## TheDaily

 StatisticsCanadaTuesday, March 1, 1988
1986 Census of Population: Mobility, Labour Force, Education

## Highlights

- Early 1980s brought an end to the shift of population to Alberta and British Columbia.
- Ontario principal beneficiary of interprovincial shifts of population since 1981 Census.
- Women accounted for almost three-quarters of labour force growth and nine-tenths of employment growth from 1981 to 1986.
- Proportion of women in the work force rose for most age groups, and particularly for women with young children.
- Part-time employment up sharply for both men and women.
- More women entered non-traditional industries and occupations.
- Number of self-employed women increased by almost $30 \%$.
- Service industries continued strong growth.
- Number of university graduates increased by $26 \%$ between 1981 and 1986.
- More young women than young men held university degrees.


## 1986 Census of Canada

This fourth major data release from the 1986 Census focuses on demographic, economic and social characteristics of the population and was drawn from the questions asked of a sample of one in five Canadian households.

Included in today's release are data on mobility, interprovincial migration, labour force participation, industrial and occupational composition of the labour force, level of education and major fields of study for postsecondary graduates. All statistics refer to the population living in private and collective households. They exclude persons in institutions such as prisons and nursing homes.

The remaining data from the 1986 Census, covering a variety of social, cultural and economic information, will be released in April 1988.

## 1986 Census of Population: Mobility, Labour Force, Education

## Census provides new insights into socio-economic trends and conditions...

The first half of the 1980s was a volatile period for the Canadian economy. Shortly after the June 1981 Census, the economy entered a recession from which some regions and industries had not fully recovered at the time of the 1986 Census: - In the course of the recession, a sharp decline in international oil prices brought an abrupt end to Canada's western resource boom.

Throughout the 1970s, Alberta and British Columbia experienced a major net influx of population from eastern Canada. Statistics released today confirm that this westward shift of population ended in the early 1980s. In the first half of this decade, Ontario replaced Alberta as the preferred destination of persons moving from elsewhere in Canada.

The impact of the recession was also captured in data released on the labour force by occupation and industry. As the events of 1981 to 1986 would imply, the labour force in the Mines, Quarries and Oil Wells industrial group declined significantly over this period. The Manufacturing and Construction industries recorded small declines as well.

Beyond the consequences of the recession, a number of other trends emerge from today's data release from the 1986 Census:

- Canadians, on average, increased the extent of their formal education. The number of university graduates rose sharply between 1981 and 1986.
- Among Canadians under 25, more young women than young men held university degrees, reversing the pattern of older age groups.
- Women accounted for almost threequarters of the growth in the labour force and nine-tenths of the growth in employment from 1981 to 1986.
- Women - particularly young women continued to increase their rate of participation in the labour force and diversify their activities. They entered non-traditional industries and occupations and created their own businesses.
- Part-time employment assumed a more important role in the labour market. Between 1980 and 1985, large increases were recorded in the numbers of both men and women employed part-time.
- The labour force in the Community, Business and Personal Service Industries grew at more than double the rate of the total labour force. Nearly one-third of the labour force was employed in this industry group in 1986.
- All service producing industries including Community, Business and Personal Service industries - recorded an $11 \%$ increase in their labour force between 1981 and 1986. This compares to a $2 \%$ decline in the goods producing industries. In 1986, nearly two of every three Canadian workers were employed in a service producing industry.

The following pages provide detailed highlights from this 1986 Census data release.

## A nation on the move, but slowing down

In 1986, $\mathbf{4 3 . 7 \%}$ of Canadians lived in a different dwelling than they had five years earlier. This is the lowest proportion in any Census since 1961. Over the last 25 years, Canadians were most mobile in the period 1971 through 1976 when almost half ( $48.5 \%$ ) of the population changed dwellings.

A closer look at the Canadians who changed dwellings between 1981 and 1986 showed that nine out of 10 movers remained in the same province over the five-year period. Over half had moved within the same municipality.

One in 10 Canadians who changed dwellings either lived in a different province in 1981 or entered Canada during the five years from 1981 to 1986

## Young people are most mobile

Persons aged 25-to-29 were the most mobile, with three of every four Canadians in this age group reporting that they lived in a different dwelling than five years earlier. From this peak, mobility declined steadily with age, in a pattern common to previous Censuses. For those aged 65 -or-over, only one in five reported living in a different dwelling in 1986.

Young women more likely to pull up roots
Females were more likely to move than males in the younger age groups. The tendency to greater mobility among young females was most pronounced in the 20 -to-24 year age group
where two-thirds of females reported a different dwelling in 1986, compared to just over half of males. This may be related to the formation of unions through marriage or cohabitation.

## Mobility rises from east to west

As in previous Censuses, the mobility of provincial populations tended to rise from east to west, attaining its highest levels in the North.Newfoundland residents were least likely to move, with only 3 of every 10 reporting a change in residence between 1981 and 1986. Alberta and British Columbia had the most mobile provincial populations with 5 in 10 reporting a different residence. The most mobile population, however, was in the Yukon and Northwest Territories where 6 in 10 residents lived in different dwellings over the five-year period.

