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Estimates of Research and
Development Expenditures
in the Higher Education
Sector, 2006/2007



August 2008 edition



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Statistics Canada
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Science Statistics

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

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Highlights

Estimates of Research and Development Expenditures in the Higher Education Sector, 2006/2007

- Spending on research and development in the higher education sector amounted to \$9.6 billion (current dollars) in the fiscal year 2006/2007, up 1.1% from 2005/2006 (table 1-1).
- The higher education sector includes affiliated research hospitals, experimental stations and clinics. Social sciences and humanities accounted for 20% of the total, health sciences 39%, and other natural sciences the remaining 41% (table 1-2).
- Higher education institutions themselves were the largest contributors, spending \$4.4 billion, 46% of the total. The second largest contributor was the federal government, funding \$2.5 billion, or 26% (table 1-3).

Analysis

Estimates of Research and Development Expenditures in the Higher Education Sector, 2006/2007

Spending on research and development in the higher education sector amounted to \$9.6 billion in 2006/2007 (table 1-1).

Spending on research and development by higher education institutions which includes all affiliated research hospitals, experimental stations and clinics is distributed by three science types: social sciences and humanities; health sciences; and natural sciences and engineering excluding health sciences (or other natural sciences).

In 2006/2007 spending on research and development by the higher education sector in the social sciences and humanities amounted to \$1.9 billion; health sciences stood at \$3.8 billion and other natural sciences at \$3.9 billion (table 1-2).

There are six funding sectors for spending on research and development in the higher education sector: the federal government; the provincial government; the business enterprise; the higher education; private non-profit organizations and foreign.

The higher education institutions themselves continued as the largest contributors to research and development done by this sector, spending \$4.4 billion (46%) in 2006/2007 up by 2.1% over 2005/2006 (table 1-1).

In 2006/2007, the second largest funding sector for higher education expenditures on research and development remained the federal government at \$2.5 billion, or 26% of total higher education expenditures on research and development (table 1-1).

The provincial government sector contributed 10% of the funding for spending on higher education research and development in 2006/2007 while business enterprises and private non-profit organizations each contributed 8%. Foreign organizations continued to fund 1% of higher education expenditures on research and development in 2006/2007 (table 1-1).

There is a strong regional pattern in the higher education sector's research and development expenditures, due to the heavy concentration of institutions in Quebec and Ontario. These two provinces accounted for two-thirds or \$6.6 billion of the \$9.6 billion expenditures in 2006/2007 (table 1-3).

Spending on research and development in higher education institutions in Saskatchewan has been declining since fiscal year 2002/2003 to \$215 million in 2006/2007 (table 1-4).

Related products

Selected publications from Statistics Canada

88-202-X	Industrial Research and Development: Intentions
88-204-X	Federal Scientific Activities
88-221-X	Gross Domestic Expenditures on Research and Development in Canada and the Provinces
88-522-X	Science and Technology Activities and Impacts: A Framework for a Statistical Information
88F0006X	Science, Innovation and Electronic Information Division Working Papers
88F0017M	Science, Innovation and Electronic Information Division Research Papers

Selected CANSIM tables from Statistics Canada

358-0001	Gross domestic expenditures on research and development, by science type and by funder and performer sector, annual
358-0024	Business enterprise research and development (BERD) characteristics, by industry group based on the North American Industry Classification System (NAICS), annual
358-0026	Intellectual property management, by federal departments and agencies indicators, annual

Selected surveys from Statistics Canada

4201	Research and Development in Canadian Industry
4204	Research and Development of Canadian Private Non-Profit Organizations
4208	Provincial Research Organizations (PRO)
4209	Provincial Government Activities in the Natural Sciences
4210	Provincial Government Activities in the Social Sciences
4212	Federal Science Expenditures and Personnel, Activities in the Social Sciences and Natural Sciences
5109	Higher Education Research and Development Estimates

Selected summary tables from Statistics Canada

- *Research and development performed by the business enterprise sector*
- *Domestic spending on research and development (GERD), funding sector, by province*
- *Domestic spending on research and development (GERD), performing sector, by province*
- *Domestic spending on research and development (GERD)*

