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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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Statistics Canada
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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
0s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
p	preliminary
r	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
E	use with caution
F	too unreliable to be published

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Data quality, concepts and methodology

Highlights

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

- Total research and development (R&D) spending is anticipated to remain at $29.0 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 was 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.
- In 2006, 70% of R&D expenditures took place in Ontario (44%) and Quebec (26%) (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 (current dollars). 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

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. 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 4th 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 (current dollars) or 44% of national R&D performance followed by Quebec at $7.6 billion or 26% of national R&D performance. 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

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 [2]	2002 constant dollars, Gross domestic expenditure on research and development [3]
	Gross domestic expenditure on research and development	Gross domestic product [1]			
	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	20,581	1,076,577	1.91	97.8	21,044
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						
Performing sector							
1999 r	1,859	233	10,399	5,082	63	...	17,638
2000 r	2,080	255	12,395	5,793	58	...	20,581
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
Funding sector							
1999 r	3,216	767	7,917	2,649	380	2,705	17,638
2000 r	3,560	878	9,223	2,892	445	3,582	20,581
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

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

	Provincial gross domestic product [1]		Gross domestic expenditures on research and development		Population [2]		Gross domestic expenditures on research and development	
							Ratio	Per capita
	millions of dollars	percent	millions of dollars	percent	thousands	percent	ratio	dollars
Canada [3]	**1,450,490**	**100**	**28,715**	**100**	**32,395**	**100**	**1.98**	**886**
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
National Capital Region								
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 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.

Table 3

Provincial distribution of the gross domestic expenditures on research and development

	Canada [1]	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
	millions of dollars						
Provincial distribution of the gross domestic expenditures on research and development							
1999 r	17,638	127	26	339	164	4,884	8,091
2000 r	20,581	138	37	362	158	5,679	9,559
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	..	..	..	..	..	..
Provincial distribution of the gross domestic product							
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						
Canada total as a percentage							
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	..	..	..	..	..	..
Provincial gross domestic product as a percentage							
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.

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						
Provincial distribution of the gross domestic expenditures on research and development							
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	558	465	2,412	2,644	1,098	86	1,012
2007 p	..	..	..	..	..	..	..
2008 p	..	..	..	..	..	..	..
Provincial distribution of the gross domestic product							
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	44,911	46,494	239,584	182,743	...	...	...
2007 p	48,549	51,628	258,936	192,528	...	...	...
2008 p	..	..	..	..	...	...	...
	percent						
Canada total as a percentage							
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	1.9	1.6	8.4	9.2	3.8	0.3	3.5
2007 p	..	..	..	..	..	..	..
2008 p	..	..	..	..	..	..	..
Provincial gross domestic product as a percentage							
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	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 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.

Table 4-1

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

	Canada [1]	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
	millions of dollars						
All sectors	**28,715**	**262**	**70**	**502**	**271**	**7,595**	**12,685**
Federal government	2,496	27	26	73	30	371	494
Provincial governments [2]	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						
Canada total as a percentage							
All sectors	**100.0**	**0.9**	**0.2**	**1.7**	**0.9**	**26.4**	**44.2**
Federal government	100.0	1.1	1.0	2.9	1.2	14.9	19.8
Provincial governments [2]	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	..	..	..	..	..	..
Provincial total as a percentage							
All sectors	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Federal government	8.7	10.3	37.1	14.5	11.1	4.9	3.9
Provincial governments [2]	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.

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						
All sectors	**558**	**465**	**2,412**	**2,644**	**1,098**	**86**	**1,012**
Federal government	81	67	133	91	1,098	86	1,012
Provincial governments [2]	6	16	125	18	.	.	.
Business enterprise	184	167	1,236	1,576	.	.	.
Higher education	287	215	919	959	.	.	.
Private non-profit organizations	..	..	..	..	.	.	.
	percent						
Canada total as a percentage							
All sectors	**1.9**	**1.6**	**8.4**	**9.2**	**3.8**	**0.3**	**3.5**
Federal government	3.2	2.7	5.3	3.6	44.0	3.4	40.5
Provincial governments [2]	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	..	..	..	..	.	.	.
Provincial total as a percentage							
All sectors	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Federal government	14.5	14.4	5.5	3.4	100.0	100.0	100.0
Provincial governments [2]	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.

Table 4-2

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

	Canada [1]	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
	millions of dollars						
All sectors	**28,715**	**262**	**70**	**502**	**271**	**7,595**	**12,685**
Federal government	5,225	75	35	158	65	1,146	1,563
Provincial governments [2]	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						
Canada total as a percentage							
All sectors	**100.0**	**0.9**	**0.2**	**1.7**	**0.9**	**26.4**	**44.2**
Federal government	100.0	1.4	0.7	3.0	1.2	21.9	29.9
Provincial governments [2]	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
Provincial total as a percentage							
All sectors	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Federal government	18.2	28.6	50.0	31.5	24.0	15.1	12.3
Provincial governments [2]	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.

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						
All sectors	**558**	**465**	**2,412**	**2,644**	**1,098**	**86**	**1,012**
Federal government	150	122	372	419	1,080	82	998
Provincial governments [2]	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						
Canada total as a percentage							
All sectors	**1.9**	**1.6**	**8.4**	**9.2**	**3.8**	**0.3**	**3.5**
Federal government	2.9	2.3	7.1	8.0	20.7	1.6	19.1
Provincial governments [2]	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	.	.	.
Provincial total as a percentage							
All sectors	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Federal government	26.9	26.2	15.4	15.8	98.4	95.3	98.6
Provincial governments [2]	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.

Table 5

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

Funding sector	Performing sector						
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	Total
	millions of dollars						
2008 p Total sciences							
Total	**2,467**	**294**	**25**	**16,316**	**9,837**	**132**	**29,071**
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 s	.	.	.	**0** s
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 s	2,479	128	7	**2,616**
2007 p Total sciences							
Total	**2,535**	**294**	**25**	**16,159**	**9,740**	**128**	**28,881**
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 s	.	.	.	**0** s
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 s	2,455	127	13	**2,596**
2006 Total sciences							
Total	**2,496**	**311**	**22**	**16,137**	**9,624**	**125**	**28,715**
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 s	.	.	.	**0** s
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 s	2,452	126	7	**2,585**
2005 r Total sciences							
Total	**2,414**	**280**	**23**	**15,791**	**9,518**	**117**	**28,142**
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 s	.	.	.	**0** s
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 s	2,542	116	17	**2,676**
2004 r Total sciences							
Total	**2,084**	**265**	**25**	**15,299**	**9,058**	**103**	**26,833**
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 s	.	.	.	**0** s
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 s	2,417	96	13	**2,526**
2003 r Total sciences							
Total	**2,083**	**254**	**24**	**14,123**	**8,143**	**92**	**24,719**
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 s	.	.	.	**0** s
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 s	2,082	76	8	**2,167**

