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# **Employment Trends in the Core Public Administration: A Geographical Profile**

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# Employment Trends in the Core Public Administration: A Geographical Profile

#### Katarzyna Naczk, Public Institutions Division

#### **Summary**

This study is the third in a series<sup>1</sup> that has profiled shifts during the past 11 years in Canada's public service employment, with special attention to the Core Public Administration (CPA)—the 178,000 or so federal public servants employed by the Treasury Board.

The first two studies showed that the CPA is smaller than it used to be and its composition has changed with the times. The CPA employees of today are more knowledge-based than they were 11 years ago, there are proportionally more women in the CPA today, and the average age of employees is increasing.

This current study found that across Canada, total employment in the CPA declined by 5.6% from 1995 to 2006, from just over 188,000 employees to just under 178,000. Most of the provinces and territories had fewer employees in the CPA by 2006.

Nova Scotia, Newfoundland and Labrador and British Columbia experienced the largest declines, each incurring a loss of more than 2,000 employees during this period. CPA employment rose in only two provinces: Prince Edward Island and Ontario. In addition, the number of CPA employees outside Canada stayed practically unchanged.

The increase in Ontario numbers can be entirely explained by the rise in CPA employment within the National Capital Region (NCR), which consists of the cities of Ottawa and Gatineau and surrounding urban and rural communities, where many federal institutions are located. The NCR had just over 75,700 CPA employees in 2006, up 20.4% from 1995—the fastest growth rate of all regions in the country.

For the purposes of this study, several occupational categories are referred to as knowledge-based. These categories are: scientific and professional; computer systems; program and administrative; executive; and administrative and foreign service.

In 2006, knowledge-based workers represented 57.8% of workers in the CPA, up from only 41.1% during the mid-1990s.

All 10 provinces experienced an increase in the number of knowledge-based employees and a decline in less knowledge-based workers from 1995 to 2006.

In 1995, none of the areas in Canada employed a majority of its CPA employees in knowledge-based occupations, other than the NCR. By 2006, they were in the majority in Prince Edward Island, Quebec, Ontario, the Yukon, the Northwest Territories and Nunavut.

The NCR, the Northwest Territories and Nunavut, were the only regions in which the majority of CPA workers were under the age of 45 in 2006.

For the first two studies, see Katarzyna Naczk, "Employment Trends in the Federal Public Service,"
 *Analysis in Brief*, Statistics Canada, Catalogue no. 11-621, March 2007,
 <a href="http://www.statcan.ca/english/research/11-621-MIE/11-621-MIE2007053.htm">http://www.statcan.ca/english/research/11-621-MIE/11-621-MIE2007053.htm</a> (accessed July 5, 2007), and
 "Female Employment in the Core (Federal) Public Administration," *Analysis in Brief*, Statistics Canada,
 Catalogue no. 11-621, September 2007, <a href="http://www.statcan.ca/english/research/11-621-MIE/11-621-MIE2007061.htm">http://www.statcan.ca/english/research/11-621-MIE/11-621-MIE2007061.htm</a> (accessed September 5, 2007).

#### Core Public Administration: Not the same as the federal general government

Core Public Administration (CPA) employees represented 46.7% of total federal general government employment in 2006. Unlike the federal general government, the CPA excludes the regular members, special constables and civilian members of the Royal Canadian Mounted Police (RCMP), regular and reserve force members of the Canadian Forces, those classified as 'Noncommercial and other' and employees of separate agencies such as the Canada Revenue Agency, all of which have a geographical distribution different from the CPA.

Sources of detailed information for characteristics such as gender, occupations (for grouping as knowledge-based or less knowledge-based) and workplace are available to Statistics Canada for CPA employees, but not for all federal general government employees.

The difference between the two universes is further emphasized by the proportion of employees within the National Capital Region (NCR). In March of 2006, 42.6% of the CPA employees were working in the NCR, while the federal general government had only 29.5% of its employees within this area for the same month.

These results show that, by the nature of the services under their responsibilities, federal agencies and organizations excluded from the definition of the CPA used for this study usually maintain a larger proportion of employees throughout Canada—e.g., Canada Border Services Agency has agents at each border crossing point in addition to ports and airports.

Consequently, the geographical distribution analysis of CPA employees cannot be generalized to the entire federal general government. The conclusions from this study, particularly the centralization movement, must be restricted to the CPA.