Statistical tables

Table 1-1
Estimates of research and development expenditures in the higher education sector — Source of funds

	Federal government	Provincial government	Business enterprise	Higher education	Private non-profit organizations	Foreign	Total
millions of current dollars							
1993/1994	872.7	312.4	313.9	1,892.1	248.3	20.3	3,659.7
1994/1995	869.8	314.7	296.1	1,913.8	259.2	21.3	3,674.9
1995/1996	854.8	323.2	296.7	1,926.6	265.7	24.2	3,691.2
1996/1997	809.0	297.6	335.6	1,905.5	312.7	36.4	3,696.8
1997/1998	792.7	369.9	381.0	1,971.5	324.5	39.5	3,879.1
1998/1999	862.9	371.6	411.0	2,339.4	335.1	49.5	4,369.5
1999/2000	1,084.6	482.2	460.3	2,648.8	349.2	56.6	5,081.7
2000/2001	1,292.8	587.2	553.4	2,892.1	418.2	49.6	5,793.3
2001/2002	1,586.8	712.0	603.3	2,928.9	509.1	84.1	6,424.2
2002/2003	1,816.7	828.6	643.2	3,461.8	604.5	100.5	7,455.3
2003/2004	2,181.7	1,018.1	679.1	3,589.3	599.4	75.8	8,143.3
2004/2005	2,336.9	1,039.0	754.7	4,146.7	684.9	95.7	9,057.9
2005/2006 ¹	2,542.4	973.3	803.3	4,340.9	742.0	116.3	9,518.2
2006/2007	2,487.5	992.7	808.2	4,434.2	775.7	125.7	9,624.1
millions of 2002 constant dollars ¹							
1993/1994	1,000.8	358.3	360.0	2,169.8	284.7	23.3	4,196.9
1994/1995	986.2	356.8	335.7	2,169.8	293.9	24.1	4,166.6
1995/1996	947.7	358.3	328.9	2,135.9	294.6	26.8	4,092.2
1996/1997	883.2	324.9	366.4	2,080.2	341.4	39.7	4,035.8
1997/1998	855.1	399.0	411.0	2,126.8	350.1	42.6	4,184.6
1998/1999	934.9	402.6	445.3	2,534.6	363.1	53.6	4,734.0
1999/2000	1,155.1	513.5	490.2	2,820.9	371.9	60.3	5,411.8
2000/2001	1,321.9	600.4	565.8	2,957.2	427.6	50.7	5,923.6
2001/2002	1,604.4	719.9	610.0	2,961.5	514.8	85.0	6,495.7
2002/2003	1,816.7	828.6	643.2	3,461.8	604.5	100.5	7,455.3
2003/2004	2,112.0	985.6	657.4	3,474.6	580.3	73.4	7,883.2
2004/2005	2,192.2	974.7	708.0	3,890.0	642.5	89.8	8,497.1
2005/2006 ¹	2,307.1	883.2	728.9	3,939.1	673.3	105.5	8,637.2
2006/2007	2,205.2	880.1	716.5	3,931.0	687.7	111.4	8,532.0

1. CANSIM, table 384-0036.

Table 1-2
Estimates of research and development expenditures in the higher education sector — Source of funds and by major field of science, 2006/2007

	Social sciences and humanities ¹		Health sciences ²		Other natural sciences and engineering ³		Total	
	2002 ⁴ constant dollars	Current dollars	2002 ⁴ constant dollars	Current dollars	2002 ⁴ constant dollars	Current dollars	2002 ⁴ constant dollars	Current dollars
	millions of dollars							
Total	1,692.6	1,909.3	3,354.1	3,783.6	3,485.2	3,931.3	8,532.0	9,624.1
Federal government	355.7	401.2	832.2	938.7	1,017.4	1,147.6	2,205.3	2,487.5
Provincial governments	176.0	198.5	264.0	297.8	440.1	496.4	880.1	992.7
Business enterprise	29.1	32.8	302.7	341.5	384.7	433.9	716.5	808.2
Higher education	1,003.7	1,132.2	1,480.1	1,669.6	1,447.2	1,632.4	3,931.0	4,434.2
Private non-profit organizations	128.1	144.5	430.5	485.6	129.0	145.5	687.7	775.7
Foreign	0.0	0.0	44.6	50.3	66.8	75.4	111.4	125.7

