

An Era of Change: Government Employment Trends in the 1980s and 1990s

Joseph Peters

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Highlights

Introduction

- This report presents a statistical overview of trends in employment in federal and provincial governments over the 1980s and 1990s.
- The focus is on employment trends for the administrative core of governments.
- Some supplementary information is provided on trends for a broader definition of government, which includes the military, education, health and social services.

Change

- Extensive change has taken place in the 1990s in federal and provincial government workforces in Canada.
- There have been notable similarities between jurisdictions in how this change has occurred, especially in the areas of downsizing, aging, occupational restructuring and gender composition.

Downsizing

- The 1990s have been a period of widespread downsizing.
- The 1996 Census was the first census this century to show a decline in employment at either the provincial or federal level of government.
- Provincial government workforces decreased 22% between 1991 and 1996. The federal workforce decreased by 15% over that period.

Change in What Government Does

- An examination of the functions that governments perform has shown that the federal and provincial changes have been quite different from 1991 to 1996.

- Federally, 40.7% of the cutbacks took place in protection of persons and property (12,855 positions). When the military is included in the federal definition, this increases to 68.5% or reductions of 40,714 positions.
- In 1996 there were 12,625 fewer positions (-22.9%) in provincial government administration than in 1991.
- When government administration is broadened provincially to include health, education, and social services, health represents 73.4% (53,027 positions) of the workforce reductions from 1991 to 1996.

Occupational Restructuring

- Between 1991 and 1997, the share of employment in managerial and administrative positions increased significantly, while the share of employment in clerical occupations saw a large decrease.
- Occupations in management and administration now comprise over one-third of the federal and provincial workforces as a result of employment increases in this occupational group and downsizing in others from 1991 to 1997.
- Reductions in clerical occupations of over 41,600 persons translated into over 94% of all workforce reductions federally, and 32% (-13,300 persons) provincially.

Aging

- Government workforces are aging at a much faster rate than the labour force as a whole.
- This rapid “greying” of government workforces reflects widespread downsizing in conjunction with the hiring freezes.
- Those aged 25 or less made up less than 2% of the workforce in four of the five jurisdictions that data were collected from.
- The most significant growth has taken place in the 45 to 54 age group. It now makes up over 30% of the government workforces: however, for many governments this category represented close to 20% in 1987.

Gender

- The gap between male and female participation rates in the government workforces has narrowed substantially over the past 20 years.
- In 1997, 47.1% of the federal workforce were women, up from 35.4% in 1976.
- Provincially, female participation exceeded male participation for the first time in 1993 (51.6%), and has since continued to do so.

Employment Equity

- The size of the employment equity designated groups declined at a slower rate than the workforce averages from 1991 to 1997.
- Aboriginal peoples, visible minorities, and persons with disabilities stood at 10.1% federally, 17.5% in Manitoba, and 6.5% in Nova Scotia.

Union Membership

- Non-unionized employees represented 18.6% of the federal workforce in 1991, but represented 44.5% of workforce reductions from 1991 to 1997.

Foreword

Governments in Canada have undergone a period of unprecedented change throughout the 1990s. External pressures and the need for fiscal restraint have led governments to reevaluate their services to the public, and to initiate a downsizing of their workforces. This widespread restructuring has tremendous human resource implications for governments, public sector unions, and for employees.

In 1996, Gordon Betcherman, who was the Work Network Director at the time, and Anil Verma, Professor of Industrial Relations and Human Resource Management at the University of Toronto, developed a project for the Work Network that would look at the implications of these changes. By the mid-1990s it was evident that governments across Canada were in the process of downsizing and restructuring their workforces. It was becoming clear that human resource issues warranted investigation. However, it was less clear what the magnitude of these changes was and what the implications of these changes would be at both the workforce and workplace levels. In fact, there were no existing empirical studies of the public sector workplace.

The need for a project quickly became a major national research initiative. I wish to thank the funders of this project, which include four provincial governments (Alberta, Manitoba, Nova Scotia, and Ontario), three federal agencies (Human Resources Development Canada, the Public Service Commission, and Treasury Board Secretariat), and the Public Service Alliance of Canada. Their support and participation along with other experts, who together form our Advisory Committee, have played an essential role in guiding this project.

The overriding goal of the Human Resources in Government project is to generate new applied knowledge that will help the federal and provincial governments to redefine the strategies, policies, and procedures needed to transform the public service. The project assumes that this transformation must include the development of both efficient and innovative workplaces and a healthy, motivated, and skilled workforce.

The research is organized into six key research areas. The first set of studies set the context for the overall project by describing how the environment shaping

human resources in government is changing. They provide a statistical profile of employment trends, an analysis of trends in labour-management relations, and a comparative analysis of public-private sector compensation trends.

The next set of studies are generated from two large-scale surveys, one of managers responsible for 5 to 100 employees and the other of government union representatives. Reports on these surveys will address technological change in the workplace, organizational change and human resource management innovation, flexible work arrangements, and industrial relations issues.

The final stage of this project will address the issue of renewal and will culminate in a synthesis report that integrates the research findings to assist in the development of renewal strategies for government.

The study presented here is the first report from the Human Resources in Government project. Joseph Peters, a researcher with the Work Network, has gathered, analyzed and presented diverse sets of data on government employment trends in Canada. These data provide a contextual overview of the change that governments in Canada have undergone over the past several decades. Not only does this study show the extent to which governments have downsized, but it also helps to identify some of the different means by which governments have undertaken these changes. As well, key trends in the composition of government employment by gender, age, occupational, and employment type are also investigated. The analysis presented in this study serves as a valuable starting point for the project, identifying a number of pressure points for governments as they look to issues of renewal. Subsequent studies in the project series will examine many of those pressure points in more detail and will draw out the policy implications for governments.

I wish to thank Joseph Peters, who has done a masterful job of combining data from multiple sources, as well as three anonymous reviewers and Kathryn McMullen, who supervised the work.

Judith Maxwell
President

Acknowledgments

This study has benefited from the input and insight of many individuals. In particular, I would like to thank Gordon Betcherman and Kathryn McMullen, who provided tremendous direction and freedom as well as being the perfect sounding boards for testing new ideas.

The people listed below were critical to the success of this study, because it is based on a multitude of data series from both Statistics Canada and the governments participating in the Human Resources in Government (HRG) project. I would like to thank Daniel Bellerive, Treasury Board Secretariat, Government of Canada; Heather Brown, Government of Nova Scotia; Killeen Farrell, Government of Ontario; Louise Adams, Government of Manitoba; Barbara Ireland, Government of Alberta; and from Statistics Canada, Terry Moore and Jean-Pierre Leroux, Public Institutions Division; Marc Lévesque, Labour Force Survey; Diane Mainville, CALURA; Anne Lupien and Joanne McIver, Census.

In addition, the HRG project Advisory Committee made many helpful suggestions at various stages of the study. Special thanks to Judith Maxwell, Graham Lowe, and Eden Cloutier for commenting on an early draft. A number of individuals at CPRN have made important contributions, including Louise Séguin-Guénette, Sylvia Burns, Gisèle Lacelle, Katie Davidman and Elisabeth Richard. As well I need to thank Raquel Fragoso Peters for her consultations and proofreading.

I would like to acknowledge the efforts of three referees whose comments and careful review of the study were invaluable. Finally, I would like to thank David Zussman for his guidance in a previous look at government employment trends.

**An Era of Change:
Government Employment Trends
in the 1980s and 1990s**

Introduction

It is generally accepted that governments across Canada have been engaged in downsizing and restructuring of their workforces. However, the magnitude of these changes is not as clear. There is also uncertainty as to whether there were differences and/or similarities in how these changes were undertaken at the federal and provincial levels of government. The aim of this study is to provide some insight into these questions by providing a contextual overview of government employment trends in Canada. This is the first in a series of research studies by the Canadian Policy Research Networks (CPRN) on Human Resources in Government (HRG).

This study examines the trends in eight key areas of government employment:

- Total employment
- Employment type (full-time, part-time, term, etc.)

- Function
- Occupation
- Age
- Gender
- Employment equity
- Unionization
- Pension coverage

There are two distinct sources of government data utilized in this study: Statistics Canada, and participating governments' administrative data.

- Government employment data from Statistics Canada were acquired from the Labour Force Survey (LFS), the Census, the Public Institutions Division, and the *Corporations and Labour Unions Return Act* (CALURA).
- The federal government (FED) as well as the governments of Alberta (AB), Manitoba

(MB), Ontario (ON), and Nova Scotia (NS) are participants in the HRG initiative. They each supplied administrative data series that are used as a valuable supplement to the public data available from Statistics Canada.

Defining Government

There is some difficulty in determining a single definition of government for this report. For the sake of simplicity, all of the series will be referred to as government. Government, for the most part, will refer to the narrow administrative core of government. It should be noted that the broad provincial function series used in Section 3 is the only one to include such areas as health, education, and social services. However, a breakdown of the inclusions and exclusions of each of the series is available in Appendix A.

Data Sources

Each source defines or collects data in a slightly different way. Annual averages are utilized where

possible to limit the effects of seasonality. As a final note, this table serves as a useful reference

for identifying key differences between the series.

Statistics Canada Series	Data Format	Period of Data Series
Labour Force Survey	Annual average	1976-97
Census	Census period	1941-96
Public Institutions Division	Annual average	1990-96
CALURA	Fiscal year end	1969-92
Jurisdictional Series	Data Format	Period of Data Series
Alberta	Annual average	1985-97
Federal (Treasury Board)	Annual average	1985-97
Manitoba	Fiscal year end	1987-97
Ontario (regular: ON-R)	Fiscal year end	1982-97
Ontario (total: ON-T)	Fiscal year end	1991-97
Nova Scotia	Annual average	1990-97

There are two different series available from the Government of Ontario because of the different variables that are available in each. The longer series covers only the regular or indetermi-

nate workforce (ON-R), while the shorter (ON-T) includes term employee counts as well. The federal government series covers only those employees under the jurisdiction of

the Treasury Board Secretariat, which encompasses the large majority of federal employees. Refer to Appendix A for further details.

1

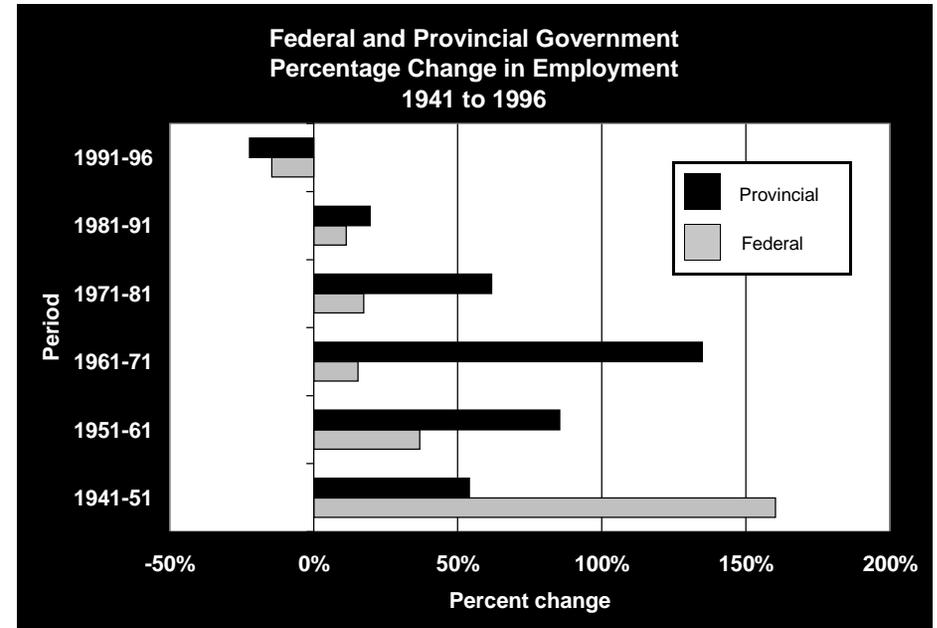
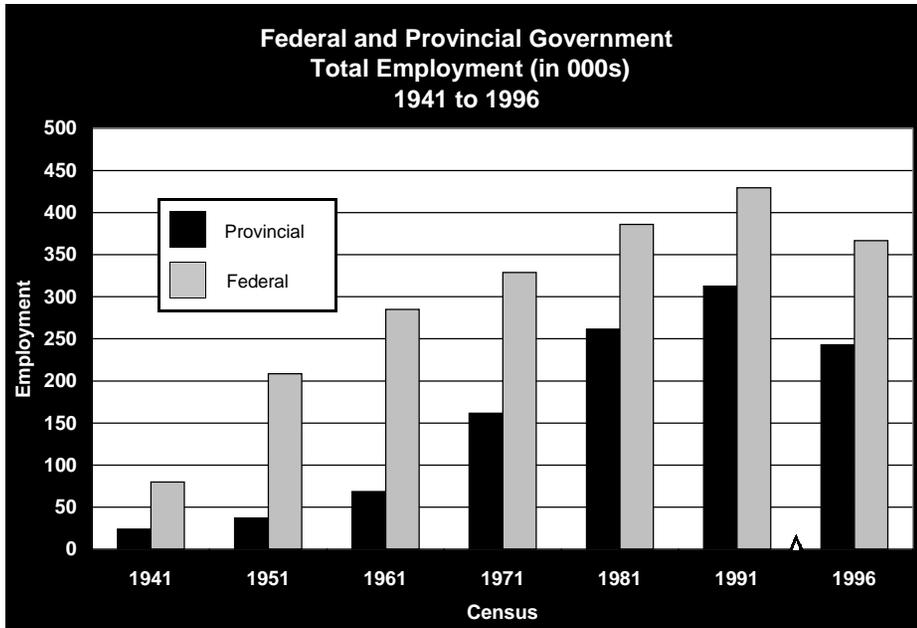
Historical and Background Trends

Employment in government has grown and transformed dramatically since the turn of the century. This section of the study is aimed at providing the general context for the sections that follow, by first outlining the longer data series that depict the

trends that have taken place in federal and provincial governments. The second aim of this introductory section of the study is to provide insight into the tremendous changes that have occurred in Canadian government workforces in

the 1990s. This has been captured through a combination of Statistics Canada data and the administrative data series submitted by the federal government, as well as the governments of Alberta, Manitoba, Ontario, and Nova Scotia.

Employment in Government



Source: Statistics Canada, Census.

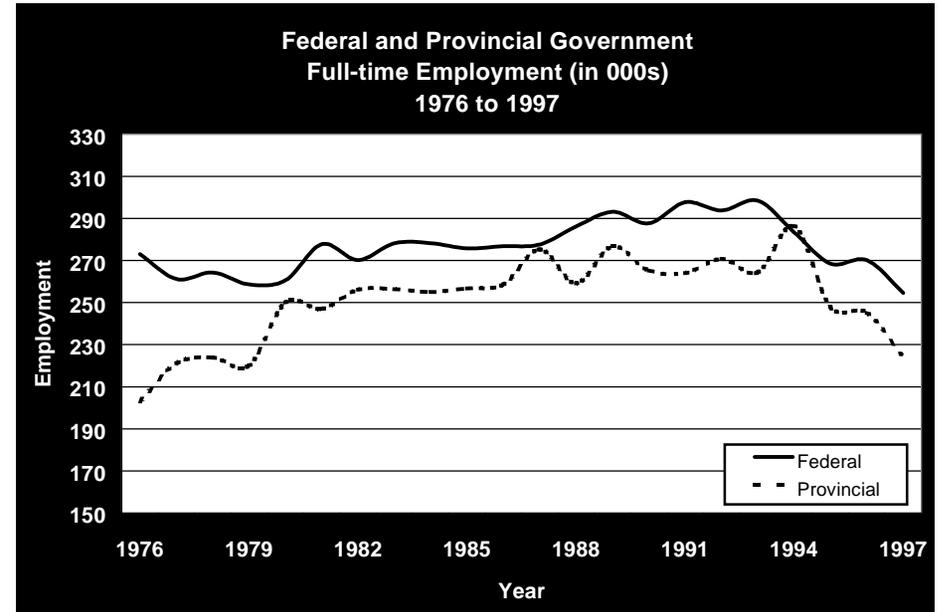
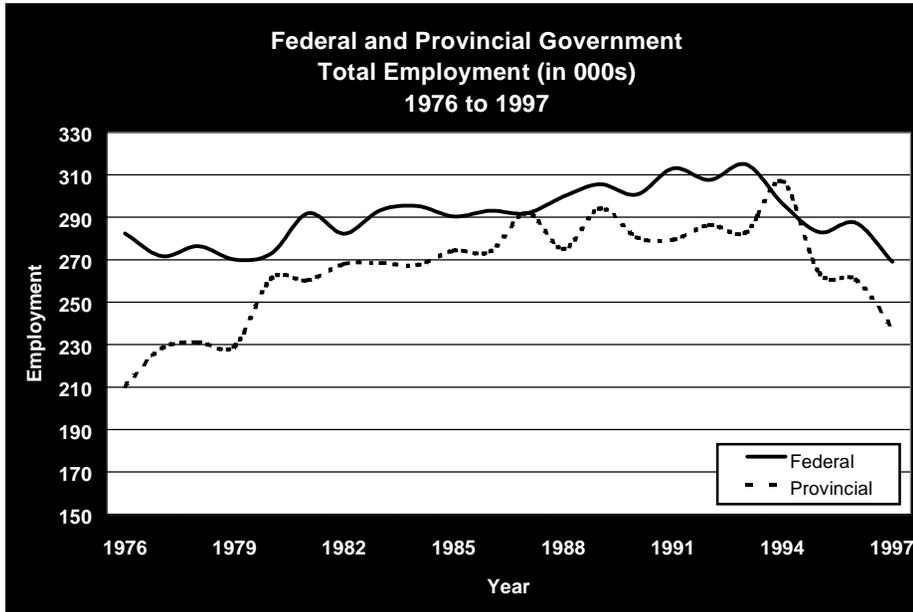
Comments and Facts

Historically, the Census provides a decennial snapshot of the Canadian population, although more recently, results are available on a five-year basis.

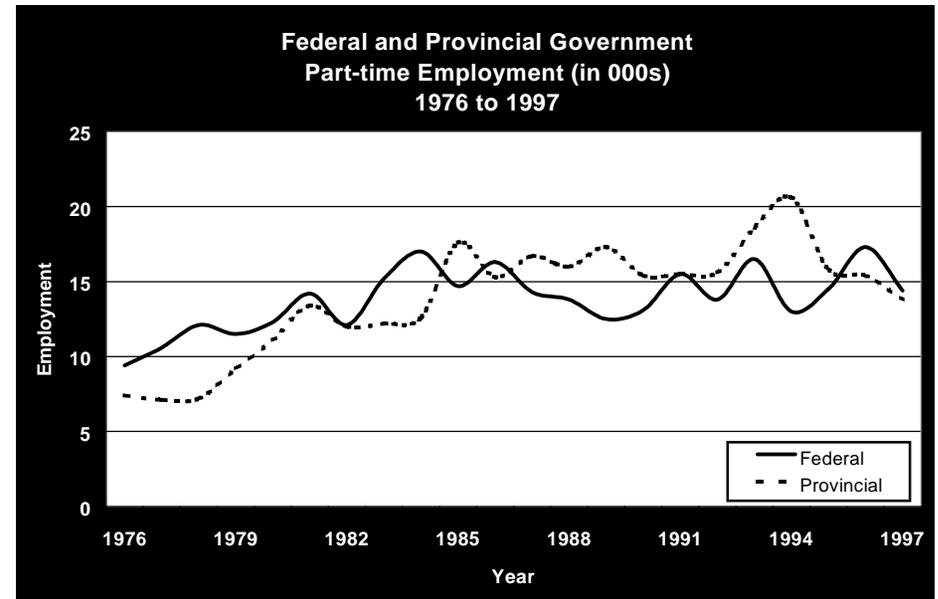
The 1911 Census was the first to generate industry data. At that time there were 72,531 men and 4,073 women employed in civil and municipal government. Provincial government did not warrant its own classification until the 1941 Census.

- Employment in the federal government expanded by 160% from 1941 to 1951.
- The provincial government workforce more than doubled from 1961 (68,761 persons) to 1971 (161,465 persons).
- From 1941 to 1991, provincial government employment skyrocketed by 1,198%.
- Government workforces continued to expand up until 1991.
- The 1996 Census was the first Census this century to depict a decline in government employment at either level.
- The decrease of 15% federally and 22% provincially from 1991 to 1996 is the result of widespread downsizing and restructuring.

Government Employment Trends

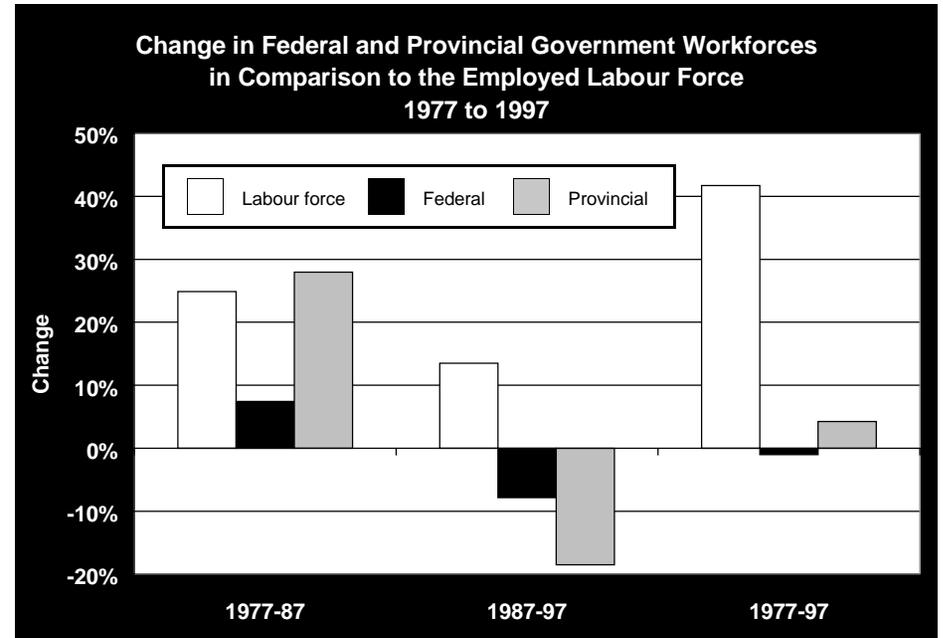
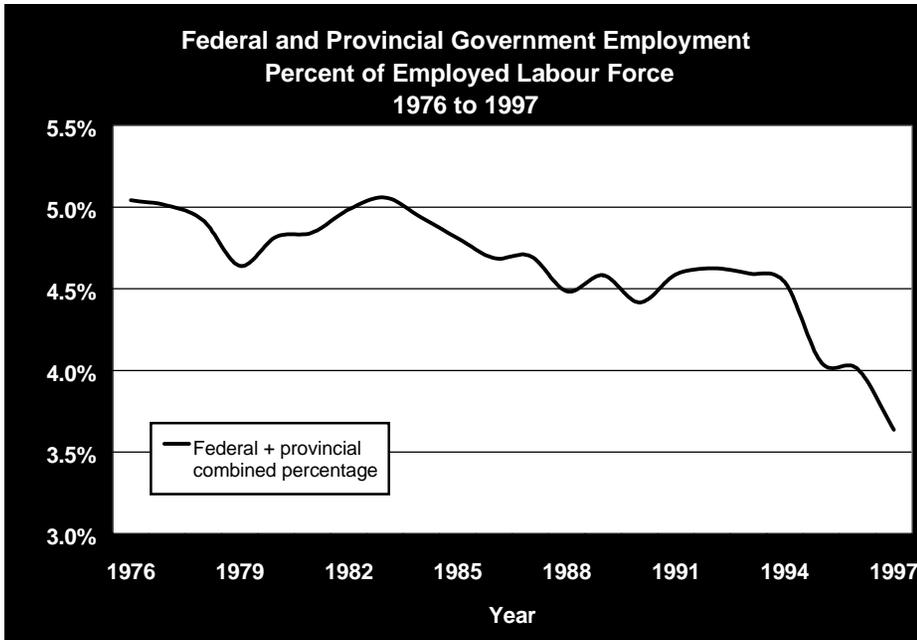


Source: Statistics Canada, Labour Force Survey.



- The Labour Force Survey provides a 22-year series of government employment.
- In 1997, total federal government employment reached its lowest employment level in 22 years at 269,000, down 14.6% since its peak in 1993.
- Total provincial government employment has declined by 22.5% since its peak in 1994.
- Full-time employment decreases both federally and provincially are the driving forces behind the total declines.
- Full-time employment reductions totaled 43,800 federally (1993 to 1997) and 62,000 provincially (1994 to 1997).
- Part-time employment is much smaller than full-time in both jurisdictions and fluctuates within a narrower range.

Government's Proportion of the Labour Force



Source: Statistics Canada, Census.

Comments and Facts

These two charts show how government employment has changed in relation to the employed labour force as a whole. It is clear that federal and provincial government employment has not followed the general labour force trend and has now become a smaller proportion of the labour force.

- There has been a steady decline in the federal and provincial governments' combined per-

centage of the labour force since the peak of 5.1% in 1983.