Table 5 – continued

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

Funding sector	Performing sector						
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	Total
	millions of dollars						
2002 r Total sciences							
Total	**2,190**	**256**	**26**	**13,540**	**7,455**	**63**	**23,531**
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 s	.	.	.	**0** s
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**
2001 r Total sciences							
Total	**2,103**	**253**	**23**	**14,266**	**6,424**	**63**	**23,132**
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 s	.	.	.	**0** s
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**
2000 r Total sciences							
Total	**2,080**	**189**	**66**	**12,395**	**5,793**	**58**	**20,581**
Federal government	2,023	0	2	239	1,293	3	**3,560**
Provincial governments	3	189	38	45	587	16	**878**
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**
1999 r Total sciences							
Total	**1,859**	**173**	**60**	**10,399**	**5,082**	**63**	**17,638**
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**
1998 r Total sciences							
Total	**1,743**	**155**	**61**	**9,682**	**4,370**	**77**	**16,088**
Federal government	1,691	0	3	262	863	11	**2,830**
Provincial governments	4	155	34	56	372	19	**640**
Provincial research organizations	.	.	0 s	.	.	.	**0** s
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**
1997 r Total sciences							
Total	**1,720**	**156**	**58**	**8,739**	**3,879**	**82**	**14,635**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**27**	**4**	**..**	**99**	**132**	**262**
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**
2005 r Total sciences						
Total	**28**	**5**	**0**	**86**	**149**	**267**
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**
2004 r Total sciences						
Total	**23**	**5**	**0**	**30**	**116**	**173**
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**
2003 r Total sciences						
Total	**23**	**5**	**0**	**31**	**114**	**173**
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**
2002 r Total sciences						
Total	**32**	**5**	**0**	**22**	**94**	**153**
Federal government	31	.	.	4	28	**63**
Provincial governments	.	5	.	0 s	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.

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

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

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**73**	**6**	**..**	**106**	**317**	**502**
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**
2005 r Total sciences						
Total	**66**	**6**	**0**	**102**	**297**	**471**
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**
2004 r Total sciences						
Total	**81**	**6**	**0**	**94**	**266**	**448**
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**
2003 r Total sciences						
Total	**66**	**6**	**0**	**79**	**259**	**409**
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**
2002 r Total sciences						
Total	**76**	**6**	**0**	**93**	**225**	**400**
Federal government	75	.	0	5	52	**131**
Provincial governments	.	6	0	0 s	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.

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

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

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**371**	**77**	**8**	**4,598**	**2,541**	**7,595**
Federal government	367	.	0 s	101	678	**1,146**
Provincial governments	0 s	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 s	465	28	**493**
2005 r Total sciences						
Total	**368**	**75**	**10**	**4,199**	**2,556**	**7,208**
Federal government	362	.	0 s	99	703	**1,164**
Provincial governments	0 s	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 s	505	28	**534**
2004 r Total sciences						
Total	**320**	**68**	**14**	**4,340**	**2,467**	**7,209**
Federal government	316	.	0 s	101	650	**1,067**
Provincial governments	0 s	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 s	479	19	**497**
2003 r Total sciences						
Total	**314**	**68**	**15**	**4,202**	**2,345**	**6,943**
Federal government	310	.	0 s	97	646	**1,053**
Provincial governments	0 s	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 s	462	16	**478**
2002 r Total sciences						
Total	**370**	**65**	**17**	**4,154**	**2,074**	**6,681**
Federal government	365	.	1	99	529	**993**
Provincial governments	0 s	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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**494**	**70**	**0**	**8,033**	**4,088**	**12,685**
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**
2005 r Total sciences						
Total	**395**	**44**	**0**	**8,250**	**3,980**	**12,670**
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**
2004 r Total sciences						
Total	**329**	**46**	**0**	**7,871**	**3,835**	**12,080**
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**
2003 r Total sciences						
Total	**351**	**48**	**0**	**7,468**	**3,187**	**11,054**
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**
2002 r Total sciences						
Total	**324**	**44**	**0**	**7,064**	**2,996**	**10,426**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**81**	**6**	**0**	**184**	**287**	**558**
Federal government	80	.	.	1	70	**150**
Provincial governments	0 s	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**
2005 r Total sciences						
Total	**83**	**4**	**0**	**199**	**294**	**581**
Federal government	81	.	.	4	72	**157**
Provincial governments	0 s	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**
2004 r Total sciences						
Total	**73**	**4**	**0**	**183**	**260**	**519**
Federal government	71	.	.	4	72	**146**
Provincial governments	0 s	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**
2003 r Total sciences						
Total	**63**	**4**	**0**	**150**	**239**	**456**
Federal government	62	.	.	7	62	**131**
Provincial governments	0 s	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**
2002 r Total sciences						
Total	**72**	**3**	**0**	**155**	**225**	**454**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**67**	**4**	**12**	**167**	**215**	**465**
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 s	10	1	**11**
2005 r Total sciences						
Total	**68**	**4**	**11**	**152**	**218**	**453**
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 s	13	0	**13**
2004 r Total sciences						
Total	**54**	**4**	**9**	**113**	**245**	**425**
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 s	7	0	**7**
2003 r Total sciences						
Total	**54**	**4**	**7**	**88**	**245**	**398**
Federal government	53	.	1	3	64	**121**
Provincial governments	.	4	3	2	30	**39**
Provincial research organizations	.	.	0 s	.	.	**0** s
Business enterprise	1	.	3	76	18	**98**
Higher education	.	.	.	.	121	**121**
Private non-profit organizations	.	.	.	.	12	**12**
Foreign	.	.	0 s	7	1	**8**
2002 r Total sciences						
Total	**53**	**4**	**7**	**112**	**259**	**435**
Federal government	52	.	0 s	4	57	**113**
Provincial governments	.	4	3	4	36	**46**
Provincial research organizations	.	.	0 s	.	.	**0** s
Business enterprise	1	.	4	96	16	**117**
Higher education	.	.	.	.	129	**129**
Private non-profit organizations	.	.	.	.	21	**21**
Foreign	.	.	0 s	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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**133**	**125**	**0**	**1,236**	**919**	**2,412**
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**
2005 r Total sciences						
Total	**130**	**122**	**0**	**1,193**	**962**	**2,406**
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**
2004 r Total sciences						
Total	**110**	**114**	**0**	**1,131**	**899**	**2,254**
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**
2003 r Total sciences						
Total	**87**	**103**	**0**	**861**	**827**	**1,877**
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**
2002 r Total sciences						
Total	**92**	**108**	**0**	**782**	**727**	**1,709**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**91**	**18**	**0**	**1,576**	**959**	**2,644**
Federal government	89	.	0	35	296	**419**
Provincial governments	0 [s]	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**
2005 [r] Total sciences						
Total	**91**	**18**	**0**	**1,493**	**904**	**2,505**
Federal government	88	.	0	35	294	**417**
Provincial governments	0 [s]	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**
2004 [r] Total sciences						
Total	**91**	**16**	**0**	**1,434**	**832**	**2,373**
Federal government	88	.	0	36	284	**409**
Provincial governments	0 [s]	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**
2003 [r] Total sciences						
Total	**80**	**15**	**0**	**1,173**	**785**	**2,052**
Federal government	77	.	0	32	231	**340**
Provincial governments	0 [s]	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**
2002 [r] Total sciences						
Total	**99**	**20**	**0**	**1,093**	**736**	**1,949**
Federal government	97	.	0	38	204	**338**
Provincial governments	0 [s]	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.

