

# Report on the Demographic Situation in Canada



2001



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Statistics Canada Demography Division

# Report on the Demographic Situation in Canada

2001

Alain Bélanger Editor-in-Chief

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# **Highlights**

# PART I

- Canada's population grew by 277,200 persons in 2000. The corresponding rate of increase (9.0 per 1,000) was up slightly from the previous year (8.6 per 1,000).
- Net migration accounted for 61% of total growth and is currently the main factor in Canadian population growth.
- Natural increase, which was relatively low, was down in all provinces, but no province has yet registered a negative rate of natural increase. In Newfoundland and Labrador as well as Saskatchewan, natural increase was no longer sufficient to offset negative net migration, and the population declined.
- Alberta was by far the Canadian province with the strongest population growth in 2000. Exceeding 18 per 1,000 in 2000, that province's population growth rate was double the rate for Canada. Although Alberta's rate of natural increase was larger than that of all other provinces, it was not greatly different from theirs, and most of that province's robust growth resulted from its net gains in interprovincial migration (9 per 1,000).
- With a rate of 14.7 per 1,000, Ontario posted the second highest population growth in Canada. It owed this primarily to its net international migration (10.8 per 1,000).
- In British Columbia, net international migration continued to be positive (28,900), offsetting the province's interprovincial migratory losses (-17,300) and enabling it to post a growth rate of 6.8 per 1,000 in 2000. But for British Columbia, this was a marked slowdown compared with the growth rates in excess of 25 per 1,000 that it experienced between 1989 and 1996.
- Quebec now accounts for less than one quarter of the population, while Ontario is approaching two fifths. Together, Alberta and British Columbia (23%) have nearly the same demographic weight as Quebec (24%), whereas in 1971, 28% of Canadians resided in Quebec compared with a total of 18% in those two Western provinces.

### XXX

 In 1999, the total fertility rate reached 1.52 children per woman, down slightly (1%) from 1998. While some industrialized countries have even lower fertility, the United States, the United Kingdom, Australia and France have a higher fertility rate than Canada.

- Newfoundland and Labrador, with a rate of 1.26 children per woman, was the province with the lowest fertility. Manitoba and Saskatchewan, with 1.81 children per woman, had the highest.
- Nunavut stood out from the rest of Canada with a fertility rate of 3.25 children per woman.
- Not only are Canadian women having fewer children, but they are having them later in life. The fertility rate of young Canadian women between 20 and 24 years of age was only half the rate posted by their mothers when they were in that age range. The average age at childbearing reached 28.7 years in 1999, continuing an upward trend that began in the mid-1970s.
- No cohort of women born during the baby-boom has had enough children to ensure its replacement.

### XXX

- In 1999, life expectancy at birth reached 81.7 years for females and 76.3 for males. The gap between male and female life expectancies has continued to narrow and was only 5.4 years in 1999, in favour of females.
- The number of deaths is increasing by approximately 1% per year because of the growth and aging of the Canadian population.
- Most of the additional deaths registered in 1998 and 1999 compared with 1997 occurred among those 85 and over.
- Life expectancy at 65 continues to increase, and in 1999 it reached 16.5 years for men and 20.3 years for women.
- According to the mortality conditions observed in 1999, one Canadian male in three and one Canadian female in two would reach age 85.
- Death by suicide is nearly stable in Canada. However, in Quebec the suicide death rate has been rising for 30 years and is currently 50% higher than in the rest of Canada.

### XXX

- Canada received 227,300 immigrants in 2000, an increase of 20% compared with 1999. During the 1990s, more than 2,200,000 persons were admitted as immigrants.
- The majority of immigrants arriving in Canada in 2000 came from Asian countries (62%) and entered under the "economic" component of the Canadian immigration policy (58%). China, India, Pakistan and the Philippines were the main countries supplying immigrants.

- In 2000 there were more than 30,000 refugees, up 23% from the year before. Their main countries of origin were the former Yugoslavia, Sri Lanka and Afghanistan.
- Three provinces attracted 90% of new arrivals: Ontario, British Columbia and Quebec. In fact, 59% of immigrants arriving in 2000 chose Ontario as their province of residence, with most of them settling in Toronto.
- Among immigrants choosing Quebec, one in four was a refugee. In Ontario, the corresponding proportion was one in ten.

### XXX

- Only Ontario and Alberta had positive interprovincial net migration in 2000.
   British Columbia and Quebec had the largest net losses in interprovincial migration, the former to the benefit of Alberta and the latter to the benefit of Ontario.
- Over the past thirty years, Quebec has lost nearly a half million persons in migration to other Canadian provinces, especially Ontario.
- Of native-born Canadians migrating to Newfoundland and Labrador, 60% were born in that province. The corresponding proportion was 52% for Quebec and 43% for Saskatchewan, while the national average was 28%.

# **PART II**

- In 1999, Canada's fertility rate fell to an all-time low of 1.52 children per woman. The same year, the U.S. rate was 2.08 children per woman. The gap between the two countries, amounting to approximately half a child per woman in favour of the United States, represents what could be called Canada's fertility deficit.
- Not only total fertility rates are higher for American women, but completed fertility rates of all groups of cohorts born after 1945 are also higher.
- The ethnic make-up of the U.S. population does not entirely explain the fertility differences observed between the two countries, since all American ethnic groups have a higher rate than Canadian women. At most, the higher fertility rates of American women who are black or of Hispanic origin would appear to explain 40% of the observed difference.

- Between 1980 and 2000, the fertility rate of American women of Hispanic origin stayed at around 3.0 children, while that of black women ranged between 2.2 and 2.4 children and that of non-Hispanic white women ranged between 1.8 and 1.9 children. There was thus a gap of 0.3 children between the total fertility rate of Canadian women and that of American non-Hispanic white women, the group exhibiting the lowest fertility in the United States.
- The growing fertility gap between American women and Canadian women results from the fact that young American women have maintained a higher fertility rate, while young Canadian women's fertility has declined significantly. The fertility of American women aged 20 to 29 has held steady and even increased slightly, while that of Canadian women of the same age has dropped considerably. Between 1979 and 1999, fertility has declined by nearly 40% among Canadian women aged 20 to 24 and by nearly 25% among those aged 25 to 29.
- The fertility rate at 15-19 years of age exceeds 50 per 1,000 in the United States, whereas in Canada it is less than 20 per 1,000. Approximately 30% of the difference observed between the U.S. and Canadian total fertility rates is due to the higher fertility of American teenage girls. No other industrialized country has juvenile fertility rates as high as those observed in the United States.
- Canadian women use more effective contraceptive methods than American women. In Canada, 46% of women using contraception opted for sterilization, compared with 41% in the United States. Pharmaceutical methods (the pill, IUD, implant) are also more popular in Canada (37%) than in the United States (31%). In Canada, the public health care system provides universal and free access to medical services, whereas in the United States, such services can be costly, making the most effective contraceptive methods less accessible.
- The younger the age group considered, the greater the gap between the proportions of Canadian and American women using an effective contraceptive method. For example, whereas in Canada, 86% of female users aged 15 to 19 use a pharmaceutical method (primarily the pill) and 14% use a natural or barrier method (mainly the condom), the corresponding proportions in the United States are 57% and 42%.
- Part of the reason why fertility is relatively high in the United States is the large proportion of unwanted pregnancies and births. In the mid-1980s, it was estimated that the proportion of unwanted pregnancies was 60% higher in the United States than in Canada.
- The total abortion rate is higher in the United States, where it is holding steady at about 0.8 abortions per woman, whereas the Canadian rate is 0.5 abortions per woman.

- By comparison with the Canadian situation, marriage is earlier and more common in the United States.
- Women tend to bear children earlier in the United States. The average age at childbearing is nearly 29 years in Canada, whereas it is 27 years in the United States. It is possible that because young people in Canada find it harder to integrate into the labour market than their American counterparts, they may postpone forming conjugal unions and having children.
- The gap between the unemployment rates of young Canadians and Americans aged 20 to 24 continues to widen. In the early 1980s, youth unemployment rates were similar in the two countries and indeed were sometimes lower in Canada, but since 1983 the youth unemployment rate has consistently been higher in Canada than in the United States. Since 1991, the unemployment rate of young Canadians has consistently been 50% to 70% higher than that of young Americans.
- Religious practice indirectly influences individuals' fertility, especially
  in its effect on the choice of marriage as a mode of conjugal life and
  the stability of the union. The rate of religious practice is much higher
  in the United States than in Canada. Among women of childbearing
  age, the proportion of Americans (34%) who reported practising
  their religion on a weekly basis was nearly double the rate for Canadians
  (18%).

### XXX

- In 1996, 20% of the elderly population living in private households received assistance for either everyday housework, grocery shopping, preparation of meal or personal care because of a long term health problem.
- Among elderly persons who received assistance because of a long term health problem, 42% received assistance only from informal sources (family, friends, and neighbours), 34% from formal sources (paid employees, government or non-government organizations and volunteers) and the remaining 24% received help from a mix of informal and formal sources.
- Having no surviving children reduces significantly the probability of using strictly informal sources of assistance. This probability was 0.32 for those without any surviving children compared to 0.44 for elderly persons with at least one surviving child.
- The younger the spouse, the greater the probability of using strictly informal sources of assistance. Among elderly persons receiving assistance, this probability was 0.32 for those with a spouse aged 75 years or over compared to 0.26 for those living alone.

- There was a strong positive association between the level of schooling and the probability of using strictly formal sources of assistance. Among elderly persons receiving assistance and living in private households, this probability increased from 0.28 for those without secondary schooling compared to 0.52 for those with post-secondary schooling.
- When considering only the changing nature and extent of the family network, the results point to a relative increase in the use of formal home care services in the future among those receiving assistance. The changing sociodemographic characteristics of the elderly population (improvement in the level of schooling for example), along with the changing social context (migration of children, divorce, remarriage, etc.) and policies regarding institutionalization of the disabled elderly population will also have important effects on the nature, formal or informal, of services received.

# PART I

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# **DEMOGRAPHIC ACCOUNTING**

According to population estimates, Canada had 30,893,800 inhabitants on January 1, 2001, an increase of 277,200 compared with the same date the previous year (Table 1). The corresponding growth rate (9.0 per 1,000) is up slightly from last year, owing to an increase in net migration. Since 1998, net international migration has grown steadily. In 2000 it stood at 168,000, owing to the admission of 227,400 immigrants and the departure of 64,100 emigrants. Net migration accounts for 61% of overall growth, and thus it is currently the main factor in Canada's population growth.

Without migration, the Canadian population would be growing much more slowly: the rate of natural increase in 2000 was 3.6 per 1,000, with births exceeding deaths by 109,200. This continues a downward trend that began in the early 1990s and is bound to continue because of the aging of the population. Indeed, the number of deaths has been rising steadily since the early 1980s, despite the increase in life expectancy at birth. In this context, net migration is expected to account for an increasing proportion of future growth.

# **Demographic Accounting in the Provinces**

With a population estimated at 11,759,700 on January 1, 2001, Ontario is Canada's most populous province. It is followed by Quebec (7,388,400 inhabitants), British Columbia (4,072,500) and Alberta (3,034,500). There are just over one million inhabitants in each of the other two Prairie provinces, Manitoba (1,147,500) and Saskatchewan (1,019,300). None of the Atlantic provinces, namely Nova Scotia (942,700), New Brunswick (756,000), Newfoundland and Labrador (536,200) and Prince Edward Island (138,200), reach this figure, although the former comes close. The vast territories in Canada's north remain very sparsely settled: there were 30,100 inhabitants in Yukon, 40,900 in the Northwest Territories and 27,700 in Nunavut, for a total of 98,700. This, then, is less than for Prince Edward Island, the least populous province.

The provinces differ not only in population size but also in their growth rates. *These differ primarily because net migration varies substantially from one province to another. Natural increase, which is relatively low and declining throughout Canada, varies much less.* With a rate of natural increase of 6.5 per 1,000, Alberta ranks first on this score. No province has a negative rate of natural increase, although the province of Newfoundland and Labrador is approaching zero growth (0.6 per 1,000).

With a growth rate exceeding 18.0 per 1,000 in 2000, double the rate observed for Canada, Alberta had by far the strongest population growth

Table 1. Population as of January 1st and Population Growth Components, Canada, 1972-2001

Numbers (in thousands)

							_																								_
Residual 1		-27.7	-27.7	-27.7	-27.7	-23.1	-19.8	-19.8	-19.8	-19.8	-20.8	-21.4	-21.4	-21.4	-21.4	-13.7	-8.2	-8.2	-8.2	-8.2	-24.6	-36.3	-36.3	-36.3	-36.3	-15.1	:	:	:	:	:
Non-permanent Residents (net)		3.0	7.9	-2.0	7.9	-3.0	-2.0	-3.0	7.9	14.9	30.3	-3.7	4.4	-0.3	11.0	46.5	40.9	108.9	67.4	-11.0	-68.3	-31.9	-63.3	-16.5	0.2	-13.5	0.2	0.2	18.5	4.7	:
Emigration		26.2	40.7	42.0	34.3	28.3	29.1	31.7	24.5	17.6	24.6	31.1	31.8	29.1	26.9	23.7	20.1	17.2	19.6	20.2	25.3	21.7	22.2	23.7	24.9	41.7	55.6	57.5	60.7	64.1	:
Immigration		122.0	184.2	218.5	187.9	149.4	114.9	86.3	112.1	143.1	128.6	121.1	89.2	88.2	84.3	99.2	152.1	161.9	192.0	214.2	230.8	252.8	255.7	223.8	212.0	226.1	216.0	174.2	190.0	227.4	:
Deaths		162.4	164.0	166.8	167.2	167.0	167.5	168.2	168.2	171.5	171.0	174.4	174.5	175.7	181.3	184.2	185.0	190.0	191.0	192.0	195.6	196.5	204.9	207.1	210.7	212.9	215.7	218.1	222.0	222.9	:
Births		347.3	343.4	345.6	359.3	360.0	362.2	358.4	366.1	370.7	371.3	373.1	373.7	377.0	375.7	372.9	369.7	376.8	392.7	405.5	402.5	398.6	388.4	385.1	378.0	366.2	348.6	342.4	337.5	332.1	:
	Migratory	8.86	151.4	174.5	161.5	118.2	83.8	51.7	95.5	140.4	134.3	86.4	61.7	58.8	68.4	122.1	172.9	253.6	239.7	183.1	137.3	199.2	170.3	183.6	187.3	170.9	160.6	116.9	147.8	168.0	:
Growth	Natural	184.9	179.3	178.9	192.1	193.0	194.7	190.2	97.61	199.2	200.3	198.7	199.2	201.3	194.4	188.7	184.8	186.8	201.7	213.5	207.0	202.1	183.5	178.0	167.3	153.3	132.9	124.3	115.5	109.2	:
	Total	256.0	303.0	325.6	326.0	288.0	258.7	222.0	273.6	319.8	313.9	263.6	239.5	238.7	241.4	297.1	349.5	432.2	433.3	388.4	319.7	365.1	317.5	325.3	318.3	309.1	293.5	241.2	263.3	277.2	:
Population as of	January 1st	22,093.1	22,349.2	22,652.2	22,977.8	23,303.8	23,591.8	23,850.5	24,072.6	24,346.2	24,665.9	24,979.8	25,243.4	25,482.9	25,721.6	25,963.1	26,260.1	26,609.7	27,041.9	27,475.2	27,863.6	28,183.3	28,548.3	28,865.8	29,191.1	29,509.4	29,818.6	30,112.1	30,353.3	30,616.6	30,893.8
Year		1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997 PD			2000 PR	2001 PR

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Non-permanent Residents

	Dmigration	Elligiation	1.18	1.81	1.84	1.48	1.21	1.23	1.32	1.01	0.72	0.99	1.24	1.25	1.14	1.04	0.91	0.76	0.64	0.72	0.73	0.90	0.76	0.77	0.82	0.85	1.40	1.86	1.90	1.99	2.08	:
	Immigration		5.49	8.19	9.58	8.12	6.37	4.84	3.60	4.63	5.84	5.18	4.82	3.52	3.45	3.26	3.80	5.75	6.04	7.04	7.74	8.24	8.91	8.91	7.71	7.22	7.62	7.21	5.76	6.23	7.39	:
	Death		7.31	7.29	7.31	7.22	7.12	7.06	7.02	6.95	7.00	68.9	6.95	6.88	98.9	7.02	7.06	7.00	7.08	7.01	6.94	86.9	6.93	7.14	7.13	7.18	7.18	7.20	7.21	7.28	7.25	:
1,000)	Direh	Dilui	15.63	15.26	15.15	15.53	15.35	15.27	14.96	15.12	15.13	14.96	14.86	14.73	14.73	14.54	14.28	13.99	14.05	14.41	14.65	14.36	14.05	13.53	13.27	12.88	12.34	11.63	11.33	11.07	10.80	:
Rates (for 1,000)	Growth	Migratory	4.45	6.73	7.65	6.98	5.04	3.53	2.16	3.95	5.73	5.41	3.44	2.43	2.30	2.65	4.68	6.54	9.45	8.79	6.62	4.90	7.02	5.93	6.32	6.38	5.76	5.36	3.87	4.85	5.46	:
		Natural	8.32	7.97	7.84	8.30	8.23	8.21	7.94	8.17	8.13	8.07	7.91	7.85	7.86	7.52	7.23	66.9	96.9	7.40	7.72	7.39	7.13	6:39	6.13	5.70	5.17	4.44	4.11	3.79	3.55	:
		Total	11.52	13.47	14.27	14.09	12.28	10.91	9.27	11.30	13.05	12.64	10.50	9.44	9.32	9.34	11.38	13.22	16.11	15.89	14.04	11.41	12.87	11.06	11.21	10.85	10.42	62.6	7.98	8.64	9.01	:
	Population as of January 1st (in thousands)		22,093.1	22,349.2	22,652.2	22,977.8	23,303.8	23,591.8	23,850.5	24,072.6	24,346.2	24,665.9	24,979.8	25,243.4	25,482.9	25,721.6	25,963.1	26,260.1	26,609.7	27,041.9	27,475.2	27,863.6	28,183.3	28,548.3	28,865.8	29,191.1	29,509.4	29,818.6	30,112.1	30,353.3	30,616.6	30,893.8
	Veor	rear	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997 PD		1999 PR		2001 PR

(PD) Final postcensal estimates, (PR) Revised postcensal estimates, based on 1996, as of January 21, 2002. Sources: Statistics Canada, Demography Division, Demographic Estimates Section and Research and Analysis Section. 1 The residual consists of the distribution over five years of the error of closure at the end of the intercensal period.

of any Canadian province. The bulk of this growth results from net interprovincial migration, which reached 27,100, up 38% from the previous year. Net international migration (8,100) and natural increase (19,600), while both positive, account for much less of this province's overall increase. Sustained economic growth over the past few years continues to exert a strong pull on people living elsewhere in Canada, especially in the neighbouring provinces of British Columbia and Saskatchewan. Because migrants are generally young, the high level of migration to this province has helped slow the aging of its population. Table 2 shows that in 2001, Alberta ranked third among the provinces in the proportion of young people, behind Saskatchewan and Manitoba, which have the highest fertility rates in Canada: twenty years earlier it ranked fifth. Alberta also has the lowest proportion of elderly persons, with scarcely 10%.

In British Columbia and Saskatchewan, the two provinces bordering Alberta, net interprovincial migration is negative. In the case of British Columbia, this is a recent trend: the phenomenon first appeared in 1998. Alberta is attracting a large number of workers from both these provinces, but with differing effects. While population growth remains substantially positive in British Columbia (27,700), it has been negative for the past two years in Saskatchewan, since natural increase (3,500) is insufficient to offset a high level of negative net migration (-8,100). This province has been losing population since 1999. Saskatchewan also has the distinction of being a province that is both young and old: it ranks first among Canadian provinces not only in the proportion of young persons aged 0 to 14 (21%) but also in the proportion of those 65 and over (15%). The emigration of younger persons has a substantial impact on the proportion of working-age persons (15-64 years). At 64%, this proportion is the lowest of any province and four percentage points below the national average. British Columbia, for its part, largely offsets its losses from interprovincial migration by substantially positive net international migration (31,900). This gives it an overall migratory growth rate of 3.6 per 1,000 in 2000 and an overall growth rate of 6.8 per 1,000. For British Columbia, however, this represents a considerable slowing compared with the growth rates in excess of 25 per 1,000 that it experienced between 1989 and 1995.

Manitoba posted a population growth of 3.2 per 1,000 in 2000, almost entirely due to natural increase (4,100). This province's net migration is practically nil (-400, for a rate of -0.3 per 1,000), since negative net interprovincial migration (-3,600) is almost entirely offset by positive net international migration (3,100). It should be noted, however, that after the positive net migration recorded in 1999, which ran against the trend of the previous 13 years, the figure was again negative in 2000, although only very slightly. Further from Alberta but bordering on Ontario, Manitoba's population seems less prone than Saskatchewan's to the pull of provinces whose economies have soared in recent years.

Table 2. Distribution of Population by Major Age Groups, Canada, Provinces and Territories, 1971-2001

	Territories,							
	197	1	198	1	199	1	200	1
Province	Number (in thousands)	Proportion (%)	Number (in thousands)	Proportion (%)	Number (in thousands)	Proportion (%)	Number (in thousands)	Proportion (%)
				0 to	14			
Nfld.Lab.	196.0	36.9	168.0	29.2	128.4	22.2	90.3	16.9
P.E.I.	35.5	31.5	30.6	24.7	29.4	22.5	26.7	19.2
N.S.	241.7	30.3	199.0	23.3	185.9	20.3	168.1	17.8
N.B.	204.2	31.8	174.7	24.7	154.2	20.7	134.1	17.7
Que.	1,799.6	29.3	1,407.7	21.5	1,396.8	19.8	1,306.8	17.6
Ont.	2,226.4	28.4	1,904.5	21.6	2,099.4	20.1	2,283.5	19.2
Man.	288.1	28.8	239.2	23.1	242.5	21.9	238.3	20.7
Sask.	280.9	30.1	239.5	24.5	239.3	23.9	215.6	21.2
Alta	520.1	31.2	548.8	23.9	611.2	23.6	626.7	20.5
B.C.	618.6	27.6	598.0	21.2	676.4	20.1	725.0	17.7
Yuk.	6.5	34.1	6.2	25.9	7.0	24.3	6.1	20.4
N.W.T. <sup>1</sup>	15.2	41.8	16.2	34.1	11.0	28.5	10.9	26.7
Nun.			••		8.6	38.9	10.4	36.8
Canada	6,432.8	29.3	5,532.6	22.3	5,790.2	20.7	5,842.4	18.8
				15 t	o 64			
Nfld.Lab.	302.4	57.0	362.7	63.1	395.4	68.2	380.3	71.2
P.E.I.	64.7	57.4	78.2	63.2	83.8	64.3	93.4	67.5
N.S.	482.7	60.5	562.7	65.8	614.9	67.2	648.6	68.8
N.B.	383.2	59.7	460.7	65.2	501.8	67.3	524.4	69.3
Que.	3,919.2	63.9	4,566.8	69.7	4,885.6	69.2	5,142.9	69.4
Ont.	4,972.2	63.3	6,032.7	68.5	7,123.0	68.3	8,099.2	68.2
Man.	614.8	61.5	675.0	65.1	719.4	64.8	756.3	65.8
Sask.	556.0	59.7	619.8	63.5	622.4	62.1	652.3	64.2
Alta	1,025.1	61.5	1,580.4	68.9	1,748.5	67.4	2,126.5	69.4
B.C.	1,414.2	63.1	1,924.7	68.2	2,268.4	67.2	2,830.3	69.1
Yuk.	12.0	63.1	16.9	70.9	20.8	71.8	22.1	73.9
N.W.T. <sup>1</sup>	20.3	55.9	30.0	63.0	26.5	68.4	28.2	69.0
Nun. Canada	13,766.9	62.7	16,910.5	68.1	13.2 19,023.5	59.2 67.9	17.1 21,321.6	60.6 68.6
Cunada	13,700.7	02.7	10,710.5			07.5	21,321.0	00.0
NCI II I	520.0		574.0	65 and		0.6	522.0	11.0
Nfld.Lab.	530.9	6.1	574.8	7.7	579.5	9.6	533.8	11.8
P.E.I.	112.6	11.0	123.7	12.1	130.3	13.1	138.5	13.3
N.S. N.B.	797.3 642.5	9.1 8.6	854.6	10.9	915.1 745.5	12.5 12.0	942.7 757.1	13.4
		8.6 6.8	706.3	10.0 8.8		12.0		13.0
Que.	6,137.4	l	6,547.7		7,064.7		7,410.5	13.0
Ont. Man.	7,849.0 998.9	8.3 9.6	8,811.3 1,036.4	9.9 11.8	10,427.6 1,109.6	11.6 13.3	11,874.4 1,150.0	12.6 13.5
Sask.	932.0	10.2	975.9	11.8	1,109.6	13.3 14.1	1,130.0	13.3 14.6
Alta	1,665.7	7.2	2,294.2	7.2	2,592.6	9.0	3,064.2	10.2
B.C.	2,240.5	9.3	2,823.9	10.7	3,373.4	12.7	4,095.9	13.2
Yuk.	19.0	2.9	23.9	3.3	28.9	3.9	29.9	5.7
N.W.T. <sup>1</sup>	36.4	2.3	47.6	3.0	38.7	3.9	40.9	4.2
N. w. 1. Nun.	••	2.3	••	3.0	22.2	1.9	28.2	2.6
Canada	21,962.1	8.0	24,820.4	9.6	28,030.9	11.5	31,081.9	12.6

<sup>&</sup>lt;sup>1</sup> Nunavut included in 1971 and 1981.

**Sources**: Statistics Canada, Demography Division, Demographic Estimates Section and Research and Analysis Section.

While Ontario, with a rate of 14.7 per 1,000, has the second highest population growth in Canada after Alberta, it owes this primarily to its strongly positive net international migration (103,200). In the past four years, it has moved ahead of British Columbia in this regard. In 2000, Ontario's immigration rate was 11.4 per 1,000, compared with 9.2 for British Columbia. Thus, Alberta's growth is primarily driven by the dynamics of internal migration, while Ontario's is propelled by international immigration. Ontario's interprovincial in-migrant and out-migrant numbers are sizable (respectively 86,800 and 64,200), making that province a real hub of the Canadian migration system, but the resulting net figure is much less sizable (22,700, for a rate of 1.9 per 1,000). However, this figure has been rising since 1992.

The growth of Quebec's population slowed slightly between 1999 and 2000, going from 3.7 per 1,000 to 3.3 per 1,000. The explanation lies in the province's net migration. In 2000, Quebec received more immigrants (32,500) and migrants from other provinces (24,000), but it also saw its numbers of emigrants (11,900) and migrants to other provinces (36,400) increase even more rapidly. Natural increase remained unchanged at 18,700.

The Maritime provinces have been gradually approaching zero population growth, year after year. Growth is 1.8 per 1,000 in Prince Edward Island, 1.6 in Nova Scotia and 1.3 in New Brunswick. In each of these provinces, the main factor in population growth is natural increase. This is because net migration is low, whether positive, as in the case of Nova Scotia (0.6 per 1,000), or negative, for New Brunswick (-0.3 per 1,000) and Prince Edward Island (-0.1 per 1,000). In absolute numbers, net migration in each of these provinces is no more than 500.

For an eighth consecutive year, Newfoundland and Labrador registered negative population growth (-3,800, which represents a rate of -7.1 per 1,000). Natural increase (0.6 per 1,000) in this province remains positive but continues to decline and is approaching zero. The explanation for the depopulation trend lies in the flow of migrants between this province and the others. The effects on the age structure are already being felt (Table 2): whereas this was the province with the highest proportion of young persons in 1971 and 1981 with 37% and 29% respectively, in the space of twenty years it has become the province with the smallest proportion of young persons under 15 years of age (17%). The bulk of its population is between 15 and 64 years of age: for this age group it ranks first among Canada's provinces with 71%, while it ranks ninth in the proportion of elderly.

The populations of Canada's three territories exhibit a very different demographic pattern from the provinces. In 2000, Yukon had a negative growth rate (-18.6 per 1,000), unlike in the previous two years. This was due to highly negative net interprovincial migration (-24.7 per 1,000), whereas natural increase remained positive (7.5 per 1,000) although it has been declining steadily

for four years. Population growth was also negative in the Northwest Territories in 2000 (-1.7 per 1,000): this was a reversal after the slight increase registered the previous year. Natural increase, which was down slightly, was not sufficient, as it was in 1999, to offset negative interprovincial migration, which deteriorated. Lastly, Nunavut is the Canadian territory with the highest population growth (20.6 per 1,000). It is worth noting that Alberta, with a rate in excess of 18 per 1,000, approaches Nunavut's figure, indicating the strength of that province's growth. For Nunavut, natural increase (20.2 per 1,000) is the main factor in population growth, since net migration is practically nil (0.4 per 1,000). The proportion of persons aged 65 and over is much lower in the three territories than in the provinces (Table 2).

# The Demographic Weight of Canada's Provinces

As a result of different growth rates, the demographic weight of the provinces within Confederation is changing. In this zero-sum game, some win and others lose. *Alberta, British Columbia and Ontario are the only three provinces to have seen their demographic weight within Canada increase between 1971 and the present*. Taken together, Alberta and British Columbia now account for almost a quarter of the Canadian population (23%); the corresponding proportion was 18% in 1971.

As Canada's second largest province, Quebec has seen the gap between it and neighbouring Ontario widen in the past 30 years. While Ontario has almost 40% of the Canadian population, Quebec now has less than a quarter of the total. In fact, in 2001, Western Canada (Alberta and British Columbia) had nearly the same demographic weight as Quebec, whereas in 1971, 28% of Canadians resided in Quebec compared with 18% in the two western provinces combined. Manitoba, Saskatchewan, Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland and Labrador have also seen their demographic weight decrease since 1971. It may be concluded that the population is tending to concentrate in the three most populous provinces other than Quebec, which are favoured by migration, whether international (Ontario and British Columbia) or interprovincial (Alberta). These provinces continue to show higher population growth rates than the other provinces.

Summary Table. Rates and Principal Demographic Indicators, Canada, Provinces and Territories, 1981-2000

Vegr Nfld Lab P.F.L N.S. N.R. Oue Ont M.													
	Year	Nfld.Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.					
Birth Rate	1981	17.7	15.4	14.1	14.9	14.6	13.9	15.5					
(per 1,000)	1986	14.1	15.0	13.9	13.5	12.6	14.2	15.6					
	1991	12.4	14.4	13.1	12.7	13.8	14.5	15.6					
	1996	10.2	12.5	11.3	10.9	11.7	12.6	13.7					
	1997	9.8	11.6	10.6	10.5	10.9	11.8	12.9					
	1998	9.1	11.0	10.2	10.5	10.4	11.7	12.7					
	1999	8.9	10.9	10.1	10.3	10.0	11.4	12.6					
	2000 (P)	8.8	10.8	9.9	10.2	9.7	11.2	12.4					
Mortality Rate	1981	5.6	8.0	8.1	7.3	6.5	7.1	8.3					
(per 1,000)	1986	6.1	8.7	8.2	7.5	7.0	7.2	8.2					
	1991	6.6	9.1	7.9	7.3	7.0	7.0	8.1					
	1996	7.0	9.3	8.3	7.8	7.2	7.1	8.4					
	1997	7.8	7.5	8.6	7.9	7.5	7.1	8.4					
	1998	7.7	8.8	8.6	8.4	7.4	7.0	8.6					
	1999	8.0	8.9	8.7	8.5	7.5	7.2	8.7					
	2000 (P)	8.2	8.9	8.9	8.6	7.2	7.3	8.8					
Total Fertility Rate	1981		1.88	1.62	1.68	1.57	1.58	1.83					
(number of children	1986	••	1.79	1.59	1.53	1.38	1.60	1.83					
per woman aged 15-49)	1991	1.44	1.86	1.59	1.55	1.65	1.67	1.97					
	1996	1.30	1.73	1.52	1.46	1.60	1.61	1.89					
	1997	1.27	1.63	1.45	1.43	1.52	1.53	1.81					
	1998	1.21	1.56	1.42	1.45	1.47	1.53	1.81					
	1999	1.26	1.58	1.43	1.42	1.45	1.52	1.81					
Total First Marriage	1981 M	653	701	686	660	546	692	722					
Rate (per 1,000)	F	631	668	672	649	560	685	712					
(males aged 17-49,	1986 M	589	711	595	600	430	623	615					
females aged 15-49)	F	580	742	631	626	442	658	660					
	1991 M	600	727	575	581	381	610	600					
	F	613	730	606	608	427	653	651					
	1996 M	607	747	586	581	327	579	582					
	F	624	782	597	618	363	609	626					
	1997 M	630	689	557	550	329	567	572					
	F	654	718	582	587	362	597	610					
	1998 M	650	694	565	557	317	567	593					
	F	670	727	579	591	350	599	635					
Rate of Natural	1981	12.0	7.3	6.0	7.6	8.0	6.7	7.2					
Increase (per 1,000)	1986	7.9	6.3	5.7	6.0	5.6	7.0	7.4					
	1991	5.8	5.3	5.2	5.4	6.8	7.5	7.5					
	1996	3.2	3.1	3.0	3.0	4.5	5.5	5.3					
	1997	2.0	4.1	2.0	2.6	3.5	4.8	4.5					
	1998	1.4	2.2	1.6	2.1	3.0	4.6	4.1					
	1999	1.0	2.0	1.3	1.8	2.5 2.5	4.3	3.8					
	2000 (P)	0.6	1.9	1.1	1.6		4.0	3.6					
Total Growth Rate	1981	-1.1	1.7	3.9	0.1	6.5	10.7	7.4					
(per 1,000)	1986	-2.8	1.1	4.8	1.7	9.1	18.3	6.3					
	1991	2.1	0.9	5.5	4.8	7.1	12.2	3.6					
	1996	-12.2	7.4	3.9	1.6	4.2	12.2	3.9					
	1997 (PD)	-13.3	2.4	2.6	0.9	3.2	13.2	0.8					
	1998 (PR)	-12.9	3.0	1.8	-1.0	3.2	11.1	2.6					
	1999 (PR)	-5.4	5.1	4.0	2.2	3.7	13.0	4.1					
	2000 (PR)	-7.1	1.8	1.6	1.3	3.3	14.7	3.2					

See notes at the end of this table.

Summary Table. Rates and Principal Demographic Indicators, Canada, Provinces and Territories, 1981-2000 - Continued

	Year	Sask.	Alta	B.C.	Yuk.	N.W.T.	Nun.	Can.
Birth Rate	1981	17.6	18.6	14.7	21.9	27.5 <sup>4</sup>		15.0
(per 1,000)	1986	17.0	18.1	14.0	19.5	27.6 <sup>4</sup>		14.3
	1991	15.3	16.5	13.5	19.8	33.14		14.4
	1996	13.1	13.6	11.9	13.9	19.4	29.4	12.3
	1997	12.6	13.0	11.3	14.8	17.4	28.7	11.6
	1998	12.5	13.1	10.8	12.6	16.5	25.3	11.3
	1999	12.4	12.8	10.4	12.3	16.4	25.5	11.1
	2000 (P)	12.3	12.2	10.0	12.1	16.6	25.7	10.8
Mortality Rate	1981	7.7	5.6	7.0	5.8	4.14		6.9
(per 1,000)	1986	7.8	5.6	7.1	4.6	4.34	••	7.1
	1991	8.1	5.6	7.1	4.0	4.84	••	7.0
	1996	8.6	5.9	7.1	3.8	3.6	4.7	7.2
	1997	8.5	5.8	6.9	3.8	3.3	4.6	7.2
	1998	8.7	5.8	7.0	4.3	3.5	5.4	7.2
	1999	8.8	5.7	7.0	4.4	3.6	5.5	7.3
	2000 (P)	9.0	5.7	6.7	4.6	3.7	5.5	7.2
Total Fertility Rate	1981	2.12	1.87	1.64	2.06	2.864		1.65
(number of children	1986	2.03	1.86	1.62	1.95	2.85 <sup>4</sup>	••	1.60
per woman aged 15-49)	1991	2.04	1.90	1.69	2.15	2.47	3.55	1.71
	1996	1.89	1.74	1.55	1.67	2.25	3.37	1.62
	1997	1.83	1.68	1.48	1.82	2.02	3.36	1.55
	1998	1.81	1.71	1.45	1.60	1.97	2.98	1.54
	1999	1.81	1.70	1.42	1.59	1.92	3.25	1.52
Total First Marriage	1981 M	710	644	684	693	457 <sup>4</sup>	••	645
Rate (per 1,000)	F	698	689	695	715	4744		651
(males aged 17-49,	1986 M	588	566	582	484	351 <sup>4</sup>	••	558
females aged 15-49)	F	628	616	623	573	399 <sup>4</sup>	••	589
	1991 M	622	597	601	470	284 <sup>4</sup>	••	548
	F	656	643	661	521	3114	••	594
	1996 M	628	569	521	453	2684	••	513
	F	653	613	563	486	282 <sup>4</sup>	••	549
	1997 M	632	565	502	411	260 <sup>4</sup>	••	505
	F	653	607	540	422	308 <sup>4</sup>	••	539
	1998 M F	638 645	571 614	506 538	427 467	282 <sup>4</sup> 313 <sup>4</sup>		506 539
Rate of Natural	1981	9.9	13.0	7.7	16.1	23.34		8.1
Increase (per 1,000)	1986	9.9	12.5	6.9	14.9	23.3 <sup>4</sup>		7.2
Therease (per 1,000)	1980	7.2	10.9	6.4	15.8	28.3 <sup>4</sup>		7.4
	1996	4.5	7.7	4.8	10.2	15.8	24.7	5.2
	1997	4.1	7.7	4.3	11.0	14.1	24.1	4.4
	1998	3.8	7.3	3.8	8.3	13.0	19.9	4.1
	1999	3.6	7.0	3.5	7.9	12.8	20.0	3.8
	2000 (P)	3.4	6.5	3.3	7.5	12.9	20.2	3.6
Total Growth Rate	1981	11.4	39.2	22.9	-22.7	37.0 <sup>4</sup>		12.6
(per 1,000)	1986	2.6	6.0	11.5	31.5	-1.74		11.4
1, /	1991	-1.2	15.9	25.3	41.4	38.94		11.4
	1996	4.2	16.5	22.9	20.0	1.5	16.7	10.4
	1997 (PD)	2.6	21.5	15.5	-6.5	-5.3	13.1	9.8
	1998 (PR)	2.8	22.9	6.5	-27.2	-12.3	18.2	8.0
	1999 (PR)	-2.2	15.8	8.4	-12.0	1.9	17.5	8.6
	2000 (PR)	-4.5	18.2	6.8	-18.5	-1.7	20.6	9.0

See notes at the end of this table.

Summary Table. Rates and Principal Demographic Indicators, Canada, Provinces and Territories, 1981-2000 - Continued

	Year	Nfld.Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.
Population Aged 65 + as a	1981	7.7	12.1	10.9	10.0	8.8	9.9	11.8
Percentage of the Total	1986	8.7	12.6	11.8	11.0	9.8	10.7	12.4
Population	1991	9.6	13.1	12.5	12.0	11.1	11.6	13.3
	1996	10.7	12.9	12.9	12.5	12.0	12.2	13.5
	1997 (PD)	11.0	12.9	13.0	12.7	12.2	12.3	13.6
	1998 (PR)	11.3	13.1	13.1	12.9	12.4	12.4	13.6
	1999 (PR) 2000 (PR)	11.5 11.7	13.1 13.2	13.2 13.3	12.9 13.0	12.6 12.8	12.5 12.6	13.6 13.6
Total Age Dependency 1981		78.2	76.0	67.0	69.5	55.9	58.9	67.7
Ratio (in percentage)	1986	68.1	68.6	61.1	62.5	52.2	55.0	64.0
	1991	59.7	67.3	59.1	59.7	53.5	55.5	65.5
	1996	54.3	63.5	57.7	56.5	54.2	57.4	65.2
	1997 (PD)	53.3	62.5	57.2	56.0	53.9	57.3	64.9
	1998 (PR)	52.5	61.9	56.6	55.4	53.5	57.1	64.6
	1999 (PR) 2000 (PR)	51.6 50.6	60.9 59.9	55.8 55.3	54.6 54.0	52.9 52.5	56.7 56.2	64.0 63.4
Life Expectancy	1981 M	72.1	72.9	71.0	71.1	71.2	72.4	72.3
at Birth (in years) <sup>2</sup>	F	78.8	80.5	78.6	79.1	78.9	79.2	78.9
	1986 M F	72.8 79.2	72.8	72.4 79.5	72.7 80.1	72.2 79.7	73.8 80.0	73.2 79.9
	1991 M F	73.7 79.5	73.2	73.7 80.3	74.2 80.9	73.8 80.9	75.0 80.9	74.6 80.7
	1996 M	74.4	74.6	74.8	74.8	74.6	75.9	75.1
	F	80.2	81.4	80.6	81.2	81.0	81.3	80.5
	1997 M	74.6	75.0	75.0	75.0	74.9	76.3	75.3
	F	80.0		80.5	81.1	81.2	81.4	80.6
	1998 M F	74.7 80.0	75.6 	75.3 80.8	75.0 81.3	75.1 81.3	76.6 81.6	75.3 80.7
	1999 M (P) F (P)	75.1 80.2	75.5 ••	75.6 81.3	75.0 81.5	75.4 81.5	76.9 81.8	75.2 80.8
Infant Mortality Rate	1981	10.7	13.2	11.5	10.9	8.5	8.8	11.9
(per 1,000)	1986	8.5	6.7	8.4	8.3	7.1	7.2	9.2
	1991	7.8	6.9	5.7	6.1	5.9	6.3	6.4
	1996	6.6	4.7	5.6	4.9	4.6	5.7	6.7
	1997	5.2	4.4	4.4	5.7	5.6	5.5	7.5
	1998	6.2	8.0	4.6	6.5	5.6	5.0	6.7
	1999	4.9	6.6	4.0	5.0	4.9	5.4	8.4
Abortion Rate	1981	3.9	0.3	14.1	4.1	9.5	25.0	10.0
(per 100 births) <sup>3</sup>	1986	3.6		14.1	3.3	14.7	20.2	15.9
	1991	6.0		15.1	6.2	15.1	20.7	15.2
	1996	9.1		17.8	7.7	22.6	21.1	21.5
	1997	9.6		19.5	8.1	24.0	19.9	23.2
	1998 1999	6.6 6.4		20.4 18.7	8.7 7.8	25.6 23.9	18.1	22.3 22.9
	1777	0.4	••	10.7	7.0	23.9	••	22.9

See notes at the end of this table.

Summary Table. Rates and Principal Demographic Indicators, Canada, Provinces and Territories, 1981-2000 - Concluded

	Year	Sask.	Alta	B.C.	Yuk.	N.W.T.	Nun.	Can.
Population Aged 65 +	1981	11.9	7.2	10.7	3.3	3.0 4		9.6
as a Percentage of the	1986	12.6	8.0	11.9	3.7	2.9 4		10.5
Total Population	1991	14.1	9.0	12.7	3.9	3.1	1.9	11.5
•	1996	14.5	9.8	12.5	4.4	3.5	2.1	12.1
	1997 (PD)	14.5	9.8	12.6	4.6	3.7	2.3	12.2
	1998 (PR)	14.5	9.9	12.8	4.9	3.9	2.4	12.3
	1999 (PR)	14.5	10.0	12.9	5.2	4.0	2.5	12.4
	2000 (PR)	14.5	10.1	13.0	5.5	4.1	2.6	12.5
Total Age Dependency	1981	73.3	57.4	58.6	53.4	77.9 4		59.8
Ratio (in percentage)	1986	70.7	56.2	57.4	50.3	69.0 <sup>4</sup>		56.3
	1991	73.8	58.1	57.7	47.5	56.2	86.0	56.8
	1996	72.5	57.7	55.9	47.2	56.9	84.2	57.1
	1997 (PD)	71.6	57.1	55.5	47.4	56.7	85.5	56.8
	1998 (PR)	70.7	56.4	55.2	47.1	56.6	85.3	56.5
	1999 (PR)	69.6	55.6	54.7	46.8	56.4	84.5	55.9
	2000 (PR)	68.8	54.8	54.1	46.2	56.0	84.2	55.4
Life Expectancy	1981 M	72.5	72.2	72.8				72.0
at Birth (in years) <sup>2</sup>	F	79.9	79.3	79.8	••			79.2
	1986 M	73.8	73.7	74.4	••			73.3
	F	80.5	80.2	80.7	••			80.0
	1991 M	75.2	75.1	75.3				74.6
	F	81.5	81.2	81.4				81.0
	1996 M	75.3	75.9	76.2	••			75.4
	F	81.4	81.3	81.8	••			81.2
	1997 M	75.5	76.2	76.5				75.8
	F	81.4	81.5	82.0				81.3
	1998 M	75.6	76.5	76.9				76.0
	F	81.6	81.7	82.2				81.5
	1999 M (P)	75.5	76.6	77.3	••			76.3
	F (P)	81.7	81.9	82.5				81.7
Infant Mortality Rate	1981	11.8	10.6	10.2	14.9	21.5 4		9.6
(per 1,000)	1986	9.0	9.0	8.5	24.8	12.0	26.6	7.9
	1991	8.2	6.7	6.5	10.6	7.7	18.0	6.4
	1996	8.4	6.2	5.1	0.0	4.9	20.1	5.6
	1997	8.9	4.8	4.7	8.4	6.9	14.8	5.5
	1998	7.1	4.8	4.2	5.1	17.6	19.5	5.3
	1999	6.3	5.8	3.8	2.6	16.7	10.9	5.3
Abortion Rate	1981	9.5	15.8	30.8	20.9	10.8 4		17.6
(per 100 births) <sup>3</sup>	1986	5.5	14.4	27.3	22.8	12.1 4		17.1
	1991	8.1	14.9	23.7	27.5	17.7 <sup>4</sup>		17.5
	1996	13.6	15.8	24.3	38.1	16.2 4		20.4
	1997	14.0	17.3	24.9	28.3	16.8 <sup>4</sup>		20.6
	1998	13.9	16.2	23.9	36.6	18.5 <sup>4</sup>		19.9
	1999	13.5	15.7	23.2	29.2	38.8	13.0	12.3

<sup>&</sup>lt;sup>1</sup> Ratio between population aged 0-17, 65+ and 18-64.

**Sources**: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section and Demography Division, Population Estimates Section.

<sup>&</sup>lt;sup>2</sup> Because of an absence of deaths in certain age groups, the mortality table could not be calculated.

<sup>&</sup>lt;sup>3</sup> Practised in hospitals in Canada.

<sup>&</sup>lt;sup>4</sup> Nunavut included.

<sup>&</sup>lt;sup>5</sup> For 1999, therapeutic abortions performed in Ontario have been excluded due to incomplete reporting. However, abortions performed on Ontario residents in other provinces are included.
(P) Preliminary.

<sup>(</sup>PD) Final postcensal estimates, (PR) Updated postcensal estimates, based on 1996 as of January 21, 2002.

# **BIRTHS AND FERTILITY**

In 1999, there were 337,249 births in Canada, some 5,200 less than in the previous year (Table A6, appended). *The number of births thus fell for the ninth consecutive year*. Compared with 1990, when the number of births peaked at 404,669, this was a decrease of 67,400. To illustrate the magnitude of the decrease, these 67,400 fewer births represent 20% of the births for the year and slightly more than the total number of births registered in the three Prairie provinces.

The total fertility rate represents the average number of children that a woman would have had if, throughout her reproductive life, she had the fertility observed in a given year. It too has been declining from year to year since 1990. For those wishing to follow the demographic situation, the change in this rate is a better indicator than the change in the number of births, since birth levels may vary as a result of changes in either the size of the population or its age distribution.

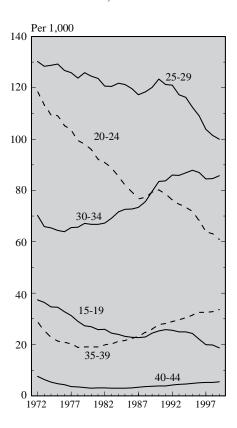
The total fertility rate declined 1.3% in 1999 to 1.52 children per woman. The decreases in this rate since 1997 are small—only about 1% per year—but it should be kept in mind that in 1997 the rate fell to an all-time low. Therefore, each new drop in the total fertility rate marks a new historic low.

The number of births fell in almost all provinces. Only Newfoundland and Labrador, Prince Edward Island and Alberta registered increases in births, and none of these gains was statistically significant. In the case of the two Atlantic provinces, the increase in births was also reflected in the total fertility rate, but this was not the case in Alberta, where fertility was down slightly. In Newfoundland and Labrador, the total fertility rate was up 4%, the strongest increase in Canada and the first recorded in that province since 1991. Apart from Newfoundland and Labrador, only Prince Edward Island and Nova Scotia showed gains in fertility, but neither was statistically significant.

The sharpest decreases in births were recorded in New Brunswick (-3.4%), Quebec (-3.0%) and British Columbia (-2.6%), whereas in the other provinces the decrease was smaller than in Canada as a whole (-1.5%) and was significant only for Ontario and Saskatchewan. The former three provinces also recorded the largest declines in the total fertility rate, with decreases of -2.1% in New Brunswick and British Columbia and -1.4% in Quebec.

In Alberta, the increase in the number of births is entirely attributable to population changes—in particular the strong population growth that the province is experiencing—since the total fertility rate actually declined (-0.6%). In Manitoba and Saskatchewan, unlike in the other Prairie province,

Figure 1. Fertility Rate by Age Group, Canada, 1972-1999



Sources: Statistics Canada, Health Statistics
Division, Health Status and Vital
Statistics Section, Demography
Division, Demographic Estimates
Section

the number of births fell but fertility remained stable. Thus, the total rate in these two provinces—the most fertile provinces in Canada—held steady at 1.81.

# Rates by Age

Fertility rates continue to decline for all age groups under age 30 and to increase for higher ages (Figure 1). The fall in fertility rates is especially marked among women aged 20 to 24, whose fertility is, on average, only half what their mothers' was when they were the same age. Except for a short period at the end of the 1980s, the fertility rate of women in this age group has been on a steep downward slope since the early 1970s and does not yet show any sign of levelling off. The fertility of women aged 25 to 29 has also been falling rapidly since the late 1980s. Whereas in 1972 it stood at 130 per 1,000, by 1999 it was only 100 per 1,000.

The decline in fertility among young women is accompanied by a rise in fertility among older women. The fertility rate for women aged 30-34 has been rising since 1976, when it was 64 per 1,000. In 1999, it reached 86 per 1,000. However, the upward trend in the fertility rate

of women in this age group appears to be tapering off. Between 1980 and 1990, it went from 67 per 1,000 to 84 per 1,000, an increase of 25%. By comparison, the rate of 86 per 1,000 registered in 1999 represents an increase of only 3% over 1990. On the other hand, the increase in the fertility of women aged 35 to 39 has been nearly steady since the early 1980s. However, it should be kept in mind that fertility in this age group is relatively low (34 per 1,000 in 1999).

Clearly, then, some childbearing is being postponed to later in life. And while a number of the births that young women seem increasingly inclined to postpone actually occur later in their lives, this is not always the case.

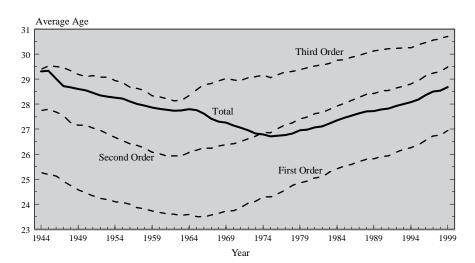


Figure 2. Average Age at Maternity by Birth Order, Canada, 1944-1999

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section, Demography Division, Demographic Estimates Section.

### Average Age at Maternity

The fertility tempo is continuing to slow down, a trend that began in the mid-1970s. Mothers' age at the birth of their children is increasing. Figure 2 shows the change over time in the average age of mothers at the birth of their children by birth order. Between the end of World War II and the mid-1970s, the average age at maternity fell steadily, from approximately 29.5 years in 1944 to less than 27 years in 1976. Part of the high birth rate of the baby-boom is attributable to this acceleration of the tempo, with young women having children earlier than those who went before them. The earlier cohorts had cut back their fertility during the 1930s and 1940s, years marked by the Great Depression and the war effort. Starting in the mid-1970s, the average age at maternity increased gradually but steadily, reaching 28.7 years in 1999.

