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The Census: One hundred years ago

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The primary function of the decennial census, as described in the British North America Act of 1867, was to provide a headcount of the population so that seats in the House of Commons could be allocated and the boundaries of federal electoral districts could be set. But the census quickly became more than just a tool for determining political representation; it became a vehicle whereby the government of the day could observe and measure various aspects of a number of social and economic issues. The census has remained a unique yardstick for measuring Canada's development.

National Censuses were undertaken in 1871 and 1881. Interest in the population of the country's western regions led to a census of the three provisional districts of the Northwest Territories (that is, the southern portions of present-day Saskatchewan and Alberta) in 1885 and another of Manitoba in 1886 (see map).

Map: Canada



View map

On April 5, 1891, enumerators visited dwellings across the nation to count a population of 4,833,239. For the first time in Canada, the 1891 Census used punched card equipment to assist in tabulating the data. Eleven electrical tabulating machines were rented and a commission was paid to H. Hollerith, their American builder. (1) The Census was conducted at a cost of \$550,000 or 11 cents per capita (1891 Dollars). (2) It seems astonishing that such a volume of information could be collected, tabulated and published so quickly without the "convenience" of motor transport or modern communication systems.

Population growth

The growth and geographic distribution of the population have always been vital issues in Canada. At Confederation, the population was concentrated in the southern parts of Ontario and Quebec, in pockets in the Maritimes and in the southern part of what is now British Columbia. Between 1871 and 1881, Canada's population grew by slightly more than 17%. The 1891 Census showed a more modest growth of just under 12%. Although most of the growth was in Ontario and Quebec, there were remarkable increases in Manitoba, British Columbia and the Territories. Today, Canada's population continues to grow, albeit at a reduced rate. While it is expected that the 1991 Census will show modest growth, it must be remembered that Canada has experienced only two periods of very rapid population increase; namely during the first two decades of the century and in the post-war baby boom years (see *Net migration*).

The Census of 1881 reported record population increases in the West, mostly in Manitoba. The 1871 Census had found 241 people living in Winnipeg in an area of 11.8 square miles. Ten years later, Winnipeg covered 393 square miles and had a population of 7,985, an increase of over 30 times. This was by far the largest increase of any city or town with a population of over 5000. According to the Census of 1986, Winnipeg had a population of 625,000 and covered more than 1150 square miles.

Between 1881 and 1891, the populations of Toronto and Montreal had increased numerically more than any other urban centre, but Winnipeg, Vancouver, Victoria and New Westminster were also growing quickly. Currently, the census metropolitan areas of Toronto, Winnipeg, Vancouver, Victoria and Montreal are all still growing, although Montreal grew at a slower rate than the others between 1981 and 1986.



Table 1 Population of Canada and the provinces in 1871, 1881 and 1891

Source: Census of Canada, 1891, Volume I, Table VI



Table 2 Population of cities and towns having more than 5,000 inhabitants in 1871, 1881 and 1891

Source: Census of Canada, 1891, Volume I, Table VII

Industry

In spite of periods of economic slow-down in the 1870s and the mid-1880s, the Canadian economy continued to expand. The railways, manufacturing and agriculture sectors predominated. The development of manufacturing industries was widespread although growth was fastest in southern Quebec and Ontario, where a market already existed. The expanding network of railways further developed these markets; industry spread to smaller centres where cheap labour was available from family farms.

Agriculture was the dominant factor in the early development of the West. However, natural and economic hardships such as grasshoppers, drought and bitterly cold winters, caused many Canadians to head south to the more prosperous and less climatically harsh regions of the northern United States. Today, even with the development of grain more suited to the limited growing season, Canadian farmers continue to be plagued by an unpredictable climate.

Overall, the structure of the Canadian economy has changed dramatically from that of 100 years ago. In 1891, almost half of the population were employed in occupations related to agriculture, fishing and mining, 20% were employed in manufacturing occupations, 15% were in domestic and personal services, and a further 12% were in occupations related to trade and transportation. The 1986 Census showed approximately 6% in agriculture, fishing and mining, 17% in manufacturing industries, almost 40% in service industries and about 22% in trade and transportation. (9) The largest recent employment increases have been in the service sector, particularly in community, business and personal service industries; these industries currently account for one in every three Canadian workers.

One hundred years ago, the census was the sole source of information about the development and expansion of industrial sectors. In 1894, a 400-page volume of detailed industrial data could be purchased for 25 cents. It showed that, by 1891, the services of blacksmithing and meat curing shops and the production of staples such as lumber, saddles and harnesses, boots and shoes, cheese and carriages were to be found in all provinces. Candle- and soap-making companies and breweries were located everywhere except the Territories. Production of more luxurious items, such as chocolate and cocoa, lace, parasols, and plumes, occurred only in the more populated areas of Ontario and Quebec.