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

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

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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**1,098**	.	.	.	.	**1,098**
Federal government	1,080	.	.	.	.	**1,080**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	18	.	.	.	.	**18**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2005 r Total sciences						
Total	**1,123**	.	.	.	.	**1,123**
Federal government	1,103	.	.	.	.	**1,103**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	19	.	.	.	.	**19**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2004 r Total sciences						
Total	**960**	.	.	.	.	**960**
Federal government	945	.	.	.	.	**945**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	14	.	.	.	.	**14**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2003 r Total sciences						
Total	**999**	.	.	.	.	**999**
Federal government	983	.	.	.	.	**983**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	15	.	.	.	.	**15**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2002 r Total sciences						
Total	**1,015**	.	.	.	.	**1,015**
Federal government	994	.	.	.	.	**994**
Provincial governments	2	.	.	.	.	**2**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	18	.	.	.	.	**18**
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 6-13
Provincial Gross Domestic Expenditures on Research and Development, in the total sciences — National Capital Region, Ontario

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**1,012**	.	.	.	.	**1,012**
Federal government	998	.	.	.	.	**998**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	14	.	.	.	.	**14**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2005 [r] Total sciences						
Total	**1,040**	.	.	.	.	**1,040**
Federal government	1,025	.	.	.	.	**1,025**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	15	.	.	.	.	**15**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2004 [r] Total sciences						
Total	**912**	.	.	.	.	**912**
Federal government	901	.	.	.	.	**901**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	11	.	.	.	.	**11**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2003 [r] Total sciences						
Total	**950**	.	.	.	.	**950**
Federal government	936	.	.	.	.	**936**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	13	.	.	.	.	**13**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2002 [r] Total sciences						
Total	**950**	.	.	.	.	**950**
Federal government	932	.	.	.	.	**932**
Provincial governments	2	.	.	.	.	**2**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	16	.	.	.	.	**16**
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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Total sciences						
Total	**86**	.	.	.	.	**86**
Federal government	82	.	.	.	.	**82**
Provincial governments	0 s	.	.	.	.	**0** s
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	.	.	.	.	**4**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2005 r Total sciences						
Total	**83**	.	.	.	.	**83**
Federal government	78	.	.	.	.	**78**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	.	.	.	.	**4**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2004 r Total sciences						
Total	**48**	.	.	.	.	**48**
Federal government	44	.	.	.	.	**44**
Provincial governments	0 s	.	.	.	.	**0** s
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	**3**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2003 r Total sciences						
Total	**49**	.	.	.	.	**49**
Federal government	46	.	.	.	.	**46**
Provincial governments	0 s	.	.	.	.	**0** s
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	**3**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2002 r Total sciences						
Total	**65**	.	.	.	.	**65**
Federal government	62	.	.	.	.	**62**
Provincial governments	0 s	.	.	.	.	**0** s
Provincial research organizations	.	.	.	.	.	.
Business enterprise	2	.	.	.	.	**2**
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 7

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

Funding sector	Performing sector						
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	Total
	millions of dollars						
2008 p Natural sciences							
Total	**2,289**	**259**	**25**	**16,316**	**7,886**	**116**	**26,892**
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 s	.	.	.	**0** s
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 s	2,479	128	6	**2,615**
2007 p Natural sciences							
Total	**2,359**	**261**	**25**	**16,159**	**7,807**	**112**	**26,724**
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 s	.	.	.	**0** s
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 s	2,455	127	6	**2,589**
2006 Natural sciences							
Total	**2,340**	**280**	**22**	**16,137**	**7,715**	**109**	**26,603**
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 s	.	.	.	**0** s
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 s	2,452	126	6	**2,584**
2005 r Natural sciences							
Total	**2,289**	**252**	**23**	**15,791**	**7,627**	**106**	**26,088**
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 s	.	.	.	**0** s
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 s	2,542	116	17	**2,675**
2004 r Natural sciences							
Total	**1,965**	**241**	**25**	**15,299**	**7,280**	**98**	**24,907**
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 s	.	.	.	**0** s
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 s	2,417	96	13	**2,526**
2003 r Natural sciences							
Total	**1,963**	**229**	**24**	**14,123**	**6,544**	**87**	**22,971**
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 s	.	.	.	**0** s
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 s	2,082	76	8	**2,167**

Table 7 – continued

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

Funding sector	Performing sector						
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	Total
	millions of dollars						
2002 r Natural sciences							
Total	**2,073**	**236**	**26**	**13,540**	**6,041**	**59**	**21,974**
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 s	.	.	.	**0** s
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**
2001 r Natural sciences							
Total	**2,010**	**234**	**23**	**14,266**	**5,150**	**59**	**21,741**
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 s	.	.	.	**0** s
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**
2000 r Natural sciences							
Total	**1,995**	**171**	**66**	**12,395**	**4,591**	**55**	**19,273**
Federal government	1,938	0	2	239	1,106	3	**3,288**
Provincial governments	3	171	38	45	470	15	**742**
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**
1999 r Natural sciences							
Total	**1,774**	**160**	**60**	**10,399**	**4,020**	**54**	**16,468**
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**
1998 r Natural sciences							
Total	**1,667**	**139**	**61**	**9,682**	**3,466**	**68**	**15,083**
Federal government	1,615	0	3	262	751	10	**2,641**
Provincial governments	4	139	34	56	297	17	**548**
Provincial research organizations	.	.	0 s	.	.	.	**0** s
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**
1997 r Natural sciences							
Total	**1,651**	**140**	**58**	**8,739**	**3,147**	**73**	**13,809**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**27**	**4**	**0**	**99**	**101**	**231**
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**
2005 r Natural sciences						
Total	**28**	**5**	**0**	**86**	**117**	**235**
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**
2004 r Natural sciences						
Total	**23**	**5**	**0**	**30**	**89**	**147**
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**
2003 r Natural sciences						
Total	**23**	**5**	**0**	**31**	**85**	**144**
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**
2002 r Natural sciences						
Total	**32**	**5**	**0**	**22**	**73**	**131**
Federal government	31	.	.	4	24	**59**
Provincial governments	.	5	.	0 s	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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**26**	**0**	**..**	**13**	**22**	**61**
Federal government	25	.	.	1	7	**33**
Provincial governments	.	.	.	0 s	1	**1**
Provincial research organizations	.	.	.	.	.	**..**
Business enterprise	0 s	.	.	11	1	**12**
Higher education	.	.	.	.	13	**13**
Private non-profit organizations	.	.	.	.	1	**1**
Foreign	.	.	.	0 s	.	**0** s
2005 r Natural sciences						
Total	**28**	**0**	**0**	**11**	**20**	**59**
Federal government	27	.	.	1	7	**36**
Provincial governments	.	.	.	0 s	0 s	**1**
Provincial research organizations	.	.	.	.	.	**0**
Business enterprise	1	.	.	7	0 s	**8**
Higher education	.	.	.	.	12	**12**
Private non-profit organizations	.	.	.	.	0 s	**0** s
Foreign	.	.	.	2	.	**2**
2004 r Natural sciences						
Total	**10**	**0**	**0**	**7**	**17**	**34**
Federal government	10	.	.	1	6	**17**
Provincial governments	.	.	.	0 s	0 s	**1**
Provincial research organizations	.	.	.	.	.	**0**
Business enterprise	0 s	.	.	6	1	**6**
Higher education	.	.	.	.	10	**10**
Private non-profit organizations	.	.	.	.	0 s	**0** s
Foreign	.	.	.	0 s	.	**0** s
2003 r Natural sciences						
Total	**12**	**0**	**0**	**7**	**18**	**37**
Federal government	12	.	.	2	5	**19**
Provincial governments	.	.	.	0 s	0 s	**1**
Provincial research organizations	.	.	.	.	.	**0**
Business enterprise	0 s	.	.	5	0 s	**5**
Higher education	.	.	.	.	12	**12**
Private non-profit organizations	.	.	.	.	1	**1**
Foreign	.	.	.	0 s	.	**0** s
2002 r Natural sciences						
Total	**8**	**0**	**0**	**4**	**13**	**26**
Federal government	8	.	.	1	3	**13**
Provincial governments	.	.	.	0 s	0 s	**0** s
Provincial research organizations	.	.	.	.	.	**0**
Business enterprise	0 s	.	.	3	1	**4**
Higher education	.	.	.	.	8	**8**
Private non-profit organizations	.	.	.	.	0 s	**0** s
Foreign	.	.	.	0 s	.	**0** s