But during the 1960s, fertility rapidly declined (Figure 3). In just over ten years, the total fertility rate fell from a peak of nearly four children per woman to approximately two children per woman. This drop in fertility was characterized by a decrease in higher-order births, which on average tend to occur at an older age. It follows that part of the lowering of the average age at maternity is attributable to the growing proportion of first and second births. This explains why the average age at maternity for all birth orders combined fell until 1974, whereas the average ages for each order (first, second and

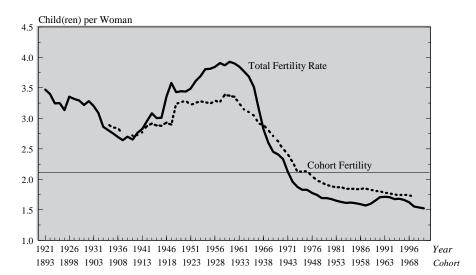


Figure 3. Total Fertility Rate, 1921-1999 and Completed Fertility, 1893-1971, Canada

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section, Demography Division, Demographic Estimates Section.

third) were all on the rise starting in 1964. This apparent paradox is, in fact, attributable only to the increasing weight of first and second births over time at the expense of higher-order births.

There is therefore an interaction between age at maternity and fertility level as measured by the total fertility rate. Just as the acceleration of the fertility tempo partly explains the high level of the total fertility rate during the baby-boom, part of the current weakness of the rate could be related to the slowing of the tempo. An increase in age at maternity is tending to reduce the period rate because the births that the successive cohorts of women will ultimately have are distributed over a longer period.

Recently, two demographers<sup>1</sup> proposed a simple method for "correcting" the period rate for the distortion created by changes in the fertility tempo. This correction is based on the annual change in the average age in the fertility tempo by birth order. According to these authors, the level of the proposed rate represents the level of the total fertility rate that would have been observed had there been no change in the tempo.

Bongaarts and Feeney (1998). "On the Tempo and Quantum of Fertility", Population and Development Review, 24(2): 271-291.

Child(ren) per Woman Corrected 1.9 1.8 1.7 1.6 1980 1982 1984 1986 1992 1994 1988 1990 1996 1998 Year

Figure 4. Total Fertility Rate Corrected and Uncorrected for the Tempo Effect, Canada, 1980-1998

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section, Demography Division, Demographic Estimates Section.

Figure 4 compares the change in the observed total fertility rate and the "corrected" rate for the period 1980-1998. As expected in light of the slowing of the fertility tempo, the corrected rate is higher than the observed rate throughout the period. The average of the observed rates is 1.64 children per woman and the correction is 0.17 children per woman, which means that without the change in the tempo, the fertility of Canadian women would have been estimated at 1.81 children on average during this period. While the corrected rate is consistently higher than the observed rate throughout the period, the gap between the two rates varies from year to year. The correction tends to be greater when the decrease in fertility is sizable, indicating that a portion of these annual changes does indeed result from a change in the tempo.<sup>2</sup> The largest gaps between the two rates occur in the years in which the total rate is down sharply from the year before. The correction was at its maximum during the period 1992-1997, when the total fertility rate went from 1.71 children per woman to 1.54 children per woman, and was at its minimum in the period 1987-1991, when fertility rose from 1.58 to 1.71 children per woman.

The correlation between the annual change in the total fertility rate and the correction made by this method is -0.49.

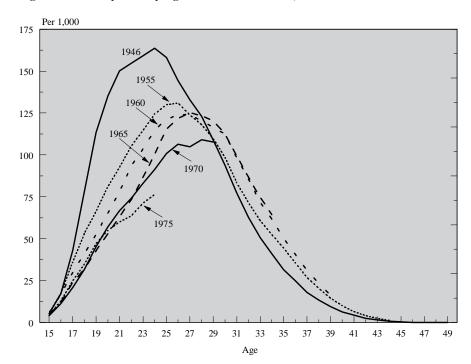


Figure 5. Fertility Rate by Age for Selected Cohorts, Canada

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section, Demography Division, Demographic Estimates Section.

#### **Change in Fertility Rates by Age Within Cohorts**

Because the change in the fertility tempo has such a substantial effect on the period rate, it is useful to pay greater attention to the change in fertility within cohorts. Figure 5 shows fertility rates by the age of the mother for selected cohorts, separated by five-year intervals. An exception is the 1946 cohort, which has been included in the chart to illustrate the fertility of a cohort that for all practical purposes replaced itself. The 1946 cohort had a completed fertility rate of 2.13 children per woman, quite close to the level needed to replace, on average, each woman in the mother cohort by one in the daughter cohort, taking the prevailing death rate into account. In the case of older women, each curve in Figure 5 represents the fertility rates of a cohort for its entire reproductive period. For younger women, the curve represents the fertility rate up to the age reached in 1999, the most recent year for which the relevant data are available.

Except for the curve for the 1970 cohort, the curves are similar in shape, with fertility rates rising rapidly from age 15 to the modal age, then declining

less rapidly. The 1970 cohort stands out by the fact that starting at age 26, the modal age for the most recent cohorts, the fertility rate of this cohort reaches a plateau and fertility remains at the maximum level (approximately 100 per 1,000) for a few years. In fact, at age 29 (in 1999), the fertility of this cohort has perhaps not yet started to decline. It should be noted that the peak of the fertility curve for the 1970 cohort, at 109 per 1,000, is much lower than that of the cohorts from 1955 to 1965 (nearly 125 per 1,000).

The slowing of the fertility tempo described above using the period rate is also seen in subsequent cohorts. From one cohort to the next, fertility prior to age 30 declines—rapidly at first, as may be seen from the large gap between the curves representing the fertility of the 1946 and 1955 cohorts, and then more slowly. After age 30, the fertility rates of the successive cohorts are on the rise for all cohorts, except for the 1965 cohort, for which the rates after age 30 are similar to those for the 1960 cohort. This corresponds to the slowing in the rise of fertility rates for women aged 30 to 34 that may be observed after 1990 in Figure 1.

The rise in fertility after age 30 is associated with women having the births that they postponed when they were younger. The juxtaposition of fertility rates after age 30 for the 1960 and 1965 cohorts is an indication that this catching-up process might have reached its limits. It may also be noted that fertility rates prior to age 23 in the 1970 cohort are practically indistinguishable from those for the 1965 cohort, which might suggest that fertility is stabilizing. On the other hand, between 23 and 29 years of age, the 1970 cohort exhibits considerably lower rates than those of the cohort five years ahead of it. Since the latter rates were themselves historically low, this instead suggests that the decline in fertility is continuing. The low fertility of the 1975 cohort between ages 20 and 24 points in the same direction. Since the area under each of the curves represents the completed fertility rate of the corresponding cohort, it appears that the completed fertility rate might well continue to decline for the most recent cohorts, because the cumulated fertility rate at age 30 for the women of the 1970 cohort, namely 1.0 child, is 10% lower than that of the 1965 cohort. Similarly, while it is somewhat early to draw conclusions, the cumulated fertility rate at age 25 for the 1975 cohort is 7% lower than that of the 1970 cohort.

# **Completed Fertility Rate of Recent Cohorts**

The level of the total fertility rate may vary from year to year because of conditions that affect fertility either positively or negatively. And as seen above, changes in the fertility tempo may also cause it to rise or fall. In both cases, the average number of children that the women of a cohort will ultimately bring into the world—the completed fertility rate—might not be affected.

This latter indicator therefore has an advantage over the total fertility rate in that it is much less influenced by period effects. Unfortunately, it is necessary to wait until the women of each cohort have reached the end of their reproductive life at age 50 before the completed fertility rate can be calculated. But as was seen in Figure 5, the fertility rate after age 30 of women born in 1965 is, for all practical purposes, identical to that of women born five years earlier. Furthermore, most of the childbearing that contributes to the completed fertility rate has already been completed by age 30. We may therefore, without risk of being greatly in error as to the level of the completed fertility rate that these women will actually attain, project it by extrapolating the observed change in fertility rates after age 30.

Figure 3 compares the change in the total fertility rate to the change in the completed fertility rate. Since the average age at maternity is 28, the curve representing the completed fertility rate is shifted by 28 years in order to better correspond to the period rate. Despite this, it may be seen that the match between the two indicators is not perfect. During the baby-boom, the total fertility rate was swelled by the acceleration of the tempo. No cohort shown in Figure 3 will have had a completed fertility rate exceeding 3.5 children per woman, whereas the total fertility rate approaches 4.0 children per woman for nearly 10 years. By contrast, since the mid-1960s, the completed fertility rate of the corresponding cohorts has exceeded the total fertility rate.

It appears that none of the baby-boom cohorts will replace itself. The completed fertility rate of the 1946 cohort almost reaches the replacement level, and the number of children per woman then declines from one cohort to the next. The 1950 cohort, the most recent to have reached age 50 and thus completed its reproductive period, had a completed fertility rate of 1.95 children. Fertility rates after age 40 are very low, and it is fairly safe to predict that the completed fertility rate of women born in 1960 will reach 1.83 children. Similarly, the completed fertility rate of the 1969 cohort, which was 30 years of age in 1999, will reach 1.72 children per women if the upward trend in fertility beyond the thirtieth birthday continues, or 1.67 children per woman if fertility stabilizes at the level observed in 1999.

# The Total Fertility Rate in Industrialized Countries

Canada is not the only industrialized country in which the total fertility rate is declining, as shown in Figure 6. Compared with other industrialized countries, Italy experienced a later but more rapid decline in fertility, and this has continued at lower levels than those observed either here or in Western and Northern Europe. Italy's rate reached a minimum of 1.2 children per woman in 1995. Other Mediterranean countries are also showing sharply falling rates: in Spain, fertility fell from 2.5 children per woman in 1978 to 1.2 children per woman in 1996; in Greece, the rate fell from 2.3 to 1.3 and in Portugal, from 2.3 to 1.4 during the same period.

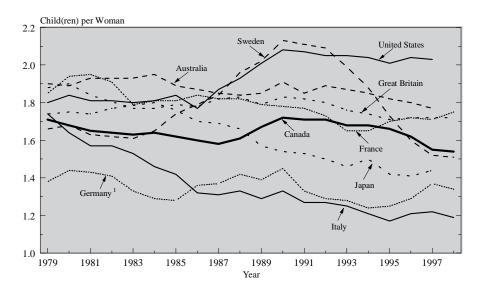


Figure 6. Total Fertility Rate for Selected Industrialized Countries, 1979-1998

<sup>1</sup> West Germany before 1990.

**Sources**: Monnier, A. "La conjoncture démographique: l'Europe et les pays développés d'outremer", *Population*, various annual publications and Statistics Canada, Demography Division.

The level of 1.2 children per woman has also been observed in the Czech Republic (1996). Perhaps the most spectacular drop in fertility has occurred in East Germany. Already low, that country's fertility rate collapsed following unification with West Germany and hovered around 0.8 children per woman between 1992 and 1995, thus pulling down the overall German level, which also approached 1.2 children per woman in the mid-1990s. The German fertility rate is now approaching 1.4 children per woman, the level that prevailed in West Germany before reunification.

Lastly, Japan is another industrialized which, like Canada, has a low fertility rate that continues to decline. At the start of the 1980s, fertility in Japan appeared to have stabilized at between 1.7 and 1.8 children per woman, which is slightly higher than the rate then observed in Canada. Since the mid-1980s, however, fertility has been declining almost continuously in Japan. It now stands at around 1.4 children per woman.

Other industrialized countries have higher fertility rates than those observed in Canada: the United States (2.1 children per woman in 2000), the United Kingdom (1.7 children per woman in 1998), Australia (1.8 children per woman

in 1997) and France (1.9 children per woman in 2000). The fertility of American women stands out from that observed in other industrialized countries, in that it alone has stayed at or exceeded the replacement level over a long period. Until the mid-1980s, fertility in the United States appeared to have stabilized at approximately 1.8 children per woman, but from 1987 to 1990, it showed a sizable increase that brought the period rate up to 2.0 children per woman, just under the replacement level. That rate, which is high in comparison with those observed in the other industrialized countries, has been maintained for a decade now. The other Anglo-Saxon countries, the United Kingdom and Australia, also show higher fertility levels than the other industrialized countries, with rates holding steady at around 1.7 or 1.8 children per woman during the past twenty years.

Sweden too experienced an increase in its total fertility rate comparable to the one observed in the United States. But unlike the U.S. increase, Sweden's was short-lived. Starting in 1992, Swedish women's fertility rate fell sharply. Like the Canadian rate, it now stands at approximately 1.5 children per woman, slightly below what it was before the increase.

Except for a short two-year period in 1993 and 1994, France's total fertility rate has been higher than Canada's. After bottoming out at 1.7 children per woman in 1994, the French rate has rebounded. Preliminary data indicate a rate of 1.9 children per woman in 2000.

# **MORTALITY**

Since the 2000 Report was published, Vital Statistics has released data on deaths for 1998 and 1999. In 1998, 218,100 deaths were registered in Canada. This was 2,400 more than in 1997, an increase of more than 1% (Table A9, appended). In 1999, the number of deaths rose again to 219,487, up 1,400 from 1998. This was a smaller increase (0.6%). Such successive increases do not seem abnormal, and they are likely to continue, since the Canadian population is continuing to grow and its age structure is shifting upward: there is a steady increase in both the number and the proportion of elderly persons.

The age distribution of deaths also shows that the majority of additional deaths registered in 1998 and 1999, namely 61% and 64% respectively, occurred at an age equal to or greater than 85. Deaths occurring between 90 and 99 years of age have doubled since 1981, and deaths of centenarians have more than tripled (Table 3). In all, the deaths of individuals aged 90 or over now account for nearly 12% of all deaths. The corresponding proportion in 1981 was 7%.

Conversely, 400 fewer deaths were registered in 1998 than in 1997 within the population under 20 years of age, and the trend was the same between

Table 3. Number of Deaths of Persons Aged 90 or Over, Canada, 1981-1999

Year	90-99	100 and Over	90 and Over	Total Deaths	Percentage of Total Deaths
1981	11,997	404	12,401	170,980	7.3
1982	12,927	505	13,432	174,238	7.7
1983	13,023	552	13,575	174,465	7.8
1984	13,922	639	14,561	175,682	8.3
1985	14,056	676	14,732	181,319	8.1
1986	14,689	741	15,430	184,218	8.4
1987	15,906	825	16,731	184,915	9.0
1988	16,069	880	16,949	189,980	8.9
1989	16,474	970	17,444	190,956	9.1
1990	17,266	1,033	18,299	191,956	9.5
1991	17,375	1,065	18,440	195,548	9.4
1992	17,858	1,115	18,973	196,524	9.7
1993	18,902	1,159	20,061	204,909	9.8
1994	19,007	1,215	20,222	207,066	9.8
1995	20,260	1,332	21,592	210,706	10.2
1996	21,216	1,399	22,615	212,876	10.6
1997	22,178	1,294	23,472	215,639	10.9
1998	23,255	1,389	24,644	218,088	11.3
1999	24,404	1,434	25,838	219,464	11.8

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section, Demography Division, Demographic Estimates Section and Research and Analysis Section. 1998 and 1999. Also, deaths of children under one year of age are decreasing (Table A9, appended). This trend may be explained by declining infant mortality (Summary Table), combined with fewer births.

#### Life Expectancy at Birth

While the number of deaths is increasing from year to year because of population growth and the aging of the population, mortality is continuing to weaken. *In 1999, life expectancy at birth reached 81.7 years for females and 76.3 years for males* (Table A10, appended). This was a gain of 0.4 years for females and 0.5 years for males compared with the figures for 1997. Life expectancy at birth grew by 0.2 years for females and 0.3 years for males between 1998 and 1999. In general, life expectancy gains have been on the rise since 1994.

According to the most recent data available for other developed countries, Canadian males enjoy one of the world's longest life expectancies at birth, with only Japanese, Swedish, Swiss and Icelandic males ahead of them (Table 4). Canadian females, for their part, rank behind only Japanese, French, Swedish, Swiss, Spanish and Italian females. The gap with our neighbours to the south is essentially stable in the case of females but has been shrinking in the past few years in the case of males. In 1997, the life expectancy of Canadian females exceeded that of American females by 2.1 years, while for males the difference was 2.2 years in favour of Canadians.

The life expectancy gains for males continue to exceed those for females, although the gap has narrowed recently. The difference in life expectancy at birth between males and females has been shrinking from year to year since the late 1970s. In 1999, it was 5.4 years in favour of females, two years less than the maximum of 7.5 years reached in 1978. However, it is interesting to note that males' life expectancy at birth in 1999 (76.3 years) had not yet reached the level already observed for females back in 1971 (76.6 years), almost thirty years earlier.

A breakdown of annual life expectancy gains by major age group shows the relative impact of the decline in mortality in each age group on gains in life expectancy at birth. The results of this breakdown are shown in Figure 7 for the age groups 0-19, 20-64 and 65 and over. As may be seen, for both males and females, recent upward or downward variations in life expectancy at birth are closely linked to those for mortality after age 65: the curve representing total gains is similar in shape to the curve for the latter age group, especially in the early 1990s. A sizable proportion of the major gains achieved in the late 1980s and at the start of the 1990s is due to the decline in mortality after age 65, especially for females. Similarly, the abrupt slowing in the rate of growth of life expectancy at birth during the first half of the 1990s largely resulted from the slowing of the decline in mortality among elderly persons during that period.

Table 4. Life Expectancy at Birth for Selected Industrialized Countries, 1978-1997

Year	Germany <sup>1</sup>	Australia	United States	France	Italy	Japan	Great Britain	Sweden	Canada
					Males				
1978	69.4	••	69.5	69.9		73.2		72.4	
1979	69.6	••	70.0	70.1		73.1		72.5	
1980	69.9	71.0	70.0	70.2	70.6	73.4	70.5	73.8	71.7
1981	70.2	71.4	70.4	70.4	71.1	73.8	70.8	73.1	72.0
1982	70.5	71.2	70.9	70.7	71.3	74.1	71.1	73.4	72.4
1983	70.8	72.1	71.0	70.7	71.4	74.3	71.4	73.6	72.7
1984	71.2	72.6	71.2	71.3	71.6	74.7	71.6	73.8	72.9
1985	71.5	72.4	71.1	71.3		74.8	71.7	74.8	73.1
1986	71.8	72.8	71.3	71.5		75.4	71.9	74.0	73.3
1987	71.5	73.0	71.5	72.0	72.6	75.6	72.2	74.2	73.5
1988	72.2	73.1	71.5	72.4	73.2	75.8	72.4	74.2	73.7
1989	72.6	73.3	71.8	72.5	73.5	75.9	72.7	74.8	74.0
1990	72.0	73.9	71.8	72.7	73.6	75.9	72.9	74.8	74.3
1991	72.1	74.4	72.0	72.9	73.6	76.1	73.2	74.9	74.6
1992	72.6	74.5	72.3	73.2	74.0	76.1	73.6	75.4	74.7
1993	72.7	75.0	72.2	73.3	74.4	76.3	73.6	75.5	74.9
1994	73.0	75.2	72.4	73.7	74.7	76.6	74.2	76.1	75.0
1995	73.3	75.2	72.5	73.9	74.9		74.0	76.2	75.2
1996	73.6	••	73.1	74.2	74.9		74.3	76.5	75.4
1997			73.6	74.6					75.8
					Females				
1978	76.1		77.2	78.0		78.5	••	78.6	
1979	76.4		77.8	78.3		78.5		78.7	
1980	76.6	78.1	77.4	78.4	77.4	78.7	76.6	79.7	78.9
1981	76.8	78.4	77.9	78.5		79.2	76.8	79.1	79.2
1982	77.1	78.2	78.1	78.9		79.7	77.0	79.4	79.4
1983	77.5	78.7	78.1	78.8	78.1	79.9	77.2	79.6	79.6
1984	77.8	79.1	78.2	79.4	78.1	80.4	77.3	79.9	79.8
1985	78.1	78.8	78.2	79.4		80.5	77.4	80.4	79.9
1986	78.4	79.1	78.3	79.6		81.3	77.6	80.0	80.0
1987	78.1	79.5	78.4	80.3	79.2	81.4	77.9	80.2	80.2
1988	78.7	79.5	78.3	80.5	79.7	81.6	78.0	80.0	80.4
1989	79.0	79.6	78.5	80.7	80.0	81.8	78.3	80.6	80.6
1990	78.4	80.1	78.8	80.9	80.2	81.8	78.5	80.4	80.7
1991	78.7	80.4	78.9	81.1	80.3	82.1	78.8	80.5	81.0
1992	79.2	80.4	79.1	81.4	80.6	82.2	79.0	80.8	81.0
1993	79.2	80.9	78.8	81.4	80.7	82.5	78.9	80.8	81.0
1994	79.5	81.1	79.0	81.8	81.2	83.0	79.4	81.4	81.0
1995	79.7	81.1	78.9	81.9	81.4		79.2	81.5	81.1
1996	79.9		79.1	82.0	81.3		79.5	81.5	81.2
1997			79.2	82.3			••		81.3

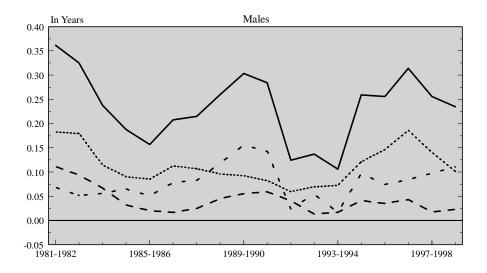
<sup>1</sup> West Germany before 1990.

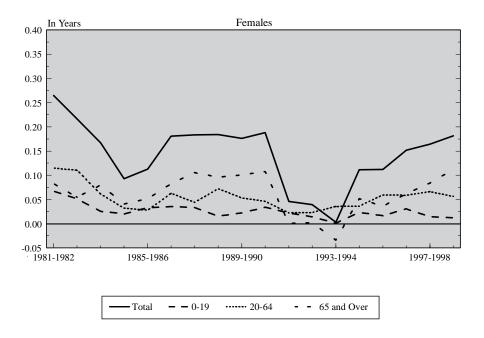
**Sources**: Monnier, A. "La conjoncture démographique: L'Europe et les pays développés d'outremer", *Population*, various years and Statistics Canada, Demography Division.

# Life Expectancy at 65 and 85 Years of Age

Life expectancy at age 65 has continued to grow, reaching 16.5 years for males and 20.3 for females in 1999 (Table A10, appended). After slowing substantially in the mid-1990s, growth has recently regained momentum and is now at nearly the levels registered in the late 1980s. Thus in 1999, gains in life expectancy at age 65 were roughly 0.2 years for both males and females.

Figure 7. Annual Gains in Life Expectancy Broken Down by Major Age Group, Canada, 1981-1999





Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section, Demography Division, Demographic Estimates Section and Research and Analysis Section.

Similarly, life expectancy at age 85 has been rising again since 1998, after six years of no change. In 1999, it reached 5.5 years for males and 6.9 years for females.

Gains on death continue. According to the 1981 mortality table, one Canadian male in five (20%) could expect to reach the age of 85, a proportion that climbed to two in five (41%) for females. According to mortality conditions observed in 1999, one male in three (30%) and one female in two (49%) could expect to reach his/her 85<sup>th</sup> birthday (Table A10, appended). This rapid improvement in survival probabilities leads to a steady increase in the number of elderly persons, seen especially in the population of centenarians. It should nevertheless be kept in mind that while some individuals have been able to reach ages in excess of 110 years (supercentenarians), these are cases of exceptional longevity.

# **Causes of Death**

In 1999, diseases of the circulatory system were the main cause of death in Canada, with standardized rates of 230.9 and 217.7 per 100,000 for males and females respectively (Table 5). Mortality related to diseases of the circulatory system—including deaths attributable to ischemic heart diseases and those due to cerebro-vascular diseases—continues to fall steadily, while mortality attributable to tumours and cancers remains relatively stable.

The main point to note in Table 5 is how different the trends for males and females are for death attributable to malignant tumours of the respiratory system. While the recent trend is toward stabilization of the death rate for this cause among males, the corresponding rate for females continues to rise. This is clearly linked to recent smoking trends in Canada, with the "young" female cohorts containing a larger proportion of smokers than those that they replace.

# **Deaths Attributable to HIV**

After the spectacular drop in deaths attributable to HIV between 1996 and 1997, the decline, which began in the mid-1990s, slowed considerably in 1998 and 1999. It is nevertheless worth noting that in 1998, 25% fewer deaths due to HIV were registered among males than in the previous years. Admittedly, this decrease was only half as large as in the previous year, but it was nonetheless significant. Among females, the drop was more modest and is not statistically significant. In 1999, 362 deaths were registered among males, only a third as many as four years earlier! Among females, the number of HIV-related deaths declined slightly in 1999, but this decrease is not statistically significant. There were 69 deaths among women, 1.5 times less than in 1996. This change is more related to the progress made in treating persons infected by the virus than to a decrease in the prevalence of the disease. The incidence

Table 5. Evolution of Mortality from Diseases of the Circulatory System and from Tumours, by Sex, Canada, 1971-1999<sup>1</sup>

Year	Diseases of the Circulatory System <sup>2</sup>	Ischemic Heart Diseases <sup>3</sup>	Cerebro-vascular Diseases <sup>4</sup>	Tumors and Cancers <sup>5</sup>	Malignant Tumors of the Respiratory System <sup>6</sup>
			Males		'
1971	511.74	346.69	89.66	199.29	55.73
1976	483.42	325.55	79.33	203.39	63.24
1981	411.99	272.00	63.87	209.92	69.44
1982	402.81	264.74	59.66	213.74	73.33
1983	387.30	253.67	56.18	213.11	74.05
1984	370.19	242.32	54.66	217.52	75.60
1985	361.19	236.15	51.80	217.79	73.55
1986	351.83	227.36	50.11	218.55	74.39
1987	333.97	216.33	48.96	217.48	74.15
1988	325.48	210.16	46.80	222.20	76.49
1989	312.07	198.42	47.22	218.56	75.90
1990	288.48	181.90	45.20	216.10	74.84
1991	281.59	176.31	43.43	216.31	73.84
1992	275.35	171.72	42.36	214.14	72.33
1993	276.87	171.67	44.18	212.62	72.30
1994	265.92	163.70	42.77	211.50	70.40
1995	260.37	158.37	42.52	208.91	67.83
1996	253.48	154.15	40.88	206.29	67.25
1997	245.12	147.00	40.75	200.62	64.33
1998	238.69	141.99	38.40	200.88	64.54
1999	230.90	137.39	36.59	199.51	64.54
			Females		
1971	471.63	263.90	119.57	167.59	10.08
1976	426.87	239.99	103.36	164.50	14.24
1981	361.41	197.39	82.89	167.81	20.40
1982	356.35	194.77	79.65	168.20	22.34
1983	339.19	183.88	75.20	168.56	22.55
1984	328.23	180.79	71.13	171.59	25.20
1985	319.47	172.65	69.75	174.92	27.04
1986	315.86	170.83	69.03	174.88	27.16
1987	299.24	161.74	64.54	174.17	28.72
1988	293.75	156.76	64.85	176.05	30.64
1989	280.83	148.58	62.82	173.87	30.54
1990	265.75	141.56	58.32	173.78	31.20
1991	261.09	137.91	57.71	174.73	33.43
1992	253.03	130.83	57.64	173.93	33.20
1993	255.25	130.97	59.43	176.83	35.79
1994	249.94	127.23	57.12	176.87	35.92
1995	244.67	123.98	55.90	173.63	35.64
1996	240.22	120.53	55.20	177.35	37.85
1997	234.37	116.82	55.22	170.43	36.65
1998	226.47	111.29	52.28	173.11	39.03
1999	217.70	106.08	49.95	171.61	39.54

 $<sup>^{1}</sup>$  Rate per 100,000, standardized on the structure by age and sex of the 1991 population. The rates can't be compared between sexes but the tendencies can.

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section and Demography Division, Demographic Estimates Section.

<sup>&</sup>lt;sup>2</sup> Causes 390-459, 9th Revision of the I.C.D. <sup>3</sup> Causes 410-414, 9th Revision of the I.C.D.

<sup>&</sup>lt;sup>4</sup> Causes 430-438, 9th Revision of the I.C.D.

<sup>&</sup>lt;sup>5</sup> Causes 140-239, 9th Revision of the I.C.D.

<sup>&</sup>lt;sup>6</sup> Causes 160-165, 9th Revision of the I.C.D.

of HIV, for example, is declining much less rapidly than the annual number of deaths attributable to it. In 1999, 2,231 new cases of persons infected with HIV were detected in Canada, down 25% from the 2,989 cases reported in 1995<sup>3</sup>.

#### Suicide

The actual number of suicides is difficult to estimate precisely, since some violent deaths, such as those caused by road accidents, may in fact be "disguised" suicides. It is therefore likely that in the figures shown, the real situation is somewhat underestimated.

In 1999, 4,074 suicides were registered in Canada, up 8% from the 3,776 suicide deaths registered five years earlier. In order to compare variations over several years, it is preferable to use rates standardized on the 1991 population. According to this indicator, suicide mortality is nearly stable in Canada. However, the Canada-wide trend masks a great disparity that becomes evident when the change over time in each province is examined (Table 6). Suicide deaths declined for both sexes during the 1990s in Ontario and all provinces to the west of it. Since 1970, the situation has especially improved in British Columbia, where the suicide death rate has fallen from 25 to 17 per 100,000 for males and from 11 to 4 per 100,000 for females, thus moving the province from first to seventh place for males and from first to fifth place for females. In Alberta, death by suicide has remained nearly stable throughout the period, and this province now has the highest suicide death rates west of Quebec. The latter province has the highest such rates in Canada, for both males and females. Furthermore, the Quebec rates are on the rise, in contrast with relatively stable or declining rates elsewhere. A major gap with the rest of Canada therefore continued to widen in the period 1995-1999, with the suicide death rate reaching 31 per 100,000 and 8 per 100,00 for male and female Quebecers respectively. For both sexes, the suicide death rate is therefore 50% higher in Quebec than in Canada as a whole. For males in this province, the suicide death rate has almost reached the rate observed in the Northwest Territories and Yukon. Among females, the beginning of a decline in suicide mortality in the early 1990s was not confirmed: the rate rose to 8 per 100,000 during the period 1995-1999, its highest level in 30 years, returning Quebec to the unenviable first-place position that Alberta occupied during the first half of the 1990s.

The situation has remained nearly stable in the Maritime provinces, except in Newfoundland and Labrador, where the suicide death rate has dropped substantially. As in the past three decades, the province of Newfoundland and Labrador has the lowest suicide death rate in Canada. For the three territories

<sup>&</sup>lt;sup>3</sup> Health Canada (2000). Aids and HIV in Canada., HIV/Aids Epidemiology Update, April 2000, Ottawa, Canada.

Table 6. Standardized Suicide Death Rates (per 100,000), Canada, Provinces and Territories, 1970-1999

ъ :			Rate	(Rank)		
Province	1970-1974	1975-1979	1980-1984	1985-1989	1990-1994	1995-1999
			M	ales		
Newfoundland and Labrador	8.3 (9)	7.5 (9)	10.0 (9)	9.5 (9)	14.8 (9)	11.7 (9)
Prince Edward Island <sup>2</sup>	23.3	26.4	18.6	13.6	21.6	17.0
Nova Scotia	19.5 (6)	20.1 (6)	20.0 (7)	19.5 (7)	19.3 (7)	19.7 (5)
New Brunswick	14.7 (8)	19.7 (7)	22.5 (4)	20.8 (4)	22.0 (3)	23.0 (3)
Quebec	16.3 (7)	18.6 (8)	25.5 (1)	26.1 (1)	27.7 (1)	31.3 (1)
Ontario	20.0 (5)	20.5 (5)	18.8 (8)	17.1 (8)	14.9 (8)	13.9 (8)
Manitoba	21.7 (2)	23.5 (4)	21.2 (6)	21.3 (3)	19.6 (5)	18.0 (6)
Saskatchewan	21.6 (3)	23.7 (3)	25.1 (2)	20.8 (4)	21.9 (4)	20.6 (4)
Alberta	21.6 (3)	25.3 (1)	24.5 (3)	24.0 (2)	25.8 (2)	23.4 (2)
British Columbia	25.0 (1)	24.2 (2)	21.8 (5)	19.8 (6)	19.4 (6)	17.1 (7)
Yukon <sup>2</sup>	69.1	34.6	44.7	45.8	31.2	33.2
Northwest Territories <sup>2</sup>	30.1	39.4	40.2	24.5	25.8	33.7
Nunavut <sup>2</sup>	••	••	••	••	125.4	115.7
Canada	19.5	20.8	21.8	20.8	20.6	20.4
			Fer	nales		
Newfoundland and Labrador	1.6 (9)	0.9 (9)	1.3 (9)	1.2 (9)	2.8 (9)	1.9 (9)
Prince Edward Island <sup>2</sup>	1.7	4.3	2.7	3.3	2.7	3.3
Nova Scotia	3.9 (7)	4.5 (7)	3.5 (7)	3.6 (8)	3.9 (7)	3.8 (7)
New Brunswick	3.3 (8)	4.4 (8)	3.4 (8)	4.3 (7)	3.6 (8)	3.5 (8)
Quebec	5.7 (6)	6.6 (6)	7.8 (2)	7.2 (1)	6.7 (2)	8.2 (1)
Ontario	9.2 (2)	8.2 (3)	6.9 (3)	5.6 (4)	4.3 (6)	3.9 (6)
Manitoba	7.5 (4)	7.7 (4)	5.7 (6)	6.1 (3)	4.6 (5)	4.4 ( 3 )
Saskatchewan	5.9 (5)	7.6 (5)	6.0 (5)	5.2 (6)	5.2 (4)	4.3 (4)
Alberta	7.6 (3)	8.5 (2)	8.1 (1)	6.3 (2)	7.2 (1)	6.2 (2)
British Columbia	11.4 (1)	9.9 (1)	6.9 (3)	5.6 (4)	5.3 (3)	4.2 (5)
Yukon <sup>2</sup>	25.5	11.6	12.1	8.7	1.4	6.4
Northwest Territories <sup>2</sup>	6.1	6.8	9.3	4.7	3.0	3.0
Nunavut <sup>2</sup>	••	••	••		27.4	35.8
Canada	7.6	7.5	6.8	5.9	5.3	5.2

<sup>&</sup>lt;sup>1</sup> Rate per 100,000, standardized on the structure by age and sex of the 1991 population. The rates can't be compared between sexes but the tendencies can.

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section, Demography Division, Demographic Estimates Section and Research and Analysis Section.

and Prince Edward Island, the figures are low and the rates shown are based on only a small number of events. Therefore it is not possible to comment on the evolution of the suicide death rate in these regions. However, the rates shown in the table give an idea of the scope of the phenomenon.

<sup>&</sup>lt;sup>2</sup> The variations can be random because of the low counts.

Table 7. Suicide Death Rates (per 100,000) by Sex and Age Group, Quebec and Rest of Canada, 1995-1999

		Males			Females	
Age Group	Quebec (1)	Rest of Canada (2)	Ratio (1) / (2)	Quebec (1)	Rest of Canada (2)	Ratio (1) / (2)
15-19	32.31	15.14	2.13	8.50	4.06	2.10
20-24	43.23	21.49	2.01	7.13	3.54	2.01
25-29	40.37	20.47	1.97	8.35	4.77	1.75
30-34	43.07	22.08	1.95	8.86	5.02	1.76
35-39	44.24	24.19	1.83	12.08	6.30	1.92
40-44	44.99	23.90	1.88	15.52	6.84	2.27
45-49	44.20	22.62	1.95	15.58	7.14	2.18
50-54	38.26	22.64	1.69	11.96	6.77	1.77
55-59	33.59	20.72	1.62	10.76	5.43	1.98
60-64	29.56	18.26	1.62	8.37	4.89	1.71
65-69	26.20	17.81	1.47	7.27	4.49	1.62
70-74	30.93	20.75	1.49	6.29	4.64	1.35
75-79	31.98	20.49	1.56	4.81	4.71	1.02
80-84	25.46	29.26	0.87	3.99	4.67	0.85
85-89	32.42	32.16	1.01	4.09	3.52	1.16
90 and Over	27.16	36.40	0.75	2.03	3.89	0.52

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section, Demography Division, Demographic Estimates Section and Research and Analysis Section.

# Age-based Rates for Quebec, Ontario and Canada in 1999

Table 7 shows differences in the suicide death rate between Quebec and the other provinces by age group. The evolution of suicide by age is similar for males and females, although the levels are higher for males. For males, suicide mortality rates are high for young adults, and they peak at between 35 and 45 years of age. They then decline slightly to age 65, after which they rise again, although more modestly. For females, the maximum suicide mortality rate is reached between ages 45 and 49, after which it gradually declines. There is no indication that retirement affects suicide mortality rates for women.

The ratio of Quebec suicide mortality rates to those of other provinces serves to highlight the age groups in which the differences between Quebec and the other provinces are the largest. A ratio of one indicates that the rates by age are identical in the two regions; when the ratio exceeds one, this means that the rates by age are higher than those observed for the rest of Canada. Table 7 shows that before age 50, suicide mortality is approximately twice as high in Quebec as in the rest of Canada. Beyond this age, the ratio gradually declines to one, even falling slightly below that level in the 80-84 age group. Thus it seems clear that the high level of suicide mortality in Quebec largely results from the behaviour of young adults, who have much higher rates than in the rest of Canada.

#### INTERNATIONAL IMMIGRATION

In 2000, Canada received 227,300 immigrants, an increase of some 37,400 over 1999 (Table A11, appended). The number of immigrants received was therefore up 20% from the previous year. The immigration rate reached 7 per 1,000, and the number of immigrants exceeded 225,000 for the first time since 1996. However, this was still short of the levels in excess of 250,000 that were registered in 1992 and 1993 (Figure 8). During the 1990s, the annual number of immigrants admitted to Canada exceeded 200,000 except in 1998 and 1999. Statistics for that decade show the strength of immigration to Canada during a ten-year period in which more than 2,200,000 persons entered the country as immigrants.

Since the Immigration Plan called for the admission of 200,000 to 225,000 persons, its objectives were surpassed in 2000 (Table 8). The goal formulated by Citizenship and Immigration Canada is to attain an annual immigration level equal to 1% of the Canadian population. The level recorded in 2000 is still far from that figure, since it would have been necessary to admit just over 300,000 immigrants, or 72,700 more than the actual number. Since the end of World War II, the 1% mark has been reached or exceeded only seven times, in the years from 1951 to 1954 and in 1956, 1957 and 1967. At no time during this period has the number of immigrants ever reached 300,000. The only year that came close was 1957, with 270,000 immigrants admitted, representing

1.7% of the population at that time. For 2002, Citizenship and Immigration planned to admit between 210,000 and 235,000 immigrants. This is 10,000 more than the objective for 2001, which was unchanged from 2000.

# **Immigrant Classes**

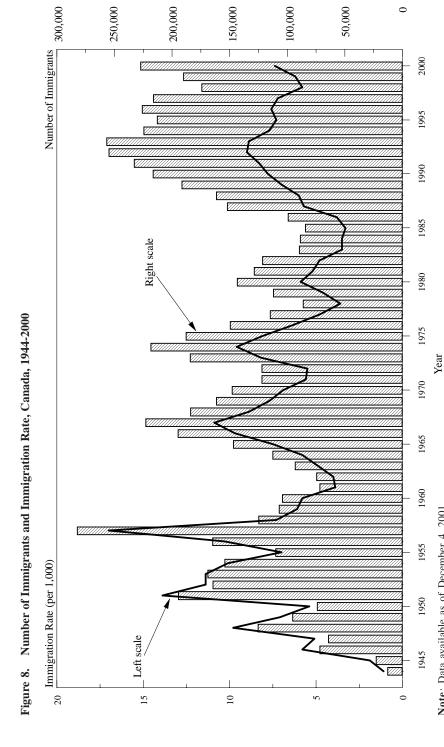
Approximately 132,000 persons, or 58% of the total number of immigrants received in 2000, entered under the economic component of the immigration policy (Table 9). This was the highest number in the past twenty years and was the same proportion as in 1997. This number slightly exceeds the

Table 8. Number of Immigrants Admitted and Number Planned by Class According to the Immigration Plan, Canada, 2000

Class	Number Planned	Observed Number
Family	57,000 - 61,000	60,552
Economic	116,900 - 130,700	132,020
Other <sup>1</sup>	4,000	4,706
Total Immigrants	177,900 - 195,700	197,278
Total Refugees	22,100 - 29,300	30,058
Total	200,000 - 225,000	227,336

Includes deferred removal order & post determination refugees, live-in caregivers, provincial/territorial nominees, backlog, retirees and not stated.

Note: Data available as of December 4, 2001. Source: Citizenship and Immigration Canada, Internet site, December 4, 2001.



Note: Data available as of December 4, 2001.

Sources: Employment and Immigration Canada, *Immigration Statistics* and after 1980, Citizenship and Immigration Canada.

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Table 9. Immigrants to Canada by Class, 1980-2000

Number   N	Table 9.	immigrants to	o Canada by Cl	ass, 1980-2000		
1980	Year	Family	Economic	Refugees	Others <sup>1</sup>	Total
1981   50,535   56,702   15,062   6,495   128,794   1982   50,187   51,148   17,002   2,994   121,331   1983   48,987   24,186   14,064   2,140   89,377   1984   44,593   26,097   15,556   2,353   88,599   1985   39,355   26,113   16,769   2,102   84,339   1986   42,470   35,837   19,199   1,835   99,341   1987   53,796   74,100   21,466   2,666   152,028   1988   51,397   80,221   26,740   3,172   161,530   1989   60,939   90,141   36,865   3,570   191,515   1990   74,367   95,638   36,101   10,315   216421   1991   85,949   80,007   35,880   30,936   232,772   1992   96,797   82,285   37,024   38,752   254,858   1993   110,445   95,653   24,895   25,771   256,764   1994   93,718   96,574   19,750   14,352   224,394   1995   77,228   100,910   27,763   6,970   212,871   1996   68,320   120,282   28,342   9,108   226,052   1997   59,959   125,471   24,134   6,466   216,030   1998   50,886   94,974   22,700   5,612   174,172   1998   50,886   94,974   22,700   5,612   174,172   1998   54,87   24,40   25,5   100,0   1982   41,4   42,2   14,0   2,5   100,0   1982   41,4   42,2   14,0   2,5   100,0   1983   54,8   27,1   15,7   2,4   100,0   1983   54,8   27,1   15,7   2,4   100,0   1985   46,7   31,0   19,9   2,5   100,0   1986   42,8   36,1   19,3   1,8   100,0   1987   35,4   48,7   14,1   1,8   100,0   1987   35,4   48,7   14,1   1,8   100,0   1988   31,8   47,1   19,2   1,9   100,0   1989   31,8   47,1   19,2   1,9   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999   34,4   44,2   16,7   4,8   100,0   1999				Number		
1982   50,187   51,148   17,002   2,994   121,331     1983   48,987   24,186   14,064   2,140   89,377     1984   44,593   26,097   15,556   2,353   88,599     1985   39,355   26,113   16,769   2,102   84,339     1986   42,470   35,837   19,199   1,835   99,341     1987   53,796   74,100   21,466   2,666   152,028     1988   51,397   80,221   26,740   31,72   161,530     1989   60,939   90,141   36,865   3,570   191,515     1990   74,367   95,638   36,101   10,315   216,421     1991   85,949   80,007   35,880   30,936   232,772     1992   96,797   82,285   37,024   38,752   254,858     1993   110,445   95,653   24,895   25,771   256,764     1994   93,718   96,574   19,750   14,352   224,394     1995   77,228   100,910   27,763   6,970   212,871     1996   68,320   120,282   28,342   9,108   226,052     1997   59,959   125,471   24,134   6,466   216,030     1998   50,886   94,974   22,700   5,612   174,172     1999   55,272   105,463   24,378   4,831   189,944     2000   60,552   132,020   30,058   4,706   227,336     1988   54,8   27,1   15,7   2,4   100,0     1984   50,3   29.5   17,6   2,7   100,0     1985   46,7   31,0   19,9   2,5   100,0     1986   42,8   36,1   19,3   1.8   100,0     1987   35,4   48,7   14,1   1.8   100,0     1988   31,8   47,1   19,2   1,9   100,0     1988   31,8   47,1   19,2   1,9   100,0     1988   31,8   47,1   19,2   1,9   100,0     1999   34,4   44,2   16,7   4,8   100,0     1990   34,4   44,2   16,7   4,8   100,0     1991   36,9   34,4   41,5   13,3   100,0     1992   38,0   32,3   14,5   15,2   100,0     1994   41,8   43,0   8,8   6,4   100,0     1995   36,3   47,4   13,0   3,3   100,0     1996   30,2   53,2   12,5   4,0   100,0     1997   27,8   58,1   11,2   3,0   100,0     1999   29,1   55,5   12,8   2,5   100,0     1999   29,1   55,5   12,8   2,5   100,0	1980	49,441	46,431	40,658	6,969	143,499
1983	1981	50,535	56,702	15,062	6,495	128,794
1984	1982	50,187	51,148	17,002	2,994	121,331
1985	1983	48,987	24,186	14,064	2,140	89,377
1986	1984	44,593	26,097	15,556	2,353	88,599
1987	1985	39,355	26,113	16,769	2,102	84,339
1988	1986	42,470	35,837	19,199	1,835	99,341
1989	1987	53,796	74,100	21,466	2,666	152,028
1990	1988	51,397	80,221	26,740	3,172	161,530
1991	1989	60,939	90,141	36,865	3,570	191,515
1992	1990	74,367	95,638	36,101	10,315	216,421
1993	1991	85,949	80,007	35,880	30,936	232,772
1994	1992	96,797	82,285	37,024	38,752	254,858
1995	1993	110,445	95,653	24,895	25,771	256,764
1996	1994	93,718	96,574	19,750	14,352	224,394
1997	1995	77,228	100,910	27,763	6,970	212,871
1997	1996	68,320	120,282	28,342	9,108	226,052
1999	1997	59,959	125,471	24,134	6,466	216,030
1999	1998	50,886	94,974	22,700	5,612	174,172
Percentage   Per	1999		*	· ·	•	· ·
1980         34.5         32.4         28.3         4.9         100.0           1981         39.2         44.0         11.7         5.0         100.0           1982         41.4         42.2         14.0         2.5         100.0           1983         54.8         27.1         15.7         2.4         100.0           1984         50.3         29.5         17.6         2.7         100.0           1985         46.7         31.0         19.9         2.5         100.0           1986         42.8         36.1         19.3         1.8         100.0           1987         35.4         48.7         14.1         1.8         100.0           1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3	2000		· ·	· ·		
1981         39.2         44.0         11.7         5.0         100.0           1982         41.4         42.2         14.0         2.5         100.0           1983         54.8         27.1         15.7         2.4         100.0           1984         50.3         29.5         17.6         2.7         100.0           1985         46.7         31.0         19.9         2.5         100.0           1986         42.8         36.1         19.3         1.8         100.0           1987         35.4         48.7         14.1         1.8         100.0           1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0	-			Percentage		
1982         41.4         42.2         14.0         2.5         100.0           1983         54.8         27.1         15.7         2.4         100.0           1984         50.3         29.5         17.6         2.7         100.0           1985         46.7         31.0         19.9         2.5         100.0           1986         42.8         36.1         19.3         1.8         100.0           1987         35.4         48.7         14.1         1.8         100.0           1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4	1980	34.5	32.4	28.3	4.9	100.0
1983         54.8         27.1         15.7         2.4         100.0           1984         50.3         29.5         17.6         2.7         100.0           1985         46.7         31.0         19.9         2.5         100.0           1986         42.8         36.1         19.3         1.8         100.0           1987         35.4         48.7         14.1         1.8         100.0           1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2	1981	39.2	44.0	11.7	5.0	100.0
1984         50.3         29.5         17.6         2.7         100.0           1985         46.7         31.0         19.9         2.5         100.0           1986         42.8         36.1         19.3         1.8         100.0           1987         35.4         48.7         14.1         1.8         100.0           1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2	1982	41.4	42.2	14.0	2.5	100.0
1985         46.7         31.0         19.9         2.5         100.0           1986         42.8         36.1         19.3         1.8         100.0           1987         35.4         48.7         14.1         1.8         100.0           1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2         12.5         4.0         100.0           1997         27.8         58.1         11.2         3.0         100.0           1998         29.2         54.5	1983	54.8	27.1	15.7	2.4	100.0
1986         42.8         36.1         19.3         1.8         100.0           1987         35.4         48.7         14.1         1.8         100.0           1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2         12.5         4.0         100.0           1997         27.8         58.1         11.2         3.0         100.0           1998         29.2         54.5         13.0         3.2         100.0           1999         29.1         55.5	1984	50.3	29.5	17.6	2.7	100.0
1987         35.4         48.7         14.1         1.8         100.0           1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2         12.5         4.0         100.0           1997         27.8         58.1         11.2         3.0         100.0           1998         29.2         54.5         13.0         3.2         100.0           1999         29.1         55.5         12.8         2.5         100.0	1985	46.7	31.0	19.9	2.5	100.0
1988         31.8         49.7         16.6         2.0         100.0           1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2         12.5         4.0         100.0           1997         27.8         58.1         11.2         3.0         100.0           1998         29.2         54.5         13.0         3.2         100.0           1999         29.1         55.5         12.8         2.5         100.0	1986	42.8	36.1	19.3	1.8	100.0
1989         31.8         47.1         19.2         1.9         100.0           1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2         12.5         4.0         100.0           1997         27.8         58.1         11.2         3.0         100.0           1998         29.2         54.5         13.0         3.2         100.0           1999         29.1         55.5         12.8         2.5         100.0	1987	35.4	48.7	14.1	1.8	100.0
1990         34.4         44.2         16.7         4.8         100.0           1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2         12.5         4.0         100.0           1997         27.8         58.1         11.2         3.0         100.0           1998         29.2         54.5         13.0         3.2         100.0           1999         29.1         55.5         12.8         2.5         100.0	1988	31.8	49.7	16.6	2.0	100.0
1991         36.9         34.4         15.4         13.3         100.0           1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2         12.5         4.0         100.0           1997         27.8         58.1         11.2         3.0         100.0           1998         29.2         54.5         13.0         3.2         100.0           1999         29.1         55.5         12.8         2.5         100.0	1989	31.8	47.1	19.2	1.9	100.0
1992         38.0         32.3         14.5         15.2         100.0           1993         43.0         37.3         9.7         10.0         100.0           1994         41.8         43.0         8.8         6.4         100.0           1995         36.3         47.4         13.0         3.3         100.0           1996         30.2         53.2         12.5         4.0         100.0           1997         27.8         58.1         11.2         3.0         100.0           1998         29.2         54.5         13.0         3.2         100.0           1999         29.1         55.5         12.8         2.5         100.0	1990	34.4	44.2	16.7	4.8	100.0
1993     43.0     37.3     9.7     10.0     100.0       1994     41.8     43.0     8.8     6.4     100.0       1995     36.3     47.4     13.0     3.3     100.0       1996     30.2     53.2     12.5     4.0     100.0       1997     27.8     58.1     11.2     3.0     100.0       1998     29.2     54.5     13.0     3.2     100.0       1999     29.1     55.5     12.8     2.5     100.0	1991	36.9	34.4	15.4	13.3	100.0
1994     41.8     43.0     8.8     6.4     100.0       1995     36.3     47.4     13.0     3.3     100.0       1996     30.2     53.2     12.5     4.0     100.0       1997     27.8     58.1     11.2     3.0     100.0       1998     29.2     54.5     13.0     3.2     100.0       1999     29.1     55.5     12.8     2.5     100.0	1992	38.0	32.3	14.5	15.2	100.0
1995     36.3     47.4     13.0     3.3     100.0       1996     30.2     53.2     12.5     4.0     100.0       1997     27.8     58.1     11.2     3.0     100.0       1998     29.2     54.5     13.0     3.2     100.0       1999     29.1     55.5     12.8     2.5     100.0	1993	43.0	37.3	9.7	10.0	100.0
1996     30.2     53.2     12.5     4.0     100.0       1997     27.8     58.1     11.2     3.0     100.0       1998     29.2     54.5     13.0     3.2     100.0       1999     29.1     55.5     12.8     2.5     100.0	1994	41.8	43.0	8.8	6.4	100.0
1997     27.8     58.1     11.2     3.0     100.0       1998     29.2     54.5     13.0     3.2     100.0       1999     29.1     55.5     12.8     2.5     100.0	1995	36.3	47.4	13.0	3.3	100.0
1998     29.2     54.5     13.0     3.2     100.0       1999     29.1     55.5     12.8     2.5     100.0	1996	30.2	53.2	12.5	4.0	100.0
1999 29.1 55.5 12.8 2.5 100.0	1997	27.8	58.1	11.2	3.0	100.0
	1998	29.2	54.5	13.0	3.2	100.0
2000 266 581 132 21 1000	1999	29.1	55.5	12.8	2.5	100.0
2000 20.0 30.1 13.2 2.1 100.0	2000	26.6	58.1	13.2	2.1	100.0

<sup>&</sup>lt;sup>1</sup> Includes deferred removal order & post determination refugees, live-in caregivers, provincial/territorial nominees, backlog, retirees and not stated.
Note: Data available as of December 4, 2001.
Source: Citizenship and Immigration Canada.

objectives of the Immigration Plan, which called for between 116,900 and 130,700 persons in this component (Table 8). Canada's current immigration policy is designed to encourage the admission of immigrants selected according to personal qualifications—notably age, education level and knowledge of one of the official languages—that will make it easier for them to integrate rapidly into the Canadian population.

