

Canada

A P O R T R A I T



-
- THE ENVIRONMENT • THE PEOPLE
 - THE SOCIETY • THE ECONOMY
-

**The Official Handbook
of Present Conditions
and Recent Progress**

53rd EDITION

Prepared in the
Communications Division
Statistics Canada

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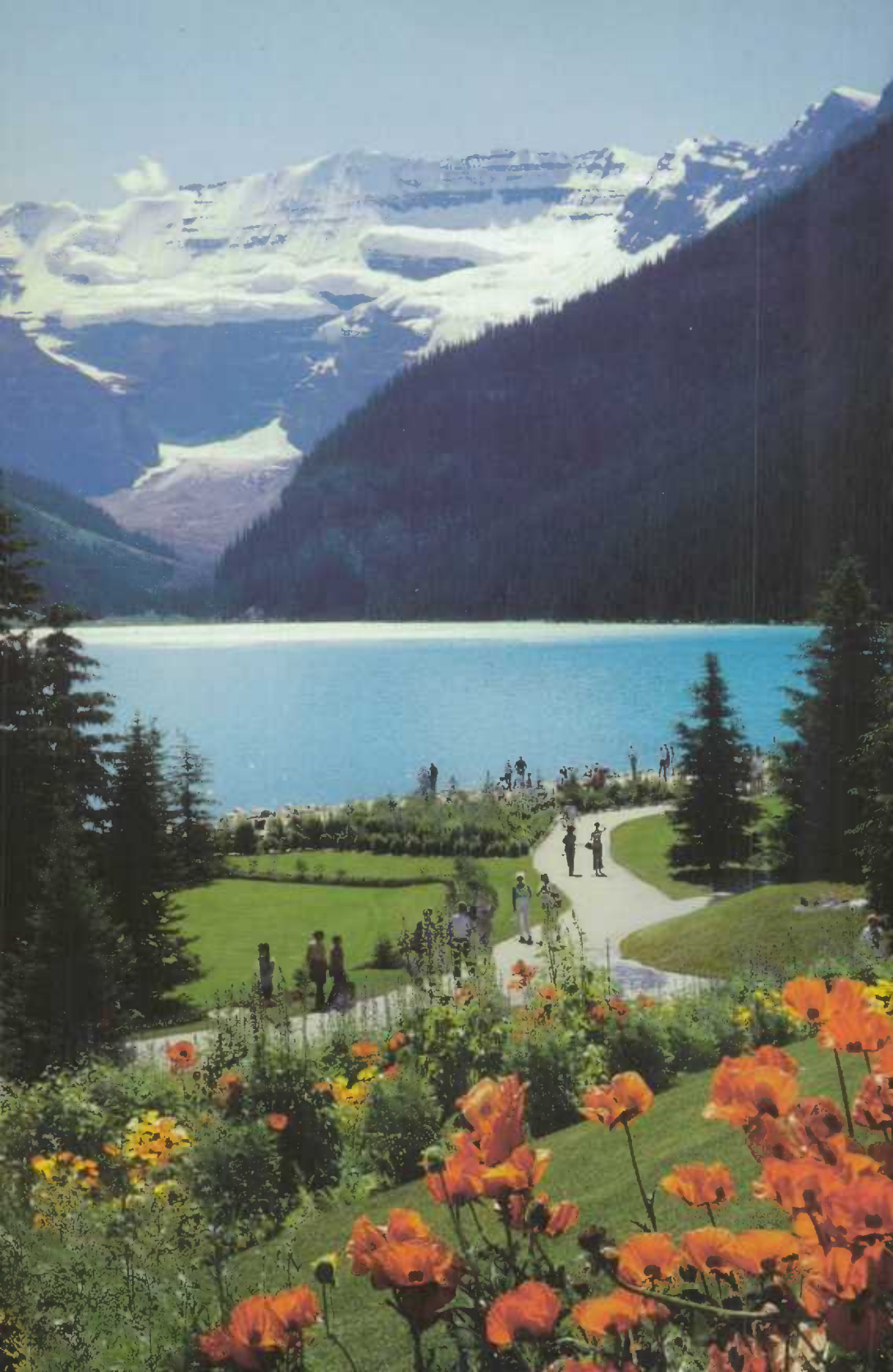
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Preface

This, the 1991 edition of *Canada: A Portrait*, marks the 60th anniversary of a Canadian tradition of publishing excellence.

Published since 1931, *Canada: A Portrait* was, until recently, known as the *Canada Handbook*. In the Preface to the first edition, the editors explained the genesis of the book this way:

“As the result of the growth of the Dominion and the increasing complexity of its institutions, there is an increasing need of an official handbook of Canada, dealing with the whole range of its economic and social institutions, and giving a succinct and popular account of its problems and its progress, while devoting special attention to the facts of the existing economic situation.”

Modeled on a booklet prepared on the occasion of the Diamond Jubilee of the Confederation of Canada in 1927, the Handbook was intended “to survey the Canadian situation as a whole within a reasonable space, in a popular and attractive format, and at a cost which makes possible a wide distribution”.

Then, as now, our intent remains unchanged. This, the 53rd edition, includes an updated exploration of the land and climate as well as an expanded examination of the range of environmental problems confronting us. Also included for the first time is an annotated bibliography of associated publications from Statistics Canada for readers with an interest in pursuing particular topics in more detail. In keeping with tradition, *Canada: A Portrait* also includes over 200 colour photographs from some of the nation’s leading photographers.

The content of *Canada: A Portrait* is drawn from over 60 contributors, making it impossible to acknowledge each individually. Nevertheless, our gratitude to each remains, as does our gratitude to the Canadian public for responding to the surveys and providing the data that are the foundation of this nation’s statistical system.

Ivan P. Fellegi
Chief Statistician of Canada
Ottawa

April 1991

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THE ENVIRONMENT

- *The highest point in Canada is located in the St. Elias Mountain range of the Yukon; Mount Logan towers 5951 metres above sea level.*
- *Acid rain, caused by sulphur dioxide and nitrogen oxide emissions, is responsible for an estimated \$1 billion worth of damage in Canada every year. In February 1985, the federal government and seven provinces agreed to cut emissions by 50 per cent by 1994 at the latest.*
- *Forest fires destroy at least 2 million hectares of forest in Canada per year, double the total area harvested. In 1989, losses were even more extensive claiming over 6 million hectares.*
- *Burning of fossil fuels, deforestation, land-use changes and industrial processes are causing increased levels of climate controlling gases in our atmosphere: over the past several centuries carbon dioxide has increased 25 per cent and is now rising at 4 per cent per decade, and chlorofluorocarbons are increasing 5 to 6 per cent per year.*

THE LAND

Canada is the second largest country in the world; its vast territory ranges from wide fertile prairies and farmlands, through great areas of mountains, rocks and lakes, to northern wilderness and Arctic tundra. The greatest north-south distance is from Cape Columbia on Ellesmere Island to Middle Island in Lake Erie, 4634 km. The greatest east-west distance is from Cape Spear, Nfld. to the Yukon-Alaska border, 5514 km.

Canada's diverse territory is divided into 10 provinces and two territories.

Newfoundland is Canada's most easterly province. The larger part, Labrador, borders the North Atlantic Coast to Hudson Strait and extends inland about 750 km toward its southern end. The surface is mostly a barren mosaic of rocks,

swamps and lakes. The extreme northern area is dominated by the Torngat Mountains, rising to 1622m. Labrador has a rigorous climate and is snow-covered for more than half the year. Many of its river valleys are well forested. Rivers have numerous falls suitable for hydro development, such as Churchill Falls. Coastal waters abound in fish. The Precambrian rocks have mineral potential; iron ore is Labrador's greatest source of wealth.

The Island of Newfoundland is also rugged. The Long Range Mountains parallel the western coast and rise to heights of over 800m. Much of the surface is barren and rocky and has innumerable ponds and swamps. Summers are cool and winters relatively mild.

The capital city is St. John's. Other urban areas are Corner Brook and Grand Falls, both pulp and paper centres.

Prince Edward Island, the smallest province, is cradled in the Gulf of St. Lawrence, east of New Brunswick and north of Nova Scotia and separated from them by the Northumberland Strait. The coast is greatly indented and has many bays and inlets running inland in every direction. Influenced by the sea, the climate is quite moderate except for occasional extreme lows in winter.

Agriculture is the principal occupation. Almost 70 per cent of the land is cultivated, producing mixed grain crops but specializing in potato growing. Dairying and livestock

Salvage Cove, Nfld. The Island of Newfoundland is rugged with a surface of barren rocks and lakes.





Prince Edward Island, the smallest province, is cradled in the Gulf of St. Lawrence

raising are also important. The lobster catch accounts for about 60 per cent by value of primary fishery production. Food processing makes up the bulk of manufacturing.

The capital of Prince Edward Island is Charlottetown.

Nova Scotia is a peninsular province almost surrounded by waters of the Bay of Fundy, the Atlantic Ocean, the Gulf of St. Lawrence and Northumberland Strait. It is connected with New Brunswick by the Isthmus of Chignecto. The northeastern portion, Cape Breton Island, is separated from the mainland by the Strait of Canso, now traversed by a permanent causeway. Winters are stormy on the Atlantic Coast and fog is prevalent all year.

Nova Scotia's fishery is one of Canada's largest; principal species by landed value are lobster, cod, scallop and haddock. Agriculture is centred on dairy products, livestock and fruit. Coal is the principal mineral produced; others are gypsum and salt.

The two large urban areas are Halifax-Dartmouth and Sydney-Glace Bay. Halifax, the capital, is situated on one of the best natural harbours in the world.

New Brunswick is nearly rectangular with a surface which is mostly undulating, and with an extensive seacoast provided by the Chaleur Bay on the North, the Gulf of St. Lawrence and Northumberland Strait on the East, and the Bay of Fundy on the South. It adjoins Quebec and the United States.

New Brunswick's climate reflects the moderating influence of the sea. Temperatures in the interior are more extreme than on the coasts.

Forest products and food processing are the principal types of manufacturing. The most important species in the provincial fishery in terms of landed value are lobster and crab. Agriculture is varied, with dairy products and potatoes being the most important products.

Fredericton is the capital. Saint John, at the mouth of the Saint John River, is the principal port and industrial centre.

Quebec, the largest province in area, extends north and west of the St. Lawrence River and Gulf of St. Lawrence to Hudson Strait and Hudson Bay; it is bounded on the southwest by the Ottawa River and on the northeast by Labrador. South of the St. Lawrence are the Eastern Townships and the Gaspé Peninsula.

Physiographically, Quebec has three regions: the plateau-like highlands of the Canadian Shield occupy the greater part of the area north of the St. Lawrence River; the Appalachian Mountains extend through the area south of the St. Lawrence; and the third region, the fertile agricultural area of the St. Lawrence lowlands, is low and flat.

In the St. Lawrence Valley, the frost-free season extends from early May to late September. Northward and westward, winter temperatures become more extreme and the summers cooler.

Prospect, NS. The fishery of this province is one of Canada's largest.





Moonlight reflects the stillness of winter on the Mississippi River, near Fergusons Falls, Ont.

Quebec accounts for about one-quarter of Canadian manufacturing, is a major producer of gold, iron ore and copper, a leading world producer of asbestos and a major producer of hydroelectric power. Agriculture is concentrated on dairy products and livestock.

Montreal, the largest city, is one of the great industrial, commercial and financial centres of the continent. The capital city of Quebec was founded by Champlain in 1608.

Ontario has a freshwater shoreline on the Great Lakes and a northern saltwater shoreline on Hudson Bay and James Bay.

Ontario has two major physiographic regions, the Canadian Shield and the gentler lowlands of the Great Lakes–St. Lawrence region. The Canadian Shield terrain, a rugged, rocky plateau strewn with lakes and muskeg, is a difficult surface over which ground transportation routes have been constructed with great effort. Summers, though warm, are short.

The southern lowlands region, about one-sixth the size of northern Ontario, has such glacial features as rock plains, morainic hills, till plains, clay plains, drumlins and sand plains. This area has a much milder climate than the northern districts. Since it lies in a major storm track, wide variations occur in weather, especially in winter, but conditions of severe cold or excessive warmth are not prolonged.

The lowlands area is densely populated and highly industrialized. Favourable climate, fertile soil and ease of travel over relatively unobstructed terrain and on the St. Lawrence River and the Great Lakes influenced population growth, and agriculture became well established. The area is now one of the world's great industrial agglomerations with the provincial capital, Toronto, as its focal point.

Ontario accounts for about half of Canadian manufacturing and ranks first among the provinces in agricultural receipts. Although Ontario ranks second in mineral production by value, it is first in metals production, including nickel, copper, uranium, gold and zinc.

Manitoba is the most easterly of the three Prairie provinces. The northern area has heavily glaciated topography and deranged drainage. Its major rivers, Nelson and Churchill, flow into Hudson Bay. The southwestern portion is the lowest of three step-like formations across the great central plains. It is floored by deep fertile clay soils left by glacial lakes that once covered the area. Manitoba has a continental-type climate with long cold winters, short but warm summers and scanty precipitation.

Canola fields create colorful designs along the Little Saskatchewan River valley, north of Minnedosa, Man.





Lloydminster area of Saskatchewan. This province is the great grain-producing region of Canada.

Manitoba's economy has been built on agricultural resources, mainly wheat and other grain crops but a variety of livestock products are also important. Manufacturing is varied, led by food processing and metal fabricating. Manitoba has the greatest water-power potential of the three Prairie provinces.

Winnipeg, the capital, is the industrial centre of Manitoba.

Saskatchewan is two-thirds prairie lowland, the great grain-producing region of Canada. Cutting across the lowland are the branches of the Saskatchewan River which flow to Lake Winnipeg.

Saskatchewan's climate is continental with long cold winters and warm summers. The frost-free period in the fertile lowland areas ranges from 80 to 100 days. Precipitation is low with an average of less than 50 cm a year.

Agriculture is the leading industry with wheat and other grains as the major components. The large value of mineral production is divided among non-metals, principally potash (Saskatchewan is a major world producer of potash), fuels and metals, notably uranium.

The urban centres — Regina, the capital, and Saskatoon — serve mainly as distributing centres for their surrounding areas.

Alberta lies mainly in the interior plains region. The southern part of the province is dry, treeless prairie changing toward the north into a zone of poplar interspersed with open prairie and giving way to mixed forests.

From the Saskatchewan border in the southern area the plain rises gradually as it merges into the Rocky Mountain Foothills. This foothills area is part of the Western Cordilleran region. The Alberta Rockies have numerous high peaks close to or on the British Columbia boundary.

The South is subject in winter to cold dry air masses of continental polar air, occasionally moderated by Chinook winds. Summers are warm with abundant sunshine but rainfall is meagre and highly variable, particularly in the southwest, with periodic droughts.

About half the value of minerals produced in Canada comes from Alberta, almost entirely related to fuels — petroleum, natural gas and its byproducts (including natural gas liquids and sulphur), and coal. Agriculture is an important sector with grains and livestock prominent. There is a substantial diversified manufacturing sector.

The metropolitan areas of Edmonton, the capital, and Calgary are in the oil and gas producing areas.

British Columbia consists almost completely of the Cordilleran region made up of parallel mountain ranges oriented in a north-south direction.

The Rocky Mountains on the East present a continuous range of wall-like ridges. Some of the highest peaks in the Canadian Rockies rise to 3 500 m or more. The central section is marked off by the Rocky Mountain Trench which contains the headwaters of the Kootenay, Columbia, Fraser, Peace and Liard rivers. In the western section, the Coast Mountains extend southward from the St. Elias Mountains.

The inner passage adjacent to the coast — the Strait of Georgia, Queen Charlotte Strait and Hecate Strait — is one of the finest natural waterways in the world. Vancouver Island rises steeply from a rocky coastline.

Prevailing westerly winds and the warm Pacific waters result in mild wet winters in the coastal area, warm summers and the longest average frost-free season in Canada. The North has long cold winters, short cool summers and moderate precipitation.

Natural resources are the basis of the economy. Forestry is particularly important, both as a primary activity and as the largest component of the province's manufacturing sector. The province's mineral production is very large, with both fuels (coal, natural gas and petroleum) and metals (notably, copper and molybdenum) predominating. Dairy products and cattle are the main forms of agriculture. Salmon makes up over half the landed value of the extensive fishery with herring also important.

Vancouver is the largest city, a rapidly growing industrial complex and seaport. Victoria, the capital, is on the southern tip of Vancouver Island.

The Yukon, north and slightly west of British Columbia, is a triangular area of plateaus and mountain ranges bounded by the Northwest Territories and Alaska. Its only seacoast extends along the Arctic Ocean west of the Mackenzie River Delta. Numerous river valleys cut through mountains and plateaus. In the southwest many peaks of the St. Elias Mountains reach heights of over 4 000 m. The highest point in Canada, Mount Logan (5 951 m), is located in this mountain range.

The whole region is north of latitude 60° and part is beyond the Arctic Circle. In summer, long hours of daylight promote rapid growth where there is suitable soil. In winter, the days are short with little effective sunshine.



Banff National Park, Canada's oldest National Park, was established in 1885.

Mining is a leading activity with gold and silver the principal products, at present.

The Alaska Highway provides a transport link with British Columbia and Alberta. The capital and main urban centre is Whitehorse.

The Northwest Territories include all Canadian territory north of the 60th parallel of latitude except the Yukon, the northwestern tip of Quebec and Labrador, and all islands south of the 60th parallel in Hudson Bay and James Bay. This vast area, more than one-third of Canada, is one of extremes in topographical characteristics, flora and fauna, and climate with permafrost throughout. Across the low-lying mainland area flows the Mackenzie River, draining Great Slave Lake and Great Bear Lake and emptying into the Arctic Ocean. The whole northeastern portion of the mainland is treeless tundra studded

with countless lakes, swamps and muskeg. In southern areas, summers last for about three months with temperatures above 10°C. North of the treeline, freezing temperatures may occur during any month and winters are long and bitterly cold. Winter nights and summer days are long, reaching a maximum of 24 hours. Precipitation is extremely light and falls mostly in late summer.

The mining industry is large with zinc, gold and lead the leading minerals. There is also some oil and gas production. Fur and fisheries resources, the mainstay of the native population, are exploited commercially to some extent.

The capital, Yellowknife, is situated on the north shore of Great Slave Lake. Road access to the rest of Canada is restricted to the Mackenzie Delta and Great Slave Lake areas. In the eastern Arctic, the focal point is Iqaluit (Frobisher Bay).

Life is dwarfed by glacial majesty at Ellesmere Island National Park Reserve, NWT, the most northerly park in the world.





Manitoba sunset at Forty Mile Lake on Grass River. Manitoba is the most easterly of the three Prairie provinces.

THE CLIMATE

Climate is both a resource and a liability. As a resource, it provides the heat and moisture that are essential for life; it is a basis for agriculture, it provides warm lakes for swimmers and snow for skiers, and it drives ocean currents. Droughts, floods and hurricanes are among its hazards; they can destroy life, damage property and inconvenience people, often disrupting normal social and economic activities within a community. Changes in climate, over long periods of time, can drastically alter regional economies by modifying the ecosystems that are fundamental to their way of life.

The heat, cold, precipitation and wind of Canadian weather are exploitable resources. Definition of the nature of climatic resources has been a major occupation over the past century — in the planning of land use (particularly for agriculture), in the development of water supplies and in the development of drainage and irrigation systems. The trend to increased productivity through fuller exploitation of climatic energy, light and moisture sources is increasing as natural resource supplies diminish.

Renewable resources are the basis of much of Canada's industry; they provide the necessities of life — food, drink and shelter — and earn about one-half of our export dollars. These resources depend primarily on climate. Resource management and use must therefore be based on an understanding of climate, and the use of weather and climate forecasts for improved productivity.

The extraction and use of other resources are also highly climate-dependent. Oil and gas, for example, are used to offset cold, snow and heat. Climate-dependent ice fields and weather control the economics of arctic development. Much of our industrial energy is generated from climate-dependent water resources and water is used extensively in processing — for example, up to 22m³ (cubic metres) to refine one cubic metre of petroleum and 3000m³ to make one tonne of synthetic rubber.

On the other hand, the impact of industry, cities and people on the atmospheric environment places an upper limit on certain types of economic endeavour. Economic activity must therefore be tailored by an understanding of the environment, man's influence thereon and the capacity of the atmosphere to safely disperse industrial effluents. The interactions of weather, ecology and economy require understanding.

Forest growth on the Queen Charlotte Islands, BC





Lumber yard at Perth-Andover, NB. Canada's forests are the most valuable natural resource.

Climatic hazards stand out in our memory because of their great impact on society and their resulting newsworthiness. Canada, like most countries in temperate and polar regions, has a fluctuating climate that has caused crises from the times of early settlement. Direct economic losses have been caused by various notable weather events in Canada. A number of these events are recognized historically as major disasters.

Agriculture and forestry are among the activities that are particularly vulnerable to weather extremes. Weather forecasts and planning information are therefore essential in coping with major hazards, such as drought, frost, hail, excessive rainfall, flood, wind, snow and winterkill, as well as climatically influenced diseases, epidemics and insect infestations. Forest fires destroy at least 2 million hectares of forest in Canada annually, double the total area harvested. The most extensive fire losses occurred in 1989; more than 6 million hectares of Canadian forests were destroyed.

Precipitation is the primary source of surface water supplies and evaporation is the major consumer. Planning, public and political conviction and economic decisions as to the viability of a hydrologic system are therefore frequently dependent on climatology. The magnitude and reliability of supplies is dictated by rainfall and snowfall characteristics. Flood prevention, irrigation, urban water demands, storm-sewer capacity and culvert size are all dependent on climate. The operation of water containment systems for flood control and conservation of water in times of drought is contingent on reliable weather and climate forecasts.

Development of Canada's resources poses major environmental problems in which climatology must play a significant role. For example, sulphur dioxide and other gaseous emissions from industrial processes, such as refining and smelting, are returned to earth as acidic precipitation and as such are destroying vegetation over vast land areas. The capacity of the atmosphere to disperse contaminants is of increasing concern. Safety and security from natural hazards are major factors to be considered in offshore drilling, pipelining, the transmission of electrical energy and the operation of nuclear generating stations.

Environmental impact assessments are an essential defence against undesirable environmental effects of man's activities, both deliberate and inadvertent. In preparing an assessment, developers are forced to consider the side effects of their proposals over the short, medium and long terms, and of possible alternatives, one of which is not to proceed. The decision process can generate much public discussion and possible program change. Subsequent climate monitoring and impact studies are important.

The Polar Passage Expedition in the ice of Franklin Bay, NWT. Canadians Mike Beedell and Jeff MacInnis recently became the first to navigate the Northwest Passage in a sail-powered vessel. Mike Beedell is a valued contributor of photographs in Canada: A Portrait.





Technicians obtain a water sample from Lake Ontario, as part of a water quality monitoring program.

Testing of a water sample at Environment Canada's water quality laboratory in Burlington, Ont.



ENVIRONMENTAL RESEARCH

Environment Canada has a mandate to foster harmony between society and the environment for the economic, social and cultural benefits of present and future generations of Canadians. In its strategic planning, the department has identified a number of priorities including the following.

Toxic substances released into the environment, especially if persistent, can have a cumulative effect on all living things, including humans. The department is undertaking

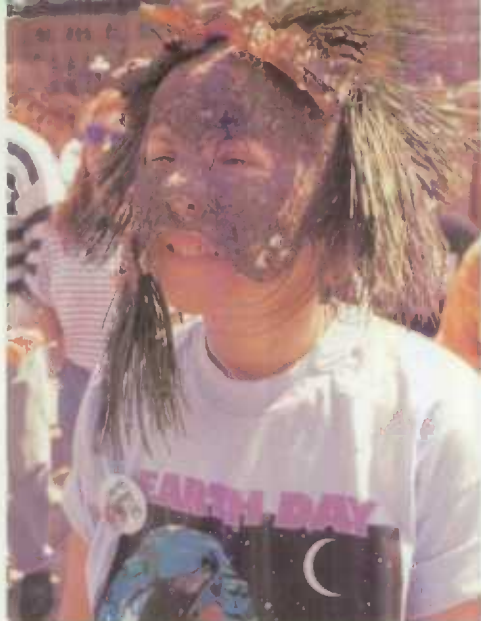
to identify threats as early as feasible. It has proposed that responsibility should be shared among governments and actual or potential polluters; that action should be taken to prevent or mitigate adverse consequences; and that public consultations should be held on the environmental and socio-economic trade-offs in using polluting substances. The Canadian Environmental Protection Act which received Royal Assent and proclamation on June 28, 1988, upgrades the penalties for a breach of the toxic chemicals provisions. The Minister is endowed with powers to recall chemicals, products, etc., which he deems to be unsafe. These and other provisions make the Act one of the most advanced of its kind in the world.

Acid rain is caused by emissions of sulphur dioxide and nitrogen oxide in Canada and the United States. To solve Canada's acid rain problem, deposition of wet sulphate in all vulnerable areas in Eastern Canada must be reduced to less than 20 kilograms per hectare a year. Acid rain is responsible for an estimated \$1 billion worth of damage in Canada every year. In February 1985, the federal government and seven provinces agreed to cut emissions by 50% by 1994 at the latest. At the March 1986 summit meeting of President Reagan and Prime Minister Mulroney, the President endorsed the findings and conclusions of the Special Envoys on Acid Rain. These included implementation of a five-year \$5 billion program in the US to develop control technology, and the establishment of a bilateral, advisory and consultative group on transboundary air pollution.

Water resources management may become as significant an issue in the 1990s as energy has been in recent years. Elements of concern include: growing imbalances between water supply and demand especially on the Prairies; inadequate water quality in various parts of the country; proposals for major diversions in Canada and export to the United States; and conflicts in water use plans among provinces and territories. A federal water policy was released in 1987, with emphasis placed on the role of realistic pricing to regulate growing demands and wasteful uses of water.

Land resources. Increased demands for renewable resources including forestry and agricultural products make it necessary to maintain land productivity and the related resource base. Issues are multiple land use, possible degradation of soil quality and loss of wildlife habitat, increasing soil erosion and water supply considerations, and land-use demands from urbanization.

Climate change. The burning of fossil fuels, deforestation, land-use changes and industrial processes are causing increases in the concentrations of greenhouse gases in the atmosphere. The most abundant of these climate controlling gases, carbon dioxide, has increased by about 25 per cent over the past several centuries and is now rising at 4 per cent per decade. Some of the other greenhouse gases, although of much lower concentrations, are more potent and are rising even more rapidly (5-6 per cent per year for chlorofluorocarbons). Collectively, increases in these gases are likely to result in unprecedented and perhaps irreversible global climate warming within the next few decades to half-century, accompanied by major shifts in precipitation and hence vegetation patterns. For Canada, primary concerns are with respect to the potential for dryer climate conditions in the south, affecting agriculture, forest ecozones and fire risks, water supply and quality, hydro power and navigation, and the risks of coastal inundations due to rising sea levels. More positive implications include longer, warmer growing seasons, reduced ice cover in navigable waters, and reduced requirements for space heating in winter. A recent world conference held in Toronto, in June 1988, concluded that seriousness of the threat of climate change is second only to that of global nuclear war and that the world community must



A one-year-old on estimated 4,000 others for Earth Day celebrations on Parliament Hill in Ottawa, April 22, 1990. About 200 million people in 136 countries participated.