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**73**	**6**	**..**	**106**	**246**	**432**
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**
2005 r Natural sciences						
Total	**66**	**6**	**0**	**102**	**226**	**400**
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**
2004 r Natural sciences						
Total	**81**	**6**	**0**	**94**	**202**	**384**
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**
2003 r Natural sciences						
Total	**65**	**6**	**0**	**79**	**201**	**351**
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**
2002 r Natural sciences						
Total	**76**	**6**	**0**	**93**	**174**	**349**
Federal government	75	.	0	5	44	**126**
Provincial governments	.	6	0	0 s	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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**30**	**2**	**2**	**102**	**91**	**226**
Federal government	29	.	0 s	1	26	**57**
Provincial governments	.	2	0 s	0 s	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 s	**4**
2005 r Natural sciences						
Total	**26**	**2**	**2**	**96**	**84**	**211**
Federal government	25	.	0 s	3	24	**53**
Provincial governments	.	2	1	0 s	3	**6**
Provincial research organizations	.	.	.	.	.	**0 s**
Business enterprise	0 s	.	1	90	5	**96**
Higher education	.	.	.	.	46	**46**
Private non-profit organizations	.	.	.	.	6	**6**
Foreign	.	.	.	4	0 s	**4**
2004 r Natural sciences						
Total	**26**	**2**	**2**	**82**	**74**	**186**
Federal government	26	.	0 s	1	22	**49**
Provincial governments	.	2	1	0 s	3	**6**
Provincial research organizations	.	.	.	.	.	**0 s**
Business enterprise	1	.	1	80	4	**85**
Higher education	.	.	.	.	40	**40**
Private non-profit organizations	.	.	.	.	5	**5**
Foreign	.	.	.	2	0 s	**2**
2003 r Natural sciences						
Total	**30**	**2**	**2**	**64**	**80**	**178**
Federal government	30	.	0 s	1	23	**54**
Provincial governments	.	2	1	0 s	3	**6**
Provincial research organizations	.	.	.	.	.	**0 s**
Business enterprise	1	.	1	61	4	**67**
Higher education	.	.	.	.	43	**43**
Private non-profit organizations	.	.	.	.	7	**7**
Foreign	.	.	.	2	0 s	**2**
2002 r Natural sciences						
Total	**46**	**2**	**2**	**62**	**67**	**178**
Federal government	45	.	0 s	2	17	**65**
Provincial governments	.	2	1	0 s	2	**5**
Provincial research organizations	.	.	.	.	.	**0 s**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**364**	**54**	**8**	**4,598**	**2,061**	**7,085**
Federal government	359	.	0 s	101	580	**1,040**
Provincial governments	0 s	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 s	465	28	**493**
2005 r Natural sciences						
Total	**367**	**54**	**10**	**4,199**	**2,064**	**6,695**
Federal government	362	.	0 s	99	603	**1,064**
Provincial governments	0 s	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 s	505	28	**534**
2004 r Natural sciences						
Total	**320**	**50**	**14**	**4,340**	**1,981**	**6,705**
Federal government	315	.	0 s	101	556	**972**
Provincial governments	0 s	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 s	479	19	**497**
2003 r Natural sciences						
Total	**314**	**50**	**15**	**4,202**	**1,891**	**6,472**
Federal government	309	.	0 s	97	555	**962**
Provincial governments	0 s	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 s	462	16	**478**
2002 r Natural sciences						
Total	**370**	**49**	**17**	**4,154**	**1,678**	**6,268**
Federal government	365	.	1	99	466	**930**
Provincial governments	0 s	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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**491**	**66**	**0**	**8,033**	**3,289**	**11,878**
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**
2005 r Natural sciences						
Total	**392**	**41**	**0**	**8,250**	**3,219**	**11,902**
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**
2004 r Natural sciences						
Total	**327**	**42**	**0**	**7,871**	**3,139**	**11,379**
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**
2003 r Natural sciences						
Total	**349**	**44**	**0**	**7,468**	**2,584**	**10,445**
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**
2002 r Natural sciences						
Total	**322**	**41**	**0**	**7,064**	**2,460**	**9,887**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**81**	**5**	**0**	**184**	**224**	**493**
Federal government	80	.	.	1	58	**138**
Provincial governments	0 s	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**
2005 r Natural sciences						
Total	**83**	**4**	**0**	**199**	**227**	**513**
Federal government	81	.	.	4	59	**144**
Provincial governments	0 s	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**
2004 r Natural sciences						
Total	**73**	**3**	**0**	**183**	**201**	**459**
Federal government	71	.	.	4	60	**134**
Provincial governments	0 s	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**
2003 r Natural sciences						
Total	**63**	**3**	**0**	**150**	**185**	**400**
Federal government	62	.	.	7	52	**121**
Provincial governments	0 s	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**
2002 r Natural sciences						
Total	**72**	**2**	**0**	**155**	**176**	**404**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**67**	**4**	**12**	**167**	**173**	**422**
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 s	10	1	**11**
2005 r Natural sciences						
Total	**68**	**4**	**11**	**152**	**176**	**411**
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 s	13	0 s	**13**
2004 r Natural sciences						
Total	**54**	**4**	**9**	**113**	**199**	**379**
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 s	7	0	**7**
2003 r Natural sciences						
Total	**54**	**4**	**7**	**88**	**197**	**350**
Federal government	53	.	1	3	54	**112**
Provincial governments	.	4	3	2	24	**33**
Provincial research organizations	.	.	0 s	.	.	**0** s
Business enterprise	1	.	3	76	17	**98**
Higher education	.	.	.	.	89	**89**
Private non-profit organizations	.	.	.	.	11	**11**
Foreign	.	.	0 s	7	1	**8**
2002 r Natural sciences						
Total	**53**	**3**	**7**	**112**	**207**	**383**
Federal government	52	.	0 s	4	49	**105**
Provincial governments	.	3	3	4	28	**39**
Provincial research organizations	.	.	0 s	.	.	**0** s
Business enterprise	1	.	4	96	16	**116**
Higher education	.	.	.	.	94	**94**
Private non-profit organizations	.	.	.	.	20	**20**
Foreign	.	.	0 s	8	0 s	**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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**133**	**124**	**0**	**1,236**	**758**	**2,251**
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**
2005 r Natural sciences						
Total	**130**	**122**	**0**	**1,193**	**786**	**2,230**
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**
2004 r Natural sciences						
Total	**110**	**114**	**0**	**1,131**	**729**	**2,085**
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**
2003 r Natural sciences						
Total	**87**	**101**	**0**	**861**	**683**	**1,732**
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**
2002 r Natural sciences						
Total	**92**	**108**	**0**	**782**	**607**	**1,588**
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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**91**	**15**	**0**	**1,576**	**750**	**2,432**
Federal government	89	.	0	35	247	**371**
Provincial governments	0 s	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**
2005 r Natural sciences						
Total	**91**	**15**	**0**	**1,493**	**707**	**2,306**
Federal government	88	.	0	35	245	**368**
Provincial governments	0 s	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**
2004 r Natural sciences						
Total	**91**	**15**	**0**	**1,434**	**648**	**2,188**
Federal government	88	.	0	36	237	**362**
Provincial governments	0 s	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**
2003 r Natural sciences						
Total	**80**	**14**	**0**	**1,173**	**620**	**1,886**
Federal government	77	.	0	32	194	**303**
Provincial governments	0 s	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**
2002 r Natural sciences						
Total	**99**	**20**	**0**	**1,093**	**586**	**1,798**
Federal government	97	.	0	38	175	**309**
Provincial governments	0 s	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.