For purposes of comparison and transparency, this study also examined general provincial and territorial trends in employment during the past decade in the full federal general government—that is, the CPA plus other federal employees including the RCMP, those classified as 'Non-commercial and other' (such as the Canadian Broadcasting Corporation and the Library of Parliament) and the Canadian Forces, as well as separate agencies (such as the Canada Revenue Agency and National Energy Board).

It found that even though federal general government employment has been on the rebound recently, this group of employees was slightly smaller in 2006 than it was in 1995. Furthermore, 8 of the 10 provinces followed the same general dip-then-rise trend of federal general government employment during this 11-year time period.

Prince Edward Island, Quebec, Ontario and Alberta had an overall increase in federal general government employees from 1995 to 2006. This increase in federal general government employment in Alberta and Quebec is a reversal to what is observed for the CPA.

In contrast, Nova Scotia and Newfoundland and Labrador experienced the largest declines in both the federal general government and the CPA.

In the federal general government and the CPA, the increase in NCR employment explained most of the increase in such employment in the province of Ontario.

# Core Public Administration (CPA) employment dipped then rebounded in all provinces except Newfoundland and Labrador

From 1995 to 2006, total employment in the CPA followed a dip-then-rise trend. That is, during this 11-year period, the total number of this group of employees declined, then rebounded. Overall, CPA employment fell by 5.6%—from just over 188,000 employees in 1995 to just under 178,000 employees in 2006.

Almost all 10 provinces followed a similar trend in CPA employment from 1995 to 2006. However, Newfoundland and Labrador experienced a year-after-year decline, changing minimally after 2000. Most of the provinces and territories, including Nunavut, had fewer employees in the CPA by 2006 than they did in 1995. CPA employment rose in only two provinces: Prince Edward Island and Ontario.

The net increase of 117 CPA employees in Prince Edward Island during this period was mainly due to growth in one federal department.

The largest declines occurred in Nova Scotia, British Columbia and Newfoundland and Labrador, with each province experiencing a loss of more than 2,000 CPA employees from 1995 to 2006. In absolute numbers, Newfoundland and Labrador's decline was not the highest in the country, but it did experience the largest relative downsizing—a decline of 39.8%. CPA employment there fell from just over 5,400 employees in 1995 to just under 3,300 in 2006.

In absolute numbers, the largest increase in CPA employment occurred in Ontario, where the number rose by 2,300 to nearly 76,000 in 2006.

The share of CPA jobs in Ontario, Quebec and Prince Edward Island increased from 1995 to 2006, while the share of all other provinces and in the Yukon decreased. Ontario's share moved from 39.0% to 42.6%, while Quebec's increased from 22.9% to 23.7%. Prince Edward Island had a marginal increase of 0.1-percentage points, up from 1.0% in 1995.

For both the Northwest Territories, including Nunavut, and outside Canada, the number of CPA employees remained stable during the period.

For more information about the dip-then-rise employment of CPA and more gender and occupational analysis, see Katarzyna Naczk, "Employment Trends in the Federal Public Service," *Analysis in Brief*, Statistics Canada, Catalogue no. 11-621, March 2007, <a href="http://www.statcan.ca/english/research/11-621-MIE/11-621-MIE/2007053.htm">http://www.statcan.ca/english/research/11-621-MIE/2007053.htm</a> (accessed July 5, 2007), and "Female Employment in the Core (Federal) Public Administration," *Analysis in Brief*, Statistics Canada, Catalogue no. 11-621, September 2007, <a href="http://www.statcan.ca/english/research/11-621-MIE/21-MIE/2007061.htm">http://www.statcan.ca/english/research/11-621-MIE/11-621-MIE/2007061.htm</a> (accessed September 5, 2007).

Table 1 Total CPA employees, by province and territory, 1995 and 2006

	1995	2006	Change
	num	percent	
Newfoundland and Labrador	5,437	3,273	-39.8
Prince Edward Island	1,829	1,946	6.4
Nova Scotia	12,026	9,363	-22.1
New Brunswick	7,161	6,154	-14.1
Quebec	43,184	42,090	- 2.5
Ontario	73,462	75,762	3.1
Manitoba	7,716	6,942	-10.0
Saskatchewan	5,362	4,611	-14.0
Alberta	11,330	9,431	-16.8
British Columbia	17,746	15,498	-12.7
Yukon	717	293	-59.1
Northwest Territories and Nunavut <sup>1</sup>	829	811	-2.2
Outside Canada	1,474	1,493	1.3
Total	188,273	177,667	-5.6

<sup>1.</sup> Nunavut and Northwest Territories data cannot be separated prior to 1999.