Like the total number of immigrants, the number of those admitted on the basis of family ties with Canadians has been rising for three years. However, the proportion represented by the family component was down slightly from the previous year, since it was only 27%, compared to nearly 30% in 1999. This proportion has generally been declining since 1993, when 43% of the immigrants for the year were admitted under the family component of the Immigration Act.

There was also an increase in the number and proportion of refugees. The 30,100 refugees received in 2000 represent 13% of the total immigrant flow, exceeding the objective set out in the Plan. This number amounts to an increase of 23% over the previous year (Table 9). At times in the past, Canada has admitted more refugees—especially in 1980, when the 40,000 refugees taken in accounted for 28% of total immigration—but 2000 saw the largest contingent of refugees since 1992, both in numbers and as a proportion of total immigration.

# **Immigrants' Place of Birth**

As has been the case for a number of years now, Asia is by far the continent that provides the largest share of Canadian immigration. *In 2000, 140,500 of the immigrants admitted were from Asia, and they accounted for 62% of all immigrants received in Canada*. As the leading supplier of Canadian immigrants, China (including Hong Kong) is the country of origin of nearly 41,000 of the immigrants received during the year, or 18% of the total (Table A11, appended). Of this number, 33,100 were admitted under the economic component of Canada's immigration policy, 7,100 in the family class and 600 by virtue of their refugee status (Table 10). The number of immigrants from China increased by 7,100 in 2000 compared with 1999. This was an increase of 20% over the previous year, proportional to the total increase.

The two countries that rank next on the list of countries providing the largest number of immigrants—India and Pakistan, with 28,200 and 14,900 immigrants respectively—have seen their number of emigrants to Canada increase in even larger proportions. The number of immigrants from India increased by 9,300, a 50% increase over the 18,800 admitted in 1999. The Pakistani contingent grew by 5,300, an increase of 55% compared with the figure for the previous year. India is noteworthy for supplying a great number of immigrants in the family class: 43% of the arrivals from that country were

Table 10. Number of Immigrants According to the 10 Main Countries of Birth by Class, Canada, 2000

	Economic	Family	Refugees	Others <sup>1</sup>	Total
China and Hong Kong	33,077	7,080	632	156	40,945
India	14,979	12,240	859	105	28,183
Pakistan	11,018	2,464	1,340	43	14,865
Philippines	4,387	3,500	9	2,740	10,636
South Korea	6,761	766	16	65	7,608
Sri Lanka	993	1,752	3,258	62	6,065
Iran	3,525	860	1,503	27	5,915
Ex-Yugoslavia	534	418	4,469	1	5,422
United States	2,542	2,530	48	19	5,139
Russia	3,300	988	370	206	4,864

<sup>&</sup>lt;sup>1</sup> Includes deferred removal order & post determination refugees, live-in caregivers, provincial/territorial nominees, backlog, retirees and not stated.

**Note**: Data available as of December 4, 2001. **Source**: Citizenship and Immigration Canada.

admitted in this class. Because of the large number of Indian immigrants and the sizable proportion of them admitted in the family class, a fifth of all immigrants received in this class were from India.

A fourth Asian country that supplied more than 10,000 immigrants to Canada in 2000 was the Philippines, the country of origin of 5% of all immigrants admitted that year. More than a quarter of Filipino immigrants, namely 2,700 of the 10,600 immigrants from the Philippines, were not admitted under any of the three main components of the Immigration Act. Falling into the "Other" class, the great majority of them were women who applied to immigrate after entering Canada as a live-in caregiver. Among the Asian countries that supply a large number of immigrants to Canada, only Iran and Taiwan saw their numbers drop appreciably.

In 2000, 42,500 persons from European countries were admitted as immigrants. European immigration therefore represents approximately one-fifth (19%) of the whole, and the number of immigrants from all European countries combined is nearly equal to the number coming from China. Among European countries, those included in the former USSR are by far the ones that supply the most immigrants to Canada.

In all, 11,700 immigrants came from one or another of the former Soviet republics (Table 11), and they represent just over 27% of European immigrants and slightly more than 5% of the total. The countries that made up the former Yugoslavia contributed 7,100 immigrants, the great majority (82%) of whom were admitted to Canada as refugees. However, immigration from Bosnia-Herzegovina has dried up in favour of other regions of the former Yugoslavia, with Kosovo the site of the conflict producing these population flows. It is

Table 11. Countries of Birth from Which more than 2,000 Immigrants Came to Canada in 1998, 1999 or 2000

in 1998, 199	9 01 2000				
Country of Birth	1998	1999	2000	Difference Between 1998 and 1999	Difference Between 1999 and 2000
AFRICA					
Algeria	2,256	2,368	2,853	112	485
Morocco	1,316	1,913	2,691	597	778
AMERICA					
Colombia	937	1,299	2,247	362	948
Jamaica	2,269	2,363	2,463	94	100
United States	4,166	4,913	5,139	747	226
ASIA					
Afghanistan	2,082	2,268	3,160	186	892
Bangladesh	2,116	2,010	3,040	-106	1,030
China <sup>1</sup>	29,172	33,882	40,945	4,710	7,063
India	16,989	18,840	28,183	1,851	9,343
Iran	7,008	6,201	5,915	-807	-286
Iraq	1,898	2,037	2,303	139	266
Pakistan	8,440	9,587	14,865	1,147	5,278
Philippines	8,637	9,536	10,636	899	1,100
South Korea	4,955	7,210	7,608	2,255	398
Sri Lanka	3,541	4,936	6,065	1,395	1,129
Taiwan	6,995	5,326	3,409	-1,669	-1,917
EUROPE					
France	3,022	3,181	3,560	159	379
Great Britain	3,284	3,777	3,777	493	0
Romania	3,112	3,583	4,588	471	1,005
Ex-U.S.S.R.	12,328	10,990	11,655	-1,338	665
Russia	4,792	4,397	4,864	-395	467
Ukraine	2,768	2,827	3,565	59	738
Others	4,768	3,766	3,226	-1,002	-540
Ex-Yugoslavia	6,510	6,370	7,132	-140	762
Bosnia-Herzegovina	2,544	2,455	813	-89	-1,642
Others	3,966	3,915	6,319	-51	2,404

<sup>1</sup> Includes Hong Kong-

**Note**: Data available as of December 4, 2001. **Source**: Citizenship and Immigration Canada.

worth noting that in 2000, Romania, with 4,600 immigrants, placed well ahead of France and the United Kingdom with 3,600 and 3,800 respectively. Only Russia, with 4,900 immigrants, placed ahead of Romania among European countries.

There have never before been so many immigrants from Africa as in 2000, with more than 20,700 persons. That continent supplied 9% of immigrant arrivals during the year. Central and North America, the West Indies and Bermuda, South America, Australasia and Oceania generally increased their contribution slightly, but there was no major change in their relative weight.

Lastly, by the very nature of the objectives of the refugee policy, the countries from which most refugees come are not the same as those that contribute

the majority of immigrants admitted under other components of the policy. In 2000, the three countries that supplied the most refugees to Canada were the former Yugoslavia (4,500), Sri Lanka (3,300) and Afghanistan (2,700). Each year since 1995, Canada has received at least 1,000 refugees from Afghanistan, but the number admitted in 2000 marks a major increase, since the corresponding number the year before was 1,900. Throughout the period 1995-2000, the greatest number of refugees admitted to Canada consistently originated from the countries of the former Yugoslavia or Sri Lanka.

# **Destination of Immigrants**

For many years, most new arrivals to Canada have settled in three provinces: Ontario, British Columbia and Quebec (Table 12). The year 2000 was no exception, with these three provinces attracting 90% of all immigrants. Ontario has long been the main province of destination of immigrants, and since the mid-1980s it has consistently received more than half the total. In 2000, that province's dominance increased even further, with 59% of the immigrants received choosing to settle there (Figure 9). This was a record level in the recent history of Canadian immigration.

This increase was offset by a corresponding decrease in the proportion of immigrants choosing to settle in British Columbia. In 2000, that province attracted only 16% of all immigrants, compared to 19% the previous year and more than 20% in each year between 1994 and 1998. The proportion of immigrants choosing British Columbia is approaching Quebec's proportion (14%), whereas between 1994 and 1999 it had substantially surpassed the figure for Quebec. In the other Canadian provinces, there were few changes in 2000. Even Alberta, which is experiencing a period of sustained economic growth and boasts the highest net interprovincial migration of any province, maintained the same proportion of immigrants (6%) as in previous years.

Immigration is becoming more concentrated, and this is probably linked to the growing importance of the economic class. More than three out of five immigrants in this class (62%) chose to settle in Ontario (Table 13). Of all provinces, *Ontario is the one with the highest proportion of economic immigrants* (62%), although the proportion is similar for British Columbia (61%). In comparison, only 49% of Quebec's immigration consists of economic immigrants, and only 52% of Alberta's. Ontario attracts a proportion of family-class immigrants (58%) that is equivalent to this province's share of Canadian immigration in general. On the other hand, a smaller proportion of refugees settle in Ontario (50%).

Quebec stands out from both British Columbia and Ontario by the large proportion of refugees among the immigrants that it receives. One Quebec immigrant in four (25%) was admitted as a refugee, compared with one in ten (11%) for Ontario and one in fourteen (7%) for British Columbia.

Table 12. Percentage Distribution of Landed Immigrants by Intended Province of Destination, Canada, 1971, 1981, 1986, 1989-2000

								Year							
Province	1971	1981	1986	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Newfoundland and Labrador	0.7	0.4	0.3	0.2	0.3	0.3	0.3	6.0	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Prince Edward Island	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nova Scotia	1.5	1.1	1.1	0.8	0.7	9.0	0.9	1.2	1.5	1.7	1.4	1.3	1.2	0.8	0.7
New Brunswick	6:0	0.8	9.0	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
Quebec	15.8	16.4	19.6	7.71	18.9	22.3	19.1	17.5	12.5	12.8	13.2	12.8	15.2	15.3	14.3
Ontario	52.8	42.7	50.0	54.6	52.9	51.5	54.6	52.5	52.4	54.4	52.9	54.5	53.0	54.8	58.7
Manitoba	4.3	4.2	3.8	3.2	3.1	2.4	2.0	1.9	1.8	1.7	1.7	1.7	1.7	1.9	2.0
Saskatchewan	1.2	1.9	1.9	1.1	1.1	1:1	1.0	0.9	1.0	0.9	0.8	0.8	0.9	0.9	0.8
Alberta	7.1	15.0	9.7	8.4	8.8	7.3	7.0	7.2	8.0	6.7	6.1	5.9	6.4	6.4	6.3
British Columbia	15.5	17.1	12.6	13.2	13.4	13.9	14.5	17.9	21.9	20.9	23.0	22.1	20.7	19.0	16.4
Yukon, Northwest Territories and Nunavut	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Unknown	0.0	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.2	0.1	0.1	0.1
Total Percentage	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total Number	121,717	128,794	99,341	191,515	216,421	232,772	254,858	256,764	224,394	212,871	226,052	216,030	174,172	189,944 227,336	227,336

Note: Data available as of December 4, 2001.

Sources: Employment and Immigration Canada, *Immigration Statistics* and after 1980, Citizenship and Immigration Canada.

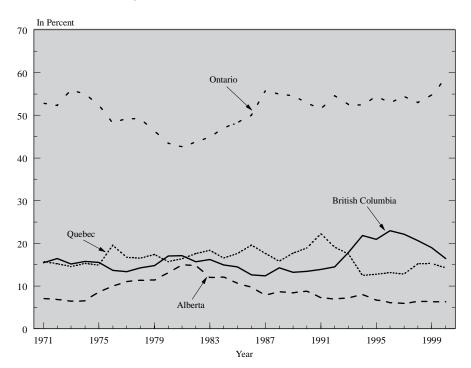


Figure 9. Proportion of Immigrants Going to Ontario, Quebec, British Columbia and Alberta, 1971-2000

Note: Data available as of December 4, 2001.

Sources: Employment and Immigration Canada, *Immigration Statistics* and after 1980, Citizenship and Immigration Canada.

If most Canadian immigrants are concentrated in the three most populous provinces, this is largely because they mainly cluster in the three large metropolises of Toronto, Montreal and Vancouver (Figure 10). In 1980, Toronto alone attracted nearly a quarter of the total immigrants; Montreal and Vancouver each attracted a tenth. In twenty years, Toronto has doubled its power to attract new arrivals, since nearly half of them settled there in 2000. The proportion of immigrants choosing Montreal or Vancouver has shown much less change over these twenty years, and the two metropolitan areas each received slightly more than 10% of Canadian immigration in 2000. Montreal attracted 20% of the immigrants in 1991, a peak level for this city, and Vancouver reached the same proportion in 1996 and 1997, but in both cases the situation was short-lived. Toronto stands out sharply from the other two Canadian metropolises in its sustained and growing attractiveness for immigrants admitted to Canada.

Table 13. Number of Immigrants and Percentage Distribution by Province of Destination and Class, Canada, 2000

Province	Family	Economic	Refugees	Others <sup>1</sup>	Total
Flovince	1	Deonomie		Outers	101111
			Number		
Newfoundland and Labrador	91	183	140	1	415
Prince Edward Island	33	50	109	0	192
Nova Scotia	309	1,018	269	5	1,601
New Brunswick	146	321	267	24	758
Quebec	7,947	15,963	8,042	492	32,444
Ontario	34,943	82,198	15,108	1,127	133,376
Manitoba	1,059	1,402	1,023	1,153	4,637
Saskatchewan	414	735	649	90	1,888
Alberta	4,471	7,387	1,867	602	14,327
British Columbia	10,966	22,667	2,576	1,186	37,395
Yukon	38	20	0	2	60
Northwest Territories	46	14	1	21	82
Nunavut	9	1	0	1	11
Not Stated	80	61	7	2	150
Total	60,552	132,020	30,058	4,706	227,336
		Distrib	ution by Provin	ce (%)	
Newfoundland and Labrador	0.2	0.1	0.5	0.0	0.2
Prince Edward Island	0.1	0.0	0.4	0.0	0.1
Nova Scotia	0.5	0.8	0.9	0.1	0.7
New Brunswick	0.2	0.2	0.9	0.5	0.3
Quebec	13.1	12.1	26.8	10.5	14.3
Ontario	57.7	62.3	50.3	23.9	58.7
Manitoba	1.7	1.1	3.4	24.5	2.0
Saskatchewan	0.7	0.6	2.2	1.9	0.8
Alberta	7.4	5.6	6.2	12.8	6.3
British Columbia	18.1	17.2	8.6	25.2	16.4
Yukon	0.1	0.0	0.0	0.0	0.0
Northwest Territories	0.1	0.0	0.0	0.4	0.0
Nunavut	0.0	0.0	0.0	0.0	0.0
Not Stated	0.1	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0
		Distri	bution by Class	(%)	
Newfoundland and Labrador	21.9	44.1	33.7	0.2	100.0
Prince Edward Island	17.2	26.0	56.8	0.0	100.0
Nova Scotia	19.3	63.6	16.8	0.3	100.0
New Brunswick	19.3	42.3	35.2	3.2	100.0
Quebec	24.5	49.2	24.8	1.5	100.0
Ontario	26.2	61.6	11.3	0.8	100.0
Manitoba	22.8	30.2	22.1	24.9	100.0
Saskatchewan	21.9	38.9	34.4	4.8	100.0
Alberta	31.2	51.6	13.0	4.2	100.0
British Columbia	29.3	60.6	6.9	3.2	100.0
Yukon	63.3	33.3	0.0	3.3	100.0
Northwest Territories	56.1	17.1	1.2	25.6	100.0
Nunavut	81.8	9.1	0.0	9.1	100.0
Not Stated	53.3	40.7	4.7	1.3	100.0
Total	26.6	58.1	13.2	2.1	100.0

Includes deferred removal order & post determination refugees, live-in caregivers, provincial/ territorial nominees, backlog, retirees and not stated.

Note: Data available as of December 4, 2001.

Source: Citizenship and Immigration Canada.

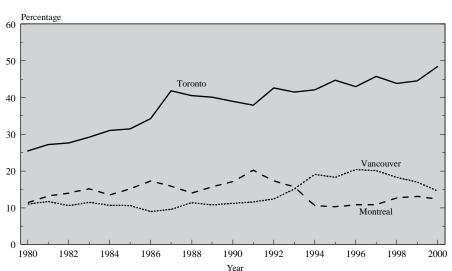


Figure 10. Proportion of Immigrants Going to the Three Main Census Metropolitan Areas of Canada, 1980-2000

**Note**: Data available as of January 16, 2002. **Source**: Citizenship and Immigration Canada.

### Conclusion

In brief, the number of international immigrants received in 2000 surpassed the objectives of the Immigration Plan and once again passed the 200,000 mark, as in much of the 1990s. Compared to previous years, 2000 saw a concentration of immigration in three respects: an increasingly number of immigrants were in the economic class; more of them came from Asia; and a growing proportion settled in Ontario.

Since 1994, the growth of Canada's population has been based more on migration than on natural increase. Unless there is a reversal of current fertility trends, immigration should, in the coming years, account for a growing share of Canadian population growth. Canada's situation differs from that of the United States, since that country can count on a fertility rate approaching the replacement level (see article in second part of the Report). However, even at high levels, immigration cannot prevent the aging of the Canadian population. At most it can somewhat slow the aging and thus give institutions a little more time to meet the challenges of an aging society.

#### INTERNAL MIGRATION

Table 14 shows the recent evolution of net migration between provinces and territories. According to preliminary data, the year 2000 saw a continuation of trends in the Canadian migration system that extend back to the mid-1990s and sometimes longer:

- 1. Ontario's net migration, which has been increasing since 1992, was positive for a fourth consecutive year;
- 2. in Western Canada, migratory flows continued to favour Alberta at the expense of British Columbia;
- 3. all the other provinces posted losses in their migratory exchanges.

The data shown in Table 14 for 2000, the most recent year available, are not directly comparable with those shown for other years. The 2000 figures are preliminary data obtained, in part, from information extracted from child tax benefit files, whereas for the previous years they are final data obtained from address changes reported by taxpayers on their income tax returns. Flows from one province to another are sometimes subject to major corrections when the final data become available, but in general, the differences between the net migration figures obtained from preliminary and final data are much smaller. It is therefore useful to comment on the preliminary data in the context of recent trends, although slight fluctuations should not be assigned too much importance.

In 2000, net migration figures showed little change from the previous year. After eight years of negative figures between 1989 and 1996, Ontario's net migration has been positive, and it was up for the fourth consecutive year. Only Ontario (22,700) and Alberta (27,100) showed positive net interprovincial balances in 2000, with both apparently higher than in 1999. Both provinces gained from their exchanges with all the other provinces and, in a surprising coincidence, they exchanged 25,400 persons with each other without either province actually gaining from the exchange. The flow of migrants leaving Ontario for Alberta (12,691) was within ten persons of being equal to the opposite flow (12,699) from Alberta to Ontario (Table 16).

Since 1997, favoured by economic growth in the oil sector, Alberta has benefited more than any other province from internal migratory exchanges, and this situation continued in 2000. Compared with the previous year, the increase in net migration was greater for Alberta, whose net figure reached 27,100 (up 7,400) than for Ontario (up 4,300). Alberta's gains were mainly at the expense of the neighbouring provinces of Saskatchewan and British Columbia, which are also the provinces whose net migration figures appear

Table 14. Net Migration for Provinces and Territories, 1972-2000

Total Number of Interpro- vincial Migrants	375,184	433,992	421,336	385,330	376,970	366,918	348,929	370,862	372,167	380,041	322,634	285,599	273,323	281,275	302,352	318,890	323,685	347,990	332,637	315,420	309,680	283,737	286,860	286,746	284,484	291,580	298,158	276,495	321,161	9,574,435
Nun.	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	-81	4	-139	-234	-249	-265	-14	-5	50	-933
N.W.T.	006	416	152	380	808-	-1,005	-972	-847	-930	175	551	-35	51	-585	-1,822	-1,179	-778	-369	9-	83	-220	-43	75	440	-642	-845	-1,055	457	-644	-11,731
Yuk.	575	-269	76	242	-350	57	-178	447	419	-1,376	-1,208	-808	-111	445	179	100	349	-30	-26	478	215	-755	-245	959	215	-558	-1,114	-601	-752	-6,529
B.C.	24,927	30,537	22,655	-2,864	-1,490	15,507	20,698	33,241	40,165	21,565	-2,019	4,029	3,505	-3,199	910	17,618	25,865	37,367	38,704	34,572	39,578	37,595	34,449	23,414	17,798	1,980	-17,521	-12,413	-17,296	469,877
Alta	6,538	2,698	14,810	23,463	34,215	32,344	31,987	39,212	46,933	40,243	3,961	-26,246	-30,591	-9,568	-20,293	-27,595	-5,535	3,366	11,055	5,511	1,030	-2,355	-2,684	4,251	15,069	32,459	40,125	19,692	27,125	311,220
Sask.	-17,296	-13,261	-4,835	6,555	3,819	384	-3,701	-3,510	-4,382	-520	1,743	2,501	733	-5,014	-7,020	-9,043	-16,338	-18,589	-15,928	-9,499	-7,727	-4,543	-3,958	-3,190	-1,871	-2,669	-1,786	-7,146	-9,159	-155,250
Man.	-7,735	-2,200	-5,400	-4,134	-3,655	-3,789	-9,557	-13,806	-11,342	-3,621	1,498	950	49	-1,755	-3,039	-4,751	-8,584	-10,004	-8,613	-7,581	-6,417	-5,206	-4,010	-3,344	-3,738	-6,717	-3,097	-2,387	-3,624	-145,707
Ont.	8,227	-5,275	-22,163	-25,057	-10,508	8,596	415	-15,317	-34,919	-19,665	19,614	32,825	36,691	33,414	42,916	40,278	14,898	-1,205	-15,117	-9,978	-13,530	-12,771	-4,527	-1,764	-1,706	6,823	11,466	18,424	22,691	103,776
Que.	-19,891	-14,730	-11,852	-12,340	-20,801	-46,536	-33,424	-30,025	-24,283	-22,549	-28,169	-19,080	-10,943	-6,023	-3,020	-7,410	-7,003	-8,379	-9,567	-13,047	-9,785	-7,426	-10,252	-10,248	-15,358	-17,559	-14,512	-11,712	-12,368	-458,292
N.B.	241	2,841	4,192	7,572	1,640	-886	-1,644	-2,219	-4,165	-4,766	2,183	2,296	812	-1,559	-2,897	-1,762	-1,215	-21	1,014	-79	-1,087	492	-505	-931	-910	-1,812	-2,935	-638	-974	-8,706
N.S.	2,845	2,107	1,576	4,454	361	-1,277	-109	-1,840	-2,494	-2,465	1,591	3,861	2,963	-234	-739	-2,183	71	572	-106	1,039	355	-1,143	-2,694	-1,972	-1,064	-2,074	-1,571	947	-650	127
P.E.I.	858	478	1,386	814	309	614	25	-225	-1,082	-783	9-	799	524	-13	-493	301	424	-102	-273	-415	232	532	694	368	401	-241	-15	212	-163	5,160
Nfld.Lab.	-189	-2,510	-618	915	-2,732	-4,009	-3,540	-4,217	-3,082	-6,238	261	-1,092	-3,585	-5,019	-4,682	-4,374	-2,154	-2,606	-1,137	-1,084	-2,563	-3,397	-6,204	-6,566	-7,945	-8,522	-7,971	-3,916	-4,236	-103,012
Year	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 (P)	Total

(P) Preliminary data.

Note: Until 1991, Nunavut is included in the Northwest Territories.

Source: Statistics Canada, Demography Division, Population Estimates Section.

Table 15. Annual Number of Interprovincial Migrants According to Revenue Canada Tax Files, 1999

Number of Migrants: 276,495

					0								
Province of Origin					P	Province of Destination	Destinatio	u					
TOVINCE OF OUR	Nfld.Lab.	P.E.I.	N.S.	N.B.	One.	Ont.	Man.	Sask.	Alta	B.C.	Yukon	N.W.T.	Nunavut
Newfoundland and Labrador	:	239	1,893	628	102	5,003	254	160	3,282	655	33	611	66
Prince Edward Island	114	:	555	328	117	716	47	23	372	89	21	11	2
Nova Scotia	1,184	260	:	2,254	790	5,965	462	201	2,259	1,248	34	61	52
New Brunswick	369	407	2,312	:	1,934	3,948	280	206	1,616	514	20	29	34
Quebec	199	99	935	1,619	:	22,418	502	157	2,670	2,925	45	24	68
Ontario	3,082	691	5,520	3,310	11,937	:	3,943	1,438	11,476	13,790	106	296	221
Manitoba	145	47	439	204	440	4,975	:	2,185	4,846	2,883	49	104	81
Saskatchewan	135	27	323	174	286	2,440	2,324	:	11,802	3,272	65	174	52
Alberta	2,278	293	2,106	1,566	1,679	12,127	3,315	6,523	:	17,180	251	841	109
British Columbia	818	227	1,687	814	2,584	15,845	2,590	2,806	27,562	:	909	366	77
Yukon	53	13	18	18	32	238	91	75	609	669	:	31	7
Northwest Territories	94	10	148	73	27	331	110	122	1,341	287	51	:	194
Nunavut	80	9	81	43	49	228	93	32	125	48	2	235	:
uI	8,551	2,586	16,017	11,031	776,61	74,234	14,011	13,928	096'19	43,569	1,283	2,331	1,017
Out	12,467	2,374	15,070	11,669	31,689	55,810	16,398	21,074	48,268	55,982	1,884	2,788	1,022
Net Migration	-3,916	212	947	-638	-11,712	18,424	-2,387	-7,146	19,692	-12,413	-601	-457	٠ <u>-</u>

Source: Statistics Canada, Demography Division, Population Estimates Section.

Table 16. Annual Number of Interprovincial Migrants According to Revenue Canada Tax and Child Tax Credit Files, 2000

Number of Migrants: 321,161

					,								
Drowings of Origin					ជ	rovince of	Province of Destination	u					
	Nfld.Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta	B.C.	Yukon	N.W.T.	Nunavut
Newfoundland and Labrador	:	250	2,118	812	257	5,861	129	139	3,548	551	28	154	149
Prince Edward Island	221	:	797	473	123	744	7	32	279	222	6	39	13
Nova Scotia	1,349	743	:	2,927	1,149	7,595	334	195	2,920	1,451	23	87	79
New Brunswick	586	452	2,924	:	2,015	4,862	226	102	1,965	712	0	41	50
Quebec	230	133	910	2,287	:	26,168	511	389	2,787	2,701	29	109	151
Ontario	4,044	721	6,288	3,711	14,970	:	4,377	1,924	12,691	14,668	100	378	283
Manitoba	194	49	445	305	520	5,654	:	3,117	5,854	3,427	29	158	120
Saskatchewan	141	70	371	62	265	2,965	3,453	:	15,405	3,736	72	118	38
Alberta	1,934	201	2,210	1,558	1,901	12,699	3,834	8,363	:	18,797	336	862	1111
British Columbia	726	135	2,019	750	2,724	19,473	3,039	2,972	31,989	:	590	364	92
Yukon	27	7	32	13	18	191	31	54	698	764	:	70	13
Northwest Territories	155	Э	77	42	26	372	152	203	1,487	457	112	:	225
Nunavut	153	2	41	21	69	262	155	47	137	75	6	287	:
In	9,760	2,766	18,202	12,961	24,037	86,846	16,248	17,537	79,931	47,561	1,337	2,667	1,308
Out	13,996	2,929	18,852	13,935	36,405	64,155	19,872	26,696	52,806	64,857	2,089	3,311	1,258
Net Migration	-4,236	-163	-650	-974	-12,368	22,691	-3,624	-9,159	27,125	-17,296	-752	-644	50

Source: Statistics Canada, Demography Division, Population Estimates Section.

to have deteriorated the most. According to preliminary data, these two provinces' losses in their migratory exchanges with the others were 17,300 and 9,200 for British Columbia and Saskatchewan respectively. For both provinces, the negative flow toward neighbouring Alberta alone accounted for just over three-fourths of the entire net loss.

Being next to a province with a booming economy definitely plays a major role in explaining this situation, but there are other factors too. Theoretically, the decision to migrate is often based on a set of pressures in the region of origin and a set of attractions in the region of destination (e.g., the possibility of obtaining a job or taking university courses), as well as the drawbacks associated with moving (e.g., the distance involved may entail not only a financial cost but also an emotional cost in being far from family and friends).

While British Columbia was the province with the largest negative net migration, Quebec (-12,400) was not far behind. But the similarity between the situations of these provinces ends there. First, the dynamics that gave rise to these deficits were not the same. Quebec mainly lost in its exchanges with Ontario (-11,200). Quebec's losses to Ontario accounted for 90% of its net interprovincial migration. British Columbia, as noted, lost mainly to Alberta (-13,200) (Table 16). More important is the fact that in the case of Quebec, negative net migration is a chronic phenomenon, whereas for British Columbia, while net migration has been negative for three years, this is an entirely new situation. Since 1972, British Columbia has had negative net migration only seven times, while its gains have exceeded 30,000 nine times (Table 14). During the same period, Quebec has registered losses every year in its migratory exchanges with other provinces, and more than two-thirds of the time the losses have exceeded 10,000. In all, over the past thirty years or so, Quebec's migratory losses have approached half a million, which is nearly equivalent to the gains registered by British Columbia.

In the case of British Columbia, another factor may therefore explain the negative net migration figures of the past few years. The sizable flow of Canadians from other provinces has, over the years, created a large pool of persons born in other provinces who may potentially migrate back to them. The economic situation in British Columbia is less favourable than in the past, and this might explain in part why that province, which for a number of years posted gains in its migratory exchanges with all other provinces, is now losing in its exchanges with most other provinces. With the 2001 census data, it will be possible to explore this hypothesis more thoroughly.

Changes in net migration between 1999 and 2000 were smaller for the other provinces, and the situation that had prevailed in 1999—sometimes for a number of years—continued in 2000. Saskatchewan (-9,200) and Newfoundland and Labrador (-4,200) posted sizable losses. In the former case, the loss was larger than those observed during the 1990s, while in the

Table 17. Proportion of Returning Migrants Among Interprovincial Inmigrants, Population 5 Years of Age and Over and Born in Canada, Canada, Provinces and Territories, 1991-1996

Province	Total	Born in the Province	Returning Migrants
Nfld.Lab.	15,415	9,260	60.1
P.E.I.	8,455	2,760	32.6
N.S.	43,905	14,400	32.8
N.B.	32,030	11,235	35.1
Que.	58,905	30,430	51.7
Ont.	154,300	51,115	33.1
Man.	38,750	13,604	35.1
Sask.	44,410	19,295	43.4
Alta	144,840	28,610	19.8
B.C.	201,385	28,910	14.4
Yuk.	5,410	355	6.6
N.W.T.	7,965	800	10.0
Total	755,770	210,774	27.9

<sup>&</sup>lt;sup>1</sup> Includes Nunavut.

**Source**: Statistics Canada, Census of Canada, 1996.

latter case it has been lower for the past two years. With out-migration rates of 26 per 1,000, these two provinces had the highest rates of all provinces (Table A1, appended).

While out-migration rates remained high for these two provinces, the number of in-migrants appeared to be up slightly for Newfoundland and Labrador after reaching a low in 1994. It appears that in 2000, 9,800 Canadians migrated to this province, compared with 6,300 six years earlier. Recalling the hypothesis of return migrations that was advanced to explain the negative flows now being experienced by British Columbia, the corollary might apply here. Table 17 shows that 60% of nativeborn Canadians who migrated to the province of Newfoundland and Labrador between 1991 and 1996 were born in that province. This was the

highest proportion of all provinces. It was followed by a proportion of 52% for Quebec and 43% for Saskatchewan, two other provinces that have had sizable negative net migration figures for the past few years. The corresponding proportion for Canada as a whole was 28%, dropping to 15% in the case of British Columbia.

Manitoba, New Brunswick and Prince Edward Island also posted migratory losses in 2000, but they were smaller than those registered by Newfoundland and Labrador or Saskatchewan. Nova Scotia had negative net migration (-600) in 2000, after having a positive figure of 900 the year before. This ran counter to recent trends, since apart from 1999, the province has registered negative net migration every year since 1993.

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# **APPENDICES**

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 NEWFOUNDLAND AND LABRADOR

Numbers (in thousands)

Year	Population as of		Growth		Births	Deaths	Immigration	Emigration	Non- permanent	Interp	provincial Mig	ration	Residual 1
Tear	January 1	Total	Natural	Migratory	Birtiis	Deaths	immigration	Emigration	Residents (net)	In	Out	Net	Residuai
1972	535.9	7.5	9.5	0.4	12.9	3.3	0.7	0.2	0.0	11.2	11.4	-0.2	-2.4
1973	543.4	4.4	8.5	-1.7	11.9	3.4	1.0	0.3	0.1	13.0	15.5	-2.5	-2.4
1974	547.8	4.7	7.0	0.1	10.2	3.3	1.0	0.3	0.0	12.4	13.0	-0.6	-2.4
1975	552.5	7.5	8.0	1.9	11.2	3.2	1.1	0.2	0.1	12.3	11.4	0.9	-2.4
1976	559.9	4.0	7.8	-2.2	11.1	3.3	0.7	0.2	0.0	9.7	12.4	-2.7	-1.6
1977	563.9	2.6	7.3	-3.6	10.4	3.1	0.6	0.2	0.0	8.1	12.2	-4.0	-1.1
1978	566.5	2.0	6.4	-3.4	9.5	3.1	0.4	0.2	0.0	8.1	11.7	-3.5	-1.1
1979	568.4	2.2	7.0	-3.7	10.2	3.1	0.6	0.2	0.1	8.9	13.1	-4.2	-1.1
1980	570.7	3.4	7.0	-2.5	10.3	3.3	0.6	0.1	0.1	9.3	12.4	-3.1	-1.1
1981	574.1	-0.6	6.9	-5.9	10.1	3.2	0.5	0.2	0.1	8.5	14.8	-6.2	-1.7
1982	573.5	4.2	5.8	0.5	9.2	3.4	0.4	0.2	0.1	10.6	10.3	0.3	-2.1
1983	577.7	2.0	5.4	-1.3	8.9	3.5	0.3	0.3	-0.2	7.6	8.7	-1.1	-2.1
1984	579.7	-0.5	5.0	-3.4	8.6	3.5	0.3	0.3	0.1	5.7	9.3	-3.6	-2.1
1985	579.2	-2.0	4.9	-4.9	8.5	3.6	0.3	0.2	0.0	6.0	11.0	-5.0	-2.1
1986	577.2	-1.6	4.6	-4.5	8.1	3.5	0.3	0.3	0.2	7.7	12.4	-4.7	-1.7
1987	575.6	-1.0	4.1	-3.8	7.8	3.6	0.5	0.2	0.3	8.4	12.8	-4.4	-1.3
1988	574.6	1.1	3.9	-1.5	7.5	3.6	0.4	0.1	0.3	10.0	12.2	-2.2	-1.3
1989	575.7	0.9	4.0	-1.8	7.8	3.7	0.5	0.1	0.4	10.1	12.7	-2.6	-1.3
1990	576.5	1.7	3.7	-0.7	7.6	3.9	0.5	0.1	-0.1	10.2	11.4	-1.1	-1.3
1991	578.2	1.2	3.4	-0.6	7.2	3.8	0.6	0.2	0.0	9.9	10.9	-1.1	-1.6
1992	579.4	1.6	3.1	0.2	6.9	3.8	0.8	0.1	2.1	8.1	10.7	-2.6	-1.8
1993	581.0	-3.6	2.5	-4.3	6.4	3.9	0.8	0.1	-1.6	6.9	10.3	-3.4	-1.8
1994	577.4	-6.4	2.3	-6.9	6.3	4.1	0.6	0.1	-1.2	6.3	12.5	-6.2	-1.8
1995	571.0	-6.7	1.9	-6.9	5.9	3.9	0.6	0.1	-0.8	7.0	13.5	-6.6	-1.8
1996	564.3	-6.9	1.8	-8.0	5.7	3.9	0.6	0.2	-0.4	6.6	14.5	-7.9	-0.7
1997 PD	557.4	-7.4	1.1	-8.5	5.4	4.3	0.4	0.3	-0.1	7.0	15.5	-8.5	
1998 PR	550.1	-7.1	0.8	-7.8	5.0	4.2	0.4	0.3	0.1	7.4	15.4	-8.0	
1999 PR	543.0	-2.9	0.5	-3.5	4.8	4.3	0.4	0.4	0.4	8.6	12.5	-3.9	•••
2000 PR	540.1	-3.8	0.3	-4.1	4.7	4.4	0.4	0.4	0.1	9.8	14.0	-4.2	
2001 PR	536.2	••	••	••	••	••		••	••	••	••	••	•••

Rates (per 1,000)

					Rate	(per 1,00	,0)					
Year	Population as of January 1 (in		Growth		Birth	Death	Immigration	Emigration	Non- permanent	Inter	rprovincial Mig	ration
1 cai	thousands)	Total	Natural	Migratory	DIIIII	Death	minigration	Emigration	Residents	In	Out	Net
1972	535.9	13.91	17.70	0.66	23.90	6.21	1.27	0.32	0.06	20.72	21.07	-0.35
1973	543.4	8.02	15.58	-3.16	21.82	6.24	1.80	0.50	0.13	23.85	28.45	-4.60
1974	547.8	8.52	12.63	0.25	18.61	5.97	1.88	0.50	-0.01	22.50	23.62	-1.12
1975	552.5	13.42	14.37	3.36	20.16	5.79	1.99	0.40	0.13	22.20	20.56	1.65
1976	559.9	7.08	13.89	-3.93	19.81	5.91	1.29	0.33	-0.02	17.28	22.14	-4.86
1977	563.9	4.58	12.86	-6.41	18.42	5.55	1.03	0.34	-0.01	14.41	21.51	-7.09
1978	566.5	3.46	11.30	-5.96	16.79	5.49	0.66	0.36	-0.02	14.36	20.59	-6.24
1979	568.4	3.92	12.35	-6.56	17.86	5.51	0.97	0.27	0.14	15.66	23.07	-7.40
1980	570.7	5.98	12.21	-4.37	18.05	5.84	0.96	0.19	0.24	16.19	21.58	-5.38
1981	574.1	-1.13	12.03	-10.27	17.65	5.63	0.84	0.32	0.09	14.89	25.76	-10.87
1982	573.5	7.38	10.06	0.95	15.94	5.88	0.71	0.43	0.22	18.40	17.94	0.45
1983	577.7	3.51	9.38	-2.27	15.43	6.04	0.48	0.52	-0.34	13.08	14.97	-1.89
1984	579.7	-0.84	8.70	-5.94	14.77	6.07	0.52	0.44	0.17	9.84	16.03	-6.19
1985	579.2	-3.51	8.55	-8.45	14.70	6.15	0.56	0.39	0.05	10.31	18.99	-8.68
1986	577.2	-2.77	7.91	-7.82	14.05	6.14	0.48	0.48	0.31	13.36	21.48	-8.12
1987	575.6	-1.76	7.20	-6.63	13.51	6.31	0.80	0.27	0.45	14.69	22.29	-7.61
1988	574.6	1.84	6.77	-2.61	13.02	6.24	0.71	0.10	0.53	17.43	21.18	-3.75
1989	575.7	1.52	7.02	-3.17	13.47	6.45	0.81	0.09	0.63	17.51	22.03	-4.52
1990	576.5	2.89	6.44	-1.23	13.17	6.73	0.95	0.12	-0.09	17.75	19.72	-1.97
1991	578.2	2.08	5.82	-1.01	12.38	6.56	1.11	0.32	0.08	17.02	18.89	-1.87
1992	579.4	2.69	5.38	0.34	11.92	6.55	1.36	0.21	3.61	14.04	18.46	-4.42
1993	581.0	-6.15	4.37	-7.49	11.09	6.72	1.39	0.22	-2.81	11.87	17.74	-5.87
1994	577.4	-11.12	3.99	-12.05	11.04	7.05	0.99	0.22	-2.02	10.97	21.78	-10.80
1995	571.0	-11.83	3.39	-12.13	10.32	6.93	1.06	0.24	-1.39	12.26	23.83	-11.57
1996	564.3	-12.24	3.24	-14.18	10.25	7.00	1.04	0.29	-0.77	11.71	25.88	-14.17
1997 PD	557.4	-13.31	1.98	-15.30	9.78	7.80	0.78	0.53	-0.16	12.57	27.96	-15.39
1998 PR	550.1	-12.93	1.40	-14.33	9.14	7.74	0.75	0.62	0.12	13.51	28.09	-14.58
1999 PR	543.0	-5.41	0.96	-6.37	8.94	7.97	0.80	0.66	0.72	15.79	23.02	-7.23
2000 PR	540.1	-7.11	0.56	-7.67	8.80	8.24	0.76	0.69	0.13	18.14	26.01	-7.87
2001 PR	536.2	••	••		••			••	••	••	••	••

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 PRINCE EDWARD ISLAND

v	Population		Growth		D: d	<b>5</b> .1			Non- permanent	Inter	provincial Mig	gration	n : 1 1
Year	as of January 1	Total	Natural	Migratory	Births	Deaths	Immigration	Emigration	Residents (net)	In	Out	Net	Residual <sup>1</sup>
1972	113.0	1.3	1.0	1.0	2.0	1.1	0.2	0.0	0.0	4.2	3.4	0.9	-0.6
1973	114.3	0.9	0.9	0.7	1.9	1.0	0.3	0.1	0.0	4.8	4.3	0.5	-0.6
1974	115.2	1.8	0.9	1.6	1.9	1.1	0.3	0.1	0.0	5.2	3.8	1.4	-0.6
1975	117.0	1.2	0.9	1.0	1.9	1.1	0.2	0.1	0.0	4.6	3.8	0.8	-0.6
1976	118.3	1.1	0.8	0.5	1.9	1.1	0.2	0.0	0.0	4.3	4.0	0.3	-0.2
1977	119.4	1.7	0.9	0.8	2.0	1.0	0.2	0.0	0.0	3.9	3.3	0.6	0.0
1978	121.1	1.2	1.0	0.1	2.0	1.0	0.1	0.0	0.0	3.5	3.5	0.0	0.0
1979	122.3	1.0	0.9	0.0	1.9	1.0	0.3	0.0	0.0	3.4	3.6	-0.2	0.0
1980	123.3	0.1	0.9	-0.9	2.0	1.0	0.2	0.0	0.0	3.0	4.1	-1.1	0.0
1981	123.3	0.2	0.9	-0.7	1.9	1.0	0.1	0.0	0.0	3.5	4.3	-0.8	0.0
1982	123.5	0.9	0.9	0.1	1.9	1.0	0.2	0.0	0.0	3.4	3.4	0.0	-0.1
1983	124.5	1.6	0.9	0.9	1.9	1.1	0.1	0.1	0.0	3.3	2.5	0.8	-0.1
1984	126.1	1.3	0.8	0.6	2.0	1.1	0.1	0.0	0.0	3.1	2.5	0.5	-0.1
1985	127.4	0.9	0.9	0.1	2.0	1.1	0.1	0.0	0.0	2.8	2.8	0.0	-0.1
1986	128.3	0.1	0.8	-0.3	1.9	1.1	0.2	0.0	0.1	2.5	3.0	-0.5	-0.4
1987	128.4	0.7	0.8	0.5	2.0	1.1	0.2	0.0	0.0	3.1	2.8	0.3	-0.6
1988	129.1	0.9	0.9	0.6	2.0	1.1	0.2	0.0	0.0	3.5	3.1	0.4	-0.6
1989	130.0	0.3	0.8	0.1	1.9	1.1	0.2	0.0	0.0	3.3	3.4	-0.1	-0.6
1990	130.3	0.2	0.9	-0.1	2.0	1.1	0.2	0.0	0.0	2.8	3.1	-0.3	-0.6
1991	130.5	0.1	0.7	-0.3	1.9	1.2	0.2	0.1	0.0	2.9	3.3	-0.4	-0.2
1992	130.6	1.1	0.7	0.3	1.9	1.1	0.2	0.0	0.0	2.8	2.6	0.2	0.0
1993	131.7	1.3	0.6	0.7	1.8	1.1	0.2	0.0	0.0	2.5	1.9	0.5	0.0
1994	133.0	1.4	0.6	0.8	1.7	1.1	0.2	0.0	0.0	2.7	2.0	0.7	0.0
1995	134.4	1.1	0.6	0.6	1.8	1.2	0.2	0.0	0.1	2.6	2.2	0.4	0.0
1996	135.5	1.0	0.4	0.6	1.7	1.3	0.2	0.0	0.1	2.7	2.3	0.4	0.0
1997 PD	136.5	0.3	0.6	-0.2	1.6	1.0	0.2	0.0	-0.1	2.5	2.8	-0.2	•••
1998 PR	136.9	0.4	0.3	0.1	1.5	1.2	0.1	0.0	0.0	2.6	2.6	0.0	•••
1999 PR	137.3	0.7	0.3	0.4	1.5	1.2	0.1	0.0	0.1	2.6	2.4	0.2	•••
2000 PR	138.0	0.3	0.3	0.0	1.5	1.2	0.2	0.0	0.0	2.8	2.9	-0.2	•••
2001 PR	138.2	••	••		••	••	••	••	••	••	••	••	•••

Rates (per 1,000)

Year	Population as of January 1 (in		Growth		Birth	Death	Immigration	Emigration	Non- permanent	Inter	provincial Migi	ation
i eai	thousands)	Total	Natural	Migratory	Bittii	Deaui	miningration	Emigration	Residents	In	Out	Net
1972	113.0	11.56	8.43	8.77	17.69	9.26	1.54	0.35	0.03	37.36	29.81	7.55
1973	114.3	7.96	7.55	6.00	16.44	8.89	2.38	0.58	0.03	41.96	37.79	4.17
1974	115.2	15.86	7.33	14.05	16.70	9.37	2.68	0.58	0.01	44.46	32.52	11.94
1975	117.0	10.47	7.40	8.52	16.39	8.98	2.00	0.45	0.05	39.19	32.27	6.92
1976	118.3	9.33	7.12	4.21	16.34	9.22	1.98	0.36	-0.01	36.25	33.65	2.60
1977	119.4	14.42	7.68	6.34	16.38	8.70	1.60	0.37	0.00	32.30	27.20	5.11
1978	121.1	9.57	8.14	1.02	16.31	8.17	1.19	0.38	0.00	28.62	28.42	0.21
1979	122.3	8.11	7.43	0.29	15.75	8.32	2.35	0.29	0.05	27.65	29.48	-1.83
1980	123.3	0.49	7.49	-7.40	15.88	8.39	1.53	0.24	0.08	24.58	33.36	-8.78
1981	123.3	1.74	7.33	-5.29	15.37	8.04	1.04	0.28	0.30	28.12	34.46	-6.34
1982	123.5	7.52	7.61	0.70	15.52	7.90	1.33	0.28	-0.30	27.09	27.14	-0.05
1983	124.5	12.87	6.84	6.81	15.22	8.38	0.84	0.50	0.10	26.17	19.80	6.38
1984	126.1	10.38	6.67	4.48	15.42	8.75	0.86	0.38	-0.13	24.23	20.10	4.13
1985	127.4	6.70	7.02	0.45	15.71	8.68	0.88	0.34	0.00	22.13	22.23	-0.10
1986	128.3	1.05	6.29	-2.28	15.02	8.74	1.31	0.23	0.48	19.45	23.29	-3.84
1987	128.4	5.68	6.52	3.68	15.18	8.67	1.23	0.09	0.20	23.96	21.62	2.34
1988	129.1	6.71	6.68	4.52	15.26	8.58	1.18	0.12	0.19	26.86	23.59	3.27
1989	130.0	2.46	6.52	0.41	14.88	8.37	1.22	0.27	0.25	25.69	26.48	-0.78
1990	130.3	1.30	6.68	-0.92	15.44	8.77	1.35	0.15	-0.03	21.73	23.82	-2.09
1991	130.5	0.93	5.34	-2.50	14.44	9.10	1.15	0.46	-0.02	22.12	25.30	-3.18
1992	130.6	8.17	5.61	2.65	14.11	8.49	1.15	0.37	0.11	21.57	19.80	1.77
1993	131.7	9.76	4.60	5.25	13.26	8.65	1.24	0.24	0.23	18.57	14.55	4.02
1994	133.0	10.62	4.50	6.21	12.84	8.33	1.20	0.28	0.10	20.17	14.98	5.19
1995	134.4	8.49	4.45	4.13	13.00	8.54	1.19	0.27	0.49	18.96	16.23	2.73
1996	135.5	7.36	3.13	4.26	12.45	9.32	1.12	0.26	0.45	20.05	17.10	2.95
1997 PD	136.5	2.43	4.10	-1.68	11.64	7.53	1.10	0.24	-0.78	18.55	20.31	-1.76
1998 PR	136.9	3.01	2.17	0.85	10.97	8.81	0.99	0.25	0.21	19.11	19.22	-0.11
1999 PR	137.3	5.06	2.01	3.05	10.88	8.87	1.00	0.30	0.81	18.79	17.25	1.54
2000 PR	138.0	1.82	1.91	-0.09	10.85	8.94	1.39	0.33	0.03	20.03	21.21	-1.18
2001 PR	138.2	••		••		••			••	••	••	••

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 NOVA SCOTIA

Year	Population as of		Growth		Births	Deaths	Immigration	Emigration	Non- permanent	Interp	provincial Mig	ration	Residual <sup>1</sup>
Tear	January 1	Total	Natural	Migratory	Bittis	Deaths	minigration	Emigration	Residents (net)	In	Out	Net	Residual
1972	800.5	8.1	6.6	4.5	13.5	6.9	1.9	0.2	0.0	22.7	19.9	2.8	-3.0
1973	808.6	7.7	6.4	4.4	13.3	6.9	2.5	0.4	0.1	26.3	24.1	2.1	-3.0
1974	816.4	6.7	6.0	3.7	12.9	6.9	2.6	0.4	-0.1	27.2	25.6	1.6	-3.0
1975	823.1	9.7	6.3	6.4	13.1	6.8	2.1	0.3	0.1	25.6	21.1	4.5	-3.0
1976	832.8	5.8	5.9	2.0	12.8	7.0	1.9	0.3	-0.1	23.0	22.6	0.4	-2.0
1977	838.6	4.1	5.4	0.0	12.4	7.0	1.6	0.3	-0.1	19.9	21.2	-1.3	-1.3
1978	842.6	4.8	5.7	0.5	12.5	6.9	1.0	0.3	-0.1	19.5	19.6	-0.1	-1.3
1979	847.5	3.6	5.6	-0.6	12.4	6.8	1.3	0.2	0.1	18.4	20.3	-1.8	-1.3
1980	851.1	3.2	5.4	-0.8	12.4	7.0	1.6	0.1	0.2	18.5	21.0	-2.5	-1.3
1981	854.3	3.3	5.1	-0.8	12.1	7.0	1.4	0.3	0.6	19.3	21.7	-2.5	-1.0
1982	857.7	7.3	5.4	2.8	12.3	6.9	1.3	0.3	0.2	18.8	17.3	1.6	-0.8
1983	865.0	9.2	5.4	4.6	12.4	7.0	0.8	0.3	0.2	18.3	14.5	3.9	-0.8
1984	874.2	8.5	5.5	3.8	12.4	6.9	1.0	0.2	0.0	17.3	14.4	3.0	-0.8
1985	882.7	4.6	5.1	0.2	12.5	7.3	1.0	0.3	-0.2	16.7	16.9	-0.2	-0.8
1986	887.2	4.3	5.1	0.1	12.4	7.3	1.1	0.3	0.0	17.1	17.8	-0.7	-0.9
1987	891.5	3.1	5.0	-0.9	12.1	7.1	1.2	0.3	0.3	17.6	19.8	-2.2	-1.0
1988	894.6	5.8	4.8	2.0	12.2	7.4	1.3	0.2	0.8	19.2	19.1	0.1	-1.0
1989	900.4	6.5	5.0	2.5	12.5	7.5	1.5	0.3	0.7	20.4	19.8	0.6	-1.0
1990	907.0	5.4	5.5	0.8	12.9	7.4	1.6	0.5	-0.2	18.6	18.7	-0.1	-1.0
1991	912.3	5.0	4.8	1.6	12.0	7.3	1.5	0.6	-0.3	19.0	17.9	1.0	-1.4
1992	917.3	4.7	4.3	2.1	11.9	7.5	2.4	0.5	-0.2	18.1	17.8	0.4	-1.7
1993	922.0	3.5	4.0	1.2	11.6	7.6	3.0	0.4	-0.2	15.5	16.7	-1.1	-1.7
1994	925.5	1.5	3.3	-0.1	11.1	7.8	3.5	0.4	-0.4	15.1	17.8	-2.7	-1.7
1995	927.1	2.6	3.0	1.3	10.7	7.7	3.8	0.5	-0.1	15.4	17.4	-2.0	-1.7
1996	929.6	3.7	2.8	1.6	10.6	7.8	3.2	0.5	-0.1	16.0	17.1	-1.1	-0.7
1997 PD	933.3	2.4	1.9	0.5	10.0	8.0	2.9	0.6	0.3	15.8	17.9	-2.1	
1998 PR	935.7	1.7	1.5	0.2	9.6	8.1	2.1	0.6	0.3	15.2	16.8	-1.6	
1999 PR	937.4	3.8	1.3	2.5	9.5	8.2	1.6	0.7	0.6	16.0	15.1	0.9	•••
2000 PR	941.2	1.5	1.0	0.5	9.4	8.4	1.6	0.7	0.3	18.2	18.9	-0.7	
2001 PR	942.7	••	••	••	••	••	••	••	••	••	••	••	•••