- The breakdown in 1983 was 2.42% provincially and 2.64% federally.
- In 1997, federal (1.93%) and provincial (1.71%) government employment made up 3.6% of the workforce, the lowest level in 22 years.

- From 1977 to 1987 the provincial government workforce grew by 28.8%, which was faster than the labour force at 24.9%.
- Both the federal and provincial government workforces experienced periods of decline from 1987 to 1997, while the employed labour force continued to grow.

The Changing 1990s

Selected Series Analysis	Total Employment 1997	Peak Year in Data Provided	Percentage Change from Peak to 1997	Year of Largest Change in 1990s	Percentage of Largest Change	Difference of Largest Change
Alberta	20,620	1985	-34.3	1995-96	-9.4	-2,326
Federal	193,519	1985	-20.1	1995-96	-5.9	-12,636
Manitoba	14,373	1991	-22.0	1993-94	-11.8	-2,029
Ontario – Regular	62,250	1992	-17.7	1996-97	-10.1	-7,017
Ontario – Total	72,850	1992	-18.4	1996-97	-8.8	-7,045
Nova Scotia	13,181	1990	-21.7	1993-94	-9.1	-1,402

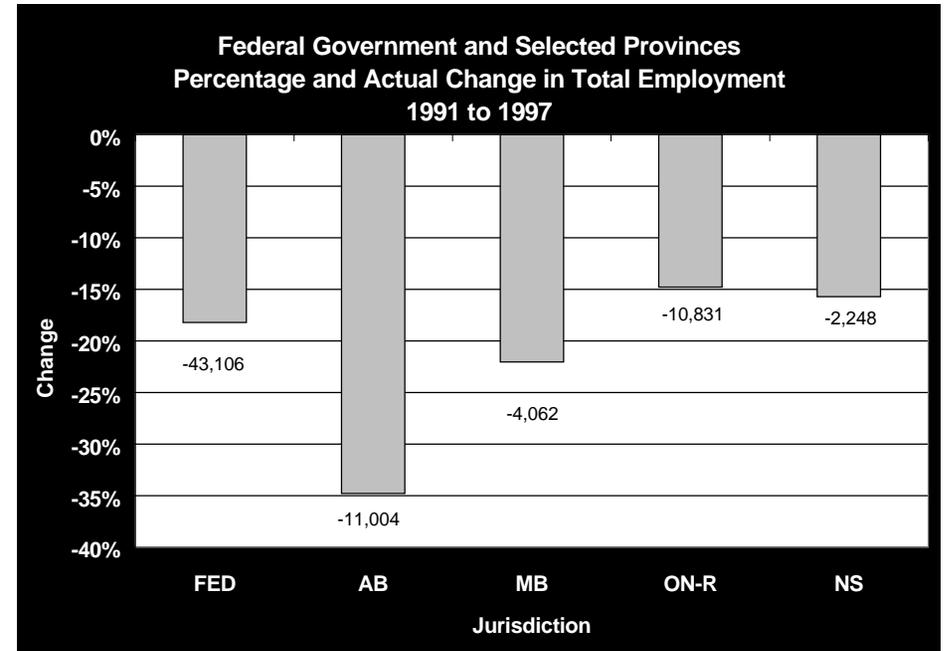
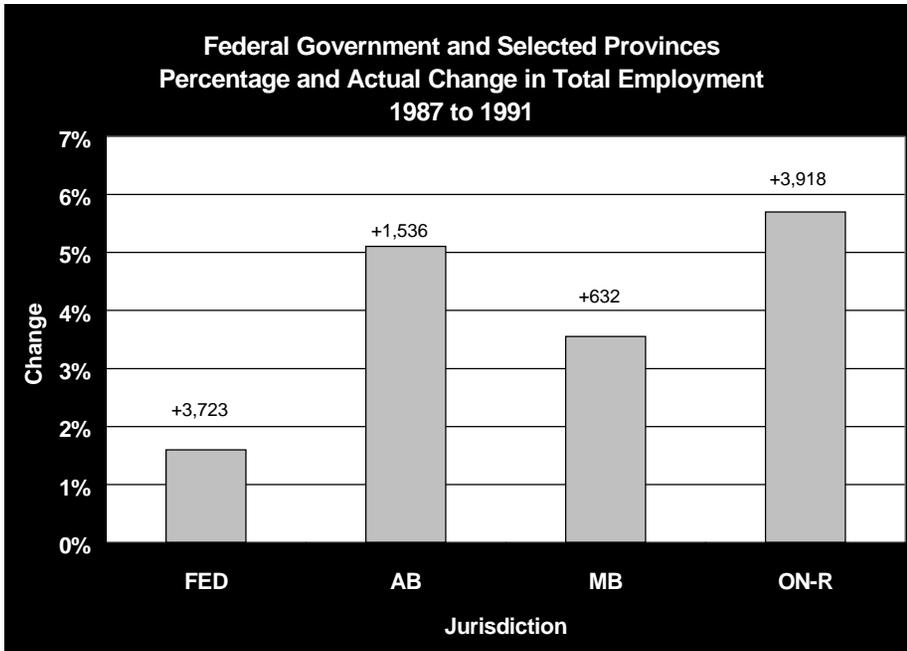
Source: Federal government and selected provinces.

Comments and Facts

This table aims to provide information on the employment trends of the 1990s. It is based on data submitted by the participating governments. As noted earlier, two series are used for the Government of Ontario, reflecting the differences in the length of each data series and the available variables for analysis in each.¹ As was apparent in the previous Census and LFS data, the decline in government employment in the 1990s has been significant.

- The peak year is generally the earliest, or early, in the data series for many of the jurisdictions.
- The exceptions are Manitoba (1991) and both Ontario data sets (1992).
- The decline from the peak employment level to 1997 ranged from 18% (Ontario total series) to 34% (Alberta).
- Given the difference in the peak year in these two provinces, these results suggest that the process of downsizing began earlier in Alberta, and so they may have proceeded further.
- The largest yearly change occurred at -11.8% for Manitoba (1993-94).
- Ontario experienced major reductions of -8.8 and -10.1% in the last year of the data series from 1996 to 1997.

Total Employment Transitions



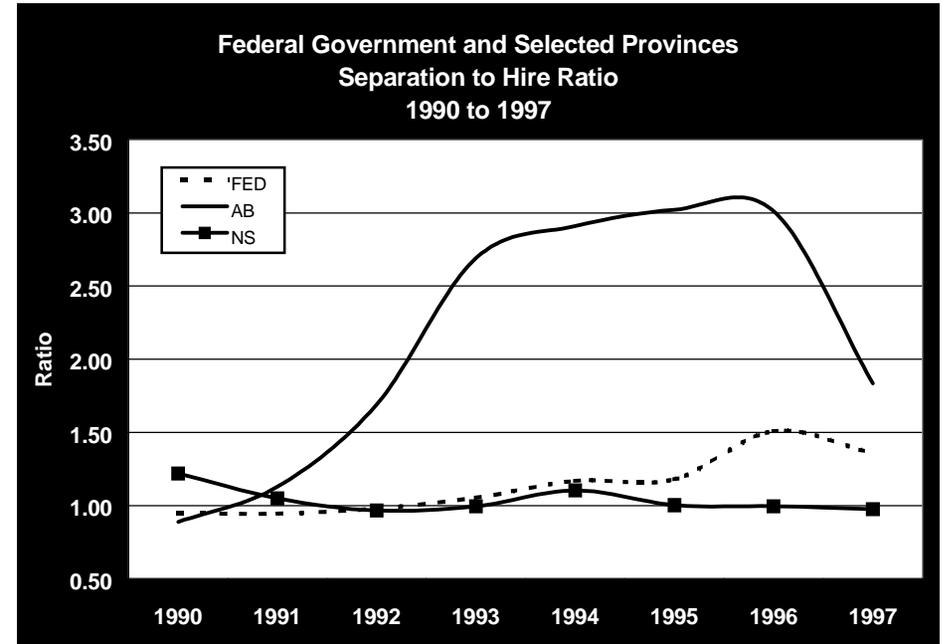
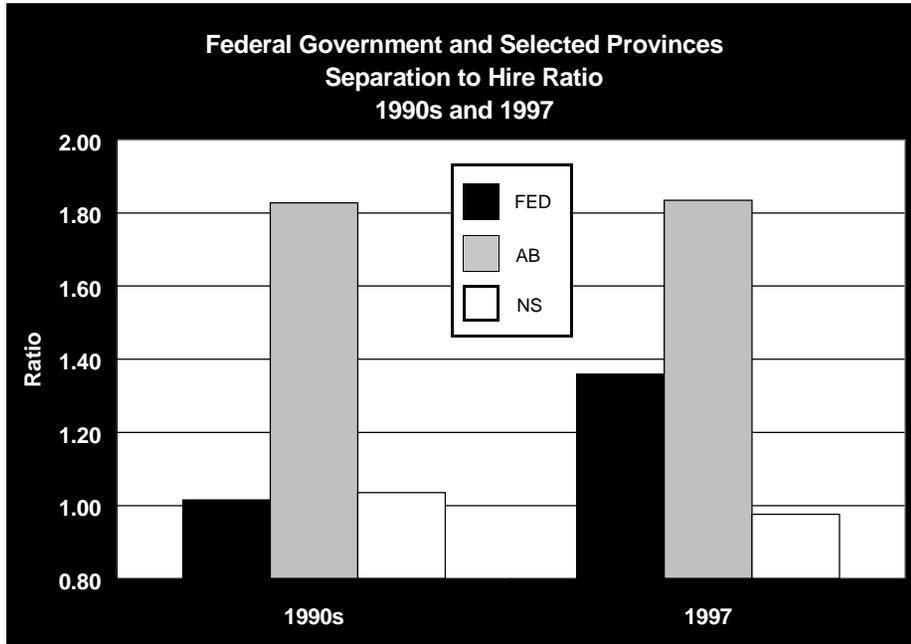
Source: Federal government and selected provinces.

Comments and Facts

Taken together, these charts depict two completely different eras in government employment but only cover an 11-year period. From 1987 to 1991 there was consistent growth in the jurisdictions that had data available for the 1980s. Conversely, the 1990s have been a period of significant decline for all governments.

- Increases (1987-91) ranged from 5.7% in Ontario, or 3,918 positions, to 1.6% at the federal level, or 3,723 positions.
- The declines (1991-97) ranged from 15.7% in Nova Scotia (2,448 persons) to 34.8% in Alberta (11,004 persons).
- The federal government reduced its workforce by 43,106 persons (1991-97).
- The total Ontario workforce, ON-T (not shown), declined by 18.3% or 16,359 employees from 1991 to 1997.

Flow of Separations and Hires



Source: Federal government and selected provinces.

Comments and Facts

These two charts utilize flow data to provide a different perspective on government restructuring in the 1990s. The separation-to-hire ratio relates the number of separations to every hire. For example, a ratio of 2 would mean that there were two separations for each hire. Another possible

interpretation of a ratio such as 1.8 would be that there were 80% more separations than hires.

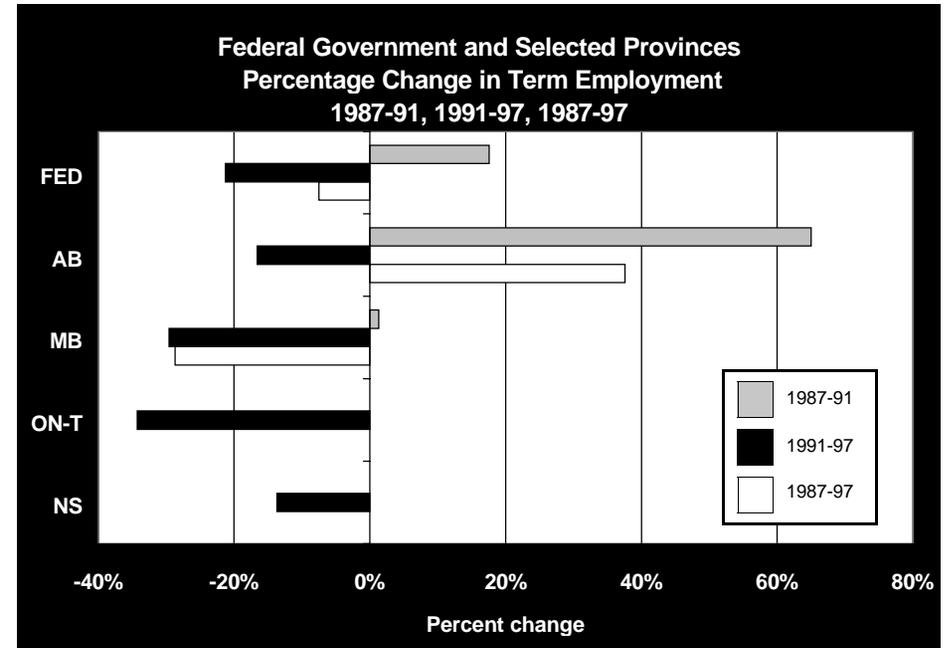
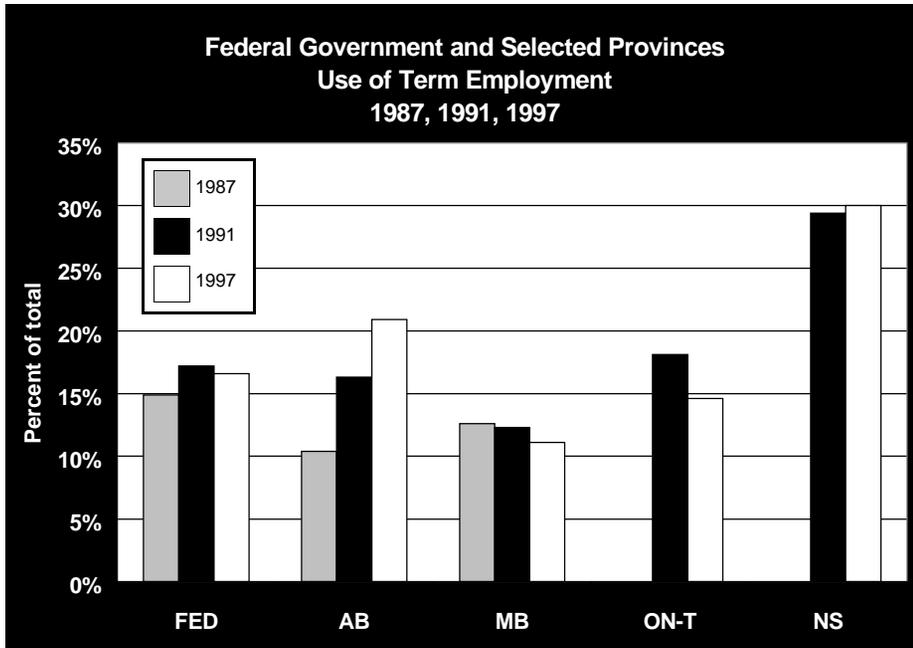
The first chart relates the separation-to-hire ratio for the 1990s as a whole, as well as for 1997. The second chart relates the yearly trend for each of the three jurisdictions for which these data were available.

- Alberta's separation to hire ratio was 3.02 in 1995 and 3.01 in 1996.
- Through the 1990s, there were 84% more separations than hires in Alberta.
- In 1996, the federal government separation-to-hire ratio stood at 1.51.

2

Employment Type

Term Employment Use and Change



Source: Federal government and selected provinces.

Comments and Facts

The term employment category has various definitions in each jurisdiction. In the interests of making a comparison, term has been interpreted as being fixed length or time-based employment.²

The use of term employment varies from government to government not only in its proportion of each workforce, but also in the evolution of its use. In many ways the changes in term employ-

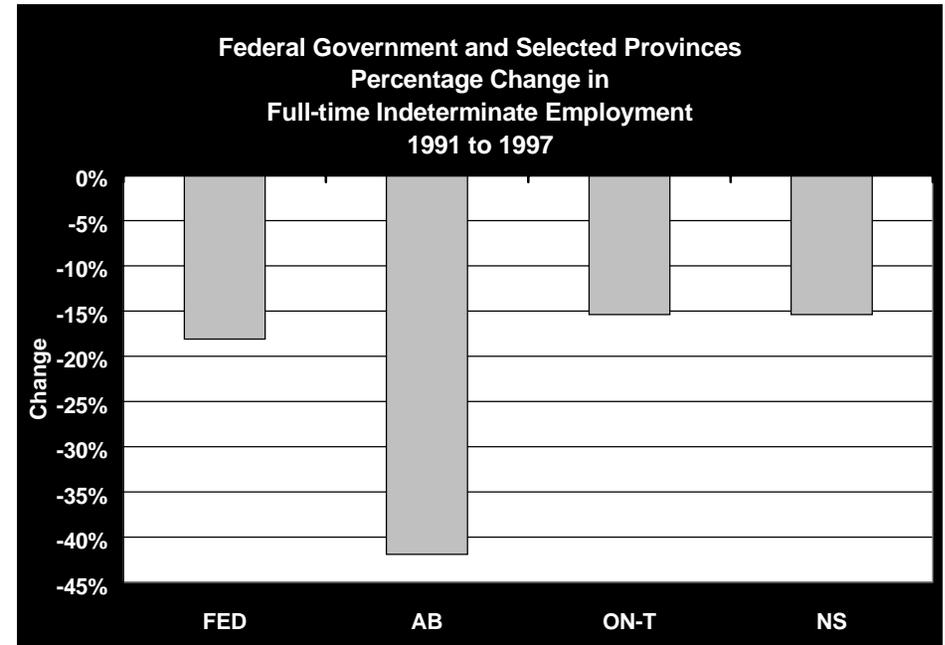
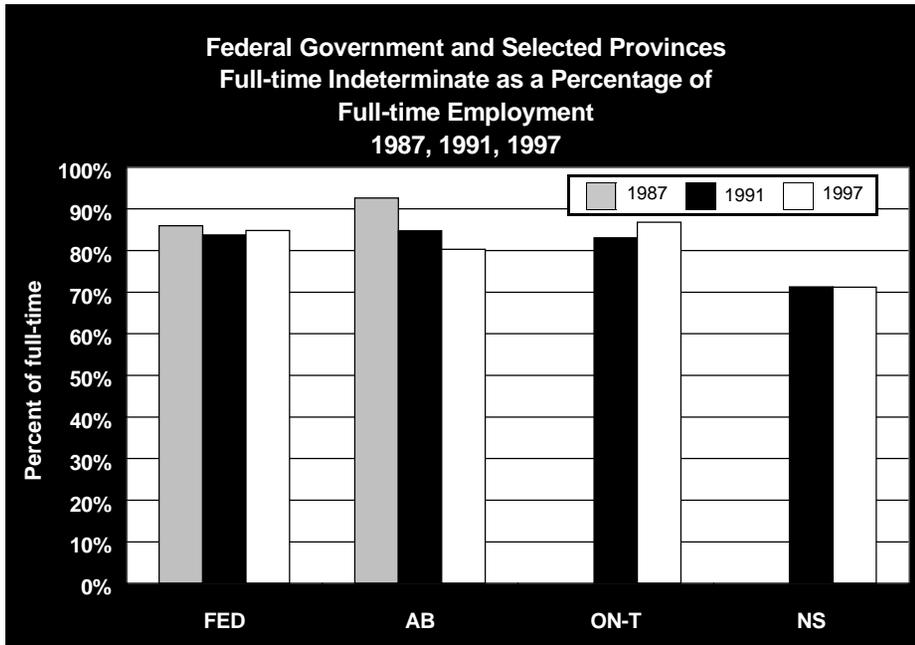
ment reflect the different means by which governments have downsized.

- Nova Scotia has had the highest use of term employment with 29.4% in 1991 and 30.0% in 1997.
- Alberta has increased its term workforce from 10.4% in 1987 to 20.9% in 1997.
- Alberta is the only jurisdiction to show a consistently significant expansion in the use

of term employment, relative to other employment types.

- Manitoba had the lowest use of term employment at 11.1% in 1997.
- Ontario had the largest decline at 34.3%.
- Alberta and Nova Scotia were the only two jurisdictions where the decline in total employment exceeded the reduction in term employment.

Full-time Indeterminate Positions



Source: Federal government and selected sources.

Comments and Facts

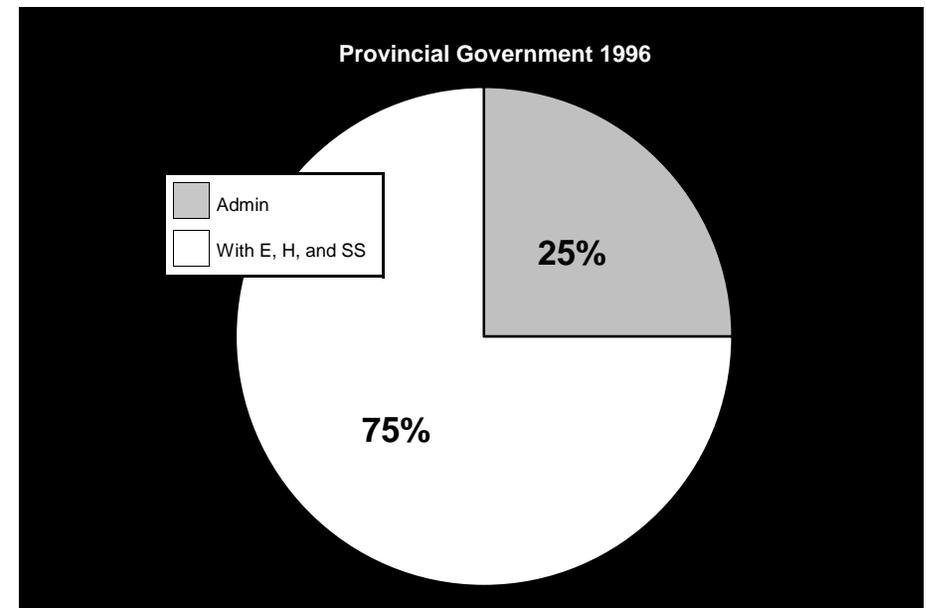
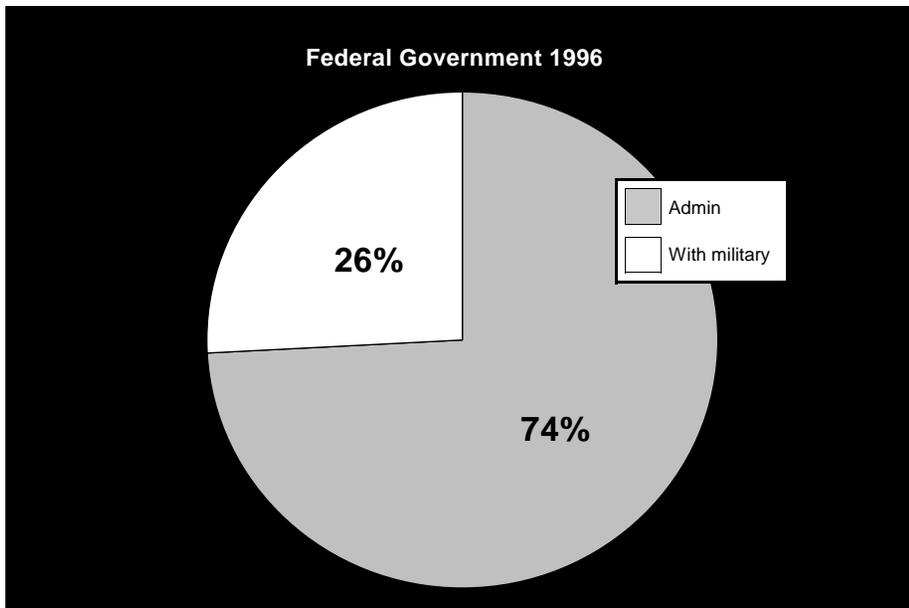
These charts relate the changes that have occurred in full-time indeterminate (permanent) positions. The first chart depicts full-time indeterminate employment as a percentage of all full-time employment. The percentage change in full-time indeterminate employment by jurisdiction is shown in the second chart.³

- Nova Scotia had the lowest proportion of full-time indeterminate positions, with 71.3% in 1991 and 71.2% in 1997.
- Overall, the number of full-time indeterminate positions decreased by 41.3% in Alberta between 1991 to 1997.
- The reduction in the proportion of full-time indeterminate positions in Alberta was to 80.3% in 1997 from 92.6% in 1987.
- The three other jurisdictions' declines ranged from 15.4 to 18.1% over the same period.

3

Function Analysis

Federal and Provincial Function Worlds



Source: Statistics Canada, Public Institutions Division.

Definition: Administration – This narrow group could generally be considered as the core of government employment. This would include most employment in government departments.

Definition: Broad – This is a larger definition of government. Federally this includes the military. Provincially, education, health and social services (E, H and SS) includes groups such as teachers, nurses, and social workers.

This is the only section of this report where these groups are included. Provincially, it is clear in the chart above that the E, H, and SS groups are much larger than government administration.

Comments and Facts

This is the only section of the report where there is a component that includes the broader categorization of education, health and social services. The functional data series analyzed was collected by the Public Institutions Division of Statistics Canada. These are submitted by individual government administrations and reconciled by the Public Institutions Division. There are two separate series or “worlds” described by the data. The

first series fall under what could be considered administrative or core government. The *second* series provides a much broader look at the government sector. This macro picture differs at the federal and provincial levels. At the federal level this broader category includes the military. Provincially, this macro series includes employment in education, health and social services. The analysis that follows separates the administrative category from the more extensive government classification. Each provides a different

perspective on the functional changes that have taken place in the 1990s.