Source: Statistics Canada, special tabulation, Public Institutions Division.

#### Ontario's increase of CPA employees entirely in the National Capital Region

The increase in the number of people employed by the CPA in Ontario can be entirely explained by the rise in CPA employment within the NCR. The NCR had just over 75,700 CPA employees in 2006, up 20.4% from 1995—the fastest growth rate of all regions in the country.

Roughly 7 out of every 10 CPA Ontario workers had a job in the Ontario part of the NCR in 2006. In comparison, about 5 out of every 10 CPA workers in Quebec had a job in the Quebec part of the NCR.

Quebec and Ontario, excluding the NCR, experienced an approximate 20% decline in the number of CPA workers from 1995 to 2006.

Table 2 CPA employees, National Capital Region, Quebec and Ontario, 1995 and 2006

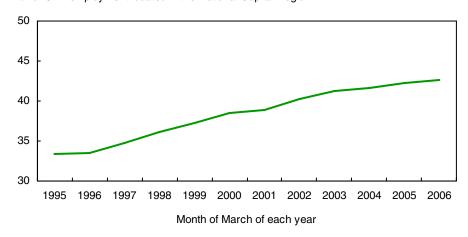
	1995	2006	Change
	num	ber	percent
National Capital Region (NCR)	62,923	75,734	20.4
NCR—Quebec part (Gatineau)	17,524	21,472	22.5
NCR—Ontario part (Ottawa)	45,399	54,262	19.5
Quebec without the NCR	25,660	20,618	-19.6
Ontario without the NCR	28,063	21,500	-23.4

**Source**: Statistics Canada, special tabulation, Public Institutions Division.

The proportion of CPA employees within the National Capital Region increased consistently each year from 1995 to 2006. The NCR contained 33.4% of CPA employees in 1995; by 2006, this proportion had increased to 42.6%.

Chart 1 Proportion of CPA employees in the National Capital Region continues to rise

% of CPA employment located in the National Capital Region



Source: Statistics Canada, special tabulation, Public Institutions Division.

#### Knowledge-based workers increased in all provinces

Without a doubt, the new economy has had an impact on CPA employment in all provinces. The number of knowledge-based CPA workers increased across Canada, except for the Yukon, from 1995 to 2006. Conversely, the number of less knowledge-based CPA workers decreased across Canada, without exception.

In 1995, no region in Canada, excluding the NCR, had the majority of its CPA employees in knowledge-based occupations. By 2006, knowledge-based CPA workers were in the majority in Prince Edward Island, Quebec, Ontario, the Yukon and the Northwest Territories including Nunavut.

The largest relative increase in the number of CPA knowledge-based workers occurred in Ontario because of the impact of the changes in employment in the NCR. The number of CPA employees in knowledge-based occupations rose in Ontario by almost 15,500, an increase of 45.5%. The smallest relative increase was in Newfoundland and Labrador, with a 1.1% gain or 14 more knowledge-based employees.

Table 3 CPA employees in knowledge-based occupations, by province and territory, 1995 and 2006

	1995		2006	
	number	percent <sup>2</sup>	number	percent <sup>2</sup>
Newfoundland and Labrador	1,294	23.8	1,308	40.0
Prince Edward Island	810	44.3	1,201	61.7
Nova Scotia	2,984	24.8	3,376	36.1
New Brunswick	2,180	30.4	2,611	42.4
Quebec	21,213	49.1	27,048	64.3
Ontario	34,040	46.3	49,516	65.4
Manitoba	2,705	35.1	3,359	48.4
Saskatchewan	1,814	33.8	2,074	45.0
Alberta	3,341	29.5	3,798	40.3
British Columbia	5,207	29.3	6,290	40.6
Yukon	299	41.7	168	57.3
Northwest Territories and Nunavut <sup>1</sup>	253	30.5	479	59.1
Outside Canada	1,166	79.1	1,471	98.5
Total	77,306	41.1	102,699	57.8

**Note:** The total of knowledge-based and less knowledge-based occupations does not add to total employment in Table 1 because of the category 'unclassified' (see "Data sources and methods").