In Calgary, Alta. approximately 10,000 people congregated to celebrate Earth Day.

act now. Canada is investigating the implications of climate change through its Canadian climate program.

Waterfowl protection. A plan to manage North American waterfowl, the North American Waterfowl Management Plan (NAWMP), signed by Canada's Federal Environment Minister and the US Secretary of the Interior, in May 1986, proposes a far-reaching \$1.5 billion management agreement to be undertaken jointly by private and public interests in Canada



Old newspapers are recycled at this plant in Calgary, Alta. to be converted into roofing material.

and the United States to bring seriously declining waterfowl populations back to the average annual fall migration level in the 1970s of 100 million birds. The objectives of NAWMP are to be achieved over a 15-year period.

The Atmospheric Environment Service (AES) provides weather warnings, forecasts and climate information for the safety and economic well-being of all Canadians. Research scientists also study the chemistry of the atmosphere, probing such key phenomena as climate change, acid rain, depletion of the ozone layer and Arctic haze. AES has nine state-of-the-art weather centres, 61 weather offices, 14 weather radar sites and 32 upper-air stations. The service also has a new technically advanced Ice Centre in Ottawa enabling it to carry out ice reconnaissance and ice research to aid shipping in Polar regions, off the Atlantic Coast and in inland waters.

The Environmental Assessment and Review Process determines potential environmental and directly related social impacts of all proposals to be undertaken by the federal government or in which the government is involved. This is done early in planning before irrevocable decisions are taken. The process applies to any federal department, board, or agency, and to any regulatory body or Crown corporation where legislation permits.

Northern Research. Canada has long recognized the contribution research makes to the socio-economic development of the North. Moreover, the Canadian North has some unique characteristics that are of particular interest to the scientific community.

The Department of Indian Affairs and Northern Development has designed certain long-term measures to encourage and support northern research. The training of graduate students is assisted by special grants administered by the department. In addition, the department actively supports and/or administers the following research programs and initiatives: Canadian Polar Commission, Northern Oil and Gas Action Plan (NOGAP), Northern Scientific Training Program, Northern Science Award and Canada/USSR Agreement on Co-operation in the Arctic and the North.

Polar bear researcher at Churchill, Man. takes blood and tissue samples to better understand their life cycle and protect them and their habitats.





THE PEOPLE AND THEIR HERITAGE

- *Canada is still a young country, but estimates indicate that the percentage of persons aged 65 and over will have doubled from 8 per cent in 1961 to 16 per cent by 2011. Women continue to outlive men by an average of seven years.*
- *In 1986, 711,725 persons or 3 per cent of Canada's total population reported at least one aboriginal origin.*
- *Historically, immigration has been a key factor in the growth of Canada's population: 1986 Census figures show that immigrants accounted for 15.6 per cent of the population. During 1988, 82,045 international students entered Canada to pursue further education, and 212,561 people arrived to work temporarily in Canada.*
- *In addition to English and French (Canada's two official languages), Italian, Chinese and German are the top three languages most often spoken in Canadian homes. There are also 11 broad linguistic categories of Native languages.*

POPULATION

Canada is the second largest country in the world in terms of land area, but it ranks only 31st in population. According to the June 1, 1989 preliminary postcensal estimate, Canada's population was 26,218,500. This represents an increase of 865,500 people or 1.1 per cent annual growth since the June 1986 Census, indicating a reversal of the declining growth rates experienced during the first half of the decade, which were among the lowest recorded.

Canada's population is concentrated in a more or less unbroken band along the United States border, with 62 per cent of its population living in two provinces

— Ontario and Quebec. However, in terms of population size, each province has changed over the past 28 years. When compared to the 1961 Census figures, the 1989 population estimates reveal that three provinces (Ontario, Alberta and British Columbia) and the Northwest Territories have increased their share of the population while the seven other provinces and the Yukon have shown a decline.

Natural Increase

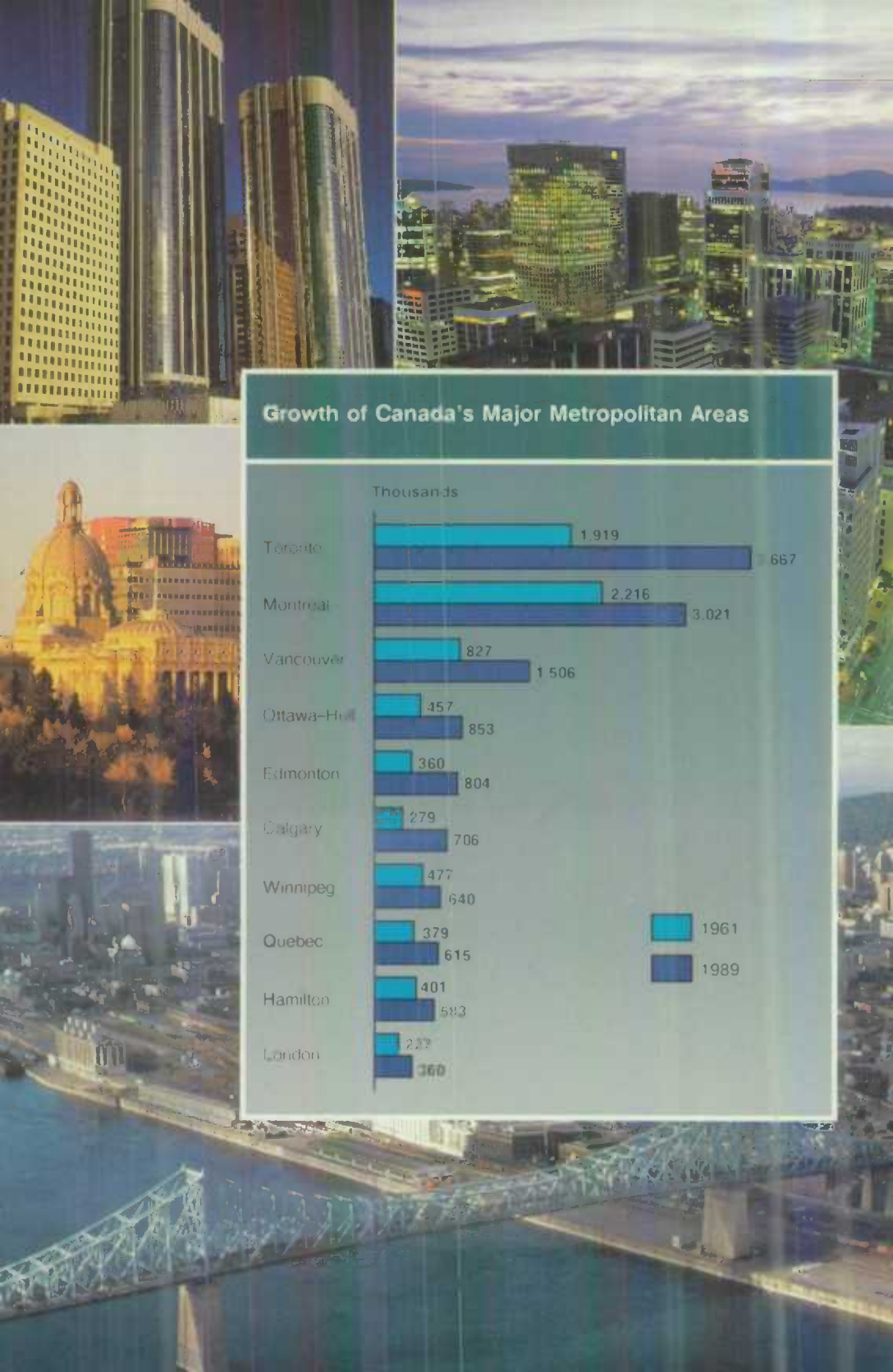
At present, natural increase accounts for approximately 65 per cent of Canada's population growth. Its annual rate (approximately 7.2 per 1,000 population), though one of the highest in the industrialized world, is the lowest in Canadian history. The birth rate (14.3 per 1,000) has continued to fall. If this trend persists and the present level of migration is maintained, depopulation will begin in the first half of the next century. There are some indications, however, that the birth rate may recover slightly in the near future.

Although the number of deaths is also climbing, because of the growth and aging of the population, the death rate has stood at a record low (about seven per 1,000) for the past five years. Life expectancy at birth, or length of life, continues to rise; in 1986, it was 73 years for males and almost 80 for females, compared to 68 and 74 years, respectively, in 1961. This increase in longevity is chiefly due to recent breakthroughs in the fight against cardiovascular disease, the leading cause of death. The battle against cancer, the second leading killer, is less encouraging at the moment; some types are being controlled, but others are claiming increasing numbers of victims.

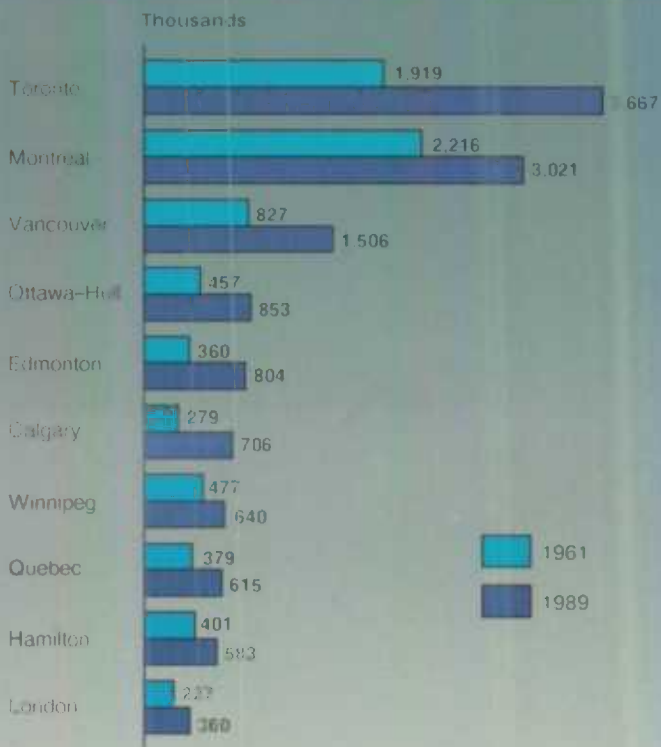
The population distribution of Canada, 1961 and 1989

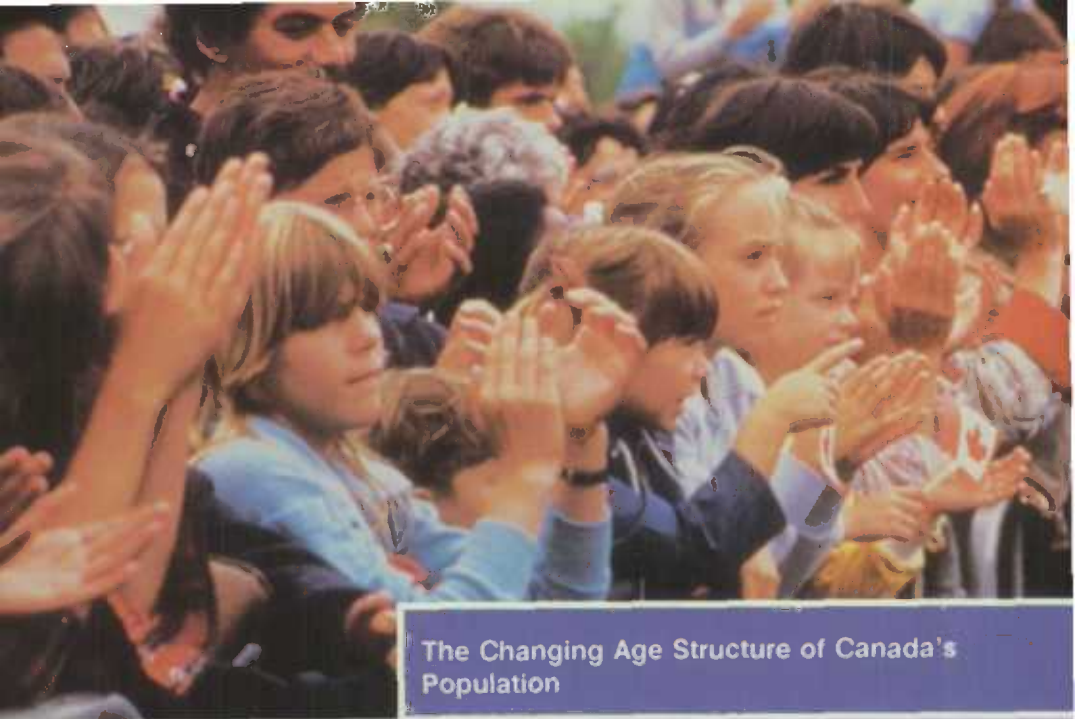
Province or territory	1961		1989 ¹	
	Population		Population	
	'000	%	'000	%
Newfoundland	457.9	2.5	570.0	2.2
Prince Edward Island ...	104.6	0.6	130.2	0.5
Nova Scotia	737.0	4.0	886.8	3.4
New Brunswick	597.9	3.3	718.5	2.7
Quebec	5,259.2	28.8	6,688.7	25.5
Ontario	6,236.1	34.2	9,569.5	36.5
Manitoba	921.7	5.1	1,084.2	4.1
Saskatchewan	925.2	5.1	1,007.0	3.8
Alberta	1,331.9	7.3	2,429.2	9.3
British Columbia	1,629.1	8.9	3,055.6	11.7
Yukon	14.6	0.1	25.4	0.1
Northwest Territories ...	23.0	0.1	53.4	0.2
Canada	18,238.2	100.0	26,218.5	100.0

¹ Preliminary postcensal estimates.

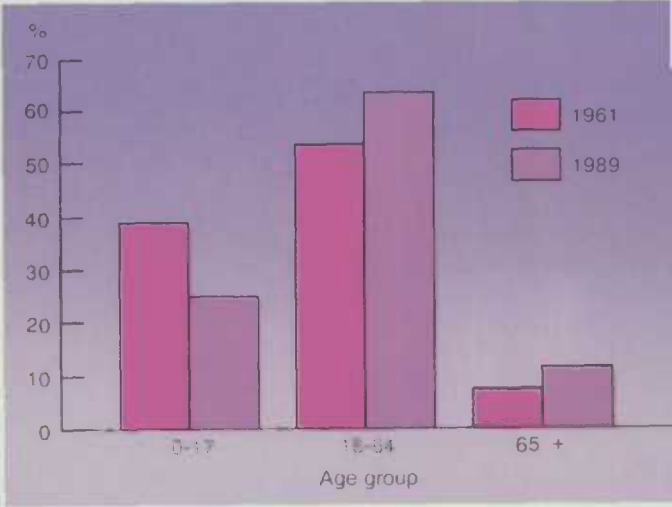


Growth of Canada's Major Metropolitan Areas





The Changing Age Structure of Canada's Population





Interprovincial Migration

Changes in the relative population size of each province and territory are in some measure due to interprovincial migratory exchanges. In this context, Ontario and British Columbia have traditionally gained in population at the expense of the other regions, while Quebec has consistently lost population.

Both the volume and direction of the migration have varied significantly over the last two decades. The present volume of interprovincial migration in Canada (about 378,000 persons in 1988-89) is now comparable to the levels observed before the recession of the early 1980s, when annual migration dropped to a low of about 270,000 persons. The direction of interprovincial movements shifted westward in the 1970s, as a wave of migrants moved from the Central and Atlantic provinces to the oil fields of the West, and to Alberta in particular. This flow reversed direction at the end of the oil boom in the early 1980s. Presently, British Columbia leads the provinces in net interprovincial migration.

Immigration

Historically, immigration has been a key factor in the growth of Canada's population. In 1986, Canada's immigrants represented 15.6 per cent of the country's population. Immigration has always been cyclical and directly related to economic conditions; periods of prosperity have largely coincided with the influx of large numbers of immigrants. As a result of the economic slump that recently affected the entire western world, the Canadian government cut immigration levels to less than 100,000 in 1983 and 1984.

Since 1984, the new policy direction has been one of continued increases in annual immigrant admissions. This reflects improved economic opportunities, demographic considerations, Canada's commitment to refugees and the importance of family reunification. In 1988, the number of landed immigrants increased to 161,929, an increase of 6.5 per cent from the previous year's level of 152,098; in 1984, Canada admitted 88,239 immigrants. The policy of growth was maintained for 1989. Approximately 190,000 immigrants were admitted, including significantly more independent immigrants admitted because of their labour market skills. At present, the Canada Employment and Immigration Commission (CEIC) is involved in national broadly based consultations on immigration levels for 1991-95.

Traditionally, the majority of immigrants came from Europe, especially Britain. In the past 10 years, however, there has been much greater diversity in the source countries of Canada's immigrants. In particular, there has been a sharp increase in the number of Asian immigrants.

Canada has always demonstrated concern for the plight of refugees from anywhere in the world. Immediately after World War II, and in the early 1980s, many Eastern Europeans took refuge in Canada; in the mid-1970s, there were large numbers of West Indians and Africans, and in the late 1970s, Southeast Asians. In the 1980s, an increasing number of refugees from Latin America, the Middle East and Western South Asia settled in Canada.

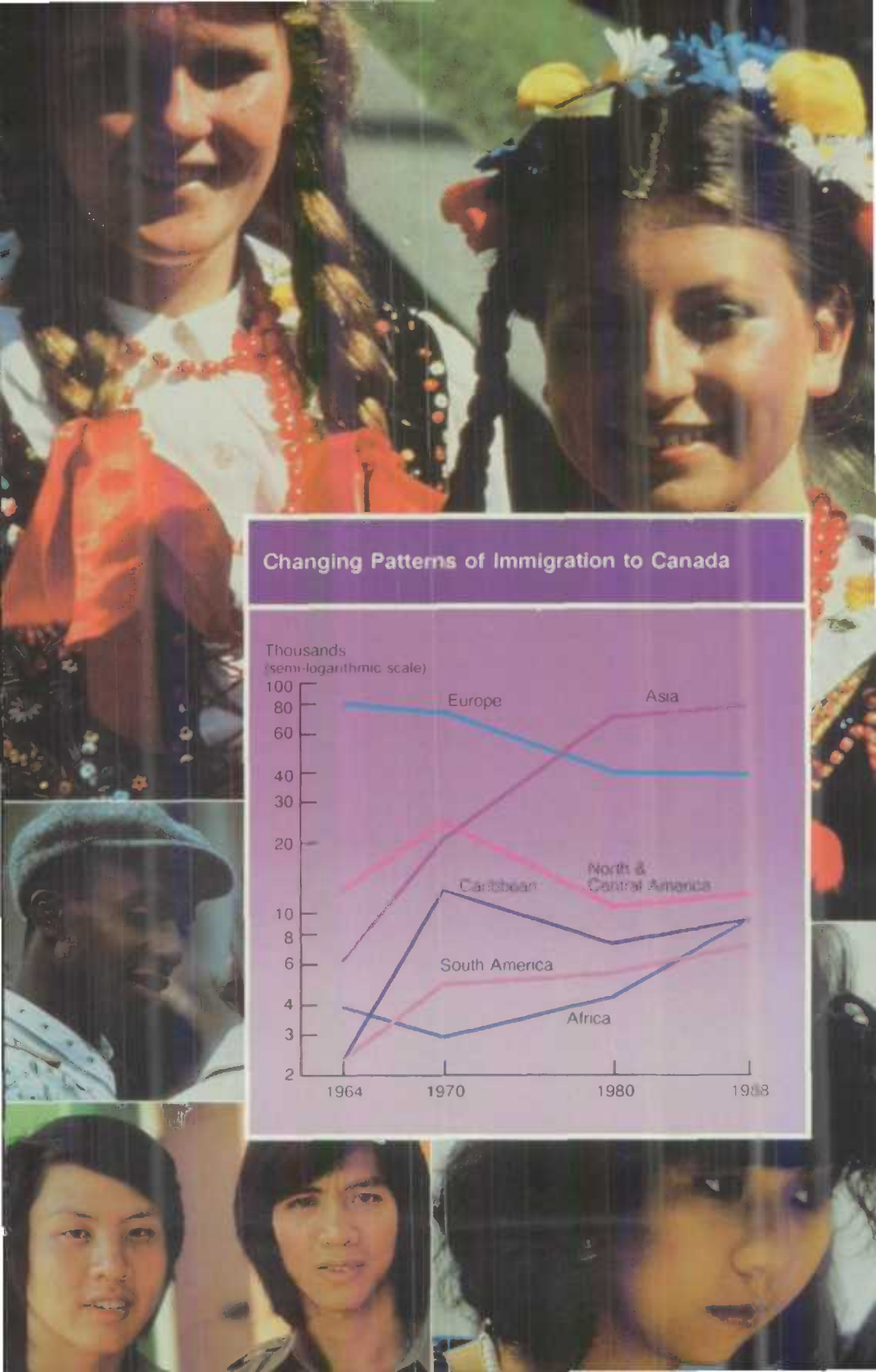
From 1979 to 1988, over half of Canada's immigrant population resided in Ontario, where immigrants represented almost one-quarter of the provincial population. In British Columbia, immigrants also represented almost one-quarter of the population, well above the national average of 15.6 per cent. While less than one-third of the total population of Canada lived in the three largest metropolitan areas (Toronto, Montreal and Vancouver) in 1986, over half of the immigrant population lived in these same urban centres.

In 1988, 82,045 international students entered Canada to pursue further education and 212,561 people came to work temporarily in Canada. CEIC assists a number of immigrants in language training and settlement allowances. In exercising its responsibilities to control illegal immigration, CEIC issued a total of 2,465 removal orders, in 1988, to people for violations of Canada's laws.

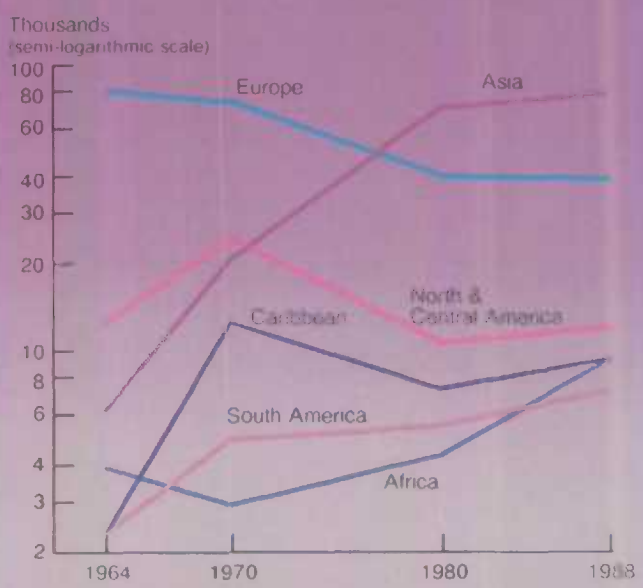
CEIC is responsible for Canada's immigration policy and related matters, although the Department of External Affairs handles immigration services abroad. National Health and Welfare, the Royal Canadian Mounted Police, Revenue Canada-Customs and the Canadian Security Intelligence Service also deliver certain immigration programs. Under the Constitution, immigration is a joint federal/provincial responsibility, and the federal program is administered in co-operation with the provinces which are active in helping immigrants settle and adjust in their new homes.

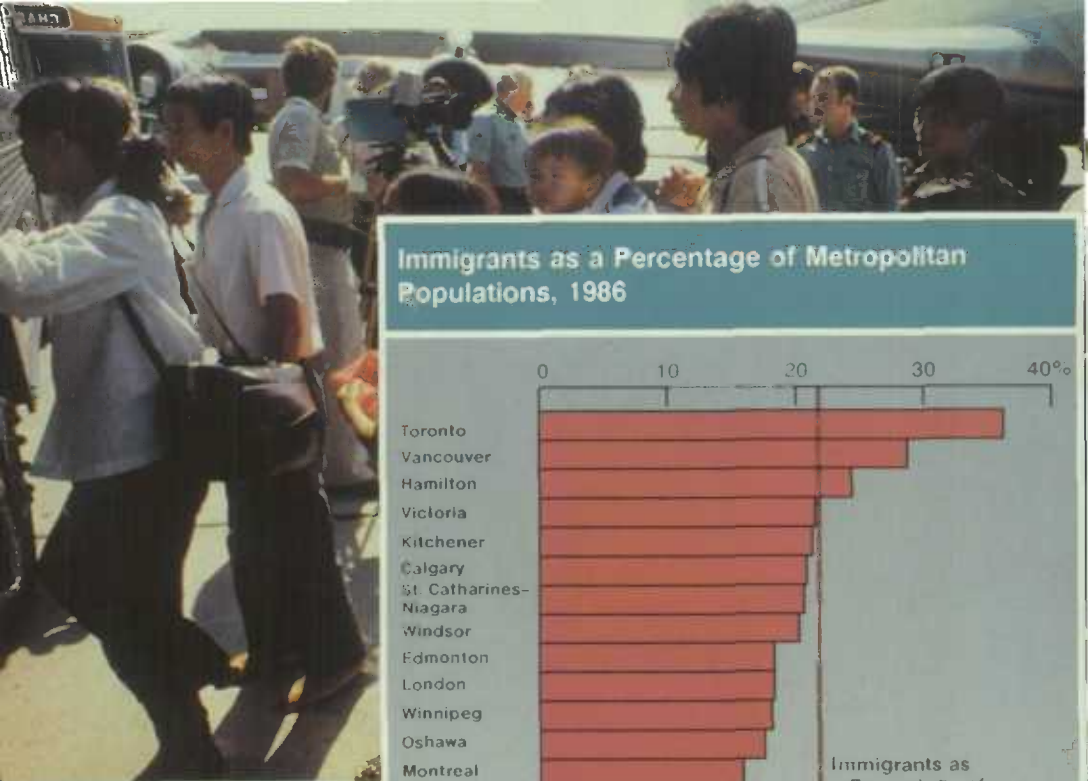
Population Characteristics

The 1989 population estimates reveal a continuation of major shifts in the age structure of Canada's population. Among the factors contributing to the change in the age structure are the impact of varying birth rates in earlier years, in particular, the "baby boom" of the 1950s and early 1960s, followed by the "baby bust" of the late 1960s and 1970s, and the substantial gain in life expectancy.