The two charts above relate the composition of government employment for these two worlds in 1996. Federally, administration made up 74% of total government when the military has been added. Provincially, the administrative world is a smaller proportion of government at 25%, once education, health, and social services has been figured into the equation.⁴

Federal Government Function Inventory

Federal Government Function <i>(military in italics)</i>	Total 1991	Total 1996	Percentage 1991	Percentage 1996	Percentage Change 1991-96	Difference 1991-96
General services	82,887	77,332	27.7	28.9	-6.7	-5,555
Protection of persons and property	77,782	64,927	26.0	24.2	-16.5	-12,855
Transportation and communications	35,359	28,648	11.8	10.7	-19.0	-6,711
Health	8,851	7,160	3.0	2.7	-19.1	-1,691
Social services	15,923	15,216	5.3	5.7	-4.4	-707
Education	925	141	0.3	0.1	-84.8	-784
Resource conservation and industrial development	26,293	28,354	8.8	10.6	7.8	2,061
Environment	5,756	4,977	1.9	1.9	-13.5	-779
Recreation and culture	10,487	9,420	3.5	3.5	-10.2	-1,067
Labour, employment and immigration	17,819	17,397	6.0	6.5	-2.4	-422
Foreign affairs and international assistance	10,958	7,441	3.7	2.8	-32.1	-3,517
Regional planning and development	3,015	3,106	1.0	1.2	3.0	91
Research establishments	3,407	3,729	1.1	1.4	9.4	322
Total	299,461	267,847	100.0	100.0	-10.6	-31,614
With Military Included						
<i>(Protection of persons and property – with military)</i>	199,192	158,478	47.3	43.9	-20.4	-40,714
<i>(Military only)</i>	121,410	93,551	28.8	25.9	-22.9	-27,859
<i>(Total with military)</i>	420,870	361,397	100.0	100.0	-14.1	-59,473

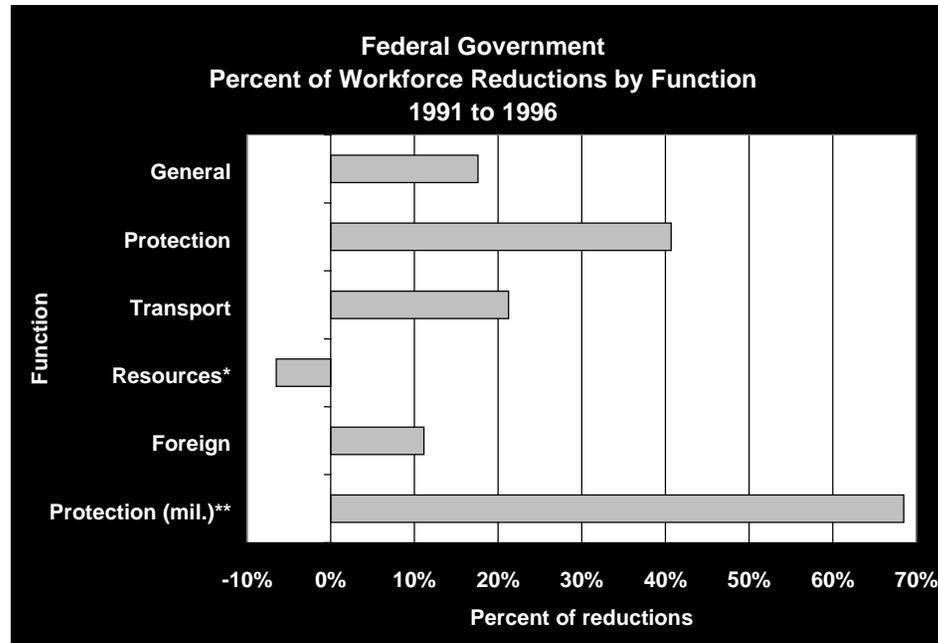
Source: Statistics Canada, Public Institutions Division.

Comments and Facts

This table depicts the federal government's employment by function for 1991 and 1996. The first 14 functions relate to the administrative or narrow definition of government. The final three rows of data add the military into the picture and are shown in italics.⁵

- The total change in administration was -10.6% or -31,614 positions.
- Protection of persons and property (excluding the military) represented the largest decline in employment with 12,855 fewer positions.
- Foreign affairs and international assistance saw the largest percentage decrease at 32.1%, a reduction of 3,517 positions.
- There was an increase of 2,061 positions (7.8%) in the function of resource conservation and industrial development.
- When the military are included in the functional analysis, the overall decrease jumps to 14.1%.
- There were 40,714 positions reduced in protection of persons and property from 1991 to 1996; 68% of these were military personnel.

Federal Reductions by Function



* Resources = increase in employment.

** When military employment is included.

Source: Statistics Canada, Public Institutions Division.

Comments and Facts

This chart relates the five largest contributions to workforce reductions by function, as well as the one function which increased over the period of analysis. On the one hand, these changes reflect the impact of downsizing, but, more indirectly, relate changes in what government does.

- Protection of persons and property comprised 40.7% of workforce reductions.
- If military is included, this increases to 68.5% of the cutbacks.
- The transportation and communication function represented 21.2% of the reductions.
- Reductions in general administration accounted for 17.6% of the downsizing from 1991 to 1996.

Provincial Government Function *

Provincial Government Function (Including E, H, and SS)	Total 1991	Total 1996	Percentage 1991	Percentage 1996	Percentage Change 1991-96	Difference 1991-96
General services	51,704	47,376	3.7	3.6	-8.4	-4,328
Protection of persons and property	68,999	62,012	5.0	4.7	-10.1	-6,987
Transportation and communications	44,946	38,581	3.2	2.9	-14.2	-6,365
Health	628,554	575,527	45.2	43.7	-8.4	-53,027
Social services	201,904	213,939	14.5	16.2	6.0	12,036
Education	305,668	300,839	22.0	22.8	-1.6	-4,829
Resource conservation and industrial development	46,142	38,871	3.3	2.9	-15.8	-7,271
Environment	7,667	7,928	0.6	0.6	3.4	261
Recreation and culture	14,715	13,553	1.1	1.0	-7.9	-1,163
Labour, employment and immigration	10,373	10,172	0.7	0.8	-1.9	-201
Housing	2,597	2,897	0.2	0.2	11.5	299
Regional planning and development	5,702	5,289	0.4	0.4	-7.2	-413
Research establishments	1,630	1,336	0.1	0.1	-18.0	-293
Total	1,390,600	1,318,319	100.0	100.0	-5.2	-72,281

Source: Statistics Canada, Public Institutions Division.

Comments and Facts

This table covers the extended or broad category of provincial government as it includes employment in education, health, and social services. We note as well that these data include all 10 provinces.

- Clearly, education, health, and social services accounted for the bulk of provincial government employment, broadly defined.

- The largest function is health, which represented 43.7% of the workforce in 1996; the second largest is education at 22.8%.
- The total change in employment was -5.2%, which translates into 72,281 persons.
- The health function decreased by 53,027 positions or 8.4% from 1991 to 1996.
- There were substantial reductions in transportation and communications, down by

14.2%, and in resource conservation and industrial development at 15.8%.

- Employment in the education function decreased by only 1.6% from 1991 to 1996.
- There was a significant increase in employment in social services at 6.0% or 12,036 positions.

* Includes education, health and social services.

Provincial Government Function^{**}

Provincial Government Function (Administration)	Total 1991	Total 1996	Percentage 1991	Percentage 1996	Percentage Change 1991-96	Difference 1991-96
General services	51,704	47,376	14.0	14.3	-8.4	-4,328
Protection of persons and property	68,999	62,012	18.7	18.7	-10.1	-6,987
Transportation and communications	44,946	38,581	12.2	11.7	-14.2	-6,365
Health	55,250	42,625	15.0	12.9	-22.9	-12,625
Social services	30,827	32,080	8.3	9.7	4.1	1,252
Education	28,841	28,236	7.8	8.5	-2.1	-606
Resource conservation and industrial development	46,142	38,871	12.5	11.7	-15.8	-7,271
Environment	7,667	7,928	2.1	2.4	3.4	261
Recreation and culture	14,715	13,553	4.0	4.1	-7.9	-1,163
Labour, employment and immigration	10,373	10,172	2.8	3.1	-1.9	-201
Housing	2,597	2,897	0.7	0.9	11.5	299
Regional planning and development	5,702	5,289	1.5	1.6	-7.2	-413
Research establishments	1,630	1,336	0.4	0.4	-18.0	-293
Total	369,393	330,954	100.0	100.0	-10.4	-38,439

Source: Statistics Canada, Public Institutions Division.

Comments and Facts

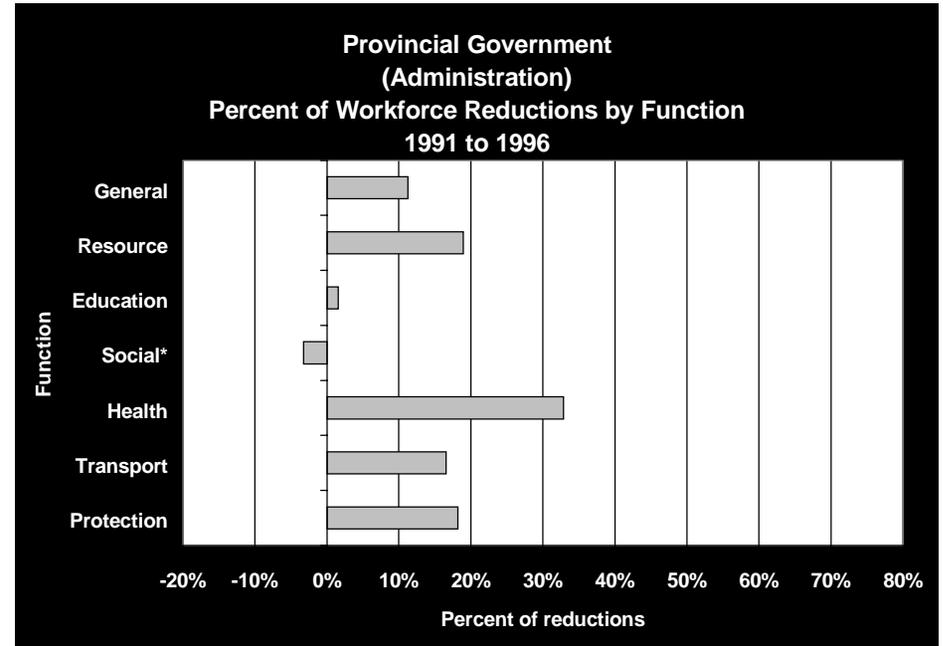
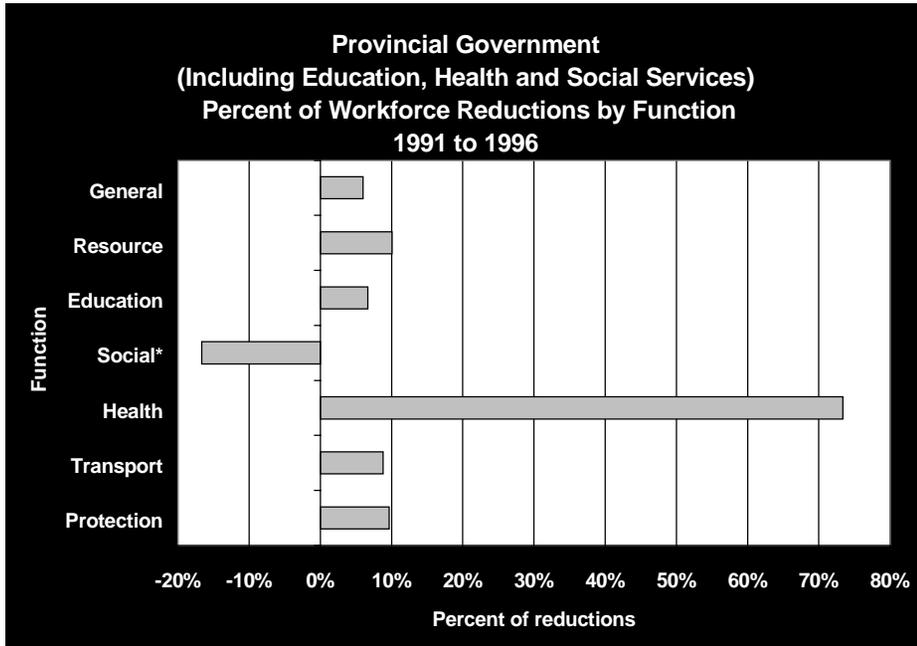
This table shows the transformation of the narrower provincial government functional breakdown. This excludes education, health, and social service positions that are outside of the administrative core of government employment. By and large, and with the exception of the significant decreases in employment in the health function, the overall shape of government in terms of the

functional composition of employment remained relatively the same between 1991 and 1996.

- Overall change from 1991 to 1996 was a decline of 10.4% or 38,439 positions.
- The largest categories in terms of their contribution to employment are protection of persons and property (18.7%) and general services (14.3%) in 1996.
- The most substantial declines took place in health (the administrative side) at 22.9%, as well as resource conservation and industrial development (15.8%) and protection of persons and property (10.1%).
- There was also an increase in employment in social services administration of 4.1% from 1991 to 1996.

^{**} Administration only, excludes education, health and social services.

Provincial Reductions by Function



* Represents an increase over this period.
Source: Statistics Canada, Public Institutions Division.

Comments and Facts

These two charts provide a view of how the different functions have been impacted during the downsizing process at the provincial level. The broad or extended world, which includes education, health and social services, is covered in the first chart and the narrower view, focussing on administration, is represented in the second. The charts depict the six largest contributions to work-

force reductions by function, as well as social services, the one function which increased over the period of analysis.

- Positions in health comprised 73.4% of the workforce reductions in the broad category and 32.8% in the administration domain.
- Protection of persons and property, resources conservation and industrial development,

and transport and communications, each accounted for between 16 and 18% of the reductions.

- Workforce reductions in general administration accounted for 11.3% of the overall reductions.

4

Labour Force Survey Occupation Analysis

Analysis of LFS Occupational Data

SOC Occupation	Total Employment (000s)			Percent of All			Percentage Change		
	1982	1991	1997	1982	1991	1997	1982-91	1991-97	1982-97
Federal									
All	282.3	313.1	269.0	100.0	100.0	100.0	10.9	-14.1	-4.7
11: management + administration	68.1	93.3	104.3	24.1	29.8	38.8	37.0	11.8	53.2
21: natural sciences	29.0	34.1	30.6	10.3	10.9	11.4	17.6	-10.3	5.5
23: social sciences	9.6	10.4	12.3	3.4	3.3	4.6	8.3	18.3	28.1
31: health	3.6	4.2	2.4	1.3	1.3	0.9	16.7	-42.9	-33.3
41: clerical	98.3	104.8	63.2	34.8	33.5	23.5	6.6	-39.7	-35.7
61: service	40.3	37.7	33.8	14.3	12.0	12.6	-6.5	-10.3	-16.1
All others	33.4	28.6	22.4	11.8	9.1	8.3	-14.4	-21.7	-32.9
Provincial									
All	268.0	279.5	237.9	100.0	100.0	100.0	4.3	-14.9	-11.2
11: management + administration	53.7	77.0	79.1	20.0	27.5	33.2	43.4	2.7	47.3
21: natural sciences	31.3	35.5	24.0	11.7	12.7	10.1	13.4	-32.4	-23.3
23: social sciences	20.8	18.6	14.6	7.8	6.7	6.1	-10.6	-21.5	-29.8
31: health	11.0	9.5	7.7	4.1	3.4	3.2	-13.6	-18.9	-30.0
41: clerical	88.4	82.4	69.1	33.0	29.5	29.0	-6.8	-16.1	-21.8
61: service	35.1	36.2	28.4	13.1	13.0	11.9	3.1	-21.5	-19.1
All others	27.7	20.3	15.0	10.3	7.3	6.3	-33.9	-30.1	-53.8

Source: Statistics Canada, Labour Force Survey.

Comments and Facts

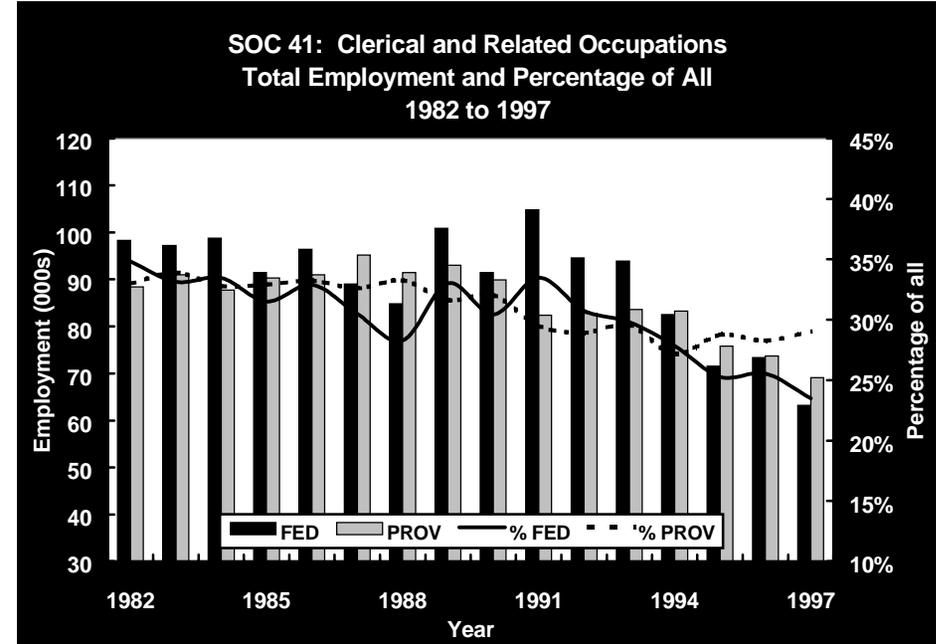
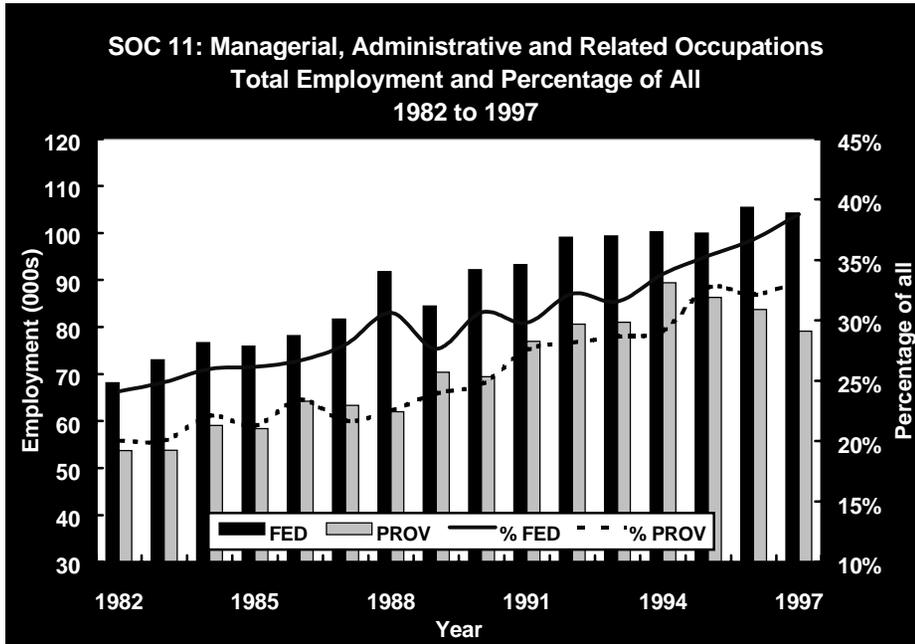
This table provides a snapshot of the occupational composition of the federal and provincial levels in 1982, 1991, and 1997. Each of the major two-digit Standard Occupational Classification (SOC) 1981 occupational⁶ groups is broken down by total employment (in thousands of persons), percent of total employment as well as percentage change in total employment. (The complete titles

of the major or two-digit SOC groups are included in the Notes.⁷)

- SOC 11, the category that includes managers and administrators, experienced significant growth at both the federal and provincial levels at 53.2 and 47.3%, respectively, from 1982 to 1997.
- Federal managers and administrators increased their proportion of the workforce to 38.8% in 1997, up from 29.8% in 1991.

- The decline in clerical occupations (SOC 41) was substantial in both jurisdictions with a decrease at the federal level of 35.7 and 21.8% provincially from 1982 to 1997.
- At the federal level, the share of clerical employment decreased from one-third in 1982 to just under one-quarter in 1997.

A New Occupational Composition



Source: Statistics Canada, Labour Force Survey.

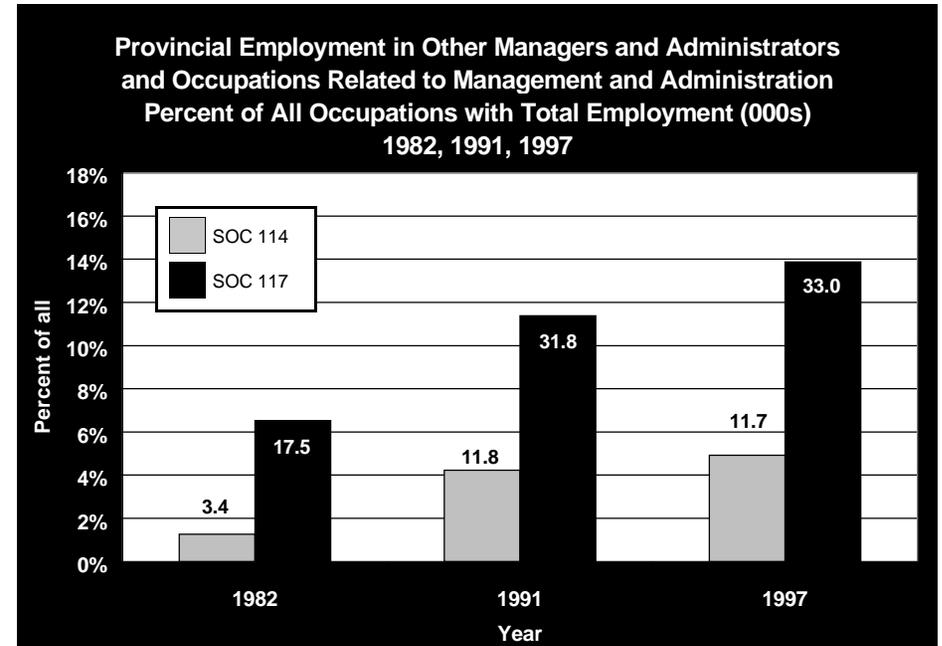
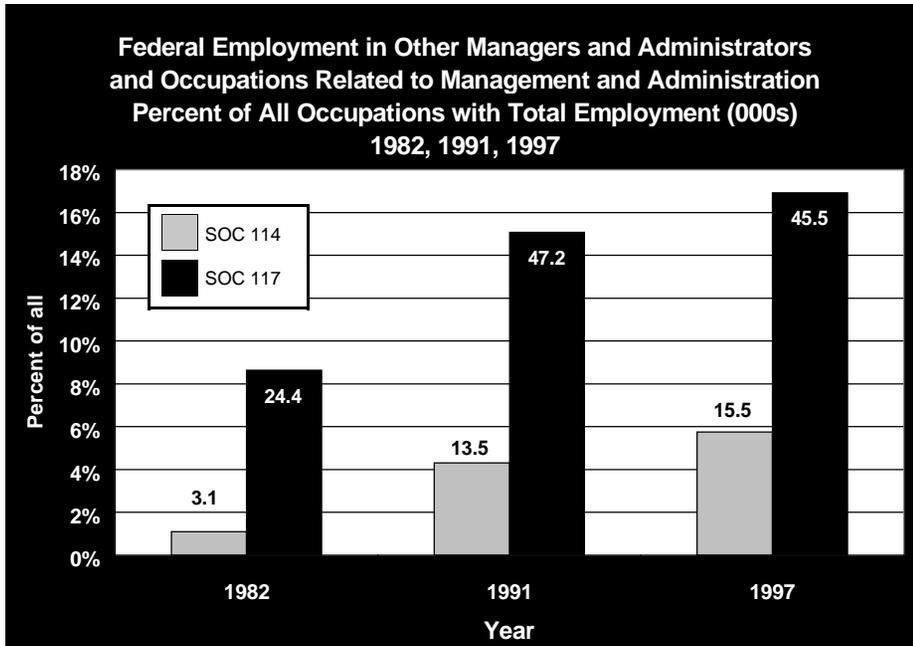
Comments and Facts

Major occupational changes have occurred in the federal and provincial governments, most notably in management, administrative, and clerical occupations. Above, the two charts relate the increase in management and administrative jobs and the decline in clerical occupations from 1982 to 1997.

The bars in each of the graphs show the total number of persons employed in each of these occupations (in thousands). The trend line shows the percentage of total employment accounted for by each of these two groups.