- 1. Nunavut and Northwest Territories data cannot be separated prior to 1999.
- 2. This percentage represents the proportion of knowledge-based employment to total employment within the geographical area.

**Source**: Statistics Canada, special tabulation, Public Institutions Division.

#### The knowledge-based trend explained more than half of the NCR increase

The shift toward a knowledge-based workforce in the CPA explains about half of the increase in the number of CPA employees in the NCR. The other half of the increase in employees could be the result of a change in the provincial distribution of CPA jobs for other reasons.

The number of CPA employees in knowledge-based occupations within the NCR increased by approximately 21,200 employees from 1995 to 2006 while elsewhere in Canada it increased by about 4,200. In 1995, knowledge-based employees within the NCR represented 47.2% of all knowledge-based CPA workers. In 2006, this proportion had increased to 56.2%.

Under the hypothesis of keeping the share constant within provinces for new knowledge-based jobs, it can be deduced that roughly 12,000 of the 21,200 additional knowledge-based employees in the NCR were hired as a direct result of the shift of the workforce from less knowledge-based to knowledge-based occupations.<sup>3</sup>

On the one hand there was an increase in knowledge-based workers in the NCR, and on the other, there was also a large decrease in less knowledge-based workers. Less knowledge-based CPA employment in the NCR decreased by 36.2%, which is larger than 33.6% decrease in CPA employment within less knowledge-based occupations in Canada overall. From 1995 to 2006 the number of CPA employees in less knowledge-based occupations within the NCR fell by almost 9,200.

Table 4 CPA employees in National Capital Region, by occupation, 1995 and 2006

		1995		2006	
		number	percent in this occupational category	number	percent in this occupational category
Knowledge-	National Capital Region	36,511	58.0	57,748	76.3
based	Quebec part	11,654	66.5	17,475	81.4
	Ontario part	24,857	54.8	40,273	74.2
Less	National Capital Region	25,362	40.3	16,189	21.4
knowledge- based	Quebec part	5,619	32.1	3,471	16.2
	Ontario part	19,743	43.5	12,718	23.4

**Note:** The total of knowledge-based and less knowledge-based occupations does not add to total employment in Table 1 because of the category 'unclassified' (see "Data sources and methods").

Source: Statistics Canada, special tabulation, Public Institutions Division.

#### Fewer employees in less knowledge-based occupations in all provinces

The counter effect of the new economy was felt on CPA employment in all provinces as well. Without exception, the number of less knowledge-based CPA workers decreased across Canada from 1995 to 2006.

The less knowledge-based occupations outside Canada practically disappeared during the period. A large number of positions in less knowledge-based occupations were reclassified into categories that changed them into knowledge-based occupations.

The CPA lost a large number of jobs in the Yukon from 1995 to 2006; however, in 2003, a set of provincial responsibilities were transferred to the Yukon government from the Department of Indian

<sup>3.</sup> An analytical technique can be used to determine the theoretical proportion of employment explained by the shift to knowledge-based workers: the shift-share analysis. For technical explanation, see J. Esteban, 1972, "A reinterpretation of shift-share analysis," *Regional and Urban Economics*, vol. 2, p. 249–261.

Affairs and Northern Development—an operation called devolution. Land and resource management programs and their funding went to the territorial government and the federal employees became employees of the Yukon government. In addition, the Yukon appeared to have lost the majority of its less knowledge-based jobs in this time period. Because of devolution, however, the jobs themselves did not disappear, differing from what is observed for the provinces.

Among the provinces, the largest relative decrease in less knowledge-based CPA occupations occurred in Newfoundland and Labrador with half of these CPA jobs disappearing. The other provinces experienced a relative decrease in the range of 25% to 35%.

All provinces recorded increases in the number of CPA employees within knowledge-based occupations, and a decline in employees within less knowledge-based occupations from 1995 to 2006. There continued to be, however, a majority of employees within less knowledge-based occupations in 6 of the 10 provinces.