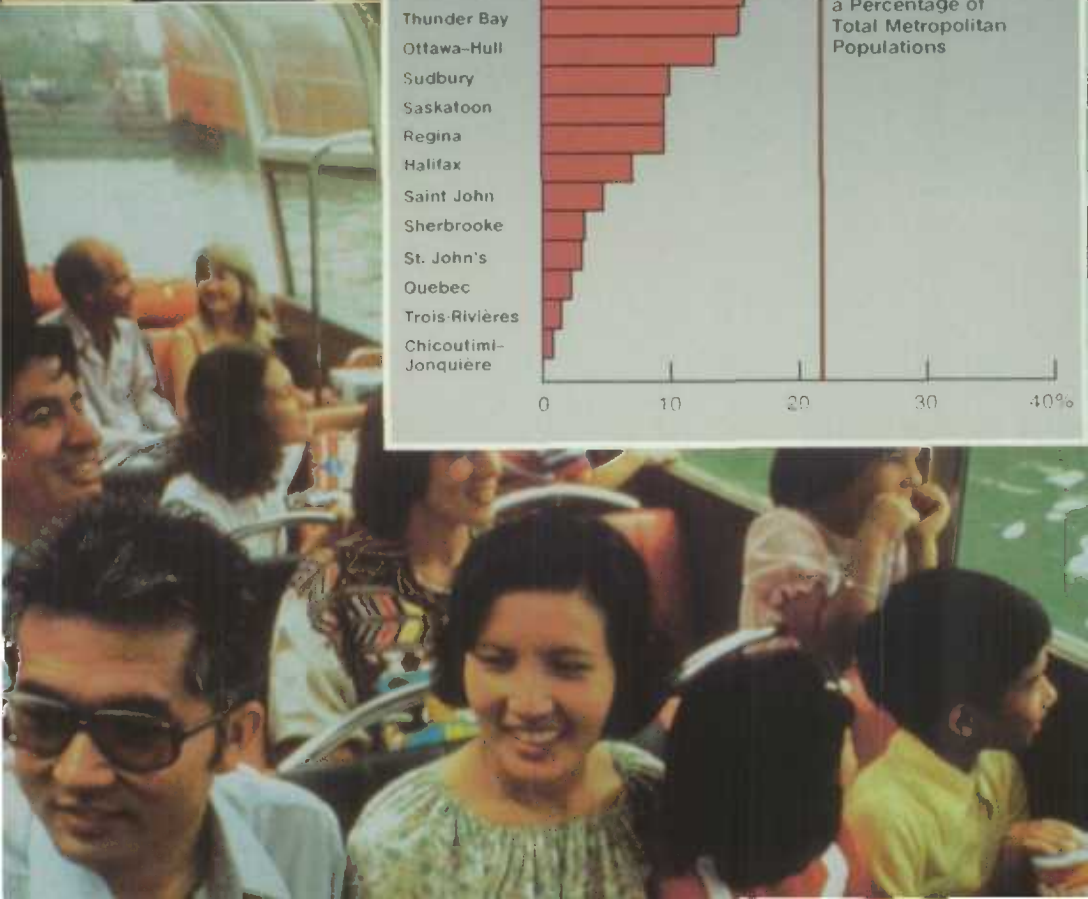
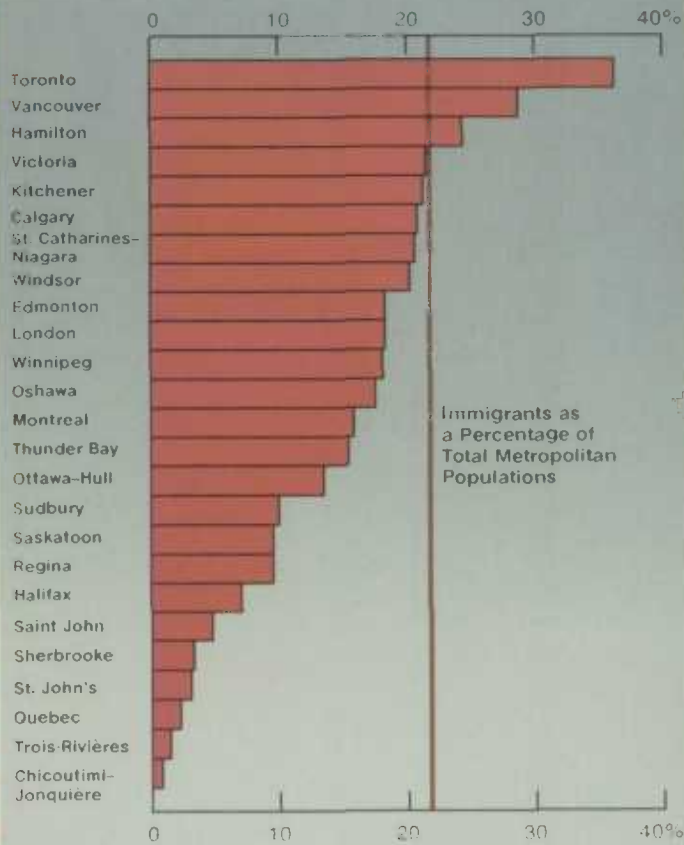


Changing Patterns of Immigration to Canada





Immigrants as a Percentage of Metropolitan Populations, 1986



Canada is still a young country, but it is aging rapidly. The proportion of Canada's total population in the under-18 age group dropped from 39 per cent in 1961 to 25 per cent in 1986 and is expected to be approximately 20 per cent in 2011. The percentage of persons aged 65 and over increased from 8 per cent in 1961 to 11 per cent in 1989 and will probably reach about 16 per cent by 2011. During the 1970s and the 1980s, the elderly population grew more rapidly than any other age group. The high growth rate of the elderly population is expected to continue well into the next century.

The older segments of the population are also characterized by an imbalance in the number of females and males. The 1989 estimated figures show that there were 139 women aged 65 and over for every 100 men. This is largely due to differences in longevity, with women outliving men an average of seven years.

The family structure of Canadians is also changing in many aspects. Today young adults are tending to marry at a later age. As a result, the proportion of single persons aged 20-34 continued to increase between 1981 and 1989. For example, 68 per cent of females, 20 to 24 years of age, were single in 1989, compared to 51 per cent in 1981 and 40 per cent in 1961. Similar patterns have been observed for both males and females in the 25 to 34 age group.

More and more Canadians are now living as husband and wife outside the bounds of formal marriage. In 1989, 8 per cent of all couples, about 584,000 families, reported that they lived in common-law union, which represented an increase of 63 per cent since 1981.

While the number of families in Canada continues to increase, the typical family is now smaller. Average family size declined from 3.9 persons in 1961 to 3.1 persons in 1988.

Factors of population change, 1961-89

	Average annual		Average annual	
	Total increase	Natural increase	Residual net migration	Ratio of migration to total increase
	'000	'000	'000	%
1961-66	355.3	303.6	51.7	14.6
1966-71	310.7	217.9	92.8	29.9
1971-76	284.9	187.0	97.9	34.4
1976-81	269.8	195.6	74.2	27.5
1981-86	202.3	197.6	4.7	2.3
1986-89	288.5	187.3	101.2	35.1

1. **The Fortress of Louisbourg in Nova Scotia, constructed in the early 1700s.**

2. **Fort Lennox on Ile aux Noix, Que.**

3. **Reconstructed sod huts at L'Anse aux Meadows, Nfld., a Norse settlement believed occupied about 1 000 AD.**

4. **Citadel, Halifax, NS.**

5. **Kings Landing Historical Settlement, west of Fredericton, NB.**



1



2







6. Upper Canada Village, near Morrisburg, Ont.

7. Old Fort Henry, Kingston, Ont., constructed in the early 1800s.

8. Fort Macleod, Alta. Students dressed in replicas of uniforms worn by the North West Mounted Police in 1878.

9. Lower Fort Garry, Man.

10. Barkerville, BC., a gold rush capital in the 1860s.



THE ETHNIC MOSAIC

Nation of Immigrants

Jacques Cartier's landing at Quebec City in the 16th century is the first recorded non-aboriginal settlement in Canada. For the next 200 years, until 1760, most settlers came from France; then, the pattern was altered by the flood of immigrants from the United Kingdom (English, Irish and Scottish) who arrived either by way of the United States (the Loyalists) or as new immigrants from Europe. In the 20th century, the pattern again changed dramatically as the bulk of Canada's immigrants arrived on her shores from Continental Europe and, later in the century, from other continents.

In 1986, 72 per cent of Canada's population reported just one ethnic origin. Of this group, just over one-third was of British origin and one-third was French.

Regional differences were reflected in ethnic reporting in the 1986 Census. Newfoundland had the highest proportion of the population with a common ethnic background; 80 per cent of Newfoundlanders reported a single British response. In Quebec, 78 per cent of respondents gave French as their only ethnic origin.

The western provinces, notably Manitoba and Saskatchewan, showed greater ethnic diversity. British single responses represented the single largest group, comprising just over 21 per cent and 22 per cent, respectively, of all ethnic origins in these provinces. The next largest group, German single response, was 9 per cent and 13 per cent respectively.

The Northwest Territories was the only area of the country where neither British nor French was the largest group. Aboriginal peoples were in the majority and 52 per cent of the population of the Northwest Territories reported a single aboriginal response.

In 1986, 25 per cent of all Canadians reported ethnic origins other than British or French. This included those who gave a single ethnic origin other than British or French as well as those who gave a multiple response that did not include British or French.

Of all Canadians who reported having neither British nor French origins, 63 per cent were of European background, 10 per cent Asian, 6 per cent South or West Asian (Middle Eastern), 6 per cent Aboriginal, 3 per cent Black, 2 per cent Other, and 10 per cent gave a multiple response that did not include British or French.

There was considerable regional variation in the non-British and non-French populations. For example, the Northwest Territories had the highest level (64 per cent) due largely to its substantial aboriginal population, while Newfoundland (2 per cent) showed the lowest. Both Manitoba and Saskatchewan had levels of non-British and non-French origins which were higher than 40 per cent.

There were also regional differences in the distribution of various groups. Asians were more likely to live in Ontario and British Columbia, than in the Maritime provinces or Newfoundland. Eighty-five per cent of Blacks lived in Ontario and Quebec and those of European ethnic background were predominant in all provinces.

In 1977, Canada proclaimed a new Citizenship Act, to replace the Act which established Canadian citizenship in 1947. The principal aim of the 1977 Act is to eliminate discrimination against applicants for Canadian citizenship based on their sex, age, marital status, or country of previous citizenship.

Interpretation and administration of the Citizenship Act, as well as promotion of Canadian citizenship is the responsibility of the Citizenship Registration and Promotion Branch



The cultural parade in Saskatchewan.

of the Department of the Secretary of State. Among the services provided are issuing proof of Canadian citizenship and granting Canadian citizenship to qualified applicants. To qualify for Canadian citizenship, an adult applicant (18 years of age or older) must have been admitted to Canada as a permanent resident and must have accumulated three years of residence in Canada during the four years preceding the application. Applicants must also demonstrate adequate knowledge of one of Canada's official languages, and a knowledge of Canada and the rights and responsibilities of Canadian citizenship; provided the applicant is not subject to any specific prohibitions set out in the Citizenship Act, he or she generally may take the Oath of Citizenship and become a Canadian citizen.

Canadian citizens are encouraged to participate actively in the affairs of their country, and a sense of belonging is also encouraged among all Canadian citizens and residents.

Annual events such as National Citizenship Week and the Citation for Citizenship, and the production of numerous publications encourage Canadians to reflect on their citizenship, and the values, rights and responsibilities which accompany it.

Further information may be obtained by contacting the nearest Court of Canadian Citizenship, or by writing to the Department of the Secretary of State, Citizenship Registration and Promotion, Ottawa, Ontario K1A 0M5.

Population by selected ethnic origins¹

Ethnic group	Total	
	No.	%
Single origins.....	18,035,665	72.1
French	6,087,310	24.3
English	4,742,040	19.0
German	896,715	3.6
Scottish	865,450	3.5
Italian	709,585	2.8
Irish	699,685	2.8
Ukrainian	420,210	1.7
Chinese	360,320	1.4
Dutch	351,765	1.4
North American Indian	286,230	1.1
Jewish	245,860	1.0
Polish	222,260	1.0
Scandinavian ²	171,715	0.7
Multiple origins ³	6,986,345	27.9
Total population.....	25,022,005	100.0

¹ 1986 Census.

² Includes the single origins of Danish, Icelandic, Norwegian, Swedish and Scandinavian, not included elsewhere.

³ Includes persons who report more than one origin.

New Councilors of the Vancouver Council of Canadian Citizenship





Arctic Bay, NWT. Inuit hunters preparing for the last hunt of the season, in late May.

Native Peoples

The Constitution of Canada identifies aboriginal peoples as consisting of three distinct groups: Indians, Métis and Inuit (formerly known as Eskimos). These groups have six main cultural areas: Northeast, Sub-Arctic, Great Plains, Plateau, Northwest Coast, and the Arctic. There are 11 broad linguistic groupings of Native languages in Canada: Algonquian, Iroquoian, Siouan, Athapascan, Kootenayan, Salishan, Wakashan, Tsimshian, Haida, Tlingit and Eskimo-Aleut. Each linguistic group has many languages and dialects.

According to the 1986 Census, 711,725 persons or 3 per cent of the total population of Canada reported having at least one aboriginal origin. Just over 286,000 persons gave a single North American Indian origin, about 60,000 a single Métis origin, and about 27,000 reported a single Inuit origin. Approximately 332,500 or 47 per cent of all persons reporting aboriginal origins said they had both aboriginal and non-aboriginal origins. Most of Canada's aboriginal population live in the western provinces and the Northwest Territories. For example, 59 per cent of the population in the Northwest Territories said they were of aboriginal origin. In the Yukon, 21 per cent or nearly 5,000 gave aboriginal origin, 8 per cent of the total population in Manitoba (85,235) and 8 per cent of the total population in Saskatchewan (77,645).



Life in the North

1. Catholic Mass celebration.
2. Daycare center.
3. Generations of an Inuit family.
4. Inuit students at computer terminals.





Totem poles in Stanley Park, Vancouver, BC.

North American Indians

Prior to the arrival of Europeans in North America, estimates of the Indian population in what is now Canada have been placed at around 220,000. By the time of the Canadian Confederation in 1867, the Indian population was estimated in the range of 100,000 to 125,000. Many factors contributed to the loss in their population, among them the disastrous introduction of European diseases such as small pox, scarlet fever and tuberculosis, against which Indians had no known natural immunities. It was not until 1941 that the Indian population began to show a pattern of sustained growth, and by 1966, it again reached the total population in existence just prior to European contact.

According to the 1986 Census, about 550,000 respondents reported a North American Indian origin as a single or part of a multiple response. According to the federal department of Indian and Northern Affairs Canada, about 390,000 persons were registered under the Indian Act of Canada. A small percentage of registered Indians are not of North American Indian origin as a result of the pre-1985 Indian Act which allowed non-Indian women to gain Indian status if they married a man who was a registered Indian. Most registered Indians belong to one of 595 Indian Bands found in every region of Canada, except the high Arctic. Most bands have one or more Indian reserves set aside for their exclusive use or Crown land settlements. The majority of registered Indians live on reserves or settlements (62 per cent), while about 38 per cent live off reserves.

There are also an unknown number of Indians, who for a variety of reasons lost their right to be registered under the Indian Act, before 1985. For example, an Indian woman who married a man who was not Indian, automatically lost her status as a registered Indian. Since 1985, a revision to the Indian Act commonly referred to as Bill C-31, has resulted in the reinstatement of nearly 70,000 persons, as of January, 1990. Another 12,000 applications await processing and people are still continuing to apply. There will remain a number



Blackfoot: Indian handicrafts in Southern Alberta.

of non-status Indians who will not be eligible to regain their status even with the recent revision to the Indian Act.

Indians have been governed by the Indian Act which was established in 1876. It has dominated Indian affairs in Canada, although it has been subject to frequent review and amendment since 1876. Throughout the 1970s and 1980s, Indians obtained various forms of self-government and social and economic program responsibilities.

In addition to political progress, Indians have been making steady improvements in their quality of life. For example, infant death rates have declined and the number of Indians enrolling in postsecondary schools has increased dramatically in the last 20 years. However, the figures still lag significantly behind those of the general population of Canada, as measured by many other social and economic indicators. Indian unemployment is several times higher than the rate of the general population of Canada, as is the overall Indian death rate, especially among young adults. The proportion with postsecondary school degrees is less than half that of the general population in Canada (10 per cent versus 24 per cent).

Métis

Métis people in Canada are those of mixed North American Indian and European descent. As a group, it was the Métis in Western and Northwestern Canada who became well-known in Canadian history, particularly in the Red River district of what is now Manitoba. Their drive for self-government was manifested in the Red River Rebellion of 1869-70 led by Louis Riel. The loss of that rebellion and the subsequent arrival of larger numbers of European

settlers resulted in the Métis migrating further west and north to Saskatchewan, Alberta, British Columbia and the Northwest Territories. The Métis in Alberta were able to obtain land title in the 1930s which established a number of Métis settlements under the Métis Betterment Act in 1938.

The actual number of Métis today is not really known. The term, Métis, has been adopted by many mixed ancestry groups outside Western Canada. While there has been a resurgence of Métis cultural awareness in recent years, it has also been reported that many people of Métis origin have not identified themselves as such. According to the 1986 Census, about 150,000 respondents reported a Métis origin as a single or part of a multiple response. Socio-economically the Métis also lag behind on various indicators when compared to the general population of Canada. For example, their unemployment rate was about double that of the general Canadian labour force. Among those reporting only Métis origin in the 1986 Census, only 9 per cent reported having a postsecondary school degree, well below the general population level of 24 per cent.

Terminal at Iqaluit (Frobisher Bay), NWT.





Inuit children in traditional caribou parkas at Peely Bay, NWT.

Inuit (Eskimos)

There are about 100,000 Inuit in the world. Canada's Inuit number around 27,000; their language is called Inuktitut. They live in small communities on the Mackenzie Delta, the Arctic islands and the mainland coast of the Northwest Territories, on the Quebec shores of Hudson and Ungava bays, and in Labrador. Their communities are situated for the most part on bays, river mouths, inlets or fiords, reflecting a culture that was, and to a considerable extent still is, tied largely to marine harvesting — fishing, gathering and hunting.

With the arrival of the whaling ships and the fur traders early in the 19th century, traditional Inuit life began to change as economic emphasis shifted from hunting and fishing to fur trapping.

With World War II came rapid development in air travel, building of defence installations, and meteorological and radio stations. Through Canada's communications satellites, telephone, radio and television programs (some in Inuktitut) are now beamed into Inuit households. The kayak and sled dogs, once essential to the Inuit hunting and trapping lifestyle, have largely been replaced by the motorized toboggan and canoe. Few communities are without airstrips and modern aircraft technology has considerably shrunk the vast spaces of the Inuit domain.

Today, while the hunter's life and the special relationship it implies with the land remains central to Inuit identity and self-perception, traditional hunting pursuits are not as important economically as they were in the past. The southern world has invaded northern



Holman Island village, NWT.

communities with all its comforts and complications; electricity, oil-fired furnaces and stoves, snowmobiles and trucks, schools, hospitals, films and television have all combined to change northern life. The problems of southern society have moved north as well, often to be amplified in the conducive atmosphere of rapid social change.

The general health of the Inuit has improved remarkably in recent years and life expectancy is far greater than it was only two decades ago. Medical help is now available throughout the North and charter aircraft serve as an air ambulance system for isolated communities.

Various government programs in areas such as education, social affairs, local government and economic development have also contributed to the dramatic change in the Inuit way of life.

The majority of Inuit communities have become incorporated hamlets or villages, managing their own affairs through elected councils. The Council of the Northwest Territories, a provincial-style body, has eight Inuit elected members.



New housing development at Yellowknife, NWT.

Native Claims

Since 1973, the federal government and native groups representing Indians, Inuit and Métis have been attempting to resolve two broad categories of native claims through a process of direct negotiations. The Comprehensive Claims Branch and the Specific Claims Directorate of Indian Affairs and Northern Development represent the federal government in this process.

Comprehensive claims are based on continued traditional native use and occupancy of land and waters. Such claims arise where the native title has not been previously dealt with by treaty or other means. They normally involve a group of bands or other native communities within a geographic area and are comprehensive in their scope, including such elements as land tenure, specified hunting, fishing and trapping rights, financial compensation, participation in management structures regarding land use, environmental assessment and review of wildlife and other benefits.

The thrust of comprehensive claims policy is to exchange undefined aboriginal land rights for concrete rights and benefits. Settlements are intended to protect and promote the native peoples' sense of identity while providing for meaningful participation in contemporary society and economic development.

Specific claims are based on grievances that Indian people might have about the fulfilment of Indian treaties or the actual administration of lands and other assets under the Indian Act or formal agreements. Each claim is judged on its own facts and merits, taking into account all relevant historic evidence. The goal of such claims settlements is to compensate the claimant band or bands for losses incurred and damages suffered, based on legal principles and established criteria.

Language

According to the 1986 Census, 15.3 million persons, or 61 per cent of the population of Canada, reported English as their only mother tongue; 6.2 million, or 24 per cent of the population, reported French as their only mother tongue; and 2.9 million, or 11 per cent of the population, reported a language other than English or French as their only mother tongue. (First language learned and still understood.) Of the 2.9 million persons who reported having a single mother tongue other than English or French, 2.1 million indicated a language of European origin, 634,000 a language of Asian or Middle Eastern origin, 138,000 an aboriginal language and 13,000 a language of another origin. (Origin means the geographical region where a language came into being. Persons who report that language may actually come from another region.)

In 1986, nine out of 10 Canadians whose only mother tongue was French lived in the province of Quebec where 81 per cent of the population reported that French was their only mother tongue. Francophones accounted for a third of the population in New Brunswick. In other provinces, French minorities accounted for 5 per cent or less of residents, including Ontario with 425,000 persons whose only mother tongue was French, the largest number of francophones outside Quebec.

Most of the 2.9 million persons with a single mother tongue other than English or French, spoke European languages (2.1 million persons) but since the 1960s, Asian and Middle Eastern languages — mainly Chinese, Vietnamese, Punjabi, Hindi and Urdu — have grown considerably. Approximately 138,000 people in Canada had an aboriginal language as their only mother tongue, mainly Cree, Ojibway and Inuktitut. Languages other than English or French are more prevalent in Ontario and the western provinces, than in the Atlantic provinces.

The latest Census results also show that trends observed during the 1970s in the linguistic make-up of the country continued into the 1980s. The proportion of anglophones outside Quebec has continued to grow, while in Quebec there has been an increase in the proportion of francophones.

Some Canadians speak a language most often in their home that is other than their mother tongue. These language shifts are a major factor in determining the mother tongue of following generations and contribute to the growth of the language spoken. Most Quebec residents who first learned a language other than English or French as mother tongue and who made a language shift, adopted English as their dominant home language; the French-speaking community in Quebec neither gained nor lost population through language shifts but a loss was recorded for the francophone population living outside Quebec.

In 1986, more than 4 million Canadians reported they could conduct a conversation in both English and French. Bilingual persons represented 16 per cent of the population, up from 15 per cent in 1981 and 13 per cent in 1971. Quebec and New Brunswick recorded the highest rates of bilingualism at 35 per cent and 29 per cent, respectively. Slightly over half of Canada's bilingual population lived in Quebec. The 1.8 million who lived outside Quebec resided mainly in Ontario (1,058,000), New Brunswick (204,000), British Columbia (176,000) and Alberta (150,000).

The Canadian Charter of Rights and Freedoms, which forms part of the Constitution Act, 1982, guarantees equality of status to both the English and French languages; it provides for equal rights and privileges regarding the use of these two official languages in all institutions of the Parliament and Government of Canada. The Charter confirms the right of

Population by mother tongue and home language¹

	Mother tongue		Home language	
	No.	%	No.	%
Single responses ²	24,354,390	96.2	23,862,330	95.4
English	15,334,085	60.6	16,595,535	66.3
French	6,159,740	24.3	5,798,470	23.2
Non-official languages	2,860,565	11.3	1,468,325	5.9
Italian	455,820	1.8	271,835	1.1
German	438,675	1.7	112,550	0.4
Chinese	266,560	1.1	230,480	0.9
Ukrainian	208,410	0.8	46,150	0.2
Aboriginal languages ³	138,060	0.5	97,280	0.4
Other languages	1,353,040	5.3	710,030	2.8
Multiple responses ²	954,940	3.8	1,159,670	4.6
English and French	332,610	1.3	351,900	1.4
Other multiple responses	622,330	2.5	807,770	3.2
Total	25,309,330 ⁴	100.0	25,022,000 ⁴	100.0

¹ 1986 Census.

² For the first time in the 1986 Census, Canadians could indicate more than one language. Consequently, care must be exercised when comparing the 1986 data with previous censuses.

³ On some Indian reserves and Indian settlements in the 1986 Census, enumeration was not permitted or was interrupted before it could be completed.

⁴ The question on mother tongue was asked of all Canadians in the 1986 Census. The question on the language spoken most often at home was to be answered by a sample of one-in-five households, which excluded persons in institutions such as prisons and nursing homes.

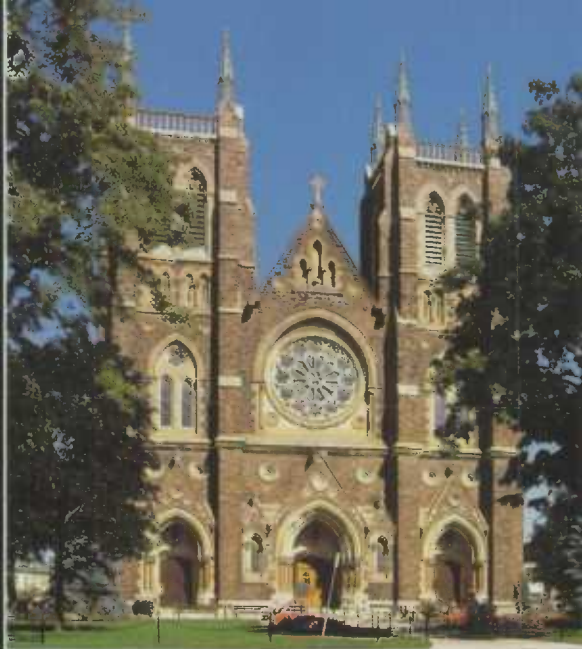
the Canadian public to communicate with all federal institutions in either English or French, and prescribes the general circumstances where this applies. It also gives significant guarantees of minority language education across the country.

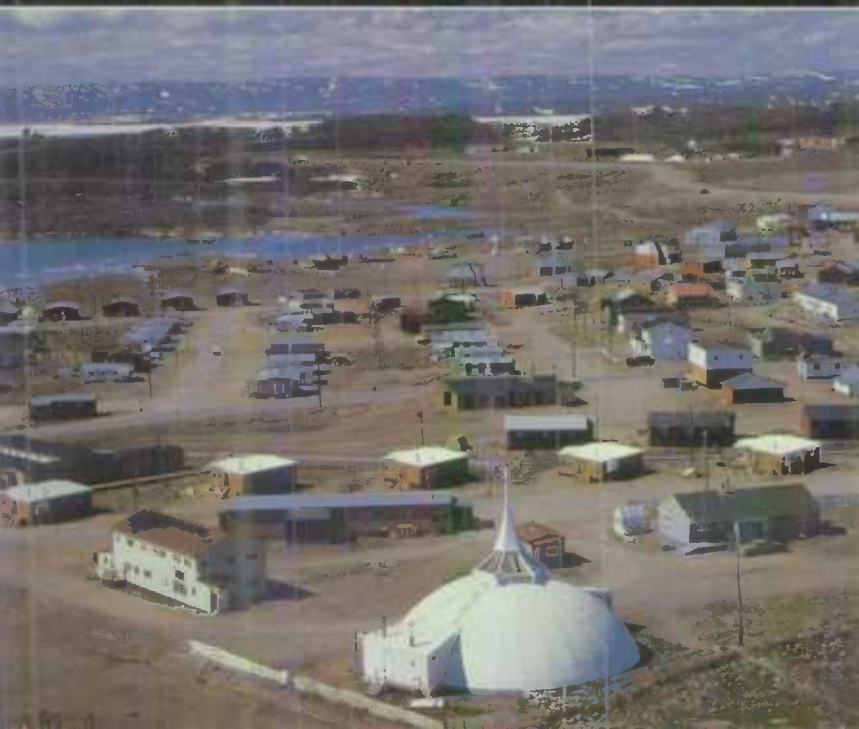
The 1988 Official Languages Act contains the detailed provisions to give effect to the Charter guarantees and to guide federal institutions in implementing them in a fair and reasonable manner. It also includes new provisions respecting the federal government's commitment to enhance the vitality of the English and French linguistic minorities.

