	2	1.05	363
Quebec	281,521	19	7,595	26	7,604	23	2.70	999
Ontario	559,778	39	12,685	44	12,587	39	2.27	1,008
Manitoba	44,911	3	558	2	1,180	4	1.24	473
Saskatchewan	46,494	3	465	2	992	3	1.00	469
Alberta	239,584	17	2,412	8	3,372	10	1.01	715
British Columbia	182,743	13	2,644	9	4,218	13	1.45	627
<b>National Capital Region</b>								
National Capital Region, Quebec	...	...	86	0	...	...	...	...
National Capital Region, Ontario	...	...	1,012	4	...	...	...	...

1. CANSIM, table 384-0002.

2. CANSIM, table 051-0005.

3. Includes the Yukon, Northwest Territories and Nunavut.

**Note(s):** Components may not add to totals due to rounding. Quebec and Ontario figures exclude federal government expenditures on research and development (R&D) performed in the National Capital Region (NCR). Therefore, the gross domestic expenditure on research and development to gross domestic product (GERD/GDP) ratios for Ontario and Quebec do not include the R&D expenditures of the Ontario or Quebec components of the NCR. The private non-profit (PNP) sector appears in both the performing and funding sector for the gross domestic expenditure on research and development (GERD) for Canada. Commencing with reference year 2000 the data for the PNP sector performing R&D are not distributed by provinces, territories or the NCR. The national totals of R&D by performing sector include the PNP sector. The data for the PNP sector funding research and development continue to be distributed by provinces, territories and the NCR.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 3**  
**Provincial distribution of the gross domestic expenditures on research and development**

	Canada <sup>1</sup>	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
millions of dollars							
<b>Provincial distribution of the gross domestic expenditures on research and development</b>							
1999 r	17,638	127	26	339	164	4,884	8,091
2000 r	20,556	138	37	362	158	5,679	9,534
2001 r	23,132	142	37	376	162	6,376	10,848
2002 r	23,531	153	31	400	211	6,681	10,426
2003 r	24,719	173	43	409	216	6,943	11,054
2004 r	26,833	173	41	448	227	7,209	12,080
2005 r	28,142	267	66	471	256	7,208	12,670
2006	28,715	262	70	502	271	7,595	12,685
2007 P	28,881	..	..	..	..	..	..
2008 P	29,071	..	..	..	..	..	..
<b>Provincial distribution of the gross domestic product</b>							
1999 r	982,441	12,184	3,159	23,059	19,041	210,809	409,020
2000 r	1,076,577	13,922	3,366	24,658	20,085	224,928	440,759
2001 r	1,108,048	14,179	3,431	25,909	20,684	231,624	453,701
2002 r	1,152,905	16,457	3,701	27,082	21,169	241,448	477,763
2003 r	1,213,175	18,119	3,798	28,851	22,366	250,752	493,081
2004 r	1,290,906	19,407	3,983	29,853	23,672	262,761	516,106
2005 r	1,372,626	21,939	4,151	31,275	24,748	271,059	536,844
2006	1,450,490	25,994	4,321	31,737	25,825	281,521	559,778
2007 P	1,535,646	29,524	4,549	33,010	26,947	296,692	584,957
2008 P	..	..	..	..	..	..	..
percent							
<b>Canada total as a percentage</b>							
1999 r	100.0	0.7	0.1	1.9	0.9	27.7	45.9
2000 r	100.0	0.7	0.2	1.8	0.8	27.6	46.4
2001 r	100.0	0.6	0.2	1.6	0.7	27.6	46.9
2002 r	100.0	0.7	0.1	1.7	0.9	28.4	44.3
2003 r	100.0	0.7	0.2	1.7	0.9	28.1	44.7
2004 r	100.0	0.6	0.2	1.7	0.8	26.9	45.0
2005 r	100.0	0.9	0.2	1.7	0.9	25.6	45.0
2006	100.0	0.9	0.2	1.7	0.9	26.4	44.2
2007 P	100.0	..	..	..	..	..	..
2008 P	100.0	..	..	..	..	..	..
<b>Provincial gross domestic product as a percentage</b>							
1999 r	1.8	1.0	0.8	1.5	0.9	2.3	2.0
2000 r	1.9	1.0	1.1	1.5	0.8	2.5	2.2
2001 r	2.1	1.0	1.1	1.5	0.8	2.8	2.4
2002 r	2.0	0.9	0.8	1.5	1.0	2.8	2.2
2003 r	2.0	1.0	1.1	1.4	1.0	2.8	2.2
2004 r	2.1	0.9	1.0	1.5	1.0	2.7	2.3
2005 r	2.1	1.2	1.6	1.5	1.0	2.7	2.4
2006	2.0	1.0	1.6	1.6	1.0	2.7	2.3
2007 P	1.9	..	..	..	..	..	..
2008 P	..	..	..	..	..	..	..

See footnotes at the end of the table.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

Table 3 – continued

Provincial distribution of the gross domestic expenditures on research and development

	Manitoba	Saskatchewan	Alberta	British Columbia	National Capital Region, Ontario/Quebec	National Capital Region, Quebec	National Capital Region, Ontario
millions of dollars							
<b>Provincial distribution of the gross domestic expenditures on research and development</b>							
1999 r	365	323	1,154	1,284	808	33	774
2000 r	393	376	1,319	1,606	889	39	850
2001 r	457	396	1,586	1,760	926	41	885
2002 r	454	435	1,709	1,949	1,015	65	950
2003 r	456	398	1,877	2,052	999	49	950
2004 r	519	425	2,254	2,373	960	48	912
2005 r	581	453	2,406	2,505	1,123	83	1,040
2006 r	558	465	2,412	2,644	1,098	86	1,012
2007 p	..	..	..	..	..	..	..
2008 p	..	..	..	..	..	..	..
<b>Provincial distribution of the gross domestic product</b>							
1999 r	31,966	30,778	117,080	120,921	...	...	...
2000 r	34,057	33,828	144,789	131,333	...	...	...
2001 r	35,157	33,127	151,274	133,514	...	...	...
2002 r	36,559	34,343	150,594	138,193	...	...	...
2003 r	37,451	36,653	170,113	145,642	...	...	...
2004 r	39,748	40,796	189,743	157,675	...	...	...
2005 r	41,517	44,066	220,419	169,308	...	...	...
2006 r	44,911	46,494	239,584	182,743	...	...	...
2007 p	48,549	51,628	258,936	192,528	...	...	...
2008 p	..	..	..	..	...	...	...
percent							
<b>Canada total as a percentage</b>							
1999 r	2.1	1.8	6.5	7.3	4.6	0.2	4.4
2000 r	1.9	1.8	6.4	7.8	4.3	0.2	4.1
2001 r	2.0	1.7	6.9	7.6	4.0	0.2	3.8
2002 r	1.9	1.8	7.3	8.3	4.3	0.3	4.0
2003 r	1.8	1.6	7.6	8.3	4.0	0.2	3.8
2004 r	1.9	1.6	8.4	8.8	3.6	0.2	3.4
2005 r	2.1	1.6	8.5	8.9	4.0	0.3	3.7
2006 r	1.9	1.6	8.4	9.2	3.8	0.3	3.5
2007 p	..	..	..	..	..	..	..
2008 p	..	..	..	..	..	..	..
<b>Provincial gross domestic product as a percentage</b>							
1999 r	1.1	1.0	1.0	1.1	...	...	...
2000 r	1.2	1.1	0.9	1.2	...	...	...
2001 r	1.3	1.2	1.0	1.3	...	...	...
2002 r	1.2	1.3	1.1	1.4	...	...	...
2003 r	1.2	1.1	1.1	1.4	...	...	...
2004 r	1.3	1.0	1.2	1.5	...	...	...
2005 r	1.4	1.0	1.1	1.5	...	...	...
2006 r	1.2	1.0	1.0	1.4	...	...	...
2007 p	..	..	..	..	...	...	...
2008 p	..	..	..	..	...	...	...

1. Includes the Yukon, Northwest Territories and Nunavut.

**Note(s):** Components may not add to totals due to rounding. Quebec and Ontario figures exclude federal government expenditures on research and development (R&D) performed in the National Capital Region (NCR). Therefore, the gross domestic expenditure on research and development to gross domestic product (GERD/GDP) ratios for Ontario and Quebec do not include the R&D expenditures of the Ontario or Quebec components of the NCR. The private non-profit (PNP) sector appears in both the performing and funding sector for the gross domestic expenditure on research and development (GERD) for Canada. Commencing with reference year 2000 the data for the PNP sector performing R&D are not distributed by provinces, territories or the NCR. The national totals of R&D by performing sector include the PNP sector. The data for the PNP sector funding research and development continue to be distributed by provinces, territories and the NCR.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 4-1**  
**Provincial distribution of gross domestic expenditures on research and development — By performing sector, 2006**

	Canada <sup>1</sup>	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
millions of dollars							
<b>All sectors</b>	<b>28,715</b>	<b>262</b>	<b>70</b>	<b>502</b>	<b>271</b>	<b>7,595</b>	<b>12,685</b>
Federal government	2,496	27	26	73	30	371	494
Provincial governments <sup>2</sup>	333	4	0	6	4	85	70
Business enterprise	16,137	99	13	106	102	4,598	8,033
Higher education	9,624	132	31	317	135	2,541	4,088
Private non-profit organizations	125	..	..	..	..	..	..
percent							
<b>Canada total as a percentage</b>							
<b>All sectors</b>	<b>100.0</b>	<b>0.9</b>	<b>0.2</b>	<b>1.7</b>	<b>0.9</b>	<b>26.4</b>	<b>44.2</b>
Federal government	100.0	1.1	1.0	2.9	1.2	14.9	19.8
Provincial governments <sup>2</sup>	100.0	1.2	0.0	1.8	1.2	25.5	21.0
Business enterprise	100.0	0.6	0.1	0.7	0.6	28.5	49.8
Higher education	100.0	1.4	0.3	3.3	1.4	26.4	42.5
Private non-profit organizations	100.0	..	..	..	..	..	..
<b>Provincial total as a percentage</b>							
<b>All sectors</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Federal government	8.7	10.3	37.1	14.5	11.1	4.9	3.9
Provincial governments <sup>2</sup>	1.2	1.5	0.0	1.2	1.5	1.1	0.6
Business enterprise	56.2	37.8	18.6	21.1	37.6	60.5	63.3
Higher education	33.5	50.4	44.3	63.1	49.8	33.5	32.2
Private non-profit organizations	0.4	..	..	..	..	..	..

See footnotes at the end of the table.



Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

Table 4-1 – continued

**Provincial distribution of gross domestic expenditures on research and development — By performing sector, 2006**

	Manitoba	Saskatchewan	Alberta	British Columbia	National Capital Region, Ontario/Quebec	National Capital Region, Quebec	National Capital Region, Ontario
millions of dollars							
<b>All sectors</b>	<b>558</b>	<b>465</b>	<b>2,412</b>	<b>2,644</b>	<b>1,098</b>	<b>86</b>	<b>1,012</b>
Federal government	81	67	133	91	1,098	86	1,012
Provincial governments <sup>2</sup>	6	16	125	18	.	.	.
Business enterprise	184	167	1,236	1,576	.	.	.
Higher education	287	215	919	959	.	.	.
Private non-profit organizations	..	..	..	..	.	.	.
percent							
<b>Canada total as a percentage</b>							
<b>All sectors</b>	<b>1.9</b>	<b>1.6</b>	<b>8.4</b>	<b>9.2</b>	<b>3.8</b>	<b>0.3</b>	<b>3.5</b>
Federal government	3.2	2.7	5.3	3.6	44.0	3.4	40.5
Provincial governments <sup>2</sup>	1.8	4.8	37.5	5.4	.	.	.
Business enterprise	1.1	1.0	7.7	9.8	.	.	.
Higher education	3.0	2.2	9.5	10.0	.	.	.
Private non-profit organizations	..	..	..	..	.	.	.
<b>Provincial total as a percentage</b>							
<b>All sectors</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Federal government	14.5	14.4	5.5	3.4	100.0	100.0	100.0
Provincial governments <sup>2</sup>	1.1	3.4	5.2	0.7	.	.	.
Business enterprise	33.0	35.9	51.2	59.6	.	.	.
Higher education	51.4	46.2	38.1	36.3	.	.	.
Private non-profit organizations	..	..	..	..	.	.	.

1. Includes the Yukon, Northwest Territories and Nunavut.

2. Includes provincial research councils and foundations.

**Note(s):** Components may not add to totals due to rounding. Quebec and Ontario figures exclude federal government expenditures on research and development performed in the National Capital Region. The private non-profit (PNP) sector appears in both the performing and funding sector for the gross domestic expenditure on research and development (GERD) for Canada. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region. The national totals of research and development by performing sector include the PNP sector. The data for the private non-profit sector funding research and development continue to be distributed by provinces, territories and the National Capital Region.

**Source(s):** CANSIM, table 358-0001.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 4-2**  
**Provincial distribution of gross domestic expenditures on research and development — By funding sector, 2006**

	Canada <sup>1</sup>	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
millions of dollars							
<b>All sectors</b>	<b>28,715</b>	<b>262</b>	<b>70</b>	<b>502</b>	<b>271</b>	<b>7,595</b>	<b>12,685</b>
Federal government	5,225	75	35	158	65	1,146	1,563
Provincial governments <sup>2</sup>	1,407	8	2	12	8	378	525
Business enterprise	14,234	102	12	117	104	4,199	7,035
Higher education	4,434	68	18	171	84	1,200	1,864
Private non-profit organizations	830	3	2	22	7	179	357
Foreign	2,585	7	0	22	4	493	1,342
percent							
<b>Canada total as a percentage</b>							
<b>All sectors</b>	<b>100.0</b>	<b>0.9</b>	<b>0.2</b>	<b>1.7</b>	<b>0.9</b>	<b>26.4</b>	<b>44.2</b>
Federal government	100.0	1.4	0.7	3.0	1.2	21.9	29.9
Provincial governments <sup>2</sup>	100.0	0.6	0.1	0.9	0.6	26.9	37.3
Business enterprise	100.0	0.7	0.1	0.8	0.7	29.5	49.4
Higher education	100.0	1.5	0.4	3.9	1.9	27.1	42.0
Private non-profit organizations	100.0	0.4	0.2	2.7	0.8	21.6	43.0
Foreign	100.0	0.3	0.0	0.9	0.2	19.1	51.9
<b>Provincial total as a percentage</b>							
<b>All sectors</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Federal government	18.2	28.6	50.0	31.5	24.0	15.1	12.3
Provincial governments <sup>2</sup>	4.9	3.1	2.9	2.4	3.0	5.0	4.1
Business enterprise	49.6	38.9	17.1	23.3	38.4	55.3	55.5
Higher education	15.4	26.0	25.7	34.1	31.0	15.8	14.7
Private non-profit organizations	2.9	1.1	2.9	4.4	2.6	2.4	2.8
Foreign	9.0	2.7	0.0	4.4	1.5	6.5	10.6

See footnotes at the end of the table.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

Table 4-2 – continued

**Provincial distribution of gross domestic expenditures on research and development — By funding sector, 2006**

	Manitoba	Saskatchewan	Alberta	British Columbia	National Capital Region, Ontario/Quebec	National Capital Region, Quebec	National Capital Region, Ontario
millions of dollars							
<b>All sectors</b>	<b>558</b>	<b>465</b>	<b>2,412</b>	<b>2,644</b>	<b>1,098</b>	<b>86</b>	<b>1,012</b>
Federal government	150	122	372	419	1,080	82	998
Provincial governments <sup>2</sup>	26	38	264	134	1	0	1
Business enterprise	192	168	1,220	1,034	18	4	14
Higher education	136	113	383	398	.	.	.
Private non-profit organizations	38	12	57	99	.	.	.
Foreign	16	11	117	560	.	.	.
percent							
<b>Canada total as a percentage</b>							
<b>All sectors</b>	<b>1.9</b>	<b>1.6</b>	<b>8.4</b>	<b>9.2</b>	<b>3.8</b>	<b>0.3</b>	<b>3.5</b>
Federal government	2.9	2.3	7.1	8.0	20.7	1.6	19.1
Provincial governments <sup>2</sup>	1.8	2.7	18.8	9.5	0.1	0.0	0.1
Business enterprise	1.3	1.2	8.6	7.3	0.1	0.0	0.1
Higher education	3.1	2.5	8.6	9.0	.	.	.
Private non-profit organizations	4.6	1.4	6.9	11.9	.	.	.
Foreign	0.6	0.4	4.5	21.7	.	.	.
<b>Provincial total as a percentage</b>							
<b>All sectors</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Federal government	26.9	26.2	15.4	15.8	98.4	95.3	98.6
Provincial governments <sup>2</sup>	4.7	8.2	10.9	5.1	0.1	0.0	0.1
Business enterprise	34.4	36.1	50.6	39.1	1.6	4.7	1.4
Higher education	24.4	24.3	15.9	15.1	.	.	.
Private non-profit organizations	6.8	2.6	2.4	3.7	.	.	.
Foreign	2.9	2.4	4.9	21.2	.	.	.