Regional differences were apparent as well. Fish canning was found in the Maritimes, Quebec and British Columbia. Opium factories were located only in British Columbia, moss factories were exclusive to Nova Scotia, and vermicelli and macaroni factories were unique to Quebec. Today, opium and moss factories no longer exist while macaroni producers employ relatively few people and are classified together with all types of manufacturers of dry pasta products. Regional differences still persist in the Canadian economy and are evident using census data. In fact, the census is the sole source of detailed

industry employment data for sub-provincial areas.

The modern census asks respondents to state for whom and where they work. In contrast, the Census of 1891 obtained data directly from businesses. Thus, it was able to provide details about the number of establishments engaged in a certain activity, the value of the capital they owned, the number of employees and the amount paid to them in wages and salaries, as well as the value of the output produced. The Dominion Statistician conceded that "many and very great difficulties surround the effort to take [stock of] the industrial establishments of Canada" (10) and stated that this data had to be recorded so that "the people of Canada may be able to look back upon the period of 'small and feeble things' and [see] from what humble beginnings the industrial life of the country sprang". (11)

Occupations

Expanding manufacturing activities brought about increased public interest in working conditions. The 1887 factory safety laws, primarily intended to discourage the employment of women and children, were not well enforced. Governments did little to remedy long hours, unsafe machinery and harsh factory discipline. (12) Increasing mechanization and union control over hiring and limits on the output of individuals (13) were topical issues.

The 1891 Census showed that 25% of males aged 10 to 14 and 2% of females aged 10 to 14 stated an occupation. Among males under 15 who reported an occupation, 87% said they were farmers' sons. However, there were also 294 miners, 293 cotton mill operatives, 156 saw and planing mill employees, 163 clerks and copyists and 689 messenger, errand and office boys. Females under 15 generally reported themselves as servants, although there were also 237 dressmakers and dressmaker apprentices, 89 boot and shoe makers, 192 cotton mill operatives and 156 seamstresses. Following international conventions and given contemporary school leaving and child labour laws, the census no longer collects occupation data from persons under 15 years of age.

In August 1893, the census published a bulletin providing more detail about occupations. (14) As the population reporting an occupation had increased more rapidly than the total population, Canadians were described as being "a busier, more 'hustling' people than [they] were in 1881". (15) The report concluded "that the domestic and personal service class and the commercial class were at an appropriate size, that there was room for many more in the professional class and the industrial class and finally, that the agricultural class, especially in the older provinces, could ?stand a good deal of depletion before being unduly reduced". (16)

Particular attention was paid to physicians and surgeons of whom, in 1891, there were 4,448 or 1 to every 1,078 persons. The report noted: "On the whole, however, considering the healthy climate and the comparatively simple life led, with a large proportion of the people engaged in occupations that would not come under the definition of hazardous or extra-hazardous, the garrison of medical men is ample for the wants of the country, especially as the returns show 1,326 medical students preparing to become part

of the guard watching over the health of the people." (17) Almost 100 years later, the 1986 Census estimated 48,600 physicians and surgeons or 1 for every 514 people in Canada.

Immigration, education and religion

The 1891 Census found that about 650,000 or over 13% of Canadians were foreign born; most (75%) were from the United Kingdom. About one in eight was born in the United States.

Immigrants today make up only a slightly greater percentage of the Canadian population; according to the 1986 Census, 16% were foreign born. About 20% of immigrants were from the United Kingdom, while a further 18% were from Asian countries. Immigrants from Italy made up another 10%.

Education seemed to have been of particular concern to the government a century ago. Through the latter part of the nineteenth century, the census asked all persons whether they were able to read and write. In 1891, 80% of the adult population (15 years and over) reported that they could both read and write.

The census has not asked about literacy since early in the century, but a recent survey has shown that about 16% of adult Canadians are unable to deal with most everyday reading requirements. Another 22% have reading skills too limited to deal effectively with unfamiliar written material. (18) In other words, things may have changed less in this regard in the past century than most people would suspect.

The Censuses of 1871, 1881 and 1891 contained a question on religion. According to the 1891 Census, 41% of Canadians were Roman Catholic, 17% were Methodist, 16% were Presbyterian and slightly more than 13% belonged to the Church of England. Regional differences were evident. In Quebec, for example, 87% were Roman Catholic compared with only 13% in Manitoba. In the Territories, 37,000 persons (38%) did not state a religion, by far the highest proportion of anywhere in the country.