- The decrease in employment in clerical and related occupations has been dramatic at the federal level in the 1990s.
- From 1991 to 1997, there was an overall decline of 44,100 in all occupations federally.
- Clerical reductions of 41,600 persons translate into 94% of all federal employment reductions over this time period.
- Provincially, reductions in clerical and related occupations represented 32% of all employment reductions from 1991 to 1997.
- At both the federal and provincial levels, the share of employment accounted for by managerial, administrative, and related occupations increased steadily from 1982 to 1997.
- At the federal level, this increase reflects increases in the absolute number of employees in this group, while provincially there was a decrease from 1994 to 1997.

A Closer Look at Changing Occupations



Source: Statistics Canada, Labour Force Survey.

Comments and Facts

These two charts provide a closer look, through the use of three-digit SOC data, at the changing occupational structure of government. These charts relate the growth that has taken place in SOC 114, other managers and administrators, and SOC 117, occupations related to management and administration, at the federal and provincial levels.

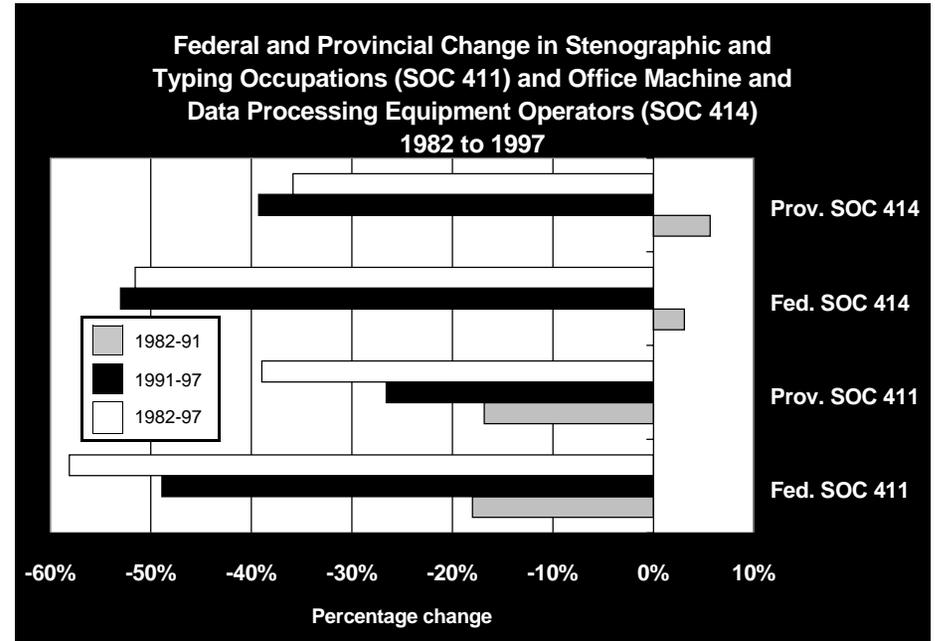
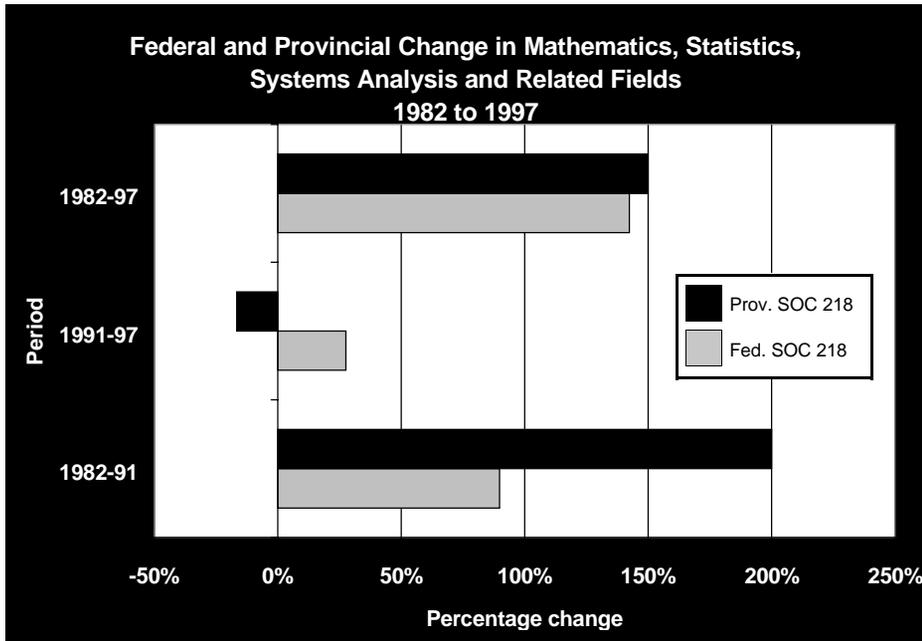
Other managers and administrators encompass occupations in areas such as purchasing and service

management. Occupations related to management and administration include occupations such as accountants, auditors, inspectors and personnel officers.

- Similar trends have taken place in the employment share of these two occupational groups at the federal and provincial levels over the 1982 to 1997 period.
- Federally, SOC 114 increased by 400% between 1982 and 1997 and made up 5.8% of the total workforce in 1997.

- Provincially, SOC 114 increased by over 240% since 1982 and accounted for 4.9% of government employment in 1997.
- Employment in SOC 117 increased 86.4% federally, and 88.6% provincially, from 1982 to 1997.

Occupations Restructured



Source: Statistics Canada, Labour Force Survey.

Comments and Facts

The first chart covers occupations in mathematics, statistics, systems analysis, and related fields (SOC 218). This includes computer programmers, systems analysts, and statisticians, which have been considered some of the most marketable positions in the private sector.

The two-digit analysis has shown that clerical occupations have undergone substantial reductions in their numbers at both the federal and provincial levels of government. SOC 411, stenographic and typing occupations includes such

groups as stenographers, secretaries, and clerk-typists. Office machine and data processing equipment operators, SOC 414, includes occupations such as data processors.

- The majority of the growth in SOC 218 at both levels of government occurred from 1982 to 1991.
- Provincially, there was a large increase of 200% in SOC 218 from 1982 to 1991.
- The federal increase of 89.8% over the same period is moderate in comparison.
- SOC 411 had major reductions in the workforce with federal reductions of 8,900 from 1991 to 1997 and 7,500 fewer positions provincially.
- The SOC 414 changes show, however, that not all of the clerical positions that were eliminated were typists and secretaries.
- The provincial reduction in SOC 414 was 2,200 positions, and 5,300 federally from 1991 to 1997.

Detailed Census Occupation Analysis

For those interested in an alternative and more detailed occupational analysis, Appendix B examines occupations based on the 1991 and 1996 Census. Because of the extremely large sample size of the Census, tremendous detail in occupa-

tional structure is possible to the four-digit or unit group level. The Census occupational data for 1991 and 1996 have been coded using the Standard Occupational Classification 1991 (SOC 91). This is a completely new occupational

classification system and is not simply an update of the previous SOC 81 used in the LFS occupational data series. Please refer to Appendix B for this detailed occupational analysis.

5

Aging Trends

The Canadian workforce as a whole is getting older as the baby boomers continue to move towards retirement. It is therefore not surprising to find that government workforces have aged considerably as

well. However, what is unexpected is the rate at which the “greying” of government has taken place over the past decade. This raises the question of the impact of cutbacks and downsizing on

the age composition of government employment. This section provides a detailed description of the aging of government workforces using Labour Force Survey data for the 1976 to 1997 period.

Age in Canada's Employed Workforce



Source: Statistics Canada, Labour Force Survey.

Workforce	1976	1986	1997
Mean age	35.9	36.0	38.2
Median age	33.0	34.0	38.0

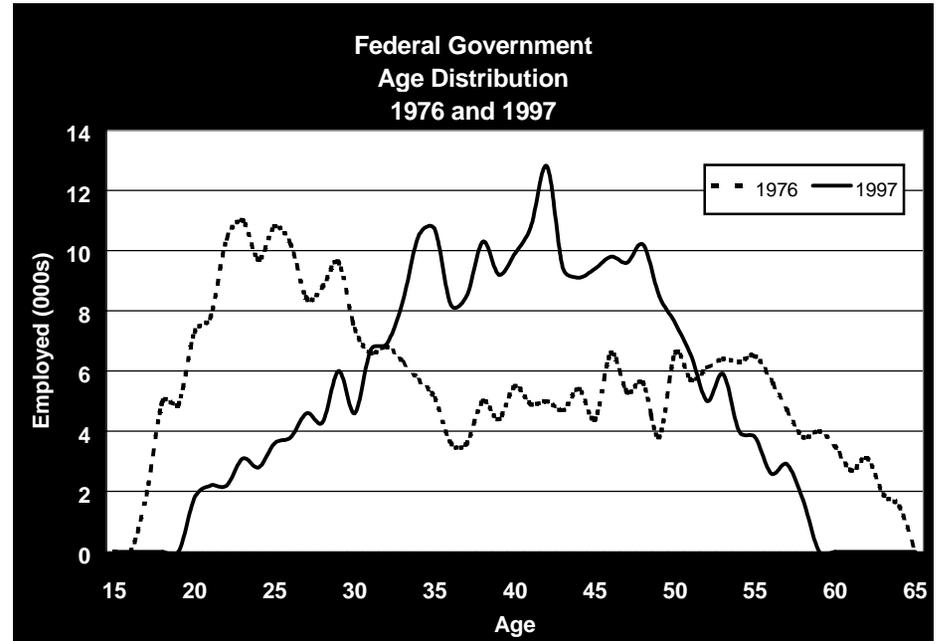
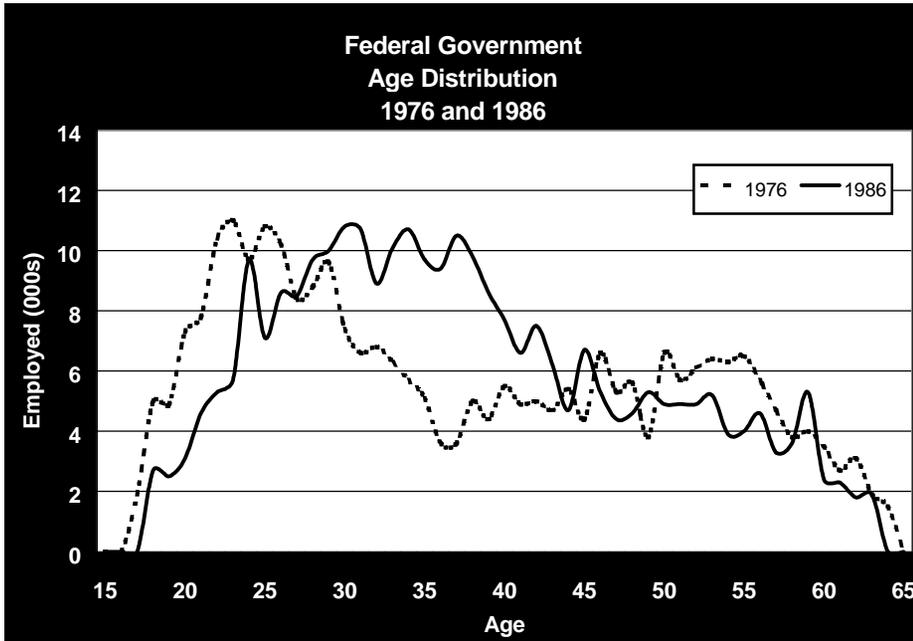
Comments and Facts

The first chart shows the age distribution of Canada's employed labour force in 1976 and 1986 while the second shows this distribution for 1976

and 1997 based on data from Statistics Canada's Labour Force Survey. What is apparent in each of these two graphs is the movement of the baby boomers through the workforce, resulting in a gradual aging of the workforce. The table to the

right shows the mean (average), and median (midpoint value of the age series). This table serves as a reference point for comparing the age profiles of employment in the provincial and federal governments shown on the next two sets of charts.

The Aging of the Federal Government



Source: Statistics Canada, Labour Force Survey.

Comments and Facts

These two charts show the age profile of employees at the federal government level in 1976 and 1986 and in 1976 and 1997. Federal government employees are older than the workforce as a whole (also shown in the table to the right). What is also interesting to note is the large drop off in age in 1997 after age 60, in comparison to the Canadian labour force as a whole. As well, it is evident that in 1997, relative to the other years, there is diminished participation of those under the age of 30 years.

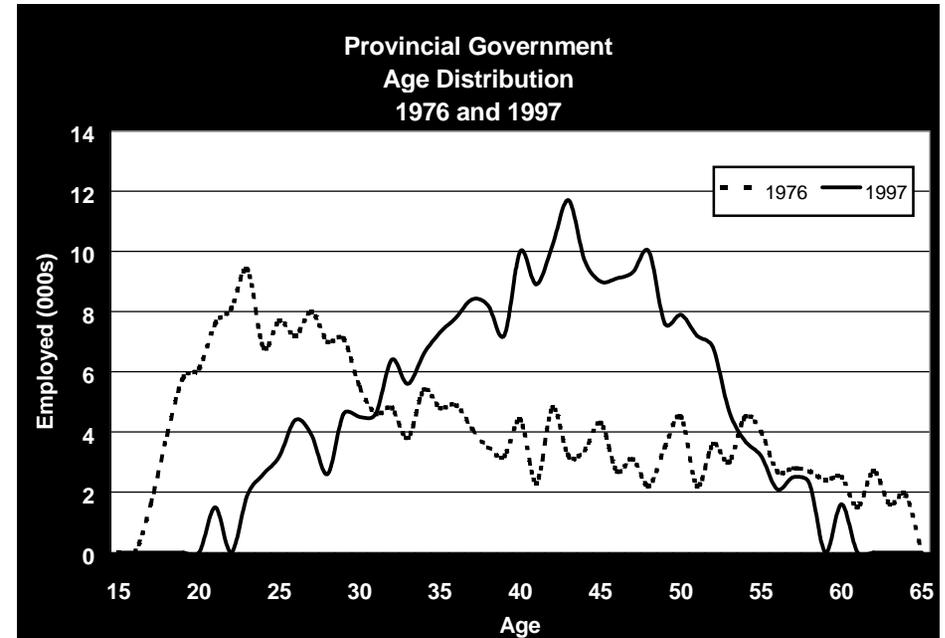
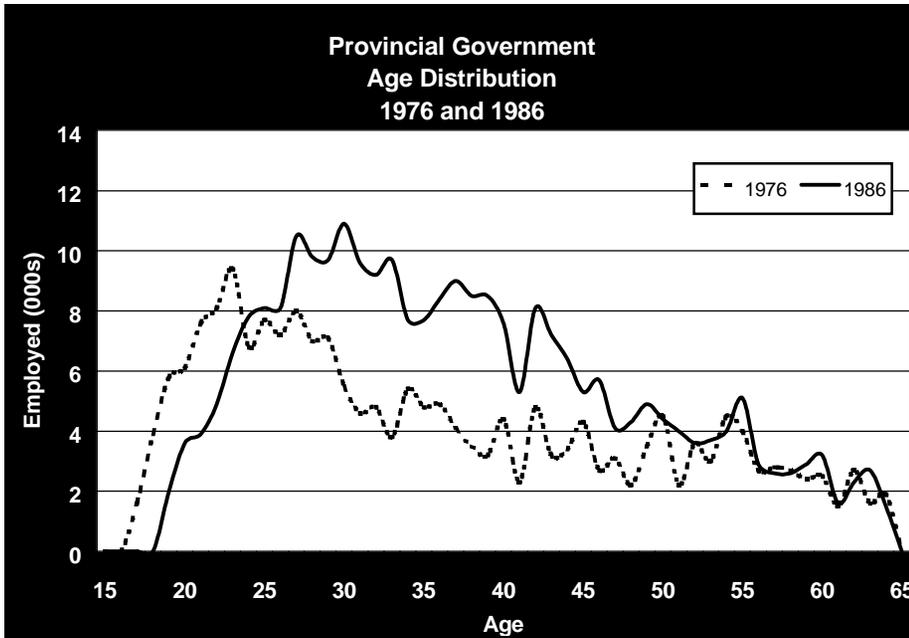
- The mean or average age of federal government employees has consistently exceeded the average age in the workforce as a whole.
- The median age of federal employees has also been consistently higher than for the Canadian workforce.
- In 1976, the median age was 35 years, meaning that half of the federal employees were under this age and half were over.

Federal	1976	1986	1997
Mean age	37.0	37.1	38.4
Median age	35.0	36.0	41.0

	Exceeds workforce
	Trails workforce

- By 1997, the median had risen to 41 years, which exceeds the average of 38.4. The significance of this is that well over half the employees are older than the average or mean age.

Provincial Government Aging



Source: Statistics Canada, Labour Force Survey.

Comments and Facts

The age distribution of provincial government employees is shown in these two charts for 1976 and 1986 as well as 1976 and 1997. Provincially there is a similar sharp decrease in the share of employment accounted for by older workers and those less than 30 years old.

- The provincial government workforce was slightly younger (mean age 35.4) than the

federal group in 1976 and even slightly younger than the employed workforce.

- However, significant aging has taken place in provincial workforces. By 1997, both the mean and median exceeded those for federal employees and for the labour force as a whole.
- In particular there was a marked concentration of employment in the middle-aged groups of 35 to 55 years.

Provincial	1976	1986	1997
Mean age	35.4	37.2	39.7
Median age	34.0	36.0	42.0

Exceeds workforce
Trails workforce

- By 1997, the median age at the provincial level was 42 years. This is similar to what has occurred at the federal level, as well over half the workforce is older than the average age of 39.7.

6

Age Band Analysis

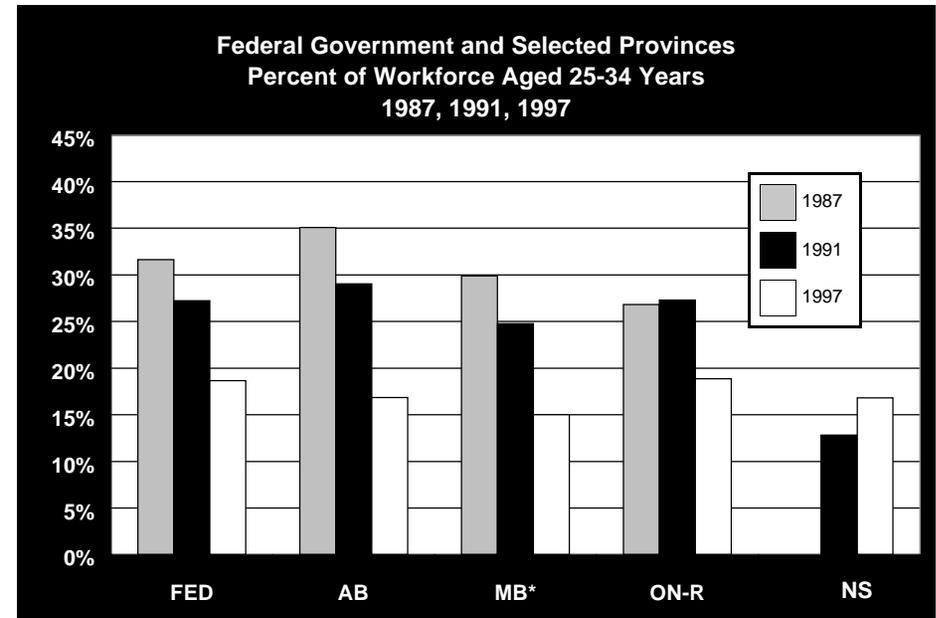
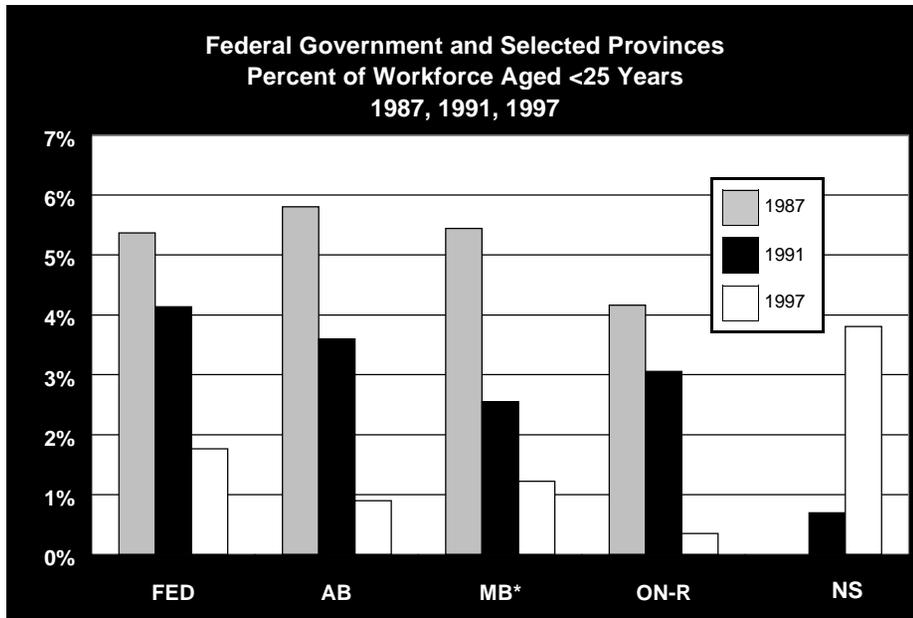
This section uses data collected from the federal government and the four provincial governments participating in this study.⁸ Using data for the period 1987 to 1997, the charts that follow show the contribution that different age bands have made to government employment over various

time periods. In addition, the impact of the changes that have occurred as a result of downsizing is also investigated.

The data shown in this section reflect two critical changes in government employment; a lack of

recruitment and an exodus of workers aged 55+. Therefore, the share of the middle age groups (35-54) has increased significantly. This has been augmented by the fact that natural aging has occurred. As a result, the large age group 25-34 seen in 1987 are 35-44 in 1997.

Age Band Analysis



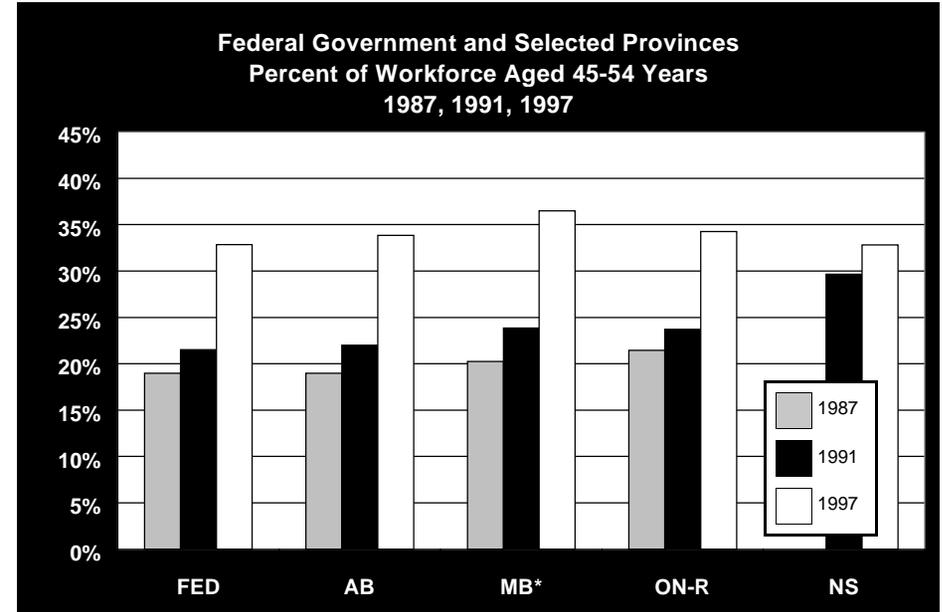
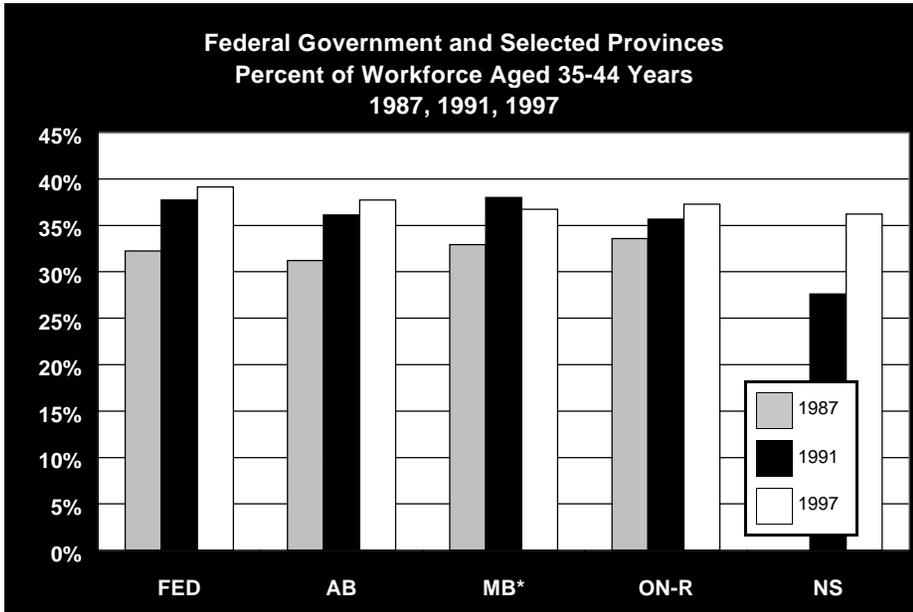
* Covers regular full-time employees only.
Source: Federal government and selected provinces.