1. Social sciences and humanities embrace all disciplines involving the study of human actions and conditions and the social, economic and institutional mechanisms affecting humans. Included are such disciplines as anthropology, business administration and commerce, communications, criminology, demography, economics, geography, history, languages, literature and linguistics, law, library science, philosophy, political sciences, psychology, religious studies, social work, sociology, and urban and regional studies.
2. Health sciences consist of programmes directed towards the protection and improvement of human health.
3. Other natural sciences and engineering consist of disciplines, other than health sciences, concerned with understanding, exploring, developing or utilizing the natural world. Included are engineering, mathematical and physical sciences.
4. CANSIM, table 384-0036.

Table 1-3
Estimates of research and development expenditures in the higher education sector — Source of funds and by province, 2006/2007

	Federal government	Provincial governments	Business enterprise	Higher education	Private non-profit organizations	Foreign	Total
	millions of current dollars						
Canada	2,487.5	992.7	808.2	4,434.2	775.7	125.7	9,624.1
Newfoundland and Labrador	40.3	2.5	14.8	67.9	2.8	3.9	132.2
Prince Edward Island	8.9	1.6	0.7	18.1	1.9	0.0	31.2
Nova Scotia	82.3	5.3	35.3	171.0	22.0	0.7	316.6
New Brunswick	34.1	5.1	5.0	83.7	7.0	0.0	135.0
Quebec	678.0	229.5	226.6	1,200.3	178.6	27.6	2,540.7
Ontario	1,003.4	421.5	373.3	1,863.8	356.9	69.3	4,088.2
Manitoba	69.5	18.8	20.8	135.7	38.2	4.1	287.2
Saskatchewan	52.7	28.9	8.2	113.3	11.8	0.6	215.4
Alberta	222.6	173.0	76.8	382.9	57.0	6.3	918.5
British Columbia	295.7	106.6	46.8	397.5	99.4	13.1	959.1
	millions of 2002 constant dollars ¹						
Canada	2,205.2	880.1	716.5	3,931.0	687.7	111.4	8,532.0
Newfoundland and Labrador	35.7	2.2	13.1	60.2	2.5	3.5	117.2
Prince Edward Island	7.9	1.4	0.6	16.0	1.7	0.0	27.7
Nova Scotia	73.0	4.7	31.3	151.6	19.5	0.6	280.7
New Brunswick	30.2	4.5	4.4	74.2	6.2	0.0	119.7
Quebec	601.1	203.5	200.9	1,064.1	158.3	24.5	2,252.4
Ontario	889.5	373.7	330.9	1,652.3	316.4	61.4	3,624.3
Manitoba	61.6	16.7	18.4	120.3	33.9	3.6	254.6
Saskatchewan	46.7	25.6	7.3	100.4	10.5	0.5	191.0
Alberta	197.3	153.4	68.1	339.5	50.5	5.6	814.3
British Columbia	262.1	94.5	41.5	352.4	88.1	11.6	850.3

1. CANSIM, table 384-0036.

Table 1-4
Estimates of research and development expenditures in the higher education sector — Province