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

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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**953**	.	.	.	.	**953**
Federal government	934	.	.	.	.	**934**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	18	.	.	.	.	**18**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2005 r Natural sciences						
Total	**1,002**	.	.	.	.	**1,002**
Federal government	982	.	.	.	.	**982**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	19	.	.	.	.	**19**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2004 r Natural sciences						
Total	**844**	.	.	.	.	**844**
Federal government	829	.	.	.	.	**829**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	14	.	.	.	.	**14**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2003 r Natural sciences						
Total	**881**	.	.	.	.	**881**
Federal government	865	.	.	.	.	**865**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	15	.	.	.	.	**15**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2002 r Natural sciences						
Total	**900**	.	.	.	.	**900**
Federal government	879	.	.	.	.	**879**
Provincial governments	2	.	.	.	.	**2**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	18	.	.	.	.	**18**
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 8-13
Provincial Gross Domestic Expenditures on Research and Development, in the natural sciences and engineering — National Capital Region, Ontario

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**870**	.	.	.	.	**870**
Federal government	855	.	.	.	.	**855**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	14	.	.	.	.	**14**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2005 r Natural sciences						
Total	**930**	.	.	.	.	**930**
Federal government	915	.	.	.	.	**915**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	15	.	.	.	.	**15**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2004 r Natural sciences						
Total	**805**	.	.	.	.	**805**
Federal government	794	.	.	.	.	**794**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	11	.	.	.	.	**11**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2003 r Natural sciences						
Total	**842**	.	.	.	.	**842**
Federal government	829	.	.	.	.	**829**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	13	.	.	.	.	**13**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2002 r Natural sciences						
Total	**845**	.	.	.	.	**845**
Federal government	827	.	.	.	.	**827**
Provincial governments	2	.	.	.	.	**2**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	16	.	.	.	.	**16**
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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Natural sciences						
Total	**83**	.	.	.	.	**83**
Federal government	79	.	.	.	.	**79**
Provincial governments	0 s	.	.	.	.	**0** s
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	.	.	.	.	**4**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2005 r Natural sciences						
Total	**72**	.	.	.	.	**72**
Federal government	67	.	.	.	.	**67**
Provincial governments	1	.	.	.	.	**1**
Provincial research organizations	.	.	.	.	.	.
Business enterprise	4	.	.	.	.	**4**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2004 r Natural sciences						
Total	**38**	.	.	.	.	**38**
Federal government	35	.	.	.	.	**35**
Provincial governments	0 s	.	.	.	.	**0** s
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	**3**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2003 r Natural sciences						
Total	**39**	.	.	.	.	**39**
Federal government	36	.	.	.	.	**36**
Provincial governments	0 s	.	.	.	.	**0** s
Provincial research organizations	.	.	.	.	.	.
Business enterprise	3	.	.	.	.	**3**
Higher education	.	.	.	.	.	.
Private non-profit organizations	.	.	.	.	.	.
Foreign	.	.	.	.	.	.
2002 r Natural sciences						
Total	**55**	.	.	.	.	**55**
Federal government	52	.	.	.	.	**52**
Provincial governments	0 s	.	.	.	.	**0** s
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.

Table 9

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

Funding sector	Performing sector						
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	Total
	millions of dollars						
2008 p Social sciences							
Total	**177**	**34**	**..**	**..**	**1,951**	**16**	**2,179**
Federal government	177	..	..	..	410	4	**591**
Provincial governments	0	34	..	..	203	4	**241**
Provincial research organizations	..	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	34	0 s	**34**
Higher education	..	..	..	..	1,157	..	**1,157**
Private non-profit organizations	..	..	..	..	148	7	**155**
Foreign	..	..	..	..	..	1	**1**
2007 p Social sciences							
Total	**176**	**33**	**..**	**..**	**1,932**	**15**	**2,156**
Federal government	176	..	..	..	406	4	**585**
Provincial governments	0	33	..	..	201	4	**238**
Provincial research organizations	..	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	33	0 s	**34**
Higher education	..	..	..	..	1,146	..	**1,146**
Private non-profit organizations	..	..	..	..	146	7	**153**
Foreign	..	..	..	..	..	1	**1**
2006 Social sciences							
Total	**156**	**31**	**..**	**..**	**1,909**	**15**	**2,112**
Federal government	156	..	..	..	401	4	**561**
Provincial governments	0	31	..	..	199	4	**233**
Provincial research organizations	..	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	33	0 s	**33**
Higher education	..	..	..	..	1,132	..	**1,132**
Private non-profit organizations	..	..	..	..	145	7	**151**
Foreign	..	..	..	..	..	1	**1**
2005 r Social sciences							
Total	**124**	**28**	**..**	**..**	**1,891**	**11**	**2,054**
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 s	**0** s
2004 r Social sciences							
Total	**118**	**24**	**..**	**..**	**1,778**	**5**	**1,926**
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 s	**0** s
2003 r Social sciences							
Total	**120**	**24**	**..**	**..**	**1,599**	**5**	**1,748**
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 s	**0** s