Mobility of Canadians
(Population aged 5 years and over)


Compared to their dwelling at the last census
56.3\%

Lived in the same residence
24.2\%

Lived in a different residence but the same municipality

## 13.5\%

Lived in a different municipality but the same province or territory
4.0\%

Lived in a different province or territory
2.0\%

Had entered from outside of Canada

Which way did they go? - Interprovincial migration

In 1986, just under a million people lived in a different province than they had five years earlier. Both the level and direction of interprovincial migration tended to relate to regional economic conditions. This was most apparent in the period 1976 to 1981 when - as a direct consequence of the Alberta resource boom - all provinces east of Alberta experienced net outflows of population to the benefit of Alberta and, to a lesser extent, British Columbia. Falling international oil prices in the early 1980s brought an abrupt end to the resource boom and with it, this westward shift of population.

## Here, there and everywhere

The net gains and losses of population through interprovincial migration are a result of a complex pattern of movements between the provinces and territories. Between 1981 and 1986, each province and territory, without exception, experienced an inflow of population
to some degree from every other province and territory and an outflow to every other province and territory.

Figure 2 illustrates the six largest individual flows of population among provinces over the periods 1976-81 and 1981-86.

As shown in Figure 2, in 1981, 126,730 people resided in Alberta who had lived in Ontario five years earlier. The 1981 Census also showed that 24,670 Ontario residents had lived in Alberta in 1976 - a reverse flow that was not one of the six largest 1981 population movements. Therefore, between 1976 and 1981, Alberta experienced a net gain of about 100,000 people through population exchanges with Ontario.

In contrast, Ontario experienced a net gain of about 25,000 from exchanges of population with Alberta between 1981 and 1986. In this five-year period, 70,425 Albertans had moved to Ontario, while only 45,460 Ontario residents had relocated to Alberta.

Table 1
Net Interprovincial Migration and Immigration*, for Provinces and Territories, 1981-1986 and 1976-1981
(Population 5 years old and over)

|  | $\begin{array}{r} \text { In- } \\ \text { migration } \\ \text { (1) } \end{array}$ | 1981-1986 <br> Out- <br> migration <br> (2) | Net interprovincial migration (1)-(2)-(3) | $\begin{array}{r} \text { 1976-1981 } \\ \text { Net } \\ \text { inter. } \\ \text { provincial } \\ \text { migration } \end{array}$ | 1981-1986 <br> Immigration <br> to province (from outside Canada)* | 1976-1981 <br> Immigration <br> to province <br> (from <br> outside <br> Canada)* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Newfoundland | 17,090 | 33,640 | -16,550 | -19,835 | 1,680 | 2,560 |
| Prince Edward Island | 9,480 | 7,950 | 1,530 | -10 | 890 | 1,230 |
| Nova Scotia | 54,985 | 48,705 | 6,280 | $-8,420$ | 7,895 | 8,400 |
| New Brunswick | 36,530 | 37,900 | -1,370 | -8,510 | 5,045 | 7,400 |
| Quebec | 66,915 | 130,215 | -63,300 | -141,725 | 72,440 | 84,700 |
| Ontario | 285,520 | 186,170 | 99,350 | -78,065 | 221,325 | 245,265 |
| Manitoba | 56,680 | 58,230 | -1,550 | -43,585 | 19,315 | 24,410 |
| Saskatchewan | 54,700 | 57,510 | -2,820 | -5,825 | 8,880 | 11,275 |
| Alberta | 177,285 | 204,950 | -27,670 | 197,650 | 55,985 | 75,485 |
| British Columbia | 151,675 | 142,175 | 9,500 | 110,930 | 69,610 | 94,450 |
| Yukon Territory | 4,620 | 7,285 | -2,660 | -550 | 280 | 445 |
| Northwest Territories | 9,005 | 9,760 | -755 | -2,055 | 560 | 580 |
| Total | 924,490 | 924,490 | -0. | -0. | 463,905 | 556,200 |

[^0]Figure 2
Six Largest Interprovincial Migration Flows


Page 5

## Westward whoa

Both Alberta and British Columbia experienced large inflows and outflows of population to and from other provinces between 1981 and 1986. These resulted in a net loss for Alberta of almost 30,000 people through interprovincial movements. British Columbia posted only a small gain of almost 10,000 .

However, despite these trends in interprovincial migration, the total population of both British Columbia and Alberta increased between 1981 and 1986. Alberta experienced the largest ( $6.1 \%$ ) and British Columbia the third largest ( $5.3 \%$ ) percentage increases in population in the period, with the second largest increase recorded in Ontario. Alberta's rapid growth in population can be attributed to the province's consistently high birth rates and low death rates during the five-year period. This natural population increase more than offset the impact of net population losses through interprovincial migration.

British Columbia's rate of natural increase was closer to the national average. Although it was the second-fastest growing province between 1976 and 1981, the reduced net inflows of population through interprovincial migration experienced by British Columbia in the following five years allowed Ontario to displace it in second position.

Among the provinces, Quebec incurred the largest absolute net outflow of population through interprovincial migration $(63,300)$ and Newfoundland the largest net outflow ( $2.9 \%$ ) as a percentage of its 1981 provincial population. In the North, the Yukon recorded a net outflow of $11.5 \%$ of its 1981 population.

## A place to grow

Ontario, where-the provincial economy remained relatively strong throughout the recession of the early 1980s, was the principal
beneficiary of interprovincial movements of population from 1981 to 1986, with a net gain of almost 100,000 people. The largest relative net gain through interprovincial migration, occurred in Prince Edward Island (1.4\% of its 1981 population).