Rates (per 1,000)

	Population as		Growth		T				Non-	Inter	provincial Migr	ation
Year	of January 1 (in thousands)	Total	Natural	Migratory	Birth	Death	Immigration	Emigration	permanent Residents	In	Out	Net
1972	800.5	10.07	8.24	5.61	16.82	8.58	2.33	0.30	0.05	28.21	24.67	3.54
1973	808.6	9.52	7.83	5.44	16.36	8.53	3.14	0.46	0.17	32.31	29.72	2.59
1974	816.4	8.21	7.37	4.55	15.79	8.42	3.17	0.47	-0.08	33.15	31.23	1.92
1975	823.1	11.69	7.64	7.73	15.85	8.21	2.57	0.38	0.16	30.88	25.50	5.38
1976	832.8	6.92	7.02	2.35	15.34	8.32	2.32	0.31	-0.10	27.51	27.08	0.43
1977	838.6	4.84	6.44	-0.02	14.72	8.28	1.89	0.31	-0.08	23.69	25.21	-1.52
1978	842.6	5.74	6.71	0.60	14.85	8.14	1.16	0.33	-0.10	23.07	23.20	-0.13
1979	847.5	4.28	6.55	-0.70	14.61	8.06	1.58	0.25	0.14	21.69	23.86	-2.17
1980	851.1	3.81	6.29	-0.92	14.51	8.21	1.89	0.17	0.28	21.68	24.61	-2.92
1981	854.3	3.90	5.98	-0.88	14.11	8.13	1.64	0.33	0.69	22.51	25.39	-2.88
1982	857.7	8.52	6.25	3.21	14.31	8.06	1.46	0.29	0.20	21.87	20.03	1.85
1983	865.0	10.56	6.16	5.34	14.26	8.10	0.96	0.31	0.26	21.08	16.64	4.44
1984	874.2	9.63	6.22	4.33	14.09	7.87	1.18	0.25	0.03	19.71	16.34	3.37
1985	882.7	5.15	5.80	0.27	14.07	8.27	1.10	0.30	-0.27	18.86	19.13	-0.26
1986	887.2	4.85	5.74	0.12	13.90	8.16	1.23	0.31	0.03	19.18	20.01	-0.83
1987	891.5	3.48	5.60	-1.04	13.56	7.96	1.37	0.30	0.33	19.68	22.12	-2.44
1988	894.6	6.43	5.31	2.18	13.57	8.26	1.45	0.24	0.90	21.38	21.31	0.08
1989	900.4	7.25	5.55	2.75	13.87	8.32	1.63	0.31	0.80	22.56	21.93	0.63
1990	907.0	5.90	6.03	0.93	14.15	8.12	1.72	0.51	-0.17	20.43	20.54	-0.12
1991	912.3	5.47	5.20	1.79	13.13	7.93	1.64	0.70	-0.29	20.73	19.59	1.14
1992	917.3	5.08	4.71	2.23	12.91	8.20	2.57	0.51	-0.21	19.73	19.34	0.39
1993	922.0	3.79	4.34	1.30	12.52	8.18	3.26	0.46	-0.27	16.79	18.03	-1.24
1994	925.5	1.66	3.59	-0.09	11.98	8.39	3.74	0.48	-0.44	16.33	19.24	-2.91
1995	927.1	2.79	3.27	1.35	11.55	8.28	4.06	0.50	-0.08	16.59	18.72	-2.12
1996	929.6	3.95	3.03	1.69	11.35	8.32	3.46	0.56	-0.07	17.21	18.35	-1.14
1997 PD	933.3	2.57	2.04	0.53	10.65	8.61	3.11	0.64	0.28	16.95	19.17	-2.22
1998 PR	935.7	1.82	1.63	0.19	10.24	8.61	2.20	0.67	0.34	16.23	17.90	-1.68
1999 PR	937.4	4.00	1.35	2.65	10.08	8.73	1.71	0.70	0.63	17.05	16.04	1.01
2000 PR	941.2	1.62	1.06	0.56	9.93	8.87	1.71	0.73	0.27	19.32	20.01	-0.69
2001 PR	942.7	••		••		••			••	••	••	

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 NEW BRUNSWICK

V	Population		Growth		Di d	ъ.,			Non- permanent	Inter	provincial Migr	ation	n1
Year	as of January 1	Total	Natural	Migratory	Births	Deaths	Immigration	Emigration	Residents (net)	In	Out	Net	Residual <sup>1</sup>
1972	646.3	6.2	6.8	1.2	11.8	5.0	1.3	0.4	0.0	18.2	17.9	0.2	-1.8
1973	652.5	8.5	6.3	4.0	11.4	5.1	1.7	0.7	0.1	22.7	19.9	2.8	-1.8
1974	661.0	10.1	6.2	5.7	11.4	5.2	2.2	0.7	0.0	22.9	18.7	4.2	-1.8
1975	671.1	14.0	6.6	9.2	11.8	5.2	2.1	0.6	0.1	24.2	16.6	7.6	-1.8
1976	685.2	8.1	6.6	2.9	11.8	5.2	1.8	0.5	0.0	18.9	17.3	1.6	-1.4
1977	693.3	5.0	6.3	-0.2	11.5	5.2	1.2	0.5	0.0	15.5	16.4	-0.9	-1.1
1978	698.3	3.0	5.6	-1.5	10.8	5.2	0.7	0.5	0.0	14.3	16.0	-1.6	-1.1
1979	701.3	3.2	5.7	-1.4	10.8	5.2	1.1	0.4	0.1	14.3	16.5	-2.2	-1.1
1980	704.6	1.2	5.3	-3.0	10.6	5.3	1.2	0.3	0.2	13.2	17.4	-4.2	-1.1
1981	705.8	0.1	5.4	-4.0	10.5	5.1	1.0	0.6	0.4	13.8	18.6	-4.8	-1.3
1982	705.9	5.9	5.3	2.1	10.5	5.2	0.8	0.6	-0.2	14.8	12.7	2.2	-1.5
1983	711.8	6.2	5.3	2.4	10.5	5.2	0.6	0.4	0.0	13.2	10.9	2.3	-1.5
1984	718.0	4.5	5.1	0.9	10.4	5.3	0.6	0.4	-0.1	12.0	11.2	0.8	-1.5
1985	722.5	1.9	4.9	-1.5	10.1	5.2	0.6	0.5	0.0	11.5	13.1	-1.6	-1.5
1986	724.4	1.2	4.3	-2.6	9.8	5.5	0.6	0.5	0.1	11.4	14.3	-2.9	-0.5
1987	725.6	3.0	4.2	-1.4	9.6	5.4	0.6	0.4	0.1	13.2	15.0	-1.8	0.2
1988	728.6	4.0	4.2	-0.4	9.6	5.5	0.7	0.4	0.6	13.7	14.9	-1.2	0.2
1989	732.5	4.8	4.2	0.5	9.7	5.5	0.9	0.5	0.1	15.0	15.0	0.0	0.2
1990	737.4	5.9	4.4	1.3	9.8	5.4	0.8	0.5	-0.1	14.2	13.2	1.0	0.2
1991	743.2	3.6	4.0	0.1	9.5	5.5	0.7	0.4	-0.1	12.8	12.9	-0.1	-0.6
1992	746.8	1.7	3.8	-1.0	9.4	5.6	0.8	0.5	-0.2	12.0	13.1	-1.1	-1.1
1993	748.5	1.8	3.2	-0.4	9.0	5.8	0.7	0.5	-0.1	11.0	11.5	-0.5	-1.1
1994	750.3	1.4	3.1	-0.6	9.0	5.9	0.6	0.5	-0.2	10.7	11.2	-0.5	-1.1
1995	751.6	0.7	2.6	-0.8	8.6	5.9	0.6	0.5	0.0	11.2	12.1	-0.9	-1.1
1996	752.3	1.2	2.3	-0.6	8.2	5.9	0.7	0.3	-0.1	11.1	12.0	-0.9	-0.5
1997 PD	753.5	0.7	2.0	-1.3	7.9	5.9	0.7	0.3	0.1	11.4	13.2	-1.8	
1998 PR	754.2	-0.8	1.6	-2.3	7.9	6.3	0.8	0.3	0.1	9.7	12.6	-2.9	
1999 PR	753.5	1.6	1.4	0.3	7.8	6.4	0.7	0.3	0.5	11.0	11.7	-0.6	
2000 PR	755.1	1.0	1.2	-0.2	7.7	6.5	0.8	0.3	0.3	13.0	13.9	-1.0	
2001 PR	756.0	••			••			••		••	••	••	•••

Rates (per 1,000)

Year	Population as of January 1 (in		Growth		Birth	Death	Immigration	Emigration	Non- permanent	Inter	provincial Migr	ration
rear	thousands)	Total	Natural	Migratory	Ditti	Death	minigration	Lingration	Residents	In	Out	Net
1972	646.3	9.49	10.51	1.78	18.18	7.67	2.00	0.66	0.07	28.00	27.63	0.37
1973	652.5	12.97	9.65	6.08	17.40	7.74	2.63	1.03	0.15	34.56	30.23	4.33
1974	661.0	15.19	9.37	8.55	17.18	7.81	3.31	1.05	-0.01	34.37	28.07	6.29
1975	671.1	20.67	9.79	13.56	17.38	7.59	3.09	0.84	0.15	35.63	24.46	11.17
1976	685.2	11.79	9.59	4.21	17.14	7.55	2.54	0.69	-0.03	27.47	25.09	2.38
1977	693.3	7.25	9.10	-0.31	16.55	7.45	1.66	0.70	-0.01	22.22	23.50	-1.27
1978	698.3	4.31	8.01	-2.18	15.42	7.41	0.94	0.75	-0.03	20.48	22.83	-2.35
1979	701.3	4.62	8.07	-1.94	15.43	7.36	1.63	0.57	0.16	20.29	23.44	-3.16
1980	704.6	1.76	7.57	-4.30	15.08	7.51	1.71	0.38	0.28	18.76	24.67	-5.91
1981	705.8	0.08	7.60	-5.66	14.88	7.28	1.40	0.86	0.55	19.61	26.36	-6.75
1982	705.9	8.34	7.47	2.99	14.80	7.33	1.06	0.87	-0.28	20.93	17.85	3.08
1983	711.8	8.67	7.43	3.33	14.71	7.28	0.77	0.60	-0.05	18.41	15.20	3.21
1984	718.0	6.21	7.06	1.22	14.38	7.32	0.83	0.59	-0.15	16.67	15.54	1.13
1985	722.5	2.64	6.76	-2.05	13.99	7.23	0.84	0.70	-0.04	15.94	18.09	-2.16
1986	724.4	1.67	5.97	-3.59	13.50	7.53	0.88	0.67	0.20	15.72	19.71	-4.00
1987	725.6	4.07	5.75	-1.91	13.19	7.44	0.88	0.57	0.20	18.17	20.59	-2.42
1988	728.6	5.45	5.70	-0.49	13.16	7.46	0.93	0.59	0.83	18.76	20.42	-1.66
1989	732.5	6.57	5.68	0.66	13.15	7.48	1.23	0.65	0.10	20.44	20.47	-0.03
1990	737.4	7.91	5.94	1.74	13.27	7.33	1.14	0.63	-0.14	19.13	17.76	1.37
1991	743.2	4.77	5.41	0.12	12.75	7.34	0.92	0.59	-0.10	17.24	17.35	-0.11
1992	746.8	2.28	5.06	-1.33	12.56	7.50	1.01	0.66	-0.22	16.10	17.55	-1.45
1993	748.5	2.37	4.33	-0.51	12.08	7.75	0.93	0.64	-0.15	14.73	15.39	-0.66
1994	750.3	1.83	4.08	-0.80	11.96	7.88	0.83	0.69	-0.28	14.29	14.97	-0.67
1995	751.6	0.93	3.49	-1.12	11.39	7.90	0.84	0.71	-0.01	14.90	16.14	-1.24
1996	752.3	1.58	3.03	-0.85	10.86	7.83	0.95	0.41	-0.18	14.70	15.91	-1.21
1997 PD	753.5	0.92	2.62	-1.70	10.51	7.88	0.88	0.35	0.17	15.17	17.57	-2.40
1998 PR	754.2	-1.01	2.10	-3.11	10.46	8.36	0.99	0.34	0.14	12.85	16.74	-3.89
1999 PR	753.5	2.16	1.82	0.35	10.31	8.50	0.90	0.37	0.67	14.62	15.47	-0.85
2000 PR	755.1	1.27	1.55	-0.28	10.20	8.64	1.00	0.40	0.41	17.15	18.44	-1.29
2001 PR	756.0	••	••	••	••	••	••	0.40	••	••	••	••
	he and of Table 1		••	· · · · · ·	••	••		••	••	••	••	

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 QUEBEC

Year	Population as of		Growth		Births	Deaths	Immigration	Emigration	Non- permanent	Inter	provincial Mig	ration	Residual <sup>1</sup>
1 Cai	January 1	Total	Natural	Migratory	Dittis	Deaths	minigration	Linigration	Residents (net)	In	Out	Net	Residual
1972	6,153.4	37.5	41.3	-5.0	83.6	42.3	18.6	4.4	0.7	36.2	56.0	-19.9	1.2
1973	6,190.9	49.5	41.4	7.0	84.1	42.7	26.9	6.9	1.7	39.6	54.4	-14.7	1.2
1974	6,240.4	58.3	42.9	14.3	85.6	42.8	33.5	7.0	-0.3	39.3	51.2	-11.9	1.2
1975	6,298.7	63.1	50.2	11.8	93.6	43.4	28.0	5.7	1.7	34.5	46.8	-12.3	1.2
1976	6,361.8	52.1	53.3	3.4	96.3	43.0	29.3	4.7	-0.5	31.6	52.4	-20.8	-4.6
1977	6,413.9	12.7	53.7	-32.3	97.2	43.5	19.2	4.8	-0.3	24.4	71.0	-46.5	-8.7
1978	6,426.6	18.4	51.8	-24.8	95.4	43.6	14.3	5.2	-0.5	24.5	57.9	-33.4	-8.7
1979	6,445.0	34.0	55.3	-12.7	98.6	43.3	19.5	4.0	1.8	23.6	53.7	-30.0	-8.7
1980	6,479.0	44.0	53.9	-1.2	97.4	43.5	22.5	2.7	3.3	21.9	46.2	-24.3	-8.7
1981	6,523.0	42.3	52.6	-0.2	95.3	42.7	21.2	3.6	4.8	23.6	46.1	-22.5	-10.1
1982	6,565.3	21.8	47.3	-14.3	90.8	43.5	21.3	4.7	-2.8	19.9	48.1	-28.2	-11.2
1983	6,587.1	26.5	43.9	-6.2	88.2	44.3	16.4	5.1	1.6	22.3	41.4	-19.1	-11.2
1984	6,613.6	31.9	43.4	-0.3	87.8	44.4	14.6	4.6	0.6	25.2	36.2	-10.9	-11.2
1985	6,645.5	39.4	40.6	9.9	86.3	45.7	14.9	3.5	4.6	25.4	31.4	-6.0	-11.2
1986	6,684.9	60.9	37.7	27.3	84.6	46.9	19.5	3.1	13.9	26.0	29.0	-3.0	-4.2
1987	6,745.8	61.3	36.2	24.2	83.8	47.6	26.8	2.3	7.1	26.0	33.4	-7.4	0.9
1988	6,807.1	79.3	38.8	39.6	86.6	47.8	25.8	2.1	22.9	27.8	34.8	-7.0	0.9
1989	6,886.4	75.3	44.1	30.4	92.4	48.3	34.2	2.6	7.2	29.5	37.8	-8.4	0.9
1990	6,961.7	71.7	49.6	21.2	98.0	48.4	40.8	2.7	-7.4	26.9	36.4	-9.6	0.9
1991	7,033.4	49.9	48.2	12.4	97.3	49.1	51.7	3.4	-22.8	24.5	37.6	-13.0	-10.7
1992	7,083.3	60.5	47.3	32.0	96.1	48.8	48.4	2.9	-3.6	25.5	35.3	-9.8	-18.9
1993	7,143.7	46.6	40.7	24.8	92.4	51.7	44.9	2.9	-9.8	24.5	32.0	-7.4	-18.9
1994	7,190.3	34.6	39.2	14.3	90.6	51.4	28.0	3.1	-0.3	22.7	33.0	-10.3	-18.9
1995	7,224.9	34.1	34.7	18.3	87.4	52.7	26.6	3.3	5.3	23.1	33.4	-10.2	-18.9
1996	7,259.0	30.6	32.9	5.6	85.2	52.3	29.7	7.5	-1.3	20.8	36.2	-15.4	-7.9
1997 PD	7,289.6	23.5	25.4	-1.9	79.8	54.4	27.8	10.4	-1.7	20.4	37.9	-17.6	•••
1998 PR	7,313.1	23.8	21.7	2.1	75.9	54.2	26.7	10.7	0.7	20.2	34.7	-14.5	•••
1999 PR	7,336.8	26.8	18.7	8.2	73.6	54.9	29.2	11.3	2.0	20.0	31.7	-11.7	•••
2000 PR	7,363.7	24.7	18.7	6.0	71.9	53.2	32.5	11.9	-2.2	24.0	36.4	-12.4	•••
2001 PR	7,388.4		••		••	••	••			••	••	••	•••

Rates (per 1,000)

						(per 1,00	- /					
Year	Population as of		Growth		Dinah	Doodh	Tanani anadi sa	Emination	Non-	Inte	rprovincial Migi	ration
i ear	January 1 (in thousands)	Total	Natural	Migratory	Birth	Death	Immigration	Emigration	permanent Residents	In	Out	Net
1972	6,153.4	6.07	6.69	-0.81	13.55	6.86	3.01	0.71	0.12	5.86	9.08	-3.22
1973	6,190.9	7.97	6.66	1.13	13.52	6.86	4.32	1.10	0.27	6.38	8.75	-2.37
1974	6,240.4	9.30	6.84	2.28	13.66	6.82	5.34	1.12	-0.04	6.27	8.16	-1.89
1975	6,298.7	9.97	7.93	1.86	14.79	6.86	4.43	0.90	0.27	5.44	7.39	-1.95
1976	6,361.8	8.16	8.35	0.53	15.08	6.73	4.58	0.73	-0.07	4.95	8.20	-3.26
1977	6,413.9	1.98	8.37	-5.04	15.14	6.77	3.00	0.74	-0.04	3.80	11.05	-7.25
1978	6,426.6	2.85	8.05	-3.85	14.82	6.77	2.22	0.80	-0.07	3.80	9.00	-5.19
1979	6,445.0	5.26	8.56	-1.96	15.27	6.70	3.02	0.61	0.28	3.66	8.30	-4.65
1980	6,479.0	6.77	8.29	-0.19	14.99	6.69	3.47	0.42	0.50	3.37	7.11	-3.74
1981	6,523.0	6.46	8.04	-0.03	14.57	6.52	3.24	0.56	0.73	3.60	7.05	-3.45
1982	6,565.3	3.32	7.19	-2.17	13.81	6.61	3.24	0.72	-0.42	3.03	7.32	-4.28
1983	6,587.1	4.01	6.65	-0.94	13.36	6.71	2.48	0.77	0.24	3.39	6.28	-2.89
1984	6,613.6	4.82	6.54	-0.04	13.25	6.70	2.21	0.69	0.09	3.81	5.46	-1.65
1985	6,645.5	5.91	6.10	1.49	12.95	6.86	2.23	0.53	0.69	3.81	4.72	-0.90
1986	6,684.9	9.07	5.62	4.07	12.60	6.98	2.90	0.46	2.08	3.87	4.32	-0.45
1987	6,745.8	9.04	5.34	3.58	12.37	7.03	3.96	0.34	1.05	3.84	4.94	-1.09
1988	6,807.1	11.58	5.67	5.78	12.65	6.98	3.77	0.31	3.35	4.07	5.09	-1.02
1989	6,886.4	10.87	6.36	4.39	13.34	6.98	4.94	0.37	1.04	4.25	5.46	-1.21
1990	6,961.7	10.25	7.09	3.03	14.01	6.92	5.84	0.38	-1.05	3.84	5.21	-1.37
1991	7,033.4	7.07	6.83	1.75	13.79	6.96	7.33	0.49	-3.24	3.47	5.32	-1.85
1992	7,083.3	8.50	6.65	4.50	13.52	6.86	6.80	0.41	-0.51	3.58	4.96	-1.38
1993	7,143.7	6.50	5.68	3.46	12.89	7.22	6.27	0.41	-1.37	3.42	4.46	-1.04
1994	7,190.3	4.80	5.44	1.98	12.57	7.13	3.89	0.44	-0.05	3.15	4.57	-1.42
1995	7,224.9	4.71	4.79	2.52	12.07	7.28	3.67	0.46	0.73	3.19	4.61	-1.42
1996	7,259.0	4.21	4.52	0.77	11.72	7.19	4.08	1.02	-0.18	2.87	4.98	-2.11
1997 PD	7,289.6	3.21	3.48	-0.26	10.93	7.45	3.80	1.43	-0.23	2.79	5.19	-2.40
1998 PR	7,313.1	3.24	2.96	0.29	10.36	7.40	3.64	1.47	0.09	2.75	4.73	-1.98
1999 PR	7,336.8	3.65	2.54	1.11	10.02	7.47	3.98	1.54	0.27	2.72	4.31	-1.59
2000 PR	7,363.7	3.34	2.53	0.81	9.75	7.22	4.41	1.62	-0.30	3.26	4.94	-1.68
2001 PR	7,388.4	••	••	••	••	••	••	•	•	••	••	••

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 ONTARIO

Year	Population as of		Growth		Births	Deaths	Immigration	Emigration	Non- permanent	Interp	provincial Mig	ration	Residual <sup>1</sup>
Tear	January 1	Total	Natural	Migratory	Bituis	Deaths	minigration	Emigration	Residents (net)	In	Out	Net	Residuai
1972	7,906.4	107.1	66.2	60.8	125.1	58.9	63.8	12.7	1.5	97.0	88.8	8.2	-19.9
1973	8,013.5	126.4	63.9	82.4	123.8	59.9	103.2	19.6	4.1	104.2	109.4	-5.3	-19.9
1974	8,139.9	120.3	63.7	76.6	124.2	60.6	120.1	20.2	-1.2	89.5	111.7	-22.2	-19.9
1975	8,260.2	106.3	65.2	61.1	125.8	60.6	98.5	16.4	4.1	80.9	106.0	-25.1	-19.9
1976	8,366.5	91.4	62.1	46.3	122.7	60.6	72.0	13.5	-1.7	88.7	99.2	-10.5	-17.0
1977	8,457.9	96.6	61.3	50.2	122.8	61.4	56.6	13.8	-1.2	98.6	90.0	8.6	-15.0
1978	8,554.5	71.0	59.8	26.1	121.0	61.1	42.4	15.0	-1.7	86.6	86.2	0.4	-15.0
1979	8,625.5	74.4	60.2	29.2	121.7	61.5	52.0	11.5	4.0	83.5	98.9	-15.3	-15.0
1980	8,699.9	72.4	60.6	26.8	123.3	62.7	62.3	8.2	7.6	74.2	109.1	-34.9	-15.0
1981	8,772.3	94.1	59.3	41.9	122.2	62.8	55.0	11.0	17.5	80.6	100.2	-19.7	-7.2
1982	8,866.4	117.8	61.2	58.3	124.9	63.7	53.0	14.3	-0.1	89.1	69.5	19.6	-1.7
1983	8,984.2	121.0	62.3	60.3	126.8	64.5	40.0	14.3	1.7	88.2	55.4	32.8	-1.7
1984	9,105.1	128.7	66.6	63.8	131.3	64.7	41.5	12.9	-1.6	89.1	52.4	36.7	-1.7
1985	9,233.9	129.6	65.5	65.8	132.2	66.7	40.7	11.8	3.4	88.4	54.9	33.4	-1.7
1986	9,363.5	172.7	66.0	107.0	133.9	67.9	49.6	10.3	24.7	100.1	57.1	42.9	-0.3
1987	9,536.2	205.8	66.5	138.7	134.6	68.1	84.8	8.6	22.2	104.7	64.4	40.3	0.6
1988	9,741.9	234.6	67.4	166.6	138.1	70.7	89.0	7.3	70.0	91.4	76.5	14.9	0.6
1989	9,976.5	218.0	74.4	143.0	145.3	70.9	104.8	8.3	47.6	87.3	88.5	-1.2	0.6
1990	10,194.5	164.8	80.1	84.1	150.9	70.8	113.4	8.3	-6.0	75.2	90.3	-15.1	0.6
1991	10,359.2	127.0	78.6	60.6	151.5	72.9	118.8	10.7	-37.5	71.2	81.2	-10.0	-12.2
1992	10,486.2	144.4	77.4	88.4	150.6	73.2	138.2	9.1	-27.2	68.0	81.5	-13.5	-21.4
1993	10,630.6	120.2	72.0	69.6	147.8	75.9	134.3	9.3	-42.6	62.3	75.1	-12.8	-21.4
1994	10,750.8	138.7	69.6	90.6	147.1	77.5	117.3	10.0	-12.2	66.0	70.5	-4.5	-21.4
1995	10,889.5	139.5	67.8	93.1	146.3	78.5	115.6	10.5	-10.2	68.5	70.3	-1.8	-21.4
1996	11,029.0	134.8	60.9	82.8	140.0	79.1	119.8	20.2	-15.0	67.0	68.7	-1.7	-8.9
1997 PD	11,163.8	148.0	53.5	94.6	133.0	79.5	117.9	27.7	-2.5	71.1	64.3	6.8	
1998 PR	11,311.8	125.8	52.4	73.3	132.6	80.2	92.2	28.4	-1.9	73.4	62.0	11.5	
1999 PR	11,437.6	150.1	49.3	100.8	131.7	82.5	104.1	29.9	8.2	74.2	55.8	18.4	
2000 PR	11,587.7	172.0	46.2	125.8	131.2	85.1	133.5	31.5	1.2	86.8	64.2	22.7	
2001 PR	11,759.7	••	••	••	••	••	••	••	••	••	••	••	•••

Rates (per 1,000)

Year	Population as of January 1 (in		Growth		Birth	Death	Immigration	Emination	Non-	Inter	provincial Migr	ation
rear	thousands)	Total	Natural	Migratory	ыпп	Death	immigration	Emigration	permanent Residents	In	Out	Net
1972	7,906.4	13.45	8.31	7.64	15.71	7.40	8.02	1.59	0.18	12.19	11.16	1.03
1973	8,013.5	15.65	7.91	10.20	15.33	7.41	12.78	2.43	0.51	12.90	13.55	-0.65
1974	8,139.9	14.67	7.76	9.34	15.15	7.38	14.65	2.46	-0.14	10.91	13.62	-2.70
1975	8,260.2	12.79	7.84	7.34	15.13	7.29	11.84	1.98	0.49	9.74	12.75	-3.01
1976	8,366.5	10.86	7.38	5.51	14.59	7.21	8.56	1.60	-0.20	10.54	11.79	-1.25
1977	8,457.9	11.35	7.21	5.90	14.43	7.22	6.65	1.62	-0.14	11.59	10.58	1.01
1978	8,554.5	8.27	6.97	3.04	14.08	7.11	4.94	1.74	-0.20	10.08	10.03	0.05
1979	8,625.5	8.59	6.95	3.37	14.04	7.10	6.00	1.33	0.46	9.64	11.41	-1.77
1980	8,699.9	8.29	6.93	3.07	14.12	7.18	7.13	0.94	0.87	8.49	12.49	-4.00
1981	8,772.3	10.67	6.73	4.75	13.85	7.13	6.24	1.25	1.99	9.14	11.37	-2.23
1982	8,866.4	13.20	6.85	6.53	13.99	7.14	5.94	1.60	-0.01	9.99	7.79	2.20
1983	8,984.2	13.37	6.89	6.67	14.02	7.13	4.43	1.58	0.19	9.75	6.12	3.63
1984	9,105.1	14.04	7.26	6.96	14.32	7.06	4.53	1.40	-0.17	9.71	5.71	4.00
1985	9,233.9	13.94	7.04	7.08	14.22	7.18	4.38	1.26	0.37	9.50	5.91	3.59
1986	9,363.5	18.27	6.99	11.32	14.17	7.18	5.25	1.09	2.61	10.59	6.05	4.54
1987	9,536.2	21.35	6.90	14.38	13.97	7.07	8.80	0.89	2.30	10.86	6.68	4.18
1988	9,741.9	23.79	6.83	16.89	14.00	7.17	9.03	0.74	7.10	9.27	7.76	1.51
1989	9,976.5	21.61	7.38	14.17	14.41	7.03	10.39	0.82	4.72	8.65	8.77	-0.12
1990	10,194.5	16.03	7.79	8.18	14.69	6.89	11.04	0.80	-0.58	7.32	8.79	-1.47
1991	10,359.2	12.18	7.54	5.82	14.53	7.00	11.40	1.02	-3.60	6.83	7.79	-0.96
1992	10,486.2	13.68	7.33	8.38	14.26	6.93	13.09	0.86	-2.57	6.44	7.72	-1.28
1993	10,630.6	11.24	6.73	6.51	13.83	7.10	12.56	0.87	-3.99	5.83	7.02	-1.19
1994	10,750.8	12.82	6.43	8.37	13.59	7.16	10.84	0.92	-1.13	6.10	6.52	-0.42
1995	10,889.5	12.72	6.19	8.49	13.35	7.16	10.54	0.96	-0.93	6.25	6.41	-0.16
1996	11,029.0	12.15	5.49	7.47	12.62	7.13	10.80	1.82	-1.35	6.04	6.19	-0.15
1997 PD	11,163.8	13.17	4.76	8.42	11.84	7.08	10.50	2.46	-0.22	6.33	5.72	0.61
1998 PR	11,311.8	11.06	4.61	6.45	11.66	7.05	8.11	2.50	-0.17	6.45	5.45	1.01
1999 PR	11,437.6	13.03	4.28	8.76	11.44	7.16	9.04	2.60	0.71	6.45	4.85	1.60
2000 PR	11,587.7	14.73	3.95	10.78	11.24	7.29	11.43	2.70	0.10	7.44	5.50	1.94
2001 PR	11,759.7	••	••		••				••			

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 MANITOBA

Year	Population as of		Growth		Births	Deaths	Immigration	Emigration	Non- permanent	Inte	rprovincial Mig	ration	Residual <sup>1</sup>
1 cai	January 1	Total	Natural	Migratory	Bituis	Deauis	minigration	Emigration	Residents (net)	In	Out	Net	Residual
1972	998.9	3.7	9.2	-3.3	17.4	8.2	5.3	0.9	0.1	26.1	33.8	-7.7	-2.2
1973	1,002.6	9.8	8.8	3.2	17.0	8.2	6.6	1.5	0.2	33.8	36.0	-2.2	-2.2
1974	1,012.4	7.1	8.9	0.4	17.3	8.4	7.4	1.5	-0.1	30.2	35.6	-5.4	-2.2
1975	1,019.5	8.6	8.8	2.0	17.1	8.4	7.1	1.2	0.2	28.4	32.5	-4.1	-2.2
1976	1,028.1	6.3	8.5	0.7	16.7	8.3	5.5	1.0	-0.1	25.1	28.7	-3.7	-2.9
1977	1,034.5	5.3	8.5	0.2	16.7	8.2	5.1	1.0	-0.1	21.6	25.3	-3.8	-3.4
1978	1,039.8	-2.5	8.1	-7.2	16.4	8.3	3.6	1.1	-0.1	18.7	28.2	-9.6	-3.4
1979	1,037.3	-4.9	8.0	-9.5	16.2	8.2	4.9	0.8	0.2	18.8	32.6	-13.8	-3.4
1980	1,032.4	0.3	7.6	-3.8	16.0	8.4	7.7	0.6	0.4	19.0	30.4	-11.3	-3.4
1981	1,032.8	7.7	7.4	1.5	16.1	8.6	5.4	1.0	0.7	22.7	26.3	-3.6	-1.2
1982	1,040.5	13.6	7.6	5.7	16.1	8.5	4.9	0.9	0.2	20.9	19.4	1.5	0.3
1983	1,054.1	12.7	8.1	4.2	16.6	8.5	4.0	1.1	0.4	18.5	17.5	1.0	0.3
1984	1,066.7	11.6	8.4	3.0	16.7	8.3	3.9	0.7	-0.2	17.2	17.2	0.0	0.3
1985	1,078.4	9.4	8.3	0.7	17.1	8.8	3.4	0.8	-0.1	17.2	19.0	-1.8	0.3
1986	1,087.7	6.9	8.1	-0.1	17.0	8.9	3.7	1.0	0.2	17.4	20.5	-3.0	-1.1
1987	1,094.6	5.2	8.2	-1.0	17.0	8.7	4.8	1.1	0.1	18.1	22.9	-4.8	-2.1
1988	1,099.8	1.7	7.9	-4.1	17.0	9.1	5.0	1.2	0.7	16.1	24.7	-8.6	-2.1
1989	1,101.5	1.3	8.5	-5.1	17.3	8.8	6.1	1.4	0.2	17.1	27.1	-10.0	-2.1
1990	1,102.8	3.4	8.5	-3.0	17.4	8.9	6.6	1.1	0.2	16.9	25.5	-8.6	-2.1
1991	1,106.3	4.0	8.3	-3.3	17.3	8.9	5.6	1.0	-0.4	16.1	23.6	-7.6	-1.0
1992	1,110.3	4.6	7.6	-2.8	16.6	9.0	5.1	1.0	-0.4	15.9	22.3	-6.4	-0.3
1993	1,114.9	5.2	7.4	-1.9	16.7	9.3	4.9	1.2	-0.4	14.6	19.8	-5.2	-0.3
1994	1,120.1	5.7	7.3	-1.4	16.5	9.1	4.1	1.2	-0.2	15.4	19.4	-4.0	-0.3
1995	1,125.8	5.0	6.5	-1.2	16.1	9.7	3.5	1.3	-0.1	15.5	18.9	-3.3	-0.3
1996	1,130.8	4.4	6.0	-1.5	15.5	9.5	3.9	1.4	-0.3	14.4	18.1	-3.7	-0.1
1997 PD	1,135.2	0.9	5.1	-4.2	14.7	9.5	3.8	1.5	0.3	13.2	19.9	-6.7	•••
1998 PR	1,136.1	3.0	4.6	-1.7	14.5	9.8	3.0	1.6	0.0	15.3	18.4	-3.1	•••
1999 PR	1,139.1	4.7	4.4	0.3	14.3	10.0	3.7	1.7	0.6	14.0	16.4	-2.4	•••
2000 PR	1,143.7	3.7	4.1	-0.4	14.2	10.1	4.6	1.8	0.3	16.2	19.9	-3.6	•••
2001 PR	1,147.5		••		••			••		••			•••

Rates (per 1,000)

YearPopulation as of January 1 (in thousands)GrowthBirthDeathImmigrationEmigrationNon-permanent Residents1972998.93.689.17-3.3417.388.225.260.940.0826	3 35.71	Net -7.73
thousands) Total Natural Migratory Residents I 1972 998.9 3.68 9.17 -3.34 17.38 8.22 5.26 0.94 0.08 26	9 33.82 3 35.71	-7.73
1 1 1 1 1 1 1 1 1 1 1 1	3 35.71	
1973     1,002.6     9.71     8.70     3.15     16.84     8.14     6.57     1.47     0.23     33		-2.18
1974   1,012.4   7.04   8.74   0.41   17.04   8.30   7.31   1.51   -0.07   29	2 35.04	-5.32
1975   1,019.5   8.40   8.56   1.95   16.75   8.19   6.97   1.20   0.22   27	2 31.76	-4.04
1976   1,028.1   6.15   8.21   0.72   16.22   8.01   5.34   0.98   -0.10   24	0 27.84	-3.54
1977 1,034.5 5.13 8.23 0.16 16.12 7.89 4.88 0.99 -0.07 20	8 24.43	-3.65
1978   1,039.8   -2.39   7.80   -6.93   15.79   7.99   3.44   1.07   -0.10   17	7 27.18	-9.20
1979 1,037.3 -4.72 7.75 -9.20 15.69 7.94 4.74 0.81 0.21 18	4 31.48	-13.34
1980 1,032.4 0.32 7.31 -3.71 15.48 8.17 7.44 0.58 0.41 18	4 29.43	-10.98
1981 1,032.8 7.44 7.16 1.46 15.51 8.34 5.18 0.94 0.71 21	7 25.37	-3.49
1982 1,040.5 13.01 7.29 5.41 15.40 8.11 4.71 0.88 0.15 19	4 18.51	1.43
1983   1,054.1   11.93   7.62   4.01   15.66   8.04   3.75   1.04   0.40   17	4 16.54	0.90
1984   1,066.7   10.85   7.80   2.75   15.52   7.73   3.64   0.68   -0.16   16	0 16.05	-0.05
1985   1,078.4   8.63   7.70   0.63   15.79   8.08   3.15   0.78   -0.12   15	0 17.52	-1.62
1986   1,087.7   6.31   7.42   -0.11   15.59   8.17   3.44   0.92   0.16   15	7 18.75	-2.79
1987 1,094.6 4.70 7.51 -0.90 15.45 7.94 4.37 1.02 0.07 16	1 20.84	-4.33
1988   1,099.8   1.58   7.20   -3.72   15.47   8.27   4.55   1.08   0.61   14	5 22.45	-7.80
1989   1,101.5   1.21   7.71   -4.60   15.72   8.00   5.57   1.31   0.21   15	8 24.56	-9.08
1990   1,102.8   3.11   7.69   -2.68   15.71   8.02   6.01   1.02   0.14   15	1 23.11	-7.80
1991 1,106.3 3.61 7.52 -2.99 15.59 8.07 5.09 0.89 -0.35 14	8 21.32	-6.84
1992 1,110.3 4.12 6.84 -2.48 14.91 8.07 4.57 0.93 -0.35 14	1 20.08	-5.77
1993   1,114.9   4.68   6.63   -1.72   14.95   8.32   4.36   1.04   -0.38   13	6 17.72	-4.66
1994 1,120.1 5.09 6.53 -1.21 14.68 8.15 3.67 1.10 -0.20 13	8 17.25	-3.57
1995   1,125.8   4.41   5.72   -1.08   14.28   8.56   3.14   1.14   -0.11   13	5 16.71	-2.96
1996   1,130.8   3.87   5.28   -1.31   13.66   8.38   3.47   1.24   -0.23   12	8 15.97	-3.30
1997 PD   1,135.2   0.83   4.53   -3.70   12.90   8.38   3.32   1.33   0.22   11	0 17.51	-5.91
1998 PR   1,136.1   2.62   4.08   -1.47   12.71   8.63   2.65   1.38   -0.01   13	7 16.19	-2.72
1999 PR   1,139.1   4.08   3.83   0.25   12.55   8.73   3.26   1.45   0.54   12	8 14.37	-2.09
2000 PR   1,143.7   3.25   3.59   -0.34   12.43   8.84   4.05   1.53   0.30   14	8 17.35	-3.16
2001 PR   1,147.5		

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 SASKATCHEWAN

Year	Population as of		Growth		Births	Deaths	Immigration	Policetica	Non- permanent	Inte	rprovincial Mig	ration	Residual <sup>1</sup>
rear	January 1	Total	Natural	Migratory	Births	Deaths	immigration	Emigration	Residents (net)	In	Out	Net	Residuai
1972	923.1	-9.5	7.9	-16.2	15.5	7.6	1.5	0.4	0.0	19.5	36.8	-17.3	-1.2
1973	913.6	-6.0	7.2	-12.0	14.8	7.6	1.9	0.7	0.1	26.2	39.4	-13.3	-1.2
1974	907.5	2.7	7.3	-3.3	15.1	7.8	2.2	0.7	0.0	28.0	32.8	-4.8	-1.2
1975	910.3	15.3	7.6	8.9	15.3	7.7	2.8	0.6	0.1	30.0	23.4	6.6	-1.2
1976	925.6	13.0	8.2	5.6	16.0	7.8	2.3	0.5	0.0	26.2	22.4	3.8	-0.8
1977	938.5	10.5	9.0	2.1	16.5	7.6	2.2	0.5	0.0	22.2	21.8	0.4	-0.5
1978	949.1	5.6	8.8	-2.7	16.6	7.7	1.6	0.6	0.0	19.3	23.0	-3.7	-0.5
1979	954.7	8.0	9.6	-1.1	16.9	7.4	2.8	0.4	0.1	21.1	24.6	-3.5	-0.5
1980	962.7	8.1	9.4	-0.8	17.1	7.7	3.6	0.3	0.2	20.7	25.0	-4.4	-0.5
1981	970.8	11.1	9.7	1.7	17.2	7.5	2.4	0.5	0.3	23.2	23.7	-0.5	-0.3
1982	981.9	12.6	9.5	3.3	17.7	8.2	2.1	0.6	0.0	21.0	19.3	1.7	-0.2
1983	994.5	13.8	10.2	3.7	17.8	7.6	1.7	0.6	0.1	19.5	17.0	2.5	-0.2
1984	1,008.3	12.6	10.3	2.5	18.0	7.7	2.2	0.6	0.2	17.3	16.6	0.7	-0.2
1985	1,021.0	6.3	10.1	-3.6	18.2	8.0	1.9	0.8	0.3	15.8	20.8	-5.0	-0.2
1986	1,027.3	2.7	9.5	-5.2	17.5	8.1	1.9	0.4	0.4	15.9	22.9	-7.0	-1.6
1987	1,030.0	-0.4	9.2	-7.0	17.0	7.8	2.1	0.5	0.4	15.7	24.7	-9.0	-2.6
1988	1,029.6	-8.1	8.7	-14.2	16.8	8.1	2.2	0.5	0.4	13.6	30.0	-16.3	-2.6
1989	1,021.4	-10.6	8.7	-16.7	16.7	7.9	2.1	0.5	0.2	15.3	33.9	-18.6	-2.6
1990	1,010.8	-8.4	8.0	-13.9	16.1	8.0	2.4	0.4	0.1	16.1	32.0	-15.9	-2.6
1991	1,002.3	-1.2	7.2	-7.9	15.3	8.1	2.5	0.4	-0.4	17.4	26.9	-9.5	-0.5
1992	1,001.2	2.4	7.2	-5.8	15.0	7.8	2.5	0.5	-0.1	17.3	25.1	-7.7	1.0
1993	1,003.5	4.2	6.1	-2.9	14.3	8.2	2.4	0.5	-0.3	16.3	20.8	-4.5	1.0
1994	1,007.7	4.2	5.7	-2.5	14.0	8.3	2.3	0.5	-0.2	16.9	20.8	-4.0	1.0
1995	1,011.9	4.4	5.0	-1.6	13.5	8.5	1.9	0.5	0.2	16.9	20.1	-3.2	1.0
1996	1,016.3	4.3	4.5	-0.6	13.3	8.8	1.8	0.7	0.1	16.8	18.7	-1.9	0.4
1997 PD	1,020.6	2.7	4.2	-1.5	12.9	8.6	1.8	0.9	0.3	16.7	19.4	-2.7	•••
1998 PR	1,023.3	2.9	3.9	-1.0	12.8	8.9	1.6	0.9	0.1	18.7	20.5	-1.8	
1999 PR	1,026.2	-2.2	3.7	-5.9	12.7	9.0	1.7	1.0	0.5	13.9	21.1	-7.1	•••
2000 PR	1,024.0	-4.6	3.5	-8.1	12.6	9.1	1.9	1.1	0.2	17.5	26.7	-9.2	•••
2001 PR	1,019.3	••			••	••		••	••	••			

Rates (per 1,000)

**	Population as of		Growth		n: 1				Non-	Inter	rprovincial Mig	ration
Year	January 1 (in thousands)	Total	Natural	Migratory	Birth	Death	Immigration	Emigration	permanent Residents	In	Out	Net
1972	923.1	-10.38	8.58	-17.62	16.85	8.26	1.65	0.49	0.05	21.22	40.05	-18.83
1973	913.6	-6.64	7.86	-13.16	16.26	8.40	2.05	0.78	0.14	28.75	43.31	-14.56
1974	907.5	3.00	8.04	-3.68	16.63	8.60	2.47	0.80	-0.03	30.81	36.13	-5.32
1975	910.3	16.66	8.27	9.73	16.63	8.36	3.09	0.64	0.14	32.66	25.52	7.14
1976	925.6	13.92	8.75	6.01	17.13	8.38	2.49	0.53	-0.05	28.15	24.05	4.10
1977	938.5	11.18	9.49	2.19	17.53	8.05	2.36	0.54	-0.03	23.52	23.11	0.41
1978	949.1	5.87	9.25	-2.88	17.39	8.14	1.64	0.59	-0.05	20.27	24.16	-3.89
1979	954.7	8.39	9.99	-1.10	17.67	7.69	2.88	0.45	0.13	22.01	25.68	-3.66
1980	962.7	8.36	9.73	-0.88	17.64	7.91	3.72	0.31	0.24	21.37	25.91	-4.53
1981	970.8	11.36	9.92	1.74	17.63	7.71	2.46	0.50	0.31	23.74	24.27	-0.53
1982	981.9	12.77	9.63	3.29	17.93	8.30	2.15	0.59	-0.03	21.29	19.53	1.76
1983	994.5	13.75	10.22	3.68	17.82	7.60	1.73	0.65	0.10	19.44	16.94	2.50
1984	1,008.3	12.46	10.16	2.46	17.75	7.60	2.12	0.57	0.19	17.08	16.36	0.72
1985	1,021.0	6.18	9.89	-3.56	17.73	7.84	1.86	0.79	0.27	15.39	20.28	-4.90
1986	1,027.3	2.63	9.19	-5.02	17.03	7.84	1.81	0.35	0.36	15.48	22.30	-6.82
1987	1,030.0	-0.42	8.96	-6.83	16.54	7.58	2.06	0.46	0.35	15.24	24.03	-8.78
1988	1,029.6	-7.93	8.45	-13.82	16.35	7.90	2.17	0.44	0.39	13.30	29.23	-15.93
1989	1,021.4	-10.46	8.59	-16.47	16.39	7.79	2.11	0.50	0.22	15.02	33.31	-18.29
1990	1,010.8	-8.39	7.99	-13.77	15.99	7.99	2.35	0.40	0.11	15.99	31.81	-15.82
1991	1,002.3	-1.18	7.19	-7.85	15.28	8.08	2.45	0.41	-0.40	17.38	26.86	-9.48
1992	1,001.2	2.35	7.19	-5.81	14.97	7.77	2.50	0.47	-0.14	17.30	25.01	-7.71
1993	1,003.5	4.15	6.07	-2.89	14.19	8.12	2.39	0.48	-0.28	16.20	20.72	-4.52
1994	1,007.7	4.19	5.67	-2.45	13.90	8.23	2.23	0.52	-0.24	16.72	20.64	-3.92
1995	1,011.9	4.32	4.93	-1.57	13.31	8.38	1.90	0.53	0.20	16.70	19.84	-3.15
1996	1,016.3	4.23	4.45	-0.62	13.06	8.61	1.79	0.69	0.12	16.48	18.32	-1.84
1997 PD	1,020.6	2.65	4.13	-1.49	12.58	8.45	1.71	0.88	0.29	16.33	18.94	-2.61
1998 PR	1,023.3	2.79	3.78	-0.99	12.47	8.69	1.54	0.93	0.14	18.28	20.03	-1.74
1999 PR	1,026.2	-2.15	3.59	-5.75	12.40	8.81	1.68	0.98	0.53	13.59	20.56	-6.97
2000 PR	1,024.0	-4.53	3.39	-7.93	12.35	8.95	1.85	1.05	0.24	17.17	26.13	-8.97
2001 PR	1,019.3	••	l		••	<b></b>	<b>.</b> .		••			

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 ALBERTA

					Nulli	bers (m t	housands)	)					
V	Population		Growth		D' d	Б. 4		E	Non- permanent	Interp	provincial Migr	ration	. n . , , 1
Year	as of January 1	Total	Natural	Migratory	Births	Deaths	Immigration	Emigration	Residents (net)	In	Out	Net	Residual 1
1972	1,680.0	30.9	18.6	11.9	29.3	10.7	8.4	3.3	0.3	60.5	54.0	6.5	0.4
1973	1,710.9	29.1	18.5	10.2	29.3	10.8	11.9	5.1	0.7	70.5	67.8	2.7	0.4
1974	1,739.9	42.6	18.6	23.7	29.8	11.3	14.3	5.3	-0.1	75.4	60.6	14.8	0.4
1975	1,782.6	56.6	20.2	36.0	31.6	11.4	16.3	4.4	0.7	76.7	53.2	23.5	0.4
1976	1,839.2	73.5	21.5	45.1	33.1	11.6	14.9	3.8	-0.2	83.5	49.3	34.2	6.9
1977	1,912.7	75.3	22.8	40.9	34.4	11.6	12.7	4.0	-0.1	82.8	50.5	32.3	11.6
1978	1,988.0	72.2	23.5	37.1	35.4	11.9	9.8	4.4	-0.2	82.6	50.6	32.0	11.6
1979	2,060.2	85.6	24.9	49.1	37.0	12.1	12.8	3.6	0.7	96.1	56.9	39.2	11.6
1980	2,145.7	102.9	27.0	64.3	39.7	12.7	18.8	2.7	1.2	106.7	59.8	46.9	11.6
1981	2,248.7	89.8	29.8	57.9	42.6	12.8	19.3	4.1	2.5	107.6	67.3	40.2	2.1
1982	2,338.5	43.8	32.1	16.4	45.0	13.0	17.9	5.1	-0.4	72.7	68.8	4.0	-4.7
1983	2,382.3	7.6	33.0	-20.7	45.6	12.6	10.7	5.2	0.0	45.9	72.1	-26.2	-4.7
1984	2,389.9	2.6	31.4	-24.1	44.1	12.7	10.7	4.4	0.2	39.3	69.9	-30.6	-4.7
1985	2,392.5	22.4	30.6	-3.5	43.8	13.2	9.0	4.2	1.2	49.9	59.5	-9.6	-4.7
1986	2,414.9	14.5	30.2	-11.8	43.7	13.6	9.7	3.6	2.5	49.5	69.8	-20.3	-3.9
1987	2,429.4	10.9	28.8	-14.6	42.1	13.3	12.0	3.6	4.6	45.3	72.9	-27.6	-3.3
1988	2,440.4	35.1	28.2	10.2	42.1	13.9	14.0	3.0	4.7	54.8	60.3	-5.5	-3.3
1989	2,475.5	44.6	29.5	18.4	43.4	13.9	16.2	3.1	1.9	64.7	61.3	3.4	-3.3
1990	2,520.1	51.7	28.9	26.1	43.0	14.1	18.9	3.5	-0.4	67.4	56.3	11.1	-3.3
1991	2,571.8	41.3	28.3	14.4	42.8	14.5	17.0	4.8	-3.3	61.2	55.7	5.5	-1.4
1992	2,613.1	40.7	27.4	13.5	42.0	14.7	17.7	3.7	-1.6	57.0	56.0	1.0	-0.1
1993	2,653.9	33.6	25.0	8.7	40.3	15.3	18.6	3.7	-3.7	49.7	52.0	-2.4	-0.1
1994	2,687.4	33.5	24.2	9.5	39.8	15.6	18.0	4.0	-1.8	51.0	53.7	-2.7	-0.1
1995	2,721.0	38.5	23.0	15.6	38.9	15.9	14.8	4.2	0.7	53.8	49.5	4.3	-0.1
1996	2,759.5	46.0	21.5	24.5	37.9	16.4	13.9	5.2	0.8	61.2	46.1	15.1	-0.1
1997 PD	2,805.4	60.9	20.5	40.5	36.9	16.5	12.9	6.6	1.7	74.5	42.0	32.5	•••
1998 PR	2,866.3	66.5	21.1	45.4	37.9	16.8	11.2	6.8	0.9	84.3	44.2	40.1	•••
1999 PR	2,932.9	46.8	20.8	25.9	37.8	17.0	12.1	7.2	1.4	68.0	48.3	19.7	•••
2000 PR	2,979.6	54.9	19.6	35.3	36.6	17.1	14.3	7.7	1.5	79.9	52.8	27.1	•••
2001 PR	3,034.5	••	••	••	••		••		••	••	••	••	•••