Comments and Facts

The first chart shows the large decline in the proportion of the government workforce that is less than 25 years of age. Today, those in government aged 25 to 34 can be considered the real youth in government. The data series for Nova Scotia includes only 1991 and 1997.

- Those aged less than 25 in 1997 made up less than 1% of the government workforces in Alberta (0.9%) and in Ontario (0.4%).
- Nova Scotia was the only government to show an increase from 0.7% in 1991 to 3.8% in 1997. This increase is largely due to the significant decline in the 55+ age band, which will be examined shortly.
- The employment of those aged 25 to 34 years also has dropped significantly in four jurisdictions. The exception is Nova Scotia, which saw an increase in the share of this group between 1991 and 1997.
- In Alberta those aged 25 to 34 represented 16.9% of the workforce in 1997, which is down 18.2 percentage points – roughly half its share in 1987.

Changing Age Composition

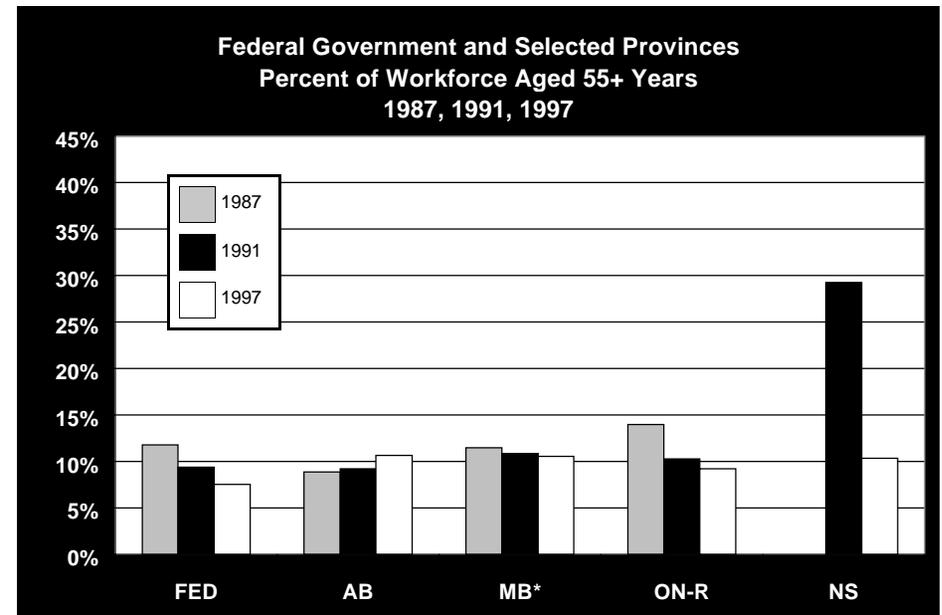


* Covers regular full-time employees only.
Source: Federal government and selected provinces.

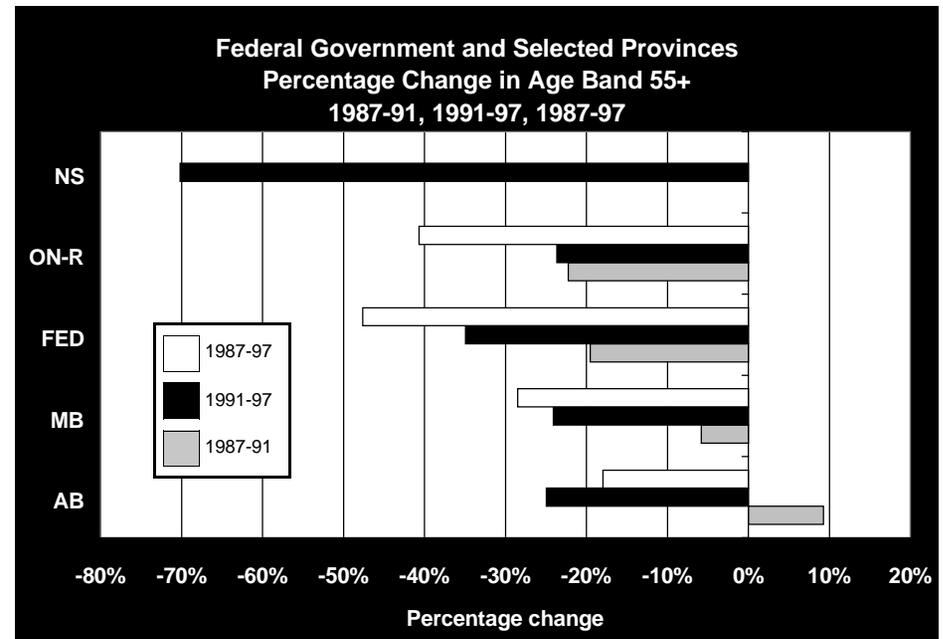
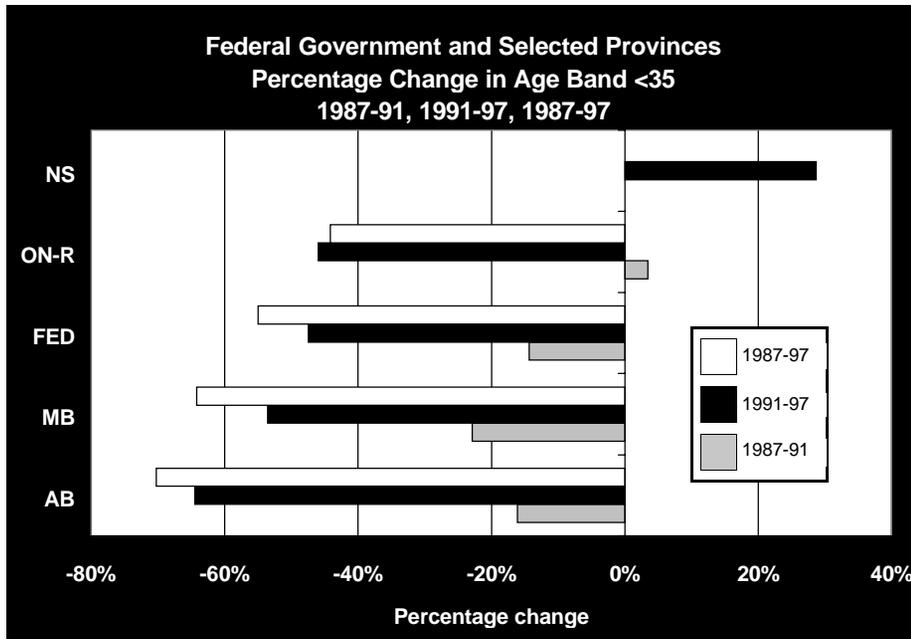
Comments and Facts

These charts provide a look at the final three age bands for the federal government and selected provinces.

- Consistent growth has taken place across each of the jurisdictions in those aged 35 to 44 years. In each case, this group represented over one-third of employees in 1997.
- Those aged 45 to 54 now make up well over 30% of the workforce in the five jurisdictions; for many, this category represented close to 20% in 1987. It is this group that has shown the most significant growth in its share of overall employment.
- Nova Scotia exhibits a slightly different pattern than the other jurisdictions. Most notably, the percentage of employment accounted for by those aged 55 years or more was much higher than in the other jurisdictions in 1991. A very significant reduction took place in the size of this group between 1991 and 1997, however, with its share dropping from 29.2 to 10.3%.



Change in Combined Age Bands



Source: Federal government and selected provinces.

Comments and Facts

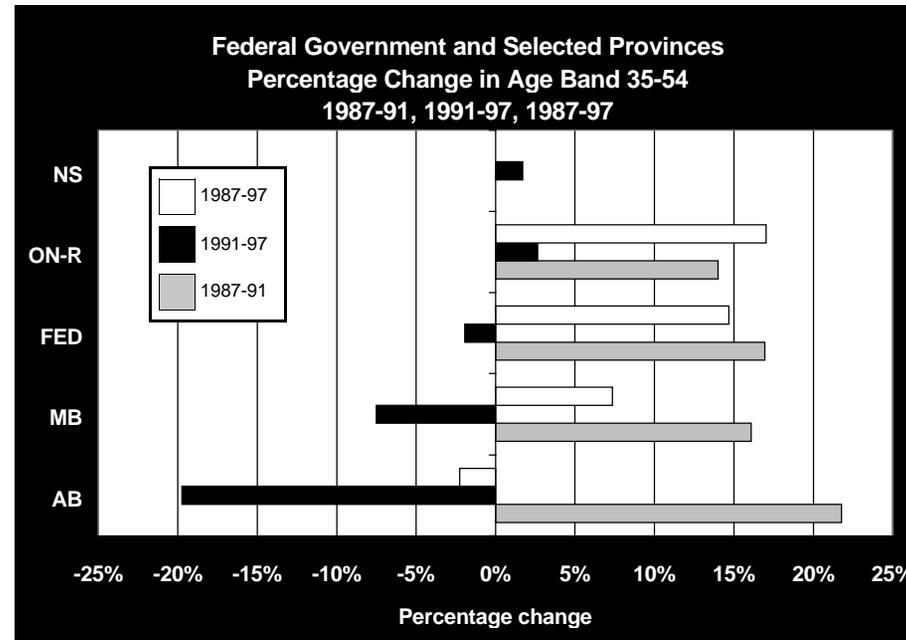
The next three graphs show how the compressed age categories, less than 35, and 55+ have changed in terms of their total size. The 35-54 age band will be discussed on the next page.

- The less than 35 age group dropped in four of the five jurisdictions by more than 40% from 1991 to 1997.
- Alberta endured the most substantial decline of 64.5% during that period with an overall

reduction of 70.2% in comparing 1987 to 1997 results.

- The 55+ age category has undergone significant decrease in their numbers from 1987 to 1997 across all jurisdictions.

Change in the 35 to 54 Age Band



Source: Federal government and selected provinces.

Comments and Facts

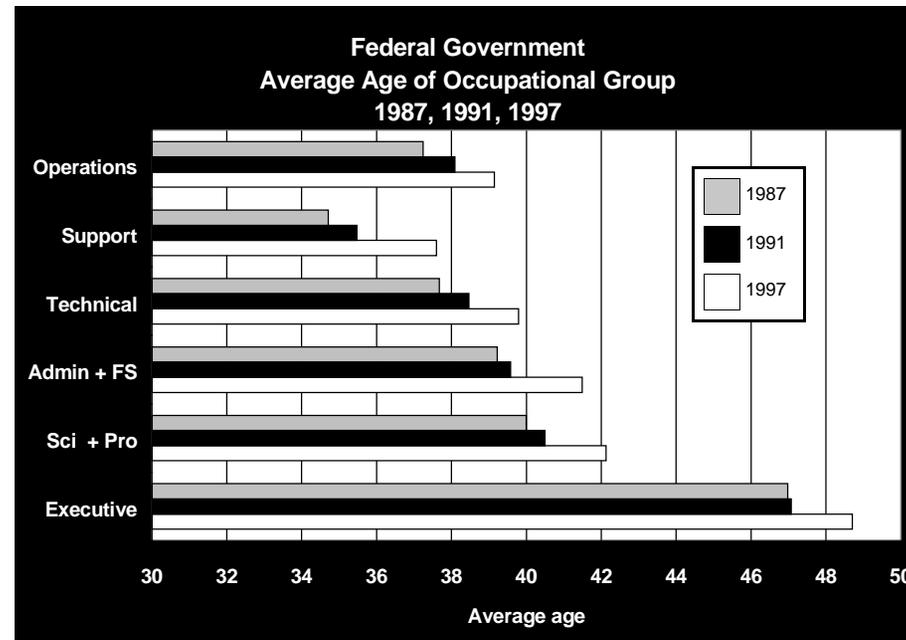
The trends for the 35 to 54 group are less consistent than for the <35 and 55+ age bands.

- While the size of this group did increase significantly in most jurisdictions, there are differences across the sub-periods.
- In the case of most jurisdictions, the largest increases took place between 1987 and 1991.
- Alberta experienced large decreases in the size of the 35 to 54 age group between 1991 to 1997. Reductions were also apparent in the 1990s in the Manitoba and federal governments.
- The trend in Ontario and Nova Scotia is different, with the size of this group continuing to increase slightly between 1991 and 1997.

7

Age and Occupation

Age and Occupation



Source: Federal government.

Comments and Facts

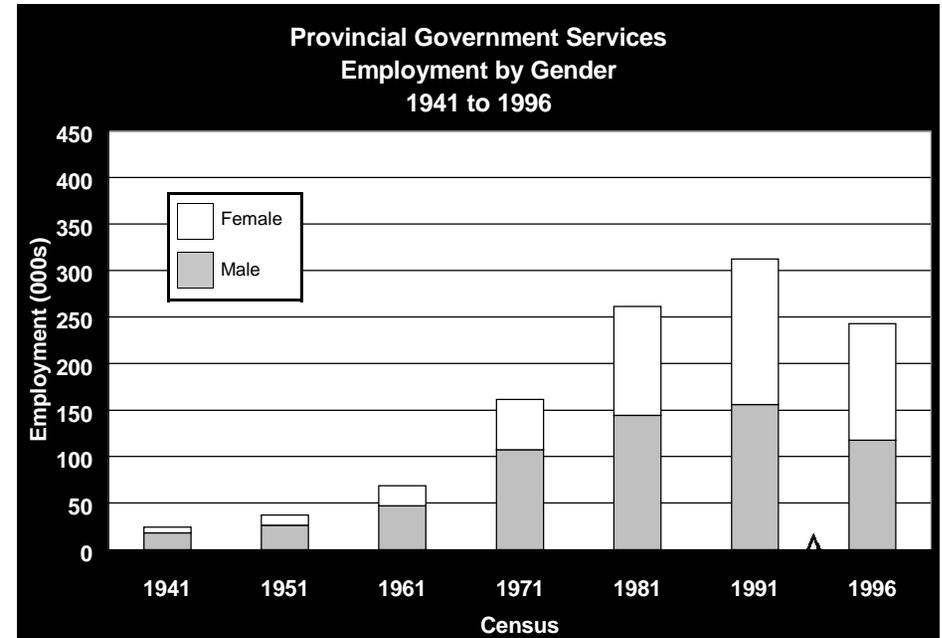
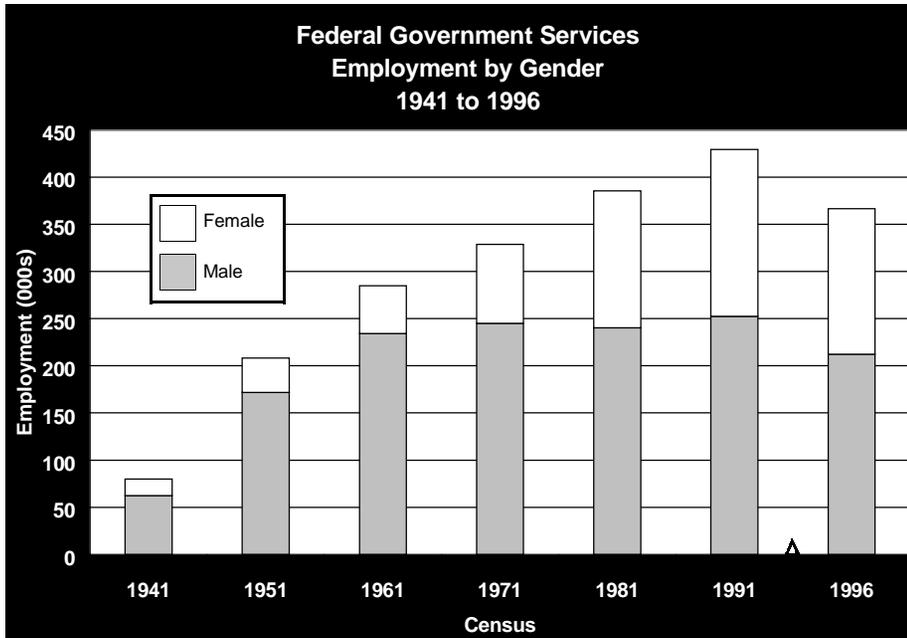
This chart shows the average age by occupation for the federal government.⁹

- The average age of the executive group, at 48.7 years, is significantly higher than for the other groups in 1997.
- The average age of the scientific and professional group at 42.1 for 1997 is also higher than the average for federal employees as a whole.
- The support group is the youngest with a mean age of 37.6 in 1997.
- Average age has increased steadily in each group since 1987, with the period of largest change being 1991 to 1997.

8

Gender Trends

Gender Trends in Government



Source: Statistics Canada, Census.

Comments and Facts

In 1911, there were 4,073 women employed in civil and municipal governments. This comprised just over 5% of the total government workforce at that time. There has been significant change in female representation since the beginning of the century. Over the past 30 years, there has been tremendous growth in the proportion of women in

government workforces, which is consistent with the greater presence of women in the labour force.

- In 1941, women accounted for 27,980 (19% of the workforce) and 6,219 (26%) in the federal and provincial workforces, respectively.
- From 1961 to 1971 total employment increased by 135%. The number of provincial

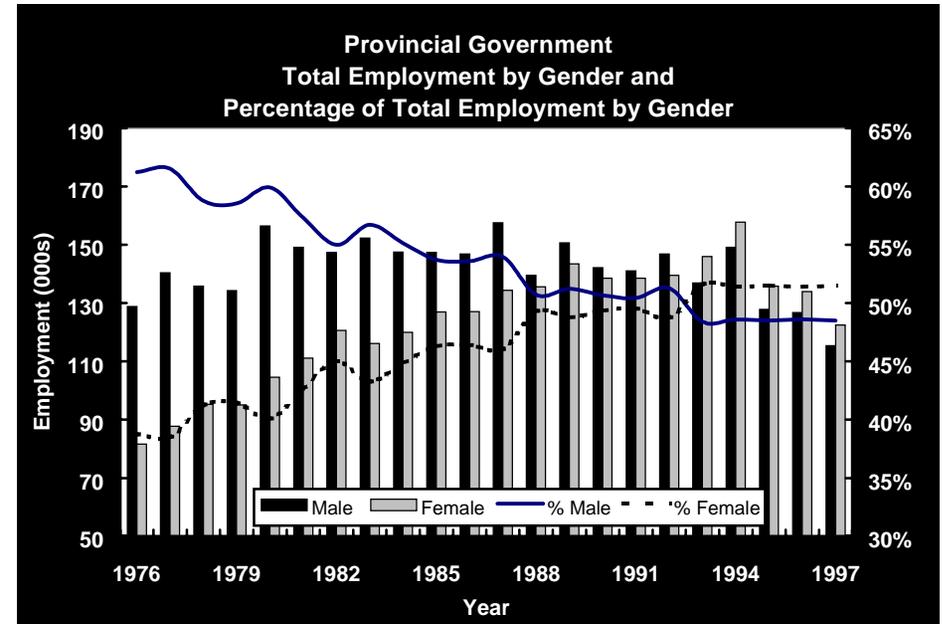
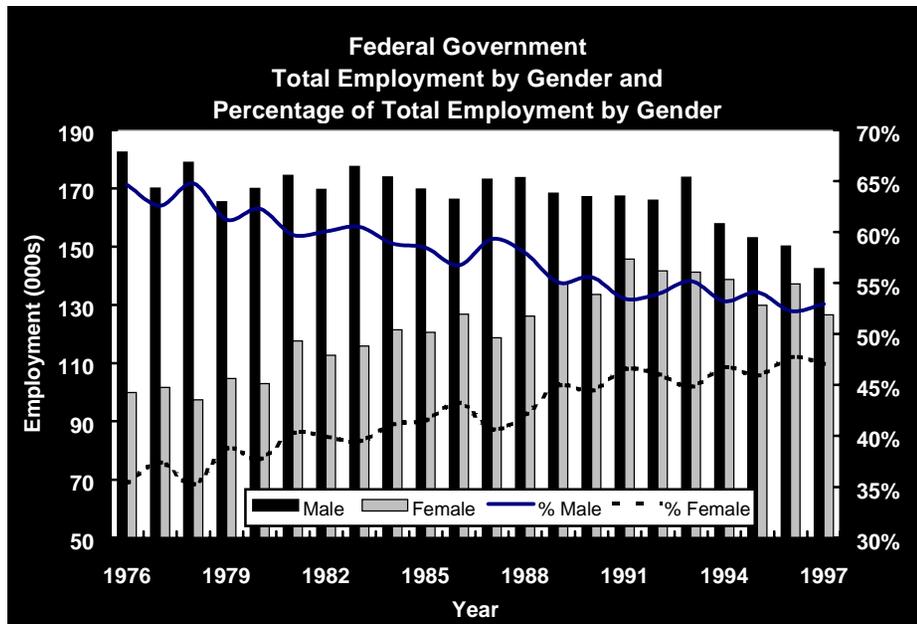
employees increased by over 90,000 with 32,578 more women and 60,126 more men.

- The 1991 Census was the first to show a slightly larger female workforce relative to male at the provincial level, at 50.1% in 1991 and 51.6% in 1996.
- Federally, female participation increased as well to 42.1% in 1996.¹⁰

9

Gender and Employment Type

Total Employment by Gender



Source: Statistics Canada, Labour Force Survey.

Comments and Facts

There has been a significant increase in the proportion of female employees in government. This can partially be attributed to an absolute increase in the number of female employees and to a decrease in the number of male employees.

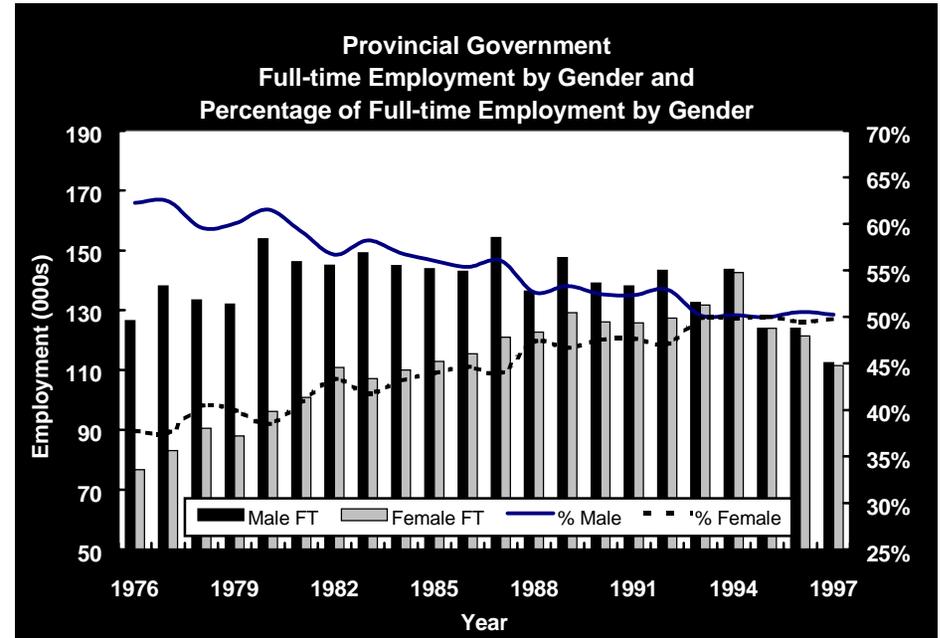
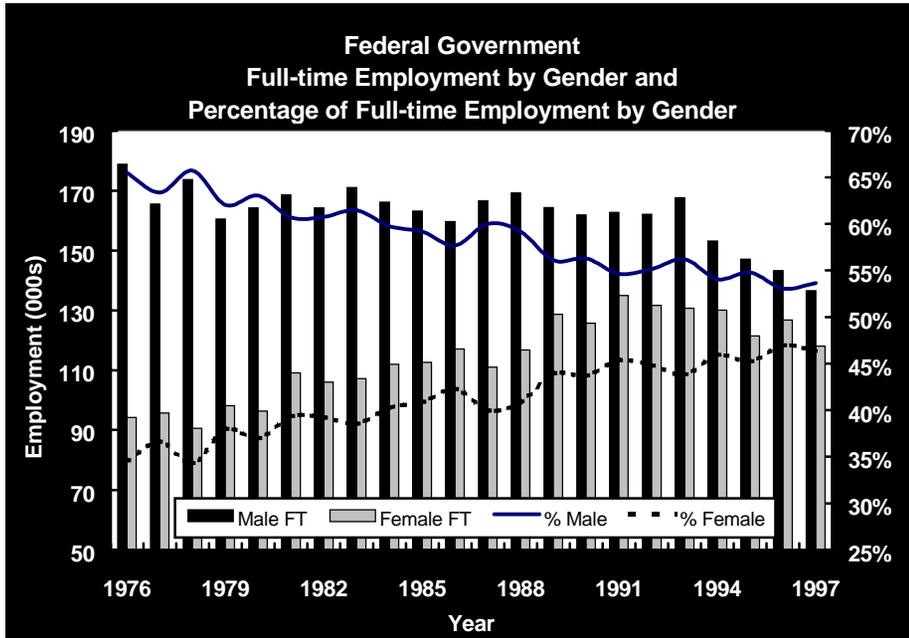
- In 1976 there were 182,500 males and 99,900 females employed in the federal government.
- The female workforce is 23.7% larger in 1997 in comparison to 1976.