The Constitution, the Act and federal official languages policies aim at reflecting the linguistic duality of Canada, and the bilingual nature of federal institutions.

Canadian Churches

1. St. Peter's Cathedral,
London, Ont.
2. Notre Dame Basilica,
Montreal, Que.
3. Ukrainian Greek
Orthodox Holy
Trinity Church,
Prince Albert, Sask.
4. Anglican Cathedral,
Iqaluit (Frobisher
Bay), NWT.







THE SOCIETY

- *In 1988-89, elementary-secondary school enrolment was 5,017,100. This was 15 per cent less than the all-time high of 5,888,000 recorded in 1970-71.*
- *In 1989, the Canadian Broadcasting Corporation (CBC), launched Newsworld, Canada's only 24-hour national, English-language news and information service.*
- *In 1987, 97.5 per cent of Canadian households had telephone service. During that year, Canadians made 36 billion local calls and 2.2 billion long distance calls, the equivalent of each person making an average of 1,436 calls per year.*
- *Canada has become a world leader in using information technology for health care and education. For example, pioneering work carried out at Newfoundland's Memorial University now enables long distance medical examinations and remote diagnosing of health problems in some parts of Canada.*

EDUCATION

Education in Canada is one of the country's largest activities. Spending on education represents about 7 per cent of Canada's Gross Domestic Product (GDP), 8.5 per cent of personal income, \$1,580 per capita of population, and \$3,090 per capita of labour force. Most education revenue comes from government sources with provincial and municipal governments providing the major share. Education is second only to social welfare as a consumer of government budgets.

Recent Trends

Until the end of the 1960s, education in Canada was one of continuous, sometimes dramatic growth. As the population grew and the economy was buoyant, educational facilities were built: new elementary and secondary schools to accommodate an increasing student population, and networks of community colleges to provide an alternative to university studies. Universities were experiencing unprecedented growth, constructing new, and expanding old facilities and introducing new programs of study to meet growing student demand.

In the early 1970s, the first signs of an end to the period of growth appeared when elementary enrolment started to drop as a result of a declining birth rate. This started a ripple effect which was to be felt at all levels of education. By the mid-70s secondary enrolment was decreasing and the rate of increase in postsecondary education was moderating. Demographic trends combined with an economic slowdown have meant that the 1980s have been a period of restraint for education in Canada.

Historical Perspectives

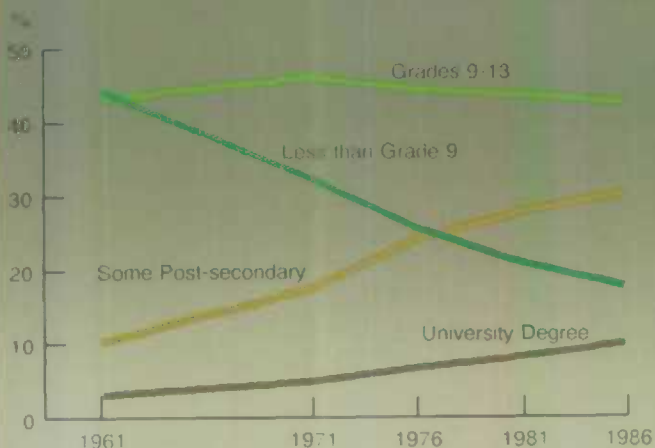
When the four original provinces of Canada were united in 1867, responsibility for education was vested in provincial legislatures rather than the federal government. Constitutional jurisdiction over education was given to other territories as they achieved provincial status.

While the constitution recognizes no federal presence in education, the federal government has assumed direct responsibility for the education of those outside provincial jurisdiction — native peoples, armed forces personnel and their dependents in Canada and abroad, and inmates of federal penal institutions. More significantly, as education has expanded, indirect federal participation in the form of financial transfers to provincial governments has expanded for the support of postsecondary education, direct financing of manpower training programs, and support for bilingualism in education.

Children in classrooms in Montreal, Que.



Highest Levels of Schooling Attained for Population Aged 15 +



Provincial Administration

Because each province and territory is responsible for the organization and administration of education within its jurisdiction, no uniform system exists. Provincial autonomy has resulted in distinctive education systems reflecting historical and cultural traditions and socio-economic conditions.

Local Administration

While provincial legislatures and education departments provide the legal framework, most of the actual operation of public schools is delegated to local boards of education composed of elected and/or appointed trustees whose duties are specified in provincial legislation and departmental regulations. Responsibilities of boards vary but they generally include school construction, pupil transportation, hiring of teachers and determination of tax rates for local support.

Elementary-Secondary Education

Elementary education is general and basic, but in the junior high school years there is usually some opportunity for students to select courses to suit their individual needs. At the secondary level students have a choice of several programs and, within provincial requirements, they may build a secondary program by selecting from a number of subject-matter areas.

Grade 2 students take part in an anti-smoking rally in Winnipeg, Man. At the event, the youngsters resolved to graduate from high school in the year 2000 without smoking.





Local children in a new school at Pond Inlet on Baffin Island, NWT.

At one time secondary schools were predominantly academic, designed to prepare students for university; vocational schools were separate institutions, primarily for those who would not proceed to postsecondary education. Today, while some technical and commercial high schools still exist, most secondary schools are composite, providing integrated programs for all types of students.

Independent Schools

In all provinces some elementary-secondary schools operate outside the public school system. These private or independent schools have been established as alternatives to the public system — alternatives based on religion, language, or social or academic status. Provincial policies on private schools vary considerably — from the provision of direct grants per pupil to minimum provincial involvement in financing and inspection.

Private kindergartens and nursery schools also exist for children of pre-elementary age.

Separate Schools

Five provinces make some legal provision for schools with religious affiliation within the publicly supported system.

Newfoundland's public school organization has traditionally been based on church affiliation. Roman Catholic schools serve the largest single religious group in the province and are organized into school districts. In the mid-1960s, the major Protestant denominations

(Anglican, United Church and Salvation Army) amalgamated their schools and boards. Two other denominations (Pentecostal and Seventh Day Adventist) also operate schools.

Quebec has a dual education system — one for Roman Catholic students, the other for non-Catholics. During the 1970s, the distinction on the basis of religion gave way, to some extent, to a distinction based on language of instruction. Both school systems receive public support.

Legislation in Ontario, Saskatchewan, Alberta and the Northwest Territories permits establishment of separate schools; in all their jurisdictions, Roman Catholic separate school districts operate a large number of schools, while a few Protestant separate school districts also exist.

Official minority language education is guaranteed under Article 23 of the Charter of Rights and Freedoms. Provincial implementation of this guarantee varies.

Postsecondary Education

The 1960s and 1970s were marked by extraordinary growth in programs and facilities for education beyond high school. In prior years, universities offered almost the only form of postsecondary education. Now, every province has networks of public community colleges and institutions of technology.

Degree-Granting Institutions

There are several types of degree-granting institutions in Canada: institutions that have, as a minimum, degree programs in arts and science; large institutions that offer degrees up to the doctorate level in a variety of fields and disciplines; smaller institutions with undergraduate degree programs only in arts; independent institutions granting degrees in religion and theology only; and institutions offering degree programs in a single field such as engineering, art or education.

The Department of National Defence finances and operates three tuition-free institutions that provide university-level instruction; Royal Military College in Kingston, Ont., Royal Roads in Victoria, BC, and Collège militaire royal in Saint-Jean, Que.

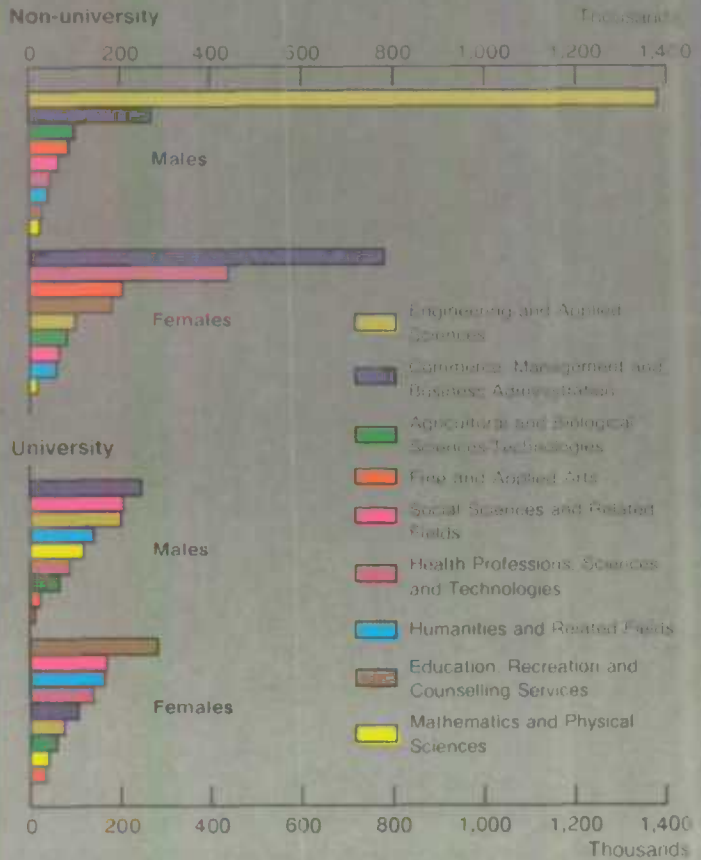
Admission to university usually requires high school graduation with specific courses and standing. Most universities, however, provide for the admission of "mature students" who do not have all the usual prerequisites.

Depending on the province, a pass bachelor's degree in arts or science takes three or four years of study. Most universities offer both pass and honours bachelor's degrees; an extra year of study is usually necessary for the latter. Admission to some professional faculties such as law, medicine, dentistry and engineering normally requires completion of part or all of the requirements for a bachelor's degree.

Admission to a master's degree program is usually contingent upon completion of an honours bachelor's degree or equivalent. Most master's programs entail an additional year or two of study plus a thesis. Entrants to doctoral programs must have a master's degree or equivalent in the same field.

University tuition fees vary among and within provinces. Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan (one institution only), Alberta and British Columbia have differential fees for foreign students.

Major Fields of Study, by Sex, University and Non-university, 1986



Note: Non-university refers to graduates of trade schools, community colleges, institutes of technology, CÉGEP, etc.

Community Colleges

As an alternative to university education, all provinces and territories have established public community colleges — institutes of technology and other public colleges in Alberta and British Columbia, an institute of applied arts and science in Saskatchewan, and colleges of applied arts and technology (CAATS) and colleges of agricultural technology (CATS) in Ontario. In Quebec, collèges d'enseignement général et professionnel (CEGEPs) offer prerequisite programs for university training as well as professional job-related programs. All other provinces and territories have community colleges.

Other institutions also exist for training in specialized fields, such as arts, fisheries and forestry, and marine and health science technologies. Many provinces now provide nurses' training programs in community colleges rather than in hospital schools of nursing which were common in the past.

Technical and Trades Training

Technical and trades training varies from province to province and often within a province. In addition to the vocational and technical programs provided in secondary schools, students may continue this type of education in public and private trade and business schools, trade divisions of community colleges and related institutions. Trades training is also available through training-in-industry and apprenticeship programs.

Adult Education

For the past decade, educational programs for out-of-school adults have been the most rapidly growing sector of Canadian education. Departments of education, school boards, community colleges and universities offer extensive part-time programs for adults to acquire accreditation at various education levels or advance their personal interests. Programs are also provided by professional associations, unions, community organizations, churches, public libraries, government departments, business and industry. Correspondence courses are also available.

Statistical Highlights

In 1988-89 education was the primary activity of 6,172,000 Canadians, or about 24 per cent of the total population. There were 5,834,000 full-time students being taught by 338,000 full-time teachers in 15,700 educational institutions. Expenditures on education for 1988-89 reached \$41.0 billion, or 6.8 per cent of Canada's Gross Domestic Product (GDP).

Lower birth rates in recent years and lower levels of immigration have produced an enrolment decline in elementary-secondary schools that has persisted since the early 1970s. At the postsecondary level, however, increased participation rates have more than offset the decline in size of the primary source population group.

Elementary-secondary enrolment in 1988-89 was 5,017,100, an increase of one per cent from 1987-88 but still down 15 per cent from the all-time high of 5,888,000 recorded in 1970-71. Elementary enrolment of 3,117,000 students in 1988-89 was 19 per cent below the 1968 high of 3,844,000. Secondary enrolment patterns resemble those of the elementary level, but they are delayed seven or eight years. Participation of the post compulsory



Graduation ceremony at the University of Calgary in 1990. The ceremony was repeated throughout the week, with approximately 2,000 graduates.

school-age group increased in the late 1980s and resulted in a small increase in the number of secondary students in 1988-89.

Full-time postsecondary enrolment in 1988-89 was 817,100, a 1.4 per cent increase from 1987-88. University enrolment made up 61 per cent of the total, but the rate of increase from 1970-71 to 1988-89 was lower than that of the community college sector, where full-time enrolment increased by 91 per cent, from 166,100 in 1970-71 to 317,700 in 1988-89. Meanwhile, full-time university enrolment went from 309,500 to 499,400, an increase of just over 60 per cent.

In 1989, 265,800 students graduated from secondary schools, a 0.6 per cent decrease from the previous year. About 50 per cent of high school graduates normally enter a postsecondary institution.

Universities conferred 103,800 bachelor's and first professional degrees, 16,300 master's degrees and 2,400 earned doctorates in 1988. Community colleges awarded 80,100 diplomas.

Expenditures for education from kindergarten through graduate studies reached \$41.0 billion in 1988-89. Elementary-secondary education consumed about \$26 billion of the 1988-89 total, universities \$8.3 billion, community colleges \$3.4 billion and vocational training \$3.3 billion.

Education spending per capita of population soared from \$315 in 1969 to \$1,580 in 1988; the increase per capita of labour force was from \$808 to \$3,090. Nevertheless, other indicators point to a relative decline in education spending. In 1970, when full-time enrolment reached record levels, expenditures on education were equivalent to 8.6 per cent of GDP. By 1980, education's share had decreased to 7.2 per cent of GDP. Recently, education expenditures, as a proportion of GDP, have been in the 6.8 to 7.2 per cent range.

1986 Census Statistics. One of the most significant changes for 1986, according to Census figures, was in the number of Canadians holding university degrees. This group represented

9.6 per cent of all Canadians aged 15 or over, a percentage twice as high as that recorded in 1971. The number of university graduates grew by 26 per cent from 1981 to 1986. Over the same period, the number of Canadians with master's degrees rose by 32 per cent, and those with earned doctorates by 20 per cent.

Among persons 15 years of age or older, 43 per cent had achieved levels of schooling between grades nine and 13 by 1986. About one-sixth of this group was aged 15 to 19, and, generally, still in school. The same was true of the 30 per cent who had received some postsecondary education. This percentage included up to 800,000 full-time students enrolled at Canadian colleges and universities in 1985-86.

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

Among recent university graduates, women outnumbered men and accounted for 55 per cent of all graduates under the age of 25. In contrast, in the 45 to 64 age group, male university graduates outnumbered females and represented 67 per cent of all graduates.

Variations in education across the country. A measure of the successful completion of formal education is the highest degree or certificate obtained. This measure shows significant regional variations.

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

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

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

University of Toronto. Among recent university graduates in Canada, women outnumbered men and accounted for 55 per cent of all graduates under the age of 25.





Anne of Green Gables presented at the Charlottetown Festival in Prince Edward Island.

ARTS AND CULTURE

To a large extent, the character of a nation is defined by the nature and the vigour of its cultural life. As arts and culture thrive, a sense of national identity and pride in the cultural achievements of Canadians thrives.

Cultural activities wield considerable economic influence. Our cultural sector is a major employer, providing approximately 300,000 jobs. It contributes as much to the Gross Domestic Product as textile, aircraft or chemical industries. The enjoyment and participation in cultural activities occupy much of our leisure time and our demand for cultural products continues to increase.

Governments and Cultural Policy

In 1987-88, governments at the federal, provincial and municipal levels spent \$4.9 billion on culture, about 1.6 per cent of their total spending. Federal expenditures of \$2.6 billion were concentrated on the cultural industries, with the largest share allocated to broadcasting. The provinces spent \$1.4 billion; libraries and heritage institutions received nearly two-thirds of this amount. The municipalities contributed \$0.9 billion, generally to libraries.

Canadian content requirements are an aspect of federal film and broadcasting policies which, according to the new proposed Broadcasting Act, aim "to encourage the development of Canadian expression, providing a wide range of programming that reflects Canadian attitudes, opinions, ideas, values and artistic creativity. . .".

In 1987-88 over 15,000 films and videos were produced in Canada, most for television audiences. These included both commercials and television programming which together generated over \$200 million in revenue. Approximately 140 feature length films were produced.

While the VCR has greatly changed the industry, television remains the largest single market for film and video distributors. In 1987-88, however, sales and rentals of video cassettes accounted for one-third of all revenue for distributors and wholesalers. The theatrical market for films dropped to third place.

Canadians watch television on average just under 24 hours per week; they attend the film theatre about three times each year.

Since 1986, the federal government has been making assistance available to the Canadian recording industry through Telefilm Canada, in part to encourage the development of Canadian content for radio. In 1987-88, record label companies released approximately 2,900 new albums in Canada, 15 per cent with Canadian content. A third of the new releases were rock albums.

Canadians listen to about 19 hours of radio per week. On average, they spend 21 minutes per week listening to records and tapes. Those actually engaged in this activity, however, devoted about 85 minutes per session of record listening.

Elaine Rizzo touches up Lynn Desjardins's make-up before Pulse goes on the air, CFCF 12.





We Won't Pay! We Won't Pay! starring Suzie Payne, Corrine Koslo and Larry Yachimec at the Vancouver Playhouse.

The Book Publishing Development Program was introduced in 1978, partly to increase the publication of Canadian-authored titles. In 1987-88, Canadian-authored books accounted for nearly three-quarters of the 7,300 new titles released by publishers in Canada. They earned nearly half of the publishers' sales in this country; sales totalled over \$850 million.

Canadian periodicals had total annual circulation of over 500 million in 1987-88; seven out of 10 were delivered to readers by Canada Post.

There were over 300 performing arts companies in Canada in 1987-88, which presented over 36,000 performances to a total audience of over 13 million. Theatres alone accounted for over 30,000 performances and accounted for two-thirds of the audience. Orchestras and other music companies attracted over 1,000 spectators for every performance.

In 1987-88, there were over 2,000 heritage institutions, such as museums, art galleries, zoos, planetariums and archives, and nearly 1,000 public library boards in Canada. The heritage institutions, ranging in size from small community to major federal and provincial museums, had over 50 million visits.

Public libraries recorded nearly 175 million loans of material in 1987-88. Although the majority of their holdings are books (a total of 2.2 books for every Canadian in 1987-88), strong growth was evident in non-traditional items such as talking books and videos.

The Canada Council

The Canada Council is an independent agency created by Parliament in 1957 to foster and promote the arts. The Council provides a wide range of grants and services to professional Canadian artists and arts organizations in dance, media arts, music, opera, theatre,



Tisha Ford and Miguel Aviles in Syntax, an Alberta Ballet production.

writing, publishing and the visual arts. The Council awards approximately 4,200 grants each year: 3,000 grants to professional arts organizations such as opera, dance and theatre companies, orchestras, film and video organizations, public art galleries, book and periodical publishers, and artists' centres; and 1,200 to individual artists to create works of art, for research, or for further training and development.

The Council has developed over 120 programs of support which are modified regularly to meet the changing needs of the arts community. Six sections are responsible for the overall development of specific art forms. A brief description of the programs follows:

Dance. The Dance Section, created in 1972, administers a variety of programs designed to foster and promote the work of professional organizations involved in ballet, modern or experimental dance. It offers assistance to professional companies, schools, independent choreographers, small-scale presenters and service organizations. In 1988-89, groups

that received funding included: Royal Winnipeg Ballet (\$1,105,000), Toronto Dance Theatre (\$340,000), La La La Human Steps in Montreal (\$175,000), Le Groupe Danse Partout in Quebec (\$80,000), Margie Gillis Dance Foundation in Montreal (\$75,000), Alberta Ballet in Edmonton (\$60,000), Jumpstart Performance Society in Burnaby, BC (\$40,000), Dance-works in Toronto (\$20,000) and Neighbourhood Dance Works in St. John's, Nfld. (\$9,544).

Music and Opera. The Music and Opera Section administers a variety of programs that provide assistance to professional music groups and organizations such as orchestras, chamber music ensembles, opera companies, and professional and community choirs. It also offers support for sound recording and for the commissioning of Canadian compositions. In 1988-89, among the organizations that received grants were: the Vancouver Symphony Orchestra (\$915,000), the Edmonton Opera Association (\$362,000), the Quatuor à cordes Arthur Leblanc in Moncton (\$25,000), the Exultate Chamber Singers in Toronto (\$13,000) and the Sound Symposium in St. John's, Nfld. (\$10,000).

Theatre. The main objective of the Theatre Section is to foster and promote the work of professional theatre companies and to make theatre accessible to the Canadian population as a whole. All forms of theatre are supported including theatre for young audiences, music theatre, mime, puppetry and collective creations. Schools offering programs for professional development and some national service organizations also may be eligible for funding. Among the organizations funded by the Theatre Section in 1988-89 were: Stratford

Kimberly Glasson and Rex Harrington in Dream Dances presented by the National Ballet of Canada.



Shakespearean Festival Theatre (\$925,000), Vancouver Playhouse (\$390,000), Citadel Theatre in Edmonton (\$380,000), Charlottetown Festival (\$230,000), Persephone Theatre in Saskatoon (\$130,000), Coopérative de théâtre de l'Escaouette in Moncton (\$40,000), Aubergine de la Macedoine in Quebec (\$35,000), Theatre Newfoundland and Labrador in Corner Brook (\$21,000) and Nakai Players Contemporary Theatre in Whitehorse (\$18,000).

Writing and Publishing. The Canada Council's programs of assistance to writers and publishers are based on a commitment to literary excellence in the fields of poetry, drama, fiction, children's literature and nonfiction. A broad range of programs covers all facets of activity in the literary community, from the writer to the publisher, through promotion and distribution, to the reader. In 1988-89, book and periodical publishers that received funding included Douglas and McIntyre (\$148,475), Boréal Express (\$144,672), Vie des Arts (\$105,000), Lester and Orpen Dennys (\$103,775), Books in Canada (\$102,000), La Courte Échelle (\$71,325), Jeu (\$61,700), NeWest Press (\$57,000) and Fiddlehead (\$20,000). The Council also has supported promotion projects undertaken by the Société de promotion du livre in Montreal (\$100,000) and the Canadian Children's Book Centre in Toronto (\$152,600). To increase public awareness of Canadian books and authors, the Council disbursed \$388,000, in 1988-89, for the National Book Festival and funded over 2,000 public readings across Canada by Canadian authors. The Council also administers the Governor General's Literary Awards, the Canada-Scotland writers-in-residence exchange, several international prizes, and national and international translation grants.

Visual Arts. The programs of the Visual Arts Section are designed to support and develop the contemporary visual arts in Canada, including drawing, painting, sculpture, photography, printmaking, installation, architecture, design, craft, holography, film, video and performance art. Financial support is provided to public art galleries for their ongoing curatorial activities and to artists' centres for their program and operation assistance.

Media Arts. The Media Arts Section provides support for the direct, creative use of conventional and new technologies and related media by independent, professional artists. This section administers programs in the following areas: film and holography, video and audio, and computer-integrated media (computer processing or imaging or system control, computer telecommunications, laser techniques, videodisc and optical storage media).

The following complement the work of the six sections listed:

Arts Awards Service. The Arts Awards Service offers competitive grant programs to individual artists and arts professionals in the following fields: architecture, criticism and curating (visual and media arts), dance, film, multidisciplinary work and performance art, music, photography, theatre, video, visual arts and writing. Individual grants range from \$32,000 (available only to senior artists) to smaller sums for living expenses, project costs and related travel.

Explorations Program. Explorations supports innovative projects by individuals, groups and nonprofit organizations that venture into new territory in the arts. In 1988-89, Explorations allocated \$2,750,000 in grants for creative work in a great variety of art forms.

Art Bank. The Art Bank, located in Ottawa, provides recognition and direct assistance to contemporary professional Canadian artists through the purchase of their work and presents contemporary Canadian art to the public in everyday environments through rental and loan programs. The Art Bank collection, which is the most comprehensive of its kind in the world, consists of over 14,500 works by over 2,000 artists and includes works on paper

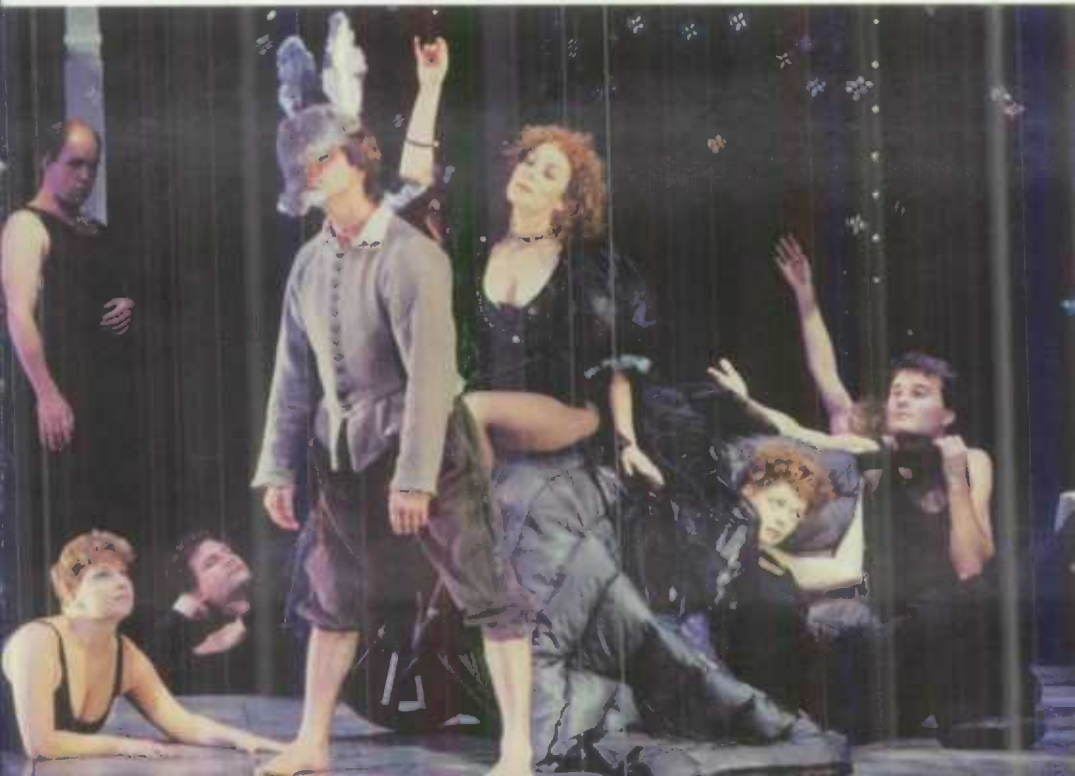
(prints, watercolours, drawings, photographs), which form the largest group; painting, sculptures and three-dimensional works (including outdoor pieces); and ceramics, wall hangings, installations, films and videos. More than 70 per cent of the collection is rented at any given time. In 1988-89, the Art Bank purchased 463 works for \$847,758. The purchase budget for 1989-90 was \$775,000.