	Canada	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
millions of current dollars											
1993/1994	3,659.7	60.9	4.4	119.0	52.5	1,163.0	1,422.6	110.7	106.2	296.8	323.6
1994/1995	3,674.9	58.5	3.8	113.2	53.8	1,136.1	1,441.3	114.8	108.2	309.0	336.2
1995/1996	3,691.2	58.4	3.7	117.0	56.2	1,111.5	1,432.7	113.5	113.9	327.8	356.5
1996/1997	3,696.8	56.6	4.2	117.6	56.3	1,099.3	1,456.1	111.3	113.6	328.8	353.0
1997/1998	3,879.1	61.2	5.9	125.0	57.4	1,131.6	1,554.2	108.3	118.9	357.7	358.9
1998/1999	4,369.5	72.0	11.4	164.1	80.4	1,273.8	1,699.7	130.8	138.4	408.1	390.8
1999/2000	5,081.7	78.6	11.4	199.6	89.0	1,532.9	1,908.0	157.6	176.1	490.9	437.6
2000/2001	5,793.3	83.4	15.7	199.9	88.2	1,628.6	2,316.2	189.6	228.2	546.0	497.5
2001/2002	6,424.2	89.4	15.7	208.6	88.2	1,778.5	2,575.9	205.9	235.6	664.9	561.5
2002/2003	7,455.3	94.4	18.7	225.5	98.9	2,074.3	2,995.5	224.5	258.8	727.5	737.2
2003/2004	8,143.3	114.1	25.2	259.1	117.5	2,345.0	3,187.4	238.7	244.8	826.8	784.6
2004/2005	9,057.9	115.6	24.2	266.0	114.3	2,467.7	3,835.1	260.6	244.7	898.2	831.5
2005/2006 ^r	9,518.2	148.5	27.4	297.4	130.1	2,556.4	3,980.3	294.5	217.7	962.0	904.0
2006/2007	9,624.1	132.2	31.2	316.6	135.0	2,540.7	4,088.2	287.2	215.4	918.5	959.1
millions of 2002 constant dollars ¹											
1993/1994	4,196.9	69.8	5.0	136.5	60.2	1,333.7	1,631.4	126.9	121.8	340.4	371.1
1994/1995	4,166.6	66.3	4.3	128.3	61.0	1,288.1	1,634.1	130.2	122.7	350.3	381.2
1995/1996	4,092.2	64.7	4.1	129.7	62.3	1,232.3	1,588.4	125.8	126.3	363.4	395.2
1996/1997	4,035.8	61.8	4.6	128.4	61.5	1,200.1	1,589.6	121.5	124.0	359.0	385.4
1997/1998	4,184.6	66.0	6.4	134.8	61.9	1,220.7	1,676.6	116.8	128.3	385.9	387.2
1998/1999	4,734.0	78.0	12.4	177.8	87.1	1,380.1	1,841.5	141.7	149.9	442.1	423.4
1999/2000	5,411.8	83.7	12.1	212.6	94.8	1,632.5	2,031.9	167.8	187.5	522.8	466.0
2000/2001	5,923.6	85.3	16.1	204.4	90.2	1,665.2	2,368.3	193.9	233.3	558.3	508.7
2001/2002	6,495.7	90.4	15.9	210.9	89.2	1,798.3	2,604.6	208.2	236.2	672.3	567.7
2002/2003	7,455.3	94.4	18.7	225.5	98.9	2,074.3	2,995.5	224.5	258.8	727.5	737.2
2003/2004	7,883.2	110.5	24.4	250.8	113.7	2,270.1	3,085.6	231.1	237.0	800.4	759.5
2004/2005	8,497.1	108.4	22.7	249.5	107.2	2,314.9	3,597.7	244.5	229.5	842.6	780.0
2005/2006 ^r	8,637.2	134.8	24.9	269.9	118.1	2,319.8	3,611.9	267.2	197.5	873.0	820.3
2006/2007	8,532.0	117.2	27.7	280.7	119.7	2,252.4	3,624.3	254.6	191.0	814.3	850.3

1. CANSIM, table 384-0036.

Table 1-5
Estimates of research and development expenditures in the higher education sector — Social sciences and humanities