- The male workforce decreased by 22.0% over the same period.
- Females represented 35.4% of the workforce in 1976; in 1997, 47.1% of the workforce was female.
- Note that these figures differ from the previous chart (in Section 9), because they are based on the LFS, which excludes the military.

Provincial female representation has also steadily increased since 1976.

- There were 128,900 males and 81,600 females employed in provincial government in 1976.
- A key difference at the provincial level is that female participation has actually exceeded male participation since 1993, when it jumped to 51.6% of the workforce.

Full-time Employment Trends



Source: Statistics Canada, Labour Force Survey.

Comments and Facts

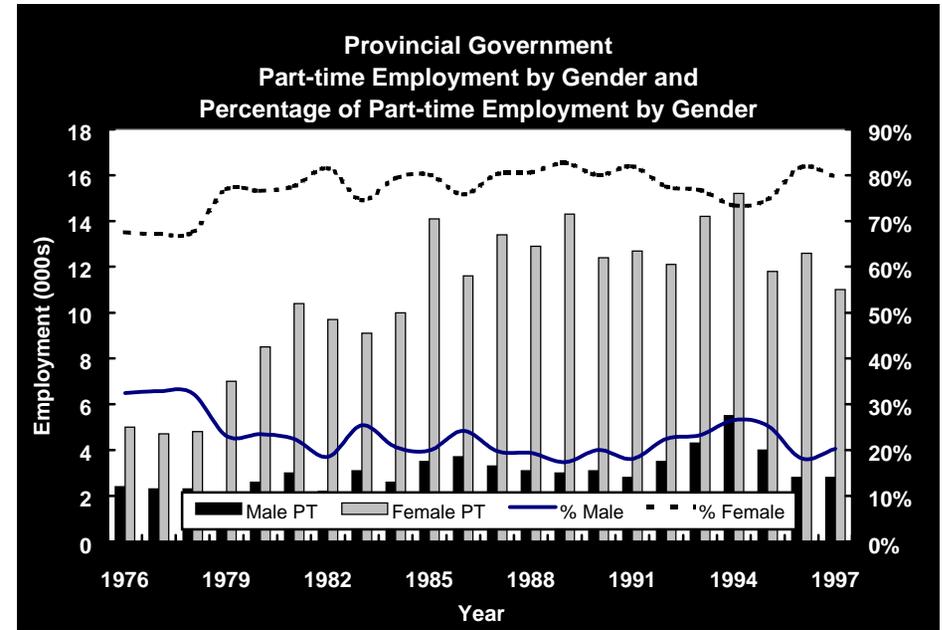
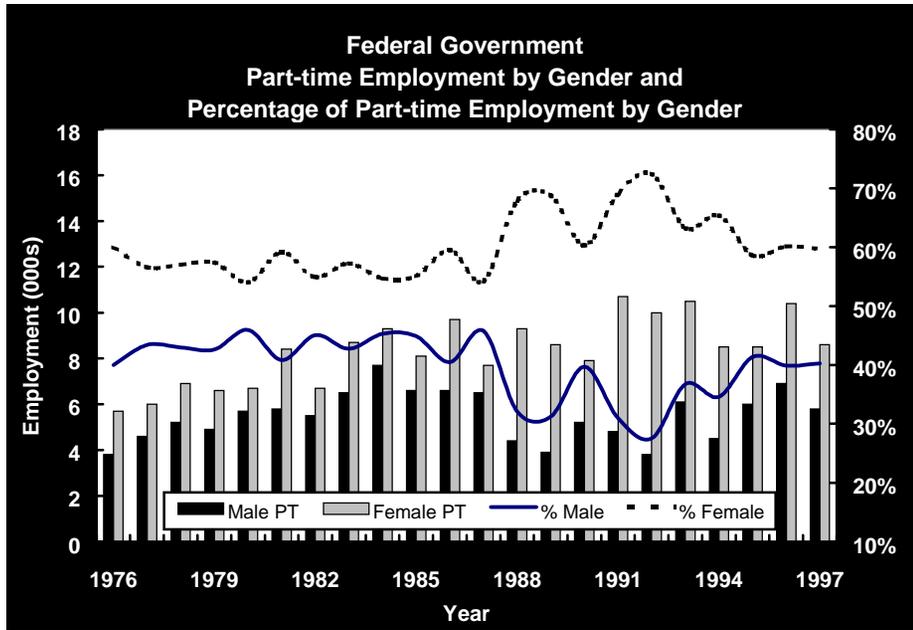
The bars in these two charts represent male and female full-time employment, while the lines depict the percentage of the full-time workforce in government for each gender. Full-time employment is defined by the LFS as persons who usually work 30 hours or more per week.

The gap between male and female full-time employment levels is slightly larger than for total employment, but has narrowed significantly since 1976. This can also be partially attributed to an increase in the number of female employees and to a decrease in the number of male employees.

- At the federal level, 53.7% of full-time employment was male, while 46.3% were female in 1997.

- The gap is smaller provincially with 50.2% male and 49.8% female in 1997.

Part-time Employment Trends



Source: Statistics Canada, Labour Force Survey.

Comments and Facts

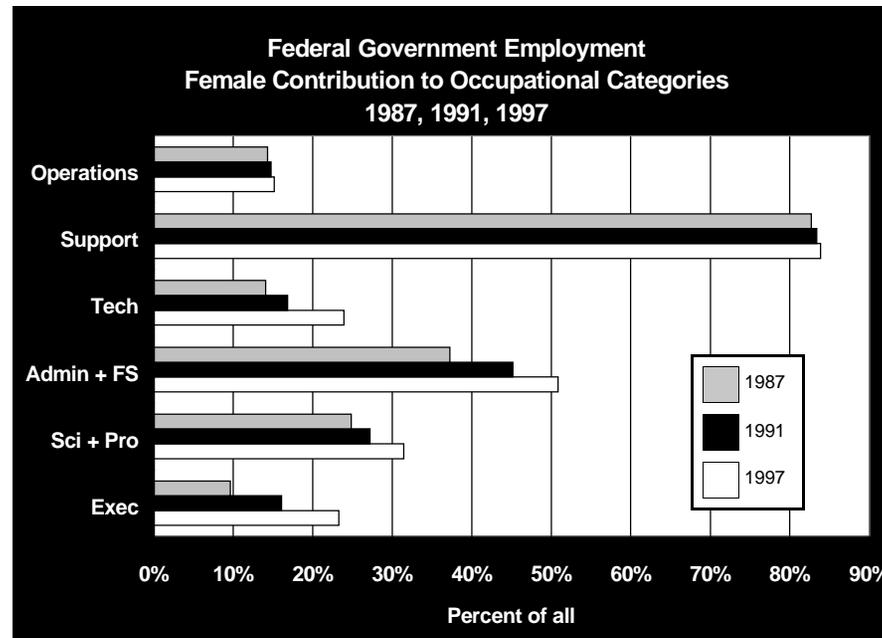
The gender composition of part-time employment in the federal and provincial governments is radically different than the full-time and total employment pictures. Females have always been more prevalent in part-time employment at both levels of government. Part-time employment is defined by the LFS as persons who usually work less than 30 hours per week.

- Overall, part-time employment accounts for a very small proportion of total employment in government.
- The share of part-time employment rose slightly between 1976 and 1997, reaching 5.4% federally and 5.8% provincially.
- Federally, females accounted for a low of 54.0% and a high of 72.5% of part-time employment from 1976 to 1997.
- The female share of part-time employment was even higher at the provincial level, ranging from 67.6 to 81.9% between 1976 and 1997.

10

Gender and Occupation

Growing Diversity in Female Employment



Source: Treasury Board of Canada.

Comments and Facts

This chart depicts the contribution or percentage of all employment that females represent by occupation at the federal government level.¹¹ It is immediately apparent that females are largely over-represented in the support category.

- There have been steady improvements in terms of female representation in a number of categories since 1987, notably in the technical, administrative and foreign service, scientific and professional, and executive groups.

gories since 1987, notably in the technical, administrative and foreign service, scientific and professional, and executive groups.

- This can be attributed to two factors: increases in female participation, and a large decline in male participation since 1987.
- An example of this occurred in the executive category, where female employment totaled

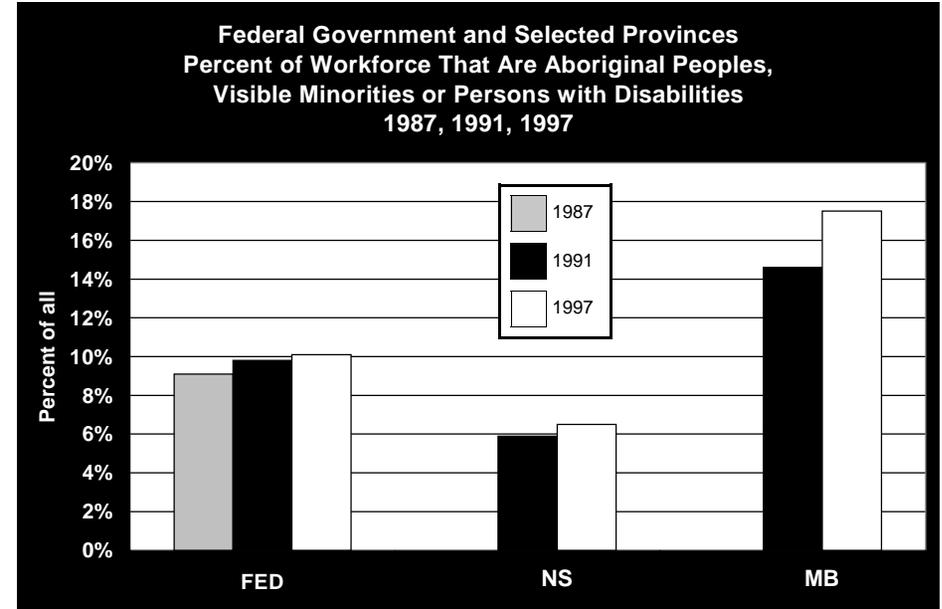
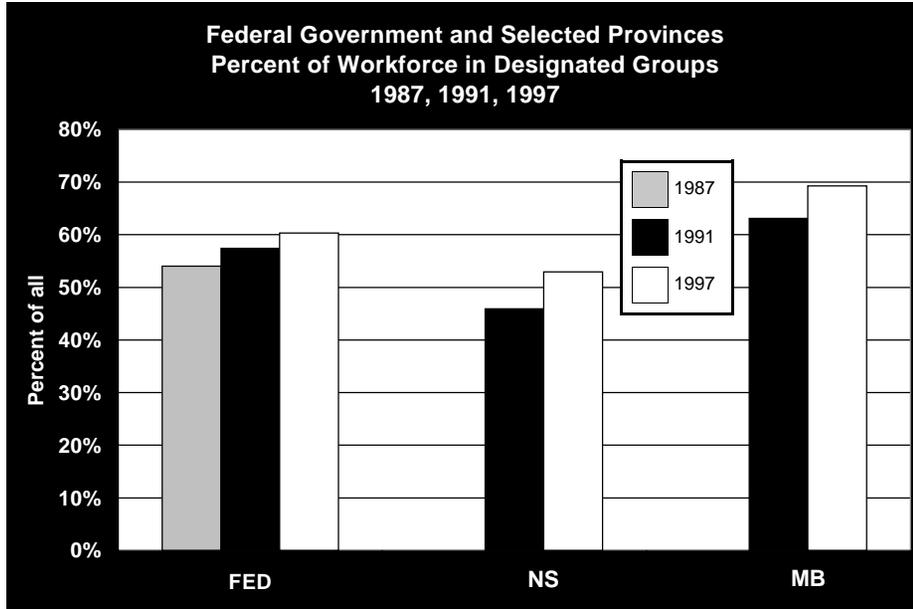
417 or 9.6% of the total in 1987. This number jumped to 744 persons in 1991, which resulted in an increase in female representation to 16.1%.

- Women's share of executive positions continued to rise in the 1990s. While the total size of this group increased by only 1.9% (or 14 positions) the share of positions held by women increased to 23.3% in 1997.

11

Employment Equity

Employment Equity Transformation



Source: Federal government and selected provinces.

Comments and Facts

Employment equity data are available for only three of the five jurisdictions involved in this study. The Government of Alberta has never collected employment equity statistics while the Government of Ontario ceased collection in 1995. Employment equity statistics relate the status of representation in the workforce of designated groups. This should not be confused with pay equity, which deals with the issue of equal pay for work of equal value.

In the three governments for which these data are available, the designated groups have increased steadily over time in terms of their proportion of the workforce.¹² The designated groups are somewhat standard between the jurisdictions and in-

clude females, Aboriginal peoples, visible minorities, and persons with disabilities.

- Manitoba had the highest proportion of an employment equity workforce with 69.3% in 1997.
- Nova Scotia had the lowest with 52.9% and the federal government peaked at 60.3% in 1997.¹³

It is interesting to note the proportion of employment that Aboriginal peoples, visible minorities, and persons with disabilities (excluding solely female results) make up of the workforce.

- In 1997 Aboriginal peoples, visible minorities, and persons with disabilities represented the following proportions:

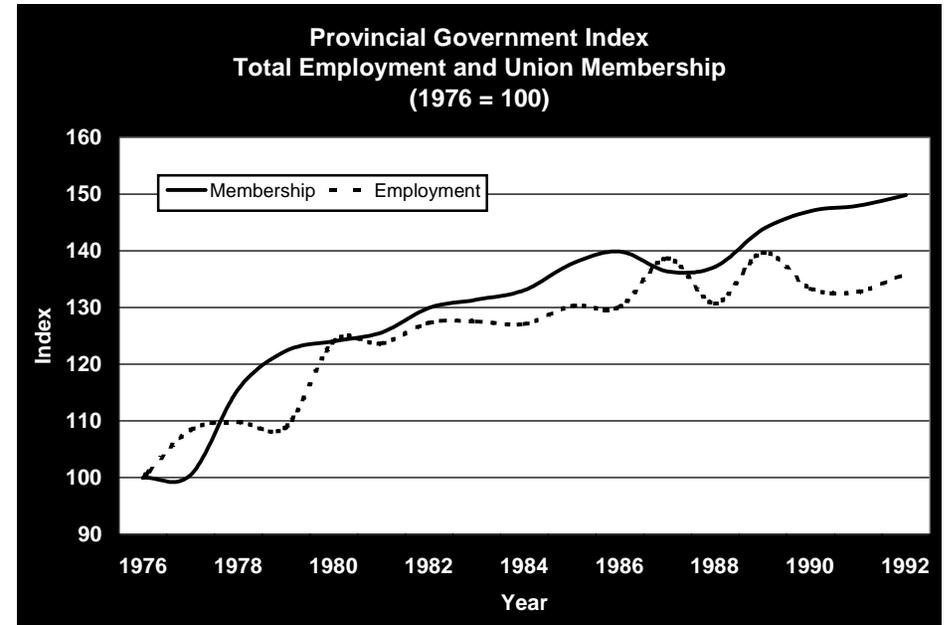
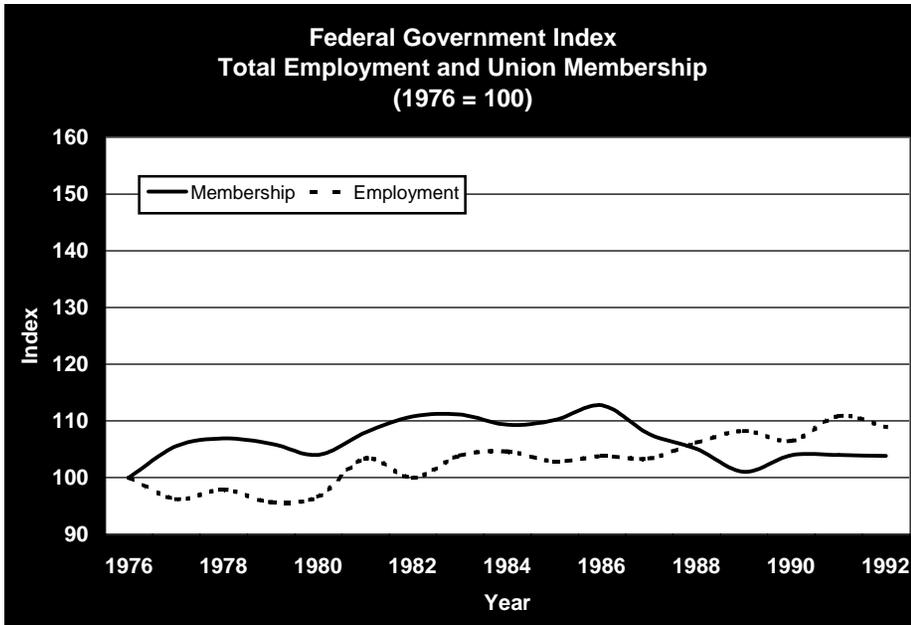
Federal 10.1%
Manitoba 17.5%
Nova Scotia 6.5%

- The size of employment equity designated groups has declined at a rate much slower than the workforce average from 1991 to 1997.
- In Nova Scotia, the difference between the two was the greatest with the designated groups declining at 2.9% while the total workforce declined by 15.7%.
- The federal variance between workforce reduction and employment equity declines was 4.1 percentage points; in Manitoba, it was 7.7 percentage points over the 1991 to 1997 period.

12

Union Data Analysis

CALURA: Union Membership in Government



Source: Statistics Canada, Labour Force Survey and CALURA.

Year/Index	Federal Employment	Federal Membership	Provincial Employment	Provincial Membership
1976	100.0	100.0	100.0	100.0
1986	103.8	112.7	130.1	139.9
1992	108.9	103.8	136.6	149.8

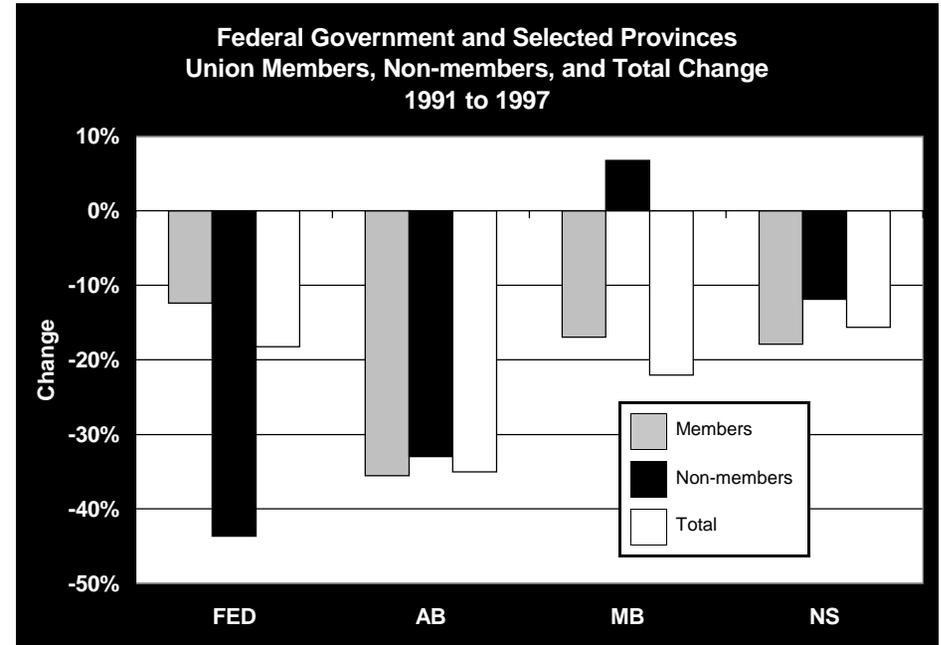
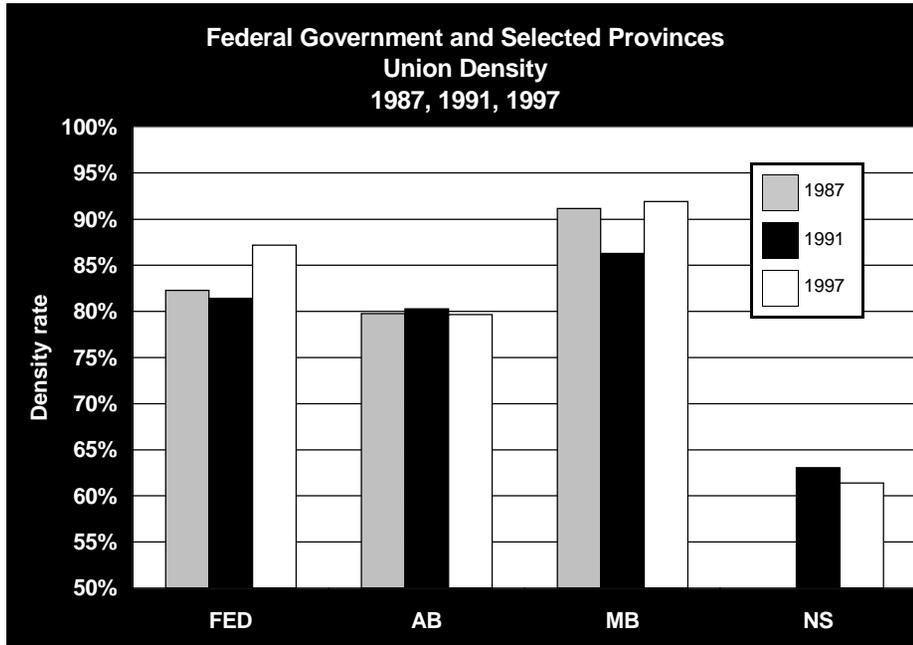
Comments and Facts

These two charts have indexed data series from the Labour Force Survey (on employment) and the *Corporations and Labour Unions Returns Act* (CALURA) from 1976 to 1992. The CALURA data series provides union membership information by industry to Parliament as a legislative requirement.¹⁴ To facilitate a comparison between union membership and employment, the two series have been indexed with 1976 as the base year. This provides not only a picture of the relative changes

between the two series on employment and union membership, but also between the two levels of government.

- Federally, membership numbers increased at a faster rate than employment, until 1988.
- The federal growth in both indexes is relatively flat in comparison to the provincial government, but this is based on the fact that provincial government workforces have grown significantly since 1976.

Change and Status of Union Density



Source: Federal government and selected provinces.

Comments and Facts

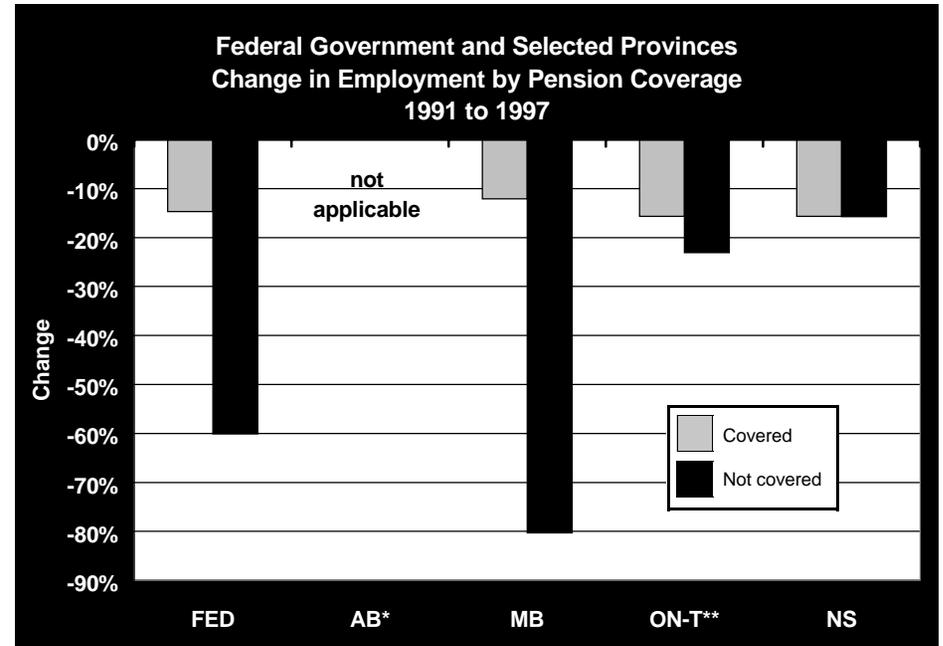
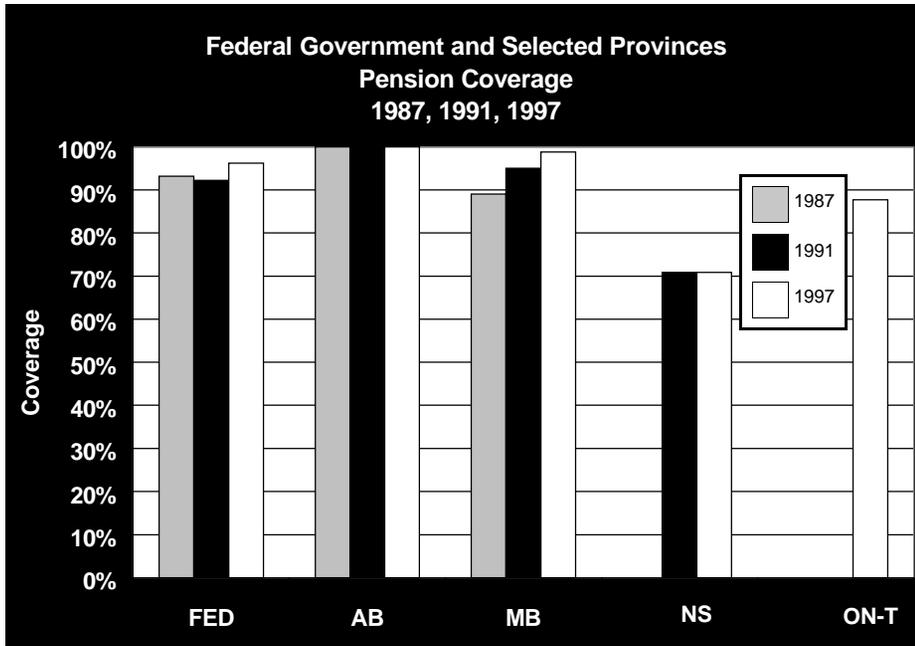
These two charts provide a more recent look at the status of unions using government administrative data series. The first chart relates the union density rates for each of the jurisdictions in 1987, 1991 and 1997. The second chart depicts the change in employment levels for union members and non-members in relation to the total or average change.