1. Includes the Yukon, Northwest Territories and Nunavut.

2. Includes provincial research councils and foundations.

**Note(s):** Components may not add to totals due to rounding. Quebec and Ontario figures exclude federal government expenditures on research and development performed in the National Capital Region. The private non-profit (PNP) sector appears in both the performing and funding sector for the gross domestic expenditure on research and development (GERD) for Canada. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region. The national totals of research and development by performing sector include the PNP sector. The data for the private non-profit sector funding research and development continue to be distributed by provinces, territories and the National Capital Region.

**Source(s):** CANSIM, table 358-0001.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 5**  
**National Gross Domestic Expenditures on Research and Development, in the total sciences, Canada**

Funding sector	Performing sector						Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	
millions of dollars							
<b>2008 P Total sciences</b>							
<b>Total</b>	<b>2,467</b>	<b>294</b>	<b>25</b>	<b>16,316</b>	<b>9,837</b>	<b>132</b>	<b>29,071</b>
Federal government	2,422	4	1	263	2,543	39	5,272
Provincial governments	3	260	12	113	1,015	13	1,414
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	42	30	11	13,461	826	15	14,386
Higher education	.	.	.	.	4,532	.	4,532
Private non-profit organizations	.	.	.	.	793	58	850
Foreign	.	0	0 <sup>s</sup>	2,479	128	7	2,616
<b>2007 P Total sciences</b>							
<b>Total</b>	<b>2,535</b>	<b>294</b>	<b>25</b>	<b>16,159</b>	<b>9,740</b>	<b>128</b>	<b>28,881</b>
Federal government	2,469	4	1	261	2,517	38	5,291
Provincial governments	6	258	12	111	1,005	12	1,404
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	60	31	11	13,331	818	15	14,267
Higher education	.	.	.	.	4,487	.	4,487
Private non-profit organizations	.	.	.	.	785	50	835
Foreign	.	0	0 <sup>s</sup>	2,455	127	13	2,596
<b>2006 Total sciences</b>							
<b>Total</b>	<b>2,496</b>	<b>311</b>	<b>22</b>	<b>16,137</b>	<b>9,624</b>	<b>125</b>	<b>28,715</b>
Federal government	2,434	4	1	261	2,488	37	5,225
Provincial governments	7	274	10	111	993	12	1,407
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	55	33	10	13,313	808	14	14,234
Higher education	.	.	.	.	4,434	.	4,434
Private non-profit organizations	.	.	.	.	776	54	830
Foreign	.	0	0 <sup>s</sup>	2,452	126	7	2,585
<b>2005 P Total sciences</b>							
<b>Total</b>	<b>2,414</b>	<b>280</b>	<b>23</b>	<b>15,791</b>	<b>9,518</b>	<b>117</b>	<b>28,142</b>
Federal government	2,341	4	1	322	2,542	38	5,248
Provincial governments	9	247	12	88	973	13	1,341
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	64	30	10	12,839	803	10	13,756
Higher education	.	.	.	.	4,341	.	4,341
Private non-profit organizations	.	.	.	.	742	35	777
Foreign	.	0	0 <sup>s</sup>	2,542	116	17	2,676
<b>2004 P Total sciences</b>							
<b>Total</b>	<b>2,084</b>	<b>265</b>	<b>25</b>	<b>15,299</b>	<b>9,058</b>	<b>103</b>	<b>26,833</b>
Federal government	2,028	2	1	271	2,337	12	4,651
Provincial governments	7	236	14	59	1,039	15	1,370
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	49	26	10	12,552	755	13	13,404
Higher education	.	.	.	.	4,147	.	4,147
Private non-profit organizations	.	.	.	.	685	50	735
Foreign	.	0	0 <sup>s</sup>	2,417	96	13	2,526
<b>2003 P Total sciences</b>							
<b>Total</b>	<b>2,083</b>	<b>254</b>	<b>24</b>	<b>14,123</b>	<b>8,143</b>	<b>92</b>	<b>24,719</b>
Federal government	2,027	2	1	299	2,182	15	4,526
Provincial governments	8	226	14	70	1,018	17	1,354
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	48	25	9	11,671	679	14	12,447
Higher education	.	.	.	.	3,589	.	3,589
Private non-profit organizations	.	.	.	.	599	38	637
Foreign	.	0	0 <sup>s</sup>	2,082	76	8	2,167

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

Table 5 – continued

National Gross Domestic Expenditures on Research and Development, in the total sciences, Canada

Funding sector	Performing sector						Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	
millions of dollars							
<b>2002 † Total sciences</b>							
<b>Total</b>	<b>2,190</b>	<b>256</b>	<b>26</b>	<b>13,540</b>	<b>7,455</b>	<b>63</b>	<b>23,531</b>
Federal government	2,124	2	1	300	1,817	6	4,251
Provincial governments	11	225	15	53	828	20	1,152
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	55	29	9	11,365	643	12	12,112
Higher education	.	.	.	.	3,462	.	3,462
Private non-profit organizations	.	.	.	.	604	24	628
Foreign	.	0	1	1,822	101	1	1,925
<b>2001 † Total sciences</b>							
<b>Total</b>	<b>2,103</b>	<b>253</b>	<b>23</b>	<b>14,266</b>	<b>6,424</b>	<b>63</b>	<b>23,132</b>
Federal government	2,044	0	1	457	1,587	6	4,095
Provincial governments	6	222	12	51	712	20	1,023
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	53	31	9	10,929	603	10	11,636
Higher education	.	.	.	.	2,928	.	2,928
Private non-profit organizations	.	.	.	.	510	26	536
Foreign	.	0	1	2,828	84	1	2,915
<b>2000 † Total sciences</b>							
<b>Total</b>	<b>2,080</b>	<b>164</b>	<b>66</b>	<b>12,395</b>	<b>5,793</b>	<b>58</b>	<b>20,556</b>
Federal government	2,023	0	2	239	1,293	3	3,560
Provincial governments	3	164	38	45	587	16	853
Provincial research organizations	.	.	1	.	.	.	1
Business enterprise	54	0	18	8,587	553	10	9,223
Higher education	.	.	.	.	2,892	.	2,892
Private non-profit organizations	.	.	.	.	418	27	445
Foreign	.	0	7	3,524	50	1	3,582
<b>1999 † Total sciences</b>							
<b>Total</b>	<b>1,859</b>	<b>173</b>	<b>60</b>	<b>10,399</b>	<b>5,082</b>	<b>63</b>	<b>17,638</b>
Federal government	1,814	0	1	309	1,085	7	3,216
Provincial governments	4	173	34	57	482	16	767
Provincial research organizations	.	.	3	.	.	.	3
Business enterprise	41	0	19	7,391	460	6	7,917
Higher education	.	.	.	.	2,649	.	2,649
Private non-profit organizations	.	.	.	.	349	31	380
Foreign	.	0	3	2,642	57	3	2,705
<b>1998 † Total sciences</b>							
<b>Total</b>	<b>1,743</b>	<b>155</b>	<b>61</b>	<b>9,682</b>	<b>4,370</b>	<b>77</b>	<b>16,088</b>
Federal government	1,691	0	3	262	863	11	2,830
Provincial governments	4	155	34	56	372	19	640
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	49	0	21	6,865	411	9	7,355
Higher education	.	.	.	.	2,339	.	2,339
Private non-profit organizations	.	.	.	.	335	37	372
Foreign	.	0	3	2,499	50	1	2,552
<b>1997 † Total sciences</b>							
<b>Total</b>	<b>1,720</b>	<b>156</b>	<b>58</b>	<b>8,739</b>	<b>3,879</b>	<b>82</b>	<b>14,635</b>
Federal government	1,654	0	4	355	793	7	2,813
Provincial governments	3	156	30	77	370	20	656
Provincial research organizations	.	.	1	.	.	.	1
Business enterprise	63	0	19	6,557	381	11	7,030
Higher education	.	.	.	.	1,971	.	1,971
Private non-profit organizations	.	.	.	.	324	43	367
Foreign	.	0	4	1,750	40	1	1,795

Note(s): Components may not add to totals due to rounding.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-1**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Newfoundland and Labrador**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>27</b>	<b>4</b>	<b>..</b>	<b>99</b>	<b>132</b>	<b>262</b>
Federal government	27	.	.	8	40	75
Provincial governments	.	4	.	1	2	8
Provincial research organizations	.	.	.	.	.	..
Business enterprise	1	.	.	87	15	102
Higher education	.	.	.	.	68	68
Private non-profit organizations	.	.	.	.	3	3
Foreign	.	.	.	3	4	7
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>28</b>	<b>5</b>	<b>0</b>	<b>86</b>	<b>149</b>	<b>267</b>
Federal government	27	.	.	8	45	80
Provincial governments	.	5	.	1	1	7
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	74	23	97
Higher education	.	.	.	.	76	76
Private non-profit organizations	.	.	.	.	2	2
Foreign	.	.	.	3	2	5
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>23</b>	<b>5</b>	<b>0</b>	<b>30</b>	<b>116</b>	<b>173</b>
Federal government	22	.	.	3	35	61
Provincial governments	.	5	.	1	1	7
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	19	16	36
Higher education	.	.	.	.	61	61
Private non-profit organizations	.	.	.	.	2	2
Foreign	.	.	.	7	0	7
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>23</b>	<b>5</b>	<b>0</b>	<b>31</b>	<b>114</b>	<b>173</b>
Federal government	22	.	.	3	36	61
Provincial governments	.	5	.	1	1	7
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	21	10	31
Higher education	.	.	.	.	63	63
Private non-profit organizations	.	.	.	.	4	4
Foreign	.	.	.	6	0	6
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>32</b>	<b>5</b>	<b>0</b>	<b>22</b>	<b>94</b>	<b>153</b>
Federal government	31	.	.	4	28	63
Provincial governments	.	5	.	0 <sup>s</sup>	2	7
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	12	10	23
Higher education	.	.	.	.	53	53
Private non-profit organizations	.	.	.	.	2	2
Foreign	.	.	.	5	0	5

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-2**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Prince Edward Island**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>26</b>	<b>..</b>	<b>..</b>	<b>13</b>	<b>31</b>	<b>70</b>
Federal government	25	.	.	1	9	35
Provincial governments	.	.	.	0 <sup>s</sup>	2	2
Provincial research organizations	.	.	.	.	.	..
Business enterprise	0 <sup>s</sup>	.	.	11	1	12
Higher education	.	.	.	.	18	18
Private non-profit organizations	.	.	.	.	2	2
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>27</b>	<b>66</b>
Federal government	27	.	.	1	9	37
Provincial governments	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>	1
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	7	0 <sup>s</sup>	8
Higher education	.	.	.	.	16	16
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	2	.	2
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>24</b>	<b>41</b>
Federal government	10	.	.	1	8	18
Provincial governments	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>	1
Provincial research organizations	.	.	.	.	.	0
Business enterprise	0 <sup>s</sup>	.	.	6	1	6
Higher education	.	.	.	.	15	15
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>25</b>	<b>43</b>
Federal government	12	.	.	2	7	20
Provincial governments	.	.	.	0 <sup>s</sup>	1	1
Provincial research organizations	.	.	.	.	.	0
Business enterprise	0 <sup>s</sup>	.	.	5	0 <sup>s</sup>	5
Higher education	.	.	.	.	17	17
Private non-profit organizations	.	.	.	.	2	2
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>19</b>	<b>31</b>
Federal government	8	.	.	1	4	13
Provincial governments	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
Provincial research organizations	.	.	.	.	.	0
Business enterprise	0 <sup>s</sup>	.	.	3	1	4
Higher education	.	.	.	.	13	13
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-3**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Nova Scotia**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>73</b>	<b>6</b>	<b>..</b>	<b>106</b>	<b>317</b>	<b>502</b>
Federal government	72	.	..	3	82	158
Provincial governments	.	6	..	1	5	12
Provincial research organizations	.	.	..	.	.	..
Business enterprise	1	.	..	81	35	117
Higher education	.	.	.	.	171	171
Private non-profit organizations	.	.	.	.	22	22
Foreign	.	.	..	21	1	22
<b>2005 r Total sciences</b>						
<b>Total</b>	<b>66</b>	<b>6</b>	<b>0</b>	<b>102</b>	<b>297</b>	<b>471</b>
Federal government	65	.	0	5	80	150
Provincial governments	.	6	0	1	6	13
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	73	31	105
Higher education	.	.	.	.	158	158
Private non-profit organizations	.	.	.	.	22	22
Foreign	.	.	0	23	0	23
<b>2004 r Total sciences</b>						
<b>Total</b>	<b>81</b>	<b>6</b>	<b>0</b>	<b>94</b>	<b>266</b>	<b>448</b>
Federal government	80	.	0	4	73	157
Provincial governments	.	6	0	1	8	15
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	58	23	83
Higher education	.	.	.	.	141	141
Private non-profit organizations	.	.	.	.	22	22
Foreign	.	.	0	31	0	31
<b>2003 r Total sciences</b>						
<b>Total</b>	<b>66</b>	<b>6</b>	<b>0</b>	<b>79</b>	<b>259</b>	<b>409</b>
Federal government	64	.	0	6	60	131
Provincial governments	.	6	0	1	7	14
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	48	21	70
Higher education	.	.	.	.	146	146
Private non-profit organizations	.	.	.	.	24	24
Foreign	.	.	0	24	1	25
<b>2002 r Total sciences</b>						
<b>Total</b>	<b>76</b>	<b>6</b>	<b>0</b>	<b>93</b>	<b>225</b>	<b>400</b>
Federal government	75	.	0	5	52	131
Provincial governments	.	6	0	0 <sup>s</sup>	7	14
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	62	21	84
Higher education	.	.	.	.	127	127
Private non-profit organizations	.	.	.	.	17	17
Foreign	.	.	0	26	1	28

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.



Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-4**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — New Brunswick**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>30</b>	<b>2</b>	<b>2</b>	<b>102</b>	<b>135</b>	<b>271</b>
Federal government	29	.	0 <sup>s</sup>	1	34	65
Provincial governments	.	2	0 <sup>s</sup>	0 <sup>s</sup>	5	8
Provincial research organizations	.	.	.	.	.	..
Business enterprise	1	.	1	97	5	104
Higher education	.	.	.	.	84	84
Private non-profit organizations	.	.	.	.	7	7
Foreign	.	.	.	3	0 <sup>s</sup>	4
<b>2005 r Total sciences</b>						
<b>Total</b>	<b>26</b>	<b>2</b>	<b>2</b>	<b>96</b>	<b>130</b>	<b>256</b>
Federal government	25	.	0 <sup>s</sup>	3	35	63
Provincial governments	.	2	1	0 <sup>s</sup>	4	7
Provincial research organizations	.	.	.	.	.	0 <sup>s</sup>
Business enterprise	0 <sup>s</sup>	.	1	90	5	96
Higher education	.	.	.	.	80	80
Private non-profit organizations	.	.	.	.	7	7
Foreign	.	.	.	4	0 <sup>s</sup>	4
<b>2004 r Total sciences</b>						
<b>Total</b>	<b>26</b>	<b>2</b>	<b>2</b>	<b>82</b>	<b>114</b>	<b>227</b>
Federal government	26	.	0 <sup>s</sup>	1	30	57
Provincial governments	.	2	1	0 <sup>s</sup>	3	7
Provincial research organizations	.	.	.	.	.	0 <sup>s</sup>
Business enterprise	1	.	1	80	4	85
Higher education	.	.	.	.	70	70
Private non-profit organizations	.	.	.	.	5	5
Foreign	.	.	.	2	0 <sup>s</sup>	2
<b>2003 r Total sciences</b>						
<b>Total</b>	<b>30</b>	<b>2</b>	<b>2</b>	<b>64</b>	<b>118</b>	<b>216</b>
Federal government	30	.	0 <sup>s</sup>	1	30	61
Provincial governments	.	2	1	0 <sup>s</sup>	4	7
Provincial research organizations	.	.	.	.	.	0 <sup>s</sup>
Business enterprise	1	.	1	61	4	67
Higher education	.	.	.	.	72	72
Private non-profit organizations	.	.	.	.	7	7
Foreign	.	.	.	2	0 <sup>s</sup>	2
<b>2002 r Total sciences</b>						
<b>Total</b>	<b>46</b>	<b>2</b>	<b>2</b>	<b>62</b>	<b>99</b>	<b>211</b>
Federal government	45	.	0 <sup>s</sup>	2	21	68
Provincial governments	.	2	1	0 <sup>s</sup>	2	6
Provincial research organizations	.	.	.	.	.	0 <sup>s</sup>
Business enterprise	1	.	1	58	2	62
Higher education	.	.	.	.	67	67
Private non-profit organizations	.	.	.	.	6	6
Foreign	.	.	.	1	1	2

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-5**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>371</b>	<b>77</b>	<b>8</b>	<b>4,598</b>	<b>2,541</b>	<b>7,595</b>
Federal government	367	.	0 <sup>s</sup>	101	678	1,146
Provincial governments	0 <sup>s</sup>	77	5	66	229	378
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	0	2	3,966	227	4,199
Higher education	.	.	.	.	1,200	1,200
Private non-profit organizations	.	.	.	.	179	179
Foreign	.	.	0 <sup>s</sup>	465	28	493
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>368</b>	<b>75</b>	<b>10</b>	<b>4,199</b>	<b>2,556</b>	<b>7,208</b>
Federal government	362	.	0 <sup>s</sup>	99	703	1,164
Provincial governments	0 <sup>s</sup>	75	7	45	260	388
Provincial research organizations	.	.	0	.	.	0
Business enterprise	5	0	3	3,550	227	3,785
Higher education	.	.	.	.	1,180	1,180
Private non-profit organizations	.	.	.	.	158	158
Foreign	.	.	0 <sup>s</sup>	505	28	534
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>320</b>	<b>68</b>	<b>14</b>	<b>4,340</b>	<b>2,467</b>	<b>7,209</b>
Federal government	316	.	0 <sup>s</sup>	101	650	1,067
Provincial governments	0 <sup>s</sup>	68	10	34	318	430
Provincial research organizations	.	.	0	.	.	0
Business enterprise	4	0	4	3,726	192	3,926
Higher education	.	.	.	.	1,129	1,129
Private non-profit organizations	.	.	.	.	160	160
Foreign	.	.	0 <sup>s</sup>	479	19	497
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>314</b>	<b>68</b>	<b>15</b>	<b>4,202</b>	<b>2,345</b>	<b>6,943</b>
Federal government	310	.	0 <sup>s</sup>	97	646	1,053
Provincial governments	0 <sup>s</sup>	68	10	35	333	446
Provincial research organizations	.	.	0	.	.	0
Business enterprise	4	0	5	3,607	187	3,803
Higher education	.	.	.	.	998	998
Private non-profit organizations	.	.	.	.	165	165
Foreign	.	.	0 <sup>s</sup>	462	16	478
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>370</b>	<b>65</b>	<b>17</b>	<b>4,154</b>	<b>2,074</b>	<b>6,681</b>
Federal government	365	.	1	99	529	993
Provincial governments	0 <sup>s</sup>	65	11	33	262	372
Provincial research organizations	.	.	0	.	.	0
Business enterprise	5	0	4	3,533	175	3,717
Higher education	.	.	.	.	911	911
Private non-profit organizations	.	.	.	.	171	171
Foreign	.	.	1	489	26	516

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-6**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Ontario**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>494</b>	<b>70</b>	<b>0</b>	<b>8,033</b>	<b>4,088</b>	<b>12,685</b>
Federal government	464	0	0	95	1,003	1,563
Provincial governments	5	70	0	29	421	525
Provincial research organizations	.	.	..	.	.	..
Business enterprise	25	0	0	6,636	373	7,035
Higher education	.	.	.	.	1,864	1,864
Private non-profit organizations	.	.	.	.	357	357
Foreign	.	.	..	1,273	69	1,342
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>395</b>	<b>44</b>	<b>0</b>	<b>8,250</b>	<b>3,980</b>	<b>12,670</b>
Federal government	358	0	0	142	997	1,497
Provincial governments	6	44	0	26	402	479
Provincial research organizations	.	.	0	.	.	0
Business enterprise	31	0	0	6,705	378	7,114
Higher education	.	.	.	.	1,794	1,794
Private non-profit organizations	.	.	.	.	342	342
Foreign	.	.	0	1,377	67	1,444
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>329</b>	<b>46</b>	<b>0</b>	<b>7,871</b>	<b>3,835</b>	<b>12,080</b>
Federal government	303	0	0	106	914	1,323
Provincial governments	4	46	0	6	391	447
Provincial research organizations	.	.	0	.	.	0
Business enterprise	22	0	0	6,407	394	6,823
Higher education	.	.	.	.	1,791	1,791
Private non-profit organizations	.	.	.	.	283	283
Foreign	.	.	0	1,352	62	1,414
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>351</b>	<b>48</b>	<b>0</b>	<b>7,468</b>	<b>3,187</b>	<b>11,054</b>
Federal government	324	0	0	136	826	1,286
Provincial governments	5	48	0	4	357	414
Provincial research organizations	.	.	0	.	.	0
Business enterprise	22	0	0	6,057	294	6,372
Higher education	.	.	.	.	1,423	1,423
Private non-profit organizations	.	.	.	.	243	243
Foreign	.	.	0	1,272	43	1,315
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>324</b>	<b>44</b>	<b>0</b>	<b>7,064</b>	<b>2,996</b>	<b>10,426</b>
Federal government	294	0	0	136	685	1,114
Provincial governments	7	44	0	4	308	362
Provincial research organizations	.	.	0	.	.	0
Business enterprise	23	0	0	5,836	295	6,154
Higher education	.	.	.	.	1,416	1,416
Private non-profit organizations	.	.	.	.	239	239
Foreign	.	.	0	1,088	52	1,140

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-7**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Manitoba**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>81</b>	<b>6</b>	<b>0</b>	<b>184</b>	<b>287</b>	<b>558</b>
Federal government	80	.	.	1	70	150
Provincial governments	0 <sup>s</sup>	6	0	1	19	26
Provincial research organizations	.	.	.	.	.	.
Business enterprise	1	.	0	170	21	192
Higher education	.	.	.	.	136	136
Private non-profit organizations	.	.	.	.	38	38
Foreign	.	.	.	12	4	16
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>83</b>	<b>4</b>	<b>0</b>	<b>199</b>	<b>294</b>	<b>581</b>
Federal government	81	.	.	4	72	157
Provincial governments	0 <sup>s</sup>	4	0	1	15	21
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	.	0	178	19	198
Higher education	.	.	.	.	149	149
Private non-profit organizations	.	.	.	.	38	38
Foreign	.	.	.	17	2	19
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>73</b>	<b>4</b>	<b>0</b>	<b>183</b>	<b>260</b>	<b>519</b>
Federal government	71	.	.	4	72	146
Provincial governments	0 <sup>s</sup>	4	0	1	19	25
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	164	16	181
Higher education	.	.	.	.	123	123
Private non-profit organizations	.	.	.	.	29	29
Foreign	.	.	.	13	2	15
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>63</b>	<b>4</b>	<b>0</b>	<b>150</b>	<b>239</b>	<b>456</b>
Federal government	62	.	.	7	62	131
Provincial governments	0 <sup>s</sup>	4	0	3	16	22
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	133	19	154
Higher education	.	.	.	.	114	114
Private non-profit organizations	.	.	.	.	25	25
Foreign	.	.	.	7	2	9
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>72</b>	<b>3</b>	<b>0</b>	<b>155</b>	<b>225</b>	<b>454</b>
Federal government	69	.	.	5	56	130
Provincial governments	1	3	0	2	15	20
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	.	0	134	18	154
Higher education	.	.	.	.	108	108
Private non-profit organizations	.	.	.	.	24	24
Foreign	.	.	.	14	3	17

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-8**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Saskatchewan**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>67</b>	<b>4</b>	<b>12</b>	<b>167</b>	<b>215</b>	<b>465</b>
Federal government	66	.	1	3	53	122
Provincial governments	.	4	4	1	29	38
Provincial research organizations	.	.	..	.	.	..
Business enterprise	1	.	6	152	8	168
Higher education	.	.	.	.	113	113
Private non-profit organizations	.	.	.	.	12	12
Foreign	.	.	0 <sup>s</sup>	10	1	11
<b>2005 r Total sciences</b>						
<b>Total</b>	<b>68</b>	<b>4</b>	<b>11</b>	<b>152</b>	<b>218</b>	<b>453</b>
Federal government	67	.	1	4	54	126
Provincial governments	.	4	4	2	20	30
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	6	133	13	153
Higher education	.	.	.	.	116	116
Private non-profit organizations	.	.	.	.	14	14
Foreign	.	.	0 <sup>s</sup>	13	0	13
<b>2004 r Total sciences</b>						
<b>Total</b>	<b>54</b>	<b>4</b>	<b>9</b>	<b>113</b>	<b>245</b>	<b>425</b>
Federal government	53	.	1	5	65	123
Provincial governments	.	4	3	2	27	36
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	5	99	18	123
Higher education	.	.	.	.	122	122
Private non-profit organizations	.	.	.	.	12	12
Foreign	.	.	0 <sup>s</sup>	7	0	7
<b>2003 r Total sciences</b>						
<b>Total</b>	<b>54</b>	<b>4</b>	<b>7</b>	<b>88</b>	<b>245</b>	<b>398</b>
Federal government	53	.	1	3	64	121
Provincial governments	.	4	3	2	30	39
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	0 <sup>s</sup>
Business enterprise	1	.	3	76	18	98
Higher education	.	.	.	.	121	121
Private non-profit organizations	.	.	.	.	12	12
Foreign	.	.	0 <sup>s</sup>	7	1	8
<b>2002 r Total sciences</b>						
<b>Total</b>	<b>53</b>	<b>4</b>	<b>7</b>	<b>112</b>	<b>259</b>	<b>435</b>
Federal government	52	.	0 <sup>s</sup>	4	57	113
Provincial governments	.	4	3	4	36	46
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	0 <sup>s</sup>
Business enterprise	1	.	4	96	16	117
Higher education	.	.	.	.	129	129
Private non-profit organizations	.	.	.	.	21	21
Foreign	.	.	0 <sup>s</sup>	8	0	8

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-9**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Alberta**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>133</b>	<b>125</b>	<b>0</b>	<b>1,236</b>	<b>919</b>	<b>2,412</b>
Federal government	132	4	0	13	223	372
Provincial governments	.	88	0	3	173	264
Provincial research organizations	.	.	..	.	.	..
Business enterprise	1	33	0	1,109	77	1,220
Higher education	.	.	.	.	383	383
Private non-profit organizations	.	.	.	.	57	57
Foreign	.	..	..	110	6	117
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>130</b>	<b>122</b>	<b>0</b>	<b>1,193</b>	<b>962</b>	<b>2,406</b>
Federal government	128	4	0	21	252	405
Provincial governments	.	89	0	4	183	275
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	30	0	1,089	63	1,183
Higher education	.	.	.	.	396	396
Private non-profit organizations	.	.	.	.	61	61
Foreign	.	..	0	79	7	86
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>110</b>	<b>114</b>	<b>0</b>	<b>1,131</b>	<b>899</b>	<b>2,254</b>
Federal government	109	2	0	10	206	328
Provincial governments	.	85	0	4	232	321
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	26	0	1,033	60	1,119
Higher education	.	.	.	.	347	347
Private non-profit organizations	.	.	.	.	49	49
Foreign	.	..	0	85	5	91
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>87</b>	<b>103</b>	<b>0</b>	<b>861</b>	<b>827</b>	<b>1,877</b>
Federal government	86	2	0	12	221	321
Provincial governments	.	75	0	4	182	262
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	25	0	766	60	852
Higher education	.	.	.	.	314	314
Private non-profit organizations	.	.	.	.	44	44
Foreign	.	..	0	79	6	85
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>92</b>	<b>108</b>	<b>0</b>	<b>782</b>	<b>727</b>	<b>1,709</b>
Federal government	91	2	0	7	181	282
Provincial governments	.	77	0	2	122	201
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	29	0	739	45	814
Higher education	.	.	.	.	321	321
Private non-profit organizations	.	.	.	.	52	52
Foreign	.	..	0	33	7	39