	Canada	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
millions of current dollars											
1993/1994	730.5	15.6	1.1	25.1	14.2	216.6	282.6	23.8	21.1	61.3	69.1
1994/1995	725.5	15.6	0.9	23.5	13.9	217.5	278.9	24.2	21.9	58.7	70.4
1995/1996	724.7	15.4	0.9	23.0	13.8	213.5	269.1	24.7	23.8	64.5	76.0
1996/1997	705.2	15.2	1.1	21.3	13.2	204.9	259.6	24.5	23.9	61.1	80.4
1997/1998	731.7	14.7	1.5	21.9	12.8	203.6	285.6	23.8	26.9	62.2	78.7
1998/1999	903.8	16.5	3.5	40.9	25.4	243.9	341.9	33.6	32.6	71.6	93.9
1999/2000	1,062.5	20.5	3.7	48.1	27.8	296.4	401.0	40.4	36.8	86.2	101.6
2000/2001	1,202.4	19.2	4.5	51.9	29.8	323.6	473.5	43.1	47.6	95.5	113.7
2001/2002	1,274.5	23.8	4.3	48.9	29.7	331.4	515.0	44.7	48.5	107.3	120.9
2002/2003	1,414.1	21.7	5.6	51.3	32.2	396.3	535.1	48.7	51.5	120.7	151.0
2003/2004	1,598.8	29.3	6.7	58.0	38.0	453.8	603.2	54.0	48.0	143.2	164.6
2004/2005	1,778.3	27.0	6.8	63.7	40.2	486.2	696.4	59.8	46.1	168.9	183.2
2005/2006 ^r	1,891.4	31.7	7.3	71.5	45.8	492.2	761.1	67.1	42.0	176.1	196.8
2006/2007	1,909.3	30.9	8.8	70.4	44.3	479.7	798.8	63.1	42.8	160.9	209.5
millions of 2002 constant dollars ¹											
1993/1994	837.7	17.9	1.3	28.8	16.3	248.4	324.1	27.3	24.2	70.3	79.2
1994/1995	822.6	17.7	1.0	26.6	15.8	246.6	316.2	27.4	24.8	66.6	79.8
1995/1996	803.4	17.1	1.0	25.5	15.3	236.7	298.3	27.4	26.4	71.5	84.3
1996/1997	769.9	16.6	1.2	23.3	14.4	223.7	283.4	26.7	26.1	66.7	87.8
1997/1998	789.3	15.9	1.6	23.6	13.8	219.6	308.1	25.7	29.0	67.1	84.9
1998/1999	979.2	17.9	3.8	44.3	27.5	264.2	370.4	36.4	35.3	77.6	101.7
1999/2000	1,131.5	21.8	3.9	51.2	29.6	315.7	427.1	43.0	39.2	91.8	108.2
2000/2001	1,229.4	19.6	4.6	53.1	30.5	330.9	484.2	44.1	48.7	97.6	116.3
2001/2002	1,288.7	24.1	4.3	49.4	30.0	335.1	520.7	45.2	49.0	108.5	122.2
2002/2003	1,414.1	21.7	5.6	51.3	32.2	396.3	535.1	48.7	51.5	120.7	151.0
2003/2004	1,547.7	28.4	6.5	56.1	36.8	439.3	583.9	52.3	46.5	138.6	159.3
2004/2005	1,668.2	25.3	6.4	59.8	37.7	456.1	653.3	56.1	43.2	158.4	171.9
2005/2006 ^r	1,716.3	28.8	6.6	64.9	41.6	446.6	690.7	60.9	38.1	159.8	178.6
2006/2007	1,692.6	27.4	7.8	62.4	39.3	425.3	708.2	55.9	37.9	142.6	185.7

1. CANSIM, table 384-0036.

Table 1-6
Estimates of research and development expenditures in the higher education sector — Health sciences