Table 5 CPA employees in less knowledge-based occupations, by province and territory, 1995 and 2006

	1995		20	06
	number	percent <sup>2</sup>	number	percent <sup>2</sup>
Newfoundland and Labrador	4,007	73.7	1,900	58.1
Prince Edward Island	958	52.4	619	31.8
Nova Scotia	8,838	73.5	5,868	62.7
New Brunswick	4,836	67.5	3,441	55.9
Quebec	21,026	48.7	13,879	33.0
Ontario	37,579	51.2	24,362	32.2
Manitoba	4,779	61.9	3,418	49.2
Saskatchewan	3,369	62.8	2,404	52.1
Alberta	7,620	67.3	5,406	57.3
British Columbia	12,028	67.8	8,889	57.4
Yukon	410	57.2	121	41.3
Northwest Territories and Nunavut <sup>1</sup>	561	67.7	325	40.1
Outside Canada	300	20.4	8	0.5
Total	106,311	56.5	70,640	39.8

**Note:** The total of knowledge-based and less knowledge-based occupations does not add to total employment in Table 1 because of the category 'unclassified' (see "Data sources and methods").

- 1. Nunavut and Northwest Territories data cannot be separated prior to 1999.
- 2. This percentage represents the proportion of less knowledge-based employment to total employment within the geographical area.

Source: Statistics Canada, special tabulation, Public Institutions Division.

#### Women account for the majority of CPA employees in most provinces

The proportion of female CPA workers has increased from 1995 to 2006. In 2006, women outnumbered men within the CPA in Canada as a whole and in most of the provinces. The increase in the proportion of female workers was largely the result of a decrease in the number of male workers, rather than a large increase in the number of female workers since the total number of employees fell during the period.

CPA employees outside Canada and in British Columbia, Newfoundland and Labrador and Nova Scotia continue to be mostly male. The proportion of female CPA workers, however, increased in all of these regions from 1995 to 2006.

CPA employees in the Yukon showed the highest proportion of female workers in 2006; they accounted for 63.1%, up from 52.2% in 1995.

Table 6 Female employees in CPA, by province and territory, 1995 and 2006

	1995		20	06
	number	percent <sup>2</sup>	number	percent <sup>2</sup>
Newfoundland and Labrador	1,773	32.6	1,367	41.8
Prince Edward Island	901	49.3	1,215	62.4
Nova Scotia	4,125	34.3	3,939	42.1
New Brunswick	3,189	44.5	3,335	54.2
Quebec	20,854	48.3	23,171	55.1
Ontario	35,669	48.6	42,484	56.1
Manitoba	3,637	47.1	3,948	56.9
Saskatchewan	2,577	48.1	2,518	54.6
Alberta	5,202	45.9	5,204	55.2
British Columbia	7,445	42.0	7,537	48.6
Yukon	374	52.2	185	63.1
Northwest Territories and Nunavut <sup>1</sup>	360	43.4	468	57.7
Outside Canada	470	31.9	571	38.2
Total	86,576	46.0	95,942	54.0

**Note:** The total of female and male employees does not add to total employment in Table 1 because of the category 'unclassified' (see "Data sources and methods").

- 1. Nunavut and Northwest Territories data cannot be separated prior to 1999.
- 2. This percentage represents the proportion of female employees to total employment within the geographical area.

Source: Statistics Canada, special tabulation, Public Institutions Division.

In 1995, slightly more female than male CPA employees worked in the NCR. In 2006, the majority of CPA employees in the NCR continued to be female—their share rising to 56.7% in 2006 from 50.1% in 1995.

Changes in the NCR had a big impact on the share of female CPA workers in Quebec in 2006 because the NCR contained 5 out of 10 CPA workers of this province.

#### CPA employees aged 45 and older in majority in all provinces

In 1995, 39.8% of CPA employees were 45 and older. By 2006, this proportion had climbed to 52.3%. The increase in the proportion of CPA workers 45 and older occurred in all provinces and territories and for employees outside Canada. In 2006, CPA workers aged 45 and older were a majority in all provinces.

In contrast, the majority of CPA employees in the National Capital Region, the Northwest Territories and Nunavut were under the age of 45 in 2006.

The large increase in the number of employees in the NCR produced a younger CPA workforce, since new employees tend to be younger than the existing workforce. Consequently, among all provinces or group of employees outside Canada, the NCR had a workforce with the lowest proportions of employees aged 45 and older; only two territories showed a younger workforce in 2006.

Nova Scotia Newfoundland and Labrador Outside Canada New Brunswick British Columbia Prince Edward Island Alberta Manitoba Saskatchewan Yukon Quebec Ontario National Capital Region Northwest Territories Nunavut 0 20 40 60 80 100 % of CPA employees 45 and older

Chart 2 CPA employees in Northwest Territories and Nunavut tended to be youngest in 2006

Source: Statistics Canada, special tabulation, Public Institutions Division.