Touring Office. Touring is a means of developing audiences and of increasing employment opportunities for artists. The Touring Office of the Canada Council promotes the distribution and enjoyment of performing art through grants and services to performing artists and arts organizations, and Canadian presenters and distributors engaged in touring performing arts productions. In 1988-89, the Touring Office allocated \$4,664,773 in grants and services.

The National Arts Centre

The National Arts Centre (NAC) is Canada's national centre for the performing arts. Opened in 1969 on the banks of the historic Rideau Canal in Ottawa, the NAC is unique as the only multi-disciplinary, bilingual performing arts centre in North America and is the largest performing arts complex in the country.

A Midsummer Night's Dream, a production by the Citadel Theatre in Edmonton, Alta.



The NAC presents a world of music, theatre, dance and variety with artists of world renown. Spearheading the artistic life of the country, the National Arts Centre provides leadership and resources to the artistic community, producing and performing to the highest possible standards. Through actual touring and innovative recording and broadcasting technologies, NAC productions in both official languages are enjoyed by a total audience approaching 700,000 each year.

The National Arts Centre has an orchestra and music department, two theatre sections (French and English), a dance department, and a variety department. As Canada's cultural ambassador, the celebrated NAC orchestra has been received in more than 200 communities across Canada and around the globe, including the United States, Great Britain, Europe, the USSR, Central America and the Orient.

Telefilm Canada

Telefilm Canada, a Crown corporation, has a mandate to develop Canada's film, television and video industry. Through Telefilm Canada, the Government of Canada provides support, as a partner, to the private sector for the production of film and broadcast material, either in investment funds or through a variety of resources at Telefilm's disposal. Meeting diverse needs of this booming industry, through a wide range of funds, Telefilm Canada participates in approximately 300 projects each year. Support is available at all stages of the process, from screenplay development to final production, and to distribution and marketing of the finished product in Canada and abroad.

*New Demons - La Belle et la Bête with Louise Lecavalier and Man
Deland, a production by La La La Tulumma Steps.*



Telefilm Canada's goal is to strengthen the competitive position of Canadian films, television programs and videos, to raise the export profile of Canadian companies, and to assist in developing marketing and promotional strategies. Telefilm Canada also co-ordinates Canada's participation in international festivals and administers a program of grants to Canadian festivals.

In addition, Telefilm Canada is responsible for managing the co-production agreements for film or television programs signed by Canada with the following foreign countries: Algeria, Argentina, Belgium, the People's Republic of China, Czechoslovakia, the Federal Republic of Germany, France, Hungary, Ireland, Israel, Italy, Morocco, the Netherlands, New Zealand, Spain, Switzerland, the United Kingdom, the USSR and Yugoslavia. Among other provisions, the agreements stipulate that a co-production is treated like a domestic production in each of the partner countries.

National Film Board of Canada

The National Film Board (NFB) has been producing and distributing outstanding Canadian films on a wide variety of subjects since it was formed in 1939. Every year, the NFB distributes thousands of films and other audio-visual materials for screening on television, in theatres and classrooms and at home. Its films are increasingly available at video rental outlets. The NFB's many subsidiary services include lectures on the art of filmmaking, and workshops with renowned filmmakers.

Through research and development, the NFB serves to advance the art and technology of audio-visual communication. The Board also furthers Canadian filmmaking by offering assistance in various ways such as assisting Canadian producers and new filmmakers, and participating in many Canadian film festivals.

The excellent quality of the NFB's films has been recognized by audiences around the world.

Mon Oncle Antoine a National Film Board production is considered by critics the best Canadian feature film ever made. The NFB celebrated its 50th Anniversary in 1989.



Museums and Galleries

Museums of Canada range from collections of local historical artifacts and objects to large government-operated institutions. Many larger museums are distinguished for research and publication of scholarly works and as cultural centres. They offer many services through exhibits, guided tours, lectures and scientific and popular publications.

The National Museums of Canada

In 1987, the government announced the disbanding of the National Museums of Canada (NMC), a Crown corporation that was established in 1968 by the National Museums Act, and which had incorporated the national museums in a single administration. Since the passing of new legislation on July 1, 1990, the National Gallery of Canada including the Canadian Museum of Contemporary Photography; the Canadian Museum of Civilization, including the Canadian War Museum; the Canadian Museum of Nature (formerly known as the National Museum of Natural Sciences); and the National Museum of Science and Technology, including the National Aviation Museum and the Agriculture Museum are functioning independently as Crown corporations. All are located in the National Capital Region.

The National Gallery of Canada. The new, spectacular building of the National Gallery in Ottawa opened to the public in May 1988. Its numerous galleries feature historical and contemporary Canadian, European, American, Inuit and Asian art, as well as the interior of a century-old chapel.

The function of the gallery, since its foundation in 1880, has been to foster public awareness of the visual arts, to stimulate interest in art in Canada and to promote Canadian art abroad.

The National Gallery of Canada in Ottawa.





The Canadian Museum of Civilization, located in Hull, Que.

There are more than 40,000 works of art in the National Gallery including paintings, sculptures, prints, drawings, photographs, decorative art, film and video. The historical collections have been built along national and international lines to give Canadians an understanding of the origins and development of their culture as expressed through the visual arts. The collection of Canadian art is the most extensive and important of its kind in existence and is continually being augmented. In addition, there are many works by Old Masters representing the European schools, dating from the 14th century to the present, and there are growing collections of Asian and modern art.

Visitors to the gallery are offered a variety of programs. There are lectures, films and concerts, and regular guided tours of the permanent, special and travelling exhibitions. The bookstore offers an exciting selection of art books, posters, cards, and gift items of outstanding quality.

The interests of the country as a whole are served by travelling exhibitions organized and sponsored by the gallery, as well as the production of publications on the gallery's collections and exhibitions. The Gallery also promotes Canadian art abroad by participating in international exhibitions and arranging for important foreign art collections to be shown in Canada.

The Canadian Museum of Civilization. The Canadian Museum of Civilization collects, preserves and displays artifacts that are part of Canada's cultural heritage. Stages of Canadian history, from the first civilizations to the cultural mosaic of present-day Canada, come

vividly and dramatically alive. A source of wonder and fascination, the museum makes use of the most up-to-date communication techniques to exhibit Canada's creative genius and multicultural riches. The Grand Hall, with a magnificent view of Parliament Hill, is the architectural centrepiece of the new Canadian Museum of Civilization which opened in June 1989. Six longhouses, dominated by majestic totem poles, form the setting for a tribute to the monumental art of Native Indians of the Pacific Coast. In the History Hall, life-size reconstructions of Canadian historic scenes enable visitors to travel through time. Special halls are reserved specifically for changing exhibitions from all disciplines in the museum, including folk arts and traditions, native cultures, Canadian history and contemporary crafts, and exhibitions from international sources.

Other features of the new museum include a Children's Museum, where hands-on activities invite the children to discover many other cultures and traditions. A world first, CINÉPLUS features both Imax and Omnimax film technologies. Music, dance, theatre and hundreds of cultural activities performed in the halls and on the outdoor plazas add another dimension to the multicultural story of the museum.

The Canadian War Museum, an associate museum of the Canadian Museum of Civilization, is responsible for research, exhibits and publications on military history and houses an extensive collection of memorabilia, ranging from war art to tanks.

Craftsman teaches soapstone carving to a young visitor at the Canadian Museum of Civilization.





The Canadian Museum of Nature.

The Canadian Museum of Nature. This museum, formerly known as the National Museum of Natural Sciences, has public display areas located in the historic Victoria Memorial Museum building. The remaining sectors of the museum, consisting of scientific, administrative, public programs and museum services, are dispersed in 12 sites throughout the city.

The museum is engaged in many major research projects undertaken by its staff members or associated scientists from universities and other outside organizations. More than 5 million scientific specimens are maintained in the museum's collections and are available to scientists from all parts of the world.

Audio-visual presentations, visitor-operated displays, drawings, models and thousands of specimens from the museum's collections are used, at present, in six permanent exhibit galleries entitled "The Earth", "Life Through the Ages", "Birds in Canada", "Mammals in Canada", "Animals in Nature", and "Plant Life". New and additional permanent galleries are currently in the planning stages. Temporary exhibits produced by the museum or on loan from other museums and institutions are exhibited in special galleries.

Public lectures, film presentations and special interpretive programs offered by the museum have become increasingly popular with school classes and the general public. Popular publications, a school loans service of educational resource materials and a program of travelling exhibits make Canada's national heritage more accessible to Canadians across the country.



Hatching chicks in the agricultural section of the National Museum of Science and Technology in Ottawa.

The National Museum of Science and Technology. This museum challenges half a million visitors each year to climb, push, pull or just view the lively displays built around its collections and temporary exhibits. An additional 250,000 people annually visit the National Aviation Museum at Rockcliffe Airport.

The museum's exhibit halls feature displays of ship models, clocks, communications equipment, a computer exhibit, a chick hatchery, old and new agriculture machinery, and printing presses. There are numerous examples of milestones in the history of ground transportation, from antique cars to giant steam locomotives. The Science Hall, with its skill-testing experiments and "seeing puzzles", delights young and old alike. The observatory houses Canada's largest refracting telescope, which is used for star-gazing in evening educational programs.

Educational programs on general or topic oriented subjects for school groups are conducted by a staff of educators. The museum's work also includes the designing and building of exhibits that are occasionally sent on tour throughout Canada. Artifacts are exchanged with museums in Canada and abroad.

The National Aviation Museum, recognized to be one of the finest of its kind in the world, has a collection of 115 aircraft plus thousands of engines and aviation related artifacts. The collection was moved, in 1988, to a uniquely designed building in Ottawa.

The "Walkway of Time", 43 aircraft on display, leads visitors through the successive aviation eras. Video games and fascinating stories on aviation are presented in the various theatres located throughout the museum.

The Agricultural Museum, located on the upper floor of the dairy barn at the central experimental farm in Ottawa, features two exhibitions: one is called "Haying in Canada" and the other one "A Barn of the 1920s".

Libraries and Archives

Libraries

Libraries have existed in Canada since the first arrivals of European settlers. A private library was established at Port Royal in 1606 and religious and academic collections were established in the 1630s. During the next century, libraries were maintained at military garrisons and fur-trading bases.

A rapid increase in the numbers and types of libraries in the country was evident in the mid-19th century, including school libraries, professional, government, college and university libraries. The passage of the Ontario Free Libraries Act in 1882 signalled the arrival of tax-supported public libraries.

In addition to providing reading matter for recreational and cultural purposes, the modern library enables citizens to obtain information and other services relating to their work, social and education needs. Libraries are a vital component of most business, scientific and educational institutions.

Approximately 95 per cent of Canada's population has access to a local or regional library. Libraries now collect video and sound cassettes, movies, computer software programs and talking books. A growing number of libraries provide foreign-language materials for those whose mother tongue is neither English nor French, and special materials and equipment for those who may be physically-disabled or print-disabled.

The modern public library plays an important role in community activities. A large number are engaged in literacy training, public education courses and other programs for targeted groups. They offer lectures, readings and community events for adults and children. Outreach programs take library services to senior citizens, shut-ins, prisoners and others who cannot go to a library in person.

The stack area of the National Library of Canada, located in Ottawa.



School and college resource centres provide a wide variety of non-book materials such as films, recordings, tapes, slides and kits. Some of the largest research collections in the country are those of the major university libraries. In addition to providing students and faculty with materials for learning and research, they play a major part in preserving the Canadian written heritage. Several hold valuable collections of manuscripts and rare Canadiana as well as extensive special collections covering the full range of disciplines.

Special libraries, such as those serving companies, government and associations, number about 1,500. Their collections and services are designed to meet the special needs of the organizations they serve; several have created their own databases and information networks, and maintain subject specialists on staff.

Although many academic, school and special libraries restrict some or all of their services to the readers at their own institution, membership in Canadian public libraries is open to all citizens of the community. Because libraries fall under provincial jurisdiction, Canada does not have a unified national library system. All public library systems, except those in the Northwest Territories and the Yukon, are supported by local and provincial funds and co-ordinated by provincial agencies. Academic libraries are funded by a combination of local, provincial, and, to some extent, federal or endowment funds.

At the national level, two federally supported libraries have a mandate to serve the whole country. Scientific, technical and health sciences information for research and industry is the responsibility of the Canada Institute for Scientific and Technical Information (CISTI). Its computer-based services include on-line access to worldwide scientific and technical literature (CAN/OLE), to critically evaluated scientific numeric data (CAN/SND) and a personalized information system (CAN/SDI). These are backed up by a lending and photocopying service from CISTI's excellent collection.

The National Library of Canada, established in 1953, promotes knowledge and use of the published heritage of Canada to ensure its acquisition and preservation, and to support Canadian studies; fosters library development throughout the country; and facilitates Canadian library and information resource sharing. It offers reference, information and advisory services; acts as the legal depository for Canadian publications; publishes a wide range of materials including the national bibliography *Canadiana*; and maintains union catalogues that enable libraries and researchers to discover where specific titles are held. Using advanced technology, it promotes national bibliographic networks to facilitate the sharing of library resources. It also co-operates in international programs which promote the interchange between countries of national publications and information.

Professional library education in Canada is available at seven universities offering the master's degree in library and information science, and two that offer doctorates. Library technicians receive training through postsecondary courses at community and technical colleges in many parts of the country, and in two undergraduate university programs.

After two decades of growth, library budgets suffered severe cutbacks during the 1980s, when book, journal and labour costs escalated. Many libraries now have staff shortages and inadequate space for collections, while at the same time increasing numbers of persons turn to them for their information needs. To deal with these problems, libraries are introducing more effective management systems; automating procedures and services; creating library networks so that resources can be shared across the country; and investigating and implementing preservation measures to conserve collections. Increasingly, the nation's libraries are viewed as a dynamic resource to help Canadians meet the information challenges of the 1990s.



Conservation laboratory at the National Archives of Canada in Ottawa.

Archives

The role of the National Archives of Canada is to acquire, preserve and make available to the public all documents that reflect the various aspects of Canadian life and the development of the country.

At one time, manuscripts were virtually the only objects of interest to researchers. Today, equal importance is given to documents of every kind as authentic sources of information. The National Archives houses manuscripts, maps and plans, pictures, federal documents, prints and drawings, photographs, films, television and sound recordings, and machine-readable records.

The department has equally important responsibilities in the management of government records and aids federal government departments and agencies in establishing and administering effective programs for the management and disposal of records.

The National Archives also manages a comprehensive exhibitions program and a national advertising campaign to make the many collections and services of the department better known.

The Canadian Broadcasting Corporation (CBC)

The CBC, created in 1936, is a publicly owned corporation established by the Broadcasting Act to provide the national broadcasting service in Canada. It is financed mainly by public funds voted annually by Parliament; these are supplemented by revenues from commercial advertising on CBC television. CBC radio is commercial free.

The corporation's facilities extend from Atlantic to Pacific and into the Arctic Circle, and include both French and English networks in television and in AM and FM stereo radio. The National Satellite Channel delivers, to Canadians, the proceedings of the House of Commons via satellite and cable. In addition, CBC operates Newsworld — a 24-hour national, satellite-delivered, English language news and information specialty service. A special northern radio service broadcasts in English, French, and eight native languages including Inuktitut, the language of the Inuit; northern television broadcasts on more than 100 northern television transmitters on two satellite channels across four time zones. Northern Service television produces programs in English, Inuktitut, Slavey, Dogrib, Chipewyan, Loucheux and Cree.

In both radio and television, CBC networks are made up of stations owned and operated by the corporation, which carry the full national service, and some privately owned affiliated stations, which carry an agreed amount of CBC programming. In many small or isolated locations, there are relay or rebroadcast transmitters that carry the national service but have no staff or studios to produce local programs. CBC transmission methods include leased channels on a Canadian communications satellite.

Radio Canada International, the CBC's shortwave service, broadcasts daily in 14 languages and distributes recorded programs free of charge for use by broadcasters throughout the world.

CBC schedules are varied, with information, enlightenment and entertainment for people of different ages, interests and tastes. Program content is largely Canadian: about 78 per cent in television and more than 80 per cent in radio.

CBC gives continuing support to Canadian artists and performers through the broadcast of Canadian music, drama and poetry, the commissioning of special works, the sponsorship of talent competitions and the presentation of Canadian films.

Street Legal, a CBC television series featuring Cynthia Dale and C. David Johnson.





Cyclists taking a break on their three-day trip from Jasper to Lake Louise, Alta., a 230 Km trip through spectacular scenery in the Rockies.

LEISURE

Industrialization and technological progress in Canada have led to shorter workweeks, longer paid vacations and earlier retirement and hence have provided more time for leisure and recreation.

Definitions of leisure are numerous and reflect a variety of views. Leisure can be simply defined as those groups of activities undertaken in “non-work” time; it has also been described as that group of activities in which a person may indulge as desired — to rest, to amuse, to add to knowledge or skills, to enhance personal, physical and mental health through sports and cultural activities, or to carry out unpaid community work. However, many definitions of leisure exclude activities such as sleeping, eating, commuting to and from work, household duties and personal care. Formal programs of continuing education may be regarded as personal improvement or maintenance just as much as sleeping or eating and therefore may also be excluded from leisure activity.

Despite the fact that there is no precise agreement on what constitutes leisure, there is agreement on a core of activities that offer recreation or give pleasure to the participants. Examples would include such activities as walking, cycling, dancing or listening to music. There are activities that may be regarded as undesired household tasks in some circumstances, yet pleasurable recreational activities in others, such as mowing the lawn, cooking, dressmaking or house painting. Thus, recreation and leisure are valued differently according to personal tastes and inclinations. These may vary not only between persons but in different circumstances for the same person.

There is a reciprocal relationship between work and leisure. Longer working hours mean less time for leisure. Additional work time normally provides additional income, while additional leisure time typically leads to increased expenditures. The distribution of time between work and leisure is theoretically a matter of choice, but in practice most employed persons have only limited freedom in determining how long they work. Working hours and holidays in Canada are normally fixed, either by employers or as a result of collective bargaining, according to current legislation and accepted norms. As a result, Canadian workers are typically committed to working a fixed number of hours a day and days a week.

The normal workweek in Canada is from 35 to 40 hours spread over five working days. Most employees receive at least 10 paid holidays annually and a two-week annual vacation, which is usually extended to three, four or more weeks after several years of service with the same employer. Allowing for weekends, paid holidays and annual vacations, most employed persons in Canada have at least 124 days free from work each year. The amount of non-work time available to Canadians depends also on the proportion of the population studying full time or in the labour force and whether the latter are employed or seeking employment. Those outside this group have more free time. Typical of these are persons who have retired early or are elderly.

Events and Attractions

Every year, in all parts of Canada, annual events and attractions draw large numbers of vacationers and travellers seeking diversion, excitement and relaxation. Events such as the Quebec Winter Carnival and the Calgary Stampede are organized to promote or celebrate historical, social or cultural occasions. On the other hand, attractions can be either natural or man-made physical features of a permanent nature that provide facilities for displaying distinctive architectural or geographic qualities or for recreational or cultural activities. In this category are museums, parks, mountains and city nightlife; specific examples would be a natural phenomenon like Niagara Falls or a man-made attraction such as Lower Fort Garry in Selkirk, Man.

Outstanding events take place in each province and territory. One of the oldest sporting events in North America is Newfoundland's annual regatta, held in St. John's. Prince Edward Island's capital city, Charlottetown, features Country Days and Old Home Week, with musical entertainment, agricultural and handicraft displays, harness racing and parades. Nova Scotia events include Highland Games in the centres of Cape Breton, while in New Brunswick there are a variety of festivities related to the province's fishing resources, such as the Shediac Lobster Festival and the Campbellton Salmon Festival.

An attraction in Quebec is Man and his World, Montreal's permanent cultural and ethnic exhibition. Drama festivals in Stratford and Niagara-on-the-Lake are examples of happenings in Ontario.

Western Canada's events reflect its cultural diversity and pioneering heritage. Examples include the National Ukrainian Festival in Dauphin, Man., Oktoberfest in Vancouver, BC, the Stampede in Calgary, Alta. and Pioneer Days festivities in Saskatoon, Sask.

Special events are held each summer in the North. In Yellowknife, NWT, a Midnight Golf Tournament is held each year late in June. In Dawson City, Yukon, the discovery of gold in 1896 is celebrated on Discovery Day in August by raft races on the Klondike River and by dances, sports and entertainment relating to the period.



Skating on the Rideau Canal in Ottawa.

Recreation

The types of leisure activities undertaken vary widely according to the age, sex, income and occupation of the individual. The Campbell's Survey on Well-Being in Canada, conducted in 1988, queried 4,500 respondents concerning eating and health habits and physical recreation activities. The five most popular physical activities among Canadians were: 1. walking 2. gardening 3. swimming 4. bicycling and 5. social dancing.

The survey was a follow-up to the 1981 Canada Fitness Survey and was sponsored by Campbell's Soup Co., Fitness Canada and National Health and Welfare. Other activities that have increased in popularity include skating and cross-country skiing.

Popular activities in Canada include watching television, listening to radio, reading newspapers, listening to records or tapes and reading magazines. Visits to bookstores, movies, sports events and public libraries are also popular.

Government Programs

All levels of government play an active role in enriching the leisure time of Canadians and several federal agencies have major programs related to leisure. Among these is Fitness and Amateur Sport Canada, which works to increase well-being and an enhanced quality-

of-life through physical activity. It encourages active living through special programs, informational materials and financial and consultative assistance to national organizations such as the YMCA, the Girl Guides of Canada and the Canadian Parks/Recreation Association. Special initiatives have been directed at priority groups including older adults, children and youth, people with disabilities and employees. Fitness Canada works closely with federal departments in related areas such as health, transportation and the environment, and with provincial and territorial government departments responsible for fitness and recreation. In addition, this department is responsible for the support and development of amateur sport in Canada.

For the area in and around Ottawa-Hull, the National Capital Commission plays an important role in conserving and developing space for outdoor recreation. The facilities it provides include Gatineau Park, an area of 357 km² (square kilometres) similar to a national or provincial park, a system of scenic driveways and bicycle paths and a greenbelt of land forming a semi-circle of recreational land to the south of Ottawa; it also maintains the longest outdoor skating rink in the world on the Rideau Canal during the winter and rents out garden plots in the greenbelt during the summer.

Kluane National Park Reserve in the Yukon.





Jasper National Park, Alta.

Canadian Parks Service

National Parks

Canada's national parks system began with a 26 km² reservation of land around the mineral hot springs in what is now Banff National Park. From this nucleus the system has grown to include 34 national parks and national park reserves that preserve more than 180,000 km² of Canada's natural areas. The Canadian Parks Service has divided Canada into 68 natural regions; 39 of the regions are terrestrial and 29 are marine. At present 21 terrestrial regions are represented by one or more national parks. The marine parks program began in 1986 and this system is still in its infancy. Only two marine regions either have a national marine park established or a formal agreement signed for such an establishment.

Canada's national parks reflect the amazing diversity of the land. The program now extends from coast-to-coast, from Terra Nova National Park, on the rugged eastern coast of Newfoundland, to Pacific Rim National Park, where breakers pound magnificent Long Beach on the west coast of Vancouver Island, and from Point Pelee, Canada's most southerly mainland point, to Ellesmere Island National Park Reserve, only 750 km from the North Pole.

The magnificent scenery and numerous recreational possibilities of the national parks attract visitors year-round, whether to camp, sightsee, hike, mountain-climb, swim, fish, ski or snowshoe. Interpretive programs include guided walks, displays, films and brochures that explain the natural history of the park regions.

National Historic Parks and Sites

To preserve Canada's past the National Historic Sites activity of the Canadian Parks Service commemorates persons, places and events that played important parts in the development of Canada. Since 1917, when Fort Anne in Nova Scotia became the first national historic site, 73 major sites and over 900 plaques and monuments have been established at significant sites.

Sites are selected on the basis of their cultural, social, political, economic, military or architectural importance and include major archaeological discoveries. Two finds in Newfoundland are the ancient Indian burial ground at Port au Choix and the Norse settlement at L'Anse aux Meadows believed occupied about 1000 A.D. L'Anse aux Meadows National Historic Site was proclaimed a World Heritage Site in 1980.

Many historic sites recall the early exploration of Canada and struggles for its possession. Cartier-Brébeuf Site in Quebec City marks Jacques Cartier's first wintering spot in the New World and is, in addition, the site of the Jesuit order's first residence in Canada.

The pursuit of furs led to extensive exploration of Canada and construction of many posts and forts to expand and protect the fur trade. Such posts include Port Royal, the earliest French settlement north of Florida, Fort Témiscamingue, a strategic trading post in the upper Ottawa Valley, and Prince of Wales Fort, the most northerly stone fort in North America. Lower Fort Garry, near Winnipeg, has been restored to recreate a 19th century Hudson's Bay Company post; here one can see women baking bread and spinning and weaving fabric at the "Big House", a blacksmith at work in his shop, and furs, once the mainstay of Canada's economy, hanging in the loft above the well stocked sales shop — the hub of fort activity.

Military fortifications that have been protected as national historic sites range from the massive Fortress of Louisbourg on Cape Breton Island, built by the French in the 18th century to protect their dwindling colonial possessions, through a series of French and English posts along the Richelieu and St. Lawrence rivers, to Fort Rodd Hill on Vancouver Island, site of three late 19th century British coastal defences.

The fur-trading posts of Rocky Mountain House in Alberta, Fort St. James in northern British Columbia and Fort Langley in southern British Columbia, where the province's salmon export industry also began, recall the expansion of trade and settlement in the West. The orderly development of Western Canada was due in large part to the North West Mounted Police, who are commemorated at Fort Walsh, Sask., first headquarters of the force. Motherwell Homestead near Abernethy, Sask. portrays pioneer farming on the Prairies.