	Canada	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
millions of current dollars											
1993/1994	1,366.9	15.3	0.5	39.1	3.6	460.4	561.8	44.2	28.0	120.0	94.0
1994/1995	1,382.1	15.6	0.3	38.8	3.6	458.6	571.4	44.9	27.8	123.7	97.4
1995/1996	1,428.4	15.3	0.3	45.7	4.7	452.5	606.1	43.8	30.4	126.8	102.8
1996/1997	1,430.4	15.0	0.3	46.3	4.6	449.0	614.1	42.7	27.3	130.0	101.1
1997/1998	1,516.1	17.3	0.6	52.8	4.8	457.4	661.6	40.8	31.1	147.3	102.4
1998/1999	1,627.8	21.6	0.6	62.2	6.8	507.8	671.1	45.6	36.1	166.5	109.5
1999/2000	1,822.5	20.1	0.6	71.8	7.1	597.5	706.1	53.8	43.5	199.5	122.5
2000/2001	2,103.9	23.9	1.4	72.6	7.5	633.9	875.6	62.0	57.9	225.0	144.1
2001/2002	2,382.6	25.4	1.3	83.4	7.7	700.2	977.1	74.1	67.6	274.5	171.3
2002/2003	2,955.6	29.7	2.1	88.1	9.2	813.5	1,296.6	81.2	76.4	306.1	252.7
2003/2004	3,086.8	35.9	3.6	107.3	10.5	877.1	1,314.8	83.1	65.3	330.0	259.2
2004/2005	3,584.6	39.0	3.7	102.9	9.6	921.2	1,692.0	91.6	64.8	351.1	308.8
2005/2006 ^r	3,767.1	54.7	4.8	112.0	10.9	969.0	1,740.4	105.9	63.2	387.1	319.2
2006/2007	3,783.6	45.2	4.8	126.8	13.0	989.8	1,736.0	103.7	59.9	375.8	328.6
millions of 2002 constant dollars ¹											
1993/1994	1,567.5	17.5	0.6	44.8	4.1	528.0	644.3	50.7	32.1	137.6	107.8
1994/1995	1,567.0	17.7	0.3	44.0	4.1	520.0	647.8	50.9	31.5	140.2	110.4
1995/1996	1,583.6	17.0	0.3	50.7	5.2	501.7	672.0	48.6	33.7	140.6	114.0
1996/1997	1,561.6	16.4	0.3	50.5	5.0	490.2	670.4	46.6	29.8	141.9	110.4
1997/1998	1,635.5	18.7	0.6	57.0	5.2	493.4	713.7	44.0	33.5	158.9	110.5
1998/1999	1,763.6	23.4	0.7	67.4	7.4	550.2	727.1	49.4	39.1	180.4	118.6
1999/2000	1,940.9	21.4	0.6	76.5	7.6	636.3	752.0	57.3	46.3	212.5	130.5
2000/2001	2,151.2	24.4	1.4	74.2	7.7	648.2	895.3	63.4	59.2	230.1	147.3
2001/2002	2,409.1	25.7	1.3	84.3	7.8	708.0	988.0	74.9	68.4	277.6	173.2
2002/2003	2,955.6	29.7	2.1	88.1	9.2	813.5	1,296.6	81.2	76.4	306.1	252.7
2003/2004	2,988.2	34.8	3.5	103.9	10.2	849.1	1,272.8	80.4	63.2	319.5	250.9
2004/2005	3,362.7	36.6	3.5	96.5	9.0	864.2	1,587.2	85.9	60.8	329.4	289.7
2005/2006 ^r	3,418.4	49.6	4.4	101.6	9.9	879.3	1,579.3	96.1	57.4	351.3	289.7
2006/2007	3,354.3	40.1	4.3	112.4	11.5	877.5	1,539.0	91.9	53.1	333.2	291.3

1. CANSIM, table384-0036.

Table 1-7
Estimates of research and development expenditures in the higher education sector — Other natural sciences and engineering