Newfoundland and Labrador had a larger increase in the proportion of CPA workers aged 45 and older from 1995 to 2006 compared with the rest of Canada. The proportion increased from 34.9% to 59.2%, an increase of 24.3-percentage points.

Ontario had the lowest increase of all provinces in the proportion of CPA workers aged 45 and older. Its proportion rose from 40.3% to 50.7%, a 10.4-percentage-point increase.

The CPA workforce was older than the general workforce because the proportion of employed Canadians aged 45 and over climbed to just under 39% in 2006.

Table 7 CPA employees 45 and older, by province and territory, 1995 and 2006

	Employees 45 and older		
	1995	2006	
	perc	ent <sup>2</sup>	
Newfoundland and Labrador	34.9	59.2	
Prince Edward Island	39.2	54.0	
Nova Scotia	41.5	60.8	
New Brunswick	39.3	56.6	
Quebec	37.9	50.9	
Ontario	40.3	50.7	
Manitoba	42.3	52.7	
Saskatchewan	38.6	51.4	
Alberta	40.4	53.9	
British Columbia	42.2	54.4	
Yukon	30.8	51.2	
Northwest Territories and Nunavut <sup>1</sup>	22.4	39.5	
Outside Canada	52.8	56.9	
Total	39.8	52.3	

Source: Statistics Canada, special tabulation, Public Institutions Division.

Nunavut and Northwest Territories data cannot be separated prior to 1999. This percentage represents the proportion of employees 45 and older to total employment within the geographical area.

#### Data sources and methods

The Core (federal) Public Administration (CPA) includes employees that work in the core occupational groups of all departments listed in Schedule I and Schedule IV of the *Financial Administration Act* (FAA), as well as the ministerial staff, deputy ministers, governor and order-incouncil appointees, judges and students affiliated with these departments.

The CPA covers almost the whole federal public service employment once the Canada Revenue Agency and Canada Border Services Agency are removed from the total. The federal public service consists of departments and agencies named in Schedules I, IV and V of the FAA. It does not include the Royal Canadian Mounted Police, organizations classified as 'Non-commercial and other', or the Canadian Forces.

For comparative purposes, the Canada Revenue Agency data were removed from 1995 to 1999, as it became a separate agency in November 1999; then referred to as the Canada Customs and Revenue Agency. The departure of the Canada Revenue Agency from the CPA resulted in a loss of approximately 40,000 employees in the file. Failure to remove these data would have shown a false drop in the number of Core (federal) Public Administration employees from 1999 to 2000, when in actuality there is an increase. For similar reasons, Canada Border Services Agency data were also removed.

Data on the CPA and occupational categories were obtained using the Incumbent File administered by Public Works and Government Services Canada (PWGSC). Data from the month of March of every year under study were used unless otherwise specified, as this month coincides with the end of the fiscal year.

Limitations of the data involved missing information with respect to gender, age and employee classification. Missing data affected less than 4% of the records, and imputations were performed to substitute most of this information. Students and others not classified were ignored for the occupational analysis.

Figures for the entire federal government employment have been taken from Statistics Canada's Public Sector Employment program.

#### **The National Capital Region**

Ottawa, Canada's capital, sits on the border between the provinces of Ontario and Quebec in central Canada. It was made capital of the British colonial Province of Canada in 1857. In the 20th century, a much larger region was created to serve as a frame for Canada's capital. Since 1969, Ottawa and Gatineau—the two cities that face each other across the broad Ottawa River—and the surrounding urban and rural communities have been formally recognized as Canada's National Capital Region (NCR). The NCR has a population of 1.1 million and it is one of Canada's most bilingual communities, with nearly half a million people speaking both English and French, according to the 2006 Census of population.

#### **Knowledge-based workers**

Researchers have defined knowledge-based workers in many different ways. The definition for this study, inspired by one classification proposed by Lavoie and Roy,<sup>4</sup> labels certain occupational categories as more knowledge-based. These include physicists, mathematicians, chemists, civil and mechanical engineers, biochemists, agriculturalists, ecologists, analysts, programmers, economists, accountants, lawyers and artists.