## Impact on the major urban centres

Canada's major metropolitan areas experienced large inflows and outflows of population between 1981 and 1986.

Paralleling trends at the provincial level, more people left the Census Metropolitan Areas (CMAs) of both Calgary and Edmonton for other places in Canada than arrived from other Canadian locations over the five-year period. The CMA of Edmonton recorded a net outflow of 15,555 between 1981 and 1986, in contrast to the net inflow of 34,975 people in the five years between 1976 and 1981. Similarly, the CMA of Calgary experienced an outflow of 6,105 residents between 1981 and 1986, after registering an inflow of 66,460 between 1976 and 1981.

Nonetheless, both metropolitan areas recorded gains in total population over the first half of the decade due to natural increase and arrivals from outside Canada.

From 1981 to 1986, Canada's four largest metropolitan areas grew through population movements from elsewhere in Canada. The population gain of 80,275 in the Toronto CMA was more than twice that of any other urban centre. Montreal CMA ( 17,775 ); Vancouver CMA $(33,140)$; and Ottawa-Hull CMA $(34,830)$ also experienced net population gains. This is a reversal from the 1976 through 1981 period when the CMAs of Montreal ( $-105,590$ ); Toronto ( $-18,240$ ) and Ottawa-Hull $(-8,010)$ all experienced a net population loss through migration within Canada.

## The Labour Market

From 1981 to 1986 Canada's working age population (those 15 years of age and older) grew by $5.5 \%$. Over the same period the labour force - that is, those persons employed or unemployed - increased by $8.3 \%$. Of this increase, almost three-quarters was attributable to women entering the work force.

As a result of the recession in the early 1980s, employment increased by only $4.8 \%$. Almost all ( $94 \%$ ) of this increase was accounted for by the growing numbers of women at work.

The Northwest Territories (27.1\%) and Prince Edward Island (12.6\%) showed the largest percentage increases in labour force. Quebec (5.3\%) and British Columbia (6.8\%) recorded the lowest rates of labour force
growth. The most rapid growth in employment occurred in the Northwest Territories ( $18.9 \%$ ) and Ontario (8.8\%).

The Labour Force: more women in, more men out

An important characteristic of the labour force is the percentage of men or women of working age who are in the labour force. The evolution of these percentages, or participation rates, for men and women over the past 35 years reveals one of the fundamental trends in the labour market, the steady increase in labour force participation among women.

From 1981 to 1986, the participation rate for males of working age declined slightly from $78.2 \%$ to $77.5 \%$, while female participation rose from $51.8 \%$ to $55.9 \%$.

Figure 3
Labour Force Participation Rates by Sex, Canada, 1951-1986


Figure 4
Labour Force Participation Rates by Sex and Age Group, Canada, 1986


## Participation differs by age group

Male participation rates in 1986 peaked in the 35 -to- 44 years age group with $95 \%$ in the labour force. Participation then decreased for older age groups to $60 \%$ for those 60 -to-64 and $15 \%$ for those 65 years of age or over. Since 1981, participation in the labour force by males in all age groups has declined, but especially among those aged 55 -and-over. This suggests a trend to earlier retirement among males.

In contrast, female participation peaked in the 20 -to- 24 year old age group, where eight of every 10 women were in the labour force in 1986. From this high, participation by women declined with age to slightly over one in four for the 60-to-64 years old, and one in 20 for women 65 years of age or older. Since 1981, female participation has increased for women of most
ages except those 60 years of age or older. The largest increase between the two Census years occurred among women aged 25-to-54.

## More women combine kids with careers

The 1986 Census revealed more women with children at home were in the labour force than ever before. A significant increase in participation occurred among married women with children at home, who were living with their spouse. Their participation rate rose to $61.2 \%$ from $52.1 \%$ in 1981 . An even more pronounced increase was registered in the participation rate of married women - living with a spouse - whose children were all under the age of six. Their participation rate increased to $62.1 \%$ in 1986 , up from $49.5 \%$ five years earlier.

Table 2
Labour Force Participation Rate of Females with Children at Home, by Marital Status, Canada,* 1981 and 1986

|  | With children at home | All children less than 6 years of age | Some children less than 6 years of age | All children 6 years of age and older |
| :---: | :---: | :---: | :---: | :---: |
| Canada |  |  |  |  |
| Total marital status |  |  |  |  |
| 1981 | 52.37 | 49.97 | 44.76 | 54.90 |
| 1986 | 60.61 | 61.67 | 55.41 | 61.38 |
| Single |  |  |  |  |
| 1981 | 50.11 | 45.33 | 32.90 | 61.11 |
| 1986 | 54.42 | 51.50 | 37.56 | 62.72 |
| Married spouse absent** |  |  |  |  |
| 1981 | 62.82 | 60.75 | 51.81 | 65.49 |
| 1986 | 67.71 | 64.70 | 56.50 | 70.57 |
| Married spouse present |  |  |  |  |
| 1981 | 52.14 | 49.45 | 44.64 | 55.02 |
| 1986 | 61.17 | 62.08 | 55.80 | 62.14 |
| Widowed |  |  |  |  |
| 1981 | 35.32 | 52.98 | 36.62 | 35.07 |
| 1986 | 33.87 | 57.45 | 46.51 | 33.39 |
| Divorced |  |  |  |  |
| 1981 | 68.69 | 64.81 | 45.86 | 71.39 |
| 1986 | 71.87 | 68.54 | 54.26 | 73.65 |

[^1]
## More part-time work for both men and women <br> There was a marked increase from 1980 to 1985 in the numbers of Canadians employed parttime;* up 19\% for males and $17 \%$ for females. Men experienced a small decline in full-time employment between 1980 and 1985, while $7 \%$ more women reported predominantly full-time employment over the same period.