The 1991 Census will again include a question on religion, the first since 1981. At that time, 47% of the population reported their religion as Catholic. The United Church, which was formed from a merger of the Methodist Church and large parts of the Presbyterian and Congregational Churches, made up 16%, followed by Anglican at 10%.

Living conditions

The Census played a major role in understanding the housing conditions of the population. In 1891, information was available on the construction materials used in dwellings, and the number of storeys and rooms. In 1891, wood was used for more than 95% of the houses in British Columbia, Manitoba, New Brunswick, Nova Scotia, Prince Edward Island and the Territories. In Ontario and Quebec, only three-quarters of houses were wood construction; the rest were brick or, less commonly, stone. More than half of the population in Ontario lived in houses with 6 to 10 rooms. Approximately the same percentage of

persons in the Territories lived in houses with 1, 2 or 3 rooms.

Although the census no longer asks a question on construction materials or the number of storeys, its role in measuring housing conditions has not been reduced. The 1991 questionnaire will gather information on the number of rooms, the period of construction, the need for repairs, the number of bedrooms and the costs of utility, rent and mortgage payments. The 1986 Census estimated that the average size of a Canadian dwelling was 5.8 rooms.



Table 3 Proportion of homes by construction material in 1891

Source: Census of Canada, 1891, Volume IV, Table A

Women's Issues

Interest was developing in women's issues as well at the end of the last century. Although the movement for women's suffrage was not well under way until about 1910, Dr. Emily Stowe, Canada's first woman doctor, launched a campaign in the 1890s.

The census provided separate occupation estimates for women for the first time in 1891. The largest occupation for women over 15 was that of servant, although there were also large numbers of dressmakers, teachers, "tailoresses", and even 11,000 farmers. In addition, there were 69 cabinet and furniture makers, 374 compositors and pressmen, 39 harness and saddle makers and repairers, 70 iron and steel workers, 135 photographers, 12 piano makers, 1 chemist, 11 dentists, 76 physicians and surgeons, and 76 hucksters and pedlars.

Currently, women tend to be concentrated in occupations related to clerical activities, sales, service, and medicine and health. However, census data also illustrate the increasing participation of women in occupations, such as management, law, and accounting, that have been traditionally dominated by men.

(19) Because the census permits the examination of specific occupations by age, it is possible to measure the rate at which young women are entering these non-traditional occupations. The 1986 Census showed, for example, that women made up 25% of dentists under the age of 35, but only 5% of those over the age of 45.

During the 1890s, people also began to notice wage differentials between men and women. Although no data on earnings were available from the Census until 1901, the issue had become sufficiently important for a lengthy discussion to be included by the Census in the 1901 publication. Sentiment of the period was expressed in claims that "the natural vocation for women ... is that of wife and mother and manager of a household; and therefore she ought not be encouraged to come into competition with man in every

other occupation, and so with her cheaper and less efficient service make it harder for [a] man to get employment at a living wage". (20) Interest in wage comparisons remains high; one of the most frequently requested items from the 1986 Census was data showing earnings of males and females by occupation.

Conclusion

One hundred years ago, Canadians were concerned about topics such as population growth and immigration, industrial development, education, and the role of women. Over the century, the specific problems have changed. As well, the nature of public opinion and the perspective from which these issues are viewed may be very different today. Nevertheless, it is interesting that these same subjects remain topical.

The Census of 1891 helped both the government and the public of the time to gain a better understanding of such issues by providing vital social and economic data. Like its counterpart from a century past, the Census of 1991 will be an important tool for shedding light on these critical issues.

Net migration

In the years following Confederation, there were sizeable movements of population into, within, and out of Canada. During this period, the number of people emigrating from Canada exceeded the number immigrating. Between 1881 and 1891, it is estimated that natural increase (the excess of births over deaths) accounted for a gain of 669,000 in the Canadian population. In the same period, approximately 903,000 persons immigrated to Canada while 1,108,000 emigrated from Canada; that is, net migration was a loss of 205,000 persons. During this decade, Manitoba, British Columbia and the Northwest Territories were the only provinces where immigration surpassed emigration. (4)

Many emigrants went to the United States. It has been estimated that "in 1880-90, the number of natives of Canada in the United States grew from 717,000 to 980,000. Canada, with its four million people and its millions of vacant acres had contributed more of its sons to the building of the United States than England with its 29 millions in their crowded land". (5)

Net migration did not become positive until the years 1901 to 1911. In fact, this was the only decade in Canadian history when net migration surpassed natural increase as a contributor to overall population growth. 60

Notes

Note 1

D.A. Worton, "History of Statistics Canada Project" p. 15.