Table 9 – continued

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

Funding sector	Performing sector						
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Private non-profit organizations	Total
	millions of dollars						
2002 r Social sciences							
Total	**117**	**21**	**..**	**..**	**1,414**	**4**	**1,556**
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 s	**0** s
2001 r Social sciences							
Total	**93**	**19**	**..**	**..**	**1,274**	**4**	**1,390**
Federal government	93	..	..	..	231	0 s	**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 s	**0** s
2000 r Social sciences							
Total	**85**	**18**	**..**	**..**	**1,202**	**3**	**1,308**
Federal government	85	..	..	..	187	0 s	**272**
Provincial governments	0	18	..	..	117	1	**137**
Provincial research organizations	..	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	22	0 s	**23**
Higher education	..	..	..	..	800	..	**800**
Private non-profit organizations	..	..	..	..	76	1	**77**
Foreign	..	..	..	..	..	0 s	**0** s
1999 r Social sciences							
Total	**85**	**13**	**..**	**..**	**1,062**	**9**	**1,170**
Federal government	85	..	..	..	142	0 s	**227**
Provincial governments	0	13	..	..	96	3	**112**
Provincial research organizations	..	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	20	0 s	**21**
Higher education	..	..	..	..	740	..	**740**
Private non-profit organizations	..	..	..	..	64	5	**69**
Foreign	..	..	..	..	..	1	**1**
1998 r Social sciences							
Total	**76**	**16**	**..**	**..**	**904**	**9**	**1,005**
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 s	**0** s
1997 r Social sciences							
Total	**69**	**16**	**..**	**..**	**732**	**9**	**826**
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.

Table 10-1

Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — Newfoundland and Labrador

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	..	**0** s	..	..	**31**	**31**
Federal government	..	..	..	..	9	**9**
Provincial governments	..	0 s	..	..	0 s	**1**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	19	**19**
Private non-profit organizations	..	..	..	..	2	**2**
Foreign	..	..	..	..	..	**..**
2005 r Social sciences						
Total	..	..	..	..	**32**	**32**
Federal government	..	..	..	..	10	**10**
Provincial governments	..	..	..	..	0 s	**0** s
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	21	**21**
Private non-profit organizations	..	..	..	..	1	**1**
Foreign	..	..	..	..	..	**..**
2004 r Social sciences						
Total	..	..	..	..	**27**	**27**
Federal government	..	..	..	..	7	**7**
Provincial governments	..	..	..	..	0 s	**0** s
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	18	**18**
Private non-profit organizations	..	..	..	..	2	**2**
Foreign	..	..	..	..	..	**..**
2003 r Social sciences						
Total	..	..	..	..	**29**	**29**
Federal government	..	..	..	..	7	**7**
Provincial governments	..	..	..	..	0 s	**0** s
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	19	**19**
Private non-profit organizations	..	..	..	..	3	**3**
Foreign	..	..	..	..	..	**..**
2002 r Social sciences						
Total	..	..	..	..	**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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	..	..	..	..	**9**	**9**
Federal government	..	..	..	..	2	**2**
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	5	**5**
Private non-profit organizations	..	..	..	..	1	**1**
Foreign	..	..	..	..	..	..
2005 r Social sciences						
Total	..	..	..	..	**7**	**7**
Federal government	..	..	..	..	2	**2**
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	5	**5**
Private non-profit organizations	..	..	..	..	0 s	**0** s
Foreign	..	..	..	..	..	..
2004 r Social sciences						
Total	..	..	..	..	**7**	**7**
Federal government	..	..	..	..	2	**2**
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	5	**5**
Private non-profit organizations	..	..	..	..	0 s	**0** s
Foreign	..	..	..	..	..	..
2003 r Social sciences						
Total	..	..	..	..	**7**	**7**
Federal government	..	..	..	..	1	**1**
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	5	**5**
Private non-profit organizations	..	..	..	..	1	**1**
Foreign	..	..	..	..	..	..
2002 r Social sciences						
Total	..	..	..	..	**6**	**6**
Federal government	..	..	..	..	1	**1**
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	4	**4**
Private non-profit organizations	..	..	..	..	0 s	**0** s
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 10-3
Provincial Gross Domestic Expenditures on Research and Development, in the social sciences and humanities — Nova Scotia