* In both the 1986 and 1981 Censuses, Canadians of working age were asked how many weeks they had worked in the previous calendar year (e.g. Jan. to Dec. 1985) and whether these weeks were predominantly full-time or part-time.


## Rapid growth in self-employment

In 1986, as in 1981, approximately nine of 10 Canadians, who reported having worked in the previous 17 months, were paid workers in their principal job.

Although the number of self-employed remained small, their rate of increase over the first half of the 1980s was quite rapid. While the number of paid workers increased by 7\% between the two Censuses, the number of selfemployed persons increased by $10 \%$. Those self-employed with paid help (employers) increased $14 \%$ compared to the increase in the self-employed without paid help ( $7 \%$ ).

Figure 5
Percentage Change in Full-time and Part-time Work by Sex, Canada, 1980-1985


Figure 6
Class of Worker by Sex, Canada, Percentage Change 1981-1986


Page 10

## More women were their own boss

There were also important differences between the sexes. While the number of selfemployed males increased by $7 \%$, the number of self-employed females increased by $27 \%$. There was strong growth in the number of female employers ( $30 \%$ ), in contrast to the much smaller increase ( $11 \%$ ) recorded for male employers. Although women made progress in self-employment, self-employed males were still three times more numerous than females in 1986.

## Service industries continue to grow...

Continuing a trend spanning several decades, the labour force in the Community, Business and Personal Service Industries*

[^2]grew rapidly from 1981 to 1986, despite the recession in this period. This increase in the Community, Business and Personal Service Industries work force represented two-thirds of the total growth in the labour force during the early 1980s. The group now accounts for one in every three Canadian workers.

While growth in other service producing industries was less rapid, the labour force in all service producing industries - including the Community, Business and Personal Service Industries - grew by $11 \%$ over the first half of the 1980s, while the labour force in goods producing industries declined $2 \%$. In total, the service producing industries accounted for two of every three Canadians in the labour force in 1986.

Figure 7
Community, Business and Personal Service Industries as a Per Cent of the Experienced Labour Force*, Canada, 1951-1986


Over the first half of the decade the highest rates of growth occurred in the Fishing and Trapping (20\%), Community, Business, and Personal Services (17\%) and Forestry (9\%) Industry Groups.

The labour force in three industry groups was still below 1981 levels at the time of the 1986 Census: Mines, Quarries and Oil Wells (down 10\%), Manufacturing (down 3\%) and Construction (down 3\%).

Table 3
Total Labour Force by Industry Divisions and Sex, Showing Percentage Change, Canada, 1981, 1986

| Canada | Total |  |  | Male |  |  | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1981 | 1986 | \% | 1981 | 1986 | \% | 1981 | 1986 | \% |
|  | 1981 Change |  |  | 1981 Change |  |  |  | Change |  |
| Total labourforce ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| All industries | 12,005,320 | 12,783,505 | 6.5 | 7,152,205 | 7,316,990 | 2.3 | 4,853,115 | 5,466,520 | 12.6 |
| Agriculture | 481,275 | 504,240 | 4.8 | 363,975 | 361,315 | -0.7 | 117,305 | 142,930 | 21.8 |
| Forestry | 100,765 | 109,390 | 8.6 | 89,680 | 95,420 | 6.4 | 11,085 | 13,970 | 26.0 |
| Fishing \& trapping | 36,870 | 44,070 | 19.5 | 33,395 | 37,830 | 13.3 | 3,475 | 6,235 | 79.4 |
| Mines, quarries \& oil wells | 210,025 | 188,245 | -10.4 | 180,550 | 159,930 | -11.4 | 29,475 | 28,315 | -3.9 |
| Primary sector | 828,935 | 845,950 | 2.1 | 667,600 | 654,500 | -2.0 | 161,340 | 191,445 | 18.7 |
| Manufacturing | 2,219,375 | 2,153,965 | -3.0 | 1,599,875 | 1,523,045 | . 4.8 | 619,500 | 630,925 | 1.8 |
| Construction | 752,370 | 731,940 | -2.7 | 681,670 | 656,770 | -3.7 | 70,700 | 75,170 | 6.3 |
| Secondary sector | 2,971,745 | 2,885,905 | -2.9 | 2,281,545 | 2,179,815 | -4.5 | 690,200 | 706,095 | 2.3 |
| Transportation, com- <br> munication, etc. 935,575 958,755 2.5 716,325 719,055 0.4 219,245 239,695 9.3 |  |  |  |  |  |  |  |  |  |
| Trade | 1,957,575 | 2,096,875 | 7.1 | 1,107,740 | 1,164,855 | 5.2 | 849,835 | 932,020 | 9.7 |
| Finance, insurance \& real estate | 621,115 | 668,495 | 7.6 | 242,285 | 262,450 | 8.3 | 378,835 | 406,040 | 7.2 |
| Community, business |  |  |  |  |  |  |  |  |  |
| \& personal serv. | 3,399,430 | 3,965,590 | 16.7 | 1,349,840 | 1,536,600 | 13.8 | 2,049,590 | 2,428,985 | 18.5 |
| Public administration \& defence | -886,605 | 950,110 | 7.2 | 558,920 | 569,530 | 1.9 | 327,685 | 380,580 | 16.1 |
| Tertiary sector | 7,800,300 | 8,639,820 | 10.8 | 3,975,110 | 4,252,495 | 7.0 | 3,825,190 | 4,387,325 | 14.7 |
| Industry not applicable | 261,755 | 358,240 | 36.9 | 114,605 | 171,485 | 49.6 | 147,150 | 186,755 | 26.9 |
| Industry unspecified \& undefined | 404,335 | 411,835 | 1.9 | 227,955 | 230,185 | 1.0 | 176,380 | 181,655 | 3.0 |