Rates (per 1,000)

					Rates	(per 1,00	0)					
Year	Population as of		Growth		Birth	Death	Immigration	Emigration	Non-	Inte	rprovincial Mig	ration
rear	January 1 (in thousands)	Total	Natural	Migratory	Birth	Death	Immigration	Emigration	permanent Residents	In	Out	Net
1972	1,680.0	18.21	10.96	7.03	17.27	6.31	4.95	1.93	0.15	35.70	31.85	3.86
1973	1,710.9	16.85	10.74	5.89	16.97	6.24	6.90	2.95	0.38	40.86	39.29	1.56
1974	1,739.9	24.21	10.54	13.45	16.93	6.39	8.11	2.99	-0.08	42.82	34.41	8.41
1975	1,782.6	31.26	11.17	19.88	17.46	6.29	8.99	2.43	0.36	42.35	29.40	12.96
1976	1,839.2	39.19	11.45	24.06	17.62	6.17	7.94	2.00	-0.12	44.51	26.27	18.24
1977	1,912.7	38.60	11.69	20.97	17.64	5.95	6.51	2.05	-0.07	42.46	25.88	16.58
1978	1,988.0	35.66	11.59	18.35	17.49	5.90	4.85	2.20	-0.11	40.79	24.98	15.80
1979	2,060.2	40.69	11.84	23.35	17.60	5.76	6.08	1.69	0.32	45.71	27.06	18.65
1980	2,145.7	46.84	12.31	29.26	18.09	5.78	8.57	1.23	0.56	48.56	27.20	21.36
1981	2,248.7	39.17	13.00	25.26	18.59	5.59	8.43	1.80	1.08	46.91	29.36	17.55
1982	2,338.5	18.55	13.59	6.95	19.08	5.49	7.60	2.16	-0.18	30.81	29.13	1.68
1983	2,382.3	3.18	13.82	-8.68	19.09	5.28	4.48	2.16	0.00	19.23	30.23	-11.00
1984	2,389.9	1.09	13.12	-10.08	18.44	5.32	4.46	1.84	0.09	16.45	29.24	-12.79
1985	2,392.5	9.33	12.72	-1.45	18.23	5.50	3.74	1.73	0.52	20.77	24.75	-3.98
1986	2,414.9	6.00	12.46	-4.86	18.06	5.60	3.99	1.49	1.02	20.44	28.82	-8.38
1987	2,429.4	4.50	11.83	-5.98	17.29	5.47	4.92	1.47	1.90	18.60	29.94	-11.33
1988	2,440.4	14.28	11.46	4.15	17.11	5.65	5.71	1.21	1.91	22.30	24.55	-2.25
1989	2,475.5	17.85	11.81	7.35	17.36	5.55	6.49	1.24	0.75	25.89	24.54	1.35
1990	2,520.1	20.32	11.37	10.25	16.89	5.53	7.44	1.38	-0.16	26.47	22.13	4.34
1991	2,571.8	15.94	10.93	5.57	16.50	5.57	6.55	1.85	-1.26	23.61	21.49	2.13
1992	2,613.1	15.47	10.39	5.13	15.96	5.57	6.72	1.39	-0.59	21.65	21.26	0.39
1993	2,653.9	12.57	9.34	3.27	15.09	5.74	6.95	1.40	-1.40	18.60	19.48	-0.88
1994	2,687.4	12.40	8.94	3.50	14.72	5.77	6.65	1.48	-0.68	18.86	19.85	-0.99
1995	2,721.0	14.04	8.40	5.69	14.20	5.80	5.41	1.53	0.26	19.63	18.08	1.55
1996	2,759.5	16.52	7.71	8.82	13.60	5.89	5.00	1.87	0.28	22.00	16.58	5.42
1997 PD	2,805.4	21.48	7.21	14.27	13.01	5.80	4.56	2.33	0.60	26.26	14.81	11.45
1998 PR	2,866.3	22.94	7.28	15.66	13.07	5.79	3.87	2.36	0.31	29.07	15.23	13.84
1999 PR	2,932.9	15.82	7.05	8.77	12.78	5.74	4.09	2.45	0.47	22.99	16.33	6.66
2000 PR	2,979.6	18.25	6.51	11.74	12.18	5.68	4.76	2.55	0.51	26.58	17.56	9.02
2001 PR	3,034.5	••	••	••					••	••	••	••

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 BRITISH COLUMBIA

Year	Population as of		Growth		Births	Deatha	T	Eiti	Non- permanent	Inter	provincial Mig	ration	Residual <sup>1</sup>
rear	January 1	Total	Natural	Migratory	Birms	Deaths	Immigration	Emigration	Residents (net)	In	Out	Net	Residuai
1972	2,278.1	60.1	16.5	41.8	34.6	18.0	20.1	3.5	0.3	72.3	47.4	24.9	1.7
1973	2,338.1	71.8	16.3	53.8	34.4	18.1	27.9	5.5	0.8	87.1	56.6	30.5	1.7
1974	2,409.9	69.2	16.3	51.2	35.5	19.2	34.5	5.7	-0.2	84.2	61.5	22.7	1.7
1975	2,479.1	41.3	17.1	22.5	36.3	19.2	29.3	4.7	0.8	61.1	64.0	-2.9	1.7
1976	2,520.4	31.9	17.1	14.8	35.8	18.8	20.5	3.9	-0.3	59.3	60.8	-1.5	0.0
1977	2,552.3	43.6	18.1	26.7	36.7	18.6	15.4	4.0	-0.2	62.8	47.3	15.5	-1.2
1978	2,595.9	45.3	18.2	28.4	37.2	19.1	12.3	4.3	-0.3	65.4	44.7	20.7	-1.2
1979	2,641.2	65.2	19.2	47.3	38.4	19.2	16.6	3.4	0.8	76.6	43.4	33.2	-1.2
1980	2,706.4	83.1	20.7	63.6	40.1	19.4	24.4	2.5	1.5	80.0	39.8	40.2	-1.2
1981	2,789.6	64.7	21.6	43.7	41.5	19.9	22.1	3.2	3.3	70.4	48.8	21.6	-0.6
1982	2,854.2	34.0	22.0	12.1	42.7	20.7	19.0	4.2	-0.6	45.9	47.9	-2.0	-0.2
1983	2,888.2	37.5	23.1	14.6	42.9	19.8	14.4	4.4	0.5	43.9	39.9	4.0	-0.2
1984	2,925.7	35.2	23.2	12.1	43.9	20.7	13.2	4.9	0.4	42.0	38.5	3.5	-0.2
1985	2,960.9	27.8	21.8	6.2	43.1	21.3	12.2	4.7	1.8	42.6	45.8	-3.2	-0.2
1986	2,988.7	34.6	20.8	13.7	42.0	21.2	12.6	4.2	4.5	49.5	48.6	0.9	0.1
1987	3,023.3	59.6	20.0	39.2	41.8	21.8	18.9	3.2	5.8	60.9	43.3	17.6	0.4
1988	3,082.9	75.9	20.4	55.1	42.9	22.5	23.2	2.4	8.5	67.5	41.6	25.9	0.4
1989	3,158.8	90.1	20.8	68.9	43.8	23.0	25.3	2.8	9.0	79.4	42.0	37.4	0.4
1990	3,248.9	89.6	22.0	67.1	45.6	23.6	28.7	3.1	2.8	78.4	39.7	38.7	0.4
1991	3,338.5	85.6	21.6	59.4	45.6	24.0	32.1	3.6	-3.6	74.5	39.9	34.6	4.6
1992	3,424.1	101.4	21.5	72.2	46.2	24.6	36.7	3.3	-0.7	78.6	39.0	39.6	7.6
1993	3,525.5	103.3	20.3	75.4	46.0	25.8	45.7	3.5	-4.4	75.2	37.6	37.6	7.6
1994	3,628.9	108.7	21.1	80.0	47.0	25.9	49.0	3.7	0.2	74.5	40.1	34.4	7.6
1995	3,737.6	97.1	20.4	69.0	46.8	26.4	44.3	3.8	5.1	67.1	43.7	23.4	7.6
1996	3,834.7	88.9	18.6	67.1	46.1	27.5	52.1	5.5	2.7	62.7	44.9	17.8	3.2
1997 PD	3,923.6	61.5	17.2	44.3	44.6	27.4	47.5	7.1	1.9	54.0	52.0	2.0	
1998 PR	3,985.0	25.9	15.1	10.8	43.1	28.0	36.0	7.5	-0.2	46.5	64.0	-17.5	•••
1999 PR	4,010.9	33.9	13.9	19.9	42.0	28.1	36.1	8.0	4.2	43.6	56.0	-12.4	•••
2000 PR	4,044.8	27.7	13.2	14.5	40.5	27.3	37.4	8.5	3.0	47.6	64.9	-17.3	•••
2001 PR	4,072.5	••	••			••	••			••	••	••	•••

Rates (per 1,000)

V	Population as of		Growth		D: 4	D d	<b>T</b>	F : .:	Non-	Inter	provincial Migr	ration
Year	January 1 (in thousands)	Total	Natural	Migratory	Birth	Death	Immigration	Emigration	permanent Residents	In	Out	Net
1972	2,278.1	26.02	7.17	18.10	14.97	7.81	8.71	1.53	0.13	31.34	20.54	10.80
1973	2,338.1	30.23	6.85	22.65	14.47	7.62	11.77	2.32	0.34	36.69	23.82	12.86
1974	2,409.9	28.30	6.66	20.93	14.50	7.84	14.11	2.35	-0.09	34.43	25.17	9.27
1975	2,479.1	16.54	6.85	8.99	14.51	7.66	11.71	1.89	0.32	24.46	25.60	-1.15
1976	2,520.4	12.56	6.73	5.83	14.13	7.41	8.08	1.53	-0.13	23.37	23.96	-0.59
1977	2,552.3	16.93	7.03	10.38	14.25	7.22	5.98	1.54	-0.08	24.39	18.36	6.02
1978	2,595.9	17.31	6.94	10.84	14.22	7.28	4.71	1.65	-0.12	24.98	17.07	7.90
1979	2,641.2	24.40	7.19	17.67	14.37	7.18	6.21	1.26	0.30	28.66	16.22	12.43
1980	2,706.4	30.24	7.54	23.15	14.59	7.05	8.89	0.90	0.54	29.09	14.48	14.62
1981	2,789.6	22.92	7.66	15.49	14.70	7.04	7.83	1.14	1.16	24.94	17.30	7.64
1982	2,854.2	11.83	7.68	4.23	14.89	7.21	6.62	1.46	-0.23	15.98	16.69	-0.70
1983	2,888.2	12.91	7.94	5.03	14.76	6.82	4.97	1.51	0.19	15.11	13.73	1.39
1984	2,925.7	11.95	7.89	4.12	14.92	7.03	4.48	1.67	0.12	14.27	13.08	1.19
1985	2,960.9	9.34	7.34	2.07	14.50	7.16	4.11	1.57	0.60	14.31	15.38	-1.08
1986	2,988.7	11.52	6.90	4.57	13.96	7.06	4.18	1.41	1.50	16.47	16.17	0.30
1987	3,023.3	19.53	6.55	12.85	13.70	7.14	6.20	1.04	1.92	19.95	14.18	5.77
1988	3,082.9	24.32	6.53	17.66	13.76	7.22	7.44	0.78	2.72	21.63	13.34	8.29
1989	3,158.8	28.11	6.48	21.50	13.66	7.18	7.91	0.87	2.80	24.77	13.11	11.66
1990	3,248.9	27.19	6.69	20.38	13.85	7.16	8.72	0.94	0.85	23.80	12.05	11.75
1991	3,338.5	25.33	6.40	17.56	13.49	7.09	9.49	1.08	-1.07	22.02	11.80	10.22
1992	3,424.1	29.19	6.20	20.79	13.28	7.08	10.56	0.95	-0.21	22.62	11.23	11.39
1993	3,525.5	28.89	5.66	21.09	12.87	7.20	12.78	0.97	-1.23	21.03	10.52	10.51
1994	3,628.9	29.51	5.72	21.72	12.76	7.04	13.32	0.99	0.04	20.23	10.88	9.35
1995	3,737.6	25.64	5.40	18.23	12.37	6.97	11.70	1.00	1.35	17.72	11.54	6.18
1996	3,834.7	22.92	4.80	17.30	11.89	7.10	13.42	1.41	0.70	16.17	11.58	4.59
1997 PD	3,923.6	15.54	4.34	11.20	11.27	6.93	12.02	1.80	0.48	13.66	13.16	0.50
1998 PR	3,985.0	6.48	3.78	2.71	10.77	7.00	9.01	1.88	-0.04	11.63	16.01	-4.38
1999 PR	4,010.9	8.41	3.45	4.95	10.42	6.97	8.97	1.99	1.05	10.82	13.90	-3.08
2000 PR	4,044.8	6.84	3.25	3.58	9.97	6.72	9.22	2.10	0.73	11.72	15.98	-4.26
2001 PR	4,072.5	••	••	••	••	••	••	••		••	••	••

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 YUKON

	Population		Growth			,	liousunus		Non- permanent	Interp	provincial Mig	gration	,
Year	as of January 1	Total	Natural	Migratory	Births	Deaths	Immigration	Emigration	Residents (net)	In	Out	Net	Residual <sup>1</sup>
1972	19.7	1.1	0.3	0.7	0.5	0.1	0.1	0.0	0.0	2.8	2.2	0.6	0.1
1973	20.8	0.2	0.3	-0.2	0.4	0.1	0.1	0.1	0.0	2.3	2.6	-0.3	0.1
1974	21.0	0.6	0.4	0.1	0.5	0.1	0.1	0.1	0.0	2.8	2.7	0.1	0.1
1975	21.6	0.7	0.3	0.3	0.4	0.1	0.1	0.0	0.0	2.8	2.5	0.2	0.1
1976	22.3	0.3	0.3	-0.3	0.4	0.1	0.1	0.0	0.0	2.6	2.9	-0.4	0.3
1977	22.5	0.8	0.3	0.1	0.4	0.1	0.1	0.0	0.0	2.8	2.7	0.1	0.4
1978	23.4	0.6	0.4	-0.2	0.4	0.1	0.1	0.0	0.0	2.7	2.8	-0.2	0.4
1979	24.0	0.4	0.4	-0.4	0.5	0.1	0.1	0.0	0.0	2.4	2.8	-0.4	0.4
1980	24.3	0.4	0.3	-0.3	0.5	0.1	0.1	0.0	0.0	2.3	2.7	-0.4	0.4
1981	24.8	-0.6	0.4	-1.3	0.5	0.1	0.1	0.0	0.0	2.7	4.1	-1.4	0.3
1982	24.2	-0.6	0.4	-1.2	0.5	0.1	0.1	0.1	0.0	1.6	2.8	-1.2	0.3
1983	23.6	-0.1	0.4	-0.8	0.5	0.1	0.1	0.0	0.0	1.6	2.4	-0.8	0.3
1984	23.6	0.6	0.4	-0.1	0.5	0.1	0.0	0.0	0.0	1.6	1.7	-0.1	0.3
1985	24.2	0.2	0.3	-0.4	0.5	0.1	0.0	0.0	0.0	1.6	2.0	-0.4	0.3
1986	24.4	0.8	0.4	0.2	0.5	0.1	0.0	0.0	0.0	2.2	2.0	0.2	0.2
1987	25.1	0.7	0.4	0.2	0.5	0.1	0.1	0.0	0.0	2.3	2.2	0.1	0.2
1988	25.9	1.0	0.4	0.4	0.5	0.1	0.1	0.0	0.0	2.4	2.1	0.3	0.2
1989	26.8	0.7	0.4	0.1	0.5	0.1	0.1	0.0	0.0	2.3	2.3	0.0	0.2
1990	27.5	0.7	0.4	0.0	0.6	0.1	0.1	0.0	0.0	2.2	2.2	0.0	0.2
1991	28.2	1.2	0.5	0.6	0.6	0.1	0.1	0.0	0.0	2.4	1.9	0.5	0.2
1992	29.3	0.8	0.4	0.3	0.5	0.1	0.1	0.0	0.0	2.3	2.1	0.2	0.1
1993	30.2	-0.2	0.4	-0.7	0.5	0.1	0.1	0.0	0.0	1.6	2.4	-0.8	0.1
1994	30.0	0.3	0.3	-0.2	0.4	0.1	0.1	0.0	0.0	1.8	2.0	-0.2	0.1
1995	30.3	1.2	0.3	0.7	0.5	0.2	0.1	0.0	0.0	2.3	1.7	0.7	0.1
1996	31.5	0.6	0.3	0.3	0.4	0.1	0.1	0.0	0.0	1.9	1.7	0.2	0.1
1997 PD	32.1	-0.2	0.4	-0.6	0.5	0.1	0.1	0.1	0.0	1.6	2.2	-0.6	
1998 PR	31.9	-0.9	0.3	-1.1	0.4	0.1	0.1	0.1	0.0	1.5	2.6	-1.1	•••
1999 PR	31.1	-0.4	0.2	-0.6	0.4	0.1	0.1	0.1	0.0	1.3	1.9	-0.6	•••
2000 PR	30.7	-0.6	0.2	-0.8	0.4	0.1	0.1	0.1	0.0	1.3	2.1	-0.8	•••
2001 PR	30.1	••			••	••				••		••	•••

Rates (per 1,000)

V	Population as		Growth		D: 4	D 4	x	F	Non-	Inte	provincial Migra	ition
Year	of January 1 (in thousands)	Total	Natural	Migratory	Birth	Death	Immigration	Emigration	permanent Residents	In	Out	Net
1972	19.7	53.78	17.17	32.32	22.25	5.08	5.72	1.92	0.15	138.94	110.57	28.37
1973	20.8	7.61	14.79	-11.34	20.10	5.31	4.31	2.97	0.19	109.42	122.29	-12.88
1974	21.0	28.53	17.91	6.53	23.27	5.36	4.70	2.73	0.00	130.67	126.11	4.56
1975	21.6	31.02	13.50	13.50	18.61	5.11	4.43	2.19	0.23	125.46	114.42	11.04
1976	22.3	12.72	14.51	-14.15	20.00	5.49	3.26	1.79	0.00	114.32	129.95	-15.62
1977	22.5	35.21	14.29	2.92	18.87	4.58	2.27	1.83	0.00	122.28	119.79	2.48
1978	23.4	25.49	15.14	-7.10	18.90	3.76	2.41	1.99	0.00	112.16	119.69	-7.53
1979	24.0	15.82	15.49	-16.81	20.75	5.26	2.86	1.37	0.21	98.53	117.04	-18.51
1980	24.3	17.11	14.18	-13.89	19.39	5.21	3.91	1.10	0.37	93.45	110.52	-17.07
1981	24.8	-22.67	16.14	-52.21	21.90	5.76	4.49	1.84	1.35	110.58	166.79	-56.21
1982	24.2	-23.20	17.01	-51.37	21.94	4.93	2.88	2.30	-1.46	67.80	118.29	-50.49
1983	23.6	-3.52	18.09	-32.96	22.88	4.79	3.09	1.44	-0.38	65.96	100.19	-34.23
1984	23.6	24.77	17.23	-3.65	21.75	4.53	1.72	0.92	0.21	66.60	71.25	-4.65
1985	24.2	8.74	14.06	-16.36	19.13	5.07	1.48	0.82	1.32	65.37	83.71	-18.34
1986	24.4	31.47	14.95	7.55	19.51	4.56	1.98	0.77	-0.89	88.50	81.27	7.23
1987	25.1	28.73	14.50	6.82	18.74	4.23	3.14	0.82	0.59	90.50	86.59	3.92
1988	25.9	36.72	14.60	14.91	19.76	5.16	2.58	0.87	-0.04	92.90	79.66	13.24
1989	26.8	24.07	14.17	2.94	17.66	3.50	3.68	0.74	1.10	85.23	86.33	-1.10
1990	27.5	23.47	15.85	0.79	19.98	4.13	2.87	1.15	0.00	79.89	80.82	-0.93
1991	28.2	41.36	15.79	19.83	19.76	3.97	2.92	1.36	1.63	81.78	65.15	16.63
1992	29.3	28.42	13.84	9.57	17.77	3.93	4.47	1.44	-0.67	78.45	71.22	7.22
1993	30.2	-6.41	12.79	-24.13	16.88	4.09	3.42	1.03	-1.43	54.40	79.49	-25.09
1994	30.0	9.89	10.55	-5.57	14.66	4.11	3.88	1.06	-0.27	59.35	67.47	-8.13
1995	30.3	38.62	10.13	23.70	15.22	5.08	2.82	1.10	0.74	74.72	53.48	21.24
1996	31.5	20.03	10.16	7.92	13.93	3.77	2.74	1.45	-0.13	59.93	53.17	6.76
1997 PD	32.1	-6.46	10.96	-17.43	14.80	3.84	2.72	2.28	-0.44	50.90	68.33	-17.43
1998 PR	31.9	-27.18	8.29	-35.47	12.58	4.29	1.97	2.64	0.57	48.21	83.58	-35.38
1999 PR	31.1	-12.02	7.87	-19.89	12.28	4.40	2.46	2.88	0.00	41.55	61.02	-19.47
2000 PR	30.7	-18.55	7.47	-26.01	12.10	4.64	1.94	3.12	-0.10	43.97	68.70	-24.73
2001 PR	30.1	••	••		••						••	••

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1972-2001 NORTHWEST TERRITORIES (Nunavut included until 1991)

Year	Population as of		Growth		Births	Deaths	Immigration	Emigration	Non- permanent	Inter	provincial Mig	gration	Residual <sup>1</sup>
Teal	January 1	Total	Natural	Migratory	Bittis	Deaths	minigration	Emigration	Residents (net)	In	Out	Net	Residual
1972	37.8	2.2	1.0	1.1	1.2	0.3	0.2	0.0	0.0	4.4	3.5	0.9	0.1
1973	40.0	0.8	1.0	-0.3	1.2	0.2	0.2	0.0	0.0	3.6	4.0	-0.4	0.1
1974	40.8	1.3	0.8	0.3	1.0	0.2	0.2	0.0	0.0	4.3	4.2	0.2	0.1
1975	42.1	1.6	1.0	0.6	1.2	0.2	0.2	0.0	0.0	4.3	3.9	0.4	0.1
1976	43.8	0.6	1.0	-0.6	1.2	0.2	0.2	0.0	0.0	4.1	4.9	-0.8	0.3
1977	44.4	0.4	1.0	-0.9	1.2	0.2	0.1	0.0	0.0	4.4	5.4	-1.0	0.3
1978	44.8	0.5	1.0	-0.9	1.2	0.2	0.1	0.0	0.0	3.9	4.8	-1.0	0.3
1979	45.2	0.7	1.1	-0.7	1.3	0.2	0.1	0.0	0.0	3.7	4.6	-0.8	0.3
1980	45.9	0.6	1.1	-0.8	1.3	0.2	0.1	0.0	0.0	3.4	4.3	-0.9	0.3
1981	46.5	1.8	1.1	0.3	1.3	0.2	0.1	0.0	0.0	4.2	4.1	0.2	0.3
1982	48.2	2.1	1.1	0.6	1.4	0.2	0.1	0.0	0.0	3.8	3.2	0.6	0.4
1983	50.4	1.6	1.3	0.0	1.5	0.2	0.1	0.0	0.0	3.4	3.4	0.0	0.4
1984	52.0	1.7	1.2	0.1	1.4	0.2	0.1	0.0	0.0	3.5	3.5	0.1	0.4
1985	53.6	1.0	1.2	-0.6	1.4	0.2	0.1	0.1	0.0	3.4	4.0	-0.6	0.4
1986	54.6	-0.1	1.3	-1.8	1.5	0.2	0.1	0.0	0.0	3.1	4.9	-1.8	0.4
1987	54.5	0.7	1.3	-1.1	1.5	0.2	0.1	0.0	0.0	3.5	4.7	-1.2	0.5
1988	55.2	1.2	1.3	-0.7	1.6	0.2	0.1	0.0	0.1	3.5	4.3	-0.8	0.5
1989	56.4	1.4	1.2	-0.3	1.5	0.2	0.1	0.1	0.0	3.7	4.1	-0.4	0.5
1990	57.8	1.9	1.4	0.1	1.6	0.2	0.1	0.1	0.1	3.8	3.8	0.0	0.5
1991	59.7	1.9	1.4	0.2	1.6	0.2	0.1	0.0	0.0	3.7	3.6	0.1	0.3
1992	39.1	0.5	0.7	-0.2	0.9	0.1	0.1	0.0	-0.1	2.9	3.1	-0.2	0.0
1993	39.6	0.8	0.7	0.0	0.8	0.1	0.1	0.0	0.0	2.6	2.6	0.0	0.0
1994	40.4	0.8	0.7	0.1	0.8	0.1	0.1	0.0	0.0	2.8	2.7	0.1	0.0
1995	41.2	0.4	0.7	-0.4	0.9	0.1	0.1	0.1	0.0	2.5	2.9	-0.4	0.0
1996	41.6	0.1	0.7	-0.6	0.8	0.2	0.1	0.1	0.0	2.4	3.0	-0.6	0.0
1997 PD	41.7	-0.2	0.6	-0.8	0.7	0.1	0.1	0.1	0.0	2.4	3.3	-0.8	•••
1998 PR	41.4	-0.5	0.5	-1.0	0.7	0.1	0.1	0.1	0.0	2.3	3.4	-1.1	
1999 PR	40.9	0.1	0.5	-0.4	0.7	0.1	0.1	0.1	0.0	2.3	2.8	-0.5	
2000 PR	41.0	-0.1	0.5	-0.6	0.7	0.2	0.1	0.1	0.0	2.7	3.3	-0.6	
2001 PR	40.9	••	••		••	••		••	••	••	••	••	•••

Rates (per 1,000)

						(per 1,0		ī				
Year	Population as of January 1		Growth		Birth	Death	Immigration	Emigration	Non- permanent	Inte	rprovincial Migra	ition
Tear	(in thousands)	Total	Natural	Migratory	Ditti	Death	mangration	Linigration	Residents	In	Out	Net
1972	37.8	55.93	24.84	27.64	31.83	6.99	4.86	0.31	-0.03	113.20	90.07	23.12
1973	40.0	20.58	23.62	-6.36	29.78	6.16	4.40	0.49	0.02	88.53	98.82	-10.29
1974	40.8	31.21	20.15	7.83	25.11	4.96	4.82	0.55	-0.10	104.82	101.15	3.66
1975	42.1	38.36	22.32	12.92	27.35	5.03	4.49	0.42	0.00	100.13	91.29	8.84
1976	43.8	13.05	22.03	-14.73	26.84	4.81	4.02	0.29	-0.11	92.98	111.31	-18.33
1977	44.4	9.60	22.25	-20.24	26.74	4.49	2.74	0.31	-0.11	98.06	120.60	-22.55
1978	44.8	10.13	22.19	-19.55	26.74	4.55	2.53	0.38	-0.11	85.59	107.18	-21.59
1979	45.2	15.22	23.64	-15.84	28.14	4.50	3.05	0.29	-0.02	81.24	99.82	-18.58
1980	45.9	12.01	23.02	-18.30	28.17	5.15	2.01	0.22	0.02	72.96	93.08	-20.12
1981	46.5	36.98	23.35	6.33	27.49	4.14	1.92	0.19	0.91	89.30	85.60	3.69
1982	48.2	43.06	22.92	13.04	27.62	4.71	2.25	0.95	0.57	76.92	65.75	11.17
1983	50.4	31.02	24.43	-0.27	29.14	4.71	1.15	0.47	-0.27	66.41	67.10	-0.68
1984	52.0	31.26	22.87	1.74	27.36	4.49	1.42	0.49	-0.15	67.14	66.18	0.97
1985	53.6	18.54	22.60	-10.55	26.56	3.96	1.31	0.98	-0.07	63.17	73.98	-10.81
1986	54.6	-1.72	23.31	-33.01	27.62	4.31	1.23	0.88	0.04	56.61	90.01	-33.39
1987	54.5	12.70	24.17	-20.52	27.76	3.59	1.31	0.42	0.07	63.92	85.41	-21.49
1988	55.2	20.77	23.93	-12.04	27.87	3.94	1.36	0.70	1.24	63.20	77.14	-13.94
1989	56.4	24.57	21.55	-5.68	25.91	4.36	1.75	1.35	0.39	65.34	71.80	-6.47
1990	57.8	33.04	23.10	1.50	26.96	3.86	1.28	0.92	1.24	63.90	64.01	-0.10
1991	59.7	38.90	28.29	3.87	33.09	4.80	2.51	0.24	-0.08	73.95	72.27	1.68
1992	39.1	13.61	18.11	-5.42	21.67	3.56	2.31	0.46	-1.68	73.22	78.81	-5.59
1993	39.6	19.39	17.31	1.03	20.86	3.55	3.43	0.75	-0.58	65.09	66.16	-1.08
1994	40.4	20.77	16.72	3.04	20.20	3.48	3.06	1.01	-0.86	68.43	66.59	1.84
1995	41.2	9.18	17.97	-9.64	21.11	3.14	2.10	1.21	0.10	60.36	70.99	-10.63
1996	41.6	1.47	15.81	-14.94	19.44	3.63	1.97	1.54	0.05	57.21	72.63	-15.42
1997 PD	41.7	-5.34	14.08	-19.43	17.40	3.32	2.02	1.54	0.43	58.04	78.38	-20.34
1998 PR	41.4	-12.26	12.99	-25.26	16.54	3.55	1.31	1.65	0.70	56.27	81.89	-25.62
1999 PR	40.9	1.90	12.77	-10.86	16.36	3.59	1.49	1.83	0.63	56.90	68.06	-11.16
2000 PR	41.0	-1.71	12.94	-14.65	16.65	3.71	2.00	2.05	1.12	65.10	80.82	-15.72
2001 PR	40.9	••				••		••		••		

Table A1. Population as of January 1 and Population Growth Components, Provinces and Territories, 1992-2001 NUNAVUT

Year	Population as of		Growth		Births	Deaths	Immigration		Non- permanent	Interp	provincial Mig	gration	Residual <sup>1</sup>
Tear	January 1	Total	Natural	Migratory	Birms	Deaths	immigration	Emigration	Residents (net)	In	Out	Net	Residuai
1972					•••			•••		•••			
1973								•••		•••			
1974					•••	•••		•••		•••	•••		•••
1975			•••		•••	•••	•••	•••	•••	•••	•••	•••	•••
1976			•••		•••	•••	•••	•••	•••	•••	•••	•••	•••
1977		•••	•••		•••	•••	•••	•••	•••	•••	•••	•••	•••
1978		•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••
1979		•••	•••		•••	•••		•••	•••	•••	•••	•••	•••
1980		•••	•••		•••	•••		•••	•••	•••	•••	•••	•••
1981		•••	•••		•••	•••		•••	•••	•••	•••	•••	•••
1982		•••	•••		•••	•••		•••	•••	•••	•••		•••
1983		•••			•••	•••		•••	•••	•••	•••	•••	•••
1984		•••			•••	•••		•••	•••	•••	•••	•••	•••
1985		•••			•••	•••		•••		•••	•••	•••	•••
1986		•••			•••	•••		•••		•••	•••	•••	•••
1987		•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••
1988		•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••
1989		•••	•••		•••	•••		•••	•••	•••	•••		•••
1990		•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••
1991		•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••
1992	22.6	0.7	0.6	-0.1	0.7	0.1	0.0	0.0	0.0	1.0	1.0	-0.1	0.2
1993	23.3	0.8	0.6	0.0	0.7	0.1	0.0	0.0	0.0	1.0	1.0	0.0	0.2
1994	24.1	0.7	0.7	-0.1	0.8	0.1	0.0	0.0	0.0	0.9	1.1	-0.1	0.2
1995	24.8	0.6	0.6	-0.2	0.7	0.1	0.0	0.0	0.0	0.8	1.1	-0.2	0.2
1996	25.4	0.4	0.6	-0.3	0.8	0.1	0.0	0.0	0.0	0.9	1.1	-0.2	0.1
1997 PD	25.8	0.3	0.6	-0.3	0.7	0.1	0.0	0.0	0.0	0.9	1.2	-0.3	•••
1998 PR	26.1	0.5	0.5	0.0	0.7	0.1	0.0	0.0	0.0	1.0	1.0	0.0	•••
1999 PR	26.6	0.5	0.5	-0.1	0.7	0.1	0.0	0.1	0.0	1.0	1.0	0.0	•••
2000 PR	27.1	0.6	0.6	0.0	0.7	0.2	0.0	0.1	0.0	1.3	1.3	0.1	•••
2001 PR	27.7	••	••	••	••	••		••	••	••	••	••	•••

Rates (per 1,000)

	Population as		Growth		71.4				Non-	Inte	rprovincial Migra	ition
Year	of January 1 (in thousands)	Total	Natural	Migratory	Birth	Death	Immigration	Emigration	permanent Residents	In	Out	Net
1972		•••	•••		•••	•••	•••	•••	•••			•••
1973		•••		•••	•••	•••		•••	•••	•••	•••	•••
1974	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1975		•••		•••	•••	•••		•••	•••	•••	•••	•••
1976		•••		•••	•••	•••		•••	•••	•••	•••	•••
1977		•••		•••	•••	•••		•••	•••	•••	•••	•••
1978		•••		•••	•••	•••		•••	•••	•••	•••	•••
1979		•••		•••	•••	•••		•••	•••	•••	•••	•••
1980	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1981		•••		•••	•••	•••		•••	•••	•••	•••	•••
1982		•••		•••	•••	•••		•••	•••	•••	•••	•••
1983	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1984	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1985	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1986	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1987	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1988	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1989	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
1990	•••	•••	•••	•••	•••	•••		•••		•••	•••	•••
1991		•••	•••		•••	•••		•••		•••	•••	•••
1992	22.6	29.79	25.56	-3.62	30.62	5.06	0.87	0.44	-0.52	41.97	45.50	-3.53
1993	23.3	34.05	25.65	1.01	30.63	4.99	1.44	0.46	-0.13	40.60	40.43	0.17
1994	24.1	28.83	26.90	-5.24	30.95	4.05	0.98	0.25	-0.29	38.77	44.47	-5.69
1995	24.8	23.77	25.61	-9.05	29.47	3.87	0.36	0.08	0.00	33.86	43.19	-9.33
1996	25.4	16.69	24.70	-10.55	29.43	4.73	0.39	1.25	0.04	34.90	44.64	-9.73
1997 PD	25.8	13.05	24.07	-11.01	28.69	4.62	0.69	1.66	0.15	35.66	45.87	-10.21
1998 PR	26.1	18.16	19.90	-1.74	25.29	5.38	0.34	1.74	0.19	39.01	39.54	-0.53
1999 PR	26.6	17.54	20.04	-2.50	25.51	5.47	0.22	1.94	-0.60	37.87	38.06	-0.19
2000 PR	27.1	20.57	20.21	0.37	25.69	5.48	0.40	2.05	0.18	47.79	45.97	1.83
2001 PR	27.7	••	••	••	••			••	••	••	••	••

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Table A2. Number of Marriages and Crude Marriage Rate, Canada, Provinces and Territories, 1981, 1986-1998

Year	Nfld.Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta	B.C.	Yukon	N.W.T. <sup>1</sup>	Canada
						Nui	nber of Marri	ages			•	•	
1981	3,758	849	6,632	5,108	41,005	70,281	8,123	7,329	21,781	24,699	235	282	190,082
1986	3,421	970	6,445	4,962	33,083	70,839	7,816	6,820	18,896	21,826	183	257	175,518
1987	3,481	924	6,697	4,924	32,616	76,201	7,994	6,853	18,640	23,395	189	237	182,151
1988	3,686	965	6,894	5,292	33,519	78,533	7,908	6,767	19,272	24,461	209	222	187,728
1989	3,905	1,019	6,828	5,254	33,325	80,377	7,800	6,637	19,888	25,170	214	223	190,640
1990	3,791	996	6,386	5,044	32,060	80,097	7,666	6,229	19,806	25,216	218	228	187,737
1991	3,480	876	5,845	4,521	28,922	72,938	7,032	5,923	18,612	23,691	196	215	172,251
1992	3,254	850	5,623	4,313	25,841	70,079	6,899	5,664	17,871	23,749	221	209	164,573
1993	3,163	885	5,403	4,177	25,021	66,575	6,752	5,638	17,860	23,447	180	216	159,317
1994	3,318	850	5,373	4,219	24,986	66,693	6,585	5,689	18,096	23,739	169	241	159,958
1995	3,404	877	5,329	4,252	24,238	67,583	6,703	5,799	18,044	23,597	207	218	160,251
1996	3,194	924	5,392	4,366	23,968	66,208	6,448	5,671	17,283	22,834	197	206	156,691
1997	3,227	876	5,177	4,089	23,958	64,535	6,261	5,707	17,254	21,845	167	210	153,306
1998	3,150	882	5,134	4,063	22,940	64,533	6,437	5,740	17,813	21,749	167	213	152,821
						Crude Ma	arriage Rate (	per 1,000)					
1981	6.54	6.86	7.76	7.23	6.26	7.98	7.84	7.51	9.49	8.75	9.83	5.93	7.66
1986	5.93	7.55	7.25	6.84	4.93	7.51	7.16	6.63	7.77	7.27	7.48	4.70	6.72
1987	6.05	7.19	7.50	6.76	4.81	7.90	7.28	6.64	7.65	7.67	7.35	4.31	6.89
1988	6.41	7.46	7.68	7.25	4.90	7.98	7.18	6.58	7.85	7.85	7.85	3.99	7.01
1989	6.77	7.83	7.55	7.15	4.81	7.95	7.07	6.51	7.97	7.87	7.89	3.91	6.99
1990	6.56	7.63	7.02	6.82	4.58	7.78	6.93	6.18	7.77	7.66	7.85	3.87	6.78
1991	6.00	6.72	6.39	6.06	4.09	6.99	6.34	5.91	7.18	7.02	6.78	5.56	6.15
1992	5.61	6.49	6.12	5.76	3.63	6.63	6.20	5.64	6.78	6.84	7.31	5.30	5.80
1993	5.45	6.69	5.85	5.57	3.49	6.23	6.04	5.60	6.69	6.56	5.88	5.41	5.55
1994	5.77	6.36	5.80	5.62	3.47	6.16	5.86	5.63	6.69	6.45	5.62	5.93	5.51
1995	5.99	6.51	5.74	5.66	3.35	6.16	5.93	5.72	6.59	6.24	6.70	5.25	5.46
1996	5.70	6.78	5.79	5.80	3.30	5.96	5.68	5.56	6.22	5.88	6.17	4.92	5.28
1997	5.82	6.40	5.54	5.42	3.28	5.74	5.51	5.58	6.08	5.52	5.18	5.03	5.11
1998	5.78	6.44	5.48	5.39	3.13	5.67	5.66	5.60	6.13	5.44	5.30	5.19	5.05

<sup>&</sup>lt;sup>1</sup> Nunavut included.

Table A3. Age-specific First Marriage Rates (per 1,000) by Age, Sex and Year of Birth, Canada

## MALES

																	Year	of Bir	th															
	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948
Age																Y	ear of 1	7th Bi	thday															
	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965
17	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.56	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.9	1.1	1.6	1.5	2.0	2.5	3.3	3.8	4.4	4.8	4.6	4.2	4.3	4.0	3.8	3.9	3.9	3.9
18		1.4	1.4	1.6	1.7	1.7	1.8	2.2	2.3	2.7	2.6	2.7	2.8	3.3	3.6	3.9	4.4	5.9	6.6	8.3	9.3	10.7	12.6	14.6	17.8	19.0	20.0	21.2	18.4	17.9	17.2	16.9	17.8	18.1
19			1.4	1.4	4.6	5.0	5.1	5.2	5.8	6.5	7.1	7.4	8.0	8.2	9.0	10.0	11.0	13.0	16.0	19.0	21.8	24.2	27.6	31.3	35.2		42.8		46.7	42.4	41.7	39.8	41.0	44.2
20				8.4	8.8	8.9	10.0	10.8	10.5	12.4	13.8	15.1	16.5	16.8	17.0	19.4	21.4	23.8	28.0	33.6	38.6	42.5	47.3	51.2	56.3	59.0	67.7		77.5	79.7	73.7	73.6	73.4	77.4
21					14.2		16.2	18.0	18.8	19.0	21.1	23.2	26.6	29.0		29.4	32.2	36.7	40.3	45.7	52.2	58.0	64.1	68.1	71.6	75.5			94.6		110.6	110.3		120.1
22 23						21.8	23.0 29.5	23.7 31.2	26.6 33.7	27.8 35.8	28.2 36.6	l	35.0 39.9	38.3 45.4	40.5 50.6	41.2	41.6 51.9	45.5 53.1	50.4 55.3	54.5 60.6	59.0 63.7	65.7 64.6	69.2 69.7	75.9 72.7	78.4 76.9	79.1 76.4	81.7 77.6	86.0 79.5	96.2 81.6	104.1 90.6	112.1 95.5		118.3 111.9	130.3 110.1
24							29.3	37.8	39.0	40.9	44.0		45.1	48.6	51.6		57.2		57.5	59.3	63.4	64.5	65.3	66.2	68.0	69.7	69.2	68.6	69.3	70.6	77.9	82.7	87.5	92.7
25								57.0	44.4	44.7	47.9	48.5	49.7		51.1		59.0			56.8	57.0	59.6	60.2	57.8	59.0	60.5			58.2	59.1	58.6	63.7	65.5	69.1
26										46.3	47.2	47.3	49.7	49.7	49.0		51.4	55.0		53.8	49.5	49.8	52.4	50.1			50.0	48.7	47.8	46.4	47.4	46.3	49.1	50.3
27											46.0	44.3	45.3	45.9	46.1	44.4	44.9	45.9	49.2	48.2	46.6	44.4	42.8	44.2	42.7	40.6	40.8	40.8	39.8	38.6	37.3	37.2	36.6	38.2
28												40.9	40.8		41.3	40.2	38.6	39.4	39.4	42.5	40.9	39.0	36.3	34.6	35.9	34.5	33.8	33.1	32.4	31.6	30.6	30.2	30.1	28.6
29													36.4	36.5		35.7	34.1	33.8	33.1	33.8	35.3	34.2		30.7	28.8	29.9	28.6	28.0	26.6	26.5	25.4	24.1	22.8	22.8
30														31.5	30.7	29.9	30.0	28.9	28.3	28.3	27.4	29.1		26.6	25.0		23.4	22.7	22.2	21.1	20.3	19.9	18.9	18.3
31															25.7	25.1	24.6	24.9	23.9	23.1	22.9	22.8	23.3	22.1	21.1		17.6	18.5	18.0	17.4	16.3	15.7	15.2	14.3
32 33																21.7	20.7 17.3	20.4 16.8	20.3 16.6	19.5 16.1	19.0 15.7	19.0 15.6	18.2 14.8	18.4 15.1	18.0 15.0		15.8 13.9	14.6 12.9	14.9 11.7	14.8 11.8	13.1 11.3	12.9 10.9	12.1 10.0	11.7 9.5
34																	17.3	14.1	13.7	14.1	13.7	12.9	12.6	12.1	11.9	12.6		11.6	10.2	9.3	9.5	8.8	8.6	7.9
35																			12.0	11.8	11.8	11.1	10.7	10.0	10.0	9.8	9.9	9.7	9.6	8.6	7.5	7.7	7.4	6.7
36																				9.9	9.7	8.9	8.9	8.3	8.4	8.2	8.0	7.9	8.0	7.3	7.1	6.5	6.2	5.7
37																					8.3	7.9	7.4	7.2	6.9	6.6	6.3	6.4	6.6	6.6	6.1	5.4	5.0	4.6
38																						6.9	6.3	6.1	5.9	5.8	5.5	5.3	5.0	5.3	5.1	5.0	4.7	3.9
39																							5.3	5.1	5.2	4.9	4.6	4.5	4.4	4.3	4.0	4.3	4.3	3.7
40																								4.6	4.4	4.2	4.1	3.9	3.5	3.3	3.2	3.4	3.5	3.4
41																									3.6	3.2	3.5	3.4	3.0	2.9	2.6	2.7	2.4	3.0
42																										3.0	3.0 2.5	2.7	2.7	2.5	2.3	2.3	2.2	2.3
43																											2.3	2.3	2.2 1.8	2.1 1.9	2.0 1.7	1.9 1.7	1.8 1.7	1.7 1.7
44													l								l							2.1	1.6	1.6	1.7	1.7	1.7	1.7
4.5																													1.0	1.0	1.7	1.5	1.4	1.2

Table A3. Age-specific First Marriage Rates (per 1,000) by Age, Sex and Year of Birth, Canada - Concluded

#### **FEMALES**

																	Y	ear of	Birth																
	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949
Age																	Year	of 15tl	n Birtl	nday															
	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964
15	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.6	0.6	0.5	0.6	0.6	1.1	2.0	2.4	2.4	2.7	3.5	3.4	3.3	3.5	3.5	3.2	3.3	3.4	3.4	4.1
16 17		0.6	0.6 1.6	0.6 1.7	0.9 2.1	1.0 2.4	1.1 2.6	1.3 2.8	1.5	1.6 3.8	1.8	2.0 4.6	2.2 4.9	2.4 5.5	3.0 6.0	3.6 7.5	3.9 8.3	4.6 9.5	4.9 10.9	5.8 12.5	6.5 15.0	7.7 16.8	9.1 19.3	11.2 23.2	13.7 26.9	15.6 32.4	17.1 35.3	18.2 38.9	17.3 40.9	17.7 39.2	16.7 40.6	15.7 38.6	16.5 39.7	16.8 40.8	17.6 41.0
18			1.0	6.8	7.6	8.3	9.2	9.6	10.5	11.0	13.3	15.3	16.1	16.6	18.1	21.6	24.1	25.4	29.3	33.7	38.0	44.0	48.5	53.1	60.0	66.4	75.5	79.8	84.5	89.5	82.8	82.7	82.0	81.7	84.5
19					13.5	14.5	15.3	17.3		18.4	21.2	23.5	26.3	29.4	31.5	32.5	37.5	40.2	43.4	48.3	54.8		68.0	71.8	77.0	82.8	88.3	97.8	102.8	111.2	115.5	109.3	108.7	108.6	110.3
20						21.9	22.5	24.6	26.5	28.8	29.4	31.5	36.1	41.1	45.5	46.1	48.0	50.7	56.6	59.6	64.7	72.8	77.9	83.6	86.4	89.2	92.9	93.3	104.3	111.1	118.0	125.2	121.8	121.5	126.1
21							29.6	31.6		37.4	39.0	40.1	42.5	47.7	54.6	57.8	59.8	60.1	61.7	67.2	71.4	72.4	78.4	80.4	85.0	85.9	87.6	86.8	87.1	97.5	104.1	112.3	120.5	123.1	126.7
22								37.7		42.0	45.4	47.9		51.5	56.7	64.0	65.4	66.4		67.2	70.2			73.1		75.5			74.4	74.9	82.1	85.9	91.3	96.3	96.9
23									46.4	47.3	50.5		54.2		58.1	62.5	67.2	67.3	67.3	65.2	63.3		66.0	64.4	65.1	64.3	63.9	62.4	59.9	60.4	58.7	63.7	65.5	68.0	71.0
24 25										50.5	53.0 52.2	53.5 52.0	57.7 53.9	56.2 55.0	56.0 54.8	57.9 53.4	59.8 54.6	65.3 54.9	65.0 57.6	62.6 56.9	59.0 54.9	56.8 50.8		56.3 48.4	53.9 45.8	53.3 42.8	50.9 41.6	50.9 40.7	48.3 39.6	46.2 37.1	45.7 35.6	44.8 35.1	48.6 34.4	48.8 35.7	49.1 35.4
26											32.2	50.0	48.6	48.3	49.1	48.4	45.7	45.3	47.0	48.7	46.2	43.9	39.2	38.1	38.8	36.1	34.1	32.4	30.8	29.3	28.4	26.9	27.3	26.4	26.5
27													43.3	42.0	42.1	41.3	40.7	37.6	38.0	38.3	39.6	36.2	35.3	32.0	29.6	29.3	28.2	26.0	25.2	23.9	23.7	21.5	21.0	20.4	19.9
28														36.4	35.2	35.0	33.2	31.9	30.9	31.4	30.5	31.4	29.5	27.5	25.3	22.1	22.7	22.0	20.2	19.2	18.2	17.5	16.4	15.9	15.2
29															29.2	29.0	27.2	27.1	26.0	25.9	24.4	24.0	24.8	23.3	22.2	19.7	17.2	17.8	16.8	15.9	15.3	14.5	13.6	12.6	12.2
30																23.9	22.8		21.7	20.5	20.0	20.0	19.1	19.6	18.9	16.8	15.3	13.8	14.1	13.6	12.2	11.7	11.2	10.6	9.7
31																	18.3	17.3	17.3	16.7	16.1	16.0	15.5	14.5	15.2	14.0	13.2	11.4	10.4	10.5	10.3	9.5	8.8	8.5	7.7
32 33																		14.7	14.1 11.9	13.8 11.6	14.0 11.2	13.4	12.6	12.1	11.8 9.9	12.0	11.1	10.2	9.1	7.8	8.2	7.8	7.5	7.0	6.4
34																			11.9	9.4	9.2	11.1 9.0	10.2 9.1	10.2 8.3	8.5	9.4 8.1	9.1 7.9	8.8 7.5	8.1 6.9	7.2 6.3	6.5 5.7	6.7 5.4	6.4 5.4	5.8 5.1	5.4 4.5
35																				7	7.8	7.5	7.3	7.3	7.0	6.6	6.4	6.3	6.1	5.7	5.4	5.1	4.2	4.2	3.9
36																						6.4	6.2	5.9	5.7	5.3	5.1	4.8	5.1	4.8	4.6	4.4	3.8	3.4	3.3
37																							4.8	5.0	4.8	4.6	4.2	4.2	4.0	3.7	3.8	3.7	3.5	3.2	2.6
38																								4.1	3.9	4.0	3.8	3.2	3.6	3.3	3.1	2.8	3.1	2.8	2.5
39																									3.7	3.3	3.2	3.0	2.8	2.8	2.6	2.6	2.6	2.6	2.2
40																										3.0	2.5	2.8	2.5	2.4	2.2	2.3	2.2	2.0	2.0
41 42																											2.4	2.2	1.9 1.9	1.8 1.7	1.8 1.7	1.9 1.6	1.7 1.4	1.7	1.6 1.5
43																												2.1	1.5	1.4	1.4	1.4	1.4	1.0	1.3
44																														1.4	1.2	1.2	1.1	1.0	1.2
45																															1.1	1.1	1.1	1.0	0.9

Table A4. Number of Divorces and Mean Duration of Marriages for Persons Divorced in the Year, Canada, Provinces and Territories, 1981, 1986, 1989-1998

Year	Nfld. Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta	B.C.	Yukon	N.W.T. <sup>2</sup>	Canada
						Nun	nber of Divo	rces					
1981	569	187	2,285	1,334	19,193	21,680	2,399	1,932	8,418	9,533	75	66	67,671
1986	687	199	2,609	1,729	19,026	27,549	2,982	2,479	9,556	11,299	94	95	78,304
1989	1,005	248	2,527	1,649	19,829	31,298	2,912	2,460	8,237	10,658	82	93	80,998
1990	1,016	281	2,419	1,699	20,474	28,977	2,798	2,364	8,489	9,773	81	92	78,463
1991	912	269	2,280	1,652	20,274	27,694	2,790	2,240	8,388	10,368	67	86	77,020
1992	867	227	2,304	1,633	19,695	30,463	2,657	2,325	8,217	10,431	117	98	79,034
1993	930	227	2,376	1,606	19,662	28,903	2,586	2,239	8,612	10,889	94	102	78,226
1994	933	249	2,286	1,570	18,224	30,718	2,746	2,354	8,174	11,437	97	92	78,880
1995	982	260	2,294	1,456	20,133	29,352	2,677	2,320	7,599	10,357	112	94	77,636
1996	1,060	237	2,228	1,450	18,078	25,035	2,603	2,216	7,509	10,898	115	99	71,528
1997	822	243	1,983	1,373	17,478	23,629	2,625	2,198	7,185	9,692	101	79	67,408
1998	944	279	1,933	1,473	16,916	25,149	2,443	2,246	7,668	9,827	117	93	69,088
					Mean Dura	ation of Marri	age for Perso	ns Divorced	in the Year	I			
1981	11.8	12.4	11.3	11.8	11.8	11.9	11.0	10.5	10.5	11.7	11.2	9.0	11.5
1986	11.7	12.5	11.3	11.8	11.5	11.7	11.1	10.7	10.9	12.1	11.8	10.9	11.5
1989	11.7	11.5	11.3	11.5	11.0	11.3	10.3	10.8	11.0	11.5	11.5	10.5	11.2
1990	11.3	11.9	11.3	11.1	10.8	11.2	10.5	10.6	11.0	11.5	11.4	10.1	11.1
1991	11.4	12.8	11.0	11.4	11.0	10.9	10.3	10.8	10.8	11.3	11.1	9.0	11.0
1992	10.9	12.0	11.2	11.0	10.7	10.9	10.4	10.6	10.8	11.1	10.7	9.3	10.9
1993	11.7	11.8	10.9	11.5	10.5	10.8	10.4	10.6	10.6	10.9	10.6	10.0	10.7
1994	11.3	12.4	11.0	11.1	10.6	10.6	10.4	10.5	10.6	10.7	10.8	10.7	10.7
1995	11.2	12.1	11.1	11.5	10.4	10.8	10.5	10.6	10.8	10.6	10.1	10.1	10.7
1996	11.3	12.2	11.3	11.5	10.4	11.0	10.5	10.6	10.5	10.6	10.2	10.0	10.8
1997	12.0	11.7	11.4	11.4	10.7	10.9	10.5	10.3	10.7	10.7	11.0	9.4	10.9
1998	12.2	12.7	11.6	11.3	10.4	10.8	10.5	10.6	10.8	10.7	10.8	10.7	10.8

<sup>&</sup>lt;sup>1</sup> Excludes divorces for marriages of a duration greater than 25 years.