Note 2

<u>Dominion Bureau of Statistics</u>, Annual report of the Dominion Statistician, 1918-19, p. 13.

Note 3

The 1891 Census was conducted by George Johnston, who was named the first Dominion Statistician in the same year. In the introduction to the first volume of published 1891 Census information, Johnston describes the quality of the data in the following way: "No pains have been spared to obtain the information necessary for the execution of so important a work as this, which is in no respect inferior as regards exactitude to works of a similar kind published in any other country. It cannot be expected that so extensive a work should be absolutely perfect. That would be to ask what is simply impossible. All that fairly can be required is the relative exactitude which has been secured in the present Census."

Note 4

See M.C. Urquhart and K.A.H. Bucley eds., Historical Statistics of Canada (1965).

Note 5

See <u>A. Shortt and A.G. Doughty</u>, eds., *Canada and its Provinces: a histroy of the Canadian people and their institutions*, p.148.

Note 6

<u>Urquhart and Buckley</u>, loc. cit.

Note 7

Shortt and Doughty, op. cit., p.152.

Note 8

D. Morton, A short history of Canada, p.96.

Note 9

The industry data is not strictly comparable. The 1891 data are based on the responses to the occupation question. These responses were subsequently reorganized into groups which, in name, bear some

similarity to the organization in our present-day industrial structure.

Note 10

Department of Agriculture, Census of Canada 1890-91, Vol. III, p.vi.

Note 11

Ibid.

Note 12

Morton, op. cit., p. 94.

Note 13

B. Hodgins and R. Page. Canadian history since Confederation: essays and interpretations, p. 218.

Note 14

Census employees of 1891 took great care in warning users of the dangers of making comparisons with the 1881 occupation data. Prudence was warranted because the classifications were not the same in all respects.

Note 15

Department of Agriculture, Census of Canada 1891, p.3.

Note 16

Selected passages from **Department of Agriculture**, op. cit., p. 15.

Note 17

<u>Ibid</u>, p. 11.

Note 18

Statistics Canada, Perspectives on Labour and Income (Winter 1990), p. 7.

Note 19

See K.D. Hughes, Perspectives on labour and income (Summer 1990), p. 58.

Note 20

Department of Agriculture, Census of Canada 1901, p. xxiii.

References

- Department of Agriculture. *Census of Canada 1890-91*. 1891 Census Catalogue 98-1891.
 Ottawa: S.E. Dawson, 1893-1897. Vol. I, 1893; Vol. II, 1893; Vol. III, p. vi, 1894; Vol. IV, 1897.
- ---. Occupations. Census of Canada 1891, Bulletin no. 18. Ottawa, 1893.
- ---. Wage-earners by occupations. Census of Canada 1901, Bulletin no. 1. Ottawa, 1907.
- Shortt, A. and A.G. Doughty, eds. "The Dominion industrial expansion." *Canada and its Provinces: A history of Canadian people and their institutions*, Vol. 9, section V, part I, Toronto: Glasgow, Brook and Company, 1914.
- Colombo, J.R. Colombo's Canadian references. Toronto: Oxford University Press, 1976.
- Cook, R., J. Ricker and J. Saywell. Canada: a modern study. Toronto: Clark Irwin, 1963.
- Creighton, D. *Dominion of the north: a history of Canada*. Toronto: The Macmillan Company of Canada Ltd, 1957.
- Dominion Bureau of Statistics. *First annual report of the Dominion Statistician*, 1918-19. Annual, Catalogue 11-201, March 1919. Ottawa.
- Hiller, H.H. Canadian society: a macro analysis. Scarborough, Ont.: Prentice-Hall Canada, 1986.
- Hodgins, B. and R. Page. Canadian history since Confederation: essays and interpretations. Georgetown, Ont.: Irwin-Dorsey, 1979.
- Morton, D. A short history of Canada. Edmonton: Hurtig, 1983.
- Statistics Canada. Overview of literacy skills in Canada Perspectives on labour and income, Quarterly, Catalogue 75-001E, Winter 1990. Ottawa.
- Hughes, K.D. <u>"Trading places: men and women in non-traditional occupations, 1971-86"</u>

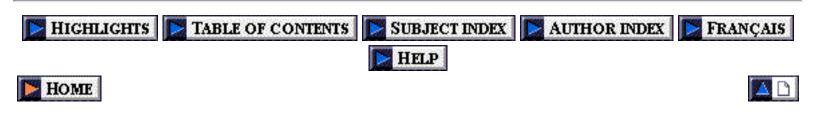
 Perspectives on labour and income, Quarterly, Catalogue 75-001E, Summer 1990. Ottawa: Statistics Canada.
- Urquhart, M.C. and K.A.H. Buckley, eds. "Series A244-253", *Historical Statistics of Canada*. Cambridge, Eng.: The University Press; Toronto: The Macmillan Company of Canada Ltd, 1965.
- Worton, D.A. "History of Statistics Canada project" (chapter "The Department of Agricuture's mandate from Confederation to 1905"). Ottawa: Statistics Canada, 1990. Unpublished study.