[^3]
## More women chose non-traditional

 industriesBetween 1981 and 1986, women have increased their representation in a number of industry groups where they have traditionally been under-represented. During the early 1980s, this has been particularly true of the Primary Industries where the female labour force grew by $19 \%$ compared to a $2 \%$ decrease for males.

But the bulk of growth in the female labour force occurred in the Community, Business and Personal Service Industries Group where women have traditionally been overrepresented, accounting for two-thirds of all workers in the group. In the Finance, Insurance and Real Estate Industries Group, the only other group in which women form the majority of workers, the male labour force grew at a slightly more rapid rate than the female labour force.

## Occupation: Boom times for social scientists...

Over the first five years of the decade, the number of workers in Social Science Occupations (economists, psychologists, social workers, lawyers, etc.) recorded the most rapid growth of any occupational category, increasing by $29 \%$ from 1981 to 1986. This compares to an $8 \%$ growth rate for the labour force as a whole. Similar rapid growth occurred in the labour force in Managerial and Administrative Occupations which rose by $27 \%$ over this period.

## ...but the recession has a lingering impact

The labour force in a number of occupational categories declined from 1981 to 1986, specifically those categories associated with such industries as mining, oil production and exploration, quarrying, manufacturing and construction. As noted above, the industries employing these workers were particularly affected by the recession of the early 1980s and had not fully recovered at the time of the 1986 Census.

In 1986, workers in Clerical Occupations were the largest occupational group, representing one-fifth of the total labour force. Workers in Service Occupations represented a further one-tenth of the labour force as did workers in each of Machining, Fabricating and Assembling Occupations; Managerial and Administrative Occupations; and Sales Occupations.

## Occupational patterns differ for men...

The fastest growing occupational categories for males in the labour force over the period 1981 to 1986 were Managerial and Administrative Occupations ( $15 \%$ ), Social Science Occupations (15\%) and Religious, Artistic, Literary and Recreational Occupations (13\%). Over the same period, the male labour force grew $4 \%$.

The largest occupational categories for males in 1986 were Machining, Fabricating and Assembling Occupations; Managerial and Administrative Occupations; and Services Occupations. In general, male workers were spread more evenly over all occupational categories than were female workers. The largest category for males represented only $13 \%$ of the total male labour force.

## ...and women

By contrast, one-third of the female labour force was concentrated in the Clerical Occupations category, the largest category for female workers. A further $16 \%$ of the female labour force was found in Services Occupations. Sales Occupations and Medicine/Health were the third and fourth largest categories respectively. While this pattern is unchanged from the 1981 Census, it is noteworthy that Managerial and Administrative Occupations have replaced Teaching Occupations as the fifth largest category for female workers.

There are indications in the 1986 Census data that the occupational structure of female employment is diversifying, particularly within white-collar occupations.

Table 4
Total Labour Force by Occupation, Major Group and Sex, Percentage Change, Canada, 1981, 1986