<sup>&</sup>lt;sup>2</sup> Nunavut included.

Table A5. Duration-specific Divorce Rate (per 10,000), Canada, Marriage Cohorts 1948-1949 to 1997-1998

Year	Number of Marriages	Marriage	Number of											M	arriag	e Dura	tion (	in yea	rs)											Year of Obser-	T.D.R. <sup>1</sup>
i eai	per Year	Cohort	Marriages	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	vation	I.D.K.
		1948-49	125,103	0	1			4	3	U	,	O	,	10	11	12	1.5	14	13	10	17	10	17	50	58	56	52	60	58	1974	2,670
1949	124,087	1949-50	124,585																				51	60	55	58	59	68	64	1975	2,932
1950	125,083	1950-51	124,383																			51	64	61	59	60	73	69	71		3,072
1951	128,408																					51									<u> </u>
1952	128,474	1951-52																			53	65	63	62	63	74	74	76	69	1977	3,063
1953	131,034	1952-53	129,754																	54	69	70	64	67	75	80	76	69	55		3,108
1954	128,629	1953-54	129,832																50	74	64	62	71	86	82	78	75	70	62	1979	3,180
1955	128,029	1954-55	128,329															57	73	65	68	69	85	85	83	75	70	68	65	1980	3,275
1956	132,713	1955-56	130,371														59	83	71	73	77	87	90	90	89	78	74	69	72	1981	3,525
1957	133,186	1956-57	132,950													67	82	76	75	78	92	105	96	87	85	84	75	75	66	1982	3,653
1958	131,525	1957-58	132,356												61	79	81	81	83	91	101	97	92	84	82	78	77	72	63	1983	3,518
1959	132,722	1958-59	132,124											68	91	82	80	86	96	105	103	92	89	80	77	84	77	68	67	1984	3,304
1960	130,338	1959-60	131,530										70	93	95	91	97	111	111	110	100	95	90	84	90	87	76	67	64	1985	3,118
	128,475	1960-61	129,407									73	97	95	95	97	119	119	116	108	100	95	95	95	94	81	78	64	80	1986	3,908
1961		1961-62	128,928								71	105	99	106	103	121	133	123	115	108	97	96	98	106	88	78	71	83	91	1987	4,788
1962	129,381	1962-63	130,246							71	114	113	112	114	131	133	134	124	118	104	99	108	105	91	86	79	88	102	81	1988	4,139
1963	131,111	1963-64	134,623						68	106	109	113	124	142	136	140	128	126	114	110	113	109	100	92	83	101	111	93	76	1989	3,996
1964	138,135	1964-65	141,827					61	98	112	121	134	150	153	153	139	134	124	117	118			97	92	104	123	92	83	76		3,841
1965	145,519	1965-66	150,558				42	93	112	128	143	156	162	163	148	137	130	123	121	115		101	93	108	124	104	91	84	72		3,707
1966	155,596	1966-67	160,738			31	68	102	126	139	166	177	171	155	145	136	131	132	128	118		94	112	132	114	97	85	78	69	1992	3,786
1967	165,879				17																										_
1968	171,766	1967-68	168,823		17	49	75	115	142	162	183	173		156	151	137	138	137	117	109	97	116	133	112	108	92	81	81	67		3,768
1969	182,183	1968-69	176,975	3	22	53	83	122	158	182	184	171	165	160	153	148	146	133	112	103	121	139	118	106	98	89	82	73	68		3,800
1970	188,428	1969-70		3	25	55	92	151	177	192	192	176		165	163	159	139	127	112	121	147	118	113	100	94	85	76	71	70		3,761
1971	191,324	1970-71	189,876	4	28	61	106	161	186	189	191	184	180	173	166	151	132	115	129	151	121	113	101	93	90	84	81	77	62	1996	3,463
1972	200,470	1971-72	195,897	4	33	74	117	174	193	196	197	191	188	186	169	145	126	145	159	131	122	111	98	97	83	87	80	72	64	1997	3,270

	Number of															ъ	· ·		`											Year of	
Year	Marriages	Marriage Cohort	Number of Marriages											M	arriag	e Dura	tion (	ın yeai	rs)											Obser-	T.D.R.1
	per Year			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	vation	
1973	199,064	1972-73	199,767	5	36	83	129	181	203	212	211	206	204	180	155	135	152	175	138	126	111	103	99	93	89	83	74	71	67	1998	3,399
1974	198,824	1973-74	198,944	5	44	94	136	184	213	227	229	218	189	168	146	160	184	149	129	111	106	104	97	87	89	78	70	70			
1975	198,085	1974-75	198,455	6	52	104	147	199	224	242	233	214	185	163	171	196	150	139	130	110	110	102	93	90	82	77	70				
1976	193,343	1975-76	195,714	8	59	111	161	217	251	246	227	194	165	195	207	165	152	131	119	113	112	103	98	86	80	76					
1977	187,344	1976-77	190,344	8	63	116	162	227	250	240	208	180	200	225	181	158	143	125	117	113	105	100	88	82	77						
1978	185,523	1977-78	186,434	7	65	123	175	235	250	221	200	230	248	196	175	155	135	130	116	107	107	90	80	82							
1979	187,811	1978-79	186,667	8	58	132	185	226	226	211	252	274	211	185	164	148	140	126	118	114	97	88	85								
1980	191,069	1979-80	189,440	7	65	135	176	206	210	268	297	227	207	184	165	148	142	131	118	105	92	92									
1981	190,082	1980-81	190,576	8	71	133	154	190	269	316	250	218	189	179	161	150	134	129	110	105	96										
1982	188,360	1981-82	189,221	9	65	118	144	260	326	263	232	216	190	177	160	153	135	119	104	103											
1983	184,675	1982-83	186,518	8	64	109	209	322	273	247	219	197	183	172	158	140	128	111	109												
1984	185,597	1983-84	185,136	8	63	150	270	263	253	237	209	202	184	171	151	135	117	112													
1985	184,096	1984-85	184,847	8	72	212	249	260	251	226	219	201	187	170	146	123	122														
1986	175,518	1985-86	179,807	10	103	217	265	263	246	237	222	203	182	163	143	140															
1987	182,151	1986-87	178,835	20	106	216	251	255	251	235	218	196	171	149	140																
1988	187,728	1987-88	184,940	19	106	214	248	254	243	237	216	175	158	150																igsquare	
1989	190,640	1988-89	189,184	19	109	208	265	268	256	231	193	170	168																	$ldsymbol{\sqcup}$	
1990	187,737	1989-90	189,189	17	113	230	272	270	257	213	181	178																		igsquare	igsquare
1991	172,251	1990-91	179,994	19	120	232	276	274	232	205	200																			igwdown	igwdown
1992	164,573	1991-92	168,412	21	121	242	270	246	216	212																				igsquare	igsquare
1993	159,317	1992-93	161,945	22	132	236	246	228	221																					igsquare	igsquare
1994	159,958	1993-94	159,638	22	129	222	230	241																						$\vdash$	
1995	160,251	1994-95	160,105	20	113	203	241																							igwdap	$\vdash$
1996	156,691	1995-96	158,471	16	106	218																								<u> </u>	
1997	153,306	1996-97	154,999	16	112																									<u> </u>	$\vdash$
1998	152,821	1997-98	153,064	15																										Ш	

Total Divorce Rate.

Sources: Statistics Canada, Health Statistics Division and Demography Division, Demographic Estimates Section.

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Table A6. Number of Live Births and Total Fertility Rate, Canada, Provinces and Territories, 1986-1999

Year	Nfld.Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta	B.C.	Yukon	N.W.T.	Nvt.	Canada
							Number of	Live Births						
1986	7,618	1,928	12,358	9,788	84,634	133,882	17,009	17,513	43,744	41,967	483	830	677	372,431
1987	7,468	1,955	12,110	9,588	83,791	134,617	16,953	17,034	42,110	41,814	478	843	680	369,441
1988	6,435	1,977	12,182	9,617	86,612	138,066	17,030	16,763	42,055	42,930	521	853	702	375,743
1989	7,026	1,937	12,533	9,667	92,373	145,338	17,321	16,651	43,351	43,769	480	819	660	391,925
1990	6,787	2,014	12,870	9,824	98,048	150,923	17,352	16,090	43,004	45,617	556	902	682	404,669
1991	7,166	1,885	12,016	9,497	97,310	151,478	17,282	15,304	42,776	45,612	568	911	723	402,533
1992	6,918	1,850	11,874	9,389	96,146	150,593	16,590	15,004	42,039	46,156	529	852	702	398,643
1993	6,421	1,754	11,568	9,049	92,391	147,848	16,709	14,269	40,292	46,026	508	834	725	388,394
1994	6,339	1,716	11,099	8,978	90,578	147,068	16,480	14,038	39,796	46,998	442	824	756	385,114
1995	5,859	1,754	10,726	8,563	87,417	146,263	16,113	13,499	38,914	46,820	470	874	739	378,016
1996	5,747	1,694	10,573	8,176	85,226	140,012	15,478	13,300	37,851	46,138	443	815	747	366,200
1997	5,416	1,591	9,952	7,922	79,774	133,004	14,655	12,860	36,905	44,577	474	723	745	348,598
1998	4,994	1,504	9,595	7,885	75,856	132,618	14,461	12,777	37,905	43,072	396	681	667	342,418
1999	5,055	1,515	9,575	7,615	73,596	131,080	14,315	12,604	38,171	41,939	383	659	737	337,249
						Total	Fertility Rate (	woman aged 1	5-49) <sup>1</sup>					
1986		1.79	1.59	1.53	1.38	1.60	1.83	2.03	1.86	1.62	1.95	2.85		1.60
1987		1.83	1.56	1.51	1.37	1.58	1.83	1.99	1.83	1.62	1.90	2.86		1.58
1988		1.86	1.57	1.53	1.43	1.60	1.85	2.00	1.85	1.65	2.00	2.94		1.61
1989		1.84	1.63	1.56	1.53	1.64	1.92	2.06	1.92	1.66	1.87	2.73	••	1.67
1990		1.94	1.68	1.59	1.64	1.68	1.95	2.08	1.90	1.70	2.19	2.83	••	1.72
1991	1.44	1.86	1.59	1.55	1.65	1.67	1.97	2.04	1.90	1.69	2.15	2.47	3.55	1.71
1992	1.40	1.85	1.59	1.56	1.67	1.69	1.93	2.04	1.88	1.68	1.93	2.30	3.37	1.71
1993	1.32	1.76	1.57	1.53	1.64	1.67	1.97	1.98	1.82	1.64	1.89	2.23	3.43	1.68
1994	1.34	1.73	1.54	1.55	1.64	1.67	1.97	1.97	1.82	1.64	1.73	2.23	3.51	1.68
1995	1.28	1.79	1.52	1.51	1.61	1.67	1.95	1.91	1.79	1.61	1.82	2.34	3.41	1.66
1996	1.30	1.73	1.52	1.46	1.60	1.61	1.89	1.89	1.74	1.55	1.67	2.25	3.37	1.62
1997	1.27	1.63	1.45	1.43	1.52	1.53	1.81	1.83	1.68	1.48	1.82	2.02	3.36	1.55
1998	1.21	1.56	1.42	1.45	1.47	1.53	1.81	1.81	1.71	1.45	1.60	1.97	2.98	1.54
1999	1.26	1.58	1.43	1.42	1.45	1.52	1.81	1.81	1.70	1.42	1.59	1.92	3.25	1.52

<sup>&</sup>lt;sup>1</sup> Number of children per woman.

Nfld.Lab. N.W.T. P.E.I. N.S. N.B. Que. B.C. Nvt. Canada Sask Alta Yukon By Birth Order 1997:1 17.0 18.1 18.4 19.0 20.9 19.4 19.0 21.3 23.2 32.3 12.9 15.1 14.5 14.3 14.9 16.3 16.9 15.2 18.1 19.6 27.4 15.7 3 3.9 7.6 5.4 4.9 5.6 6.4 7.9 9.0 7.2 5.5 7.2 9.5 19.4 6.2 0.9 1.7 1.6 1.4 1.7 1.9 3.2 3.8 2.7 1.7 2.8 4.7 14.9 2.0 2.7 5 + 0.5 1.2 0.7 0.5 0.8 1.0 2.8 1.8 0.8 1.2 4.1 21.2 1.1 1998: 1 16.2 17.6 17.4 18.1 17.8 18.8 20.8 19.2 19.8 18.4 17.5 22.4 29.0 18.6 12.3 15.2 14.2 14.9 14.5 16.2 15.6 16.2 16.8 14.7 17.2 16.6 24.7 15.5 3.6 5.2 4.9 5.0 6.3 7.9 7.4 5.3 5.9 10.9 16.1 6.0 4 0.8 2.2 1.5 1.3 1.5 1.9 3.5 3.6 2.6 1.6 2.1 4.9 13.0 1.9 5 + 0.4 0.7 0.5 0.8 1.0 2.7 2.8 1.7 0.8 0.8 4.2 17.8 1.1 17.9 20.7 18.1 33.5 1999: 1 16.5 18.7 17.8 17.7 18.8 18.8 19.8 19.5 22.2 18.5 15.4 13.0 14.9 14.0 13.8 14.0 15.7 16.5 16.4 14.1 15.2 17.5 22.4 15.0 3.4 4.9 5.0 4.7 6.1 7.9 7.2 5.1 5.7 8.6 21.8 5.8 4 1.6 1.3 1.4 1.8 3.2 3.5 2.6 1.5 5.2 13.0 1.8 1.0 1.7 0.8 3.9 17.7 5 + 1.1 By Age Group 1997: 15-19 22.6 25.4 15.5 36.2 25.8 17.4 55.2 136.4 29.0 23.7 17.1 31.4 20-24 59.2 76.1 68.6 76.0 67.0 85.4 94.7 75.3 59.5 90.5 117.5 214.6 64.0 53.7 25-29 90.6 111.9 98.0 101.2 111.7 98.8 115.8 123.4 112.5 94.3 115.1 103.2 165.5 103.8 30-34 61.5 75.7 71.4 91.5 87.2 79.4 83.2 82.8 98.1 84.5 64.6 79.6 84.9 79.6 35-39 17.3 27.3 17.1 33.2 32.4 35.7 37.2 48.7 32.5 24.4 26.6 38.1 41.3 40-44 2.2 3.1 3.9 6.3 4.7 5.6 7.7 7.6 5.2 0.2 0.2 0.3 0.3 0.0 0.2 45-49 0.0 0.2 0.0 0.1 0.4 0.1 0.0 0.0 20.4 29.7 23.9 26.4 17.2 38.7 38.0 25.4 28.7 54.8 137.9 19.8 1998: 15-19 14.9 16.1 20-24 57.8 72.5 65.8 71.7 63.7 54.6 85.3 94.0 76.1 58.2 88.6 109.8 187.8 63.2 25-29 83.2 99.6 94.2 103.9 108.3 97.4 115.6 121.2 110.5 91.0 86.0 97.3 126.8 101.5 30-34 61.7 75.1 71.1 65.1 77.2 91.9 85.8 79.1 90.7 82.4 72.0 90.4 92.0 84 6 35-39 17.1 24.3 20.5 26.3 38.6 32.9 32.8 35.5 36.0 41.6 32.8 2.2 5.9 7.2 10.3 40-44 2.3 4.3 3.6 4.1 6.4 4.3 4.0 5.3 3.8 5.2 0.2 0.2 0.2 0.2 0.2 45-49 0.1 0.2 0.1 0.1 0.3 0.3 0.0 1.6 0.0 1999: 15-19 20.1 22.4 21.9 23.5 15.9 35.6 36.8 24.5 15.4 28.1 56.7 135.5 18.7 14.6 20-24 56.5 73.7 64.7 71.8 60.6 52.5 86.1 75.4 53.8 75.2 97.6 202.7 88.3

Table A7. Fertility Rate (per 1,000) by Birth Order and by Age Group, Canada, Provinces and Territories, 1997-1999

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section and Demography Division, Demographic Estimates Section.

112.7

88.6

33.1

5.4

122.3

81.0

27.7

4.3

0.1

108.9

91.1

34.8

5.8

0.3

87.8

83.9

35.9

6.3

0.2

87.4

77.0

39.7

9.4

106.0

77.5

36.6

8.8

1.7

162.5

87.2

41.9

18.7

100.0

85.8

33.6

5.5

0.2

25-29

30-34

35-39

45-49

65.3

19.8

2.7

103.7

80.8

30.7

4.1

94.7

73.4

26.5

3.7

0.2

99.7

66.5

19.8

2.2

105.8

77.0

27.3

4.1

0.1

96.4

93.6

39.0

6.8

0.3

Table A8. Age-specific Fertility and Total Fertility Rates by Birth Order and Age of Mother for Quebec and Rest of Canada<sup>1</sup>, 1986, 1989-1999

Table A	10. Aş	ge-specii	ic reru	nty and	Total I'c	i unity K	ates by B	ıı ııı Oı	uei anu	Age of I	viouici .	ioi Que	ovec an	u Kesi	oi Cana	aua , 13	700, 170	37-1777
Birth		15	-19	20-	-24	25	-29	30	-34	35	-39	40	-44	45	-49	Tota	al Fertility	Rate
Order	Year	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Canada						
1	1986	13.01	21.16	47.20	46.09	49.85	48.42	17.49	20.57	4.42	5.03	0.50	0.66	0.03	0.02	0.66	0.71	0.70
	1989	14.86	22.29	51.09	45.59	57.95	50.49	21.45	23.55	5.19	6.29	0.64	0.85	0.05	0.02	0.76	0.75	0.75
	1990	15.66	22.94	53.49	45.75	60.65	52.95	23.54	25.20	5.64	6.87	0.66	0.89	0.02	0.02	0.80	0.77	0.78
	1991	14.93	23.67	52.62	44.41	61.47	51.22	24.25	24.97	6.20	6.99	0.73	0.93	0.01	0.04	0.80	0.76	0.77
	1992	15.08	22.89	49.24	42.46	60.41	51.41	24.80	26.05	6.10	7.31	0.78	0.99	0.02	0.01	0.78	0.76	0.76
	1993 1994	14.69 14.89	22.31 22.30	47.70 46.99	41.73	56.78	50.70	24.75	27.02 27.99	6.29	7.70 7.94	0.86 0.89	1.11 1.19	0.01 0.02	0.04 0.04	0.76 0.74	0.75 0.76	0.75 0.75
	1994	14.89	21.92	45.30	40.74 40.07	54.50 53.94	50.84 49.35	24.57 25.42	28.95	6.55 6.52	8.37	1.00	1.19	0.02	0.04	0.74	0.76	0.73
	1995	13.89	19.72	44.88	37.41	54.54	49.33	25.23	28.70	6.93	8.86	0.87	1.23	0.04	0.03	0.73	0.73	0.74
	1997	13.15	17.50	41.36	34.93	52.00	46.22	25.25	28.22	6.98	8.84	0.87	1.38	0.04	0.03	0.73	0.72	0.72
	1998	12.48	17.56	39.27	35.45	51.28	44.81	24.92	28.71	7.07	9.03	1.04	1.36	0.03	0.04	0.70	0.68	0.68
	1999	12.39	16.68	38.51	34.28	50.94	45.42	25.59	30.15	7.49	9.51	1.05	1.49	0.04	0.06	0.68	0.69	0.69
2	1986	1.66	3.88	18.89	27.32	46.14	47.64	25.15	30.68	5.71	8.16	0.67	0.81	0.04	0.01	0.49	0.59	0.57
2	1986	1.00	4.08	20.75	25.33	45.51	47.64	28.66	32.44	7.05	9.63	0.67	1.10	0.04	0.01	0.49	0.59	0.57
	1989	2.21	4.08	21.96	23.33	49.14	44.74	31.51	33.89	7.03	10.15	0.73	1.10	0.01	0.03	0.52	0.59	0.57
	1991	2.10	4.32	22.29	24.48	48.52	43.82	32.14	33.28	7.80	10.13	0.91	1.20	0.04	0.02	0.57	0.59	0.58
	1992	2.36	4.59	22.23	24.30	49.69	43.77	33.40	34.89	8.69	10.76	0.94	1.41	0.01	0.04	0.59	0.60	0.60
	1993	2.31	4.52	22.42	23.33	48.47	42.35	33.95	34.19	8.77	11.23	1.11	1.43	0.02	0.04	0.59	0.59	0.59
	1994	2.28	4.46	22.00	22.90	48.59	41.70	34.86	34.92	9.22	11.67	1.07	1.53	0.02	0.04	0.59	0.59	0.59
	1995	2.36	4.20	21.30	22.54	45.56	40.07	34.77	35.81	9.64	11.96	1.19	1.59	0.01	0.05	0.57	0.58	0.58
	1996	2.12	3.65	20.93	21.25	44.22	38.35	34.19	35.82	10.41	12.71	1.26	1.70	0.01	0.05	0.57	0.57	0.57
	1997	2.09	3.44	19.59	20.05	41.85	36.83	33.53	35.09	10.04	12.97	1.17	1.83	0.03	0.07	0.54	0.55	0.55
	1998	2.23	3.33	19.24	19.86	41.04	36.14	33.24	35.41	10.11	13.36	1.29	1.84	0.03	0.07	0.54	0.55	0.55
	1999	2.06	2.91	17.18	19.21	39.54	34.76	33.28	35.86	10.63	13.61	1.34	2.01	0.02	0.07	0.52	0.54	0.54
3	1986	0.18	0.48	3.39	7.49	13.12	19.28	12.26	17.67	4.30	6.05	0.57	0.74	0.01	0.03	0.17	0.26	0.23
	1989	0.22	0.49	4.30	7.28	13.91	17.81	13.86	18.44	4.61	7.09	0.65	0.96	0.01	0.02	0.19	0.26	0.24
	1990	0.17	0.50	4.53	7.19	15.09	17.30	15.14	18.36	5.20	7.25	0.58	0.91	0.03	0.02	0.20	0.26	0.24
	1991	0.19	0.51	4.64	7.11	15.13	16.91	15.73	18.54	5.44	7.19	0.68	0.92	0.01	0.03	0.21	0.26	0.24
	1992	0.24	0.60	5.01	7.09	15.49	16.46	16.64	17.98	5.63	7.31	0.81	0.94	0.02	0.03	0.22	0.25	0.24
	1993	0.25	0.56	5.36	7.00	15.03	15.50	16.07	17.68	5.58	7.16	0.73	0.97	0.01	0.04	0.22	0.24	0.24
	1994	0.29	0.57	5.30	7.07	15.57	15.10	16.17	16.96	5.85	7.31	0.82	1.06	0.01	0.02	0.22	0.24	0.24
	1995	0.33	0.54	5.31	6.69	14.93	14.53	16.06	16.66	5.97	7.41	0.80	1.09	0.03	0.04	0.22	0.23	0.23
	1996	0.24	0.54	5.14	6.46	14.58	13.75	15.82	16.20	6.04	7.47	0.84	1.10	0.04	0.04	0.21	0.23	0.22
	1997	0.17	0.44	4.77	6.12	13.33	12.75	14.82	15.39	5.77	7.38 7.40	0.74	1.12 1.11	0.02	0.04	0.20 0.18	0.22	0.21
	1998 1999	0.18 0.14	0.41 0.37	4.16 3.99	5.85 5.71	11.68 11.12	12.92 12.57	13.04 12.74	15.15 15.06	5.60 5.57	7.40	0.83 0.72	1.11	0.03	0.04 0.04	0.18	0.21 0.21	0.21 0.20
	1999	0.14	0.57	3.99	3./1	11.12	12.37	12.74	15.00	3.37	1.43	0.72	1.22	0.02	0.04	0.17	0.21	0.20

Birth		15	-19	20	-24	25	-29	30	-34	35	-39	40	-44	45	-49	Tota	al Fertility	Rate
Order	Year	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Quebec	Rest of Canada	Canada
4	1986	0.02	0.03	0.48	1.49	2.40	5.19	3.33	5.97	1.70	2.83	0.37	0.49	0.02	0.02	0.04	0.08	0.07
	1989	0.01	0.05	0.58	1.59	2.61	4.90	3.65	6.14	1.68	3.07	0.35	0.57	0.00	0.03	0.04	0.08	0.07
	1990 1991	0.00 0.01	0.04 0.05	0.76 0.82	1.67 1.68	2.80 3.23	4.77 4.73	3.95 4.18	6.03 6.04	2.24 2.11	3.11 3.21	0.35 0.37	0.54 0.49	0.02	0.02 0.03	0.05 0.05	0.08	0.07 0.07
	1991	0.01	0.05	0.82	1.08	3.23	4.73	4.18	5.89	2.11	3.03	0.37	0.49	0.00	0.03	0.05	0.08	0.07
	1993	0.03	0.05	0.83	1.61	3.13	4.41	4.54	5.74	2.24	3.17	0.45	0.56	0.02	0.01	0.06	0.08	0.07
	1994	0.02	0.06	1.14	1.64	3.51	4.40	4.81	5.58	2.52	3.05	0.49	0.57	0.00	0.02	0.06	0.08	0.07
	1995	0.03	0.06	1.06	1.64	3.56	4.43	4.65	5.30	2.38	3.18	0.48	0.56	0.02	0.02	0.06	0.08	0.07
	1996	0.02	0.07	0.97	1.64	3.86	4.03	4.52	5.18	2.45	3.08	0.40	0.64	0.03	0.02	0.06	0.07	0.07
	1997	0.04	0.04	1.02	1.55	3.23	3.89	4.26	4.71	2.37	3.00	0.50	0.59	0.02	0.03	0.06	0.07	0.07
	1998	0.00	0.04	0.72	1.49	3.19	3.84	4.08	4.78	2.13	2.87	0.46	0.60	0.01	0.03	0.05	0.07	0.06
	1999	0.00	0.04	0.75	1.41	3.00	3.78	3.66	4.63	2.03	2.93	0.43	0.62	0.02	0.03	0.05	0.07	0.06
5 +	1986	0.00	0.00	0.09	0.37	0.68	1.82	1.29	2.86	1.07	2.14	0.36	0.72	0.02	0.06	0.02	0.04	0.03
	1989	0.00	0.00	0.13	0.41	0.77	1.77	1.60	2.88	1.30	2.15	0.35	0.63	0.00	0.04	0.02	0.04	0.03
	1990	0.01	0.01	0.15	0.44	0.77	1.91	1.51	2.92	1.30	2.27	0.39	0.67	0.03	0.05	0.02	0.04	0.04
	1991	0.00	0.00	0.14	0.42	0.80	1.93	1.62	2.98	1.38	2.25	0.37	0.64	0.04	0.05	0.02	0.04	0.04
	1992	0.00	0.01	0.21	0.42	0.97	1.99	1.69	2.98	1.32	2.29	0.38	0.68	0.01	0.04	0.02	0.04	0.04
	1993	0.00	0.01	0.17	0.45	0.95	1.96	1.80	2.93	1.48	2.22	0.47	0.65	0.01	0.05	0.02	0.04	0.04
	1994 1995	0.00	0.01	0.19 0.20	0.49 0.47	1.16 1.08	2.01 2.04	1.81 1.91	2.93 2.83	1.39 1.63	2.21 2.33	0.46 0.47	0.67 0.70	0.01	0.03 0.05	0.03	0.04 0.04	0.04 0.04
	1995	0.00	0.00	0.20	0.47	1.08	1.98	1.91	2.83	1.50	2.33	0.47	0.70	0.03	0.05	0.03	0.04	0.04
	1997	0.00	0.00	0.21	0.42	1.30	1.84	1.85	2.66	1.43	2.30	0.48	0.71	0.03	0.05	0.03	0.04	0.04
	1998	0.00	0.00	0.26	0.43	1.15	1.87	1.90	2.77	1.38	2.17	0.51	0.69	0.03	0.06	0.03	0.04	0.04
	1999	0.00	0.00	0.21	0.41	1.16	1.85	1.73	2.75	1.55	2.13	0.51	0.69	0.05	0.05	0.03	0.04	0.04
All	1986	14.86	25.56	70.05	82.75	112.18	122.34	59.52	77.75	17.20	24.22	2.48	3.43	0.12	0.14	1.38	1.68	1.60
Orders	1989	17.03	26.91	76.85	80.20	120.75	119.96	69.22	83.46	19.82	28.23	2.72	4.11	0.08	0.15	1.53	1.72	1.67
	1990	18.06	27.66	80.88	80.04	128.43	121.68	75.65	86.40	22.35	29.65	2.89	4.21	0.15	0.12	1.64	1.75	1.72
	1991	17.22	28.56	80.52	78.09	129.16	118.61	77.91	85.82	22.93	30.05	3.03	4.19	0.09	0.20	1.65	1.73	1.71
	1992	17.72	28.14	77.60	75.98	129.71	118.23	80.89	87.79	23.94	30.69	3.33	4.55	0.08	0.13	1.67	1.73	1.71
	1993	17.26	27.45	76.48	74.12	124.34	114.92	81.11	87.55	24.36	31.49	3.63	4.72	0.07	0.18	1.64	1.70	1.68
	1994	17.46	27.40	75.61	72.85	123.34	114.05	82.21	88.39	25.52	32.18	3.73	5.02	0.06	0.16	1.64	1.70	1.68
	1995	17.01	26.73	73.17	71.41	119.06	110.42	82.81	89.56	26.13	33.26	3.94	5.17	0.13	0.21	1.61	1.68	1.66
	1996 1997	16.27 15.45	23.99 21.42	72.13 66.95	67.24 63.08	118.42 111.72	106.28 101.53	81.69 79.61	88.64 86.08	27.33 26.58	34.34 34.50	3.94 3.88	5.47 5.63	0.17 0.11	0.20 0.22	1.60 1.52	1.63 1.56	1.62 1.55
	1997	14.89	21.42	63.66	63.08	108.33	99.57	77.19	86.83	26.29	34.83	4.13	5.60	0.11	0.22	1.52	1.56	1.55
	1999	14.60	20.00	60.64	61.02	105.77	98.37	76.99	88.45	27.27	35.63	4.06	6.02	0.12	0.25	1.45	1.55	1.52
	1777	14.00	20.00	00.04	01.02	103.77	70.37	70.77	00.43	41.41	33.03	4.00	0.02	0.13	0.23	1.43	1.33	1.32

<sup>1</sup> Excluding Newfoundland and Labrador before 1991. **Sources**: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section and Demography Division, Population Estimates Section.

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Table A9. Number of Total Deaths and Infant Deaths (age less than one year), Canada, Provinces and Territories, 1981, 1986, 1989-1999

	T		Ι		1	Ι		Ι			Γ			
Year	Nfld.Lab.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta	B.C.	Yukon	N.W.T.	Nvt.	Canada
							Number	of Deaths						
1981	3,230	992	6,958	5,139	42,684	62,838	8,648	7,523	12,823	19,857	141	196		171,029
1986	3,540	1,121	7,255	5,458	46,892	67,865	8,911	8,061	13,560	21,213	113	119	116	184,224
1989	3,718	1,089	7,516	5,496	48,305	70,907	8,819	7,920	13,854	22,997	95	140	109	190,965
1990	3,884	1,143	7,388	5,426	48,420	70,818	8,863	8,044	14,068	23,577	115	124	103	191,973
1991	3,798	1,188	7,255	5,469	49,121	72,917	8,943	8,098	14,451	23,977	114	135	102	195,568
1992	3,798	1,114	7,544	5,609	48,824	73,206	8,980	7,793	14,679	24,615	117	144	112	196,535
1993	3,890	1,145	7,559	5,806	51,711	75,853	9,299	8,164	15,338	25,764	123	143	117	204,912
1994	4,050	1,114	7,770	5,917	51,365	77,487	9,148	8,308	15,613	25,939	124	143	98	207,076
1995	3,935	1,153	7,687	5,938	52,734	78,479	9,658	8,495	15,895	26,375	157	131	96	210,733
1996	3,928	1,268	7,751	5,896	52,336	79,099	9,497	8,765	16,391	27,536	120	152	120	212,859
1997	4,318	1,030	8,044	5,944	54,399	79,541	9,511	8,637	16,452	27,412	123	138	120	215,669
1998	4,230	1,207	8,068	6,305	54,181	80,184	9,815	8,905	16,795	27,978	135	146	142	218,091
1999	4,139	1,137	7,640	6,074	54,555	81,393	9,860	9,044	17,206	28,018	135	197	89	219,487
						Infa	nt Deaths (ag	e less than 1	year)					
1981	98	25	139	114	807	1,073	191	203	452	424	8	28		3,562
1986	65	13	104	81	604	969	157	157	393	355	12	10	18	2,938
1989	64	12	73	69	632	985	115	134	325	360	2	7	17	2,795
1990	70	12	81	71	612	946	138	123	346	344	4	3	16	2,766
1991	56	13	69	58	578	953	111	126	285	298	6	7	13	2,573
1992	49	3	71	59	522	886	113	110	304	286	2	9	17	2,431
1993	50	16	82	65	529	922	118	115	268	264	4	5	10	2,448
1994	52	11	67	48	506	878	115	125	294	297	1	10	13	2,417
1995	46	8	52	41	477	870	123	123	274	280	6	8	13	2,321
1996	38	8	59	40	396	802	104	112	236	237	0	4	15	2,051
1997	28	7	44	45	444	728	110	114	178	210	4	5	11	1,928
1998	31	12	44	51	425	667	97	91	183	183	2	12	13	1,811
1999	25	10	38	38	361	704	120	79	220	160	1	11	8	1,775
	1 1 1 1													

<sup>1</sup> Nunavut included in 1981.

Source: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section.

Table A10. Life Expectancy at Different Ages, , Canada, 1971 to 1999

Table A10.		ехресіа	ncy at Di	Life Expectancy at Different Ages, Canada, 19/1 to 1999	ges, Can	ada, 1971	10 LYYY		
Age	1971	1976	1981	1986	1991	1996	1997	1998	19991
					Males				
0	69.58	70.47	72.03	73.29	74.61	75.45	75.76	76.02	76.27
1	70.00	70.49	71.82	72.92	74.14	74.92	75.21	75.46	75.70
5	66.25	66.71	67.99	69.05	70.25	71.01	71.30	71.55	71.78
10	61.43	61.86	63.10	64.14	65.32	66.07	66.35	66.60	66.84
15	56.58	56.99	58.22	59.23	60.40	61.14	61.42	61.67	61.90
20	51.97	52.39	53.57	54.52	55.66	56.36	56.64	56.88	57.11
25	47.40	47.83	48.95	49.85	50.96	51.63	51.90	52.14	52.36
30	42.72	43.15	44.26	45.12	46.24	46.88	47.13	47.36	47.59
35	38.04	38.46	39.53	40.40	41.53	42.16	42.39	42.61	42.83
40	33.42	33.83	34.85	35.69	36.86	37.47	37.68	37.88	38.10
45	28.96	29.34	30.28	31.07	32.22	32.84	33.04	33.23	33.44
50	24.71	25.08	25.92	26.62	27.73	28.31	28.49	28.68	28.89
55	20.75	21.10	21.83	22.42	23.43	23.96	24.11	24.28	24.47
60	17.11	17.45	18.06	18.54	19.44	19.86	19.99	20.14	20.31
65	13.87	14.17	14.65	15.01	15.81	16.09	16.19	16.31	16.46
70	11.05	11.26	11.66	11.90	12.55	12.73	12.80	12.89	13.02
5	8.62	8. /8	9.07	9.22	9.71	9.79	28.4	9.88	10.01
8 8	6.59	6.72	6.92	6.99	7.36	7.31	7.32	7.34	7.4
90	3.92	4.30	3.95	3.82	4.28	3.94	3.93	3.96	4.04
					Females				
0	76.58	77.79	79.16	79.99	80.96	81.20	81.33	81.49	81.70
1	76.77	77.71	78.83	79.54	80.43	80.62	80.73	80.89	81.10
5	73.00	73.89	74.97	75.66	76.52	76.70	76.81	76.97	77.17
10	68.13	69.00	70.06	70.72	71.58	71.76	71.86	72.01	72.22
15	63.23	64.09	65.13	65.79	66.64	66.81	66.91	67.06	67.26
25	58.40	59.25	60.27	60.91	61.75	61.92	62.02	62.17	62.37
30 50	18.71	J4.40 /0 <b>5</b> /	50.52	51.17	51 07	52 12	52.11	52.26	52.56
35	43.91	44.71	45.69	46.27	47.11	47.25	47.33	47.47	47.67
40	39.19	39.96	40.90	41.45	42.29	42.41	42.50	42.64	42.84
45	34.56	35.30	36.21	36.72	37.52	37.66	37.74	37.88	38.08
50	30.06	30.80	31.64	32.12	32.89	32.99	33.07	33.20	33.39
55	25.72	26.43	27.24	27.67	28.39	28.46	28.52	28.65	28.84
60	21.58	22.25	23.02	23.40	24.07	24.11	24.16	24.27	24.44
8	17.66	18.30	19.02	19.35	19.97	19.96	20.01	20.10	20.25
70	14.04	14.64	15.31	15.57	16.13	16.08	16.10	16.18	16.34
75	10.81	11.36	11.95	12.13	12.60	12.51	12.52	12.57	12.73
8 8	8.07	8.54	9.01	9.15	9.52	9.36	9.35	9.38	9.51
3 %	5.93	6.36	6.66	6.68	6.98	3 /	6.73	0.74	6.86
90	4.45	4.95	4.95	4.86	5.07	4.82	4./4	4./3	4.83

<sup>1</sup> Calculated by using the average of deaths in 1998 and twice those of 1999.

Sources: Statistics Canada, Health Statistics Division, Health Status and Vital Statistics Section and Demography Division, Population Estimates Section and Research and Analysis Section.

Table A11. Landed Immigrants in Canada by Country of Birth, 1981, 1986, 1991-2000

	1981	1986	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Asia	50,894	42,294	123,422	143,061	149,835	143,254	130,542	145,492	139,749	102,779	113,397	140,526
Afghanistan	48	584	1,395	1,223	972	849	1,483	2,001	2,307	2,082	2,268	3,160
Bangladesh	98	473	1,105	1,621	1,268	1,341	1,970	2,754	3,272	2,116	2,010	3,040
China <sup>1</sup>	13,829	8,477	37,567	50,668	47,044	57,078	45,846	49,131	42,559	29,172	33,882	40,945
South Korea	1,504	1,203	2,608	3,787	3,816	3,015	3,506	3,250	4,107	4,955	7,210	7,608
India	9,427	7,450	14,300	14,302	21,751	18,569	18,265	23,384	21,716	16,989	18,840	28,183
Iran	1,409	2,128	6,688	7,103	4,171	3,010	4,078	6,255	7,891	7,008	6,201	5,915
Iraq	305	316	996	2,174	3,320	2,253	2,414	2,769	2,568	1,898	2,037	2,303
Lebanon	1,043	2,419	12,225	6,664	4,804	2,724	2,167	1,895	1,469	1,356	1,567	1,897
Pakistan	823	632	2,788	3,750	4,511	4,401	4,667	8,560	12,176	8,440	9,587	14,865
Philippines	5,986	4,200	12,730	13,804	20,548	19,493	15,819	13,626	11,411	8,637	9,536	10,636
Sri Lanka	368	1,827	7,158	12,942	9,480	7,085	9,360	6,442	5,345	3,541	4,936	6,065
Taiwan	705	638	4,295	7,077	9,379	7,005	7,415	12,739	12,783	6,995	5,326	3,409
Vietnam	8,241	6,221	8,892	7,864	8,392	6,507	4,176	2,711	2,011	1,833	1,622	1,950
Others	7,108	5,726	10,675	10,082	10,379	9,924	9,376	9,975	10,134	7,757	8,375	10,550
Europe	44,817	22,447	46,890	43,627	45,701	38,068	40,302	39,195	37,947	37,546	38,776	42,537
Germany	2,075	1,342	1,574	1,411	1,659	1,364	1,589	1,761	1,561	1,664	1,911	1,649
Bosnia-Herzegovina	0	0	0	344	2,741	4,718	4,183	2,471	2,204	2,544	2,455	813
France	1,681	1,113	2,631	3,114	3,350	2,521	3,037	2,437	2,308	3,022	3,181	3,560
Great Britain	18,920	4,605	6,443	5,919	5,954	4,770	4,567	4,381	3,923	3,284	3,777	3,777
Greece	927	549	626	597	539	341	246	238	210	145	158	170
Ireland	851	477	639	490	418	317	226	260	226	173	167	166
Italy	2,058	781	782	671	696	533	505	486	465	369	389	356
Poland	4,094	5,271	15,801	11,940	6,944	3,572	2,452	2,167	1,792	1,521	1,370	1,398
Portugal	1,838	1,973	5,188	2,648	1,622	773	781	672	677	406	329	377
Romania	1,004	998	2,599	3,314	3,786	3,595	4,342	3,952	4,048	3,112	3,583	4,588
Russia	0	1	7	174	905	1,429	2,105	3,175	4,240	4,792	4,397	4,864
Ukraine	0	0	10	123	872	1,441	1,833	2,672	2,643	2,768	2,827	3,565
Others	11,369	5,337	10,590	12,882	16,215	12,694	14,436	14,523	13,650	13,746	14,232	17,254

	1981	1986	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Africa	5,915	5,173	16,634	20,239	17,564	14,215	15,496	15,846	15,308	14,517	16,426	20,693
South Africa	1,238	795	948	1,139	1,668	2,464	1,475	1,350	1,763	1,416	1,433	1,717
Algeria	128	111	913	852	751	649	1,113	2,042	1,795	2,256	2,368	2,853
Egypt	767	630	1,941	1,640	1,660	2,320	2,718	2,374	2,043	1,307	1,247	1,376
Ethiopia	152	991	2,569	2,275	1,924	1,271	950	1,041	812	654	746	1,165
Somalia	9	58	3,268	5,554	3,660	1,730	2,078	1,428	1,158	1,387	1,598	1,472
Others	3,621	2,588	6,995	8,779	7,901	5,781	7,162	7,611	7,737	7,497	9,034	12,110
North and Central America	10,184	12,381	19,096	18,835	14,427	8,772	7,268	8,552	7,928	6,879	7,830	8,263
United States	8,696	6,090	5,323	5,975	6,482	5,154	4,329	5,054	4,405	4,166	4,913	5,139
Mexico	397	673	1,150	1,200	1,153	786	764	1,247	1,689	1,383	1,683	1,657
Others	1,091	5,618	12,623	11,660	6,792	2,832	2,175	2,251	1,834	1,330	1,234	1,467
Carribean and Bermuda	8,805	8,867	13,111	15,236	16,753	10,070	10,089	9,395	8,235	6,405	6,811	7,164
Haiti	3,704	1,729	2,851	2,433	3,688	2,124	2,036	1,977	1,657	1,316	1,448	1,650
Jamaica	2,688	4,663	5,135	6,060	6,117	3,950	3,640	3,308	2,870	2,269	2,363	2,463
Trinidad and Tobago	949	921	2,981	4,347	4,216	2,342	2,584	2,205	1,760	1,197	1,186	920
Others	1,464	1,554	2,144	2,396	2,732	1,654	1,829	1,905	1,948	1,623	1,814	2,131
South America	6,126	6,530	10,514	10,313	9,554	7,957	7,518	6,020	5,590	4,910	5,585	6,783
Guyana	3,024	3,977	3,370	3,059	3,549	4,275	3,974	2,392	1,841	1,276	1,388	1,334
Others	3,102	2,553	7,144	7,254	6,005	3,682	3,544	3,628	3,749	3,634	4,197	5,449
Australasia	1,024	451	743	931	1,017	741	676	696	625	515	579	661
Oceania	726	383	1,626	1,780	1,336	1,049	680	636	472	397	379	475
Others and not stated	303	815	736	836	577	268	300	220	176	224	161	234
TOTAL	128,794	99,341	232,772	254,858	256,764	224,394	212,871	226,052	216,030	174,172	189,944	227,336

Hong Kong included.

Note: Preliminary data as of December 4, 2001.

Sources: Citizenship and Immigration Canada, unpublished data.

Table A12. Population (in thousands) as of July 1st, by Age and Sex, Canada, 1998, 1999, 2000

46	45	4	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	= 5	9	~	7	6	5	4	3	2	_	0	90	Δ σω	
222.4	229.7	239.8	248.3	250.0	257.6	262.8	263.7	269.6	272.4	270.0	274.9	271.2	261.0	242.5	228.2	221.4	220.3	222.1	219.4	209.8	205.9	203.8	209.3	209.3	208.7	207.7	210.3	212.3	211.8	208.9	208.7	209.2	210.7	209.0	202.7	208.4	215.7	214.9	212.0	206.8	202.5	200.8	197.4	184.9	176.0	1998		
229.6	239.8	248.5	250.1	257.8	263.0	264.0	269.9	272.6	270.6	276.0	272.4	262.2	243.7	229.7	223.3	222.7	224.4	221.5	211.8	207.8	205.6	211.2	211.2	210.3	209.2	211.6	214.2	213.5	210.3	210.0	210.3	211.7	210.1	205.7	203.6	216.6	215.8	213.0	207.9	203.5	201.7	198.3	185.9	177.0	173.2	1999	Males	
239.7	248.6	250.3	258.1	263.4	264.1	270.2	273.2	271.2	277.2	273.8	263.6	245.2	231.1	225.5	225.2	226.8	224.1	214.3	210.1	207.6	213.1	213.2	212.4	210.9	213.2	216.0	215.9	212.2	211.6	211.8	213.0	211.2	207.0	204.8	210.5	216.9	214.1	209.1	205.0	203.1	199.6	187.1	178.3	174.5	171.6	2000		
222.6	231.8	242.1	248.9	250.5	257.3	261.3	263.8	267.8	269.8	265.9	269.5	264.6	255.3	237.3	224.0	217.9	216.0	216.3	215.1	205.0	200.3	197.8	201.9	200.9	199.6	196.7	198.6	200.9	201.4	198.0	197.6	198.3	198.4	197.6	193.1	198.2	205.3	204.2	202.5	196.4	192.2	190.3	189.2	174.2	168.3	1998		
231.7	241.9	248.9	250.6	257.6	261.7	264.3	268.4	270.5	266.7	270.8	266.0	256.7	238.7	225.5	219.8	218.2	218.7	217.4	207.4	202.6	200.2	204.2	203.0	201.9	199.0	200.8	203.1	202.9	199.7	199.0	199.3	199.2	198.5	195.8	199.1	206.1	205.0	203.5	197.5	193.2	191.2	190.2	175.4	170.0	165.4	1999	Females	
241.8	249.0	250.8	257.9	262.1	264.8	269.2	271.4	267.7	272.2	267.6	258.2	240.4	227.3	222.2	220.7	221.5	220.1	210.2	205.2	202.7	206.5	205.3	204.1	201.4	203.5	205.7	205.6	201.6	200.8	200.6	200.3	199.4	196.8	194.9	207.2	206.1	204.5	198.8	194.7	192.6	191.4	176.6	171.3	167.2	163.9	2000		

Table A12. Population (in thousands) as of July 1st, by Age and Sex, Canada, 1998, 1999, 2000 - Concluded

Source: Statistics Canada, Demography Division, Population Estimates Section.

#### **GLOSSARY**\*

Age: Age at last birthday (in years).

**Aging (of a Population)**: An increase of the percentage of old persons in the total population.

**Birth Cohort or Generation**: Unless otherwise specified, refers here to a group of persons born within the 12-month period between January 1<sup>st</sup> and December 31<sup>st</sup> of a given year.

#### **Census Coverage**

Net undercoverage: Difference between undercoverage and overcoverage.

**Overcoverage**: Number of persons who should not have been counted in the census or who were counted more than once.

*Undercoverage*: Number of persons not enumerated in a census (who were intended to have been enumerated).

**Census Metropolitan Area** (**CMA**): The general concept of a census metropolitan area (**CMA**) is one of a very large *urban area*, together with adjacent *urban* and *rural areas* which have a high degree of economic and social integration with that urban area.

A Census Metropolitan Area is delineated around an urban area (called the *urbanized core* and having a population of at least *100,000* (*based on the previous census*). Once an area becomes a CMA, it is retained in the program even if its population subsequently declines.

CMAs are comprised of one or more *census subdivisions* (*CSDs*) which meet at least one of the following criteria:

- (1) the CSD falls completely or partly inside the urbanized core;
- (2) at least 50% of the employed labour force *living* in the CSD *works* in the urbanized core; or
- (3) at least 25% of the employed labour force *working* in the CSD *lives* in the urbanized core (*1991 Census Dictionary*, Catalogue no. 92-351-XPE, page 181).

**Cohort**: Represents a group of persons who have experienced a specific demographic event during a given period which can be a year. Thus, the married cohort of 1996 consists of the number of persons who married in 1996. Persons born within a specified year could be referred to as a generation.

<sup>\*</sup> For further information consult the following: International Union for the Scientific Study of Population (1980). **Multilingual Demographic Dictionary**, Ordina Editions, Liège and Van de Walle, Étienne. **The Dictionary of Demography**, ed. Christopher Wilson. Oxford, England, New York, New York, United States of America.

- **Cohort, fictitious**: An artificial cohort created from portions of actual cohorts present at different successive ages in the same year.
- **Common-law Union**: Union consisting of a male and a female living together as husband and wife, without being legally married.
- **Components of Demographic Change**: Any of the classes of events generating population movement or variations. Births, deaths, migration, marriages, divorces and new widowhoods are the components responsible for the change in total population or in the age, sex and marital status distribution of the population.
- **Current index**: An index constructed from measurements of demographic phenomena and based on the events reflecting those phenomena during a given period, usually a year. For example, life expectancy in 1996 is a current index in the sense that it indicates the average number of years a person would live if he or she experienced 1996 conditions throughout his or her life.
- **Dependency Ratio**: The total population is customarily divided up into three broad age groups: 0-14 (children), 15-64 (adults) and 65 and over (older persons). The following ratios may be defined on the basis of this classification:
  - (a) child dependency ratio: The number of children per adult (15-64);
  - (b) age dependency ratio: The number of aged persons per adult (15-64);
  - (c) total dependency ratio: The sum of the child and the aged dependency ratios.
- **Error of Closure**: Difference between the postcensal estimate and the population adjusted for net undercoverage according to a census for the same date.
- **Fertility**: Relates the number of live births to the number of women, couples or, very rarely, men.