The major route to the Klondike Gold Rush is marked and protected at the Klondike Gold Rush International Historic Site. In Dawson City, the boom town of 1898, the Palace Grand Theatre, the Robert Service Cabin and the paddlewheeler *S.S. Keno* have been restored, while other historic buildings are in the process of restoration or stabilization.

Historic Canals. The canals of Canada were initially constructed as defence or commercial trading routes to serve a new country. At Confederation, canals came under the jurisdiction of the federal government because of their importance to the nation's transportation system.

Certain of these canals, with roles as commercial routes diminished, are now the responsibility of Canadian Parks Service. The canals are operated and maintained as examples of land and water adapted by man to suit his needs for transportation and communication. In addition, the canals provide outstanding opportunities for recreational use.



The Rideau-Denis-Severn waterway exemplifies the importance of heritage canals which illustrate both historical development and early engineering technology.

The Rideau Canal, now a scenic waterway, was built over 150 years ago, in 1832, completing a connecting waterway from Ottawa to Kingston. Several places of interest are located along this waterway, such as the blockhouse at Kingston Mills, the blacksmith shop at Jones Falls and the foundry building at Merrickville. Boaters enjoy heritage canals in Ontario, Quebec and Nova Scotia.

Canadian Heritage Rivers. The Canadian Parks Service is the lead federal agency in the Canadian Heritage Rivers System, a federal-provincial-territorial program for the protection of Canada's most important natural, historical and recreational rivers. In addition to managing five designated rivers within national parks, the Canadian Parks Service operates the program's secretariat and provides funding for studies and for national and international publicity. As of January 1990, 18 rivers had been included in the system in seven provinces and both territories.



1. **Riding Mountain National Park, Man.**
2. **Kootenay National Park, BC.**
3. **Terra Nova National Park, Nfld.**
4. **Fundy National Park, NB.**





Provincial Parks

All provincial governments have established parks within their boundaries. Some are wilderness areas set aside so that portions of the country might be retained in their natural state. Most of them, however, are smaller areas of scenic interest, easily accessible and equipped or slated for future development as recreational parks with camping and picnic facilities.

Some of the oldest parks in Canada were created by the provinces. In 1895, the Quebec government's concern for the conservation of the caribou led to the establishment of Laurentide Park, one boundary of which is only 48 km north of Quebec City. In Ontario, the first park was Algonquin, created in 1897, which covers an area of 7 540 km² and extends to within 240 km of the city limits of both Toronto and Ottawa; this park, like many of the others in Ontario and the other provinces, features camping, canoeing and sport fishing.

Echo Valley Provincial Park, in Saskatchewan.





Sightseeing in Victoria, BC.

Tourism

Tourism is a major earner of foreign exchange for Canada. At the same time, tourism is a significant generator of domestic spending. It has a considerable impact on consumption, investment and employment and is a source of substantial tax revenue for governments; it also spreads its benefits widely across Canada, playing a prominent role in helping to alleviate regional socio-economic disparities.

Tourism affects the lives of all Canadians. It has an impact on our lifestyle and provides a change of pace from contemporary social pressures. It also contributes to national unity by increasing understanding among people of the different regions which form the country.

In the world context, Canada ranked ninth in 1988 in terms of international travel receipts and seventh in terms of international travel spending by its residents. Tourism was a business worth approximately \$24 billion to Canada as a whole in 1988, an amount equivalent to 4.0 per cent of the Gross National Product. The spending of Canadians travelling within Canada amounted to \$17.3 billion. The balance of \$6.9 billion was earned from spending in Canada by visitors from other countries — our third largest source of foreign exchange in 1988 after autos and auto parts.

In 1988, visitors from the United States numbered 12.8 million, up 0.3 per cent from 1987. Non-resident travellers from countries other than the US numbered 2.7 million, an increase of 20.7 per cent from 1987. Of this number 1,554,700 came from Europe and arrivals from the United Kingdom, the largest source of tourists after the US, totalled 527,200. Visitors from other major tourist-producing countries included 324,100 from Japan, 263,000 from the Federal Republic of Germany, 229,700 from France, 90,900 from Australia, 88,000 from the Netherlands, and 86,300 from Italy.

The value of tourism spending in Canada should not, however, be measured solely in terms of the \$24 billion direct travel expenditure. Subsequent rounds of spending spread throughout the economy and create additional business.



Mt. Kidd golf course in Alberta.

For example, when a traveller rents a hotel room he contributes to the gross margin of the hotel owner. Part of this margin will be paid to employees in the form of wages. These wages will subsequently be spent to the benefit of the owner of a corner store, for example. The money will then pass to the wholesaler who supplied the goods purchased and then to the manufacturer, who in turn probably purchases his raw materials from another Canadian firm, and so on. Counting this “multiplier” effect, the \$24 billion generated in 1988 could have amounted to approximately \$43.4 billion.

Tourism also generated the equivalent of 632,000 jobs across Canada in 1988. It involved governments at every level and more than 60,000 individual private enterprises of diverse kinds, such as transportation companies, accommodation operators, restaurateurs, tour wholesalers and operators, travel agents, operators of activities and events, and trade associations.

Another important feature of travel consumption in Canada is the low import content of the products consumed. As travel is predominantly service-oriented, travel spending is on goods and services with a relatively high domestic labour content. Furthermore, the goods purchased by tourists are usually home-produced — food and drink by Canadian farmers and processors and souvenirs by Canadian craftsmen, for example.

Canada possesses many basic tourism assets. It has an enviable location at the crossroads of the northern hemisphere and adjacent to the world’s most affluent travel market. It has an abundance of open space, for which world demand is sure to intensify. Its northern territories constitute one of the world’s few remaining tourist frontiers. It possesses immense supplies of a most precious recreational resource — water — and of a most promising one — snow. Canada’s scenic, cultural and ethnic diversity add to its travel appeal, as do its heritage buildings and the developing attractions of its major cities.

COMMUNICATIONS

Communications play a central role in the lives of Canadians. In the past, communications overcame barriers of vast distance, rugged terrain, and scattered population in order to develop Canada's economic and social resources. Today, Canadians rely increasingly on the creation and communication of information to produce jobs, wealth and social progress.

Information workers (those engaged in processing, analyzing and distributing information) account for nearly half of Canada's total employment — evidence that Canada is being transformed into an information-based society. This shift is comparable to our earlier transition from an agricultural to an industrial society.

Telecommunications and computer technologies have converged into the new field of information technology. The unified system of computers and communications is like a network of electronic highways transporting the information.

The benefits of information technology are becoming very familiar. For example, at automated teller machines across the country, Canadians make bank deposits, withdraw cash and pay bills at any time, day or night. Many retail stores have cash registers connected to computer systems that automatically update inventory records at the end of every business day.

Taxis are dispatched by computer messages appearing on the screen of small mobile data terminals similar to those used by police forces. Librarians search electronically for bibliographic references, and airline agents consult flight schedules and make reservations using computer-communication systems.

Private companies and public institutions are also making increasing use of new information technology. Office workers are using electronic workstations to perform tasks such as word processing, financial analysis, storing and retrieving information, consulting remote data bases, and communicating text, numbers and graphics.

Technicians in the satellite control tower in Ottawa monitor Telesat's fleet of Anik satellites on a 24-hour basis.



In assembly-line plants, computer-controlled robots help to manufacture cars and industrial machinery. The forest-products industry relies on computer systems to direct the sizing and cutting of logs for maximum economy.

Hydro networks monitor their transmission grids using information automatically collected at checkpoints throughout the system and fed back along communications lines to major control centres.

Canada has become a world leader in using information technology for health care and education. Long-distance medical examinations and remote diagnosing of health problems are available in some parts of Canada. Much of the pioneering work was performed at Memorial University of Newfoundland, which has been extensively involved in the development of satellite-based health care delivery systems. This Canadian technology is being shared with countries in Europe, Africa and the Caribbean.

Pioneering work in educational broadcasting and other forms of tele-education has used communications to deliver computer-aided courses and permitted consultation between teachers and students in different locations. In recognition of Canada's expertise in this area, the Commonwealth and La Francophonie have requested that Canada take the lead in developing distance-learning centres and television program services for the benefit of their member nations.

In 1988, 13 per cent of Canadian households had home computers (not counting computers used exclusively for business or games). The number of home computers is growing every year. Word processing and spreadsheet programs are the most popular applications, but as more Canadians buy computers, new opportunities are opening up for exchanging information and conducting business transactions.

Easy-to-use interactive videotex services are already in widespread use, answering tourist inquiries, analyzing stock-market quotations and providing weather briefings. The most renowned is the Teletext/Minitel system in France, which had some 5 million subscribers and 12,000 service providers by the end of 1989. In December 1988, Bell Canada started a market trial in the Montreal area of a new videotex consumer service called ALEX. It is built on the French model, but uses computer graphics technology developed by DOC researchers in the 1970s. Encouraged by the market response to ALEX (20,000 subscribers in less than 12 months), Bell Canada has announced plans to commercialize the ALEX service and extend it to Toronto. The company expects that, by the end of 1990, some 65,000 subscribers will be using the service via Alextel terminals, rented from Bell or with software packages, which allow modem-equipped personal computers to act as terminals. The same technology is used for an interactive television service, delivered by the Vidéotron Cable TV system to some 50,000 subscribers in Montreal. Vidéotron expects to extend this service to all its Quebec subscribers over the next two years.

In 1989, the computer and telecommunications industries spent over \$1 billion on R&D — about 30 per cent of total industrial R&D spending in Canada. The telecommunications equipment industry is the major R&D participant, particularly Bell Canada Enterprises (Northern Telecom, Bell Northern Research and Bell Canada).

With communications technologies continuing to play a decisive role in restructuring economies, research and development continues to become more central to future economic viability.

The Department of Communications operates Canada's largest program devoted to long-term applied research in communications and information technology. The department's



Cellular service at British Columbia's popular resort, Whistler.

laboratories have achieved many significant advances in satellite and fibre-optic communications, as well as major improvements in radio technology. One recent research project focused on using a small pilotless microwave-powered aircraft to serve as an inexpensive alternative to a satellite. The Stationary High Altitude Relay Platform (SHARP), successfully demonstrated in 1987, was the world's first demonstration of microwave-powered flight. Such "platforms" can retransmit radio signals over large areas and bring greater communications coverage to countries or businesses unable to afford satellites or satellite time.

Complementing R&D programs in Canada are tests and trials to encourage people to explore ways they can use both new and established technologies. Communications planners are laying the groundwork for development of networks to bring the information age within the reach of everyone. The Canadian communications system is already largely digital. In digital communications, signals are transmitted in pulses (the language of computers) instead of continuous waves, as used in analogue transmission. Digital communications carry larger amounts of information over longer distances with less distortion. The goal is a system that will permit digital communication of voice, data and video. Instead of using one network for telephone, another for high-speed data and a third for broadcasting, Canadians will, in future, be able to access all telecommunications services through a single outlet similar to a telephone jack.

The Integrated Services Digital Network (ISDN) of the future is not a separate new communications system. It is a concept that will unify existing networks through the

application of international standards which Canada is helping to develop. The first phase uses the copper wires that now connect individual subscribers to networks. It will permit a customer to simultaneously place a telephone call and establish a high-speed data communications link.

The real impact will be felt in the second phase, with the installation of optical fibres. Instead of the electromagnetic waves or pulses used in copper wires, optical fibres use light to carry information. The fibres are capable of carrying amounts of information so much greater than either telephone lines or coaxial cables that a customer could plug in a television set, a burglar alarm, a computer and a telephone all at the same time on the same communications line.

Computers and computer-based office equipment will be able to exchange information and share processing functions, regardless of manufacturer or country of origin. A general world model was agreed upon in the early 1980s and is already being tested in Canada for the communication of bibliographic and banking information.

Developments in communications and information technology are now reshaping our economic and social life, profoundly affecting the way we live, the way we work, how we are educated, how we use our leisure time and how we interact with others in our communities, across the country and throughout the world.

At present, broadcasting is primarily thought of as radio and television programs transmitted over the air with information flowing in one direction. However, cable systems can transmit in both directions, providing interactive communications. This two-way communications capability, combined with recent developments in computers, heralds a new era in broadcasting. As the switching of broadcast audio and video signals are digitized, broadcasting can be integrated with powerful, low-cost computer systems. Thus, the future of broadcasting will likely be defined and driven by a merging of communications, computer and broadcast technologies.

Regulation of Broadcasting and Telecommunications

Under the terms of the Broadcasting Act, the Canadian Radio-television and Telecommunications Commission (CRTC) regulates and supervises the Canadian broadcasting system: radio, television and cable TV as well as specialty and pay television channels. The Commission issues broadcasting licences and holds public hearings to consider applications relating to broadcasting undertakings, policy and regulatory matters. At these hearings, members of the public may comment or intervene on specific applications or issues.

Traditionally, Canada's telecommunications services have been subject to legislation, policies and regulations set by federal, provincial and municipal governments. Until late 1989, six telecommunications companies were regulated by the CRTC, which is a federal agency: Bell Canada, British Columbia Telephone Company, CNCP Telecommunications (UNITEL), Teleglobe Canada, Telesat Canada and Northwefel. The other major telecommunications companies were provincially regulated; and a number of independent telephone companies came under provincial and municipal jurisdiction. Presently, Canada is developing a new national policy which, among other things, will simplify the existing regulations structure. One reason this is now possible is that in 1989 the Supreme Court of Canada, through its Alberta Government Telephone decision, gave the federal government jurisdiction



Telecommunications dishes at Iqaluit, used by CBC and the Inuit Broadcasting Corporation to distribute radio and television programs to other Arctic communities.

over all the major telephone companies as well as the national telecommunications carriers. The independent telephone companies may also, in the future, come under federal jurisdiction. However, the latter is subject to a further court decision.

Regulation of Radiocommunications

Radiocommunications use that part of the electromagnetic spectrum that lies between audible sound and infrared light. Spectrum is a limited resource and effective management is essential to ensure that as many people as possible have interference-free access to radiocommunications for their business and personal affairs. Management of the spectrum, in Canada, is the responsibility of the Department of Communications. Under the Radiocommunications Act, this department regulates all radiocommunication facilities in Canada, issuing broadcasting certificates for stations that are part of a broadcasting undertaking and licensing the use of radio for other applications, mainly communications.

Telecommunications Industry

Canada's telecommunications carriers operate a vast network of public and private voice, data and video services. The bulk of the traffic is handled by the coast-to-coast integrated network of Telecom Canada, whose 10 members include nine telephone companies and

Telesat Canada, the corporation that owns and operates Canada's commercial satellite system. Incorporated in 1969, Telesat established the world's first domestic commercial communications satellite system in 1973. Telesat satellites and earth stations provide domestic and Canada-US private-line data, voice and broadcasting services.

Public message (telegram) service is provided by UNITEL (formerly known as CNCP Telecommunications) on a monopoly basis. In some regions, UNITEL competes with the telephone companies in providing private-line voice and data services, including computer data, facsimile and telex.

Overseas telecommunication is provided by Teleglobe Canada, through a combination of international cable and satellite networks, supplying services such as telephone, telex, data communications, radio and television transmission.

Approximately 600 radio common carriers, and two national cellular-service providers, which are also part of the telecommunications industry, offer mainly paging, cellular and mobile-telephone services.

Statistics

Telephone Companies. Most Canadians now have the option of buying or renting telephones from either the telephone companies or independent vendors, but all telephones must meet prescribed standards. Canada is among the countries with the highest availability to basic telephone services in the world; 97.5 per cent of households had telephone service in 1987. Canadians made 36 billion local calls in 1987 and 2.2 billion long-distance calls, averaging 1,436 calls per person.

Radiocommunications. At the end of February 1988, there were 1,102,414 radio station licences in effect: 306,804 General Radio Service (GRS) or Citizen's Band (CB) radio licences; 43,205 licences for maritime mobile radio, used on ships; 103,940 base stations; 23,920 amateur radio licences; and 624,545 licences for mobile stations, including 16,620 for aircraft. Radio licences are issued for stations operated by federal, provincial and municipal agencies; stations on ships and aircraft registered in Canada; stations in land vehicles operated for public and private use; and GRS stations.

Broadcasting. Canadians are heavy users of radio and television. An estimated 98.7 per cent of Canadians had a radio in their homes in May 1988, while 96.1 per cent had an FM radio set. Almost 98.6 per cent had at least one television set in their homes; 50.2 per cent had more than one set; 94.5 per cent had colour-TV; and 32.6 per cent had more than one colour set. In 1988, 69 per cent of Canadian households received cable services, and 40.9 per cent of Canadian homes had cable converters, giving them access to between 12 and 35 TV channels. Nearly 26.3 per cent of Canadian homes subscribed to discretionary TV services (pay TV and specialty TV) delivered over cable systems.

More than 78 per cent of Canadians watch TV at least once every day. In fall 1989, the average Canadian watched 23.2 hours of TV and listened to 19.4 hours of radio broadcasting in one week. In 1989, Canadians watched or listened to broadcasting originated by 385 licensed AM radio stations, 303 FM radio stations and 135 television stations, and to programming carried by 1,310 cable television systems. Coverage was extended by 328 AM, 602 FM and 1,297 TV rebroadcasting stations.

The CBC operates coast-to-coast AM radio networks in both French and English, and its FM radio networks, in both languages, approach national distribution. Fifteen private

commercial stations are affiliated with the CBC's English or French AM networks. In Quebec, there are three private French-language AM radio networks: Télémedia, Radio-Mutuel and Réseau des Appalaches.

There are three national television networks: the CTV English-language network, and two CBC networks, one in English and one in French; plus Newsworld, an English-language satellite-to-cable all news channel. There are seven regional or provincial networks: ATV; Atlantic Satellite Network; Saskatchewan Telecommunications Network; Radio Quebec, TVA and the Réseau de télévision Quatre Saisons, which offer French-language programming across Quebec; and the privately-owned Global Communications Ltd. network, which serves parts of Ontario in English and owns stations in Western Canada. The provincial governments of Ontario, Alberta and British Columbia operate their own educational-TV networks.

Radio Canada International (RCI) is the shortwave service of the CBC. Its production studios and main office are in Montreal; its transmitters are located at Sackville, NB. RCI broadcasts daily in 14 languages to the USSR, Europe, Asia, Latin America, the Caribbean, the Middle East, Africa and the United States. Audience research indicates it has approximately 12 million regular listeners each week. RCI's primary purpose is to reflect Canada to the world — to produce programs that tell listeners what is happening in Canada,

Communications equipment in Holman Island, NWT.



and how Canadians feel about what is happening in the rest of the world. RCI also produces and distributes recordings for foreign AM and FM radio stations to use in their own programming. Between 1988 and 1989, it sent discs, tapes and cassettes to approximately 500 stations; these recordings represented a total of 4,000 program hours of spoken-word material (topical items about Canada) and 14,500 program hours of Canadian music (classical/serious, jazz, folk and pop).

Postal Service

The Canada Post Corporation was incorporated by the Canada Post Corporation Act passed by Parliament in 1981. The transition from a government department to a Crown corporation placed Canada's postal services on a similar, legal footing to that of other Crown corporations which also have a business mandate.

The objectives of Canada Post, as stated in the Canada Post Corporation Act, are to establish and to operate a postal service within Canada and between Canada and other postal administrations.

With a workforce of approximately 61,000 full- and part-time employees; a network of 29 major, mechanized mail processing plants; over 15,000 outlets (more than 60 per cent operated by private businesses) where postal products and services may be purchased; and a fleet of over 5,000 vehicles, Canada Post collects and processes over 8 billion pieces of mail and delivers them to almost 11 million addresses in every part of urban and rural Canada each year.

Canada Post operates a fleet of over 5,000 vehicles.





Medical researcher at the Montreal General Hospital.

HEALTH AND WELFARE

Social Context

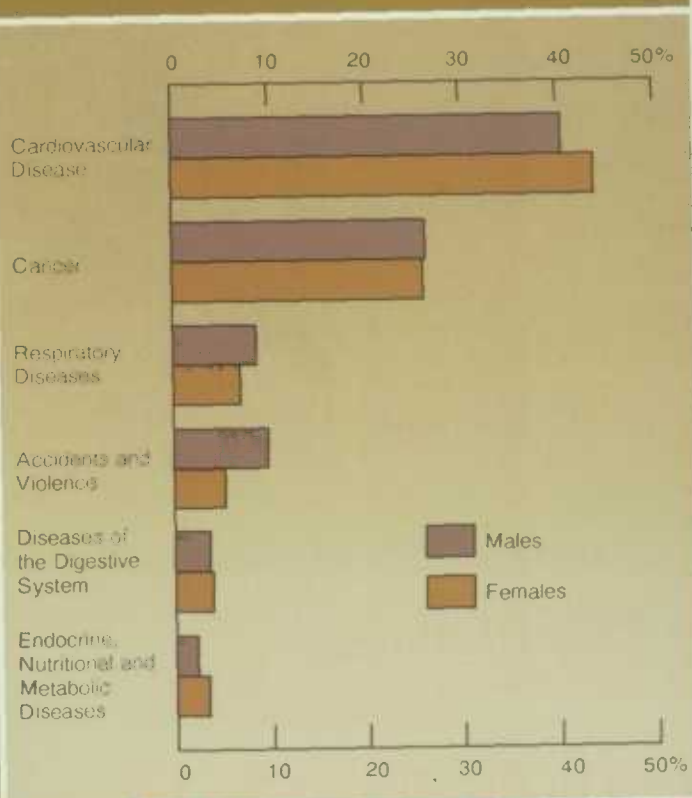
In Canada's growing and evolving society, the Department of National Health and Welfare, which is the principal federal ministry responsible for both health and welfare programs, strives to promote and preserve the health, social security and social welfare of the people of Canada.

The changing demography of Canada has had a significant impact on programs to enhance the health and welfare of Canadians. As a result of a general decline in fertility, Canada's population is aging. The proportion of older people is growing steadily and by 2031 almost 25 per cent of Canadians will be 65 and over, compared to the current 11 per cent. Life expectancy continues to rise, with Canada ranking among the top 10 countries in the world. The life expectancy of women exceeds that of men by 7.3 years — one of the largest life expectancy differences in western industrialized nations.

Sixty-one per cent of Canada's population rate their health as excellent or very good while only 3 per cent rate their health as poor. This rating of healthfulness is linked to income; 21 per cent of persons in the lowest income group feel their health is fair or poor, compared to 5 per cent in the highest income group.



The Leading Causes of Death, by Sex, 1987



Although the growth in average real family income slowed in the 1980s, the percentage of people below the low income cut-offs was 13.1 per cent in 1988, compared to 14.2 per cent in 1980. There are much greater proportions of single parent families and elderly unattached persons among those who live below the low income cut-offs.

In the 1980s, approximately 13 per cent of Canadians reported some level of disability; the rates increased with age, from 5 per cent for children to 45 per cent for seniors. About 40 per cent of disabled working-age adults were employed, compared to 70 per cent of the non-disabled. Approximately 16 per cent of disabled seniors lived in institutions; the rates increased with age.

The leading cause of death for men, heart disease, has declined over the past two decades. No similar decline has been observed for women. A major contributing cause of heart disease, smoking, has declined substantially over the past decade. This decline has been much more significant for men than women. In the late 1980s, about 30 per cent of men smoked compared to about 25 per cent of women.

At the end of 1988, there was one doctor (not counting interns and residents) for every 525 Canadians. The number of physicians in Canada is increasing at a rate that far exceeds population growth. Nevertheless, there remains an under-supply of physicians in the less populated regions of Canada. Hospital and long-term care facility use in Canada is greater, on a per capita basis, than most other western countries. In 1988, there were 1,217 hospitals operating in Canada which admitted over 3.7 million patients with an average length of stay of just over 14 days. The length of stay has been rising rapidly in recent years, particularly for persons 65 and over.

Health services are provided on the basis of need to all Canadians without user fees. Total health expenditures in 1987 were \$47.9 billion. Although health expenditures have been

Health care and medical services are provided at the Gijin Regional Hospital in Inuvik, N.W.T.



rising rapidly, they have been stable as a percentage of Gross Domestic Product (8.7 per cent in 1987).

Canada's welfare programs provide a wide range of benefits for the aged, the disabled and those with low incomes. In addition, benefits are provided to families in recognition of their added responsibilities. In 1987-88, governments spent \$59.8 billion on welfare programs. Of this amount, federal expenditures accounted for \$44.2 billion, provincial government spending was about \$14.8 billion and the remaining \$0.7 billion consisted of local government expenditures.

Federal Health Programs

The Department of National Health and Welfare has four branches to administer health-related programs.

The Health Protection Branch protects Canadians by defining, providing advice and managing risks to human health. These risks may be associated with food, drugs, medical devices, radiation-emitting devices, other consumer products, and with the man-made and natural environment. The branch also monitors the occurrence and cause of communicable and non-communicable diseases.

Ensuring access to health care, funding health research and promoting health is the responsibility of the Health Services and Promotion Branch. With respect to nationally insured health care services, the federal government provides contributions to the provinces and territories in the form of cash and tax transfers. In 1988-89, total federal contributions in support of provincial health programs amounted to some \$13.3 billion. In 1987, the Seniors Secretariat was created to support the new federal seniors initiative and the newly appointed Minister of State for Seniors.

A painting class for seniors, at Calgary's Kirby Centre.





Bicycling is one of the most popular recreational activities in Canada.

The Fitness and Amateur Sport Branch encourages increased participation in physical activity and supports the development of Canadian sport at the national and international level. Federal and provincial programs related to fitness and sport are included in the Leisure section.

The Medical Services Branch provides services in response to the health needs of such varied groups of clients as the Indian and Inuit peoples, public servants, certain groups of immigrants and refugees, the travelling public, the aviation industry, disaster victims and others.

Provincial Health Programs

Responsibility for the administration of hospital and medical insurance plans and/or the direct provision of other general health services rests with the provincial and territorial governments. Public insurance plans cover standard hospital care, all medically necessary physicians' services, as well as necessary drugs, supplies and diagnostic tests. In many cases, other health-related institutional and ambulatory care services are also provided by the



A technician of Bell Canada attends to the installation and maintenance of the telecommunications equipment at Sunnybrook Medical Centre in Toronto, Ont.

provincial ministries responsible for health. Increased attention is being placed on preventive services. For example, programs which address health problems such as AIDS, alcoholism and drug addiction, sexually transmitted diseases, and food poisoning have been undertaken often in co-operation with voluntary associations.

Federal Welfare Programs

A high level of income security is provided in Canada through a variety of federal programs.

The Canada Pension Plan (CPP) and Quebec Pension Plan (QPP) are contributory income security programs providing workers with a basic level of income in the event of retirement, disability or death. Both plans are financed from compulsory contributions by employers and employees and interest on funds invested. During 1988-89, CPP and QPP provided a total of \$11.1 billion to 3.0 million beneficiaries.