| Canada | 1981 | Total <br> 1986 | Change | 1981 | $\begin{gathered} \text { Male } \\ 1986 \end{gathered}$ | Change | 1981 | $\begin{array}{r} \text { Female } \\ 1986 \end{array}$ | Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total labour force 1 | 12,054,155 | 13,049,860 | 8.3 | 7,155,260 | 7,441,170 | 4.0 | 4,898,890 | 5,608,690 | 14.5 |
| Total experienced labour force | 11,877,040 | 12,740,230 | 7.3 | 7,080,095 | 7,294,215 | 3.0 | 4,796,940 | 5,446,015 | 13.5 |
| Managerial, administrative | 1,060,015 | 1,341,970 | 26.6 | 797,825 | 919,690 | 15.3 | 262,190 | 422,280 | 61.1 |
| Natural sciences, engineering | 401,460 | 447,800 | 11.5 | 345,520 | 369,420 | 6.9 | 55,940 | 78,380 | 40.1 |
| Social sciences | 191,065 | 246,460 | 29.0 | 90,685 | 103,900 | 14.6 | 100,380 | 142,565 | 42.0 |
| Teaching | 501,510 | 543,640 | 8.4 | 202,095 | 207,450 | 2.7 | 299,410 | 336,190 | 12.3 |
| Medicine and health | 533,500 | 614,095 | 15.1 | 118,595 | 130,270 | 9.8 | 414,905 | 483,820 | 16.6 |
| Clerical | 2,241,540 | 2,318,620 | 3.4 | 498,205 | 494,415 | -0.8 | 1,743,335 | 1,824,210 | 4.6 |
| Sales | 1,062,605 | 1,153,160 | 8.5 | 613,485 | 641,750 | 4.6 | 449,120 | 511,410 | 13.9 |
| Services | 1,430,115 | 1,617,520 | 13.1 | 676,250 | 742,615 | 9.8 | 753,870 | 874,905 | 16.1 |
| Religion, artistic, literary | 208,525 | 241,890 | 16.0 | 129,670 | 146,105 | 12.7 | 78,855 | 95,785 | 21.5 |
| Farming, horticulture | 481,605 | 508,310 | 5.6 | 375,375 | 383,970 | 2.3 | 106,225 | 124,340 | 17.1 |
| Fishing, trapping, forestry | 124,270 | 135,695 | 9.2 | 116,915 | 125,220 | 7.1 | 7,355 | 10,475 | 42.4 |
| Mining and quarrying | g 77,550 | 67,145 | -13.4 | 75,915 | 65,830 | -13.3 | 1,635 | 1,315 | -19.6 |
| Processing | 485,480 | 446,800 | -8.0 | 377,340 | 336,980 | -10.7 | 108,140 | 109,815 | 1.6 |
| Machining, fabricating, assembling | 1,270,045 | 1,235,885 | -2.7 | 1,013,515 | 986,155 | -2.7 | 256,535 | 249,725 | $-2.7$ |
| Construction | 783,620 | 753,480 | -3.9 | 768,350 | 735,385 | -4.3 | 15,270 | 18,095 | 18.5 |
| Transport equipment operating | 470,535 | 468,825 | -0.4 | 439,980 | 432,435 | -1.7. | 30,555 | 36,390 | 19.1 |
| Other ${ }^{1}$ | 553,600 | 598,935 | 8.2 | 440,375 | 472,625 | 7.3 | 113,225 | 126,310 | 11.6 |
| Occupation not applicable. | 177,115 | 309,630 | 74.8 | 75,165 | 146,955 | 95.5 | 101,945 | 162,675 | 59.6 |

1 Includes material handling and related occupations, other crafts and equipment operating occupations and occupations not elsewhere classified.

Occupational categories showing the most rapid growth for female workers from 1981 to 1986 were Managerial and Administrative Occupations ( $61 \%$ ); Fishing, Trapping and Forestry Occupations (42\%); Social Science Occupations ( $42 \%$ ); and Natural Sciences and Engineering Occupations ( $40 \%$ ). This growth was most pronounced among women in the 25-to-44 year age group. Other than Social Science Occupations, women have traditionally been under-represented in all of these categories.

Clerical Occupations, the largest category for women workers, experienced one of the smallest increases over this period ( $5 \%$ ). Among women aged 15-24, the numbers in clerical occupations dropped by $20 \%$, while the numbers in Medicine and Health Occupations, another traditionally female dominated category, declined by $16 \%$.

## A trend away from gender-dominated occupations

Some additional insights into occupational trends can be obtained by looking at more detailed occupational data.

Between 1981 and 1986, Pharmacists ceased to be a male-dominated occupation females represented $51 \%$ of the labour force in this occupation in 1986, up from $42 \%$ in 1981.

While such reversals are rare in the 1986 Census results, the number of females increased from between $40 \%$ to $100 \%$ in such male-dominated occupations as Architect, Industrial Engineer, Chemist, Economist, Lawyer, Physician/Surgeon, Dentist, and Agriculturalist.

Over the same period, the number of males in these professions increased by a maximum of $15 \%$, and, in some cases, declined.

The number of women also increased - if somewhat less rapidly - in such diverse occupations as Bus Driver, Motor Vehicle Mechanic, Cabinet and Wood Furniture Maker, Police Officer, and Carpenter. Although their numbers in these occupations remain small, the rate of increase for women exceeded that for men over the first half of the decade.

If women were entering traditionally maledominated occupations, men, in turn, were entering traditionally female-dominated occupations. Occupations where the number of male workers increased at a faster rate than the number of female workers included Nurses, Housekeepers, Receptionists/Information Clerks, Telephone Operators and Cashiers/ Tellers.

The growing impact of computer technology in the Canadian workplace is also evident in the detailed occupational data. The labour force in Systems Analysis and Computer Programming Occupations increased sharply for both men and women from 1981 to 1986 (up $60 \%$ for men and $82 \%$ for women). The number
of Office and Data Processing Equipment Operators was up $28 \%$ for men and $32 \%$ for women.

The increasing participation of women in the labour force was also reflected in the growing numbers of Child-care Workers - up $50 \%$ for males and $82 \%$ for females.

## Canadians better educated*

One of most significant changes for 1986 was in the number of Canadians holding university degrees. This group represented $9.6 \%$ of all Canadians aged 15 or over, a percentage twice as high as that recorded in 1971. Moreover, the number of university graduates grew by $26 \%$ from 1981 to 1986. Over the same period, the number of Canadians with master's degrees rose by $32 \%$, and those with earned doctorates by $20 \%$.

Among persons 15 years of age or older, $43 \%$ had achieved levels of schooling between grades nine and 13 by 1986. About one-sixth of this group was aged 15-to-19, and, for the most part, still in school. The same is true of the 30\% who had received some postsecondary education. This percentage includes up to 800,000 full-time students enrolled at Canadian colleges and universities in 1985-6.