	Canada	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
millions of current dollars											
1993/1994	1,562.3	30.0	2.8	54.8	34.7	486.0	578.2	42.7	57.1	115.5	160.5
1994/1995	1,567.2	27.3	2.7	50.9	36.2	460.0	591.1	45.6	58.5	126.6	168.3
1995/1996	1,538.1	27.7	2.5	48.3	37.6	445.5	557.6	45.0	59.7	136.5	177.7
1996/1997	1,561.2	26.4	2.8	50.0	38.4	445.4	582.5	44.1	62.4	137.7	171.5
1997/1998	1,631.4	29.2	3.7	50.3	39.7	470.7	607.0	43.7	61.0	148.2	177.8
1998/1999	1,837.9	33.9	7.3	61.0	48.2	522.0	686.7	51.6	69.8	170.0	187.4
1999/2000	2,196.8	38.0	7.2	79.6	54.2	639.0	800.9	63.4	95.8	205.1	213.6
2000/2001	2,487.0	40.2	9.8	75.5	50.9	671.2	967.1	84.5	122.7	225.5	239.6
2001/2002	2,767.1	40.2	10.1	76.2	50.8	746.7	1,083.8	87.0	119.5	283.2	269.6
2002/2003	3,085.6	43.0	11.0	86.1	57.5	864.5	1,163.8	94.6	130.9	300.7	333.5
2003/2004	3,457.7	48.9	14.9	93.9	69.0	1,014.2	1,269.4	101.5	131.5	353.6	360.8
2004/2005	3,695.1	49.6	13.7	99.4	64.5	1,060.3	1,446.8	109.2	133.8	378.1	339.6
2005/2006 ^r	3,859.7	62.1	15.3	113.9	73.5	1,095.2	1,478.8	121.5	112.5	398.8	388.1
2006/2007	3,931.3	56.1	17.6	119.4	77.6	1,071.2	1,553.4	120.4	112.7	381.9	421.0
millions of 2002 constant dollars ¹											
1993/1994	1,791.6	34.4	3.2	62.8	39.8	557.3	663.1	49.0	65.5	132.5	184.1
1994/1995	1,776.9	31.0	3.1	57.7	41.0	521.5	670.2	51.7	66.3	143.5	190.8
1995/1996	1,705.2	30.7	2.8	53.5	41.7	493.9	618.2	49.9	66.2	151.3	197.0
1996/1997	1,704.4	28.8	3.1	54.6	41.9	486.2	635.9	48.1	68.1	150.3	187.2
1997/1998	1,759.9	31.5	4.0	54.3	42.8	507.8	654.8	47.1	65.8	159.9	191.8
1998/1999	1,991.2	36.7	7.9	66.1	52.2	565.5	744.0	55.9	75.6	184.2	203.0
1999/2000	2,339.5	40.5	7.7	84.8	57.7	680.5	852.9	67.5	102.0	218.4	227.5
2000/2001	2,542.9	41.1	10.0	77.2	52.0	686.3	988.9	86.4	125.5	230.6	245.0
2001/2002	2,797.9	40.6	10.2	77.0	51.4	755.0	1,095.9	88.0	120.8	286.3	272.6
2002/2003	3,085.6	43.0	11.0	86.1	57.5	864.5	1,163.8	94.6	130.9	300.7	333.5
2003/2004	3,347.2	47.3	14.4	90.9	66.8	951.8	1,228.8	98.3	127.3	342.3	349.3
2004/2005	3,466.3	46.5	12.9	93.2	60.5	994.7	1,357.2	102.4	125.5	354.7	318.6
2005/2006 ^r	3,502.5	56.4	13.9	103.4	66.7	993.8	1,341.9	110.3	102.1	361.9	352.2
2006/2007	3,485.2	49.7	15.6	105.9	68.8	949.6	1,377.1	106.7	99.9	338.6	373.2

1. CANSIM, table 384-0036.

Data quality, concepts and methodology

Estimation of research and development expenditures in the higher education sector, 2006/2007

Definitions

Natural sciences and engineering

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

Social sciences and humanities

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

Scientific research and experimental development (R&D)

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

The central characteristic of R&D is an appreciable element of novelty and of uncertainty. New knowledge, products or processes are sought. The work is normally performed by, or under the supervision of, persons with postgraduate degrees in the natural sciences or engineering.

An R&D project generally has three characteristics:

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

Canadian business enterprises

This sector is composed of business and government enterprises, including public utilities and government owned firms and frequently referred to as the industry sector. Incorporated consultants providing scientific and engineering services are also included. Industrial research institutes located at Canadian universities are considered to be in the university sector.

Higher education

The higher education sector is composed of all universities, colleges of technology and other institute 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, or associated with, the higher education establishments.

Canadian private non-profit institutions

Charitable foundations, voluntary health organizations, scientific and professional societies, and other organizations not established to earn profits comprise this sector. Private non-profit institutions primarily serving or controlled by another sector should be included in that sector (e.g., the Pulp and Paper Research Institute is in Canadian business enterprises).

Canadian provincial and municipal governments

Departments and agencies of these governments form this sector. Government enterprises, such as provincial utilities are included in the Canadian business enterprises sector, and hospitals in the Canadian non-profit institutions or university sector.

Other Canadian performers

This sector includes all individuals or organizations not belonging to any of the above sectors. In particular, it includes provincial research councils and foundations.

Foreign performers

All foreign governments, foreign companies (including foreign subsidiaries of Canadian firms), international organizations, non resident foreign nationals and Canadians studying or teaching abroad, are included in this sector.