**Infant mortality**: Mortality of children less than a year old.

**Intensity**: Frequency of occurrence of an event among members of a given cohort.

**Intercensal**: The period between two censuses.

- **International Migration**: Movement of population between Canada and a foreign country which involves a change in residence. A distinction is made between *landed immigrants*, *returning Canadians* from other countries who settle in Canada, *emigrants* and the net change in *non-permanent residents*.
- Interprovincial Migration: Movement from one province to another involving a permanent change in residence. A person who takes up residence in another province is an *out-migrant* with reference to the province of origin, and an *in-migrant* with reference to the province of destination.
- **Life expectancy**: A statistical measure derived from the life table that indicates the average years of life remaining for a person at a specified age, if the current age-specific mortality rates prevail for the remainder of that person's life.

**Legal Marital Status**: Indicates the conjugal status, that is whether single, married, widowed or divorced.

*Single*: Includes persons who have never been married and all persons under 15 years of age.

Married: Includes persons legally married and persons legally married and separated.

Widowed: A person whose spouse has died and who has not remarried.

Divorce: A person who has obtained a legal divorce and who has not remarried.

**Mean Age**: The mean age of a population is the average age of all its members.

**Median Age**: The median age is an age "x", such that exactly one half of the population is older than "x" and the other half is younger than "x".

**Natural Increase**: A change in population size over a given period as a result of the difference between the numbers of births and deaths.

Neonatal mortality: Mortality in the first month after birth (part of infant mortality).

**Net migration**: Difference between immigration and emigration for a given area and period of time.

**Non-permanent Residents**: The five following groups are referred to as non-permanent residents:

- persons residing in Canada claiming refugee status;
- persons residing in Canada who hold a student authorization (foreign students, student visa holders);
- persons residing in Canada who hold an employment authorization (foreign workers, work permit holders);
- persons residing in Canada who hold a Minister's permit;
- all non-Canadian born dependents of persons claiming refugee status, or of persons holding student authorizations, employment authorizations or Minister's permits and living in Canada.

**Parity**: A term used in reference to a woman or a marriage to denote the number of births or deliveries by the woman or in the marriage. A two-parity woman is a woman who has given birth to a second-order child.

**Population**: Estimated population and population according to the census are both defined as being the number of Canadians whose usual place of residence is in that area, regardless of where they happened to be on Census Day. Also included are any Canadians staying in a dwelling in that area on Census Day and having no usual place of residence elsewhere in Canada, as well as those considered "non-permanent residents".

#### **Population Estimate:**

**Preliminary, Updated and Final Postcensal**: Population estimates produced by using data from the most recent census adjusted for net census undercoverage and estimates of the components of demographic change since that last census.

*Intercensal*: Population estimate derived by using postcensal estimates and data from the most recent census counts adjusted for net undercount preceding and following the year in question.

**Population Growth**: A change, either positive or negative, in population size over a given period.

**Population movement**: Gradual change in population status over a given period attributable to the demographic events that occur during the period. Movement here is not a synonym for migration.

**Population Projection**: The projection differs from the estimate in that its objective is to establish what the evolution of the population will be in the future by size, geographical distribution and other demographic characteristics using selected hypotheses. A reference is made to a projection when the formulated hypotheses appear to be highly probable. Generally, population projections are restricted to a short term period.

**Post-neonatal mortality**: Mortality between the ages of one month and one year.

**Prevalence**: Number of cases existing at one point in time.

**Probability of survival**: Probability of a survivor of exact age x surviving at least to age x+n. Its notation is  ${}_{n}p_{x}$  and it is the complement of the probability of dying  $(1-{}_{n}q_{x})$ .

**Proportion ever married**: A measure of the prevalence of marriage in a generation or a fictitious cohort. It is usually equivalent to the proportion remaining single at an age such as 50 after which first marriages are rare.

#### Rate:

**Age-Specific Fertility**: Ratio of the number of births occurring in a given age group to the number of females of a given age (per 1,000).

*Birth*: Refers to a rate calculated by relating the number of live births observed in a population during a given period to the size of the population during that period (per 1,000).

*Divorce*: Refers to the number of divorces per 1,000 population.

*First Marriage*: Ratio of the number of first marriages observed in a population in a given period to the number of persons in that population regardless of the marital status (per 1,000).

- **Mortality**: Ratio of the annual number of deaths occurring in a population or sub-population during a given period to the number exposed to the risk of dying during the same period (per 1,000).
- **Population Growth**: Ratio of population growth between the year t and t+1, to the average population of that period (per 1,000).
- **Residual**: Difference between population growth as measured by population estimates of two consecutive years and the sum of the components. This difference results from the distribution of the closure error between years within the quinquennial period.
- **Returning Canadians**: Canadian citizens and landed immigrants who emigrated from the country and who subsequently returned to Canada to re-establish a permanent residence.
- **Sex Ratio**: The ratio of the number of men to the number of women. This is not to be confused with the sex ratio at birth, which is the ratio of the number of liveborn boys to the number of liveborn girls. This ratio is usually expressed as an index, with the number of females taken to be a base of 100.
- **Standardized Rates**: Mathematical transformations designed to make it possible to compare different populations with respect to a variable, e.g., fertility or mortality, where the influence of another variable, e.g., age, is held constant.
- **Structure**: Arrangement of a population by different demographic characteristics such as age, sex or marital status.
- **Tempo**: Distribution over time, within the cohort, of the demographic events corresponding to the investigated phenomenon.
- **Total Rates**: A period measure obtained by the summation of the series of agespecific or duration-specific rates. It represents the behaviour of the members of the fictitious cohort.
  - **Total Divorce Rate**: Proportion of marriages that finish in divorce before the 25th anniversary according to the divorce conditions of that year. It is a result of the sum of the divorce rates by length of marriage expressed per 10,000.
  - **Total Fertility**: Average number of children per female according to the fertility in a given year computed by the summation of the series of age-specific fertility rates.
  - **Total First Marriage**: Proportion of males or females marrying before their 50th birthday according to nuptiality conditions in a given year computed by the summation of the rates by age at first marriage.
- **Vital Statistics**: Includes all the demographic events (that is to say births, deaths, marriages and divorces) for which there exists a legal requirement to inform the Provincial or Territorial Registrar's Office.

### **PART II**

## A COMPARATIVE STUDY OF RECENT TRENDS IN CANADIAN AND AMERICAN FERTILITY, 1980-1999

by Alain Bélanger and Geneviève Ouellet

## CHANGING DEMOGRAPHIC TRENDS AND THE USE OF HOME CARE SERVICES

by Yves Carrière, Laurent Martel, Jacques Légaré and Lucie Morin

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## A COMPARATIVE STUDY OF RECENT TRENDS IN CANADIAN AND AMERICAN FERTILITY, 1980-1999

Alain Bélanger\* and Geneviève Ouellet\*

#### **Summary**

Canadians and Americans report wanting to have the same number of children. However, Canada's total fertility rate is declining, and in 1999 it reached an all-time low of 1.52 children per woman, while the U.S. rate, which is rising, reached 2.08 children per woman. The differential between the two countries has increased over the last decade and is now about one-half child per woman. This study describes the fertility differences between the two countries and explores a few possible explanations, drawing primarily on vital statistics data from the two countries but also on data from two national fertility surveys conducted in 1995: the General Social Survey for Canada and the National Survey of Family Growth for the United States.

The high fertility rates of American ethno-racial groups does not entirely explain the differences observed, and the growing gaps between the two countries are due to a sizable drop in fertility among Canadian women under 30 years of age. The relatively high fertility rate of American teenage females explains nearly a third of the difference observed between the two countries. Unwanted pregnancies and births are more frequent in the United States, as is the use of abortion, while Canadian females use more effective contraceptive methods than Americans, partly because medical methods and sterilization are more accessible and less costly. Marriage takes place earlier and is more widespread in the United States, and a higher level of religious practice is indicative of a more traditional and less secularized society than in Canada. Lastly, access to the labour market is more difficult for young Canadians than for young Americans.

#### Introduction

In 1999, Canadian fertility reached an all-time low of 1.52 children per woman. That same year, the U.S. rate was 2.08 children per woman, approaching the replacement level. The gap between the two countries, amounting to approximately one-half child per woman in favour of the United States, amounts to what could be called, in practical terms, Canada's fertility deficit.

<sup>\*</sup> Statistics Canada, Demography Division.

And yet the two neighbouring countries are similar in many ways. Their economies have long been highly integrated, and this integration has increased since the signing of the free trade agreements (NAFTA). The economies of both countries benefit from a highly educated and skilled labour force. In both countries, female participation in the labour market is sizable. Both countries receive a large number of immigrants, and they have had comparable rates of population growth for decades, although growth was somewhat stronger in Canada throughout the twentieth century except in the last decade.

Of course, there are also major differences between the two societies. In particular, the economic, political and military power of the United States is unequalled. To judge from per capita gross domestic product, Americans are also, on average, wealthier than Canadians (\$36,000, compared with \$28,100) (Statistics Canada, 2002). But Canadian society is traditionally more egalitarian. Social security programs are generally more developed and more generous in Canada. For example, Canada has endowed itself with a public health program providing universal and free access to all hospital and medical services.

Paradoxically, or perhaps precisely because they have a more extensive social safety net, Canadians as a society appear to have adopted more of the values of individualism and secularism that characterize many Western societies. In Canada, religious attendance is lower, families are smaller and the marriage rate is lower, especially because common-law unions have gained ground at the expense of legal marriage.

While for some, the current American fertility pattern appears durable and below replacement fertility does not seem to be a problem for the United States (Morgan, 2000), it is hard to foresee a substantial rise in Canadian fertility (Bélanger, 2000). Indeed, this is reflected in the fertility assumptions made by the two countries' statistical bodies concerning the probable future course of fertility. The middle scenario in the most recent projections for the Canadian population (Statistics Canada, 2001) assumes a slight decrease in fertility, with the fertility rate quickly reaching 1.48 children per woman and remaining at this level until the end of the projection period in 2051. By contrast, the middle scenario advanced by the U.S. agency foresees fertility increasing slowly and steadily and reaching 2.20 children per woman in 2050 (U.S. Census Bureau, 2000). Thus, the fertility rate for American women, which is already more than 30% higher than that of Canadian women, could in the future exceed it by nearly 50%. What is the explanation for this? Is it possible that the fertility rate of Canadian women will rise and in the near future reach levels comparable to those observed or projected in the United States?

Strictly speaking, the time horizon for the Canadian projections is 2026, with the different scenarios projecting that the fertility, mortality and mobility levels reached in 2026 will hold constant between 2026 and 2051.

This study seeks to explain the fertility differences that exist between the two populations. First, using various measures, the article describes the fertility differences observed between Canada and the United States. In the second section, a few possible explanations are explored. The populations of the two countries are compared in terms of different factors that are directly or indirectly associated with fertility. Among the factors directly associated with fertility, the analysis will compare contraceptive practices and the use of abortion in the two countries as well as differences as to the modes of entry into conjugal life: marriage and common-law union. The factors indirectly associated with fertility are numerous, and the study makes no claim to cover them exhaustively; instead it will focus on those indirect factors that are the most likely to vary across the two populations: religious practice and job insecurity among the young.

#### Fertility Differences Between Canada and the United States

Figure 1 compares the trend in the total fertility rate of Canadian and American women over slightly more than half a century. In both countries, the course of fertility over the past half century has varied considerably, and while the broad trends are similar, there are also major differences.

In both countries, postwar prosperity favoured an increase in the fertility rate, which had been at historically low levels following the Great Depression of the 1930s. The baby-boom that shaped the post-war course of fertility in many Western countries was a greater phenomenon in the Anglo-Saxon countries, namely Canada, the United States, New Zealand and Australia—countries that experienced the largest increases in their fertility during this period. This was especially true for Canada, and until the mid-1960s, the fertility of Canadian women, as measured by the period rate, exceeded that of American women. At the height of the baby-boom in 1957, the total fertility rate reached 3.91 and 3.77 children per woman in Canada and the United States respectively.

With the revolution in birth control, both countries' fertility rates fell abruptly from the early 1960s to the mid-1970s. This period was marked not only by a decrease in the number of children born but also by growing childlessness and a lengthening of the childbearing period. The fertility rates of the two countries had fallen below the replacement level (which is currently about 2.1 children per woman) by the early 1970s and continued their slide, reaching approximately 1.7 children per woman toward the end of that decade. During that period, the two countries' rates overlapped almost completely, but since then the two curves have moved apart. The Canadian rate has continued to fall, despite a slight upturn in the early 1990s, while the fertility of American women began rising and recently reached the replacement level. *In 1999, the last year for which observations are available for both countries, the total rate reached 1.52 and 2.08 children per woman in Canada and the United States respectively*.

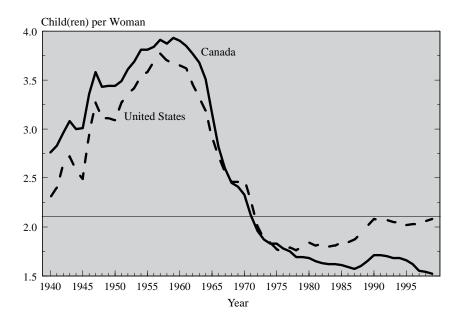


Figure 1. Total Fertility Rate, Canada and United States, 1940-1999

In examining the differences in fertility observed between the two countries, one of the first sources of explanations that comes to mind is the make-up of the U.S. population by ethno-racial origin. In the United States, as elsewhere, there are major differences in fertility between sociocultural or ethnic groups. But since that country has large ethno-racial minorities that traditionally have higher fertility rates, could this fact alone explain the differences observed between the two countries with respect to the fertility of the general population? Specifically, could the widening gap in national fertility in favour of the United States be explained by the fact that the black and Hispanic minorities, historically more fertile than the white majority, represent a growing proportion of the U.S. population?

Figure 2, which shows the recent evolution of the total fertility rate of the U.S. population by ethno-racial origin, appears to go against this hypothesis. On the one hand, it is clear that black and Hispanic American women have higher fertility rates. The total rate for black American women increased between 1980 and the early 1990s, when it exceeded 2.4 children per woman. Subsequently, black women's fertility declined and by the end of the 1990s had returned to the initial levels of approximately 2.2 children per woman.

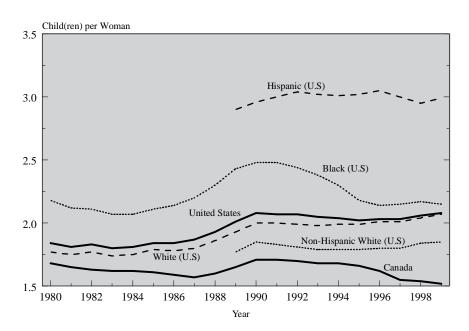


Figure 2. Total Fertility Rate, Canada and United States by Ethno-racial Group, 1980-1998

The fertility of Hispanic American women remained at around 3.0 children per woman throughout the observation period. In the early 1980s, the fertility of American white women was only slightly higher than that of Canadian women (1.77 children per woman, as compared to 1.68). However, throughout the observation period, the fertility of the former group exhibited an upward trend that was especially pronounced between 1987 and 1990. By contrast, the fertility of Canadian women tended to decline throughout the period, except for a short interval between 1987 and 1990 when the rate rose from 1.57 children per woman to 1.71 children per woman. At the end of the period, the fertility of white American women (2.04 children per woman) was much closer to that of black American women (2.17 children per woman) than to the fertility of Canadian women (1.52 children per woman). However, it should be noted that some Hispanic women are white, which raises the average for the group.

Since 1989, U.S. vital statistics data have distinguished between Hispanic and non-Hispanic white women. The higher fertility rate of Hispanic white women appears to explain nearly half the difference observed between the

TFR of Canadian women and that of white American women. Nevertheless, all American ethno-racial groups exhibit a higher period fertility rate than that of Canadian women. For 1999, a gap of 0.3 children is observed between the TFR of Canadian women and that of non-Hispanic white American women (1.85 children per woman), the group exhibiting the lowest fertility rate in the United States. Therefore, the ethnic make-up of the U.S. population does not entirely explain the differences in fertility observed between the two countries. At most, the higher fertility of black or Hispanic American women would appear to explain 40% of the difference observed in 1999.

The total fertility rate is a cross-sectional measure of the intensity of the phenomenon, and its level may be influenced by a change in the childbearing tempo. Women in recent cohorts have tended to remain in school longer than those in earlier cohorts, and both men and women in the younger cohorts have been slower to enter the labour market. Perhaps adapting to these changes, women in recent cohorts have tended to postpone childbearing.

In Canada, the mean age at childbearing has been rising since 1974, while the proportion of high-order births has declined over time. In fact, for each parity, the mean age at childbearing has begun to increase earlier, and it has been rising for all birth orders since the mid-1960s. In 1980, the mean age at childbearing was 27.0 years, and it reached 28.7 years in 1999. In Canada, the mean age at the first birth was somewhat lower in 1980, at 25 years. It was approaching 27 years in 1999. In the United States, childbearing tends to occur earlier, but the age at childbearing also rose between 1980 and 1999, going from 22.6 years to 24.7 years (Figure 3). A comparable phenomenon is therefore observed in that country, but it has been less pronounced since the late 1980s. The change over time is also comparable for mothers' age at subsequent births, with the length of the interval between births remaining practically unchanged. In Canada, for example, the mean age at childbearing is 29.5 years for second births (27.5 in 1980) and 30.7 years for third births (29.4 in 1980). In the United States, the mean age at the second birth was 27.6 years in 1997 (25.4 years in 1980) and 29.1 years at the third birth (27.3 years in 1980). Canadian women postpone childbearing more than American women, and this trend intensified between 1990 and 1997. In a situation in which some childbearing is postponed, the period rate underestimates female fertility, since the births that successive cohorts of women will have are distributed over a longer period.

In neither country has any female cohort yet had a completed fertility rate as low as the level reached by the total fertility rate. To get a good grasp

The gap at the national level is 0.56 children per woman, while the gap between non-Hispanic white American women and Canadian women is 0.33 children. Assuming, in the interest of simplicity, that the Canadian population is homogeneous, the difference between these two numbers (0.23 children) represents the proportion attributable to the higher fertility of black or Hispanic American women, or 41% of the total difference.

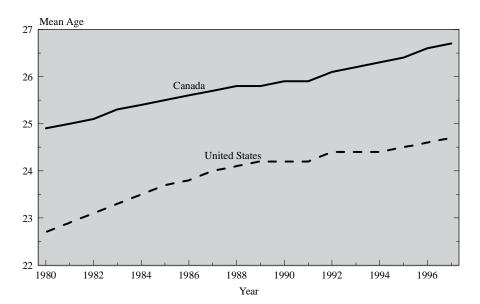


Figure 3. Mean Age at First Birth, Canada and United States, 1980-1998

of the phenomenon, it will be necessary to analyse cohort fertility. Table 1 looks at groups of cohorts of American and Canadian women born after 1945 and compares their cumulative fertility at different ages. The women in some of these cohorts have reached age 50 and thus have completed their fertile period. For them, the table therefore shows the total number of children that they have ultimately brought into the world (their completed fertility) and their overall fertility history. Thus the actual childbearing tempo of the women in these cohorts can be compared.

American women in the cohorts born between 1945 and 1954 had slightly more children than Canadian women in the same cohorts (90 and 106 children more per 1,000 women for the 1945-1949 and 1950-1954 cohorts respectively). On the other hand, it is worth noting that until 30-34 years of age, the Canadian women in the first group of these cohorts had a cumulative fertility—the average number of children that they had borne up to a given age—that was slightly higher than that of their American counterparts. For example, at 30-34 years of age, Canadian women born between 1945 and 1949 had already, on average, given birth to 1.86 children, whereas their American counterparts had, on average, had 1.81 children. This indicates that the Canadian women in these cohorts were tending to have their children earlier, while their American counterparts had a higher fertility rate beyond age 30.

Table 1. Completed or Cumulative Fertility Rates at Various Ages (per 1,000 Women) for Selected Cohort Groups, Canada and United States, 1945-1949 to 1975-1979

Age			]	Birth Cohorts			
Group	1945-49	1950-54	1955-59	1960-64	1965-69	1970-74	1975-79
				Canada			
20-24	697	525	447	370	319	323	291
25-29	1,399	1,158	1,036	913	848	774	
30-34	1,860	1,628	1,525	1,446	1,358	•••	
35-39	2,037	1,834	1,770	1,714	•••	•••	•••
40-44	2,081	1,890	1,836	•••	•••	•••	
45-49	2,085	1,896	•••	•••	•••	•••	•••
		•	1	United States			-
20-24	684	560	503	489	478	525	523
25-29	1,369	1,140	1,090	1,048	1,062	1,087	
30-34	1,813	1,638	1,573	1,571	1,583	•••	
35-39	2,091	1,891	1,868	1,891	•••	•••	
40-44	2,163	1,987	1,978		•••	•••	•••
45-49	2,175	2,002	•••	•••	•••	•••	•••
				Variations			
20-24	13	-35	-56	-119	-159	-202	-232
25-29	30	18	-54	-135	-214	-313	
30-34	47	-10	-48	-125	-225	•••	•••
35-39	-54	-57	-98	-177	•••	•••	•••
40-44	-82	-97	-142	•••	•••	•••	
45-49	-90	-106	•••	•••	•••	•••	•••
			Varia	ations (in per	cent)		
20-24	2	-7	-13	-32	-50	-63	-80
25-29	2	2	-5	-15	-25	-40	•••
30-34	3	-1	-3	-9	-17		
35-39	-3	-3	-6	-10	•••	•••	
40-44	-4	-5	-8		•••		
45-49	-4	-6	•••	•••	•••	•••	•••

Canadian women have gone from having their children earlier than American women to having them later. Starting with the 1955-1959 cohorts, American women at all ages have a higher cumulative fertility than Canadian women. From one group of cohorts to the next, the gap widens between the cumulative fertility of Canadian women and that of American women. For example, for the group of cohorts born between 1970 and 1974, the cumulative fertility level of American women aged 30 to 34 on January 1, 1999 is 40% greater than that of Canadian women. Thus the cohorts reflect the effect of the steeper decline in fertility before age 30 that is observable for Canadian women in

Figure 4. For all the cohort groups, cumulative fertility, at the highest age for which it can be calculated using the statistics available, is greater in the United States than in Canada. *The higher fertility of American women shown by the period rate is also observed for all groups of cohorts born after 1945*. There is every indication that the completed fertility rate of the cohorts that have not yet come to the end of their fertile years will remain lower in Canada than in the United States. It is therefore important to pursue our analysis by looking at rates by age.

#### Fertility by Age

Over the past twenty years, the childbearing tempo of Canadian and American women has slowed, although more markedly for Canadians. The fertility rates of women 30 years of age or more have increased at nearly the same rate in the two countries. The fertility of younger American women has held steady and even increased slightly among those aged 25 to 29, while that of Canadian women of the same age has fallen substantially. Between 1979 and 1999, there was a decrease of nearly 40% in the fertility of Canadian women aged 20 to 24 and approximately 25% among those aged 25 to 29 (Figure 4). Throughout the observation period, the fertility of American women under 25 years of age exceeded that of Canadian women of the same age, but the gap between the two populations has widened over time. In both countries, fertility peaks at 25-29 years of age; but before 1995, the fertility of Canadian women in this age group was higher than that of American women in the same age group, whereas in 1999 it was nearly 15% lower. Between 30 and 34 years of age, the rates follow a similar upward trend in the two countries. After age 35, the rates also rise in both countries, but the increase is somewhat greater in the United States. Nevertheless, it should be kept in mind that the fertility of women over 35 years of age is low and its effect on the total fertility rate is negligible.

Figure 5 sheds more light on the evolution of the fertility rates of Canadian and American women over the past twenty years. The upward trend in fertility rates beyond age 30 is similar in the two countries, and the curves almost overlap, both in 1980 and in 1999. By contrast, the higher fertility of young American women, which were already perceptible in 1980, increased thereafter, and at the end of the observation period the differences between the two curves before age 25-29 were greater. The growing fertility gap between American women and Canadian women is thus due to the fact that young American women have continued to exhibit higher fertility levels while young Canadian women's fertility has declined substantially.

It can be calculated that approximately 30% of the gap observed between the total fertility rates of American and Canadian women in 1999 results from the higher fertility of American teenage girls. The fertility rate at 15-19

Figure 4. Change in Fertility Rates by Age Group, Canada and United States, 1979-1999

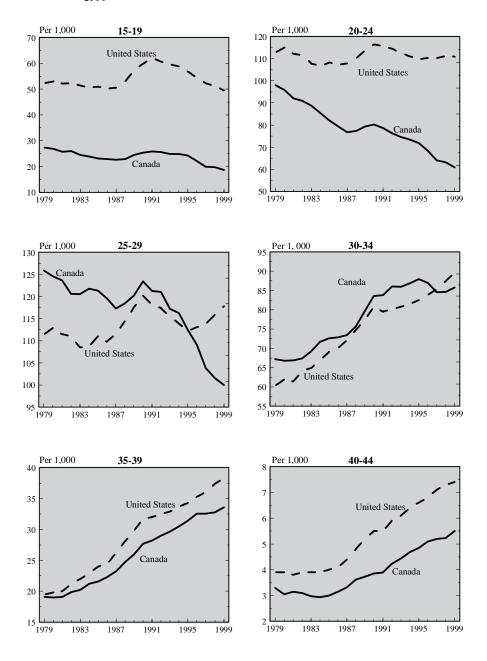
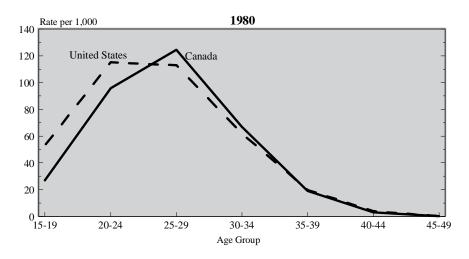
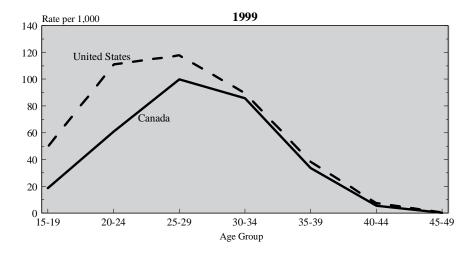


Figure 5. Fertility Rates by Age Group, Canada and United States, 1980 and 1999





years of age exceeds 50 per 1,000 in the United States, whereas in Canada it is less than 20 per 1,000. No other industrialized country has juvenile fertility rates as high as those observed in the United States. The fertility rate of American teenage girls is more than double that in other industrialized countries, including Canada, and ten times greater than in Japan and the Netherlands (Maynard,

1996). Contrary to what one might expect, it is not solely due to the ethnic composition of the U.S. population, since the white population also has higher rates (40 per 1,000) than those observed elsewhere.

In many respects, this situation is not enviable. At the individual level, having children too early is, for the mother, often associated with an interruption of schooling and the problems that this can entail for integrating into the labour market. It is also associated with a higher risk of single parenthood, living below the poverty level and experiencing long periods on social assistance (Moore et al., 1993; Maynard, 1996). The socio-economic disadvantages of teenage pregnancy in adulthood are perceptible even for young women who come from relatively wealthy backgrounds and those who have completed their secondary schooling (Olausson et al., 2001). Furthermore, the harmful consequences are not limited to the mothers. They also extend to the health and future socio-economic status of the children born as a result of these pregnancies. The chances of educational, economic or family "success" are lower for the children of a teenage mother, even when differences in the socio-economic characteristics of the mother are taken into account (Haveman et al., 1996).

The fertility of American teenage girls is a concern for officials who closely follow how it is developing (Ventura et al., 2001) and seek to reduce it by means of various incentive policies (Donavan, 1999). The vast majority (87%) of teenage pregnancies in the United States are unwanted (Maynard, 1996). It is therefore possible that the U.S. total fertility rate will fall if efforts to reduce the fertility of teenage females are successful.

On the other hand, nearly two-thirds (60%) of the difference observed between the American and Canadian rates is due to the lower fertility of Canadian women aged 20 to 29, the age at which procreation is physiologically easier. Is this because Canadian women want fewer children than American women?

#### Fertility Intentions

Figure 6 appears to rule out this hypothesis. It shows the average number of children wanted<sup>3</sup> by respondents to the two surveys, both conducted in 1995. That number varied between 2.0 children for American women aged 40 to 44 at the time of the survey and 2.4 children for Canadian women aged 20 to 24. Also, in both countries, the number of children that the women

The concepts are not exactly the same in the Canadian and U.S. surveys. In Canada, women were asked, "What is the total number of children that you intend to have including those that you have now?" On the other hand, the U.S. survey asked women who reported intending to have another child the minimum and maximum number of children that they intended to have, and it was the average of these two numbers that was used to calculate the average number of children desired.

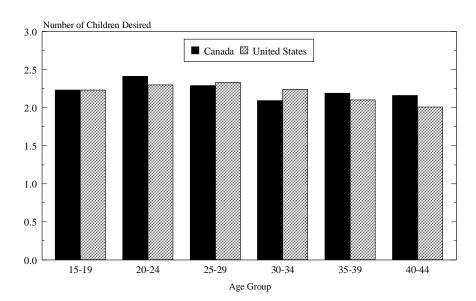


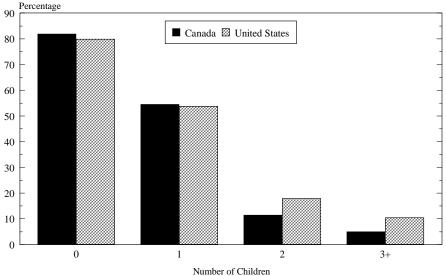
Figure 6. Average Number of Children Desired by Age Group, Women Aged Between 15 and 44, Canada and United States, 1995

**Sources:** Statistics Canada, General Social Survey 1995 and National Centre for Health Statistics, National Survey of Family Growth 1995.

reported wanting to have increased with age up to the 25-29 age group and subsequently declined to approximately 2 children per woman. Canadian women of childbearing age (15 to 44 years of age) reported intending to have an average of 2.22 children, a number entirely comparable to that reported by American women (2.19 children).

The appeal of having a standard two-child family is also clear from Figure 7, which shows the proportion of females aged 15 to 44 who reported wanting at least one more child depending on the number of children already born. The great majority of women who had either no child or one child responded that they wanted to have at least one more child: 80% or more of childless women want to have at least one child, and 54% of those with one child want to have another child. However, the proportion of women wishing to have another child falls off dramatically among those who already have two children: 11% of Canadian women and 18% of American women who have had two children report wanting another child, and these proportions decline again among those with three or more children. *The desire to start a family and the desire to reach the "standard" of two children are identical in Canada* 

Figure 7. Proportion of Females Aged 15 to 44 Who Report Wanting at Least One More Child According to Number of Children Already Born, Canada and United States, 1995



Sources: Statistics Canada, General Social Survey 1995 and National Centre for Health Statistics, National Survey of Family Growth 1995.

and the United States, but the desire for a larger family (three or four children) seems to be greater among American women than among Canadian women respondents, as may be seen from the fact that for American women who already have two or more children, nearly twice the proportion want to have at least one more child.

There is some question as to the value to assign to responses concerning fertility intentions. On this subject, opinions vary. Analysing a sample of nearly 3,000 non-Hispanic white women in a U.S. longitudinal study, Schoen et al. (1999) were able to determine that at the individual level, intentions regarding future fertility (i.e., whether or not to have a child) and the degree of certainty expressed by the two spouses were strongly associated with the respondents' fertility behaviour over the five years since the survey was first administered. Others doubt that fertility intentions expressed in the form of the number of children desired can be a useful indicator of the "demand" for children in low-fertility countries, since these desires are too heavily influenced by social stereotypes such as the norm of the two-child family (Livi Bacci, 2001).

In any case, in most developed countries, the average number of children desired approaches two or slightly exceeds that level. In these countries, where the fertility rate is below the replacement level, the average number of children that women report wanting generally exceeds the number that they will actually have. This is probably especially true where the respondent is young when asked how many children she wants to have, since it sometimes seems easier today to control fertility in order to prevent an unwanted birth than to create the financial and family conditions required for the long-term commitment entailed in having a child. Thus it is useful at this point to examine whether these conditions, and the capacity to satisfy them, vary between the two countries.

#### A Few Possible Explanations

Many demographers, sociologists and economists have tried to explain variations in fertility. For this comparative study, the conceptual framework proposed by Davis and Blake (1956) seems appropriate, and a number of factors that directly influence the fertility level are compared for the two countries. Bongaarts (1976) looks at eight of the eleven factors identified by Davis and Blake as directly influencing fertility: nuptiality, contraception, abortion, post-partum amenorrhoea, frequency of sexual relations, intra-uterine mortality, sterility and the duration of the fertile period. The first three factors seem more important for explaining differences in fertility between two posttransitional countries<sup>4</sup> such as Canada and the United States. The influence of the last five factors on potential fertility can be only marginal, since fertility levels are less sensitive to a change in these factors, and furthermore the make-up of the two populations studied varies relatively little with respect to these factors. They are more important for explaining variations in fertility between pre-transitional societies, in which the fertility level of married women approaches the natural fertility level. Therefore, the following analysis focuses on only the first three factors and compares the composition of the two populations in relation to them.

Contraception (including access to and use of an effective method) is by far the factor that has the greatest effect on the likelihood of conception and live births and therefore on the fertility rates observed in developed countries where the total fertility rate is less than 3.0 children per woman (Bongaarts, 1982). The most effective contraceptive methods—birth control pills, implants, injections and IUDs, which can be grouped under the heading of medical or pharmaceutical methods—are generally less accessible, since their use requires a prescription and a doctor's involvement and hence a medical consultation. The same is true for sterilization for contraceptive purposes, which requires surgery.

<sup>&</sup>lt;sup>4</sup> This refers to the fact that the two populations have low birth and death rates characteristic of societies that have completed their demographic transition and also to the fact that these two societies have completed the transition from natural fertility to controlled fertility.

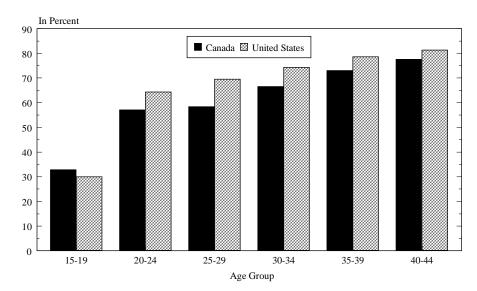


Figure 8. Proportion of Women Aged 15 to 44 Who Use a Contraceptive Method by Age Group, Canada and United States, 1995

Note: For United States: Sexually active women. For Canada: all women.Sources: Statistics Canada, General Social Survey 1995 and National Centre for Health Statistics, National Survey of Family Growth 1995.

In Canada, the public health system provides universal and free access to medical services, whereas in the United States, such services can generate substantial costs. On the other hand, a number of states have family planning clinics, with one of their roles being to provide access to contraception to those who would not have it otherwise (Donavan, 1999). Nevertheless, medical methods and sterilization for contraceptive purposes are more accessible in Canada because they are less costly to users.

Figure 8 compares the proportions of Canadian and American women who report using a contraceptive method by age group. The proportion of users increases with age in both countries, rapidly between the 15-19 and 20-24 age groups and more slowly thereafter. While the trends are similar in the two countries, the figure shows that starting with the 20-24 age group, the proportion of users estimated from the U.S. survey is slightly higher than the proportion estimated for the Canadian population according to the General Social Survey. The gap is widest for the 25-29 age group, where the proportion of users of a contraceptive method is roughly 20% higher in the United States. This finding would seem to run counter to expectations, considering that the

Table 2. Percentage Distribution of Female Users of Contraceptive Methods by Method Used and Age Group, Canada and United States, 1995

A 000		Can	ada			United	States	
Age Group	Sterilization	Pharma- ceutical	Barrier and Natural	Total	Sterilization	Pharma- ceutical	Barrier and Natural	Total
15-19	0.0	86.0	14.0	100.0	0.6	57.3	42.1	100.0
20-24	3.6	77.1	19.3	100.0	5.1	61.9	33.0	100.0
25-29	19.6	59.6	20.8	100.0	22.7	45.0	32.3	100.0
30-34	44.1	34.7	21.3	100.0	41.3	30.9	27.8	100.0
35-39	68.9	13.6	17.5	100.0	62.2	12.8	25.0	100.0
40-44	84.6	3.8	11.5	100.0	73.7	6.8	19.5	100.0
Total	45.8	36.7	17.5	100.0	41.4	30.6	28.0	100.0

**Sources**: Statistics Canada, General Social Survey 1995 and National Centre for Health Statistics, National Survey of Family Growth 1995.

fertility of American women under age 30 is greater than that of Canadian women of the same age. This counterintuitive result is probably due to the fact that the American survey asks the questions regarding contraception only to women who are sexually active. While the Canadian survey asked those questions to all women.

On the other hand, Canadian women who use contraception appear to use more effective contraceptive methods than their American counterparts. For example, 28% of American users report using a natural method (coitus interruptus, the calendar) or a barrier method (condom, spermicide foam, diaphragm, etc.), compared to 17% in Canada (Table 2). In Canada, 46% of women using contraception opted for sterilization compared with 41% in the United States, and pharmaceutical methods (the pill, IUD, implant) are more popular in Canada (37%) than in the United States (31%).

The younger the age group, the wider the gap between the proportions of Canadian and American women using a pharmaceutical method. For example, whereas in Canada 86% of users aged 15 to 19 use a pharmaceutical method (primarily the pill) compared to 14% who use a natural or a barrier method (primarily the condom), these proportions are 57% and 42% respectively in the United States.

Clearly, the use of a less effective contraceptive method means a higher risk of unwanted or unplanned pregnancy, greater use of abortion and a larger proportion of unwanted births. There is an abundant literature in the United States on the high incidence of unwanted pregnancies (Henshaw 1998, 2001; Jones et al. 1989). It is estimated that nearly half of all pregnancies (49%) in the United States in the first half of the 1990s were unwanted. Approximately half of them ended in an abortion. This left a sizable proportion (31%) of births that were unwanted (Frejka, 2002). For some women, it is only the timing of the pregnancy that is not planned, whereas the child is wanted.

Nevertheless, a substantial proportion of all births are not desired. For example, it is estimated that 10% of all births that took place in the first half of the 1990s were undesired (Abma et al. 1997).

In Canada, there is no recent survey by which to estimate the proportion of unwanted pregnancies. Only the 1984 survey of the family and fertility included questions on the circumstances surrounding each pregnancy. For each pregnancy reported, the survey asked the respondent whether she had intended to become pregnant at that time, whether she would have preferred to be pregnant later or if she would have preferred not to have any more children. Jones et al. (1989) conducted an in-depth comparative study of the results of this survey. The comparison is essentially made with the situation in the United States, although the study compares the birth planning situation in some twenty industrialized countries. The authors also give special attention to family policies, in particular family planning services in each country, using in-depth interviews with officials responsible for the development and evaluation of family policies as well as other experts. They conclude that in the early 1980s, the proportion of unplanned or unwanted pregnancies was much larger in the United States than in other countries—roughly 60% higher than in Canada, Belgium or Sweden, more than double the proportion in the United Kingdom and five times higher than in the Netherlands.

As regards the comparison of the U.S. and Canadian situations, their conclusions are clear. The contraceptive methods used are clearly more effective in Canada than in the United States, with the result that the rate of unwanted pregnancy is lower in Canada. Canadian women appear to assign greater importance to the prevention of unwanted pregnancies by using more effective contraceptive methods, and by better accepting the problems that may be associated with their use (Jones et al. 1989).

Looking at the two countries' family planning systems, the authors note four major differences, which they see as contributing to Canadians' success in preventing unwanted births:

- The lack of an economic barrier to obtaining effective contraception. Canadian women can obtain prescriptions for oral contraceptives quickly and at no charge. Furthermore, sterilization for contraceptive purposes may be obtained easily and at no charge;
- 2) The availability of information on contraceptive methods as soon as young women become sexually active. When becoming contraceptive users, Canadian women of all social classes can obtain detailed advice usually on an individual basis—on sexuality, contraceptive methods and the importance of avoiding early and unwanted pregnancies;
- 3) A more positive attitude toward the pill. Family planning services encourage the use of the contraceptive pill, the most effective method;

4) More birth control services to high school students. The schools supply information on available contraceptive methods and family planning services through school nurses or social workers.

According to the authors, these differences probably explain why the rate of unwanted pregnancy is lower in Canada. This reasoning can easily be extended to explain why abortion is also less common there.

Even though access to abortion has been a controversial political issue in the United States, the total abortion rate has consistently been higher in the United States than in Canada over the past 20 years. Between 1980 and 1990, the total abortion rate was twice as high in the United States, where it remained at about 0.8 abortions per woman, while the Canadian rate ranged between 0.3 and 0.35 abortions per woman (Figure 9). Since 1990, the gap between the two countries has narrowed, with the U.S. rate declining (it stood at 0.7 abortions per woman in 1997) and the Canadian rate rising (0.5 abortions per woman in 1997). In both countries, the abortion rates are higher for young women. The main factor causing the two countries' rates to move closer together is a reduction in the gaps for the abortion rates of women under 30 years of age (Table 3). Since 1990, the abortion rate for American teenage girls (15-19 years) has declined by nearly 30% and that of women aged 20 to 24 has decreased by nearly 15%, while in Canada these rates have increased slightly (6%) for the younger age group but more substantially (26%) for women aged 20 to 24. Nevertheless, abortion rates remain higher in the United States than in Canada for all age groups.

#### Marriage, Cohabitation and Divorce

Both in Canada and the United States, an increase is observed in the non-marital fertility rate, but the majority of births still take place within marriages. In 1980, the proportion of births to unmarried women stood at 13% in Canada and 18% in the United States. This proportion has been rising steadily over the past 20 years and in 1999, the corresponding percentages were 31% and 33% in Canada and the United States respectively (Ventura and Bachrach, 2000). This trend results from the growing acceptance of another form of conjugal life, namely common-law unions. Whereas in the past these often functioned as a "trial marriage," they are tending increasingly to take the place of legal marriage.

While the fertility of common-law couples is increasing over time, the fertility rate of married women is nevertheless much higher than that of women in common-law unions. Having a child is a long-term commitment, and many women still prefer to do so within the framework of a legal marriage. Thus, the number of children per woman continues to be higher for married women than for women who are in common-law unions or not living with a partner. For Canada as a whole, the total fertility rate for married women is nearly

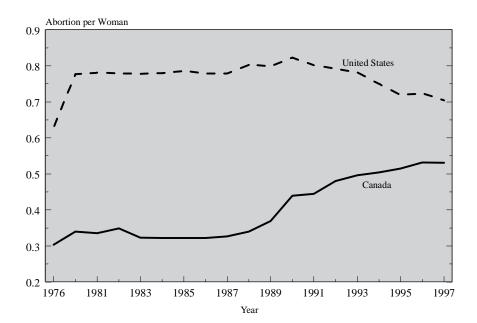


Figure 9. Total Abortion Rate, Canada and United States, 1976-1997

double that of women in common-law unions, both for unions formed between 1975 and 1984 and those formed between 1985 and 1994 (Dumas and Bélanger, 1997: 169). The mode of conjugal living, while less decisive a factor than in the past, is still a major intervening variable in explaining fertility differences.

Compared to Canadian women, American women tend to marry in greater proportions and to do so earlier in life. Figure 10 shows, by age group, the proportion of women who reported being married at the time of the 1995 surveys. Before age 35, the proportions are higher in the United States than in Canada, and the younger the respondent, the wider the gap. For example, while nearly 5% of American females aged 15 to 19 reported being married in 1995, the proportion of married respondents among Canadian females of the same age was less than 1%. Similarly, in the 20-24 age group, the proportion of married women was 40% higher in the United States, with these proportions being 16.6% and 28.0% in Canada and the United States respectively.

According to the two 1995 surveys, nearly 20% of women aged 20 to 24 were living in common-law unions in Canada, while the corresponding

Table 3. Abortion Rate (per 1,000) by Age Group, Canada and United States, 1990 and 1997

A ===		Canada			United States	
Age Group	1990	1997	Variation (%)	1990	1997	Variation (%)
15-19	20.4	21.6	5.9	40.3	27.5	-31.8
20-24	26.9	34	26.4	56.7	49.2	-13.2
25-29	17.1	22.6	32.2	33.9	33.3	-1.8
30-34	11.3	14.1	24.8	19.7	18.1	-8.1
35-39	6.8	8.3	22.1	10.8	9.6	-11.1
40 +	2.1	2.9	38.1	3.2	3.1	-3.1

proportion in the United States was 11%. The higher marriage rate of American women is largely due to the greater appeal of common-law unions as a mode of conjugal life in Canada, but even so, before age 25 the proportion living in a couple relationship is higher (by about 8%) in the United States than in Canada. Possibly young Canadians postpone forming a union because it is harder for them to integrate into the labour market than their American counterparts.

#### Factors Indirectly Associated with Fertility

In the conceptual framework proposed by Davis and Blake, contraceptive practices, abortion use and marriage (as well as the other variables mentioned above) are intervening variables between socio-economic and cultural variables and fertility itself. For example, the use of abortion and the choice of one mode of conjugal life instead of another may be influenced by an individual's religious practice; for young persons, union formation may be influenced by the ease or difficulty of achieving the financial independence that steady employment may offer; the choice of a contraceptive method and its effective use may be influenced both by financial constraints and by the ability to receive information and use it appropriately.

Although not intended to be exhaustive, the following section seeks to shed light on a few of the relationships that exist between social-economic and cultural variables and fertility and to show that they may differ between the two countries. The choice of the variables analysed results in part from considerations such as those mentioned in the preceding paragraph and from the results of an analysis conducted in Canada. Using a transitions analysis model, Bélanger and Dumas (1998) and Bélanger (2000) have shown that out of a set of socio-cultural variables, several—employment, education level,

80 Percentage

60 - United States

40 - Canada

20 - Canada

Age Group

Figure 10. Proportion of Women who Report Being Married at the Time of the Survey by Age Group, Canada and United States, 1995

**Sources:** Statistics Canada, General Social Survey 1995 and National Centre for Health Statistics, National Survey of Family Growth 1995.

religious practice and country of birth—had significant effects on the likelihood of having a second or third child. Some of these variables are of particular interest here.

#### - Religious Practice

Religious practice can serve as an indicator of a society's level of traditionalism or secularism. It indirectly influences an individual's fertility, especially in that it affects the choice of marriage as the mode of conjugal life and the stability of the union. In Canada, individuals who do not practise their religion are nearly three times as likely to form a common-law union as those who participate in religious practices on a weekly basis (Dumas and Bélanger, 1997). Unions of individuals who practice their religion are less likely to be dissolved (Turcotte and Bélanger, 1997).

In Canada, Bélanger and Dumas (1998) observed a slightly higher proportion of contraceptive use among couples in which the respondent reported never participating in religious practices (81%) than among those practising either occasionally or weekly (75%). On the other hand, the frequency of religious

practice has few effects on the choice of a contraceptive method, except that a smaller proportion of practising couples report using the pill or an IUD (18%) compared with others (28%), but this difference is entirely offset by a higher proportion of sterilized couples among those participating in religious practices on a weekly basis. The same offsetting phenomenon is observed in the United States. Among women using some method of contraception, sterilization is used by 48% of those practising a religion (or their spouse), compared with 35% of those not practising; 22% of those practising use a pharmaceutical method (the pill, an implant or injection) compared with 32% of those not practising.

Religious attendance is much higher in the United States than in Canada. Among women of childbearing age, the proportion of Americans (34%) who report practising their religion on a weekly basis is nearly double the rate for Canadians (18%). This one-to-two ratio is nearly constant for all age groups (Figure 11).

#### - Job Insecurity Among the Young

Over the past twenty years, access to the labour market was more difficult for the younger cohorts in Canada, for males and females alike. The unemployment rate is an indicator of job insecurity. The long-term responsibilities that come with having a child assume at least a minimum of financial (and emotional) security and a reasonable level of confidence in the future. Figure 12 compares the evolution of the unemployment rates of young men and young women aged 20-24 changed over time in the two countries between 1980 and 1998. The upward and downward movements in youth employment generally occur at the same time in the two countries, reflecting the strong integration of the two economies.

Against this backdrop of parallel patterns, a new phenomenon emerges: the growing gap between the Canadian and American rates. In the early 1980s, youth unemployment rates are similar in the two countries and indeed are sometimes lower in Canada, but since 1983, youth unemployment has consistently been higher in Canada than in the United States. Except in 1984 and 1985, when youth unemployment was 40% to 50% higher in Canada than in the United States, Canadian rates have been between 20% and 30% higher. The recession of the early 1990s appears to have had more serious consequences in Canada. Since 1991, the unemployment rate of young Canadians has consistently been 50% to 70% higher than that of young Americans.

One of the consequences of this job insecurity has been the relative lower income of young cohorts in comparison with those that preceded them. Indeed, the real earnings of young males in Canada were lower at the end of the 1990s than in the early 1980s. Between 1984 and 1999, the median net worth of young couples (aged 25 to 34) with children fell 30%. In 1999, 16% of these

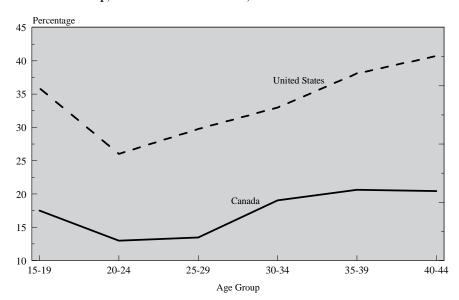


Figure 11. Proportion of Women who Report Practising their Religion Weekly by Age Group, Canada and United States, 1995

**Sources**: Statistics Canada, General Social Survey 1995 and National Centre for Health Statistics, National Survey of Family Growth 1995.

families had a nil or negative net worth, compared with 10% in 1984 (Morissette et al., 2002). Comparable data for the United States are not available, but a comparison of employment statistics suggests that the situation of American youth might be more favourable.

#### - Policies on the Family

In societies where public spending accounts for a large proportion of the gross national product, the social security system may exert negative pressure on the fertility level. In modern countries where health care, aid to the elderly and a minimum retirement income are guaranteed, some may consider it more advantageous (at least from an economic standpoint) not to have children, since they will be able to receive social protection when they are elderly and contribute minimally to the cost of children. In fact, according to Livi Bacci (2001), of all the factors that may be responsible for the low fertility observed in developed countries, the negative effect of the social security system deserves the greatest attention.

Neither Canada nor the United States has an explicit policy on the family, but in both countries a number of programs have an impact on the situation

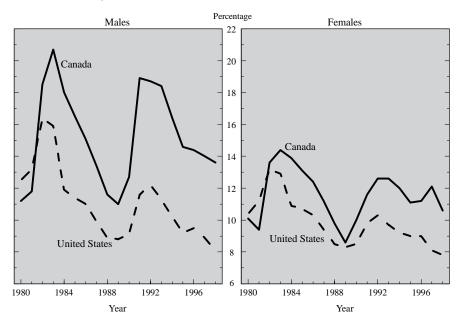


Figure 12. Unemployment Rate of Youths Aged 20-24 by Sex, Canada and United States, 1980-1998

Sources: Statistics Canada, Labour Force Survey and Bureau of Labour Statistics.

of families. The wellbeing of Canadian families is directly or indirectly affected by various tax measures and social programs: tax credits for child care expenses; child tax benefits to less advantaged families, which replaced family allowances; free and universal health and hospitalization insurance; certain health care services provided to children in families below the poverty level; and social aid to the economically disadvantaged (Baker and Phipps, 1997).

As is currently the case in Canada, American programs providing for direct transfer to families focus on combating the poverty of children and other specific groups, such as abused or neglected children and disabled persons (Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), Food Stamps). They mainly target families belonging to visible minorities and single mothers. The social protection provided is minimal, often short-term and oriented toward integration into the labour market (Kamerman and Kahn, 1997: 409). There is no universal health insurance program, and most Americans have to look to the private sector. There is no family allowance or child tax benefit, and parental leave is minimal and unpaid. On the other hand, the American tax system provides various tax credits that favour wealthier taxpayers: exemptions for dependants (children or spouse), deductions

for mortgage interest payments, deductions for medical expenses beyond a certain level, and a child tax credit (Earned Income Tax Credit). While there is no family allowance program in the United States, several tax measures favour families with children (e.g., tax exemption for children and the deductibility of mortgage costs from taxable income). The benefits created by these measures might translate into financial aid that is comparable to or perhaps greater than what exists in other industrialized countries.