The majority of the occupations listed above can, in general, be found in the following occupational categories defined in the CPA: scientific and professional; computer systems; program and administrative; executive; and administrative and foreign service. Therefore, they will be referred to as the knowledge-based occupational categories.<sup>5</sup>

The less knowledge-based categories are made of the CPA's technical, operational and administrative support categories. More specifically, less knowledge-based occupational categories include groups such as the following: clerical and regulatory; secretarial, stenographic and typing; engineering and scientific support; social science support; general technician; correctional services; general labour and trades; and general services.

Students and others not classified were ignored for the occupational analysis. They represented less than 4% of the CPA employees from 1995 to 2006.

#### Federal general government

#### Employment dipped and then rebounded in most provinces

For purposes of comparison and transparency, this study also looks at trends in employment in the federal general government from 1995 to 2006. It found that the number of federal general government employees experienced a decline and then an increase, with a slight overall decrease in the number of employees in 2006 as compared with 1995.

In March 2006, approximately 380,700 individuals were working for the federal general government, down slightly from nearly 382,000 in March 1995. The number of federal general government employees fell to a low of about 326,500 in March 1999. Since the turn of the millennium, it has been on the rebound. From 1999 to 2006, federal general government employment increased by just over 54,000—an average annual pace of growth of 2.2%.

During the same period, Canada's working-age population increased from 22.6 million in 1995 to 26.1 million in 2006, an increase of nearly 15.5%. The number of employed Canadians also rose, by roughly 24.0%, from 13.0 million in 1995 to about 16.1 million in 2006. <sup>6</sup>

<sup>4.</sup> See Marie Lavoie and Richard Roy, "Employment in the Knowledge-Based Economy: A Growth Accounting Exercise for Canada," Human Resources Development Canada, Applied Research Branch, Strategic Policy, R98-8E, 1998.

<sup>5.</sup> The program and administrative group, as well as the computer systems group, were created for the purpose of this study. Treasury Board defined these employees as originally belonging to the administrative and foreign service category.

<sup>6.</sup> See Statistics Canada, CANSIM table 282-0001.

thousands of employees 450 400 Federal general government 350 300 250 200 150 Core Public Administration 100 50 0 1996 1998 1999 2000 2001 2002 2003 2004 1995 1997 2005 2006 Month of March of each year

Chart 3 Employment dip-then-rise trend in the CPA and total federal general government between 1995 and 2006

Source: Statistics Canada, special tabulation, Public Institutions Division.

Eight of the 10 provinces followed the same general dip-then-rise trend of federal general government employment from 1995 to 2006. Such employment in Newfoundland and Labrador, on the other hand, experienced a steady decline with a levelling off after 1999, whereas Prince Edward Island had a general increase during the same time period.

The Yukon experienced a 45.1% decline in the number of federal general government employees from 1995 to 2006, to almost 550 employees. In 2003, however, a set of provincial responsibilities was transferred to the Yukon government from the Department of Indian Affairs and Northern Development—an operation called devolution. Land and resource management programs and their funding went to the territorial government and the federal employees became employees of the Yukon government. In other words, most of the jobs disappeared only on paper.

Prince Edward Island, Quebec, Ontario and Alberta had an increase in federal general government employees in 2006 compared with 1995. All other provinces and territories had fewer federal general government employees at the end of the period. Nova Scotia and Newfoundland and Labrador experienced the largest declines.

Nova Scotia had just over 4,400 fewer federal general government employees in 2006, a 15.6% decline from 28,200 in 1995. Newfoundland and Labrador had almost 2,600 fewer federal general government employees compared with 1995, a 26.4% decrease to 7,200 in 2006. This was the largest percentage decline of all the provinces.

In contrast, from 1995 to 2006, Prince Edward Island and Ontario had the largest overall percentage increase in the number of federal general government employees. Prince Edward Island had almost 600 more employees in 2006, a 19.4% increase from just over 3,000 federal general government employees in 1995. At the same time, Ontario had an increase of 5.6%, or almost 8,400 employees, to just over 158,100 federal general government employees.