The Old Age Security (OAS), Guaranteed Income Supplement (GIS) and Spouse's Allowance (SPA) programs provide additional income security benefits to Canada's seniors. Under the OAS program, persons aged 65 years and over who meet the residence requirements receive a monthly pension. In 1988-89, \$11.0 billion in OAS pensions were paid to about 2.9 million persons. OAS pensioners with little or no other income may qualify for GIS benefits. Approximately 1.3 million persons received a total of \$3.8 billion through the Guaranteed Income Supplement program in 1988-89. In addition, the Spouse's Allowance program provides benefits for low income persons aged 60 to 64 who are either spouses of OAS pensioners, or widows or widowers. In 1988-89, \$473 million were paid to about 133,700 beneficiaries.

Family Allowances (FA) are paid monthly on behalf of children under the age of 18 whose parents/guardians meet certain residence requirements. A Special Allowance is payable on behalf of a child under 18 years of age who is maintained by a welfare agency, a government department or an institution. Provinces may vary the rate of the regular Family Allowances, subject to certain conditions; Quebec and Alberta have chosen to do this. In 1988-89, \$2.6 billion were paid to roughly 6.6 million children in 3.7 million families in Canada.

The federal Child Tax Credit program, administered by Revenue Canada Taxation, provides additional benefits to low- and middle-income families. Payments are made through the income tax system to eligible families on behalf of children who are entitled to FA. In 1987, Child Tax Credits totalling approximately \$1.6 billion were paid on behalf of 4.6 million children in 2.3 million families.

The Department of National Health and Welfare also administers, through its Social Service Programs Branch, the Canada Assistance Plan (CAP), the Vocational Rehabilitation of Disabled Persons Program (VRDP), and the Alcohol and Drug Treatment and Rehabilitation Program. Under CAP, the federal government shares 50 per cent of costs incurred by the provincial and territorial governments in providing direct financial assistance and social services to persons in need. Social services include day care, homemakers and home support, counselling, adoption and vocational rehabilitation services. VRDP shares in 50 per cent of the costs of comprehensive vocational rehabilitation services. In March 1989, nearly 1.9 million Canadians received direct financial assistance from provincial programs shared under CAP. Total payments to the provinces for financial assistance, social services and vocational rehabilitation for the 1988-89 fiscal year were \$5.2 billion.

Other programs support the development of social services in Canada, the prevention of family violence, international adoptions and the provision of meaningful activities for elderly Canadians.

The seniors program at the University of Winnipeg has been in operation for 18 years and offers courses in the arts, business, French, Spanish and computer science.

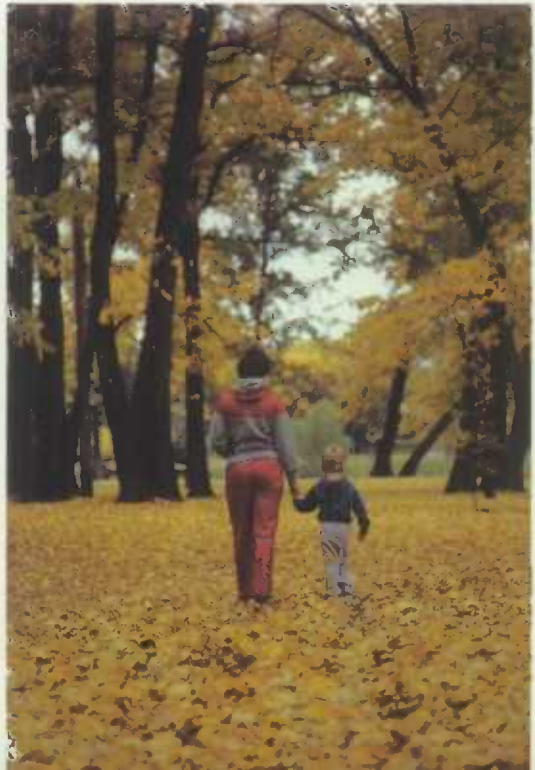


Provincial Welfare Programs

Each province and territory administers its own financial assistance program to provide income for basic requirements when all other resources have been exhausted. Benefits include direct payments for basic needs, special needs and medical care expenses. To complement these benefits, most provinces also offer employment and training initiatives to help integrate these clients back into the work force and ensure their self-sufficiency.

The provinces also provide a wide range of social services for financial assistance clients, families, the aged and others in need of support. Services include homemakers, day care, counselling, vocational rehabilitation, community development, and the care, protection and placement of children. Many of these are contracted to, or supplemented by programs through voluntary organizations. Financial assistance, as well as related employment and social services are cost-shared with the federal government through the Canada Assistance Plan.

Most provinces also operate income supplementation and tax grant/credit programs for low-income and/or elderly residents. Many of the income supplements are provided to low-income seniors already in receipt of federal GIS benefits. Other programs provide a range of benefits to assist eligible individuals and families with meeting the costs of property and/or school taxes, rental costs and general costs of living.





Daffodils for the national cancer campaign: one shipped each spring from Bradner, BC, in the fertile Fraser Valley.

Health and Welfare Research

Health and welfare research in Canada consists of a wide range of activities undertaken by federal and provincial governments, non-governmental organizations, universities, hospitals and individuals, and is strongly supported by an extensive research program within the Department of National Health and Welfare.

Health research includes such areas as the exploration of new approaches for applying technologies and scientific discoveries to the health system, basic medical research in human biology and health sciences, as well as research on the prevention and diagnosis of diseases.

Research is also ongoing on matters such as disability, nutrition, demography, elder abuse, shelter needs, adoption, family violence and family services.

Overall, the services and benefits being provided to Canada's health and welfare sector are well complemented by continuing research efforts.

International Health and Welfare

Canada actively participates in international health and welfare matters including the work of the World Health Organization, the Pan American Health Organization, the United Nations Commission on Narcotic Drugs, the International Labour Organization, the International Social Security Association, the Organization for Economic Co-operation and Development, the United Nations and many others. In addition, Canada has signed reciprocal Social Security agreements with a number of countries to ensure benefits under CPP and OAS/GIS/SPA.

Veterans Affairs

The Department of Veterans Affairs provides support for the economic, social, mental and physical well-being of veterans, certain civilians, and their dependents. Services, including pensions and war veterans' allowances, medical treatment, counselling, and educational assistance to children of the war dead, are provided by Veterans Affairs and the three agencies associated with it — the Canadian Pension Commission, the Veterans Appeal Board, and the Bureau of Pensions Advocates. The department is also committed to ensure, through commemoration activities, that the achievements and sacrifice made by Canadians for their country in time of war are not forgotten.

Veterans Affairs Program

Federal legislation provides benefits to veterans (and certain civilians), their dependents and survivors. These benefits include: medical and dental services; prosthetic appliances; income support programs; emergency financial assistance; counselling services for veterans, their dependents and survivors; educational assistance for veterans and orphans; and burial grants for veterans. The Veterans Independence program, introduced in 1981, aims to maintain or improve the level of independence and self-sufficiency of an aging veteran population. Benefits for eligible veterans include, nursing, personal care, housekeeping, groundskeeping and transportation costs. Where direct assistance is not possible, a referral service to other sources of aid is provided.

At a commemoration service, at Groesbeek Canadian War Cemetery, Dutch school children lay flowers at the base of the Cross of Sacrifice in the Netherlands, May 7, 1990, the 45th Anniversary of the liberation of the Netherlands.





War Memorial in Ottawa, with tulips from the Netherlands in the foreground. Following her stay in Canada during WWII, Princess Juliana of the Netherlands sent 100,000 tulip bulbs to Ottawa. Thousands of tulip bulbs have been sent from the Netherlands each year since 1945 which add to the beauty of Canada's capital.

Pensions Program

The Canadian Pension Commission administers the Pension Act, the legislation under which pensions are awarded as compensation for disability or death related to military service. This Act also provides for the payment of pensions for surviving dependents. War veterans' pensions (disability and death benefits) totalling \$814 million were paid in 1987-88. Social and income support accounted for another \$344 million.

The Veterans Appeal Board serves as a final court of appeal for veterans, ex-servicemen and their dependents in all matters concerning disability pensions and the interpretation of the Pension Act, the War Veterans Allowance Act and Part XI of the Civilian War Pensions and Allowances Act.

The Bureau of Pensions Advocates provides a legal aid service for persons seeking to establish claims, relating to military service, under the Pension Act and allied statutes and orders. The relationship between the bureau and applicant or pensioner is that of solicitor and client. Its service is highly decentralized, with advocates and support staff located in 21 cities across Canada.

GOVERNMENT AND LEGAL SYSTEM

Government

The Executive. Canada is a constitutional monarchy. The executive government “is vested in the Queen” of Canada, our Head of State. In strict law, all the powers of the Government of Canada flow from the Crown. In fact, they are always exercised on the advice of ministers of the Crown who are responsible to and have the confidence of the House of Commons, which is elected by the people.

The executive authority vested in the Queen is exercised by her personal representative in Canada, the Governor General, whom she appoints on the advice of the Prime Minister.

Except in extraordinary circumstances, the Governor General must act on, and is bound by, the advice of responsible ministers. On certain matters, such as the appointment of ministers and members of the Senate, the Governor General acts on the individual advice of the Prime Minister. The Prime Minister also recommends when Parliament shall meet and when it shall be dissolved for a general election (although one must be held at least once every five years).

For most matters, the Governor General acts on the collective advice of ministers. Formally, the Governor General acts on the advice of the “Queen’s Privy Council for Canada”, and such actions are said to be taken by the “Governor General in Council”,

The Open Skies conference, held in Ottawa in February 1990, with foreign ministers from NATO and Warsaw Pact nations.





Canada's new Governor General Ray Hnatyshyn waves from the landau following the formal ceremony on Parliament Hill, Jan 29, 1990.

as provided in the Constitution Act, 1867. For example, the Governor General in Council appoints judges of the superior, district and county courts, Lieutenant Governors of the provinces, deputy ministers of government departments and other senior officials.

Members of the Privy Council are appointed for life by the Governor General on the Prime Minister's recommendation; they include all Cabinet ministers, all former ministers and various distinguished individuals appointed as a mark of honour. It is to some extent an honorific body; its practical importance being that membership in it is an essential requirement for holding ministerial office, and that only Privy Councillors currently holding ministerial office may offer binding advice to the Governor General.

The Cabinet and Prime Minister derive their powers from conventions rather than the law of the Constitution. The Cabinet's authority derives from it being a committee of the Privy Council drawn by the Prime Minister from Privy Councillors currently holding ministerial office. It is the collective decision-making forum for reaching a final consensus

on important government matters, under the leadership of the Prime Minister. The Prime Minister, who is commissioned by the Governor General to form a Government, is thus responsible for providing the cohesion and direction necessary for retaining the unity of the Ministry and the confidence of Parliament.

The Legislature. Parliament consists of the Queen, the Senate and the House of Commons. The Senate and the House of Commons have identical legislative duties and powers, with the exception that financial bills must originate in the Commons. The Senate has 104 seats: 24 from Ontario, 24 from Quebec, 10 each from Nova Scotia and New Brunswick, 4 from Prince Edward Island, 6 from Newfoundland, 6 from each of the four western provinces, 1 from the Yukon and 1 from the Northwest Territories. Senators are appointed by the Governor General on the advice of the Prime Minister. They must retire at age 75.

The House of Commons has 295 seats: 7 from Newfoundland, 11 from Nova Scotia, 10 from New Brunswick, 4 from Prince Edward Island, 75 from Quebec, 99 from Ontario, 14 each from Manitoba and Saskatchewan, 26 from Alberta, 32 from British Columbia, 1 from the Yukon and 2 from the Northwest Territories. Members are elected by obtaining a plurality of votes in single-member constituencies. Every adult Canadian citizen, with

The Queen Mother's royal visit to Ottawa in July 1989 revived memories in Canada of her visit 50 years earlier, in 1939, when she and the late King George VI toured Canada. The Queen Mother celebrated her 90th birthday on Aug. 4, 1990.





Soviet leader Mikhail Gorbachev talks to the press during a two-day visit to Ottawa, in May 1990, for a brief series of talks with Prime Minister Brian Mulroney.

some exceptions, (such as people in jail) may vote. The number of constituencies allotted to each province is computed according to the democratic principle of representation by population, on the basis of a complex formula contained in the Constitution Act, and is readjusted after each decennial census. No province can have fewer members in the House of Commons than in the Senate. The Chief Electoral Officer is responsible for the representation process.

In the House of Commons, all bills pass through three stages known as "readings". The first, at which time the bill is tabled, is purely formal. On the second, the House gives the bill consideration in principle and, if satisfied, refers it to a committee, where it is dealt with clause by clause. The committee then reports the bill to the House, with or without amendments, and at this stage any member may propose amendments, which are debatable. Third reading then follows. If the bill passes this last stage, it is sent to the Senate, where it goes through a similar procedure, following which it receives Royal Assent, thereby completing the process by which legislation is enacted.

The Canadian Constitution would be unworkable without political parties. Yet parties are almost unknown to Canadian law (an exception being the Election Expenses Act), a notable example of the conventions of the Constitution. Political parties and party discipline make possible a stable government, capable of carrying its policies into effect, and provide for continuous organized criticism of that government. They also make possible an orderly transfer of power from one government to another. They help to educate the electorate on public affairs and reconcile the country's divergent elements and interests.

The Progressive Conservative Party goes back to a coalition of moderate Conservatives and moderate Reformers in the province of Canada in 1854, six years after responsible government had been won. It was broadened into a national party in 1867 when Sir John A. Macdonald, the first Prime Minister of the Canadian federation, formed a Cabinet of eight Conservatives and five Liberals or Reformers, whose followers soon came to be known as "Liberal-Conservatives"; the present name was adopted in 1942. The Liberal Party has its roots in the pre-Confederation Reform parties that struggled for the establishment of parliamentary responsible government in the 1840s. The New Democratic Party dates from 1961 when the major trade union federation (the Canadian Labour Congress) and the Co-operative Commonwealth Federation (CCF) joined forces to launch a new party; the CCF had been founded in 1932 by a group of farmer and labour parties in the western provinces.

World leaders Delors, Andreotti, Kohl, Mitterand, Bush, Thatcher, Mulroney and Kaifu attending the 1990 Economic Summit in Houston, Texas, July 1990.





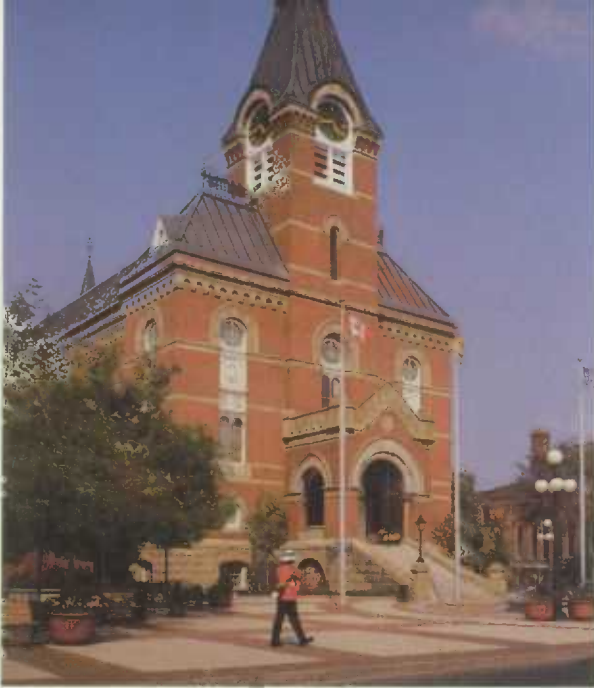
Legislative building in Quebec City, Que.

Provincial and Territorial Government

In each province the machinery of government is substantially the same as that of the central government, except that no province has an upper house. The Crown is represented by a Lieutenant Governor. In each province and territory, there is at least one municipal association representing the interests of local governments at the provincial/territorial level.

The two territories, the Yukon and the Northwest Territories, come directly under the Government and Parliament of Canada but enjoy a growing degree of self-government.

The Government of the Yukon includes a federally appointed Commissioner who assumes certain functions of a Lieutenant Governor, an Executive Council which corresponds to a provincial cabinet, and a 16-member elected Legislative Assembly. The Executive Council consists of the Premier, who is the leader of the majority party in the Assembly, and four other members of the majority party in the House who are assigned portfolio responsibilities. The jurisdiction of the Legislature, or Commissioner in Council, is subject to federal legislation. The Legislature can enact laws relating to most subjects of a provincial nature other than natural resources.



City Hall in Fredericton, NB.

The Northwest Territories is administered by a Commissioner, appointed by the Government of Canada, and an elected Legislative Assembly of 24, with an Executive Council composed of eight members of the Assembly. As in the Yukon, the Commissioner functions as a Lieutenant-Governor.

Municipal Government

Municipal government, being a matter of provincial jurisdiction, varies considerably. All municipalities (cities, towns, villages, rural municipalities and communities) are governed by elected councils. In Ontario and Quebec there are also counties, which group smaller municipal units for certain purposes; both these provinces and British Columbia have set up regional municipalities for metropolitan areas.

In general, the municipalities are responsible for police and fire protection, local jails, roads and hospitals, water supply and sanitation, and schools (often administered by distinct boards elected for this purpose). They get their revenues mainly from taxes on real estate, fees for permits and licences and grants from the provinces.

The Constitution

The Canadian federation was created by the British North America Act (BNA) of 1867, an Act of the British Parliament. After more than 50 years of federal-provincial negotiations, the Constitution was "patriated" with the proclamation of the Constitution Act, 1982, on April 17, 1982.

The Constitution Act and its amendments provide only a skeletal framework of government, which is filled out by judicial interpretation, by various Acts of Parliament and of the legislatures and, most of all, by custom or convention. The powers of the Crown are exercised, as the Fathers of Confederation put it, "according to the well understood principles of the British Constitution" — that is, according to the usages and conventions under which the British system of responsible government evolved. Canada has inherited and elaborated on these conventions to suit its own needs.

The BNA Act, now renamed the Constitution Act, 1867, is the core document of our written Constitution. It created the federation, the provinces, the territories and the fundamental institutions of our nation. It provided the basic elements of a federal state, with a strong central government and Parliament, but also with a necessary level of autonomy for each of the federating provinces. The Act also set out the distribution of powers between Parliament and the provincial legislatures.

Distribution of Powers. Under the Act, the Canadian Parliament has the power to "make laws for the peace, order and good government of Canada in relation to all matters . . . not . . . assigned exclusively to the Legislatures of the provinces". The Act also enumerates various heads of federal legislative power, including: defence; raising money by any kind of taxation; regulation of trade and commerce; navigation and shipping; fisheries; currency and banking; bankruptcy and insolvency; interest; patents and copyrights; marriage and divorce; criminal law and criminal procedure; penitentiaries; inter-provincial and international steamships, ferries, railways, canals and telegraphs; and any "works" situated within a province that are declared by Parliament to be "for the general advantage of Canada". An amendment in 1940 added unemployment insurance to the federal jurisdiction.

Each provincial legislature has exclusive power over: natural resources; direct taxation for provincial purposes; prisons; hospitals, asylums and charities; municipal institutions; licences for provincial or municipal revenue; local works and undertakings; incorporation of provincial companies; solemnization of marriage; property and civil rights; administration of justice; matters of a merely local or private nature; and education, subject to certain safeguards for denominational schools in Newfoundland and Protestant or Roman Catholic schools in the other provinces. Judicial decisions have given "property and civil rights" a very wide scope, including most labour legislation and much of social security.

The Act of 1867 gave Parliament and the provincial legislatures concurrent power over agriculture and immigration, with the federal law prevailing over the provincial in case of conflict. Amendments have since provided for concurrent jurisdiction over pensions, but with provincial law prevailing in case of conflict.

Fundamental Rights. The Constitution Acts of 1867 and 1982 guarantee certain fundamental language rights. The English and French languages enjoy equal status in all the institutions of the Parliament and Government of Canada and of the legislature and government of New Brunswick. English and French may be used in the debates of the legislatures and in any pleading or process of the courts of Quebec and Manitoba, and must be used in keeping the records and journals of the legislatures of those provinces. In addition, the Constitution of Canada also provides for language of educational rights for the linguistic minority, whether anglophone or francophone, in each province or territory, and sets out certain educational rights for some denominational groups. Moreover, the rights of Canada's aboriginal peoples are recognized and affirmed in the Constitution Act, 1982.

Finally, the Charter of Rights and Freedoms, contained in the Constitution, also protects the fundamental freedoms and the democratic, mobility, legal and equality rights of all Canadians.

Amendments. The unanimous consent of Parliament and the legislatures of all the provinces is required for amendments to the Constitution respecting matters such as the office of the Queen, the Governor General or the Lieutenant Governor of a province, the composition of the Supreme Court, the use of English or French, and the amending procedures themselves. For other constitutional amendment of general application, the consent of Parliament and of seven provinces representing at least 50 per cent of the population is required. However, where an amendment derogates from the legislative powers, the proprietary rights or any other rights or privileges of the legislature or government of a province, the legislative assembly of a province can express its dissent and the amendment will not have effect in that province. In such a case, if the amendment is one that transfers legislative powers to Parliament relating to education or other cultural matters, Canada shall provide reasonable compensation to any province to which the amendment does not apply.

An amendment to the Constitution of Canada that applies to one or more, but not all, provinces requires the assent of the federal Parliament and of the concerned provinces. However, the federal Parliament can act alone to amend the constitutional provisions relating to the Government of Canada, or Parliament, and each provincial legislature can do the same to amend the constitution of the province.

Finally, the Senate enjoys a 180 day suspensive veto over all amendments requiring the assent of the federal Parliament and at least one provincial legislature.

Prime Minister Mulroney and provincial premiers at final meetings of the Meech Lake Accord conference.





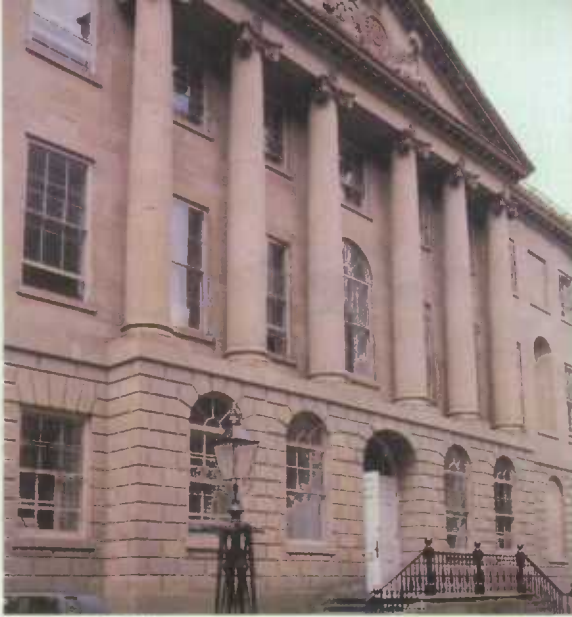
Legislative building in Edmonton, Alta.

The Legal System

The Law and Law-making. The law in Canada consists of statutes and judicial decisions. There is also a large body of case law that comes mainly from English common law and consists of legal principles evolved by the decisions of the superior courts over a period of centuries. The English common law came to Canada with the early English settlers and is the basis of much of the federal, provincial and territorial law. The province of Quebec, however, was originally settled by French inhabitants who brought with them civil law derived from French sources. Thus civil law principles govern such matters as personal, family and property relations in Quebec; the province has developed its own Civil Code and Code of Civil Procedure governing these and other matters and has, in effect, adapted the French civil law to meet Quebec's needs.

A vast body of subordinate legislation contained in regulations adopted by appropriate authorities, and in bylaws made by municipalities, is issued under authority conferred by either Parliament or the provincial legislatures.

Statutes enacted by the federal Parliament apply throughout the country; those enacted by provincial legislatures apply only within the territorial limits of the provinces. Hence,



Nova Scotia Legislature.

variations may exist from province to province in the legal rules regulating an activity governed by provincial law.

The main body of Canadian criminal law, being federal, is uniform throughout the country. Although Parliament has exclusive authority under the Constitution Act, 1867 to enact criminal law, the provincial legislatures have the power to impose fines or punishments for breaches of provincial laws.

Most Canadian criminal law is contained in the Criminal Code, which is derived almost exclusively from English sources. Other federal statutes provide for the punishment of offences committed thereunder by fine or imprisonment or both. In any event, whether an offence be serious or minor, it is a fundamental principle of Canadian criminal law that no person may be convicted unless it has been proved beyond all reasonable doubt to the satisfaction of either a judge or a jury that he or she is guilty of the offence.

Law Reform. Many of the provinces now have law reform commissions that inquire into matters relating to law reform and make recommendations. At the federal level, the Law Reform Commission of Canada studies and reviews federal law with a view to making recommendations that reflect society's changing needs and standards.

The Courts and the Judiciary

Courts play a key role in the process of government. Acting through an independent judiciary, the courts declare what the law is and apply it to resolve conflicting claims between individuals, between individuals and the state and between the constituent parts of the Canadian federation.

The Judiciary. Because of the special function performed by judges in Canada the Constitution Act, 1867 guarantees the independence of the judiciary of superior courts.



Parliament Buildings, Ottawa, Ont.

This means that judges are not answerable to Parliament or to the executive branch of the government for decisions rendered. A federally appointed judge holds office during good behaviour but is removable from office by the Governor-in-Council on the address of the Senate and House of Commons; in any event, he or she ceases to hold office at age 75. The tenure of judges appointed by provinces to inferior courts is determined by the applicable provincial laws. No judge, whether federally or provincially appointed, may be subjected to legal proceedings for any acts done or words spoken in a judicial capacity in a court of justice.

The Courts. In Canada, the power to create courts is divided. Some courts are created by Parliament (for example, the Supreme Court of Canada) and others by provincial legislatures (for example, superior courts, county courts and many lesser provincial courts). However, the Supreme Court of Canada and the provincial courts are part of an integrated whole; thus, appeals may be made from the highest courts of the provinces to the Supreme Court. Generally speaking, federal and provincial courts are not necessarily given separate mandates as to the laws that they administer. For instance, although criminal law is made by the Parliament of Canada, it is administered mainly in provincial courts.

Federal Courts. Federal courts in Canada include the Supreme Court of Canada, the Federal Court of Canada and various specialized tribunals such as the Tax Court of Canada, the Court Martial Appeal Court and the Immigration Appeal Board. These courts and tribunals are created by Parliament.

The Supreme Court, established in 1875, is the highest appeal court of Canada in civil and criminal matters. At least three of its nine judges must come from Quebec, a requirement



Royal Canadian Mounted Police training headquarters at Regina, Sask.

added because of the special character of Quebec civil law. Under conditions determined by the statute law of Parliament, the Supreme Court entertains appeals from the provincial courts of appeal and from the Federal Court. It also gives advisory opinions to the federal government when asked under a special reference procedure.

The Federal Court of Canada, created in its present form in 1970, deals with: taxation cases; claims involving the federal government (for instance, claims against the federal government for damage caused by its employees); cases involving trademarks, copyrights and patents; admiralty law cases; and aeronautics cases. It has two divisions, a Trial Division and an Appeal Division; the Appeal Division hears appeals from decisions rendered by the Trial Division and by many federal boards and agencies.