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	..	..	..	..	**70**	**70**
Federal government	..	..	..	..	14	**14**
Provincial governments	..	..	..	..	1	**1**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	0 s	**0** s
Higher education	..	..	..	..	54	**54**
Private non-profit organizations	..	..	..	..	1	**1**
Foreign	..	..	..	..	..	**..**
2005 r Social sciences						
Total	..	..	..	..	**71**	**71**
Federal government	..	..	..	..	16	**16**
Provincial governments	..	..	..	..	1	**1**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	0 s	**0** s
Higher education	..	..	..	..	53	**53**
Private non-profit organizations	..	..	..	..	1	**1**
Foreign	..	..	..	..	..	**..**
2004 r Social sciences						
Total	..	..	..	..	**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	..	..	..	..	..	**..**
2003 r Social sciences						
Total	..	..	..	..	**58**	**58**
Federal government	..	..	..	..	10	**10**
Provincial governments	..	..	..	..	2	**2**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	0 s	**0** s
Higher education	..	..	..	..	45	**45**
Private non-profit organizations	..	..	..	..	1	**1**
Foreign	..	..	..	..	..	**..**
2002 r Social sciences						
Total	..	..	..	..	**51**	**51**
Federal government	..	..	..	..	8	**8**
Provincial governments	..	..	..	..	1	**1**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	0 s	**0** s
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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**..**	**0**	**..**	**..**	**44**	**44**
Federal government	..	..	..	..	8	**8**
Provincial governments	..	0	..	..	1	**1**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	35	**35**
Private non-profit organizations	..	..	..	..	..	**..**
Foreign	..	..	..	..	..	**..**
2005 [r] Social sciences						
Total	**..**	**0**	**..**	**..**	**46**	**46**
Federal government	..	..	..	..	11	**11**
Provincial governments	..	0	..	..	1	**1**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	34	**34**
Private non-profit organizations	..	..	..	..	..	**..**
Foreign	..	..	..	..	..	**..**
2004 [r] Social sciences						
Total	**..**	**0**	**..**	**..**	**40**	**40**
Federal government	..	..	..	..	8	**8**
Provincial governments	..	0	..	..	1	**1**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	31	**31**
Private non-profit organizations	..	..	..	..	..	**..**
Foreign	..	..	..	..	..	**..**
2003 [r] Social sciences						
Total	**..**	**0**	**..**	**..**	**38**	**38**
Federal government	..	..	..	..	7	**7**
Provincial governments	..	0	..	..	1	**1**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	30	**30**
Private non-profit organizations	..	..	..	..	..	**..**
Foreign	..	..	..	..	..	**..**
2002 [r] Social sciences						
Total	**..**	**0**	**..**	**..**	**32**	**32**
Federal government	..	..	..	..	4	**4**
Provincial governments	..	0	..	..	0 [s]	**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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**8**	**22**	**..**	**..**	**480**	**509**
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	..	..	..	..	..	**..**
2005 r Social sciences						
Total	**1**	**21**	**..**	**..**	**492**	**513**
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	..	..	..	..	..	**..**
2004 r Social sciences						
Total	**0 s**	**18**	**..**	**..**	**486**	**505**
Federal government	0 s	..	..	..	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	..	..	..	..	..	**..**
2003 r Social sciences						
Total	**0 s**	**17**	**..**	**..**	**454**	**472**
Federal government	0 s	..	..	..	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	..	..	..	..	..	**..**
2002 r Social sciences						
Total	**0 s**	**16**	**..**	**..**	**396**	**413**
Federal government	0 s	..	..	..	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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**4**	**4**	**..**	**..**	**799**	**806**
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	..	..	..	..	..	**..**
2005 r Social sciences						
Total	**3**	**4**	**..**	**..**	**761**	**767**
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	..	..	..	..	..	**..**
2004 r Social sciences						
Total	**2**	**4**	**..**	**..**	**696**	**702**
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	..	..	..	..	..	**..**
2003 r Social sciences						
Total	**2**	**4**	**..**	**..**	**603**	**609**
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	..	..	..	..	..	**..**
2002 r Social sciences						
Total	**2**	**3**	**..**	**..**	**535**	**540**
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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**..**	**1**	**..**	**..**	**63**	**64**
Federal government	..	..	..	..	12	**12**
Provincial governments	..	1	..	..	4	**5**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	41	**41**
Private non-profit organizations	..	..	..	..	6	**6**
Foreign	..	..	..	..	..	**..**
2005 r Social sciences						
Total	**..**	**1**	**..**	**..**	**67**	**68**
Federal government	..	..	..	..	13	**13**
Provincial governments	..	1	..	..	3	**4**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	44	**44**
Private non-profit organizations	..	..	..	..	6	**6**
Foreign	..	..	..	..	..	**..**
2004 r Social sciences						
Total	**..**	**1**	**..**	**..**	**60**	**61**
Federal government	..	..	..	..	12	**12**
Provincial governments	..	1	..	..	4	**5**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	38	**38**
Private non-profit organizations	..	..	..	..	5	**5**
Foreign	..	..	..	..	..	**..**
2003 r Social sciences						
Total	**..**	**1**	**..**	**..**	**54**	**55**
Federal government	..	..	..	..	10	**10**
Provincial governments	..	1	..	..	3	**4**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	36	**36**
Private non-profit organizations	..	..	..	..	4	**4**
Foreign	..	..	..	..	..	**..**
2002 r Social sciences						
Total	**..**	**1**	**..**	**..**	**49**	**49**
Federal government	..	..	..	..	8	**8**
Provincial governments	..	1	..	..	3	**4**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	33	**33**
Private non-profit organizations	..	..	..	..	4	**4**
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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**..**	**0**	**..**	**..**	**43**	**43**
Federal government	..	..	..	..	7	**7**
Provincial governments	..	0	..	..	6	**6**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	30	**30**
Private non-profit organizations	..	..	..	..	0 s	**0** s
Foreign	..	..	..	..	..	**..**
2005 r Social sciences						
Total	**..**	**0**	**..**	**..**	**42**	**42**
Federal government	..	..	..	..	7	**7**
Provincial governments	..	0	..	..	4	**4**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	30	**30**
Private non-profit organizations	..	..	..	..	0 s	**0** s
Foreign	..	..	..	..	..	**..**
2004 r Social sciences						
Total	**..**	**0**	**..**	**..**	**46**	**46**
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	..	..	..	..	..	**..**
2003 r Social sciences						
Total	**..**	**0**	**..**	**..**	**48**	**48**
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	..	..	..	..	..	**..**
2002 r Social sciences						
Total	**..**	**0** s	**..**	**..**	**52**	**52**
Federal government	..	..	..	..	8	**8**
Provincial governments	..	0 s	..	..	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.

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

Funding sector	Performing sector					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**..**	**1**	**..**	**..**	**161**	**161**
Federal government	..	..	..	..	33	**33**
Provincial governments	..	1	..	..	35	**35**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	2	**2**
Higher education	..	..	..	..	82	**82**
Private non-profit organizations	..	..	..	..	9	**9**
Foreign	..	..	..	..	..	**..**
2005 r Social sciences						
Total	**..**	**0 s**	**..**	**..**	**176**	**176**
Federal government	..	..	..	..	43	**43**
Provincial governments	..	0 s	..	..	37	**37**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	85	**85**
Private non-profit organizations	..	..	..	..	10	**10**
Foreign	..	..	..	..	..	**..**
2004 r Social sciences						
Total	**..**	**0**	**..**	**..**	**169**	**169**
Federal government	..	..	..	..	38	**38**
Provincial governments	..	0	..	..	46	**46**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	76	**76**
Private non-profit organizations	..	..	..	..	8	**8**
Foreign	..	..	..	..	..	**..**
2003 r Social sciences						
Total	**..**	**1**	**..**	**..**	**143**	**145**
Federal government	..	..	..	..	35	**35**
Provincial governments	..	1	..	..	36	**38**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	63	**63**
Private non-profit organizations	..	..	..	..	8	**8**
Foreign	..	..	..	..	..	**..**
2002 r Social sciences						
Total	**..**	**0 s**	**..**	**..**	**121**	**121**
Federal government	..	..	..	..	21	**21**
Provincial governments	..	0 s	..	..	24	**24**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	1	**1**
Higher education	..	..	..	..	65	**65**
Private non-profit organizations	..	..	..	..	10	**10**
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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**..**	**2**	**..**	**..**	**210**	**212**
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	..	..	..	..	..	**..**
2005 r Social sciences						
Total	**..**	**2**	**..**	**..**	**197**	**199**
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	..	..	..	..	..	**..**
2004 r Social sciences						
Total	**..**	**1**	**..**	**..**	**183**	**184**
Federal government	..	..	..	..	47	**47**
Provincial governments	..	1	..	..	8	**9**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	0 s	**0** s
Higher education	..	..	..	..	101	**101**
Private non-profit organizations	..	..	..	..	27	**27**
Foreign	..	..	..	..	..	**..**
2003 r Social sciences						
Total	**..**	**1**	**..**	**..**	**165**	**166**
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	..	..	..	..	..	**..**
2002 r Social sciences						
Total	**..**	**1**	**..**	**..**	**151**	**152**
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.