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-10**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — British Columbia**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>91</b>	<b>18</b>	<b>0</b>	<b>1,576</b>	<b>959</b>	<b>2,644</b>
Federal government	89	.	0	35	296	419
Provincial governments	0 <sup>s</sup>	18	0	10	107	134
Provincial research organizations	.	.	.	.	.	.
Business enterprise	2	0	0	985	47	1,034
Higher education	.	.	.	.	398	398
Private non-profit organizations	.	.	.	.	99	99
Foreign	.	.	.	547	13	560
<b>2005 r Total sciences</b>						
<b>Total</b>	<b>91</b>	<b>18</b>	<b>0</b>	<b>1,493</b>	<b>904</b>	<b>2,505</b>
Federal government	88	.	0	35	294	417
Provincial governments	0 <sup>s</sup>	18	0	9	81	108
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	0	0	931	44	977
Higher education	.	.	.	.	377	377
Private non-profit organizations	.	.	.	.	98	98
Foreign	.	.	.	518	10	528
<b>2004 r Total sciences</b>						
<b>Total</b>	<b>91</b>	<b>16</b>	<b>0</b>	<b>1,434</b>	<b>832</b>	<b>2,373</b>
Federal government	88	.	0	36	284	409
Provincial governments	0 <sup>s</sup>	16	0	10	39	64
Provincial research organizations	.	.	0	.	.	0
Business enterprise	3	0	0	948	32	983
Higher education	.	.	.	.	348	348
Private non-profit organizations	.	.	.	.	121	121
Foreign	.	.	.	440	8	448
<b>2003 r Total sciences</b>						
<b>Total</b>	<b>80</b>	<b>15</b>	<b>0</b>	<b>1,173</b>	<b>785</b>	<b>2,052</b>
Federal government	77	.	0	32	231	340
Provincial governments	0 <sup>s</sup>	15	0	21	88	124
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	0	0	897	65	964
Higher education	.	.	.	.	320	320
Private non-profit organizations	.	.	.	.	72	72
Foreign	.	.	.	224	7	231
<b>2002 r Total sciences</b>						
<b>Total</b>	<b>99</b>	<b>20</b>	<b>0</b>	<b>1,093</b>	<b>736</b>	<b>1,949</b>
Federal government	97	.	0	38	204	338
Provincial governments	0 <sup>s</sup>	20	0	8	75	103
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	0	0	890	60	952
Higher education	.	.	.	.	316	316
Private non-profit organizations	.	.	.	.	70	70
Foreign	.	.	.	158	11	169

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-11**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — Yukon, Northwest Territories and Nunavut**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>5</b>	.	.	<b>24</b>	.	<b>28</b>
Federal government	4	.	.	0	.	4
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	18	.	18
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	6	.	6
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>9</b>	.	.	<b>10</b>	.	<b>19</b>
Federal government	9	.	.	0 <sup>s</sup>	.	9
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	10	.	10
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>6</b>	.	.	<b>13</b>	.	<b>19</b>
Federal government	5	.	.	0 <sup>s</sup>	.	5
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	13	.	13
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>5</b>	.	.	<b>1</b>	.	<b>6</b>
Federal government	5	.	.	0	.	5
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	1	.	1
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>3</b>	.	.	<b>1</b>	.	<b>4</b>
Federal government	3	.	.	0	.	3
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	1	.	1
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.



**Table 6-12**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — National Capital Region, Ontario/Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>1,098</b>	.	.	.	.	<b>1,098</b>
Federal government	1,080	.	.	.	.	<b>1,080</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	18	.	.	.	.	<b>18</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>1,123</b>	.	.	.	.	<b>1,123</b>
Federal government	1,103	.	.	.	.	<b>1,103</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	19	.	.	.	.	<b>19</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>960</b>	.	.	.	.	<b>960</b>
Federal government	945	.	.	.	.	<b>945</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	14	.	.	.	.	<b>14</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>999</b>	.	.	.	.	<b>999</b>
Federal government	983	.	.	.	.	<b>983</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	15	.	.	.	.	<b>15</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>1,015</b>	.	.	.	.	<b>1,015</b>
Federal government	994	.	.	.	.	<b>994</b>
Provincial governments	2	.	.	.	.	<b>2</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	18	.	.	.	.	<b>18</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 6-13**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — National Capital Region, Ontario**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>1,012</b>	.	.	.	.	<b>1,012</b>
Federal government	998	.	.	.	.	<b>998</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	14	.	.	.	.	<b>14</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>1,040</b>	.	.	.	.	<b>1,040</b>
Federal government	1,025	.	.	.	.	<b>1,025</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	15	.	.	.	.	<b>15</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>912</b>	.	.	.	.	<b>912</b>
Federal government	901	.	.	.	.	<b>901</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	11	.	.	.	.	<b>11</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>950</b>	.	.	.	.	<b>950</b>
Federal government	936	.	.	.	.	<b>936</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	13	.	.	.	.	<b>13</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>950</b>	.	.	.	.	<b>950</b>
Federal government	932	.	.	.	.	<b>932</b>
Provincial governments	2	.	.	.	.	<b>2</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	16	.	.	.	.	<b>16</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 6-14**  
**Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — National Capital Region, Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Total sciences</b>						
<b>Total</b>	<b>86</b>	.	.	.	.	<b>86</b>
Federal government	82	.	.	.	.	<b>82</b>
Provincial governments	0 <sup>s</sup>	.	.	.	.	<b>0<sup>s</sup></b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	.	.	.	.	<b>4</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2005 † Total sciences</b>						
<b>Total</b>	<b>83</b>	.	.	.	.	<b>83</b>
Federal government	78	.	.	.	.	<b>78</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	.	.	.	.	<b>4</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2004 † Total sciences</b>						
<b>Total</b>	<b>48</b>	.	.	.	.	<b>48</b>
Federal government	44	.	.	.	.	<b>44</b>
Provincial governments	0 <sup>s</sup>	.	.	.	.	<b>0<sup>s</sup></b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	<b>3</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2003 † Total sciences</b>						
<b>Total</b>	<b>49</b>	.	.	.	.	<b>49</b>
Federal government	46	.	.	.	.	<b>46</b>
Provincial governments	0 <sup>s</sup>	.	.	.	.	<b>0<sup>s</sup></b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	<b>3</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2002 † Total sciences</b>						
<b>Total</b>	<b>65</b>	.	.	.	.	<b>65</b>
Federal government	62	.	.	.	.	<b>62</b>
Provincial governments	0 <sup>s</sup>	.	.	.	.	<b>0<sup>s</sup></b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	2	.	.	.	.	<b>2</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 7**  
**National Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering, Canada**

Funding sector	Performing sector						Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	
millions of dollars							
<b>2008<sup>p</sup> Natural sciences</b>							
<b>Total</b>	<b>2,289</b>	<b>259</b>	<b>25</b>	<b>16,316</b>	<b>7,886</b>	<b>116</b>	<b>26,892</b>
Federal government	2,244	4	1	263	2,132	35	4,681
Provincial governments	3	226	12	113	812	9	1,173
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	42	30	11	13,461	793	15	14,352
Higher education	.	.	.	.	3,375	.	3,375
Private non-profit organizations	.	.	.	.	645	51	696
Foreign	.	..	0 <sup>s</sup>	2,479	128	6	2,615
<b>2007<sup>p</sup> Natural sciences</b>							
<b>Total</b>	<b>2,359</b>	<b>261</b>	<b>25</b>	<b>16,159</b>	<b>7,807</b>	<b>112</b>	<b>26,724</b>
Federal government	2,294	4	1	261	2,111	34	4,705
Provincial governments	6	225	12	111	804	8	1,166
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	60	31	11	13,331	785	14	14,233
Higher education	.	.	.	.	3,342	.	3,342
Private non-profit organizations	.	.	.	.	639	49	688
Foreign	.	..	0 <sup>s</sup>	2,455	127	6	2,589
<b>2006 Natural sciences</b>							
<b>Total</b>	<b>2,340</b>	<b>280</b>	<b>22</b>	<b>16,137</b>	<b>7,715</b>	<b>109</b>	<b>26,603</b>
Federal government	2,278	4	1	261	2,086	33	4,663
Provincial governments	7	243	10	111	794	8	1,174
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	55	33	10	13,313	775	14	14,200
Higher education	.	.	.	.	3,302	.	3,302
Private non-profit organizations	.	.	.	.	631	48	679
Foreign	.	..	0 <sup>s</sup>	2,452	126	6	2,584
<b>2005<sup>r</sup> Natural sciences</b>							
<b>Total</b>	<b>2,289</b>	<b>252</b>	<b>23</b>	<b>15,791</b>	<b>7,627</b>	<b>106</b>	<b>26,088</b>
Federal government	2,217	4	1	322	2,126	35	4,704
Provincial governments	9	219	12	88	779	10	1,116
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	64	30	10	12,839	774	10	13,726
Higher education	.	.	.	.	3,229	.	3,229
Private non-profit organizations	.	.	.	.	603	31	634
Foreign	.	..	0 <sup>s</sup>	2,542	116	17	2,675
<b>2004<sup>r</sup> Natural sciences</b>							
<b>Total</b>	<b>1,965</b>	<b>241</b>	<b>25</b>	<b>15,299</b>	<b>7,280</b>	<b>98</b>	<b>24,907</b>
Federal government	1,909	2	1	271	1,960	11	4,154
Provincial governments	7	212	14	59	831	14	1,137
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	49	26	10	12,552	728	12	13,377
Higher education	.	.	.	.	3,110	.	3,110
Private non-profit organizations	.	.	.	.	556	48	604
Foreign	.	..	0 <sup>s</sup>	2,417	96	13	2,526
<b>2003<sup>r</sup> Natural sciences</b>							
<b>Total</b>	<b>1,963</b>	<b>229</b>	<b>24</b>	<b>14,123</b>	<b>6,544</b>	<b>87</b>	<b>22,971</b>
Federal government	1,907	2	1	299	1,846	14	4,070
Provincial governments	8	202	14	70	814	15	1,124
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	48	25	9	11,671	654	13	12,421
Higher education	.	.	.	.	2,669	.	2,669
Private non-profit organizations	.	.	.	.	485	37	523
Foreign	.	..	0 <sup>s</sup>	2,082	76	8	2,167

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

Table 7 – continued

**National Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering, Canada**

Funding sector	Performing sector						Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	
millions of dollars							
<b>2002 † Natural sciences</b>							
<b>Total</b>	<b>2,073</b>	<b>236</b>	<b>26</b>	<b>13,540</b>	<b>6,041</b>	<b>59</b>	<b>21,974</b>
Federal government	2,007	2	1	300	1,588	5	3,904
Provincial governments	11	205	15	53	663	19	966
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	55	29	9	11,365	619	11	12,088
Higher education	.	.	.	.	2,577	.	2,577
Private non-profit organizations	.	.	.	.	493	23	516
Foreign	.	..	1	1,822	101	1	1,924
<b>2001 † Natural sciences</b>							
<b>Total</b>	<b>2,010</b>	<b>234</b>	<b>23</b>	<b>14,266</b>	<b>5,150</b>	<b>59</b>	<b>21,741</b>
Federal government	1,951	0	1	457	1,356	6	3,771
Provincial governments	6	203	12	51	570	18	860
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	53	31	9	10,929	578	9	11,617
Higher education	.	.	.	.	2,150	.	2,150
Private non-profit organizations	.	.	.	.	412	25	436
Foreign	.	..	1	2,828	84	1	2,915
<b>2000 † Natural sciences</b>							
<b>Total</b>	<b>1,995</b>	<b>146</b>	<b>66</b>	<b>12,395</b>	<b>4,591</b>	<b>55</b>	<b>19,248</b>
Federal government	1,938	0	2	239	1,106	3	3,288
Provincial governments	3	146	38	45	470	15	717
Provincial research organizations	.	.	1	.	.	.	1
Business enterprise	54	0	18	8,587	531	10	9,200
Higher education	.	.	.	.	2,092	.	2,092
Private non-profit organizations	.	.	.	.	342	26	367
Foreign	.	..	7	3,524	50	1	3,582
<b>1999 † Natural sciences</b>							
<b>Total</b>	<b>1,774</b>	<b>160</b>	<b>60</b>	<b>10,399</b>	<b>4,020</b>	<b>54</b>	<b>16,468</b>
Federal government	1,729	0	1	309	943	7	2,989
Provincial governments	4	160	34	57	386	13	654
Provincial research organizations	.	.	3	.	.	.	3
Business enterprise	41	0	19	7,391	440	6	7,897
Higher education	.	.	.	.	1,909	.	1,909
Private non-profit organizations	.	.	.	.	285	26	311
Foreign	.	..	3	2,642	57	2	2,704
<b>1998 † Natural sciences</b>							
<b>Total</b>	<b>1,667</b>	<b>139</b>	<b>61</b>	<b>9,682</b>	<b>3,466</b>	<b>68</b>	<b>15,083</b>
Federal government	1,615	0	3	262	751	10	2,641
Provincial governments	4	139	34	56	297	17	548
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	.	0 <sup>s</sup>
Business enterprise	49	0	21	6,865	393	8	7,336
Higher education	.	.	.	.	1,697	.	1,697
Private non-profit organizations	.	.	.	.	278	32	310
Foreign	.	..	3	2,499	50	1	2,552
<b>1997 † Natural sciences</b>							
<b>Total</b>	<b>1,651</b>	<b>140</b>	<b>58</b>	<b>8,739</b>	<b>3,147</b>	<b>73</b>	<b>13,809</b>
Federal government	1,585	0	4	355	692	6	2,642
Provincial governments	3	140	30	77	296	18	564
Provincial research organizations	.	.	1	.	.	.	1
Business enterprise	63	0	19	6,557	365	10	7,014
Higher education	.	.	.	.	1,486	.	1,486
Private non-profit organizations	.	.	.	.	268	38	306
Foreign	.	..	4	1,750	40	1	1,794

Note(s): Components may not add to totals due to rounding.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-1**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering**  
**— Newfoundland and Labrador**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>27</b>	<b>4</b>	<b>0</b>	<b>99</b>	<b>101</b>	<b>231</b>
Federal government	27	.	.	8	31	66
Provincial governments	.	4	.	1	2	7
Provincial research organizations	.	.	.	.	.	..
Business enterprise	1	.	.	87	15	102
Higher education	.	.	.	.	49	49
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	3	4	7
<b>2005 r Natural sciences</b>						
<b>Total</b>	<b>28</b>	<b>5</b>	<b>0</b>	<b>86</b>	<b>117</b>	<b>235</b>
Federal government	27	.	.	8	35	71
Provincial governments	.	5	.	1	1	7
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	74	23	97
Higher education	.	.	.	.	55	55
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	3	2	5
<b>2004 r Natural sciences</b>						
<b>Total</b>	<b>23</b>	<b>5</b>	<b>0</b>	<b>30</b>	<b>89</b>	<b>147</b>
Federal government	22	.	.	3	28	53
Provincial governments	.	5	.	1	1	7
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	19	16	36
Higher education	.	.	.	.	43	43
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	7	0	7
<b>2003 r Natural sciences</b>						
<b>Total</b>	<b>23</b>	<b>5</b>	<b>0</b>	<b>31</b>	<b>85</b>	<b>144</b>
Federal government	22	.	.	3	29	53
Provincial governments	.	5	.	1	1	6
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	21	10	31
Higher education	.	.	.	.	44	44
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	6	0	6
<b>2002 r Natural sciences</b>						
<b>Total</b>	<b>32</b>	<b>5</b>	<b>0</b>	<b>22</b>	<b>73</b>	<b>131</b>
Federal government	31	.	.	4	24	59
Provincial governments	.	5	.	0 <sup>s</sup>	1	6
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	12	10	23
Higher education	.	.	.	.	37	37
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	5	0	5