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Source

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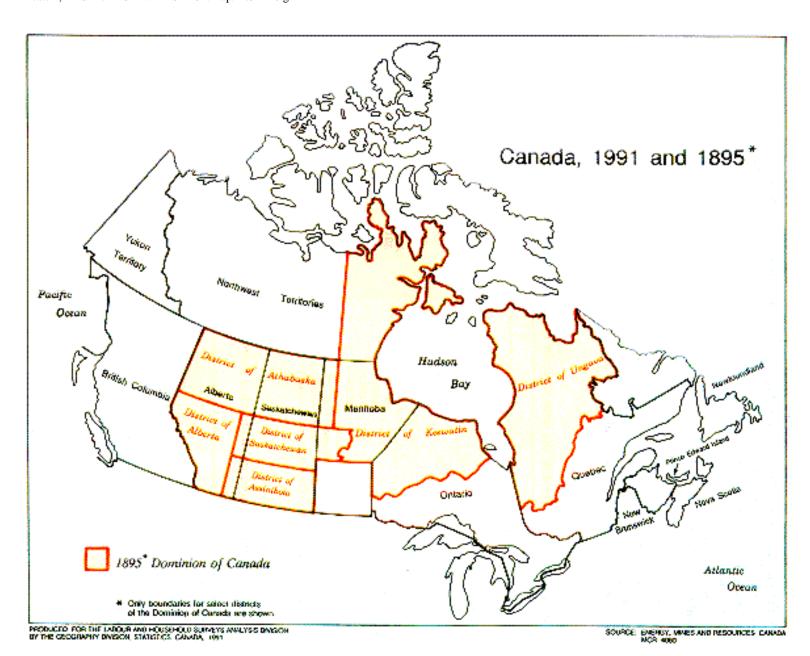


Table 1 Population of Canada and the provinces in 1871, 1881 and 1891						
Canada	3,689,257	4,324,810	4,833,239			
British Columbia	36,247	49,459	98,173			
The Territories*	18,000	25,515	66,799			
Manitoba	25,228	62,260	152,506			
Ontario	1,620,851	1,926,922	2,114,321			
Quebec	1,191,516	1,359,027	1,488,535			
New Brunswick	285,594	321,233	321,263			
Nova Scotia	387,800	440,572	450,396			
Prince Edward Island	94,021	108,891	109,078			
Unorganized Territories**	30,000	30,931	32,168			
Source: Census of Canada, 1891,	Volume I, Table VI	,	,			
* Includes the districts of Alberta,	Assiniboia, Athabaska	, and Sasko	atchewan.			
** Includes the Northwest Territor	ies and the district of	Keewatin.				

Table 2							
Population of cities and towns having more than 5,000 inhabitants in 1871, 1881 and 1891							
Population	1871	1881	1891	% change 1881-1891			
Montreal	107,225	155,237	216,650	40			
Toronto	56,092	96,196	181,220	88			
Ottawa	21,545	31,307	44,154	41			
Halifax	29,582	36,100	38,556	7			
Winnipeg	241	7,985	25,642	221			
Victoria	3,270	5,925	16,841	184			
Vancouver	-	-	13,685	-			
New Westminster	-	1,500	6,641	343			
Source: Census of Canada, 18	891, Volume I, T	able VII	,				

Table 3						
Proportion of homes by construction material in 1891						
	Wood	Brick	rick Stone	Undescribed		
Canada	81.5	15.4	3.0	0.1		
British Columbia	97.6	2.3	0.1	-		
The Territories*	96.0	1.0	1.0	2.0		
Manitoba	95.2	3.7	0.9	0.2		
Ontario	75.5	21.1	3.3	0.1		
Quebec	77.1	17.8	5.0	0.1		
New Brunswick	98.2	1.6	0.1	0.1		
Nova Scotia	99.4	0.3	0.2	0.1		
Prince Edward Island	99.5	0.4	0.1	_		
Source: Census of Canada, 1891, Volume IV, Table A						
* Includes the districts of Alberta, Assiniboia, Athabaska, and Saskatchewan.						