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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
2005 [r] Social sciences						
Total	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
2004 [r] Social sciences						
Total	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
2003 [r] Social sciences						
Total	..	..	..	..	..	..
Federal government	..	..	..	..	..	..
Provincial governments	..	..	..	..	..	..
Provincial research organizations	..	..	..	..	..	..
Business enterprise	..	..	..	..	..	..
Higher education	..	..	..	..	..	..
Private non-profit organizations	..	..	..	..	..	..
Foreign	..	..	..	..	..	..
2002 [r] Social sciences						
Total	..	..	..	..	..	..
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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**145**	**..**	**..**	**..**	**..**	**145**
Federal government	145	..	..	..	..	**145**
Provincial governments	..	..	..	..	..	**..**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	..	**..**
Private non-profit organizations	..	..	..	..	..	**..**
Foreign	..	..	..	..	..	**..**
2005 [r] Social sciences						
Total	**121**	**..**	**..**	**..**	**..**	**121**
Federal government	121	..	..	..	..	**121**
Provincial governments	..	..	..	..	..	**..**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	..	**..**
Private non-profit organizations	..	..	..	..	..	**..**
Foreign	..	..	..	..	..	**..**
2004 [r] Social sciences						
Total	**116**	**..**	**..**	**..**	**..**	**116**
Federal government	116	..	..	..	..	**116**
Provincial governments	..	..	..	..	..	**..**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	..	**..**
Private non-profit organizations	..	..	..	..	..	**..**
Foreign	..	..	..	..	..	**..**
2003 [r] Social sciences						
Total	**118**	**..**	**..**	**..**	**..**	**118**
Federal government	118	..	..	..	..	**118**
Provincial governments	..	..	..	..	..	**..**
Provincial research organizations	..	..	..	..	..	**..**
Business enterprise	..	..	..	..	..	**..**
Higher education	..	..	..	..	..	**..**
Private non-profit organizations	..	..	..	..	..	**..**
Foreign	..	..	..	..	..	**..**
2002 [r] Social sciences						
Total	**115**	**..**	**..**	**..**	**..**	**115**
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.

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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**142**	**.**	**.**	**.**	**.**	**142**
Federal government	142	.	.	.	.	**142**
Provincial governments	.	.	.	.	.	**.**
Provincial research organizations	.	.	.	.	.	**.**
Business enterprise	.	.	.	.	.	**.**
Higher education	.	.	.	.	.	**.**
Private non-profit organizations	.	.	.	.	.	**.**
Foreign	.	.	.	.	.	**.**
2005 r Social sciences						
Total	**110**	**.**	**.**	**.**	**.**	**110**
Federal government	110	.	.	.	.	**110**
Provincial governments	.	.	.	.	.	**.**
Provincial research organizations	.	.	.	.	.	**.**
Business enterprise	.	.	.	.	.	**.**
Higher education	.	.	.	.	.	**.**
Private non-profit organizations	.	.	.	.	.	**.**
Foreign	.	.	.	.	.	**.**
2004 r Social sciences						
Total	**107**	**.**	**.**	**.**	**.**	**107**
Federal government	107	.	.	.	.	**107**
Provincial governments	.	.	.	.	.	**.**
Provincial research organizations	.	.	.	.	.	**.**
Business enterprise	.	.	.	.	.	**.**
Higher education	.	.	.	.	.	**.**
Private non-profit organizations	.	.	.	.	.	**.**
Foreign	.	.	.	.	.	**.**
2003 r Social sciences						
Total	**108**	**.**	**.**	**.**	**.**	**108**
Federal government	108	.	.	.	.	**108**
Provincial governments	.	.	.	.	.	**.**
Provincial research organizations	.	.	.	.	.	**.**
Business enterprise	.	.	.	.	.	**.**
Higher education	.	.	.	.	.	**.**
Private non-profit organizations	.	.	.	.	.	**.**
Foreign	.	.	.	.	.	**.**
2002 r Social sciences						
Total	**105**	**.**	**.**	**.**	**.**	**105**
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					
	Federal government	Provincial governments	Provincial research organizations	Business enterprise	Higher education	Total
	millions of dollars					
2006 Social sciences						
Total	**3**	**.**	**.**	**.**	**.**	**3**
Federal government	3	.	.	.	.	**3**
Provincial governments	.	.	.	.	.	**.**
Provincial research organizations	.	.	.	.	.	**.**
Business enterprise	.	.	.	.	.	**.**
Higher education	.	.	.	.	.	**.**
Private non-profit organizations	.	.	.	.	.	**.**
Foreign	.	.	.	.	.	**.**
2005 r Social sciences						
Total	**11**	**.**	**.**	**.**	**.**	**11**
Federal government	11	.	.	.	.	**11**
Provincial governments	.	.	.	.	.	**.**
Provincial research organizations	.	.	.	.	.	**.**
Business enterprise	.	.	.	.	.	**.**
Higher education	.	.	.	.	.	**.**
Private non-profit organizations	.	.	.	.	.	**.**
Foreign	.	.	.	.	.	**.**
2004 r Social sciences						
Total	**9**	**.**	**.**	**.**	**.**	**9**
Federal government	9	.	.	.	.	**9**
Provincial governments	.	.	.	.	.	**.**
Provincial research organizations	.	.	.	.	.	**.**
Business enterprise	.	.	.	.	.	**.**
Higher education	.	.	.	.	.	**.**
Private non-profit organizations	.	.	.	.	.	**.**
Foreign	.	.	.	.	.	**.**
2003 r Social sciences						
Total	**10**	**.**	**.**	**.**	**.**	**10**
Federal government	10	.	.	.	.	**10**
Provincial governments	.	.	.	.	.	**.**
Provincial research organizations	.	.	.	.	.	**.**
Business enterprise	.	.	.	.	.	**.**
Higher education	.	.	.	.	.	**.**
Private non-profit organizations	.	.	.	.	.	**.**
Foreign	.	.	.	.	.	**.**
2002 r Social sciences						
Total	**10**	**.**	**.**	**.**	**.**	**10**
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

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[1]	
	millions of dollars						
Total	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	**GERD is total intramural (domestic) R&D expenditures provided by the performing sector**
Federal government							**Federal government**
Provincial governments							**Provincial governments**
Provincial research organizations							**Provincial research organizations**
Business enterprise							**Business enterprise**
Higher education							**Higher education**
Private non-profit organizations							**Private non-profit organizations**
Foreign[2]							**Foreign**

1.These data are not distributed provincially.

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

Data sources and methodology

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".[1] 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.

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)".[2]

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.

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.[3]

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.

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.