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 8-2**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering**  
**— Prince Edward Island**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>26</b>	<b>0</b>	<b>..</b>	<b>13</b>	<b>22</b>	<b>61</b>
Federal government	25	.	.	1	7	33
Provincial governments	.	.	.	0 <sup>s</sup>	1	1
Provincial research organizations	.	.	.	.	.	..
Business enterprise	0 <sup>s</sup>	.	.	11	1	12
Higher education	.	.	.	.	13	13
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2005 r Natural sciences</b>						
<b>Total</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>20</b>	<b>59</b>
Federal government	27	.	.	1	7	36
Provincial governments	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>	1
Provincial research organizations	.	.	.	.	.	0
Business enterprise	1	.	.	7	0 <sup>s</sup>	8
Higher education	.	.	.	.	12	12
Private non-profit organizations	.	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>
Foreign	.	.	.	2	.	2
<b>2004 r Natural sciences</b>						
<b>Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>17</b>	<b>34</b>
Federal government	10	.	.	1	6	17
Provincial governments	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>	1
Provincial research organizations	.	.	.	.	.	0
Business enterprise	0 <sup>s</sup>	.	.	6	1	6
Higher education	.	.	.	.	10	10
Private non-profit organizations	.	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2003 r Natural sciences</b>						
<b>Total</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>18</b>	<b>37</b>
Federal government	12	.	.	2	5	19
Provincial governments	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>	1
Provincial research organizations	.	.	.	.	.	0
Business enterprise	0 <sup>s</sup>	.	.	5	0 <sup>s</sup>	5
Higher education	.	.	.	.	12	12
Private non-profit organizations	.	.	.	.	1	1
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2002 r Natural sciences</b>						
<b>Total</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>13</b>	<b>26</b>
Federal government	8	.	.	1	3	13
Provincial governments	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>	0 <sup>s</sup>
Provincial research organizations	.	.	.	.	.	0
Business enterprise	0 <sup>s</sup>	.	.	3	1	4
Higher education	.	.	.	.	8	8
Private non-profit organizations	.	.	.	.	0 <sup>s</sup>	0 <sup>s</sup>
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-3**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — Nova Scotia**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>73</b>	<b>6</b>	<b>..</b>	<b>106</b>	<b>246</b>	<b>432</b>
Federal government	72	.	..	3	68	144
Provincial governments	.	6	..	1	4	11
Provincial research organizations	.	.	..	.	.	..
Business enterprise	1	.	..	81	35	117
Higher education	.	.	.	.	117	117
Private non-profit organizations	.	.	.	.	21	21
Foreign	.	.	..	21	1	22
<b>2005 † Natural sciences</b>						
<b>Total</b>	<b>66</b>	<b>6</b>	<b>0</b>	<b>102</b>	<b>226</b>	<b>400</b>
Federal government	65	.	0	5	64	134
Provincial governments	.	6	0	1	5	11
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	73	30	104
Higher education	.	.	.	.	105	105
Private non-profit organizations	.	.	.	.	21	21
Foreign	.	.	0	23	0	23
<b>2004 † Natural sciences</b>						
<b>Total</b>	<b>81</b>	<b>6</b>	<b>0</b>	<b>94</b>	<b>202</b>	<b>384</b>
Federal government	80	.	0	4	60	144
Provincial governments	.	6	0	1	6	14
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	58	22	82
Higher education	.	.	.	.	93	93
Private non-profit organizations	.	.	.	.	21	21
Foreign	.	.	0	31	0	31
<b>2003 † Natural sciences</b>						
<b>Total</b>	<b>65</b>	<b>6</b>	<b>0</b>	<b>79</b>	<b>201</b>	<b>351</b>
Federal government	64	.	0	6	50	120
Provincial governments	.	6	0	1	5	12
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	48	21	70
Higher education	.	.	.	.	101	101
Private non-profit organizations	.	.	.	.	23	23
Foreign	.	.	0	24	1	25
<b>2002 † Natural sciences</b>						
<b>Total</b>	<b>76</b>	<b>6</b>	<b>0</b>	<b>93</b>	<b>174</b>	<b>349</b>
Federal government	75	.	0	5	44	126
Provincial governments	.	6	0	0 <sup>s</sup>	6	12
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	62	21	84
Higher education	.	.	.	.	86	86
Private non-profit organizations	.	.	.	.	16	16
Foreign	.	.	0	26	1	28

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.



**Table 8-4**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering**  
**— New Brunswick**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>30</b>	<b>2</b>	<b>2</b>	<b>102</b>	<b>91</b>	<b>226</b>
Federal government	29	.	0 <sup>s</sup>	1	26	57
Provincial governments	.	2	0 <sup>s</sup>	0 <sup>s</sup>	4	7
Provincial research organizations	.	.	.	.	.	..
Business enterprise	1	.	1	97	5	104
Higher education	.	.	.	.	49	49
Private non-profit organizations	.	.	.	.	7	7
Foreign	.	.	.	3	0 <sup>s</sup>	4
<b>2005 r Natural sciences</b>						
<b>Total</b>	<b>26</b>	<b>2</b>	<b>2</b>	<b>96</b>	<b>84</b>	<b>211</b>
Federal government	25	.	0 <sup>s</sup>	3	24	53
Provincial governments	.	2	1	0 <sup>s</sup>	3	6
Provincial research organizations	.	.	.	.	.	0 <sup>s</sup>
Business enterprise	0 <sup>s</sup>	.	1	90	5	96
Higher education	.	.	.	.	46	46
Private non-profit organizations	.	.	.	.	6	6
Foreign	.	.	.	4	0 <sup>s</sup>	4
<b>2004 r Natural sciences</b>						
<b>Total</b>	<b>26</b>	<b>2</b>	<b>2</b>	<b>82</b>	<b>74</b>	<b>186</b>
Federal government	26	.	0 <sup>s</sup>	1	22	49
Provincial governments	.	2	1	0 <sup>s</sup>	3	6
Provincial research organizations	.	.	.	.	.	0 <sup>s</sup>
Business enterprise	1	.	1	80	4	85
Higher education	.	.	.	.	40	40
Private non-profit organizations	.	.	.	.	5	5
Foreign	.	.	.	2	0 <sup>s</sup>	2
<b>2003 r Natural sciences</b>						
<b>Total</b>	<b>30</b>	<b>2</b>	<b>2</b>	<b>64</b>	<b>80</b>	<b>178</b>
Federal government	30	.	0 <sup>s</sup>	1	23	54
Provincial governments	.	2	1	0 <sup>s</sup>	3	6
Provincial research organizations	.	.	.	.	.	0 <sup>s</sup>
Business enterprise	1	.	1	61	4	67
Higher education	.	.	.	.	43	43
Private non-profit organizations	.	.	.	.	7	7
Foreign	.	.	.	2	0 <sup>s</sup>	2
<b>2002 r Natural sciences</b>						
<b>Total</b>	<b>46</b>	<b>2</b>	<b>2</b>	<b>62</b>	<b>67</b>	<b>178</b>
Federal government	45	.	0 <sup>s</sup>	2	17	65
Provincial governments	.	2	1	0 <sup>s</sup>	2	5
Provincial research organizations	.	.	.	.	.	0 <sup>s</sup>
Business enterprise	1	.	1	58	2	62
Higher education	.	.	.	.	39	39
Private non-profit organizations	.	.	.	.	6	6
Foreign	.	.	.	1	1	2

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-5**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>364</b>	<b>54</b>	<b>8</b>	<b>4,598</b>	<b>2,061</b>	<b>7,085</b>
Federal government	359	.	0 <sup>s</sup>	101	580	1,040
Provincial governments	0 <sup>s</sup>	54	5	66	184	310
Provincial research organizations	.	.	..	.	.	..
Business enterprise	4	0	2	3,966	213	4,186
Higher education	.	.	.	.	918	918
Private non-profit organizations	.	.	.	.	138	138
Foreign	.	.	0 <sup>s</sup>	465	28	493
<b>2005<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>367</b>	<b>54</b>	<b>10</b>	<b>4,199</b>	<b>2,064</b>	<b>6,695</b>
Federal government	362	.	0 <sup>s</sup>	99	603	1,064
Provincial governments	0 <sup>s</sup>	54	7	45	208	315
Provincial research organizations	.	.	0	.	.	0
Business enterprise	5	0	3	3,550	214	3,771
Higher education	.	.	.	.	890	890
Private non-profit organizations	.	.	.	.	121	121
Foreign	.	.	0 <sup>s</sup>	505	28	534
<b>2004<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>320</b>	<b>50</b>	<b>14</b>	<b>4,340</b>	<b>1,981</b>	<b>6,705</b>
Federal government	315	.	0 <sup>s</sup>	101	556	972
Provincial governments	0 <sup>s</sup>	50	10	34	254	348
Provincial research organizations	.	.	0	.	.	0
Business enterprise	4	0	4	3,726	180	3,914
Higher education	.	.	.	.	850	850
Private non-profit organizations	.	.	.	.	122	122
Foreign	.	.	0 <sup>s</sup>	479	19	497
<b>2003<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>314</b>	<b>50</b>	<b>15</b>	<b>4,202</b>	<b>1,891</b>	<b>6,472</b>
Federal government	309	.	0 <sup>s</sup>	97	555	962
Provincial governments	0 <sup>s</sup>	50	10	35	266	362
Provincial research organizations	.	.	0	.	.	0
Business enterprise	4	0	5	3,607	176	3,792
Higher education	.	.	.	.	748	748
Private non-profit organizations	.	.	.	.	130	130
Foreign	.	.	0 <sup>s</sup>	462	16	478
<b>2002<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>370</b>	<b>49</b>	<b>17</b>	<b>4,154</b>	<b>1,678</b>	<b>6,268</b>
Federal government	365	.	1	99	466	930
Provincial governments	0 <sup>s</sup>	49	11	33	210	303
Provincial research organizations	.	.	0	.	.	0
Business enterprise	5	0	4	3,533	164	3,706
Higher education	.	.	.	.	679	679
Private non-profit organizations	.	.	.	.	133	133
Foreign	.	.	1	489	26	516

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-6**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — Ontario**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>491</b>	<b>66</b>	<b>0</b>	<b>8,033</b>	<b>3,289</b>	<b>11,878</b>
Federal government	461	0	0	95	834	1,389
Provincial governments	5	66	0	29	337	437
Provincial research organizations	.	.	..	.	.	..
Business enterprise	25	0	0	6,636	358	7,019
Higher education	.	.	.	.	1,393	1,393
Private non-profit organizations	.	.	.	.	299	299
Foreign	.	.	..	1,273	69	1,342
<b>2005 r Natural sciences</b>						
<b>Total</b>	<b>392</b>	<b>41</b>	<b>0</b>	<b>8,250</b>	<b>3,219</b>	<b>11,902</b>
Federal government	355	0	0	142	831	1,329
Provincial governments	6	41	0	26	322	394
Provincial research organizations	.	.	0	.	.	0
Business enterprise	31	0	0	6,705	365	7,101
Higher education	.	.	.	.	1,352	1,352
Private non-profit organizations	.	.	.	.	282	282
Foreign	.	.	0	1,377	67	1,444
<b>2004 r Natural sciences</b>						
<b>Total</b>	<b>327</b>	<b>42</b>	<b>0</b>	<b>7,871</b>	<b>3,139</b>	<b>11,379</b>
Federal government	301	0	0	106	766	1,173
Provincial governments	4	42	0	6	313	365
Provincial research organizations	.	.	0	.	.	0
Business enterprise	22	0	0	6,407	381	6,810
Higher education	.	.	.	.	1,382	1,382
Private non-profit organizations	.	.	.	.	235	235
Foreign	.	.	0	1,352	62	1,414
<b>2003 r Natural sciences</b>						
<b>Total</b>	<b>349</b>	<b>44</b>	<b>0</b>	<b>7,468</b>	<b>2,584</b>	<b>10,445</b>
Federal government	322	0	0	136	698	1,155
Provincial governments	5	44	0	4	286	339
Provincial research organizations	.	.	0	.	.	0
Business enterprise	22	0	0	6,057	283	6,362
Higher education	.	.	.	.	1,075	1,075
Private non-profit organizations	.	.	.	.	199	199
Foreign	.	.	0	1,272	43	1,315
<b>2002 r Natural sciences</b>						
<b>Total</b>	<b>322</b>	<b>41</b>	<b>0</b>	<b>7,064</b>	<b>2,460</b>	<b>9,887</b>
Federal government	292	0	0	136	602	1,030
Provincial governments	7	41	0	4	246	298
Provincial research organizations	.	.	0	.	.	0
Business enterprise	23	0	0	5,836	285	6,144
Higher education	.	.	.	.	1,075	1,075
Private non-profit organizations	.	.	.	.	200	200
Foreign	.	.	0	1,088	52	1,140

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-7**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering**  
**— Manitoba**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>81</b>	<b>5</b>	<b>0</b>	<b>184</b>	<b>224</b>	<b>493</b>
Federal government	80	.	.	1	58	138
Provincial governments	0 <sup>s</sup>	5	0	1	15	21
Provincial research organizations	.	.	..	.	.	..
Business enterprise	1	.	0	170	20	191
Higher education	.	.	.	.	95	95
Private non-profit organizations	.	.	.	.	32	32
Foreign	.	.	.	12	4	16
<b>2005<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>83</b>	<b>4</b>	<b>0</b>	<b>199</b>	<b>227</b>	<b>513</b>
Federal government	81	.	.	4	59	144
Provincial governments	0 <sup>s</sup>	4	0	1	12	17
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	.	0	178	18	197
Higher education	.	.	.	.	105	105
Private non-profit organizations	.	.	.	.	32	32
Foreign	.	.	.	17	2	19
<b>2004<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>73</b>	<b>3</b>	<b>0</b>	<b>183</b>	<b>201</b>	<b>459</b>
Federal government	71	.	.	4	60	134
Provincial governments	0 <sup>s</sup>	3	0	1	15	20
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	164	15	181
Higher education	.	.	.	.	85	85
Private non-profit organizations	.	.	.	.	24	24
Foreign	.	.	.	13	2	15
<b>2003<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>63</b>	<b>3</b>	<b>0</b>	<b>150</b>	<b>185</b>	<b>400</b>
Federal government	62	.	.	7	52	121
Provincial governments	0 <sup>s</sup>	3	0	3	13	18
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	0	133	18	153
Higher education	.	.	.	.	79	79
Private non-profit organizations	.	.	.	.	21	21
Foreign	.	.	.	7	2	9
<b>2002<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>72</b>	<b>2</b>	<b>0</b>	<b>155</b>	<b>176</b>	<b>404</b>
Federal government	69	.	.	5	48	122
Provincial governments	1	2	0	2	12	16
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	.	0	134	17	153
Higher education	.	.	.	.	76	76
Private non-profit organizations	.	.	.	.	20	20
Foreign	.	.	.	14	3	17