In 1986, $18 \%$ of the population aged 15 years or over had achieved less than a Grade 9 level of schooling. This was down from $32 \%$ in 1971. Three-quarters of Canadians with less than Grade 9 were 45 years of age or older, though this age group represented only $37 \%$ of the total population 15 and over.

* To permit historical comparisons, all text, tables and figures in this section pertaining to level of schooling refer to data employing a 1971 Census classification of these levels. Other published tables showing 1986 Census levels of schooling without historical comparisons will employ a slightly different classification. The principal difference in the two classifications is in the treatment of vocational training. The 1971 classification disregards vocational training while the 1986 classification treats such training as a level of schooling intermediate to high school and other non-university postsecondary training.

Figure 8
Educational Attainment in Canada, 1971-1986
(Population 15 years of age and over)


Table 5
Highest Level of Schooling by Age, Canada, 1986

| Age group | Population | Less than <br> Grade9 <br> $\%$ | Grades $9-13$ <br> $\%$ | Some post- <br> secondary <br> $\%$ | University <br> degree <br> $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 15 years and over | $19,634,100$ | 17.7 | 42.5 | 30.2 | 9.6 |
| $15-19$ years | $1,917,250$ | 6.1 | 80.0 | 13.8 | 0.1 |
| $20-24$ years | $2,243,945$ | 3.8 | 43.4 | 45.5 | 7.4 |
| $25-44$ years | $8,132,655$ | 8.1 | 39.5 | 37.3 | 15.1 |
| $45-64$ years | $4,845,100$ | 30.1 | 37.2 | 24.8 | 7.9 |
| 65 years and over | $2,495,160$ | 46.4 | 33.2 | 16.2 | 4.2 |

More young women pursuing university education

Among recent university graduates, women outnumbered men, accounting for $55 \%$ of all graduates under the age of 25 .

In contrast, in the 45-to-64 age group, male university graduates outnumbered females, representing $67 \%$ of all graduates.

Figure 9
Population 15-24 Years with University Degrees by Sex, Canada, 1971-1986


## Variations in education across the country

Another measure of the successful completion of formal education is the highest degree or certificate obtained. This measure shows significant regional variations.

Alberta (13\%) and Ontario (12\%) had the highest proportion of their populations holding university degrees or certificates, while Newfoundland (7\%) and New Brunswick (9\%) had the lowest.

If all postsecondary degrees, diplomas and certificates are considered, including trades and other non-university certificates, the Yukon (39\%) had the highest proportion of
postsecondary graduates, followed by Alberta (35\%). The lowest proportions were in Newfoundland (26\%) and New Brunswick (27\%).

British Columbia (54\%) and the Yukon (57\%) had the largest proportion of population holding secondary or postsecondary degrees, diplomas or certificates, while Newfoundland (39\%) and the Northwest Territories ( $40 \%$ ) had the smallest.

## What did they study?

In 1986, the Census included a question for the first time on major field of study for those with postsecondary degrees, certificates or diplomas.

## Business and Engineering still traditional faculties for men

Among male university graduates the most common field of study was Commerce, Management and Business Administration which accounted for $20 \%$ of male graduates. Social Sciences and related fields represented a further $\mathbf{1 7 \%}$ as did Engineering/Applied Sciences.

For males with certificates and diplomas from community colleges, CEGEPs, technical institutes and similar institutions, two-thirds gave Engineering and Applied Science Technologies and Trades as their major field of study. Commerce, Management and Business Administration was a distant second, representing one-eighth of male graduates of non- university postsecondary institutions.
...while women concentrate on education
Almost $28 \%$ of women with university degrees reported Educational, Recreational and Counselling Services as their major field of
study, making this the largest field for women, followed by Social Science and Related Fields (17\%); and Humanities and Related Fields (16\%).

For female university graduates aged 45-to-64, Health Professions, Sciences and Technologies was the second largest field of study, revealing a significant shift among more recent graduates toward the social sciences.

Female graduates of community colleges, CEGEPs, technical institutes and other nonuniversity postsecondary institutions were most likely to have studied Commerce, Management and Business Administration (40\%). The Health Professions, Sciences and Technologies Field (23\%) was the second most common for women followed by the Fine and Applied Arts Field (11\%). The third largest category for female graduates of these institutions aged 45-to-64 years (Educational, Recreational and Counselling Services) was not among the top three for younger graduates.

Figure 10
Highest Degree, Certificate or Diploma, Canada, Provinces and Territories, 1986
(Population 15 years of age and over)


Figure 11
Major Fields of Study of Male and Female
University Graduates, Canada, 1986
(Population 15 years of age and over)

Educ., Rec. \& Counselling Serv.
Fine \& Applied Arts
Humanities \& Related Fields
Social Sciences \& Related Fields
Commerce, Mgmt. \& Business Admin.
Agric. \& Biological Sciences/Tech.
Engineering \& Applied Sciences
Health Professions, Sciences \& Tech.
Mathematical \& Physical Sciences All Other


Figure 12
Major Fields of Study of Male and Female Trades and
Other Non-University Certificate Holders, Canada, 1886
(Population 15 years of age and over)

Educ., Rec. \& Counselling Serv.
Fine \& Applied Aits.
Humanities \& Related Fields Social Sciences \& Related Fields
Commerce, Mgmt. \& Business Admin. Agric. \& Biological Seiences / Tech. Eng. \& Applied Sciences Tech. \& Trade
Health Professions, Sciences \& Tech. Mathematical \& Physical Sciences All Other


## For more information...

This dedicated edition of the DAILY has discussed highly summarized information at a national level. The value of the 1986 Census data base is its capacity to provide this same information for geographical areas as small as a neighbourhood.