- Nova Scotia's density rate at 61.4% in 1997 is much lower than the other jurisdictions.
- Manitoba had the highest density rate at 91.9% in 1997.
- Alberta's change in employment for union and non-union employees was quite similar at -35.6 and -33.0%, respectively.
- The federal government dramatically reduced its non-union workforce from 1991 to 1997 by 43.6%, much higher than the reduction in the unionized workforce at 12.4%.
- Federal non-unionized employees accounted for 44.5% of workforce reductions over this time period while only representing 18.6% of the workforce in 1991.

13

Pension Analysis

Pension Coverage in Government



* Pension coverage in Alberta is 100% in all periods; therefore the change calculation is not applicable.
 ** Series is only available from 1993, therefore change period is 1993 to 1997.
 Source: Federal government and selected provinces.

Comments and Facts

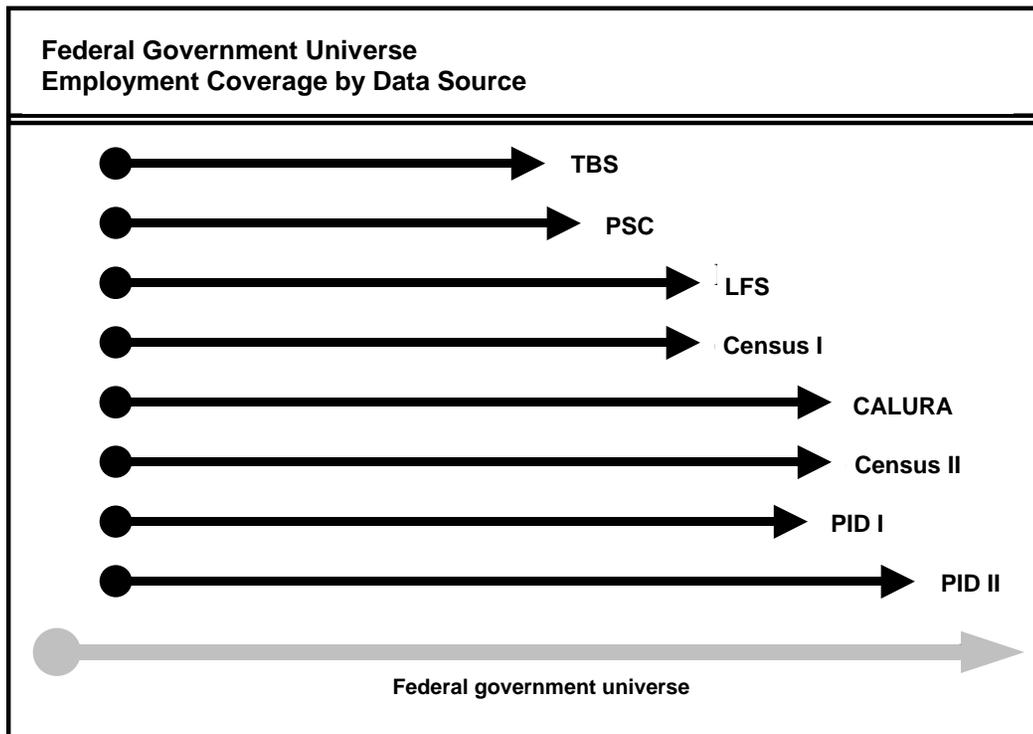
These two charts examine the status and change in pension coverage in the federal government and selected provinces.

- Pension coverage is high in most jurisdictions from 1987 to 1997.
- There has been a steady increase in coverage in Manitoba from 89.0% in 1987 to 98.8% in 1997.
- Nova Scotia has the lowest coverage rate at 70.8% in both 1991 and 1997.
- The federal and Manitoba¹⁵ governments heavily cut into those who are not covered under a pension plan with declines of 60.1 and 80.3%, respectively.

Appendices

Government Definitional Differences

Federal Government Employment Universe



TBS: Treasury Board Secretariat
 PSC: Public Service Commission
 LFS: Labour Force Survey
 Census I: First Census Series

CALURA: *Corporations and Labour Unions Return Act*
 Census II: Second Census Series
 PID I: First Public Institutions Division Series
 PID II: Second Public Institutions Division Series

TBS (Treasury Board Secretariat)

TBS is the employer for departments and agencies of the federal government listed in Schedule I, Part I of the *Public Service Employment Act*. TBS' employment universe is slightly smaller than the Public Service Commission's (PSC).

PSC (Public Service Commission)

The PSC covers all of the government employees under TBS' jurisdiction plus student employees. This makes their continuum marginally larger than TBS'.

There have not been any data series used in this publication that have originated from the PSC.

LFS (Labour Force Survey)

This covers the PSC and TBS worlds plus employees of other federal agencies for which TBS is not the employer. This would include such entities as employees of the House of Commons and the National Research Council. The LFS excludes full-time

members of the armed forces, overseas households, persons living in institutions, persons living on native reserves, and persons living in the Yukon and Northwest Territories.

Census I

This census data series was specially generated by Statistics Canada based on our request to utilize the same exclusions as the LFS for the occupational series. The key differences between the LFS and Census lie in statistical methodology, especially in the area of sample periods.

CALURA

The *Corporations and Labour Unions Returns Act* (CALURA) includes a legislative requirement that unions report their membership levels to Parliament. Statistics Canada compiles this data on behalf of the federal government. This data can be broken down by industry code and covers inclusions similar to those used in the second census data series. The CALURA series is based on fiscal year end data. The membership levels in certain cases will exceed employment levels, as unemployed and retired workers are still included. For this reason, the CALURA data has been presented in an index format to relate the relative growth of the workforce and union membership.

Census II

The Census II data series does not have any of the exclusions that are configured in the LFS. This data series is used for the historical data series provided in Section 1 and in Section 8.

PID I (Public Institutions Division)

This first PID series is slightly larger than the census and LFS because it includes the exclusions save the military.

PID II (Public Institutions Division)

PID II includes all members of the armed forces and as such is significantly larger than PID I, the LFS, and Census I.

Additional Notes on Data

TBS

TBS has provided us an annual average data series on behalf of the federal government that is used throughout this study. TBS generally reports employment statistics using fiscal year end data, so there are substantial differences between what is normally reported and those results presented in this study.

This is the data series that is used to compare with the other provincial governments participating in this study. This data series is sourced from the federal government. Other series that depict federal government data have been sourced differently, depending on the origin, such as the LFS or Census.

LFS

LFS data series have been used throughout this study in annual average format. There are three key series. One that covers employment type

by jurisdiction from 1976 to 1997; a second, which covers occupation from 1982 to 1997; and a third, which covers age distribution from 1976 to 1997. The definition of government employed by the LFS is based on the Standard Industry Classification, with the exclusions noted above. Occupational series originating from the LFS are based on the Standard Occupational Classification 1980. The age distribution data also includes a series for the Employed Workforce as a whole for the purposes of comparison.

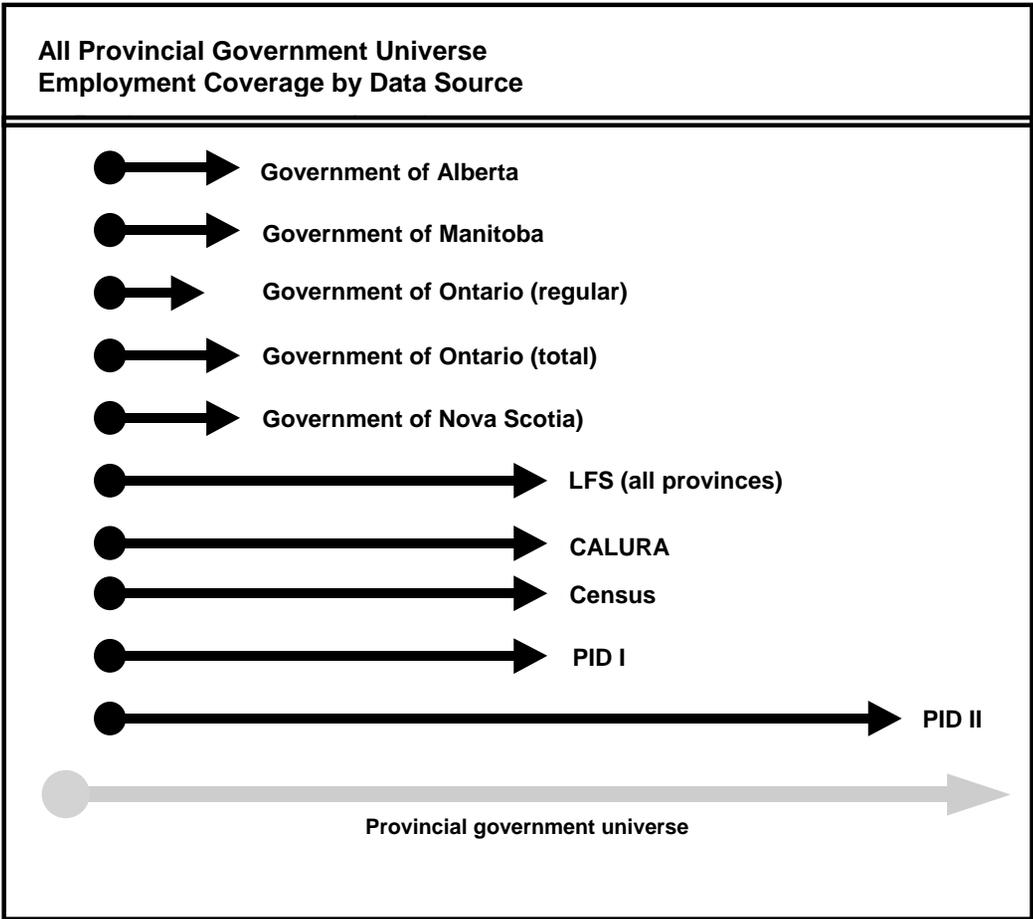
Census I

This census data is not comparable to the LFS occupational data based on the methodologies and samples periods. The Census data provides a point in time snapshot of the Canadian population, while the LFS data is presented in an annual average format. The other major difference in the Census occupational data series is that Standard Occupational Classification 1991 is used to encode the data. This system is not just an update of the 1980 occupational classification system but a complete revision. Additionally, it provides concordance with the National Occupational Classification (NOC). The NOC provides detail on skill level.

PID I + II

The PID I and PID II are used in a comparative basis in Section 3 of the study to show the different trends in function. For a complete breakdown of the function definitions please refer to Statistic Canada's: *Public Sector Employment and Wages and Salaries, 1996* (72-209).

Provincial Government Employment Universe



LFS: Labour Force Survey
 CALURA: *Corporations and Labour Unions Return Act*
 Census: Census Series
 PID I: First Public Institutions Division Series
 PID II: Second Public Institutions Division Series

Provincial Government Series

The provincial government data series have been submitted by those governments participating in CPRN’s Human Resource in Government initiative. Each government submitted data series of their administrative/core government, which are typically those employees under the umbrella of their Public Service Commission. Each jurisdiction provided those data elements to be analyzed in either annual average or year end format. Not all data elements could be provided by each jurisdiction so there are several charts where one or two jurisdictions may not be covered. As well, if there have been changes from the standard format (i.e., year end instead of the usual annual average), then this is clearly outlined.

Government of Alberta

Data submitted by the Government of Alberta on their defined administrative/core workforce.
 Format: Annual Average
 Series: 1985-97

Government of Manitoba

Data submitted by the Government of Manitoba on their defined administrative/core workforce.
 Format: Annual Average
 Series: 1985-97

Government of Ontario

Data submitted by the Government of Ontario on their defined administrative/core workforce. There are two data series used throughout the study, which illustrate the employment trends for the Government of Ontario. The longer series covers only the regular or permanent workforce. The shorter series includes term employment and covers the total workforce. The fiscal year end for the Government of Ontario fell at the end of March from 1982 to 1995. In 1996 and 1997, the fiscal year end took place at the end of February.

Ontario Regular
Format: Fiscal Year End
Series: 1982-97

Ontario Total
Format: Fiscal Year End
Series: 1991-97

Government of Nova Scotia

Data submitted by the Government of Nova Scotia on their defined administrative/core workforce.

Format: Annual Average
Series: 1990-97

LFS (Labour Force Survey)

The LFS provincial government data series is based on the Standard Industrial Classification, with the same exclusions that are used in the federal government series. This series depicts the combined totals of provincial government workforces, crosscut by various elements such as employment type, age, etc.

As with the use of the LFS at the federal level, there are three key series.

CALURA

Please refer to the federal definition. The explanation is applicable to the provincial series as well.

Census

The census data used is at the macro level of all provinces. This is defined with the same exclu-

sions as the federal level. However, the impact of the exclusions will not be as substantial as the federal level, based on the fact there is no provincial military element, and a limited number of overseas households.

PID I (Public Institutions Division)

The PID I series focuses on government employment that falls under the jurisdiction of provincial Public Service Commissions or their equivalent, which is primarily the administrative/core workforce. This series depicts the combined total of all provincial government employment.

PID II (Public Institutions Division)

The PID II series covers all those covered in the PID I series plus the broader elements of the provincial government workforce outside of administration. This includes employees in the health, education, and social service sectors.

B

Census Occupation Analysis

This appendix provides a comparative inside look at the changes in federal and provincial government occupations using the Census. Because of the extremely large sample size of the Census, tremendous detail in occupational structure is possible to a much greater level of detail than was shown in Section 4 using the Labour Force Survey.

The Census occupational data for 1991 and 1996 have been coded using the Standard Occupational Classification 1991 (SOC 91). This is a completely new occupational classification system and is not simply an update of the previous SOC 81 used in the LFS occupational data series. In the introduction to the *Standard Occupational Classification 1991*, it is emphasized that there are very few unit groups in the new structure that correspond exactly one-to-one with the previous SOC 81, even when the unit group title is exactly the same.

The SOC 1991 structure is based on broad, major, minor, and unit groups. The broad occupational groups consist of 10 titles starting at A and ending at J. Major group titles have one numeral associated with the letter, for example A0, and minor groups will have two numbers such as A01. The individual unit groups will have three numbers such as A011.

This appendix is structured around the different broad categories of the SOC 91. The first part of the analysis examines the broad groups in terms of their contribution, change and percentage of workforce reductions from 1991 to 1996. Once these base lines are established, each of the broad groups are analyzed independently up to the four-digit or unit group level, if warranted.

It is important to note that the same exclusions used in the LFS analysis apply to the analysis of

the Census data; however, the methodologies and sample periods are not the same. Revisions were made to the Census 1991 and 1996 data requests to reflect the exclusions to the monthly Labour Force Survey. The exclusions were as follows:

- persons living in institutions;
- persons living on Indian reserves;
- persons living in the Yukon and in the Northwest Territories;
- full-time members of the armed forces, and persons in the following occupations A353(0643) Commissioned officers, Armed Forces and G624(6464) Other ranks, Armed Forces; and,
- overseas households.

In addition, the LFS data were in annual average format while the Census results were generated based on the 1991 and 1996 Census periods.

Analysis of Census Occupational Data

CENSUS SOC ANALYSIS 1991 and 1996	Percent of All				Percent Change		Percent of All Reductions	
	FED	PROV	FED	PROV	FED	PROV	FED	PROV
Occupation (1991 SOC)	1991	1991	1996	1996	1991-96	1991-96	1991-96	1991-96
All occupations	100.0	100.0	100.0	100.0	-16.2	-21.7	100.0	100.0
A Management occupations	8.7	9.3	8.9	9.2	-14.4	-23.1	7.8	9.9
B Business, finance and administrative occupations	46.5	38.0	48.3	41.5	-13.1	-14.4	37.6	25.3
C Natural and applied sciences and related occupations	12.2	12.4	13.2	13.2	-8.9	-16.4	6.7	9.4
D Health occupations	1.1	2.8	0.9	1.3	-30.2	-63.6	2.1	8.1
E Occupations in social science, education, government service and religion	8.7	14.8	8.1	16.1	-21.5	-15.0	11.5	10.3
F Occupations in art, culture, recreation and sport	2.8	2.6	2.8	2.3	-18.1	-31.3	3.2	3.8
G Sales and service occupations	11.8	12.2	11.6	12.3	-17.7	-21.1	12.9	11.9
H Trades, transport and equipment operators and related occupations	6.6	5.4	5.1	2.5	-35.3	-64.1	14.4	15.9
I Occupations unique to primary industry	0.9	1.8	0.7	1.4	-34.2	-36.8	1.8	3.0
J Occupations unique to processing, manufacturing and utilities	0.7	0.7	0.5	0.3	-43.3	-68.4	1.8	2.2

Source: Statistics Canada, Census.

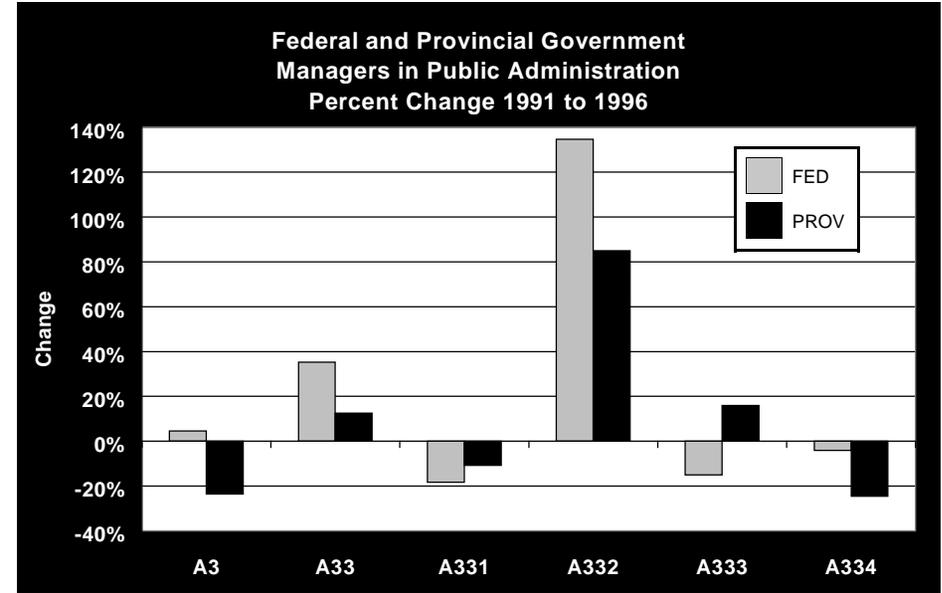
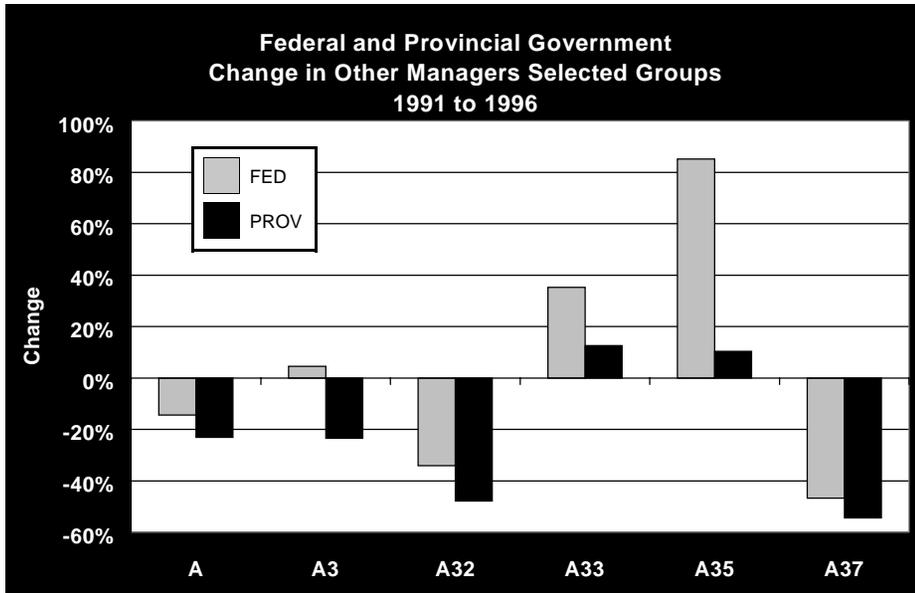
Comments and Facts

Analysis of the Census occupational data based on the SOC 91 shows that no occupational group escaped the downsizing in government from 1991 to 1996. The total change for all occupations was a decline of 16.2% federally and 21.7% provincially.

The largest percentage changes were in categories D, H, I, and J, which include some of the smallest groups in terms of their contribution to government workforces.

- Business, finance and administrative occupations (B) was the largest occupational group at the federal and provincial levels of government in both periods.
- Federally this increased from 46.5% in 1991 to 48.3% in 1996.
- The results provincially were 38.0 and 41.5% over the same periods, respectively.
- Business, finance and administrative occupations (Group B) clearly absorbed the majority of the reductions with 37.6% federally and 25.3% provincially.
- Groups H, G, and E were the next order of cuts in both jurisdictions.
- Group H represented 6.6% of the workforce in 1991 federally and 5.4% provincially, yet contributed 14.4 and 15.9%, respectively, to the occupational reductions.

Management and Administrative Change



Source: Statistics Canada, Census.

SOC Categories

A3 Other managers n.e.c.
 A32 Managers in health, education, social and community services
 A33 Managers in public administration
 A35 Managers in protective services
 A37 Managers in construction and transportation

A33 Managers in public administration analysis, policy development and program administration
 A331 Government managers in health and social policy development and program administration
 A332 Government managers in economic analysis, policy development and program administration
 A333 Government managers in education policy development and program administration
 A334 Other managers in public administration

Comments and Facts

The focus of these charts is on A3, Other managers, and its minor and unit groups because of the differences in the employment trends that have characterized this group compared to the other management groups.

- A33, Managers in public administration, shows substantial increases at both the federal

and provincial levels in contrast to the reductions in other management occupations.

- This change in A33 represents an increase of 1,760 positions from 1991 to 1996.
- Within this group, A332, Government managers in economic analysis, policy development and program administration, underwent significant growth of 134.6% federally and 84.9% provincially.

- This represents an increase of 2,120 and 1,015 positions at the federal and provincial levels, respectively.
- A35 experienced a large positive percentage change from 1991 to 1996, especially federally, but this only represents an increase of 690 positions.

Business, Finance and Administrative Occupations

B Business, Finance and Administrative Occupations	Federal		Provincial	
	1991	1996	1991	1996
	(Percent)			
1. Group B – Share of Total Employment	46.5	48.3	38.0	41.5
2. Occupational Composition of Group B				
B0 Professional occupations in business and finance	7.8	10.4	8.5	11.2
B1 Finance and insurance administrative occupations	0.9	0.7	2.8	2.8
B2 Secretaries	11.1	7.2	23.0	19.3
B3 Administrative and regulatory occupations	16.2	17.6	10.8	12.5
B4 Clerical supervisors	5.1	4.8	3.4	3.2
B5 Clerical occupations	58.9	59.3	51.5	51.0
Total	100.0	100.0	100.0	100.0

B Business, Finance and Administrative Occupations	Federal	Provincial
	(Percent)	
3. Group B – Share of Total Workforce Reductions 1991-96	37.6	25.3
4. Share of Group B Workforce Reductions 1991-96		
B0 Professional occupations in business and finance	-9.4*	-7.7*
B1 Finance and insurance administrative occupations	2.4	2.7
B2 Secretaries	36.8	44.9
B3 Administrative and regulatory occupations	7.0	0.9
B4 Clerical supervisors	7.1	4.4
B5 Clerical occupations	56.1	54.8
Total	100.0	100.0

* Represents an increase over this period.

Source: Statistics Canada, Census.

Comments and Facts

These two tables follow the same structure as those for Group A. The first table shows the proportion of the total government workforce that Broad Group B, Business, finance and administrative occupations represents as well as the composition of Broad Group B by each of its major groups. The second chart shows Broad Group B's share of the total workforce reductions and how each major group contributed to Broad Group B's workforce reductions.