Table 8 Federal government employees, by province and territory, 1995 and 2006

	1995	2006	Change
	number		percent
Newfoundland and Labrador	9,815	7,219	-26.4
Prince Edward Island	3,018	3,602	19.4
Nova Scotia	28,226	23,821	-15.6
New Brunswick	14,694	14,069	-4.3
Quebec	76,873	78,345	1.9
Ontario	149,750	158,106	5.6
Manitoba	17,937	16,725	-6.8
Saskatchewan	10,181 9,124		-10.4
Alberta	26,577	27,291	2.7
British Columbia	38,819	37,158	-4.3
Yukon	991	544	-45.1
Northwest Territories and Nunavut <sup>1</sup>	1,499	1,436	-4.2
Outside Canada	3,388	3,212	-5.2
Total <sup>2</sup>	381,768	380,652	-0.3

- 1. Nunavut and Northwest Territories data cannot be separated prior to 1999.
- 2. Data are subject to annual revisions. Some totals may vary slightly compared to previous papers in this series.

Source: Statistics Canada, CANSIM table 183-0002.

In terms of proportion of federal general government employment, Ontario continued to house the largest proportion of these employees. In 1995, Ontario had the largest share of federal general government employees, at 39.2%, with its share increasing to 41.5% by 2006.

Nova Scotia, on the other hand, experienced the largest decline during this same time period. The share of federal general government employees in Nova Scotia decreased from 7.4% in 1995 to 6.3% in 2006. Newfoundland and Labrador's proportion fell by 0.7-percentage points to 1.9% in 2006.

In comparison, the remainder of the provinces and territories (including Nunavut) and those working outside Canada had relatively the same proportion of federal general government employees in 2006 as in 1995, all with an increase or decrease of around 0.4%.

The main differences in the trends between the CPA and the federal general government were identified for Quebec and Alberta, where employment changes showed a decrease in the CPA while it showed an increase in the federal general government. As well, the NCR showed a different story when looked at from a federal general government point of view.

## NCR and the federal general government: A smaller piece of the pie than in the CPA

The increase in the proportion of employees within the National Capital Region can be seen for both the federal general government and the CPA, although the proportion of workers in this region is higher within the CPA. Specifically, the proportion of CPA employees within the NCR rose consistently from 1995 to 2006. The NCR contained 33.4% of CPA employees in 1995; by 2006, this proportion had increased to 42.6%.

For the federal general government, the NCR reached 30.0% of the total number of employees only in September of 2002. In September of 2006, this proportion reached 31.2%. In short, it means that the centralization looks more intensive when studying only the CPA.

Chart 4 Proportions of employees in the National Capital Region for both CPA and federal general government continue to rise



Federal general government (September)

% of employment located in the National Capital Region

**Sources:** Statistics Canada, special tabulation, Public Institutions Division, and CANSIM table 183-0003.

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

From 1995 to 2006, the increase in the number of federal general government employees in Quebec can be entirely explained by an increase in the number of such employees in the NCR. Outside of the NCR in Quebec, federal general government employment decreased slightly during the same time period, whereas in Ontario federal general government employment increased both within the NCR portion and the rest of the province.

The NCR had nearly 112,200 federal general government employees in 2006, an increase of 7.9% from just under 104,000 in 1995. Furthermore, the proportion of federal general government employees within the NCR increased by 2.2-percentage points—from 27.2% in 1995 to 29.5% in 2006.

In Quebec, the number of federal general government employees in the NCR increased from roughly 21,500 in 1995 to nearly 23,600 in 2006, or 9.7%. In contrast, federal general government employment in the rest of Quebec declined by just over 600 employees to almost 54,800 in 2006, a decrease of 1.1%.

25

20

1995

The story is slightly different in Ontario, where the number of federal general government employees in the NCR portion increased by 7.4% from nearly 82,500 in 1995. The remainder of Ontario also increased, but to a lesser extent, from almost 67,300 in 1995 to just over 69,500 in 2006, an increase of 3.3%.

Table 9 Federal general government employees, National Capital Region, Quebec and Ontario, 1995 and 2006

	1995	2006	Change	
	num	number		
National Capital Region (NCR)	103,942	112,161	7.9	
NCR—Quebec part (Gatineau)	21,490	23,568	9.7	
NCR—Ontario part (Ottawa)	82,451	88,593	7.4	
Quebec without the NCR	55,383	54,777	-1.1	
Ontario without the NCR	67,299	69,513	3.3	

**Note**: Numbers for March 1995 were estimated based on a ratio as the actual split between Ottawa and Gatineau was not available for this reference year for some components.

Source: Statistics Canada, special tabulation, Public Institutions Division.