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-8**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering**  
**— Saskatchewan**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>67</b>	<b>4</b>	<b>12</b>	<b>167</b>	<b>173</b>	<b>422</b>
Federal government	66	.	1	3	46	116
Provincial governments	.	4	4	1	23	32
Provincial research organizations	.	.	..	.	.	..
Business enterprise	1	.	6	152	8	168
Higher education	.	.	.	.	83	83
Private non-profit organizations	.	.	.	.	11	11
Foreign	.	.	0 <sup>s</sup>	10	1	11
<b>2005 r Natural sciences</b>						
<b>Total</b>	<b>68</b>	<b>4</b>	<b>11</b>	<b>152</b>	<b>176</b>	<b>411</b>
Federal government	67	.	1	4	47	119
Provincial governments	.	4	4	2	16	26
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	6	133	13	153
Higher education	.	.	.	.	86	86
Private non-profit organizations	.	.	.	.	14	14
Foreign	.	.	0 <sup>s</sup>	13	0 <sup>s</sup>	13
<b>2004 r Natural sciences</b>						
<b>Total</b>	<b>54</b>	<b>4</b>	<b>9</b>	<b>113</b>	<b>199</b>	<b>379</b>
Federal government	53	.	1	5	57	116
Provincial governments	.	4	3	2	22	31
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	.	5	99	18	123
Higher education	.	.	.	.	89	89
Private non-profit organizations	.	.	.	.	12	12
Foreign	.	.	0 <sup>s</sup>	7	0	7
<b>2003 r Natural sciences</b>						
<b>Total</b>	<b>54</b>	<b>4</b>	<b>7</b>	<b>88</b>	<b>197</b>	<b>350</b>
Federal government	53	.	1	3	54	112
Provincial governments	.	4	3	2	24	33
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	0 <sup>s</sup>
Business enterprise	1	.	3	76	17	98
Higher education	.	.	.	.	89	89
Private non-profit organizations	.	.	.	.	11	11
Foreign	.	.	0 <sup>s</sup>	7	1	8
<b>2002 r Natural sciences</b>						
<b>Total</b>	<b>53</b>	<b>3</b>	<b>7</b>	<b>112</b>	<b>207</b>	<b>383</b>
Federal government	52	.	0 <sup>s</sup>	4	49	105
Provincial governments	.	3	3	4	28	39
Provincial research organizations	.	.	0 <sup>s</sup>	.	.	0 <sup>s</sup>
Business enterprise	1	.	4	96	16	116
Higher education	.	.	.	.	94	94
Private non-profit organizations	.	.	.	.	20	20
Foreign	.	.	0 <sup>s</sup>	8	0 <sup>s</sup>	8

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-9**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — Alberta**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>133</b>	<b>124</b>	<b>0</b>	<b>1,236</b>	<b>758</b>	<b>2,251</b>
Federal government	132	4	0	13	189	338
Provincial governments	.	87	0	3	138	229
Provincial research organizations	.	.	..	.	.	..
Business enterprise	1	33	0	1,109	75	1,218
Higher education	.	.	.	.	301	301
Private non-profit organizations	.	.	.	.	48	48
Foreign	.	..	..	110	6	117
<b>2005 † Natural sciences</b>						
<b>Total</b>	<b>130</b>	<b>122</b>	<b>0</b>	<b>1,193</b>	<b>786</b>	<b>2,230</b>
Federal government	128	4	0	21	209	362
Provincial governments	.	89	0	4	146	239
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	30	0	1,089	62	1,182
Higher education	.	.	.	.	311	311
Private non-profit organizations	.	.	.	.	51	51
Foreign	.	..	0	79	7	86
<b>2004 † Natural sciences</b>						
<b>Total</b>	<b>110</b>	<b>114</b>	<b>0</b>	<b>1,131</b>	<b>729</b>	<b>2,085</b>
Federal government	109	2	0	10	168	290
Provincial governments	.	85	0	4	186	275
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	26	0	1,033	59	1,118
Higher education	.	.	.	.	270	270
Private non-profit organizations	.	.	.	.	41	41
Foreign	.	..	0	85	5	91
<b>2003 † Natural sciences</b>						
<b>Total</b>	<b>87</b>	<b>101</b>	<b>0</b>	<b>861</b>	<b>683</b>	<b>1,732</b>
Federal government	86	2	0	12	186	286
Provincial governments	.	74	0	4	146	224
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	25	0	766	59	851
Higher education	.	.	.	.	250	250
Private non-profit organizations	.	.	.	.	36	36
Foreign	.	..	0	79	6	85
<b>2002 † Natural sciences</b>						
<b>Total</b>	<b>92</b>	<b>108</b>	<b>0</b>	<b>782</b>	<b>607</b>	<b>1,588</b>
Federal government	91	2	0	7	160	261
Provincial governments	.	77	0	2	97	176
Provincial research organizations	.	.	0	.	.	0
Business enterprise	1	29	0	739	44	813
Higher education	.	.	.	.	256	256
Private non-profit organizations	.	.	.	.	43	43
Foreign	.	..	0	33	7	39

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 8-10**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering**  
**— British Columbia**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>91</b>	<b>15</b>	<b>0</b>	<b>1,576</b>	<b>750</b>	<b>2,432</b>
Federal government	89	.	0	35	247	371
Provincial governments	0 <sup>s</sup>	15	0	10	85	110
Provincial research organizations	.	.	..	.	.	..
Business enterprise	2	0	0	985	46	1,033
Higher education	.	.	.	.	284	284
Private non-profit organizations	.	.	.	.	73	73
Foreign	.	.	.	547	13	560
<b>2005<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>91</b>	<b>15</b>	<b>0</b>	<b>1,493</b>	<b>707</b>	<b>2,306</b>
Federal government	88	.	0	35	245	368
Provincial governments	0 <sup>s</sup>	15	0	9	65	90
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	0	0	931	43	976
Higher education	.	.	.	.	269	269
Private non-profit organizations	.	.	.	.	75	75
Foreign	.	.	.	518	10	528
<b>2004<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>91</b>	<b>15</b>	<b>0</b>	<b>1,434</b>	<b>648</b>	<b>2,188</b>
Federal government	88	.	0	36	237	362
Provincial governments	0 <sup>s</sup>	15	0	10	31	56
Provincial research organizations	.	.	0	.	.	0
Business enterprise	3	0	0	948	31	982
Higher education	.	.	.	.	247	247
Private non-profit organizations	.	.	.	.	94	94
Foreign	.	.	.	440	8	448
<b>2003<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>80</b>	<b>14</b>	<b>0</b>	<b>1,173</b>	<b>620</b>	<b>1,886</b>
Federal government	77	.	0	32	194	303
Provincial governments	0 <sup>s</sup>	14	0	21	70	105
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	0	0	897	65	963
Higher education	.	.	.	.	228	228
Private non-profit organizations	.	.	.	.	56	56
Foreign	.	.	.	224	7	231
<b>2002<sup>r</sup> Natural sciences</b>						
<b>Total</b>	<b>99</b>	<b>20</b>	<b>0</b>	<b>1,093</b>	<b>586</b>	<b>1,798</b>
Federal government	97	.	0	38	175	309
Provincial governments	0 <sup>s</sup>	20	0	8	60	88
Provincial research organizations	.	.	0	.	.	0
Business enterprise	2	0	0	890	60	952
Higher education	.	.	.	.	226	226
Private non-profit organizations	.	.	.	.	54	54
Foreign	.	.	.	158	11	169

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-11**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — Yukon, Northwest Territories and Nunavut**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>5</b>	.	.	<b>24</b>	.	<b>28</b>
Federal government	4	.	.	0	.	4
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	18	.	18
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	6	.	6
<b>2005 r Natural sciences</b>						
<b>Total</b>	<b>9</b>	.	.	<b>10</b>	.	<b>19</b>
Federal government	9	.	.	0 <sup>s</sup>	.	9
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	10	.	10
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2004 r Natural sciences</b>						
<b>Total</b>	<b>6</b>	.	.	<b>13</b>	.	<b>19</b>
Federal government	5	.	.	0 <sup>s</sup>	.	5
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	13	.	13
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2003 r Natural sciences</b>						
<b>Total</b>	<b>5</b>	.	.	<b>1</b>	.	<b>6</b>
Federal government	5	.	.	0	.	5
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	1	.	1
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>
<b>2002 r Natural sciences</b>						
<b>Total</b>	<b>3</b>	.	.	<b>1</b>	.	<b>4</b>
Federal government	3	.	.	0	.	3
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	1	.	1
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	0 <sup>s</sup>	.	0 <sup>s</sup>

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.



**Table 8-12**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — National Capital Region, Ontario/Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>953</b>	.	.	.	.	<b>953</b>
Federal government	934	.	.	.	.	<b>934</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	18	.	.	.	.	<b>18</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2005 † Natural sciences</b>						
<b>Total</b>	<b>1,002</b>	.	.	.	.	<b>1,002</b>
Federal government	982	.	.	.	.	<b>982</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	19	.	.	.	.	<b>19</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2004 † Natural sciences</b>						
<b>Total</b>	<b>844</b>	.	.	.	.	<b>844</b>
Federal government	829	.	.	.	.	<b>829</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	14	.	.	.	.	<b>14</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2003 † Natural sciences</b>						
<b>Total</b>	<b>881</b>	.	.	.	.	<b>881</b>
Federal government	865	.	.	.	.	<b>865</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	15	.	.	.	.	<b>15</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2002 † Natural sciences</b>						
<b>Total</b>	<b>900</b>	.	.	.	.	<b>900</b>
Federal government	879	.	.	.	.	<b>879</b>
Provincial governments	2	.	.	.	.	<b>2</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	18	.	.	.	.	<b>18</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 8-13**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — National Capital Region, Ontario**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>870</b>	.	.	.	.	<b>870</b>
Federal government	855	.	.	.	.	<b>855</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	14	.	.	.	.	<b>14</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2005 † Natural sciences</b>						
<b>Total</b>	<b>930</b>	.	.	.	.	<b>930</b>
Federal government	915	.	.	.	.	<b>915</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	15	.	.	.	.	<b>15</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2004 † Natural sciences</b>						
<b>Total</b>	<b>805</b>	.	.	.	.	<b>805</b>
Federal government	794	.	.	.	.	<b>794</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	11	.	.	.	.	<b>11</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2003 † Natural sciences</b>						
<b>Total</b>	<b>842</b>	.	.	.	.	<b>842</b>
Federal government	829	.	.	.	.	<b>829</b>
Provincial governments	1	.	.	.	.	<b>1</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	13	.	.	.	.	<b>13</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2002 † Natural sciences</b>						
<b>Total</b>	<b>845</b>	.	.	.	.	<b>845</b>
Federal government	827	.	.	.	.	<b>827</b>
Provincial governments	2	.	.	.	.	<b>2</b>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	16	.	.	.	.	<b>16</b>
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 8-14**  
**Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — National Capital Region, Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Natural sciences</b>						
<b>Total</b>	<b>83</b>	.	.	.	.	<b>83</b>
Federal government	79	.	.	.	.	79
Provincial governments	0 <sup>s</sup>	.	.	.	.	0 <sup>s</sup>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	.	.	.	.	4
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2005 r Natural sciences</b>						
<b>Total</b>	<b>72</b>	.	.	.	.	<b>72</b>
Federal government	67	.	.	.	.	67
Provincial governments	1	.	.	.	.	1
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	.	.	.	.	4
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2004 r Natural sciences</b>						
<b>Total</b>	<b>38</b>	.	.	.	.	<b>38</b>
Federal government	35	.	.	.	.	35
Provincial governments	0 <sup>s</sup>	.	.	.	.	0 <sup>s</sup>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	3
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2003 r Natural sciences</b>						
<b>Total</b>	<b>39</b>	.	.	.	.	<b>39</b>
Federal government	36	.	.	.	.	36
Provincial governments	0 <sup>s</sup>	.	.	.	.	0 <sup>s</sup>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	3
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2002 r Natural sciences</b>						
<b>Total</b>	<b>55</b>	.	.	.	.	<b>55</b>
Federal government	52	.	.	.	.	52
Provincial governments	0 <sup>s</sup>	.	.	.	.	0 <sup>s</sup>
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	3
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 9**  
**National Gross Domestic Expenditures on Research and Development, in the social sciences and humanities, Canada**

Funding sector	Performing sector						Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	
millions of dollars							
<b>2008 p Social sciences</b>							
<b>Total</b>	<b>177</b>	<b>34</b>	..	..	<b>1,951</b>	<b>16</b>	<b>2,179</b>
Federal government	177	..	..	..	410	4	591
Provincial governments	0	34	..	..	203	4	241
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	34	0 <sup>s</sup>	34
Higher education	..	..	..	..	1,157	..	1,157
Private non-profit organizations	..	..	..	..	148	7	155
Foreign	..	..	..	..	..	1	1
<b>2007 p Social sciences</b>							
<b>Total</b>	<b>176</b>	<b>33</b>	..	..	<b>1,932</b>	<b>15</b>	<b>2,156</b>
Federal government	176	..	..	..	406	4	585
Provincial governments	0	33	..	..	201	4	238
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	33	0 <sup>s</sup>	34
Higher education	..	..	..	..	1,146	..	1,146
Private non-profit organizations	..	..	..	..	146	7	153
Foreign	..	..	..	..	..	1	1
<b>2006 Social sciences</b>							
<b>Total</b>	<b>156</b>	<b>31</b>	..	..	<b>1,909</b>	<b>15</b>	<b>2,112</b>
Federal government	156	..	..	..	401	4	561
Provincial governments	0	31	..	..	199	4	233
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	33	0 <sup>s</sup>	33
Higher education	..	..	..	..	1,132	..	1,132
Private non-profit organizations	..	..	..	..	145	7	151
Foreign	..	..	..	..	..	1	1
<b>2005 r Social sciences</b>							
<b>Total</b>	<b>124</b>	<b>28</b>	..	..	<b>1,891</b>	<b>11</b>	<b>2,054</b>
Federal government	124	..	..	..	416	3	544
Provincial governments	0	28	..	..	195	3	225
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	30	1	30
Higher education	..	..	..	..	1,111	..	1,111
Private non-profit organizations	..	..	..	..	139	4	143
Foreign	..	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
<b>2004 r Social sciences</b>							
<b>Total</b>	<b>118</b>	<b>24</b>	..	..	<b>1,778</b>	<b>5</b>	<b>1,926</b>
Federal government	118	..	..	..	377	1	497
Provincial governments	0	24	..	..	208	1	233
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	27	1	28
Higher education	..	..	..	..	1,037	..	1,037
Private non-profit organizations	..	..	..	..	129	2	131
Foreign	..	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
<b>2003 r Social sciences</b>							
<b>Total</b>	<b>120</b>	<b>24</b>	..	..	<b>1,599</b>	<b>5</b>	<b>1,748</b>
Federal government	120	..	..	..	336	1	457
Provincial governments	0	24	..	..	204	2	230
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	25	1	26
Higher education	..	..	..	..	920	..	920
Private non-profit organizations	..	..	..	..	114	1	115
Foreign	..	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

Table 9 – continued

National Gross Domestic Expenditures on Research and Development, in the social sciences and humanities, Canada