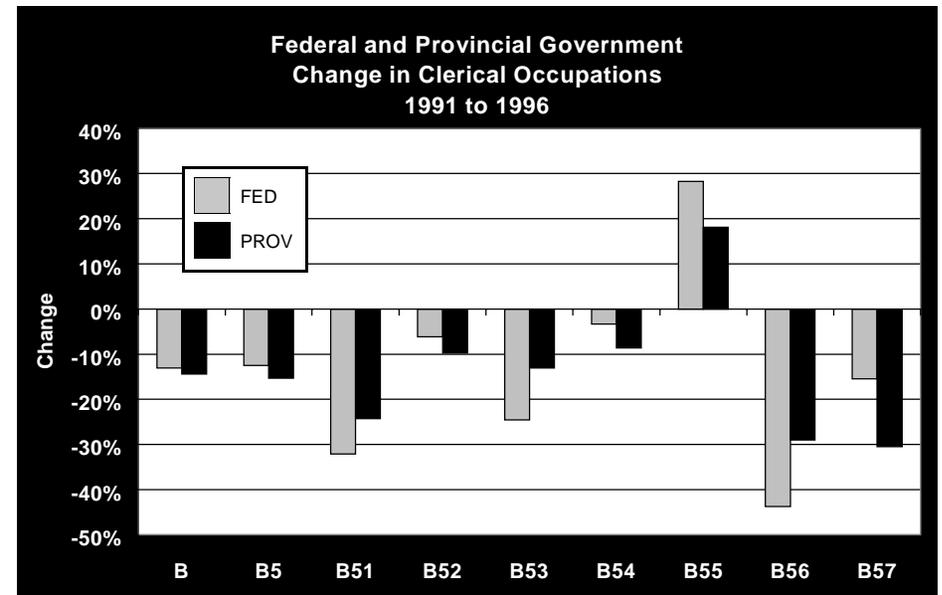
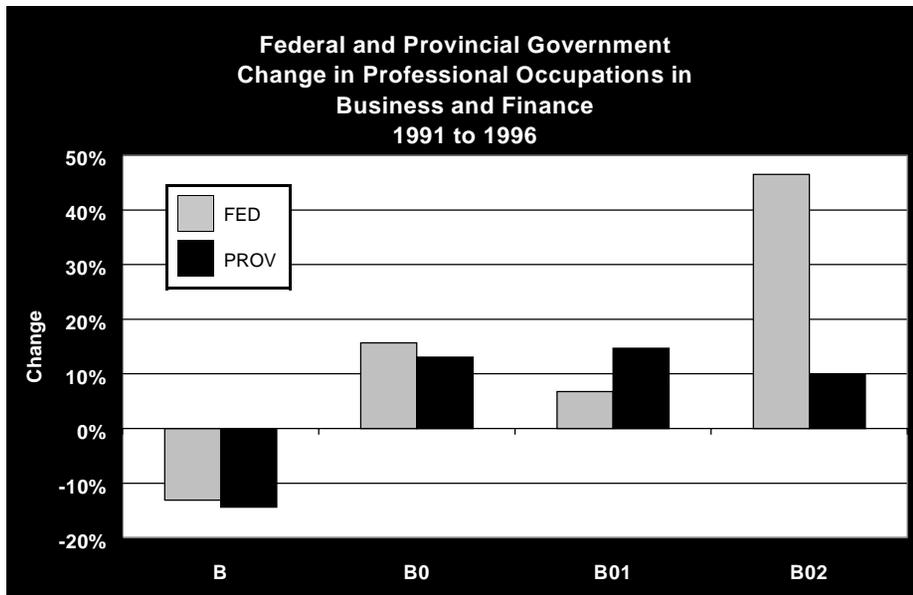
- Broad Group B, is the largest broad occupational group at both the federal and provin-

cial levels at 48.3 and 41.5%, respectively, in 1996.

- While clerical occupations remained at a similar proportion of the Group B workforce in 1996 compared to 1991, there were in fact over 12,000 fewer clerical positions at the federal level and over 9,300 fewer at the provincial level.
- In other words, employment reductions for this group were proportionate to its share of employment in Group B.
- Professional occupations in business and finance was the only major group to experience an increase from 1991 to 1996.

- Secretaries comprised 11.1 and 23.0% of Group B occupations federally and provincially in 1991, but their share of the workforce reductions within Group B was much higher at 36.8 and 44.9%, respectively.
- In other words, employment reductions in Group B occupations, at one-third of the total reductions at the federal level and one-quarter at the provincial level, were significant. And 90% of the reductions at both levels of government consisted of clerical and secretarial workers.

Professional and Clerical Changes



Source: Statistics Canada, Census.

SOC Categories

B Business, finance and administrative occupations
 B0 Professional occupations in business and finance
 B01 Auditors, accountants and investment professionals
 B02 Human resources and business service professionals

B5 Clerical occupations

B51 Clerical occupations, general office skills

B52 Office equipment operators

B51 Clerical occupations, general office skills

B54 Administrative support clerks

B55 Library, correspondence and related information clerks

B56 Mail and message distribution occupations

B57 Recording, scheduling and distributing occupations

Comments and Facts

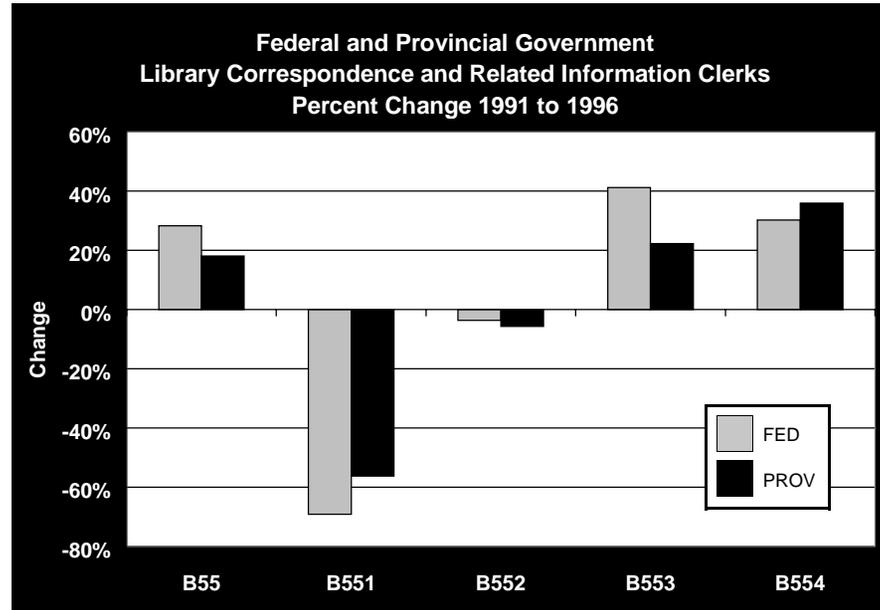
These charts provide some insight into the changes that have taken place in the Minor Group and Unit Group occupational categories for Group B. While the majority of Group B occupations experienced declines from 1991 to 1996, B0, employment in professional occupations in business and finance rose by 15.7% federally and 13.0% provincially.

- B01, Auditors, accountants and investment professionals expanded by 6.8% at the federal level and 13.0% provincially.
- This was driven by an 11.3% gain federally, and a 23.0% increase provincially in B011, Financial auditors and accountants.
- These gains were offset by a decrease of 38.7 and 17.6% at the federal and provincial levels in B014, Other financial officers, which

primarily includes bank and financial institution inspectors.

- There was a substantial increase federally of more than 5,000 positions in B55, Library, correspondence and related information clerks.
- The largest absolute declines took place in B51, Clerical occupations, general office skills, with reductions of 32.1% (federal) and 24.3% (provincial).

Changing Clerical Occupations



SOC Categories

- B55 Library, correspondence and related information clerks
- B551 Library clerks
- B552 Correspondence, publication and related clerks
- B553 Customer service, information and related clerks
- B554 Survey interviewers and statistical clerks

Comments and Facts

- B554, Survey interviewers and statistical clerks, rose by 30.2% at the federal level or 4,400 more positions.

- With what could be considered a new focus on customer service in federal and provincial governments, B553, Customer service, information and related clerks,

experienced a substantial increase in both percentage and numbers.

Natural and Applied Sciences Occupations

C Natural and Applied Sciences and Related Occupations	Federal		Provincial	
	1991	1996	1991	1996
	(Percent)			
1. Group C – Share of Total Employment	12.2	13.2	12.4	13.2
2. Occupational Composition of Group C				
C0 Professional occupations in natural and applied sciences	50.3	54.8	49.3	51.6
C1 Technical occupations related to natural and applied sciences	49.7	45.2	50.7	48.4
Total	100.0	100.0	100.0	100.0

C Natural and Applied Sciences and Related Occupations	Federal	Provincial
	(Percent)	
3. Group C – Share of Total Workforce Reductions 1991-96	6.7	9.4
4. Share of Group C Workforce Reductions 1991-96		
C0 Professional occupations in natural and applied sciences	4.5	37.7
C1 Technical occupations related to natural and applied sciences	95.7	62.4
Total	100.0	100.0

Source: Statistics Canada, Census.

Comments and Facts

The first table shows the share of the total government workforce that Broad Group C, natural and applied science occupations represents. In addition, it shows the composition of Broad Group C according to its major groups.

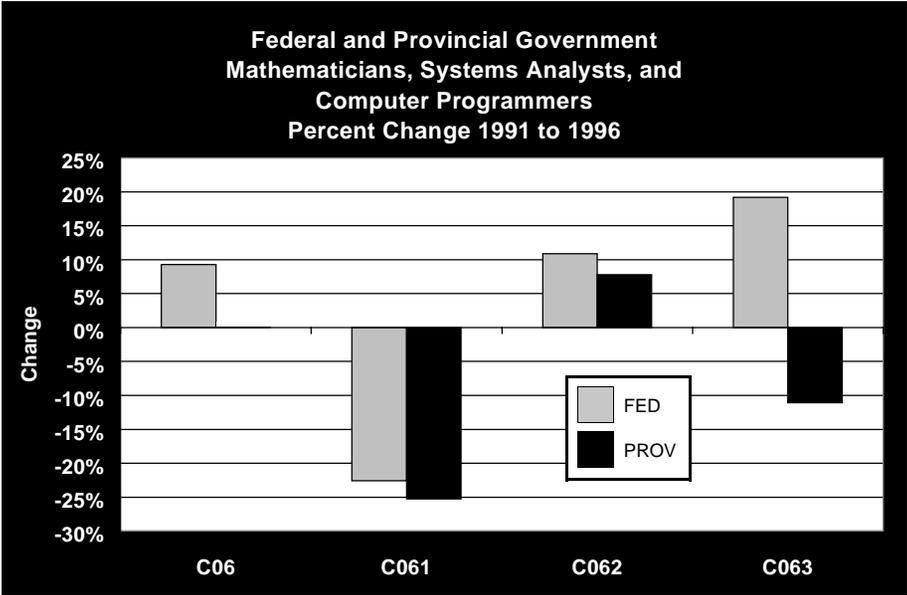
Broad Group C's share of the total workforce reductions are shown in the second table, which

also shows how each major group contributed to Broad Group C's workforce reductions.

- Broad Group C slightly increased its proportion of the total workforce to 13.2% both federally and provincially in 1996.
- This increase was a result of a smaller than average decline in employment in Broad Group C.

- There was a shift in the composition of this group as the professional occupations in natural and applied sciences gained ground on the technical occupations.
- Technical occupations experienced the vast majority of workforce reductions in this group at both levels of government, accounting for 95.7% of the reductions federally and 62.4% provincially.

Critical Knowledge-based Occupations



Source: Statistics Canada, Census.

SOC Categories

- C06 Mathematicians, systems analysts and computer programmers
- C061 Mathematicians, statisticians and actuaries
- C062 Computer systems analysts
- C063 Computer programmers

Comments and Facts

This chart details the status of C06, Mathematicians, systems analysts and computer programmers. This occupational group includes some of

the most marketable skills in the private sector.

- C062, Computer systems analysts, were up at both levels of government with increases of 10.9% federally and 7.8% provincially.

- Federally there was an increase of 19.2% in C063, Computer programmers, but an 11.1% decrease at the provincial level.

Social Science and Social Service Occupations

E Occupations in Social Science, Education, Government Service and Religion				
	Federal		Provincial	
	1991	1996	1991	1996
	(Percent)			
1. Group E – Share of Total Employment	8.7	8.1	14.8	16.1
2. Occupational Composition of Group E				
E0 Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers	62.4	68.9	64.7	70.3
E1 Teachers and professors	16.0	14.0	10.2	6.0
E2 Paralegals, social services workers and occupations in education and religion n.e.c.	21.7	17.1	25.1	23.7
Total	100.0	100.0	100.0	100.0

E Occupations in Social Science, Education, Government Service and Religion				
	Federal		Provincial	
	(Percent)			
3. Group E – Share of Total Workforce Reductions 1991-96		11.5		10.3
4. Share of Group E Workforce Reductions 1991-96				
E0 Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers		38.3		32.7
E1 Teachers and professors		23.2		34.4
E2 Paralegals, social services workers and occupations in education and religion n.e.c.		38.4		32.9
Total		100.0		100.0

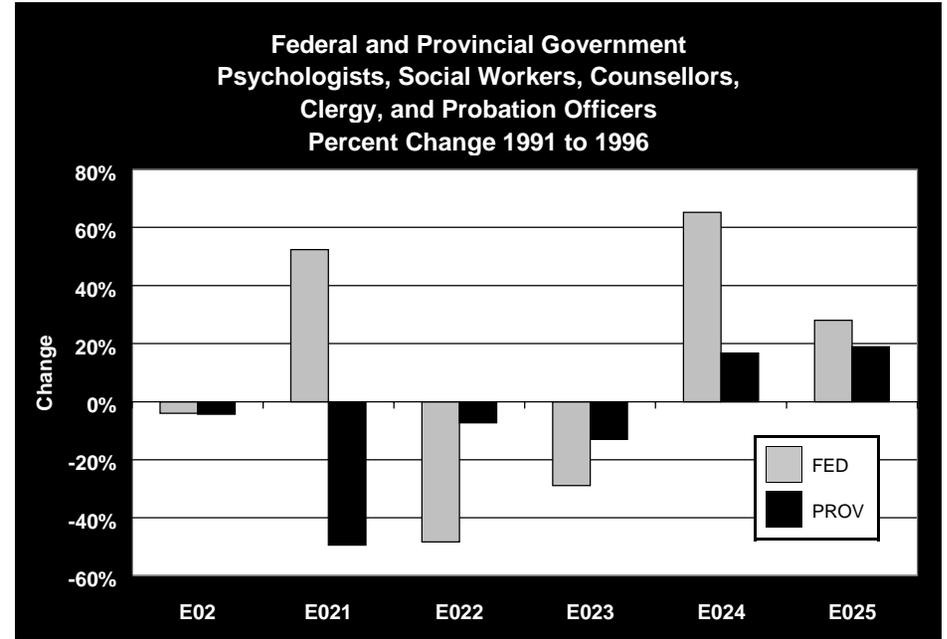
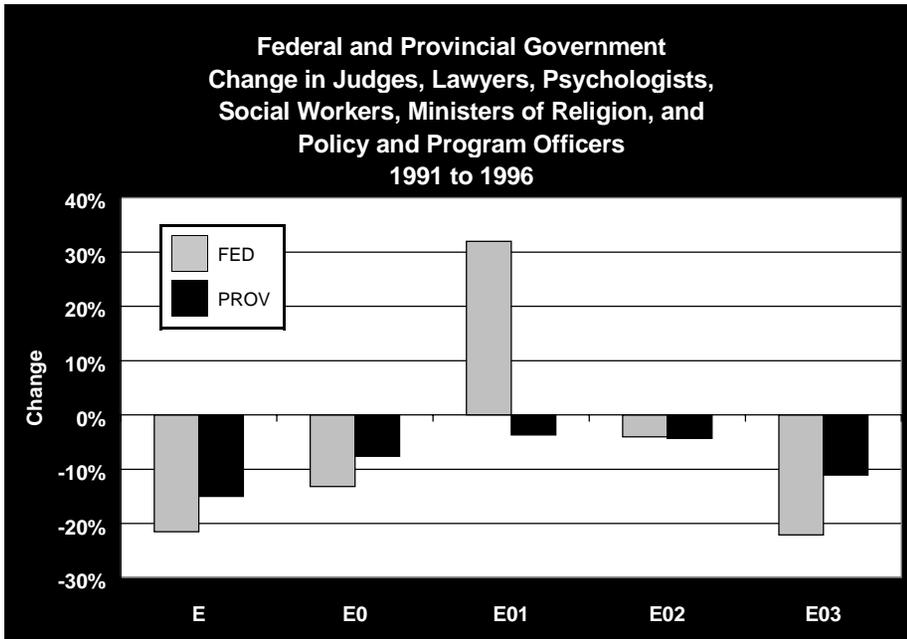
n.e.c. = not elsewhere classified.
Source: Statistics Canada, Census.

Comments and Facts

These two tables recount the composition of Broad Group E: occupations in social science, education, government service and religion. The first table shows its contribution to the government workforce as a whole and the composition of the broad group in terms of its component major groups. The second table presents 1) the share of workforce reductions that Group E comprised as a proportion of the total government workforce reductions, and 2) the extent to which each major group contributed to the Broad Group E workforce reductions.

- Provincially, Group E (16.1%) is almost double the size of the federal group (8.1%) in terms of its share of total government employment in 1996.
- There is a similar structure in major group composition of Group E at both levels of government, with the diverse Major Group E0, Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers comprising 68.9% federally and 70.3% provincially in 1996.
- Federally, Broad Group E's share of total workforce reductions (11.5%) exceeded its proportion of the workforce.
- Provincially workforce reductions in Broad Group E at 10.3% from 1991 to 1996 were less than its proportion of the workforce at 14.8% in 1991.
- Federally, workforce reductions in this group were significant for E2, Paralegals, social services workers, and occupations in education and religion. While this group also accounted for a disproportionate share of reduction at the provincial level, these reduction were also significant for E1, Teachers and professors.

Sciences, Legal and Social Sciences



Source: Statistics Canada, Census.

SOC Categories

E0 Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers
 E01 Judges, lawyers and Quebec notaries
 E02 Psychologists, social workers, counselors, clergy and probation officers
 E03 Policy and program officers, researchers and consultants

E02 Psychologists, social workers, counselors, clergy and probation officers
 E021 Psychologists
 E022 Social workers

E023 Family, marriage and other related counselors
 E024 Ministers of religion
 E025 Probation and parole officers and related occupations

Comments and Facts

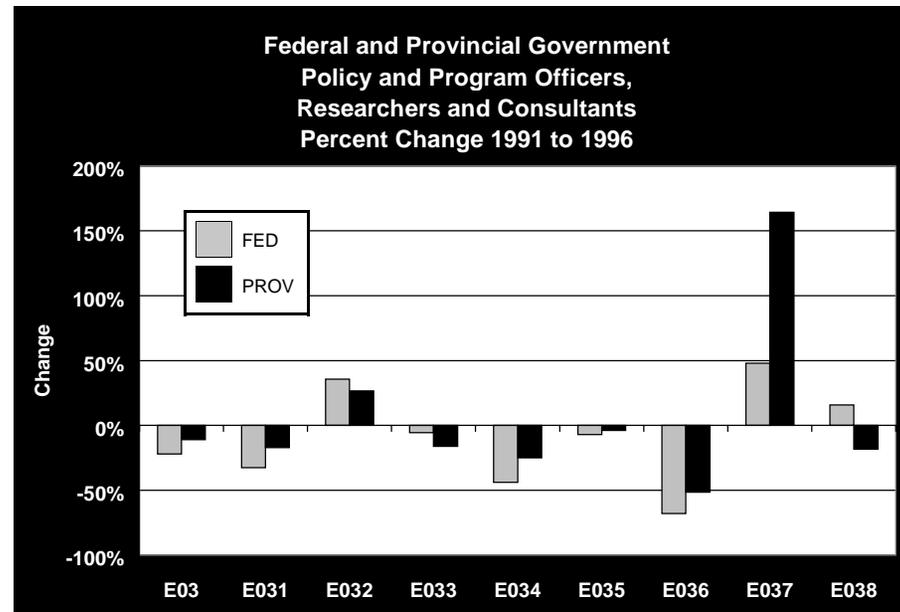
Major Group E0, Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers has been reduced by less than the average of the total workforce at -13.2% federally and -7.6% provincially. This decline is driven mainly by the reduction

in E03, Policy and program officers, researchers and consultants.

- Federally, judges were up 28.2% and lawyers and Quebec notaries increased by 34.3%.
- Policy and program officers were down by 22.1% federally and 11.1% provincially, mainly driven by declines in health and social policy.

- Social Workers (E022) were down 48.3% federally (510 positions) and cut by 7.8% provincially (395 positions).
- E025, Probation and parole officers and related occupations experienced increases at both levels of government. Federally there were 310 more positions (28.1%) and 385 more positions (16.7%) provincially.

Policy and Program Officers



Source: Statistics Canada, Census.

SOC Categories

- E03 Policy and program officers, researchers and consultants
- E031 Natural and applied sciences policy researchers, consultants and program officers
- E032 Economists and economic policy researchers and analysts
- E033 Economic development officers and marketing researchers and consultants
- E034 Health and social policy researchers, consultants and program officers
- E035 Education policy researchers, consultants and program officers
- E036 Recreation and sports program supervisors and consultants
- E037 Program officers unique to government
- E038 Other professional occupations in social science

Comments and Facts

- E034, Health and social policy researchers made up the decline with reductions of 43.8%
- E032, Economists and economic policy researchers and analysts experienced gains of (-3,065 positions) federally and 25.1% (-1,670 positions) provincially.
- E037, Program officers unique to government experienced gains of 35.5% federally and 26.7% provincially from 1991 to 1996.

Notes

- 1 Ontario-regular (ON-R) refers to indeterminate or permanent positions within the Government of Ontario. This series runs from 1982 to 1997. Ontario-total (ON-T) refers to all employment positions within the Government of Ontario with a data series that is available from 1991 to 1997.
- 2 The employment categories that have been defined as term are different for each jurisdiction. The employment categories used for each are:
 - Alberta: full-time temporary, contract, and part-time temporary
 - Federal: seasonal, contract, miscellaneous and casual, extended casual
 - Manitoba: term, contract, time worked employees
 - Ontario total workforce: full-time and part-time term employees
 - Nova Scotia: term and temporary employees
- 3 Full-time indeterminate can also be referred to as permanent full-time employees. The other categorization would be temporary full-time.
- 4 It should be noted that there are two categories that do not apply both federally and provincially. The “housing” category is only applicable provincially, while “foreign affairs” applies solely at the federal level.
- 5 The protection of persons and property function that includes the military includes both non military (civilian) and military elements. Military refers to full- and part-time members of the armed forces. The military element alone for this function was 121,410 in 1991 and 93,551 in 1996.
- 6 The SOC information is categorized into digit levels. Generally, the more digits that are presented (up to four), the more specific the classification. For example, SOC 41 (Major Group) refers to clerical and related occupations while SOC 416 (Minor Group) deals with only library, file and correspondence clerks and related occupations. The LFS can only generate up to the three-digit level for public administration. More detailed information is available in Census publications.
- 7 The SOC major categories used are the following:
 - SOC 11 – Managerial, Administrative and Related Occupations
 - SOC 21 – Occupations in Natural Sciences, Engineering and Mathematics
 - SOC 23 – Occupations in Social Sciences and Related Fields
 - SOC 31 – Health Related Occupations
 - SOC 41 – Clerical and Related Occupations
 - SOC 61 –Service Occupations
 - Other
- 8 The federal government, as well as the governments of Alberta, Manitoba, Ontario and Nova Scotia submitted data for this section. The federal government data used in the age band analysis are

fiscal year end data (March). This is an exception to the majority of other federal government series that use an annual average format. The Government of Manitoba series for the age bands analysis only covers regular full-time employees, which represents between 76.3 and 80.0% of Manitoba's workforce from 1987 to 1997. The run dates for the Manitoba series are not identical, but are generally run in the first calendar quarter of the year. The data series used for the Government of Ontario is the longer regular employee series, which represents between 81.9 and 85.4% of the workforce between 1991 to 1997.

- 9 The full titles for the abbreviations on the chart are: Admin and FS = Administration and Foreign Service and Sci + Pro = Scientific and Professional.

10 This Census series includes the military. The LFS series excludes the military.

11 Please refer to Note 14.

12 Employment equity statistics have often been considered as being biased, as there is a reliance on self-identification. Further, sometimes double counting might occur, for example, in the case of a female Aboriginal. It is possible within the data presented in this section that double counting has taken place.

13 Please note that for this data series, the results are based on fiscal year end results tabulated in March of each year. All other series are based on annual averages for the federal government.

14 CALURA is based on point in time data submissions by unions with membership of 100+ persons or more. This includes both employed and unemployed membership. Statistics Canada can break down the membership by industry code, but cannot distinguish between employed and unemployed membership. The series is available up until 1992 only.

15 There were very small numbers involved in Manitoba's decline (less than 200 persons). Manitoba results for pension statistics are recorded at December 31. They include those persons contributing to the plan as of December 31 of a given year.

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CPRN Publications

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Government Compensation: Issues and Options. Morley Gunderson. Human Resources in Government Project. Discussion Paper No. W|03. July 1998.

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