For larger areas, more detailed information is available than what is presented here. For example, there are over 500 occupational categories and 400 major fields of study available at maximum detail, including crossclassified tables.

## ...in a variety of formats

Data from the 1986 Census are available in a variety of publications, computer tapes, micro-computer diskettes and in other formats.

Immediately available with this release are information packages for the nation, provinces and Census Metropolitan Areas. These packages contain a variety of basic tables of statistics on mobility, the labour force and education, and can be ordered by calling 1-800-267-6677 (toll free) or by contacting your nearest Statistics Canada Regional Office.

Huc)
...at your service
For more specialized or urgent requirements, custom tabulations to your individual specifications are available as well as an inquiries service to answer your questions regarding Census results or other Statistics Canada data and programs. Toll free telephone numbers for each of the Statistics Canada Regional Reference Centres are provided on page 21.

## Regional Reference Centres

Statistics Canada's regional reference centres provide a full range of the bureau's products and services. Each reference centre is equipped with a library and a sales counter where users can consult or purchase our publications, microcomputer diskettes, microfiche, maps and more.

Each centre has facilities to retrieve information from Statistics Canada's computerized data retrieval systems CANSIM and Telichart. A telephone inquiry service is also available with toll free numbers for regional clients outside local calling areas. Many other valuable services - from seminars to consultations - are offered. Call or write your regional reference centre for information.

Newfoundland and Labrador
Advisory Services
Statistics Canada
$3^{\text {rd }}$ floor
Viking Building
Crosbie Road
St. John's, Newfoundland
A1B 3P2
Local calls: 772-4073
Toll free service: 1-800-563.4255

Maritime Provinces
Advisory Services
Statistics Canada
North American Life Centre
1770 Market Street
Halifax, Nova Scotia
B3J 3M3
Local calls: 426-5331
Toll free service: 1-800-565-7192

## Quebec

Advisory Services
Statistics Canada
200 René Lévesque Blvd, West
Guy Favreau Complex
Suite 412 East Tower
Montreal, Quebec
H2Z 1 X4
Local calls: 283-5725
Toll free service: 1-800-361-2831

## National Capital Region <br> Advisory Services <br> Central Inquiries <br> Statistics Canada <br> Lobby <br> R.H. Coats Building <br> Holland Avenue <br> Ottawa, Ontario <br> K1A0T6

Local calls: 951-8116
If outside the local calling area, please dial the toll free number for your province.

Ontario
Advisory Services
Statistics Canada
$10^{\text {th }}$ Floor
Arthur Meighen Building
25 St. Clair Avenue East
Toronto, Ontario
M4T 1M4
Local calls: 973-6586
Toll free service: 1-800-268-1151

Nipissing Region
Advisory Services
Statistics Canada
Civic Administration Centre
225 Holditch Street
Sturgeon Falls, Ontario
P0H 2GO
Local calls: 753-4888
If outside the local calling area, please dial the toll free number given for Ontario residents.

Manitoba
Advisory Services
Statistics Canada
$6{ }^{\text {th }}$ Floor
General Post Office Building
266 Graham A venue
Winnipeg, Manitoba
R3C 0K4
Local calls: 983-4020
Toll free service: 1-800-542-3404

## Saskatchewan

Advisory Services
Statistics Canada
530 Midtown Centre
Regina, Saskatchewan
S4P 2B6
Local calls: 780-5405
Toll free service: 1-800-667-7164
Alberta and the Northwest
Territories
Advisory Services
Statistics Canada
2d Floor
Hys Centre
11010 - 101 Street
Edmonton, Alberta
T5H 4C5
Local calls: (403) 495-3027
Toll free service: 1-800-282-3907
N.W.T. - Call collect (403) 495-3028
Southern Alberta
Advisory Services
Box 2390, Station M
Room 245
220-4th Avenue South East
Calgary, Alberta
T2P3C1
Local calls: 292-6717
Toll free service: 1-800-472-9708

British Columbia and the Yukon
Advisory Services
Statistics Canada
3rd Floor
Federal Building, Sinclair Centre
757 West Hastings Street
Suite 440F
Vancouver, B.C. V6C 3C9
Local calls: $666-3691$
Toll free service: South and Central
B.C. 1-800-663-1551;
Yukon and Northern B.C.
Zenith 08913

BIBLIOTHEQUE STATISTIQUE CANADA


[^0]:    * includes returning Canadians.

[^1]:    * Includes females in occupied private households only.
    ** Includes separated.

[^2]:    * The Community, Business and Personal Service industries include organizations engaged in providing such services as: accounting, legal counsel, education, health care, accommodation, entertainment, beauty care, dry cleaning, etc. The term service producing industries is a much broader concept, incorporating the above, as well as the Finance, Insurance, Real Estate, Trade, Transportation, Communications, Utilities, Public Administration and Defence Industries.

[^3]:    1 To permit comparison with 1981 data, a definition of the labour force slightly different from that used elsewhere in this section has been employed.