Funding sector	Performing sector						Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	
millions of dollars							
<b>2002 r Social sciences</b>							
<b>Total</b>	<b>117</b>	<b>21</b>	<b>..</b>	<b>..</b>	<b>1,414</b>	<b>4</b>	<b>1,556</b>
Federal government	117	..	..	..	229	1	346
Provincial governments	0	21	..	..	165	1	187
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	24	1	24
Higher education	..	..	..	..	885	..	885
Private non-profit organizations	..	..	..	..	111	1	112
Foreign	..	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
<b>2001 r Social sciences</b>							
<b>Total</b>	<b>93</b>	<b>19</b>	<b>..</b>	<b>..</b>	<b>1,274</b>	<b>4</b>	<b>1,390</b>
Federal government	93	..	..	..	231	0 <sup>s</sup>	324
Provincial governments	0	19	..	..	142	2	163
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	25	1	26
Higher education	..	..	..	..	778	..	778
Private non-profit organizations	..	..	..	..	98	1	99
Foreign	..	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
<b>2000 r Social sciences</b>							
<b>Total</b>	<b>85</b>	<b>18</b>	<b>..</b>	<b>..</b>	<b>1,202</b>	<b>3</b>	<b>1,308</b>
Federal government	85	..	..	..	187	0 <sup>s</sup>	272
Provincial governments	0	18	..	..	117	1	137
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	22	0 <sup>s</sup>	23
Higher education	..	..	..	..	800	..	800
Private non-profit organizations	..	..	..	..	76	1	77
Foreign	..	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
<b>1999 r Social sciences</b>							
<b>Total</b>	<b>85</b>	<b>13</b>	<b>..</b>	<b>..</b>	<b>1,062</b>	<b>9</b>	<b>1,170</b>
Federal government	85	..	..	..	142	0 <sup>s</sup>	227
Provincial governments	0	13	..	..	96	3	112
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	20	0 <sup>s</sup>	21
Higher education	..	..	..	..	740	..	740
Private non-profit organizations	..	..	..	..	64	5	69
Foreign	..	..	..	..	..	1	1
<b>1998 r Social sciences</b>							
<b>Total</b>	<b>76</b>	<b>16</b>	<b>..</b>	<b>..</b>	<b>904</b>	<b>9</b>	<b>1,005</b>
Federal government	76	..	..	..	112	1	189
Provincial governments	0	16	..	..	75	2	93
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	18	1	19
Higher education	..	..	..	..	642	..	642
Private non-profit organizations	..	..	..	..	57	5	62
Foreign	..	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
<b>1997 r Social sciences</b>							
<b>Total</b>	<b>69</b>	<b>16</b>	<b>..</b>	<b>..</b>	<b>732</b>	<b>9</b>	<b>826</b>
Federal government	69	..	..	..	101	1	171
Provincial governments	0	16	..	..	74	2	92
Provincial research organizations	..	..	..	..	..	..	..
Business enterprise	..	..	..	..	16	1	16
Higher education	..	..	..	..	485	..	485
Private non-profit organizations	..	..	..	..	56	5	62
Foreign	..	..	..	..	..	0	0

Note(s): Components may not add to totals due to rounding.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 10-1**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities**  
**— Newfoundland and Labrador**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	0 <sup>s</sup>	..	..	31	31
Federal government	..	..	..	..	9	9
Provincial governments	..	0 <sup>s</sup>	..	..	0 <sup>s</sup>	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	19	19
Private non-profit organizations	..	..	..	..	2	2
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	..	..	..	32	32
Federal government	..	..	..	..	10	10
Provincial governments	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	21	21
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	..	..	..	27	27
Federal government	..	..	..	..	7	7
Provincial governments	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	18	18
Private non-profit organizations	..	..	..	..	2	2
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	..	..	..	29	29
Federal government	..	..	..	..	7	7
Provincial governments	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	19	19
Private non-profit organizations	..	..	..	..	3	3
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	..	..	..	22	22
Federal government	..	..	..	..	4	4
Provincial governments	..	..	..	..	1	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	16	16
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 10-2**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities**  
**— Prince Edward Island**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	..	..	..	9	9
Federal government	..	..	..	..	2	2
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	5	5
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	..	..	..	7	7
Federal government	..	..	..	..	2	2
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	5	5
Private non-profit organizations	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	..	..	..	7	7
Federal government	..	..	..	..	2	2
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	5	5
Private non-profit organizations	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	..	..	..	7	7
Federal government	..	..	..	..	1	1
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	5	5
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	..	..	..	6	6
Federal government	..	..	..	..	1	1
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	4	4
Private non-profit organizations	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 10-3**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — Nova Scotia**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	..	..	..	70	70
Federal government	..	..	..	..	14	14
Provincial governments	..	..	..	..	1	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Higher education	..	..	..	..	54	54
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	..	..	..	71	71
Federal government	..	..	..	..	16	16
Provincial governments	..	..	..	..	1	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Higher education	..	..	..	..	53	53
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	..	..	..	64	64
Federal government	..	..	..	..	13	13
Provincial governments	..	..	..	..	2	2
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	1
Higher education	..	..	..	..	48	48
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	..	..	..	58	58
Federal government	..	..	..	..	10	10
Provincial governments	..	..	..	..	2	2
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Higher education	..	..	..	..	45	45
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	..	..	..	51	51
Federal government	..	..	..	..	8	8
Provincial governments	..	..	..	..	1	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Higher education	..	..	..	..	41	41
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.



**Table 10-4**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities**  
**— New Brunswick**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>44</b>	<b>44</b>
Federal government	..	..	..	..	8	8
Provincial governments	..	0	..	..	1	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	35	35
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>46</b>	<b>46</b>
Federal government	..	..	..	..	11	11
Provincial governments	..	0	..	..	1	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	34	34
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>40</b>	<b>40</b>
Federal government	..	..	..	..	8	8
Provincial governments	..	0	..	..	1	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	31	31
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>38</b>	<b>38</b>
Federal government	..	..	..	..	7	7
Provincial governments	..	0	..	..	1	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	30	30
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>32</b>	<b>32</b>
Federal government	..	..	..	..	4	4
Provincial governments	..	0	..	..	0 <sup>s</sup>	1
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	28	28
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 10-5**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	<b>8</b>	<b>22</b>	..	..	<b>480</b>	<b>509</b>
Federal government	8	..	..	..	98	105
Provincial governments	..	22	..	..	46	69
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	13	13
Higher education	..	..	..	..	282	282
Private non-profit organizations	..	..	..	..	40	40
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	<b>1</b>	<b>21</b>	..	..	<b>492</b>	<b>513</b>
Federal government	1	..	..	..	100	100
Provincial governments	..	21	..	..	52	74
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	14	14
Higher education	..	..	..	..	290	290
Private non-profit organizations	..	..	..	..	37	37
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	<b>0<sup>s</sup></b>	<b>18</b>	..	..	<b>486</b>	<b>505</b>
Federal government	0 <sup>s</sup>	..	..	..	94	95
Provincial governments	..	18	..	..	64	82
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	11	11
Higher education	..	..	..	..	279	279
Private non-profit organizations	..	..	..	..	38	38
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	<b>0<sup>s</sup></b>	<b>17</b>	..	..	<b>454</b>	<b>472</b>
Federal government	0 <sup>s</sup>	..	..	..	90	90
Provincial governments	..	17	..	..	67	84
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	11	11
Higher education	..	..	..	..	250	250
Private non-profit organizations	..	..	..	..	36	36
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	<b>0<sup>s</sup></b>	<b>16</b>	..	..	<b>396</b>	<b>413</b>
Federal government	0 <sup>s</sup>	..	..	..	63	63
Provincial governments	..	16	..	..	52	68
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	11	11
Higher education	..	..	..	..	232	232
Private non-profit organizations	..	..	..	..	38	38
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 10-6**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — Ontario**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	<b>4</b>	<b>4</b>	..	..	<b>799</b>	<b>806</b>
Federal government	4	..	..	..	170	173
Provincial governments	..	4	..	..	84	88
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	16	16
Higher education	..	..	..	..	471	471
Private non-profit organizations	..	..	..	..	58	58
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	<b>3</b>	<b>4</b>	..	..	<b>761</b>	<b>767</b>
Federal government	3	..	..	..	166	168
Provincial governments	..	4	..	..	80	84
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	13	13
Higher education	..	..	..	..	442	442
Private non-profit organizations	..	..	..	..	60	60
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	<b>2</b>	<b>4</b>	..	..	<b>696</b>	<b>702</b>
Federal government	2	..	..	..	148	150
Provincial governments	..	4	..	..	78	82
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	13	13
Higher education	..	..	..	..	409	409
Private non-profit organizations	..	..	..	..	48	48
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	<b>2</b>	<b>4</b>	..	..	<b>603</b>	<b>609</b>
Federal government	2	..	..	..	129	131
Provincial governments	..	4	..	..	71	75
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	11	11
Higher education	..	..	..	..	348	348
Private non-profit organizations	..	..	..	..	44	44
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	<b>2</b>	<b>3</b>	..	..	<b>535</b>	<b>540</b>
Federal government	2	..	..	..	83	85
Provincial governments	..	3	..	..	62	64
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	10	10
Higher education	..	..	..	..	341	341
Private non-profit organizations	..	..	..	..	39	39
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 10-7**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities**  
**— Manitoba**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>63</b>	<b>64</b>
Federal government	..	..	..	..	12	12
Provincial governments	..	<b>1</b>	..	..	4	<b>5</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	41	<b>41</b>
Private non-profit organizations	..	..	..	..	6	<b>6</b>
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>67</b>	<b>68</b>
Federal government	..	..	..	..	13	13
Provincial governments	..	<b>1</b>	..	..	3	<b>4</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	44	<b>44</b>
Private non-profit organizations	..	..	..	..	6	<b>6</b>
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>60</b>	<b>61</b>
Federal government	..	..	..	..	12	12
Provincial governments	..	<b>1</b>	..	..	4	<b>5</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	38	<b>38</b>
Private non-profit organizations	..	..	..	..	5	<b>5</b>
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>54</b>	<b>55</b>
Federal government	..	..	..	..	10	10
Provincial governments	..	<b>1</b>	..	..	3	<b>4</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	36	<b>36</b>
Private non-profit organizations	..	..	..	..	4	<b>4</b>
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>49</b>	<b>49</b>
Federal government	..	..	..	..	8	<b>8</b>
Provincial governments	..	<b>1</b>	..	..	3	<b>4</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	33	<b>33</b>
Private non-profit organizations	..	..	..	..	4	<b>4</b>
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 10-8**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities**  
**— Saskatchewan**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>43</b>	<b>43</b>
Federal government	..	..	..	..	7	7
Provincial governments	..	0	..	..	6	6
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	30	30
Private non-profit organizations	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>42</b>	<b>42</b>
Federal government	..	..	..	..	7	7
Provincial governments	..	0	..	..	4	4
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	30	30
Private non-profit organizations	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>46</b>	<b>46</b>
Federal government	..	..	..	..	8	8
Provincial governments	..	0	..	..	5	5
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	32	32
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>48</b>	<b>48</b>
Federal government	..	..	..	..	9	9
Provincial governments	..	0	..	..	6	6
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	32	32
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	<b>0<sup>s</sup></b>	..	..	<b>52</b>	<b>52</b>
Federal government	..	..	..	..	8	8
Provincial governments	..	0 <sup>s</sup>	..	..	7	7
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	35	35
Private non-profit organizations	..	..	..	..	1	1
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 10-9**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — Alberta**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>161</b>	<b>161</b>
Federal government	..	..	..	..	33	<b>33</b>
Provincial governments	..	<b>1</b>	..	..	35	<b>35</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	2	<b>2</b>
Higher education	..	..	..	..	82	<b>82</b>
Private non-profit organizations	..	..	..	..	9	<b>9</b>
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	<b>0<sup>s</sup></b>	..	..	<b>176</b>	<b>176</b>
Federal government	..	..	..	..	43	<b>43</b>
Provincial governments	..	<b>0<sup>s</sup></b>	..	..	37	<b>37</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	85	<b>85</b>
Private non-profit organizations	..	..	..	..	10	<b>10</b>
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	<b>0</b>	..	..	<b>169</b>	<b>169</b>
Federal government	..	..	..	..	38	<b>38</b>
Provincial governments	..	<b>0</b>	..	..	46	<b>46</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	76	<b>76</b>
Private non-profit organizations	..	..	..	..	8	<b>8</b>
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>143</b>	<b>145</b>
Federal government	..	..	..	..	35	<b>35</b>
Provincial governments	..	<b>1</b>	..	..	36	<b>38</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	63	<b>63</b>
Private non-profit organizations	..	..	..	..	8	<b>8</b>
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	<b>0<sup>s</sup></b>	..	..	<b>121</b>	<b>121</b>
Federal government	..	..	..	..	21	<b>21</b>
Provincial governments	..	<b>0<sup>s</sup></b>	..	..	24	<b>24</b>
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	<b>1</b>
Higher education	..	..	..	..	65	<b>65</b>
Private non-profit organizations	..	..	..	..	10	<b>10</b>
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 10-10**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities**  
**— British Columbia**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	<b>2</b>	..	..	<b>210</b>	<b>212</b>
Federal government	..	..	..	..	48	48
Provincial governments	..	2	..	..	21	24
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	1
Higher education	..	..	..	..	113	113
Private non-profit organizations	..	..	..	..	26	26
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	<b>2</b>	..	..	<b>197</b>	<b>199</b>
Federal government	..	..	..	..	49	49
Provincial governments	..	2	..	..	16	18
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	1
Higher education	..	..	..	..	108	108
Private non-profit organizations	..	..	..	..	23	23
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>183</b>	<b>184</b>
Federal government	..	..	..	..	47	47
Provincial governments	..	1	..	..	8	9
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	0 <sup>s</sup>	0 <sup>s</sup>
Higher education	..	..	..	..	101	101
Private non-profit organizations	..	..	..	..	27	27
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>165</b>	<b>166</b>
Federal government	..	..	..	..	38	38
Provincial governments	..	1	..	..	18	19
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	1
Higher education	..	..	..	..	92	92
Private non-profit organizations	..	..	..	..	16	16
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	<b>1</b>	..	..	<b>151</b>	<b>152</b>
Federal government	..	..	..	..	29	29
Provincial governments	..	1	..	..	15	16
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	1	1
Higher education	..	..	..	..	90	90
Private non-profit organizations	..	..	..	..	16	16
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 10-11**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — Yukon, Northwest Territories and Nunavut**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.