#### Conclusion

Canadian and American women desire the same number of children, yet the total fertility rates of the two countries differ by half a child. The period rate indicates that on average, American women, unlike Canadian women, are achieving their birth number objectives.

This average probably reflects a balance between those who have more children than they want and those who have fewer. In fact, a sizable fraction nearly a third—of the difference between the total fertility rates of the two countries may be explained by the high fertility of American teenage girls. No other industrialized country has such a high fertility rate for the 15-19 age group, and U.S. officials have long sought to reduce this phenomenon. Furthermore, the high fertility rate of some American ethno-racial groups especially that of Spanish speakers, which stands at nearly three children per woman—is raising Americans' overall rate significantly. In Canada too there are fertility differences between ethno-racial groups, but they are less pronounced, and these groups account for a smaller proportion of the population. The effect on the national average is therefore smaller. It seems likely that the U.S. total rate might decline in the future if the fertility rate of teenage girls, many of whose births are unwanted, were to drop and if Hispanics' fertility rate were to follow that of the black minority and converge toward the lower rate of the white majority.

Fertility differences between the two countries are mainly observable among persons under thirty years of age. The fertility of American women aged 20 to 24 exceeds that of Canadian women of the same age by 75%; in the case of women aged 25 to 29, the difference is 15%. Favoured by earlier marriage, a greater propensity for legal marriage (which is more stable and more fertile than common-law union, an option that is more popular with Canadians), and easier entry into the labour market, in particular for young males, young American women aged 20 to 29 have more children than young Canadian women of the same age. While the fertility of women aged 30 and over has been rising for a quarter century in Canada, this increase does not offset the drop in the fertility of younger women.

While unwanted births are apparently more common in the United States, it nevertheless appears that in Canada there is a demand for more children

than Canadians are actually bringing into the world. In fact, when we compare the difference between the desired number of children and the actual number of children for women aged 25 to 29 in the different countries that participated in surveys of fertility and the family conducted between 1989 and 1996, the gap for Canada is one of the largest.<sup>5</sup>

The reasons why women do not manage to have the number of children that they want are generally grouped under two factors: involuntary infertility, and the other constraints that directly compete with the time and money that are required in order to raise children: career, standard of living, other family responsibilities, leisure activities, etc. A number of couples are infertile for physiological reasons, or because of disease-related complications, in particular certain sexually transmitted diseases. However, low fertility is probably on the rise more because of decisions to delay starting families, perhaps due to economic difficulties of young households, or the growing fragility of conjugal relationships, which are often dissolved through divorce or separation (or sometimes death) before the desired number of children are born. Couples may then tend to postpone having a child and delaying childbearing often results in a smaller number of children than desired, if only because of the decrease in fecundity that affects both men and women as they advance in years (Menken, 1985; de la Rochebrochard, 2001).

On this subject, see Figure 1 in the article of Livi-Bacci (2001) published in *Population and Development Review*, supplement to volume 27, page 285.

#### **BIBLIOGRAPHY**

- Abma, J., A. Chandra, W. Mosher, and L. Peterson (1997). "Fertility, Family Planning and Women's Health: New Data from the 1995 National Survey of Family Growth", NCHS, *Vital Statistics*, 23 (19).
- Baker, M. and S. Phipps (1997). "Family Change and Family Policies: Canada" in Kamerman, S.B. and A.J. Kahn (Eds.), *Family Change and Fertility Politics in Great Britain, Canada, New Zealand, and the United States*. Clarendon Press, Oxford, 1997, 463 pages.
- Bélanger, A. (2000). Réflexions sur l'évolution des composantes de la croissance démographique canadienne dans le contexte de l'examen triennal du Régime de pension du Canada, actes du colloque sur les perspectives démographiques et économiques du Canada, Bureau de l'Actuaire en chef. Ottawa.
- Bongaarts, J. (1978). "A Framework for Analysing the Proximate Determinants of Fertility", *Population and Development Review*, 4 (1), pp. 105-132.
- Bongaarts, J. (1982). "The Fertility-Inhibiting Effects of the Intermediate Fertility Variables", *Studies in Family Planning*, 13 (6/7), pp. 179-189.
- Bongaarts, J. (2001). "Fertility and Reproductive Preferences in Post-Transitional Societies", in R. Bulatao and J. Casterline (Eds.), *Global Fertility Transition*, Population and Development Review, volume 27 (supplement), pp. 282-289.
- De la Rochebrochard, É. (2001). "Stérilité, fertilité: la part des hommes", *Population et sociétés*, number 371, September 2001, Paris.
- Davis, K and J. Blake (1956). "Social Structure and Fertility: An Analytical Framework", *Economic Development and Cultural Changes*, volume 4 (4), pp. 211-235.
- Donavan, P. (1999). "The "Illegitimacy Bonus" and State efforts to reduce Out-of-Weedlock Births", *Family Planning Perspectives*, volume 31 (2), pp. 94-97.
- Dumas, J. and A. Bélanger (1997). *Report on the Demographic Situation in Canada*, Statistics Canada, catalogue no. 91-209, Ottawa, 192 pages.
- Frejka, T. and W. Kingkade (2002). *US Fertility in International Comparison:* An Exploration to Aid Projections. Paper presented at Conference of the US Bureau of the Census, the Direction of Fertility in the United States, Alexandria, Virginia, October 2-3, 2001 (post-conference revision).

- Haveman, R.H., B. Wolfe and E. Peterson (1996). "Children of Early Childbearers as Young Adults" in R. Maynard (Ed.), *Kids Having Kids*, The Urban Institute Press, Washington, pp. 257-285.
- Henshaw (1998). "Unintended Pregnancy in the United States", *Family Planning Perspectives*, volume 30 (1), pp. 24-29 and 46.
- Henshaw (2001). "Teenage Abortion and Pregnancy Statistics by State, 1996", *Family Planning Perspectives*, volume 32 (6), pp. 272-280.
- Kamerman S.B. and A.J. Kahn (1997). "Family Change and Family Policies: United-States" in Kamerman, S.B. and A.J. Kahn (Éds.), *Family Change and Fertility Politics in Great Britain, Canada, New Zealand, and the United States*, Clarendon Press, Oxford, 1997, 463 pages.
- Jones, E.F., J.D. Darroch Forrest, S.K. Henshaw, J. Silverman and A. Torres (1989). *Pregnancy, Contraception, and Family Planning Services in Industrialized Countries*, Yale University Press, New Haven and London.
- Livi Bacci, M. (2001). "Comment: Desired Family Size and the Future Course of Fertility", in R. Bulatao and J. Casterline (Eds.), *Global Fertility Transition*, Population and Development Review, volume 27 (supplement), pp. 282-289.
- Maynard, R. (1996). *Kids Having Kids*, The Urban Institute Press, Washington, 361 pages.
- Menken, J. (1985). "Age and Fertility: How Late Can You Wait?", *Demography*, 22 (4), pp. 469-483.
- Morgan, S.P. (2000). "La fécondité aux États-Unis : Caractéristiques actuelles et tendances futures", in Fécondité en dessous du niveau de remplacement, *Bulletin démographique des Nations Unis*, special number 40-41, New York, pp. 401-420.
- Moore, K.A., D. Myers, D.R. Morrison, C. Nord, B. Brown and B. Edmonston (1993). "Age at Childbirth and Later Poverty", *Journal of Research on Adolescence*, 3 (4), pp. 393-422.
- Morissette, R., X. Zhang and M. Drolet (2002). **The Evolution of Wealth Inequality in Canada, 1984-1999**, Statistics Canada, catalogue no. 11F0019, number 187.
- Olausson, P.O., B. Haglund, G.R. Weitoft and S. Cnattingius (2001). "Teenage Childbearing and Long-Term Socioeconomic Consequences: A Case Study in Sweden", *Family Planning Perspectives*, volume 33 (2), pp. 70-74.

- Shoen, R., N.M. Astone, Y.J. Kim, C.A. Nathanson and J.M. Fields (1999). "Do Fertility Intentions Affect Fertility Behaviour?", *Journal of Marriage and the Family*, volume 61, pp. 790-799.
- Statistics Canada (2001). *Population Projections for Canada, Provinces and Territories*, 2000-2026, catalogue no. 91-520, Ottawa, 188 pages.
- Statistics Canada (2002). Canada at a Glance, 24 pages
- Turcotte, P. and A. Bélanger (1997). *The dynamics of formation and dissolution of first common-law unions in Canada*, Research paper published on the Statistics Canada Internet site.
- US Census Bureau (2000). *National Population Projections*, Detailed Files, Data file NP-D3: Annual Demographic Components of Change for the Resident Population by Race and Hispanic Origin, Middle Series, 1999-2100.
- Ventura, S.J., M.S. Mathews and B.E. Hamilton (2001). "Births to Teenagers in the United States, 1940-2000", *National Vital Statistics Reports*, volume 49 (10), National Centre for Health Statistics, Hyattsville, Maryland, 24 pages.
- Ventura, S.J. and C.A. Bachrach (2000). "Nonmarital Childbearing in the United States, 1940-2000", *National Vital Statistics Reports*, volume 48 (16), National Centre for Health Statistics, Hyattsville, Maryland, 39 pages.

# CHANGING DEMOGRAPHIC TRENDS AND THE USE OF HOME CARE SERVICES

Yves Carrière\*, Laurent Martel\*, Jacques Légaré\*§ and Lucie Morin§

#### Summary

A long-term health problem can sometimes result in a loss of independence in carrying out the activities of everyday life. To make up for this loss, a person may be able to obtain assistance from an informal source (family, friend, neighbour), a formal source (paid employee, public or private agency, volunteer) or both sources at the same time (mixed source of assistance). The probability of using one or the other of these sources of assistance will depend in part on the person's family circle and existing formal resources.

Using data from the 1996 General Social Survey, this study examines the main socio-demographic factors associated with the source of assistance received by elderly persons living in a private household. According to the survey findings, the probability of receiving assistance from exclusively formal sources increases significantly among persons who have no surviving children. Also, compared to a person living alone, one living with a spouse under 75 years of age has a higher probability of using exclusively informal sources. Education level and health status also have a significant effect on the source of the assistance received. The study discusses the possible consequences of recent demographic changes on the use of formal sources in the future.

## Introduction

In the last two decades, population aging has become a major concern in terms of the financial sustainability of social programs that are thought to be strongly tied to the age structure of a population, in particular public retirement plans and the health care system. This study focuses on the possible effects of some changing demographic trends on the use of home care services by first examining characteristics associated with the use of the different sources providing these services to the elderly population.

When projecting the future aging of a population, we concentrate mostly on changes in the proportion of older persons. However, if we only focus on

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the proportion of older persons, we restrict our analysis to the macro level, the age structure. Population aging also means important changes at the family level. By definition, the parents of baby-boomers tended to have many children. If they become disabled, either their spouse or their children are usually able to provide the assistance they need with their daily activities. Also by definition, baby-boomers tended to have brothers and sisters who might be in a position to provide them with assistance in old age. However, since baby-boomers tended to have few children of their own, their potential support network is limited. Finally, the children of baby-boomers, in turn, tend to have very few brothers and sisters in addition to having few children of their own. This demographic trend is particularly significant since 70% to 80% of the care provided to disabled elderly persons living in private households is delivered by informal caregivers (Hébert et al., 2001).

One can also look to other changes that could affect the availability of informal support. For example, women now participate more fully in the paid workforce and may not want to reduce their participation in order to provide daily assistance to aging relatives. That could reduce the amount of assistance provided by a child and increase the use of formal services by disabled elderly people. High divorce rates are another important social change that could affect the availability of informal support. Relationships that end in divorce may distance parents from their children and quite possibly reduce the likelihood of receiving assistance from these children in old age (Bulcroft and Bulcroft, 1991; Shapiro and Lambert, 1999).

The objective of this research is to identify factors associated with the use of different sources of assistance (informal, formal or both) among elderly persons receiving assistance for daily activities and living in private households. Although their numbers and proportions are not as high as they will be in the future, among today's older population there are some who have characteristics that may compare with tomorrow's elderly. From results observed to date, we could probably start to draw some preliminary conclusions on what could be, for example, the possible effect of the changing family structure associated with an aging population.

Although there are many studies about the use of health care services in general, few have looked at the use of formal and informal sources of assistance for home care services among elderly persons. The distinction among different types of health care services is important considering that the determinants of service utilization may be quite different from one type of service to another (Cafferata, 1987; Wan, 1987; Wolinsky and Johnson, 1991).

In the case of home care services, the difference from other kinds of health services is of particular importance. These services can be viewed as more social than medical and, therefore, may be provided by the informal support network. They are not primarily intended to cure an individual of a chronic or acute condition, but to provide assistance with daily living. While looking at the types of services offered, Wister and Dystra (2000) found that formal and informal care providers did not offer the same types of care. Care needs that are routine, predictable and require some level of technical expertise may be better handled by formal helpers, while tasks that require proximity and flexibility may be better performed by informal helpers. Having informal sources of assistance readily available may significantly reduce the use of formal home care services (Greene, 1983; Soldo and Manton, 1985; Tennstedt et al., 1990; Wan, 1987). It is not surprising then to find that living arrangements have a significant effect on the use of the formal support network. For example, Grabbe et al. (1995) found that those living alone were more inclined to use formal services. Choi (1994) found that the childless elderly and the elderly living apart from their children were more likely to use social services than were elderly persons living with their children.

American studies have shown that age was one of the most significant factors associated with the use of formal home care services (Evashwick et al., 1984; Grabbe et al., 1995; Wan and Arling, 1983; Wan and Odell, 1981). Except for a study by Wan and Arling (1983), results showed that age was positively associated with the use of these services. Gender was shown to have a significant effect on the use of formal home care services, women being more inclined to use these services (Coulton and Frost, 1982; Evashwick et al., 1984; Grabbe et al., 1995; Wan and Arling, 1983). As expected, all of these studies found that functional limitation was the best predictor of the use of formal home care services.

Formal and informal services should not be seen as competitors or substitutes. Unless there is a total breakdown of the informal network or absence of such a network, formal services are usually provided in conjunction with informal services. In a review of the literature, Penning and Keating (2000) concluded that informal caregivers did not appear to reduce or stop involvement when formal caregiving was available. This was what Keating et al. (1997) called a "caring partnership"; we will refer to it as the receipt of "mixed services".

As mentioned earlier, we will look at factors associated with the use of informal, formal or mixed sources providing assistance with everyday activities. Following the analysis of the results, we will discuss how decreasing fertility and the changing socio-demographic characteristics of tomorrow's elderly population might affect future demand for formal home care services.

### **Data and Methods**

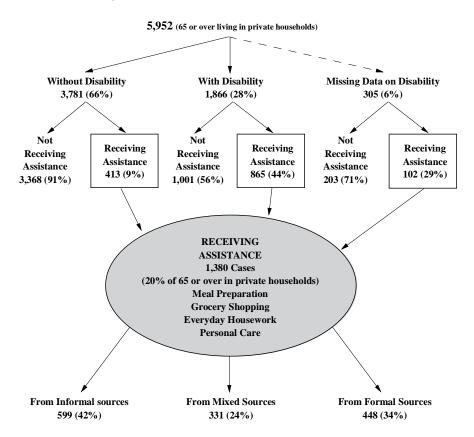
The data used for this study came from Statistics Canada's 1996 General Social Survey (see Box "1996 General Social Survey—Social and Community Support" for details of this survey). Persons living in institutions were excluded from the survey, creating a bias in the results presented later. This issue will

#### 1996 General Social Survey – Social and Community Support

The data used for this study came from Statistics Canada's 1996 General Social Survey, Cycle 11: Social and Community Support. The target population for the survey was all Canadians 15 years of age or over living in private households. Full-time residents of institutions as well as residents of the Yukon and Northwest Territories were excluded. Data was collected using Computer Assisted Telephone Interviewing (CATI), systematically excluding households without telephones. Statistics Canada estimates that less than 2% of the target population resides in this type of household and that their characteristics are not different enough from those of the rest of the target population to have an impact on the estimates. Survey estimates were adjusted (weighted) to account for persons without telephones. In total, the sample consisted of 12,756 respondents. The response rate was 85.3%.

Two of the survey's objectives were to learn about the types of assistance Canadians provide or receive, as well as to gain a better understanding of the dynamics that link a person's social network and the assistance this person gives and/or receives. To this end, the questionnaire was designed to collect detailed information on the type of assistance provided or received for the following activities: meal preparation, house cleaning, laundry and sewing, house maintenance and outside work, grocery shopping, transportation, banking and bill paying, personal care (bathing, toileting, care of toenails/fingernails, brushing teeth, shampooing and hair care or dressing) as well as moral or emotional support. Since we were interested in the effect of changing sociodemographic characteristics on the use of home care services, we concentrated on four activities that are more commonly associated with those services: everyday housework, shopping for groceries, meal preparation and personal care. With the information collected in the survey, we were also able to identify the reasons behind the need for assistance: temporary or long term health or physical limitations, temporary difficult times, task sharing in the household, time constraints, etc. Here, we focused on assistance received due to a long-term health problem and the sources of the assistance received from formal sources (paid employees, government or nongovernment organizations and volunteers), informal sources (spouse, children, brothers or sisters, other members of the family, friends and neighbours) or a mixture of both formal and informal sources.

Figure 1. Distribution of the Elderly Population Living in Private Households According to Disability, Physical Dependence and Source of Assistance, Canada, 1996



**Note**: Percentages between parentheses are weighted. Numbers are unweighted. Among the 1,380 cases receiving assistance, two had missing data on sources of assistance.

Source: Statistics Canada, General Social Survey, 1996.

be addressed in the discussion. However, our main concern was to identify factors associated with the use of formal and informal sources of assistance for services related to home care, i.e., services provided to those living in private households. For the purposes of this study, we examined information on people aged 65 or older who received assistance because of long term health problems for at least one of the following four activities: everyday housework, shopping for groceries, meal preparation or personal care. Figure 1 is weighted to represent the total Canadian population over age 65 living in private households, and shows that 28% could be identified as having a disability.

Disability is defined as having problems of vision, hearing, speech, mobility or dexterity that are not corrected by special equipment, or having problems in cognition. Out of those disabled persons, 44% received assistance with one of the four daily activities. It should also be noted that 8.6% of those without disability received assistance because of other long-term health problems. In total, 20% of the elderly population living in private households (1,380 respondents) received assistance with at least one of the activities considered in this study<sup>1</sup>.

### **Dependent and Independent Variables**

The focus was on the source of assistance provided to persons aged 65 years or over residing in private households. Assistance can be provided by the informal or the formal network or a mix of both. By informal source of assistance, we mean help given by the spouse, children, brothers or sisters, other members of the family, friends and neighbours. A formal source of assistance is help provided by paid employees, government or non-government organizations and volunteers. Therefore, our dependent variable has three categories: informal sources of assistance only, formal sources of assistance only and a mix of both informal and formal sources of assistance. No distinction was made for the level of assistance, i.e., the number of hours those networks were actually giving to the respondents.

The independent variables included in the analysis were as follows: gender, living arrangement, age of spouse, number of surviving children, number of surviving siblings, level of schooling and a composite measure of functional health. Ideally, we would include in our analysis both the age of the respondent and the health status of their spouse. Since this latter information was not available in the survey, we instead included the age of the spouse. Because of the strong correlation between the respondents' age and the age of their spouse, the age of the respondent was excluded from the analysis. Also, since not all respondents lived with a spouse, not everyone could be assigned a value for the age of their spouse. For this reason, living arrangements were categorized as follow: living alone, living with a spouse under 75 years of age, living with a spouse 75 of age or over and living with others. Educational attainment was divided into four categories: elementary school or less, some or completed secondary school or technical school, some or completed community college or university and level of schooling not stated (missing). The latter category included almost 10% of all elderly respondents who received assistance so we opted to keep these individuals in the logistic regression as a separate group instead of dropping them from the analysis. Finally, health status was measured with a composite indicator, the Health Utility Index (HUI), based

Other elderly persons may have needed assistance but not received any. These individuals were excluded from our sub population. Therefore, the 20% figure underestimates the percentage of elderly persons living in private households who needed help with everyday activities.

## **Multinomial Logistic Regression Model**

The model used to derive estimated probabilities of receiving formal, informal or mixed assistance was a multinomial logistic regression. By using this type of regression procedure, the estimated probabilities of receiving a particular type of assistance were all computed at the same time. Thus, the model took into account competing risks since the probability of receiving formal sources of assistance, for example, should be linked to the probability of receiving informal care. The model was executed using SPSS 10.0 for Windows. We used weighted data for which the weights had been normalized by dividing the weight for each respondent by the average weight for the sample. This is necessary when regression procedures are used to correctly estimate the variance and the confidence intervals accounting for the stratification and clustering of the sample design. To ease the interpretation, results were presented using probabilities computed from the estimated parameters for each category of the dependent variable. Because of missing data on some of the variables used in the analysis, the studied sample was reduced from 1,380 to 1,319 cases.

on the Comprehensive Health Status Measurements System (CHSMS), which takes into account both the quantitative and qualitative aspects of health (Torrance et al., 1996). The HUI provides information on the functional health of an individual using the following attributes: vision, hearing, speech, mobility, dexterity, cognition, emotion, and pain and discomfort. This is a single numerical value ranging from 0 to 1 which takes into consideration all possible combinations of levels of the eight self-reported health attributes, using preference weight by health states based on previous research.

We hypothesized that characteristics related to the family structure of elderly people in need of assistance would be strongly associated with their use of specific sources of assistance. For example, those living alone with no surviving children and no surviving siblings would have a higher probability of using only formal sources of assistance (Martel and Légaré, 2001). Conversely, those with an extended family network would be able to rely more heavily on their informal network. In this regard, we expect that the shrinking family network would, all other things being equal, increase the demand for formal home care services. Even though those living with a spouse may rely more heavily on their partner to receive assistance, we expect that

those with older spouses would be more likely to use formal services or a mix of formal and informal sources of assistance. As for the association between health status and the use of specific sources of assistance, we hypothesized that those with a lower HUI—greater disability—will have a higher probability of using a combination of both networks, the informal network alone being insufficient to provide all the needed assistance. Even though more women use formal sources of assistance, gender should not be strongly associated with the use of specific sources of assistance after controlling for variables such as living arrangement and health status.

#### **Results**

Before looking at the results specific to the older Canadian population in receipt of assistance for daily activities, we first compared persons who received assistance with those who did not receive any. As expected, Table 1 shows that, on average, the former were approximately five years older than the latter (77.4 years compared to 72.6 years). It also shows that the Health Utility Index (HUI) of those receiving assistance was 30% lower, which indicates that they were in far worse functional health. Considering the difference between the average ages of both groups, it is not surprising that we found a much higher percentage of women among those needing assistance. Also, those who received assistance were more likely to be living alone or with someone other than their spouse and to have no surviving siblings.

For the older population receiving assistance with daily activities, Table 2 shows, using bivariate analysis, the association between our independent variables and specific sources of assistance. 42% received assistance only from informal sources, 34% from formal sources and the remaining 24% received help from a mix of informal and formal sources.

Of all the categories examined, the highest proportion (64%) receiving assistance only from informal sources was among elderly persons living with others. Conversely, those with post-secondary schooling had the highest proportion (50%) of those receiving assistance from formal sources only. With respect to living arrangements, those living with a spouse aged 75 or over were quite similar to those living alone as far as using only formal sources of assistance. With respect to the number of surviving children, the proportion of elderly using strictly formal sources of assistance was much smaller among those with at least one surviving child. Although the proportion of elderly receiving assistance from informal sources only did not vary according to functional health status, the proportion of those using only formal sources of assistance was greater among those with an HUI greater than 0.66. Finally, men were more likely than women to receive assistance from informal sources only (47% versus 40%).

We used multinomial logistic regression to control for other variables and to better understand the effect of each independent variable on the use of

Table 1. Characteristics of the Population Aged 65 or Over Living in Private Households According to Whether or Not They Receive Assistance in Performing Daily Activities, Canada, 1996

	No Assistance	With Assistance	Total
Sex			
Males	45.8	33.0	43.3
Females	54.2	67.0	56.7
Age Group			
65-74	67.0	38.8	61.5
75-84	29.0	42.7	31.6
85 and Over	4.0	18.5	6.9
Average Age	72.6	77.4	73.5
Living Arrangements			
Alone	28.7	41.1	31.1
Living with Spouse	62.1	40.9	57.9
Living with Others	9.2	18.0	10.9
Number of Surviving Children			
0	11.3	13.8	11.8
1	10.7	13.4	11.3
2 +	77.9	72.8	76.9
Number of Surviving Siblings			
0	14.9	22.4	16.3
1	20.4	19.0	20.1
2 +	64.7	58.6	63.5
Education (highest level obtained)			
Elementary School or Less	22.7	30.6	24.1
Secondary School and Technical	64.0	57.5	62.8
Community College and University	13.3	11.9	13.0
Health Status			
Health Utility Index < 0.66 <sup>1</sup>	19.0	59.0	26.8
Health Utility Index ≥ 0.66	81.0	41.0	73.2
Health Utility Index (average)	0.86	0.66	0.83

<sup>&</sup>lt;sup>1</sup> We have grouped together those with a health utility index less than 0.66 and those who did not answer all the questions needed to compute this index (316 cases). Bivariate analysis showed similar needs for assistance for these two groups.

Source: Statistics Canada, General Social Survey, 1996.

different sources of assistance among the older population. The model showed that *living arrangements*, *health status*, *educational attainment and number of surviving children were strongly associated with the use of specific sources of assistance* (Table 3). Gender, to a lesser extent, was also associated with the source of assistance used.

To better understand the effect of the independent variables on the use of specific sources of assistance, Figure 2 shows the results of the computed

Table 2. Percent Distribution of the Population Aged 65 or Over Living in Private Households and Receiving Assistance in Performing Daily Activities According to the Source of Assistance, Canada, 1996

	Informal Only	Formal Only	Mixed	Total
Total	42.1	34.1	23.8	100.0
Sex				
Males	47.4	34.3	18.3	100.0
Females	39.5	34.0	26.5	100.0
Living Arrangements				
Living Alone	29.3	40.9	29.8	100.0
Living with Spouse Aged Less than 75	51.8	33.3	14.9	100.0
Living with Spouse Aged 75 and Over	36.4	39.6	24.0 *	100.0
Living with Others	64.1	14.3 *	21.6 *	100.0
Number of Surviving Children				
0	31.3	46.6	22.2 *	100.0
1	41.9	30.4	27.7 *	100.0
2 +	44.6	32.6	22.8	100.0
Number of Surviving Siblings				
0	39.5	36.0	24.5	100.0
1	35.8	36.7	27.4	100.0
2 +	46.1	32.4	21.5	100.0
Education (highest level obtained)				
Elementary School or Less	54.9	23.9	21.2	100.0
Secondary School and Technical	40.2	37.7	22.1	100.0
Community College and University	28.2 *	50.0	21.8 *	100.0
Health Status				
Health Utility Index < 0.66	43.4	26.4	30.2	100.0
Health Utility Index $\geq 0.66$	40.2	45.2	14.6	100.0

<sup>\*</sup> High sampling variation associated with the estimate and should be interpreted with caution. **Source**: Statistics Canada, General Social Survey, 1996.

probabilities using the  $\beta$  coefficients from our equation<sup>2</sup>. Probabilities were computed for the following variables: gender, health status, level of schooling, living arrangement and number of surviving children. Note that these probabilities are conditional given that the population under study is receiving assistance

The probabilities were computed using a coding procedure called "effect coding". For a specific set of characteristics, this coding procedure will produce the same probabilities as those resulting from the more traditional "dummy coding". When using effect coding, we control for the average effect of the independent variables instead of controlling for a series of reference categories. Therefore, the probabilities presented in Figure 2 are for a specific category of an independent variable, controlling for the average effect of all other independent variables. We have excluded the number of surviving siblings from Figure 2 since the effect of this variable was not significant.

# **Interpretation of Odds Ratios**

Table 3 presents the odds ratios ( $e^{\beta}$ ) and the corresponding 95% confidence intervals (CI) for each category of the independent variables for informal versus mixed, formal versus mixed, and formal versus informal sources of assistance. For a specific category of an independent variable, when the odds ratio was greater than 1, there was a greater chance of using the source of assistance that was being compared, in relation to the reference category for that variable. For example, those with no surviving children, compared with those with at least two surviving children, were twice as likely to use formal sources only rather than using informal sources only. When the ratio was less than 1, the interpretation was reversed. For example, those living with others, compared with those living alone, had half (0.52) the chance of using the formal sources only rather than using a mix of informal and formal sources. When the 95% CI included the value 1, there was no significant difference between the reference category and the one being compared. The interpretation of the odds ratios in a multinomial logistic regression is not particularly straightforward because there are more than two outcomes for the dependent variable. To better understand the results of this model, we computed the probabilities associated with specific characteristics among our independent variables (Figure 2).

because of a long term health problem. The probabilities then only apply to those who are receiving some assistance for the activities considered in the analysis.

As shown in Figure 2, the effect of gender, although significant, was rather small. Elderly men and women receiving assistance had similar probabilities of using strictly formal sources of assistance. However, *men had a slightly greater probability of using only informal sources (0.42 versus 0.37)*. This may be a result of the kinds of daily activities examined. Because of the way housework is shared between men and women, especially among today's elderly population, the probability of being assisted by a spouse—a major component of the informal network—is greater for men than for women.

The relationship of functional health status to sources of assistance was interesting. A higher HUI, although it did not increase significantly the probability of using only informal sources, was associated with a greater probability of receiving assistance only from formal sources. The greater reliance on the latter was probably related to the fact that almost one third (31%) of those

Table 3. Odds Ratios Relating the Source of Assistance Received Because of a Long Term Health Problem According to Certain Characteristics of the Elderly Population, Canada, 1996

	Formal vs Infomal		Informal vs Mixed		Formal vs Mixed	
	Odds Ratio	Confidence Interval of 95%	Odds Ratio	Confidence Interval of 95%	Odds Ratio	Confidence Interval of 95%
Sex Females Males (reference)	1.07 1.00	0.77 - 1.49	<b>0.62</b> 1.00	0.42 - 0.91	<b>0.66</b> 1.00	0.44 - 0.99
Living Arrangements Living with Others Living with Spouse Aged < 75 Living with Spouse Aged ≥ 75 Living Alone (reference)	0.18 0.55 0.79 1.00	0.11 - 0.29 0.37 - 0.82 0.52 - 1.20	2.92 3.10 1.49 1.00	1.89 - 4.49 1.90 - 5.08 0.94 - 2.38	0.52 1.71 1.18 1.00	0.30 - 0.89 1.03 - 2.84 0.75 - 1.87
Number of Surviving Children 0 1 2 + (reference)	2.05 0.98 1.00	1.33 - 3.16 0.63 - 1.53 	0.87 0.99 1.00	0.53 - 1.44 0.62 - 1.57	1.78 0.97 1.00	1.10 - 2.88 0.59 - 1.58 
Number of Surviving Siblings 0 1 2 + (reference)	1.17 1.41 1.00	0.82 - 1.69 0.96 - 2.09	0.91 <b>0.60</b> 1.00	0.61 - 1.35 0.40 - 0.91	1.06 0.85 1.00	0.70 - 1.61 0.55 - 1.30
Education No Response Elementary School or Less Secondary School and Technical Post-Secondary (reference)	0.57 <b>0.28</b> <b>0.47</b> 1.00	0.28 - 1.17 0.17 - 0.47 0.29 - 0.76 	0.74 <b>1.98</b> 1.58 1.00	0.35 - 1.55 1.09 - 3.62 0.90 - 2.80	0.42 0.56 0.75 1.00	0.20 - 0.86 0.31 - 1.00 0.44 - 1.27
Health Status Health Utility Index < 0.66 Health Utility Index ≥ 0.66 (reference)	<b>0.57</b> 1.00	0.43 - 0.77	<b>0.51</b> 1.00	0.36 - 0.72	<b>0.29</b> 1.00	0.21 - 0.42

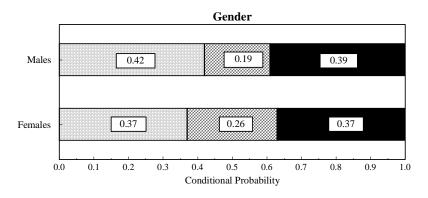
**Note**: Numbers in bold are significant  $(p \le .05)$ 

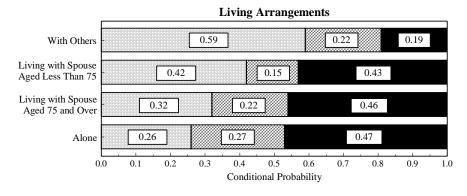
Source: Statistics Canada, General Social Survey, 1996.

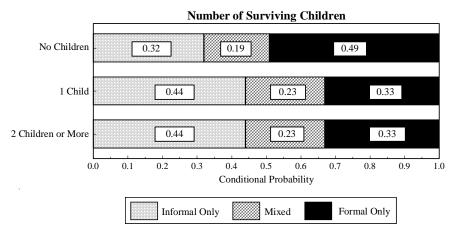
with a higher HUI received assistance strictly for housework, compared to about one sixth (16%) of those with an HUI below 0.66. It may very well be that these individuals were paying for housekeeping services, which would have a significant effect on the probability of receiving only formal assistance among those with a higher HUI.

As can be seen in Figure 2, those living with others had the greatest probability (0.59) of using only informal sources. Although this result may not be surprising considering that living with others can be seen as a strategy for easier access to informal sources of assistance, it is still interesting to see that the majority of elderly persons receiving assistance for daily activities were not using any formal sources of assistance at all. The other three categories showed about the same probabilities of using formal sources only. However, although the probability of using informal sources, either strictly or in conjunction with formal sources, was quite similar among the three groups, the probability of using only informal sources was significantly different. The results show

Figure 2. Conditional Probabilities¹ of Receiving Assistance from Informal, Formal or Mixed Sources According to Certain Characteristics of the Elderly Population Who Received Assistance Because of a Long Term Health Problem, Canada, 1996 - continued

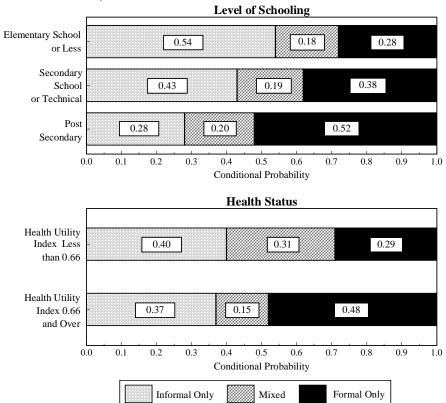






Source: See end of figure.

Figure 2. Conditional Probabilities<sup>1</sup> of Receiving Assistance from Informal, Formal or Mixed Sources According to Certain Characteristics of the Elderly Population Who Received Assistance Because of a Long Term Health Problem, Canada, 1996 - end



<sup>&</sup>lt;sup>1</sup> It is a conditional probability since everyone in this analysis received assistance. Source: Statistics Canada, General Social Survey, 1996.

that the younger the spouse, the greater the probability of using only informal sources of assistance. When the spouse's age was 75 or over, the probability of using only informal sources of assistance became similar to that of those living alone.

Having at least one surviving child had a significant effect on the probability of using specific sources of assistance (Figure 2). We note that the probability of using only formal sources of assistance (0.33) was the same for those having only one child as for those with at least two children but much higher (0.49) for those with no children. The probability of using only informal sources of assistance was 0.32 for those with no surviving children compared to 0.44 for those with at least one surviving child. The combined probabilities

of receiving assistance from informal sources or a mix of formal and informal sources was 0.67 for those with at least one surviving child, compared with 0.51 for those with no surviving children.

Finally, Figure 2 shows how strong the relationship was between the use of formal sources of assistance and educational attainment. Among elderly persons receiving assistance for daily activities, there was a strong positive relationship between the level of schooling and the probability of using only formal sources. This probability increased from 0.28 for those with less than secondary schooling to 0.52 for those with post-secondary education. This increase was paralleled by an equally important drop in the probability of using strictly informal sources of assistance. The probability of receiving help fully or partly from informal sources was 0.72 for those with a lower level of schooling compared with less than one out of two (0.47) for those with post-secondary schooling.

#### **Discussion and Conclusions**

Contrary to most previous studies, we restricted our analysis to those older individuals who received assistance. Many studies have looked at factors associated with the use of formal services among the older population in general. Of course, health then became the main predictor of the use of formal services. By contrast, we restricted our analysis to older persons who received assistance in daily activities because of long-term health problems since we were interested in factors associated with the use of different sources of assistance once a need had been expressed and partially or totally satisfied. Since our interest in this research was driven by the changing nature and extent of the informal network, the discussion will emphasise the results pertaining to the effects of living arrangements and the number of surviving children on the source of assistance.

Before proceeding with the discussion, certain limitations should be acknowledged when trying to interpret the results of this study. First, the study population was limited to those living in private households and receiving assistance. Although we were looking at home care services, it is certain that if formal care services were not provided in institutional settings, the need for home care services (provided by both formal and informal sources) would be greatly increased. Also, the exclusion of institutionalized individuals in the GSS created a selection bias in the sample we were studying since it selectively removed those in worse health and possibly without access to informal care. It can lead to an overestimate of the effects of some independent variables while underestimating the effects of others.

Secondly, home care policies in Canada fall under provincial jurisdiction. Each province has its own policy, which affects formal and informal service use. The results for Canada as a whole can hide important provincial differences. Also, although we were able to control for the number of surviving children

and siblings, the data set did not contain any information about the health status of these members of the informal network. This information could have a substantial impact on the use of specific sources of assistance, specifically where the oldest-old are concerned. Often, members of this group have survived the majority of their siblings. Moreover, even if other family members are still alive, they may themselves be restricted by functional limitations and unable to provide any assistance. Also, we have no information about the place of residence of the surviving children. Being assisted by children does not require simply having surviving children, but, among other factors, it also requires that these children live close by. Similarly, we had no information about the health status of the spouse. Although we used the spouse's age as a proxy for the latter, we were not capturing the full effect it could have on the source of assistance provided.

Thirdly, working with cross sectional data also caused some problems. Longitudinal data would certainly add important information towards a better understanding of the dynamic process that exists between the informal and formal networks, especially when the demand for services increases or when important changes affect the nature and extent of the informal network as people age. Finally, when looking at the computed probabilities, we should pay more attention to the relative value of a probability compared to another rather than the exact value of this probability. Some probabilities are computed based on small numbers of individuals and the variance could be significant.

The multinomial logistic regression showed that all of the independent variables, except for the number of surviving siblings, were significantly associated with the source of assistance. It is clear from this study that demographic trends will have an impact on the use of formal home care services in the future. A decline in fertility affects the extent and the nature of the immediate social environment. The baby-boomer generations will reach old age with fewer children (see Figure 3 in Part I of the Report) to provide them with assistance, if needed. These generations have a completed fertility rate of less than two children per woman. However, our results showed that having just one surviving child instead of two or more did not affect the probabilities of using formal or informal sources of assistance for daily activities for persons receiving assistance. It was less the number of children than having at least one child that affected the probability of receiving formal assistance. Before concluding that the decrease in fertility below the replacement level—less than 2.1 children per woman—necessarily implies an increase in the use of formal home care services, we should look at the trend in the probability of having at least one child.

Table 4 shows that even in 1991, after a period of rapid decline in fertility, at least eight out of ten women born during the first half of the baby-boom (1947 -1956) gave birth to at least one child. The major cause of the decrease in the total fertility rate for these generations was the sharp decline in the

proportion of women having at least three children (Statistics Canada, 1998). This decline in itself should not have a major impact on their use of formal home care services. However, it will mean that such assistance must be provided by a shrinking informal network, tending to increase the burden of those providing the assistance. Also, we were not trying to study how effectively the assistance received responded to the needs of the elderly receiving assistance. Those with a smaller informal network may also have a higher probability of having

Table 4. Probability for a Woman to Have No Children, by Cohort, Canada, 1991

Cohorts	Probability (per 1,000)
1927-1931	134
1932-1936	120
1937-1941	121
1942-1946	137
1947-1951	159
1952-1956	198

**Source**: Statistics Canada, Census of Canada 1991, catalogue no. 93-321, table 2.

unmet needs. If so, it could mean that a shrinking informal network in the future would leave more disabled elderly without needed assistance. Finally, the results for those having just one surviving child emphasize the effect that the migration of children could have on the assistance they can provide to their aging parents. Recent trends regarding the migration of children should be studied to see how it could affect the use of formal home care services and institutionalization in the future.

A decline in fertility also means that younger generations will enter old age with fewer surviving siblings. However, our results show that this component of the informal network had no significant effect on the source of assistance received by elderly Canadians living in private households. The fact that today's youngest generations will enter old age with fewer siblings may not affect the use of formal home care services.

The results also show the importance of living arrangements on the conditional probability of using formal sources of assistance. Trying to determine trends in the living arrangement of tomorrow's elderly population implies making hypotheses about trends regarding divorce, remarriage, the age gap between spouses and the life expectancies of men and women. The increase in divorce rates implies that a greater proportion of the baby-boom generations will enter old age as divorced individuals (Martel and Carrière, 1999) who may be living alone. On the other hand, this will depend on the rate of remarriage or common law union among divorced individuals. Finally, if the gap between the life expectancy of men and women continues to diminish, it would increase the probability of living with a partner in old age, especially for women. All other things being equal, it would tend to reduce the use of formal home care services.

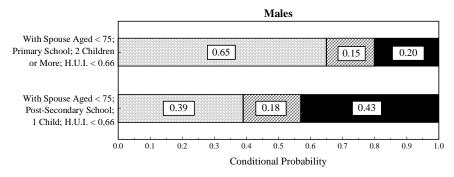
Of course, factors other than those related to demographic trends will affect the future use of formal home care services. For example, the level of

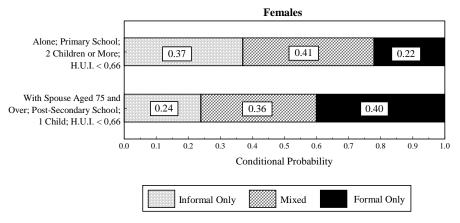
schooling of the population has increased considerably over the last 30 years. Data from the 1996 census show that among those born between 1912 and 1931 (aged 65-84 in 1996), 36% of both men and women had less than a grade 9 education; by far the most common schooling level among these generations. Conversely, the 1996 census shows that this proportion was only 5% for generations born between 1947 and 1966 (those aged 30-49 in 1996). More than 28% of the latter had some university education, making that the most common schooling level. In fact, 57% of men and women of those generations had at least some post-secondary education. This major improvement in the schooling level of tomorrow's elderly population could have an important effect on the use of formal home care services for those in need of assistance. We saw that higher educational levels were associated with a greater probability of using formal sources of assistance, assuming that any assistance is received. This could very well be interpreted as a cultural rather than strictly educational effect. Within the cohorts under study, those with a lower level of schooling may be less knowledgeable about the services available or more apprehensive about having the formal network involved in the provision of their home care needs. Those with a higher level of schooling may be more inclined to accept this type of assistance or more assertive about making their needs known to agencies providing home care services. It may also be that they set a high priority on independence from their children and will be more likely to ask or pay for formal services<sup>3</sup>. With the increasing level of schooling in the population, we may be likely to see, all other things being equal, an increase in the use of formal home care services.

For a better understanding of what could be the effect of changing demographic characteristics on the use of home care services, Figure 3 shows the conditional probabilities of using informal, formal and mixed networks according to two different profiles for both men and women. The top part of the Figure shows the probabilities for males and females who can be described as more representative of today's older population. It shows that, for those who received assistance, there was a 0.65 probability for a male in poor health (HUI less than 0.66) living with a spouse under the age of 75, with less than secondary school and at least two surviving children, of receiving assistance strictly from informal sources. In fact, there were eight chances out of ten that informal sources would be involved in the provision of home care services. Conversely, the conditional probability of having at least partial assistance

One could assume that higher education necessarily means higher income, therefore a greater purchasing power that includes purchasing home care services from private agencies. This hypothesis was not supported by our data. A logistic model was used adding a proxy for low income—receiving the Guaranteed Income Supplement (GIS) or not—but was not found to be statistically significant. However, data on income can be questionable because of the high rate of non response and it would be hazardous to reject the hypothesis of an income effect picked up through the education variable. Also, those receiving GIS may have been more likely to be in institutions.

Figure 3. Conditional Probabilities of Receiving Assistance from Informal, Formal or Mixed Sources for Certain Profiles of Males and Females Aged 65 or Over Who Received Assistance Because of a Long Term Health Problem, Canada, 1996





Source: Statistics Canada, General Social Survey, 1996.

from formal sources was 0.35 (0.15 plus 0.20). For a typical elderly female—living alone, less than secondary schooling and at least two surviving children—receiving home care services, the probability of receiving only informal assistance was 0.37. The conditional probability of having the formal network involved was much greater than for an elderly male: 0.63 compared to 0.35.

For both males and females, we created an additional scenario that could better represent the profile of tomorrow's elderly population. For men, we increased the level of schooling to post-secondary level, while lowering the number of surviving children to only one. From the results shown earlier, we know that the effect of having one surviving child instead of two or more had no effect on the probability of using one source of assistance over another

for those receiving assistance. The difference in the results shown in Figure 3 then reflects only the change in the schooling level. This effect was particularly important for the use of formal sources; for men receiving assistance it doubled the probability of using strictly formal sources from 0.20 to 0.43. For women, in addition to increasing the level of schooling and lowering the number of surviving children, we changed their profile from living alone to living with a spouse aged 75 years or over. That profile reflected the continuing trend toward the narrowing of the gap in the life expectancy between males and females. Similarly to what we observed for men, these changes would result in an increase from 0.22 to 0.40 in the conditional probability of using strictly formal sources of assistance.

These scenarios indicate that there are factors, aside from the growing number of oldest-old in the future, that will tend to increase the pressure on formal home care services. However, other factors might help to ease some of this increasing pressure. When looking at the results of this study, we have to remember that we are focusing on the population living in private households and receiving assistance because of long-term health problems. Tomorrow's older population will have socio-economic and demographic characteristics that may very well increase the use of home care services, but only when a need for assistance is present. While it is true that, all other things being equal, an improvement in the level of schooling may lead to an increase in the use of formal services, it is also possible that this improvement will have a positive effect on the health status of the older population. In this case, a higher level of schooling would reduce the relative number of those in poor functional health needing home care services in the first place, thereby reducing the probability of receiving assistance. Moreover, if healthy life expectancy increased faster than life expectancy, it would also reduce the proportion of years in which an elderly person needed home care services. Finally, our results show that having a spouse under 75 years of age is associated with a greater conditional probability of using informal sources of assistance only. When interpreting the spouse's age as a proxy for his/her health status, this result would indicate that living with a spouse increases the conditional probability of receiving informal assistance mainly for those with a healthy spouse. Improvements in the health status of the elderly population would also mean that a spouse would be in better health to provide assistance to his/her partner if needed. Promoting population health could go a long way towards reducing the pressure on formal home care services in the context of population aging.

Policies regarding institutionalization of the disabled elderly population will also play an important factor in the demand for home care services. These policies directly affect the use of formal home care services. Limiting entry into institutions, all other things being equal, increases the demand for formal and informal home care services. Conversely, higher rates of institutionalization

will tend to lower this demand. The effects of these policies on the overall social costs related to dependent elderly persons with needs for assistance with daily activities is far from clear.

This study demonstrates the need for a better understanding of the factors underlying the use of different sources of home care services. When considering only the changing nature and extent of the family network, the results point to a relative increase in the use of formal home care services in the future among those receiving assistance. This increasing use will not be solely the result of demographic pressures. As we saw, the changing sociodemographic characteristics of the elderly population, along with the changing social context (migration of children, divorce, remarriage, etc.), will also have important effects on the nature, formal or informal, of services received.

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#### **BIBLIOGRAPHY**

- Bulcroft, K.A. & R.A. Bulcroft (1991). "The Timing of Divorce: Effects on Parent-Child Relationships in Later Life", *Research on Aging*, 13 (2), pp. 226-243.
- Cafferata, G. L. (1987). "Marital Status, Living Arrangement and the Use of Health Services by Elderly Persons", *Journal of Gerontology*, Social Sciences, 42 (6), pp. 613-618.
- Choi, N.G. (1994). "Patterns and Determinants of Social Service Utilization: Comparison of the Childless Elderly and Elderly Parents Living With or Apart From Their Children", *The Gerontologist*, 34 (3), pp. 353-362.
- Coulton, C. & A.K. Frost (1982). "Use of Social and Health Services by the Elderly", *Journal of Health and Social Behavior*, 23, pp. 330-339.
- Evashwick, C., G. Rowe, P. Diehr & L. Branch (1984). "Factors Explaining the Use of Health Care Services by the Elderly", *Health Services Research*, 19 (3), pp. 357-382.
- Grabbe, L. et al. (1995). "Functional Status and The Use of Home Care in the Year Before Death", *Journal of Aging and Health*, 7 (3), pp. 339-364.
- Greene, V.L. (1983). "Substitution Between Formally and Informally Provided Care for the Impaired Elderly in the Community", *Medical Care*, 21 (6), pp. 609-619.
- Hébert, R., N. Dubuc, M. Buteau, J. Desrosiers, G. Bravo, L. Trottier, C. St-Hillaire & C. Roy (2001). "Resources and Costs Associated With Disabilities of Elderly People Living at Home and in Institutions", *Canadian Journal of Aging/La revue canadienne du vieillissement*, 20 (1), pp. 1-21.
- Keating, N., J. Fast, I. Connidis, M. Penning & J. Keefe (1997). "Bridging Policy and Research in Eldercare", *Canadian Journal on Aging / La revue canadienne du vieillissement*, (suppl.), pp. 22-41.
- Martel, L. & Y. Carrière (1999). "Some Evidence of the Effect of Divorce on Later Life: An International Comparison", Population Activities Unit, Economic Commission for Europe, United Nations, Sion, December.
- Martel, L. & J. Légaré (2001). "Avec ou sans famille proche à la vieillesse: une description du réseau de soutien informel des personnes âgées selon la présence du conjoint et des enfants", *Cahiers québécois de démographie*, 30 (1), pp. 89-114.

- Penning, M. & N. Keating (2000). "Self, Informal and Formal Care: Partnerships in Community-Based and Residential Long-Term Care Settings", *Canadian Journal on Aging/La revue canadienne du vieillissement*, 19 (suppl.1), pp. 75-100.
- Shapiro, A. & J. D. Lambert (1999). "Longitudinal Effects of Divorce on the Quality of the Parent-Child Relationship and on Fathers' Psychological Well-Being", *Journal of Marriage and the Family*, 61, pp. 397-408.
- Soldo, B. J. & K. G. Manton (1985). "Health Status and Service Needs of the Oldest Old: Current Patterns and Future Trends", *Health and Society*, 63 (2), pp. 286-319.
- Statistics Canada (1998). *Report on the Demographic Situation in Canada* 1997, catalogue no. 91-209-XPF, Ottawa, Ministre de l'Industrie, 193 pages.
- Tennstedt, S.L., L.M. Sullivan, J.B. McKinlay and R.B. D'Agostino (1990). "How Important Is Functional Status as a Predictor of Service Use by Older People?", *Journal of Aging and Health*, 2 (4), pp. 439-461.
- Torrance G.W., D.H. Feeny, W.J. Furlong, R.D. Barr, Y. Zhang & Q. Wang (1996). "Multiattribute Utility Function for a Comprehensive Health Status Classification System. Health Utilities Index Mark 2", *Medical Care*, 34, pp. 702-722.
- Wan, T.T.H. (1987). "Functionally Disabled Elderly: Health Status, Social Support and Use of Health Services", *Research on Aging*, 9 (1), pp. 61-78.
- Wan, T.T.H. & G. Arling (1983). "Differential Use of Health Services Among Disabled Elderly", *Research on Aging*, 5 (3), pp. 411-431.
- Wan, T.T.H. & B. Gill Odell (1981). "Factors Affecting the Use of Social and Health Services Among the Elderly", *Aging and Society*, 1, pp. 95-115.
- Wister, A. & P.A. Dykstra (2000). "Formal Assistance Among Dutch Older Adults: An Examination of the Gendered Nature of Marital History", *Canadian Journal on Aging/La revue canadienne du vieillissement*, 19 (4), pp. 508-535.
- Wolinsky, F.D. & R.J. Johnson (1991). "The Use of Health Services by older Adults", *Journal of Gerontology*, Social Sciences, 46 (6), pp. 345-357.