**Table 10-12**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — National Capital Region, Ontario/Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	<b>145</b>	..	..	..	..	<b>145</b>
Federal government	145	..	..	..	..	145
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2005 r Social sciences</b>						
<b>Total</b>	<b>121</b>	..	..	..	..	<b>121</b>
Federal government	121	..	..	..	..	121
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2004 r Social sciences</b>						
<b>Total</b>	<b>116</b>	..	..	..	..	<b>116</b>
Federal government	116	..	..	..	..	116
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2003 r Social sciences</b>						
<b>Total</b>	<b>118</b>	..	..	..	..	<b>118</b>
Federal government	118	..	..	..	..	118
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
<b>2002 r Social sciences</b>						
<b>Total</b>	<b>115</b>	..	..	..	..	<b>115</b>
Federal government	115	..	..	..	..	115
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

Gross Domestic Expenditures on Research and Development in Canada (GERD), and the Provinces – National Estimates 1997 to 2008 and Provincial Estimates 2002 to 2006

**Table 10-13**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — National Capital Region, Ontario**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	<b>142</b>	.	.	.	.	<b>142</b>
Federal government	142	.	.	.	.	142
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2005 r Social sciences</b>						
<b>Total</b>	<b>110</b>	.	.	.	.	<b>110</b>
Federal government	110	.	.	.	.	110
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2004 r Social sciences</b>						
<b>Total</b>	<b>107</b>	.	.	.	.	<b>107</b>
Federal government	107	.	.	.	.	107
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2003 r Social sciences</b>						
<b>Total</b>	<b>108</b>	.	.	.	.	<b>108</b>
Federal government	108	.	.	.	.	108
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2002 r Social sciences</b>						
<b>Total</b>	<b>105</b>	.	.	.	.	<b>105</b>
Federal government	105	.	.	.	.	105
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

**Table 10-14**  
**Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — National Capital Region, Quebec**

Funding sector	Performing sector					Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	
millions of dollars						
<b>2006 Social sciences</b>						
<b>Total</b>	<b>3</b>	.	.	.	.	<b>3</b>
Federal government	3	.	.	.	.	3
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2005 r Social sciences</b>						
<b>Total</b>	<b>11</b>	.	.	.	.	<b>11</b>
Federal government	11	.	.	.	.	11
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2004 r Social sciences</b>						
<b>Total</b>	<b>9</b>	.	.	.	.	<b>9</b>
Federal government	9	.	.	.	.	9
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2003 r Social sciences</b>						
<b>Total</b>	<b>10</b>	.	.	.	.	<b>10</b>
Federal government	10	.	.	.	.	10
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
<b>2002 r Social sciences</b>						
<b>Total</b>	<b>10</b>	.	.	.	.	<b>10</b>
Federal government	10	.	.	.	.	10
Provincial governments	.	.	.	.	.	.
Provincial research organizations	.	.	.	.	.	.
Business enterprise	.	.	.	.	.	.
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.

**Note(s):** Components may not add to totals due to rounding. Commencing with reference year 2000 the data for the private non-profit sector performing research and development are not distributed by provinces, territories or the National Capital Region.

## How to read the GERD matrix

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The gross domestic expenditure on research and development (GERD) is constructed by adding together the intramural research and development expenditures (R&D) of the performing sectors.

The table below is constructed by completing each of the performing sectors' columns (federal government, provincial governments, provincial research organizations, business enterprises, higher education and private non-profit organizations) with their R&D performance data.

The performing sectors indicate the funding sectors for their intramural R&D expenditures. This is an important distinction.

The federal government's intramural R&D expenditures are taken from the annual Federal Science Expenditure and Personnel survey. Intramural R&D expenditures represent spending on R&D performed by federal departments and agencies. As the GERD matrices within the publication indicate, federal departments and agencies receive funding for intramural R&D performance from provincial governments and the business enterprise sector.

The provincial governments' intramural R&D expenditures are from annual provincial surveys of scientific activities in the following provinces: Newfoundland and Labrador, Ontario, Manitoba, Alberta and British Columbia. The provincial government of Quebec conducts a survey of its intramural R&D activities which it shares for GERD construction purposes with Statistics Canada. Estimates for provincial government R&D activities are calculated for remaining provinces and territories.

The annual survey of the research and development activities of provincial research organizations is the source of information for the column for provincial research organizations.

The annual survey of Research and Development in Canadian Industry is the source of the business enterprise sector's R&D performance data.

The estimation model developed for the higher education expenditures on research and development provide the R&D intramural expenditures for the higher education sector.

The annual survey of Research and Development in Private Non-Profit Organizations provides national R&D performance data for this sector.

Users interested in total R&D spending for a sector such as the federal government are referred to the intramural and extramural R&D spending published in *Science Statistics* (88-001-X), and *Federal Scientific Activities* (88-204-X). The funding sector's R&D expenditures shown in the GERD matrix will not equal the extramural R&D spending of individual funding sectors.

GERD data are presented separately for total sciences, natural sciences and engineering, and social sciences and humanities. Total sciences is the sum of natural sciences and engineering and social sciences and humanities. For the business enterprise sector and provincial research organizations, R&D data are only collected, and therefore presented, for the natural sciences and engineering.

GERD data presented in these matrix tables are used for international comparability purposes and are assembled based on guidelines presented in the Organisation for Economic Co-operation and Development's *Frascati Manual* (2002). For a graphical representation similar to the one shown below, see page 122 of the manual.

### The GERD matrix – Canada

When populated, values in the table's cells are provided by the performing sectors.

This table is for reference purposes only.

**Text table 1 Gross domestic expenditure on research and development ( GERD ) matrix - Canada**

Funding sector	Performing sector Total intramural (domestic) research and development performed by:						Total
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations <sup>1</sup>	
<b>Total</b>	millions of dollars						
	Federal government intramural (domestic) R&D expenditures provided by this performing sector and identifying the funding sector	Provincial governments intramural (domestic) R&D expenditures provided by this performing sector and identifying the funding sector	Provincial research organizations intramural (domestic) R&D expenditures provided by this performing sector and identifying the funding sector	Business enterprise intramural (domestic) R&D expenditures provided by this performing sector and identifying the funding sector	Higher education intramural (domestic) R&D expenditures provided by this performing sector and identifying the funding sector	Private non-profit organizations intramural (domestic) R&D expenditures provided by this performing sector and identifying the funding sector	<b>GERD is total intramural (domestic) R&amp;D expenditures provided by the performing sector</b>
Federal government							<b>Federal government</b>
Provincial governments							<b>Provincial governments</b>
Provincial research organizations							<b>Provincial research organizations</b>
Business enterprise							<b>Business enterprise</b>
Higher education							<b>Higher education</b>
Private non-profit organizations							<b>Private non-profit organizations</b>
Foreign <sup>2</sup>							<b>Foreign</b>

1. These data are not distributed provincially.

2. Foreign enterprises within same group or other foreign governments or international organizations.

# Data sources and methodology

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## Definitions

Gross domestic expenditure on research and development (GERD) is a statistical series, constructed by adding together the intramural expenditures on research and development (R&D) as reported by the performing sectors. As a term used by OECD Member countries, it is defined as "total intramural expenditure on R&D performed on the national territory during a given period. GERD includes R&D performed within a country and funded from abroad but excludes payments for R&D performed abroad".<sup>1</sup> GERD is constructed by adding together the intramural expenditures of the performing sectors.

GERD is often displayed as a matrix of performing and funding sectors. The GERD and GERD matrix are fundamental to the national and international examination of R&D expenditures.

The matrix illustrates three aspects of a country's R&D effort:

- it shows how much R&D each sector performed over a 12-month period;
- it shows the amount of R&D each sector financed over a 12-month period (as indicated by the R&D performing sector); and
- it indicates the flow of funds between sectors.

The GERD is an indicator of science and technology (S&T) activities; it is appropriately used as a summary of R&D activities and the basic flow of funds. General guidelines to follow when using a summary statistical series such as the GERD, include:

- Such series provide only a summary of very complex patterns of activities. The series should, therefore, be used in conjunction with other relevant information;
- Users generally refer to R&D data with a question in mind: "Is our national university research effort declining?" "Does my firm spend a higher proportion of its funds on R&D than the average for my industry?" etc. It is, therefore, necessary to identify the basic data relevant to each question in order to know which R&D indicator is best suited to answering the question. The user should keep in mind that the data used for the R&D indicator may be accurate enough to answer one question but not another.

## Provincial estimates of GERD

In a country as large as Canada it is useful to have a general idea of where R&D activities are located to indicate the level of scientific and technical endeavour in a particular area and to use the statistics in association with other provincial data. For these reasons, an estimate of the provincial distribution of the Canadian GERD has been prepared.

The definition of GERD in a provincial context is similar to that provided above.

The expenditures are assigned to the province in which the performing establishment is located. Personnel may live in an adjoining province (e.g., the National Capital Region) and materials and equipment will often come from another province or country; these factors must be taken into consideration when using GERD as a provincial indicator of S&T activity.

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1. The Measurement of Scientific and Technological Activities - Proposed Standard Practice for Surveys of Research and Experimental Development, Frascati Manual 2002. OECD, Paris, 2002, p. 121.

The funding shown is of R&D carried out in a province; it is not R&D funding from a province. For example, when the federal government is shown as the funder for R&D in a province, the funds are received from the central government and are to be spent on R&D in an establishment in that province. The federal government, of course, raises funds from many sources, outside of that province. Similarly, when R&D is shown as being funded by the business enterprise sector, the funds are not necessarily raised from activities within the province.

Most provincial governments provide minimal funding towards federal government performance, so statistical zeros should be applied. The next release of GERD will better distinguish between data that are not available and a statistical zero for this cross-section.

The provincial and territorial R&D expenditures for the business enterprise sector are collected on the Research and Development in Canadian Industry Survey. This survey does not collect sources of funds by province or territory. The provincial and territorial distribution by sources of funds of the business enterprise sector R&D expenditures is derived through a modeling system, which prorates values based on reported business enterprise provincial and territorial R&D. The provincial and territorial distribution of total R&D is proportionally distributed to the reported national sources of funds.

## Limitations of GERD

The GERD, like any other social or economic statistic, can only be approximately true. Different components are of different accuracy: sector estimates probably vary from 5% to 15% in accuracy. However, the GERD estimates are sufficiently reliable for their main use as an aggregate indicator for science policy.

One of the most important problems relating to GERD concerns its definition. There remains some ambiguity in defining precisely what constitutes R&D or, for example, in a continuing project, determining the precise point at which the project passes the boundary of R&D and becomes exploitation of a process or product on which it may be said that the R&D stage has been completed. This ambiguity is perhaps less serious in internal time series, where it may be expected that the year-to-year application of the definitions by the same reporting units are at least consistent.

A second difficulty arises with regards to survey design. The people best qualified to apply the R&D definitions and classifications - scientific and technical personnel engaged in the direct management of S&T activity - rarely participate in the statistical agency's data collection process. Because the data collected are concerned not with scientific and technical content, but financial and labour inputs to achieving this content, the questionnaires tend to be addressed to and completed by financial and management staff. This is a fundamental problem of all surveys addressed to large organizations, whether they are public or private.

These two problems account for the limited amount of geographic and scientific detail in the published GERD. The amount of detail presented, for example, in the Canadian GERD as published by Statistics Canada is limited by the nature of the surveys, and the other data collection and analysis instruments. Nor is it possible to increase the amount of detail because this would require switching to new kinds of data collection instruments in a vastly expanded survey operation.

Another reason for the limited detail about sectors stems from the fact that R&D is often a secretive endeavour. Private sector companies usually want to surprise competitors with a new product. Thus the money spent on the R&D may be reported, but details about R&D projects would not. Similarly, a government department such as National Defence might report R&D expenditures but not the nature and detail of the respective R&D projects.

To summarize, the GERD serves as a general indicator of R&D activity and not as a detailed inventory of R&D projects within an organization, sector, or province. It is an estimate and as such can show trends in R&D expenditures by sector and sub-sector, by province and country, from year-to-year. In this capacity, the GERD estimates are sufficiently reliable for their main use as an aggregate indicator for science policy.

## R&D performers and funders categorized

### Sectoring

Considering that the GERD is the aggregate of the total R&D expenditures of the performing sectors, it is useful now to look at these sectors individually. Sectors are reviewed in terms of an international (OECD) framework for measuring R&D expenditures. There are four major sectors of R&D performance and five for funding:

- Government;
- Business enterprises;
- Higher education;
- Private non-profit organizations;
- Foreign (funding only).

The sectors for the GERD, as chosen and defined by the OECD, are based largely on existing United Nations classifications and in particular, the System for National Accounts (SNA). Under the general heading of "Institutional classifications", the OECD approach focuses on the characteristic properties of the performing and funding institutions. Each statistical unit is classified according to its principal economic activity and, consequently, the whole of the R&D resources of the unit classified are allocated to one sector or sub-sector.

### Government

The OECD definition of this sector is: "All departments, offices and other bodies which furnish, but normally do not sell to the community, those common services, other than higher education, which cannot otherwise be conveniently and economically provided, as well as those that administer the state and the economic and social policy of the community. (Public enterprises are included in the business enterprise sector)".<sup>2</sup>

Public enterprises such as Petro-Canada and Ontario Hydro are excluded from this sector and included in the business enterprise sector. Many non-profit organizations and bodies, however, are included in this sector if they either serve or are controlled by government, or both.

In Canada the distribution of GERD amongst the government sub-sectors is published. The sub-sectors are the federal government, the provincial governments and the provincial research organizations (PRO's). Currently Canada has seven PRO's. They are the New Brunswick Research and Productivity Council, the "Centre de recherche industrielle du Québec (CRIQ)", the Industrial Technology Centre (Manitoba), the Saskatchewan Research Council, the Yukon Research Institute, the Nunavut Research Institute and the Aurora Research Institute.

### Business enterprise

This sector is composed of all firms, organizations and institutions whose primary activity is the production of goods or services for sale to the general public at a price intended approximately to cover at least the cost of production as well as non-profit institutes serving such firms. Included are government-owned enterprises such as Ontario Hydro and Canadian National Railways.

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2. Ibid., p. 62.



## Higher education

This sector is composed of all universities, colleges of technology and other institutes of post-secondary education, whatever their source of finance or legal status. It also includes all research institutes, experimental stations and clinics operating **under the direct control of** or **administered by** higher education establishments.

## Private non-profit organizations

This sector comprises private or semi-private organizations which are not established primarily with the aim of making a profit.

It consists of voluntary associations (scientific and professional societies, health-oriented groups), philanthropic foundations and research institutes supported by the associations and foundations. These kinds of institutions are usually maintained by fees, dues and donations from members and sponsors and by grants from governments and enterprises. They may also obtain revenue from the sale of their products such as publications or special studies.

Non-profit institutes and organizations excluded from this sector are those which are controlled by enterprises, government, or higher education. Such non-profit institutes and organizations are included with the respective sectors whose interests they mainly serve.

The PNP sector appears in both the performing and funding sector for the GERD for Canada. Commencing with reference year 2000, the data for the PNP sector performing research and development are not distributed by provinces, territories or the NCR. However, the national totals of research and development by performing sector include the PNP sector. The PNP sector continues to be distributed for the funding sector.

## Foreign

This sector consists of: "All institutions and individuals located outside the political borders of a country, except vehicles, ships, aircraft and space satellites operated by domestic entities and testing grounds acquired by such entities."<sup>3</sup>

This sector also includes all international organizations (except business enterprises), including facilities and operations within the country's borders. Foreign-owned subsidiaries are not included in this sector (e.g., Ford Canada is, for the purposes for measuring R&D expenditures, a domestic organization in the Canadian business enterprise sector, even though its parent company is the Ford Motor Company of the United States).

The foreign sector is included in the GERD only as a funding sector (see matrix), since by definition the GERD includes R&D performed within a country and **funded from abroad** but excludes payments made abroad for R&D. Thus, funding from the foreign sector is implicitly included in the intramural expenditures of the four performing sectors.

## Science type

### Definition of natural sciences and engineering

The natural sciences and engineering 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.

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3. Op cit., p.72.

### **Definition of social sciences and humanities**

The social sciences and humanities 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.