Provincial Courts. Provincial courts are established by provincial legislation and their names vary from province to province; nevertheless, their structures are roughly the same. Each province has inferior courts, such as family courts, juvenile courts, magistrates' courts and small debts courts; these deal with minor civil and criminal matters and the great majority of cases originate and are decided in them. With the exception of the province of Quebec, all provinces also have systems of county or district courts. These courts have intermediate jurisdiction and decide cases involving claims beyond the jurisdiction of the small debts courts. Although they do not have unlimited monetary jurisdiction, they also hear all but the most serious criminal cases, and have a limited jurisdiction to hear appeals from decisions of magistrates' courts. The highest courts in a province are its superior courts, which hear civil cases involving large sums of money and criminal cases involving serious offences.

The Legal Profession

In common law jurisdictions in Canada, practising lawyers are both called as barristers and admitted as solicitors. In Quebec the legal profession is divided into the separate branches of advocate and notary. In all cases admission to practice is a provincial matter.

Legal Aid. In recent years all provincial governments have established publicly funded legal aid programs to assist persons of limited means in obtaining legal assistance in a number of civil and criminal matters, either at no cost or at a modest cost, depending on the individual's financial circumstances. These programs vary from province to province but all are intended to ensure that economically disadvantaged Canadians have access to justice.

Grants and Contributions. In addition, the federal Department of Justice administers grants and contributions programs whose purpose is to promote and maintain basic standards in the justice system and to improve the delivery of justice services to the public.

The Police

The Constitution Act, 1867 assigns to the provinces the responsibility for judicial administration within their boundaries, but police forces have nevertheless been created by federal, provincial and municipal governments.

RCMP Musical Ride at their Rockcliffe, Ont. training station.



Ontario and Quebec have created provincial forces that police areas of the province not served by municipal forces. Provincial police duties include providing police and traffic control over provincial highways, and assisting municipal police in the investigation of serious crimes.

The federal government maintains the Royal Canadian Mounted Police (RCMP). This civil force was originally created in 1873 as the North West Mounted Police. Today the RCMP is the sole police force in the Yukon and the Northwest Territories and is employed by eight provinces and over 190 municipalities to carry out provincial and municipal responsibilities within their borders.

The RCMP enforces many federal statutes such as the Narcotic Control Act and Immigration Act with the greatest emphasis on the Criminal Code by virtue of its provincial and municipal contracts. Through the Canadian Police Information Centre (CPIC) the RCMP provides a central information service to all recognized Canadian police agencies about such matters as stolen property, missing persons, fingerprints and criminal records. The RCMP is responsible for the protection of government property and the safekeeping of visiting dignitaries and it represents Canada in the International Criminal Police Organization, which Canada joined in 1949.

The Correctional Service of Canada

Under the provisions of law, the Correctional Service of Canada (CSC) is responsible for offenders sentenced to two years or more and for their successful return to the community. These responsibilities extend from the time an offender is sentenced to the expiry of the sentence.

The Commissioner of Corrections directs the CSC through its national headquarters in Ottawa and five regional headquarters. At the operational level, CSC manages 55 major institutions and 12 parole districts which collectively are responsible for 13,000 inmates and 9,000 parolees.

Sixty per cent of the inmate population are serving their first term in a federal institution and a total of 60 per cent are serving sentences for non-violent crimes. Over 70 per cent of the offenders, supervised on full parole, complete their parole period successfully.

The National Parole Board

The National Parole Board (NPB) has exclusive authority to grant, deny, terminate, or revoke parole for offenders in federal, territorial, and provincial institutions in provinces that do not maintain a provincial parole board. Federal inmates are those serving a sentence of two years or more; provincial inmates serve sentences of less than two years. At present, provincial boards exist in Quebec, Ontario and British Columbia. The NPB has jurisdiction over the granting of conditional release for all federal offenders and for provincial inmates in the seven remaining provinces and the two territories.

The NPB as part of the criminal justice system, makes independent, quality conditional release decisions and clemency recommendations. The board, by facilitating the timely reintegration of offenders as law-abiding citizens, contributes to the protection of society.



RCMP Sgt Vic Gorman, one of four certified blood-stain analysts in Canada, uses geometry and a calculator to analyse bloodstain patterns.

The NPB is composed of up to 36 full-time members appointed for up to 10 years by the Governor in Council upon the recommendation of the Solicitor General. In addition to the full-time members, temporary members, also Governor-in-Council appointees, stand in for an absent member or assist with heavy case loads. Community board members may also be appointed to participate in hearings on cases involving life or indeterminate sentences.

Conditional release decisions are made by board members acting out of the five regional offices located in Moncton, Montreal, Kingston, Saskatoon and Abbotsford.

The Appeal Division, located at NPB headquarters in Ottawa, is responsible for the re-examination of decisions and making recommendations on applications for pardons and clemency. Four individuals appointed to the board serve as members of the Appeal Division. The Parole Act authorizes federal inmates to request a re-examination of adverse decisions. Most decisions of the NPB are appealable to the Appeal Division of the board. In general, the Appeal Division can affirm an original decision, substitute its own, or order a new review providing written reasons to the inmate.

EXTERNAL RELATIONS AND DEFENCE

External Affairs

The Department of External Affairs has three primary functions: to advise the government on foreign policy, foreign trade, development assistance, international defence and economic matters, co-ordinate implementation of the government's policies and programs in these areas, represent Canada in other countries and in international organizations, and negotiate international agreements; to provide consular assistance to Canadians travelling or living abroad and to provide immigration services to persons intending to come to Canada; and to promote Canada and its interests abroad.

The department headquarters is in Ottawa. In 1989, there were 105 diplomatic and consular posts in 79 countries; many of these posts are accredited to two or more governments, thus permitting Canada to maintain diplomatic relations with an additional 86 countries. Canada also had 50 consulates headed by honorary consuls. In addition, in 1989, there were 104 resident diplomatic missions in Ottawa and 45 non-resident accreditations.

A Canadian diplomatic mission in a Commonwealth country is designated as a high commission rather than an embassy. Consular posts, which attend primarily to Canada's trade relations or consular responsibilities, are headed by consuls-general or consuls.

The Department of External Affairs building in Ottawa.





Canadian Embassy in Washington DC.

Canada also has 12 permanent and separate missions accredited to a number of international organizations, including: the United Nations (UN) in New York and Geneva; the European Communities (EC) and the North Atlantic Treaty Organization (NATO) in Brussels; the Organization for Economic Co-operation and Development (OECD) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris; and the Organization of American States (OAS) in Washington. Canada is also a member of the Commonwealth and of La Francophonie with headquarters in London and Paris respectively.

The department works actively in international trade, a large and rapidly growing component of Canada's national income, affecting nearly every sector or region of Canada. Potential and present Canadian exporters, when travelling abroad, can benefit from the services of trade commissioners who work in approximately 95 posts around the world.

The annual report of the department sets out the goals and achievements of Canadian foreign policy from country to country, from region to region and in the fields of international law, disarmament and arms control, energy, trade and international economic affairs, social and humanitarian affairs, international security and other issues.

Services to Canadians

Consular assistance is one of the primary functions of Canada's embassies and other missions abroad and involves helping Canadians travelling or residing outside the country.



School for disabled children in New Delhi, India, a CIDA project, with its part with Canadian funds.

In 1989, consular personnel handled close to 579,000 cases ranging from the issuance of passports (approximately 73,750) to special services in the event of death abroad (1,140), hospitalization (1,764), financial difficulties (2,683) and imprisonment due to drug-related or other offences (865).

Passports. In 1989, approximately 1,096,500 passports were issued under the authority of the Department of External Affairs. Passports, certificates of identity, and refugee convention travel documents are issued through regional passport offices across Canada and Canadian missions abroad.

Assistance in International Legal Matters. Requests for assistance in international legal matters, such as pressing claims against or involving foreign governments are dealt with by the department's bureau of legal affairs. In the area of private international law, the bureau offers a variety of services to facilitate legal proceedings involving Canadian and foreign jurisdictions on the basis of conventions or by arranged procedures.

Canadian International Development Agency (CIDA)

CIDA administers most of Canada's official development assistance program which amounted to \$2.9 billion in 1988-89. Canada provides assistance to over 100 developing countries, with most efforts concentrated in approximately 30. The broad objective of the program is to help Third World countries meet the basic needs of their people and move toward self-reliance.

Assistance is provided through two main channels. In 1988-89, \$1,429 million was disbursed in the National Initiatives Program under agreements between Canada and the recipient countries for the financing of development projects. The funds, provided as grants, are used for various projects including infrastructure projects, rural and agricultural development, food aid, lines of credit and technical assistance. In 1988-89, the funds were disbursed as follows: Asia \$364.3 million; anglophone Africa \$226.6 million; francophone Africa approximately \$199.4 million; and the Americas \$154.4 million. Included in National Initiatives assistance was approximately \$243 million in food aid, \$75.3 million in humanitarian assistance, \$76.8 million in scholarships and related costs, and \$61.1 million for Petro-Canada International Assistance Corporation.

In the Partnership Program, through multilateral programs (\$914.8 million in 1988-89), Canada supports the development efforts of some 85 international organizations, including United Nations agencies, development banks, humanitarian institutions and other international groups seeking solutions to the problems of world development.

Special programs support the initiatives of Canadian non-governmental organizations and institutions, playing an active role in international development. In 1988-89, \$243.7 million was provided to over 400 organizations and institutions (including churches, service clubs, co-operatives, unions and universities) in support of some 3,500 projects.

Medical clinic, a CIDA project in Ethiopia.



The Business Co-operation Program encourages Canadian firms to create joint ventures with Third World business and to transfer technology to developing countries. In 1988-89, \$60.6 million was used to support more than 880 projects in progress by 450 firms.

Canadian Executive Service Organization (CESO)

CESO is a private, non-profit, Canadian corporation, founded in 1967 by Canadian public and private sectors. A board of directors determines the policy of the corporation. With nearly 3,000 qualified, experienced Canadian men and women, CESO aims to supply professional and technical knowledge to governmental, industrial or other organizations in developing countries and to aboriginal people in Canada. CESO operations include two major programs: the overseas program within developing countries of the world and the Canadian Native Program throughout Canada. CESO volunteer consultants receive no salary but all travel and living expenses are covered. Overseas projects average two to three months in length while projects for the Canadian Native Program average one to two days to two weeks. Most native projects are within commuting distance of the volunteer consultant's home.

CESO is funded by the Canadian International Development Agency, (CIDA), Indian and Northern Affairs Canada (INAC), provincial/territorial governments, over 300 Canadian corporations and several hundred individuals.

CUSO

CUSO recruits Canadians experienced in trades, agriculture, fisheries, forestry, education, health, business and technology to pass on their skills in the Third World and in return learn about a different culture and lifestyle. Since 1961, CUSO has placed more than 9,000 volunteers of all ages on two-year contracts in developing countries. The overseas governments

A CUSO nurse treats a young patient in Papua, New Guinea.





Women and children in developing countries often spend many hours each day collecting enough water for drinking, cooking and washing. IDRC has financed the development of a reliable handpump, such as this pump in Malaysia, that can be easily repaired locally and can be cheaply manufactured in developing countries.

or agencies requesting assistance pay the worker's salary at local rates. CUSO, an independent, non-profit organization, pays travel, medical/dental/life insurance, orientation, and language training costs.

CUSO is also involved in funding an increasing number of self-help projects overseas and in developmental education at home. A substantial part of the organization's finances comes from the Canadian International Development Agency (CIDA), the balance being contributed by individuals, corporations, foundations, community groups and provincial governments.

International Development Research Centre (IDRC)

IDRC is a public corporation created by an Act of Parliament in 1970. Although IDRC is funded entirely by Parliament, to which it reports annually, its operations are guided by a Board of Governors.

The centre supports scientific research projects in developing countries. IDRC also promotes co-operation between researchers in developing countries and their counterparts in Canada — whether academic, governmental or private. Financial and professional support are offered by IDRC in fields such as agriculture, health, social sciences, information sciences, earth and engineering sciences, training, and implementation of research results.

IDRC's headquarters is in Ottawa. The centre also has six regional offices located in Montevideo, Cairo, Dakar, Nairobi, New Delhi and Singapore.

National Defence

To ensure that Canada remains secure and independent, Canadian Forces are committed to collective security and defence arrangements with Canada's allies in the North Atlantic Treaty Organization (NATO); with the United States under a series of bilateral agreements including the North American Aerospace Defence Command (NORAD) agreement; with the United Nations in various peacekeeping and observer roles; and in the maintenance of Canada's ability to function as a sovereign state within its own territory and the contiguous water areas under Canada's jurisdictional authority.

Canada's principal contribution in Europe includes a division of land forces which, in a time of crisis, would be assigned to the Central Army Group Commander's tactical reserve. European-based forces include 4 Canadian Mechanized Brigade, 4th Air Defence Regiment and other units located in the southwest corner of the Federal Republic of Germany. Canadian-based land formations and units assigned to NATO include 5^e Brigade mécanisé du Canada. In 1989, these units assumed new roles as part of the 1st Canadian Division. Canada's commitment to NATO Allied Air Forces in Central Europe continues to be met by 1 Canadian Air Division, which would perform conventional air-to-ground and air defence roles in time of crisis.

Co-operation with United States forces, under a renewed NORAD agreement signed in March 1985, is a vital feature of the defence of North America. The agreement includes

Canadian destroyer Terra Nova leaving Halifax Harbour, Aug. 20, 1990, with Canadian troops heading toward the Persian Gulf.





Canadian 433 Squadron pilots familiarize themselves with the terrain and stringent flying procedures on a NATO assignment in Europe. NATO celebrated its 40th Anniversary in 1989.

the North American Air Defence Modernization Program which will replace the DEW Line and significantly improve our capability to identify and intercept aircraft and cruise missiles around the periphery of North America.

In addition to providing surveillance and control of the sea approaches of the three oceans bordering Canada, the maritime forces also provide combat-ready ships in support of Canada's commitment to NATO and continental defence in co-operation with US forces.

Canadian peacekeeping commitments are according to an established policy whereby up to 2,000 Canadian forces members can be called on for peacekeeping duties at any time. Canada currently has military personnel serving with the United Nations in the Golan Heights between Syria and Israel, in Cyprus, Central America and other locations in the Middle East. Members of the Canadian forces also participate in the Multinational Force and Observers Organization in the Sinai Peninsula to help monitor the terms of the 1979 peace treaty between Egypt and Israel.

Protection of Canada as a sovereign state imposes two main roles on the Canadian Armed Forces. One concern is the possibility of challenges to Canada's right to exercise jurisdiction over Canadian territory and adjacent waters. A second concern is the possibility of the forces being called to the aid of the civil power in the event of a serious civil disorder. While no armed forces are maintained for this specific purpose, forces performing other tasks are trained to provide such assistance.



THE ECONOMY

- *In 1931, Canada's farm population represented over 31 per cent of the total population; by 1986 this proportion had fallen to under 4 per cent. Comparatively, in 1941 there were 733,000 Census-farms, but by 1986, this figure had dropped by more than half, to 293,000.*
- *By the end of 1988, Canadians owned over \$995 billion worth of life insurance, an average \$109,000 worth of life insurance per household.*
- *The principal means of passenger transportation remains the motor vehicle. In 1987, there were 15.9 million registered motor vehicles, including 11.8 million passenger automobiles, 3.5 million trucks and buses, and 500,000 motorcycles.*
- *Approximately 75 per cent of the world's maple syrup is produced in Canada. Maple syrup, including maple sugar, taffy and butter earned Canadian farmers \$96 million in 1988.*

ECONOMIC PERFORMANCE IN THE '80s

The Canadian economy grew by about 3 per cent in 1989, its lowest annual rate of growth since the current expansion began in 1983. Real Gross Domestic Product (GDP) had expanded by 4.5 per cent in 1987 and 5 per cent in 1988. The slowdown in growth reflected a moderation in all major sectors of demand, although exports were particularly weak, posting their first annual decline since the 1982 recession.

The growth of the economy was better than expected by many forecasters. Factors influencing expectations included a slowing of growth in the United States, high interest rates, a rising dollar, constraints on fiscal policy arising from the burden of interest payments on the federal debt and a belief that the six-year expansion was due to come to a natural end.

On a regional basis, there was a marked shift in the centre of growth from Central to Western Canada. Growth in Western Canada was encouraged by a

← Toronto, Ont. Harbourfront with Skydome, CN Tower and business area skyscrapers.

rebound in the grain crop from the 1988 drought. Energy prices rebounded by year-end, while continued high prices for many paper and metals prices, and an inflow of immigration boosted demand in British Columbia. The housing market in British Columbia and Alberta was particularly strong.

Industrial Growth and Change

Domestic Demand

The external sector deteriorated steadily during 1989, but relatively strong gains in consumer and business spending sustained overall growth. Consumer spending was fuelled by increases of over 10 per cent in disposable incomes. Labour income remained buoyant as both employment and wages continued to advance, while taxes moderated after three years of rapid growth. Personal income taxes grew only 6 per cent (following three consecutive increases of over 12 per cent), partly as a result of tax reform and tax refunds carried forward from 1988. With a 4.6 per cent increase in prices, the net result was growth in real disposable incomes of about 6 per cent, the fastest increase of the decade.

Halifax, NS. The Town Clock, completed in 1803, was made in London by the House of Vulliamy, clockmakers to George III.





Cement plant, Fraser River Delta area in British Columbia.

Non-automotive consumer demand posted a solid gain, in contrast to the weakness in auto sales. Growth was led by services, and accompanied continued steady gains in disposable incomes. The gain in average weekly wages outstripped that of inflation for the second straight year, after real wages had eroded for most of the decade. New car sales declined by about 6 per cent in 1989, the largest of three consecutive yearly decreases. The last time the economy experienced a comparable weakness in auto demand was in 1987, when car production fell by 25 per cent.

Steady growth in housing demand also supported gains in sales of related goods such as furniture and appliances. Housing demand grew by about 4 per cent for the second consecutive year, following growth of over 20 per cent in 1986 and in 1987. The slower growth of housing demand was most evident in Central Canada, as real estate markets cooled after a cycle of exceptional gains. This slack was offset, however, by a resurgence of housing starts and sales in Western Canada, notably Alberta and British Columbia. The rebound in Western Canada reflected a combination of economic and demographic factors, such as a rebound in some resource sectors such as wood in British Columbia, oil and gas in Alberta, and wheat in Saskatchewan, as well as high rates of immigration into British Columbia.

Business investment grew rapidly for the third straight year, up by 8 per cent in volume. Business investment in plant and equipment grew by 8 per cent after inflation, down sharply from nearly 19 per cent in 1988, but still respectable considering that it was the sixth year of expansion. The 1989 increase was no doubt restrained by reduced profits and high interest rates, but sustained by strong final demand and the need to modernize in an increasingly competitive world economy. Business investment in Canada expanded by 38 per cent in the three year period from 1986 through 1989; compared to a 30 per cent gain in the Organization for Economic Co-operation and Development (OECD) block over the same period.

External Demand

Real net exports subtracted substantially from growth in 1989. Exports fell marginally, their first decline since 1982, while continued heavy business investment in machinery and equipment led a 7 per cent gain in imports. The deterioration in real net exports, together with continued weakness in export prices, led to a \$5 billion reduction in Canada's merchandise trade surplus. The increased outflow of interest and dividend payments required to service Canada's growing stock of international debt also contributed to a record \$20 billion current account deficit.

The weakness of exports occurred against a background of weakening US demand and a rising exchange rate. The slowdown in the US market was particularly pronounced in key Canadian export markets, such as autos, paper and metals products. As well, the exchange rate rose steadily to over 86 cents (US) by year-end, its highest level in almost a decade. A sharp drop in the exchange rate early in 1990, however, reversed all of the increase posted in 1989. This should bolster the competitiveness of Canadian manufactured goods, and strengthen profit margins for many resource products.

First Marathon's trading room in Toronto, Ont.





Montreal Stock Exchange.

Import growth was led by rapid increases for machinery and equipment. This gain reflected the strength of business investment, as well as near-full capacity utilization for Canadian producers of some capital goods such as electrical products. Imports of non-automotive consumer goods also grew rapidly, to offset the drop in automotive products.

Labour Markets

The slowdown in economic growth accompanied little change in labour market conditions in 1989. The unemployment rate edged down from 7.8 per cent to 7.5 per cent, following five years of rapid decline, as employment growth (of 2 per cent) no longer outstripped gains in the labour force. Other labour market indicators were mixed, as the average duration of unemployment was unchanged at 18 weeks, while full-time jobs strengthened relative to part-time employment. The number of "discouraged workers" who gave up looking for work fell to 33,000 in 1989, compared to a peak of 111,000 in 1982.

Employment in goods lagged behind that of services, in 1989, continuing a trend evident throughout the 1980s. Employment in goods rose by only 1.1 per cent, its smallest increase since 1985. A drop in primary industries accompanied slow growth in manufacturing, particularly in Ontario where most of the auto industry is located. Construction employment posted a strong gain as a result of robust demand for housing and business investment.

Prices and Wages

Price developments diverged markedly for different sectors of the economy in 1989. While the economy-wide rate of inflation, as measured by the GDP implicit price index, rose slightly to 5 per cent, consumer prices accelerated while manufacturing and raw materials prices weakened. There also was a convergence of consumer price increases by region, after the marked concentration of inflation in Ontario in 1988.

The Consumer Price Index rose by 5 per cent in 1989, up from 4.1 per cent and the largest annual increase since 1983. Price increases were largest for services, partly due to rising costs for housing and higher taxes. Prices of goods rose by 4.4 per cent. The relatively lower rate of increase for goods partly reflects a decline in import prices arising from the steady appreciation of the Canadian dollar exchange rate.

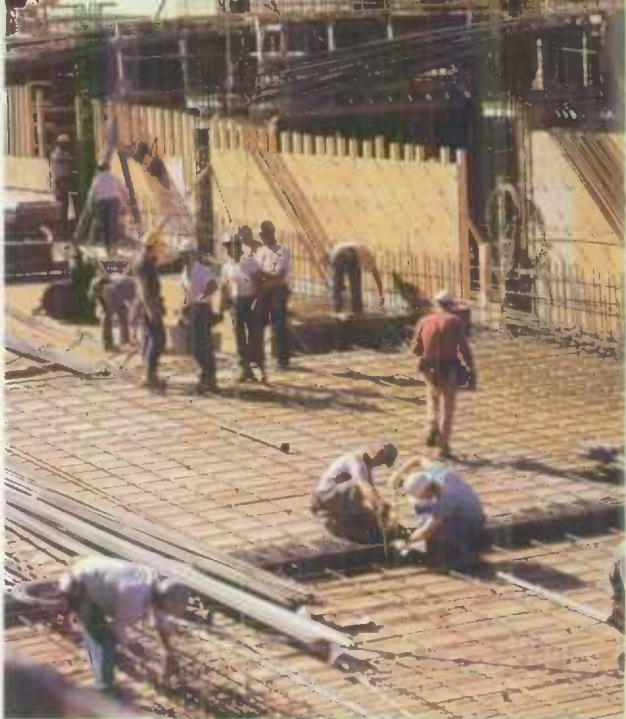
Consumer price increases by province, ranged from a low of 3.5 per cent in Newfoundland to 5.8 per cent in Ontario. All other provinces (except Prince Edward Island) recorded increases of between 4.2 per cent and 4.7 per cent. This contrasts with the greater dispersion of inflation rates in 1988, when seven of the 10 provinces posted increases of less than 4 per cent.

International Trends

Japan and the Federal Republic of Germany took the lead in growth among the major industrial nations, in 1989, as growth in North America slowed substantially. The Canadian and US economies had led the recovery of demand from 1983 to 1988. In 1989, total output grew by over 4 per cent in both the Federal Republic of Germany and Japan, compared to about 3 per cent in Canada and the United States.

Drill rig in the Brooks area of Alberta. The slowdown in economic growth accompanied little change in labour market conditions in 1989.





Construction sites in Montreal, Que. Ontario, Quebec and Nova Scotia were the only provinces with lower unemployment rates in 1989 than in 1981.

THE LABOUR SCENE

Labour Force

In 1989, the Canadian labour force averaged 13,503,000 persons, or 67.0 per cent of the total population 15 years of age and over. The labour force was composed of 12,486,000 employed and 1,018,000 unemployed persons. In the seventh year since the recession of 1981-82, the number of persons in the labour force grew by 1.7 per cent while the number employed rose 2.0 per cent. After having peaked in 1983 at 11.8 per cent, the unemployment rate declined steadily to 7.5 per cent in 1989, the same rate that prevailed just prior to the recession.

An important factor that has affected the overall growth of the labour force is the rise in the number of women entering the labour market. During the decade which preceded the 1981-82 recession, the number of women entering the labour force averaged over 4 per cent each year. While this rate of growth was reduced to only 1.4 per cent during 1981-82, it has averaged nearly 3 per cent since then. This remains above the rate of growth of the male labour force, which averaged gains of approximately one per cent during the same period.

Table 1. Employment by age and sex, and employment/population ratio by age, 1983-89

Age and sex	1983	1984	1985	1986	1987	1988	1989
	'000	'000	'000	'000	'000	'000	'000
Total employed.....	10,675	10,932	11,221	11,531	11,861	12,245	12,486
Men.....	6,203	6,308	6,428	6,567	6,709	6,876	6,977
Women.....	4,472	4,624	4,794	4,964	5,152	5,368	5,508
Employed aged 15-24....	2,313	2,341	2,347	2,367	2,382	2,388	2,372
Men.....	1,180	1,207	1,199	1,218	1,232	1,241	1,234
Women.....	1,133	1,134	1,149	1,148	1,151	1,147	1,138
Employed aged 25+....	8,363	8,590	8,874	9,164	9,479	9,857	10,114
Men.....	5,023	5,100	5,229	5,349	5,477	5,636	5,743
Women.....	3,339	3,490	3,645	3,815	4,002	4,221	4,371
	Employment/population ratio						
	%	%	%	%	%	%	%
Total.....	56.8	57.5	58.5	59.4	60.4	61.6	62.0
Persons aged 15-24....	53.0	54.9	56.4	58.1	59.7	61.3	62.3
Persons aged 25+....	57.9	58.3	59.1	59.8	60.6	61.6	61.9

Table 2. Unemployment by age and sex, 1983-89

Age and sex	1983	1984	1985	1986	1987	1988	1989
	'000	'000	'000	'000	'000	'000	'000
Total unemployed.....	1,434	1,384	1,311	1,215	1,150	1,031	1,018
Men.....	849	792	739	677	623	546	548
Women.....	585	592	572	539	527	485	470
Unemployed aged 15-24.....	570	507	460	421	377	326	303
Men.....	339	290	265	239	214	184	175
Women.....	232	218	195	181	163	142	128
Unemployed aged 25+.....	864	876	850	795	773	705	715
Men.....	510	503	473	437	409	362	373
Women.....	354	374	377	357	364	343	342



Labour Force Trends Since World War II



Note: For 1949 and 1959, males and females are aged 14 and over.
For all other years, males and females are aged 15 and over.



Overall employment gains in the service-producing industries have averaged 2.7 per cent annually since 1981-82 while goods-producing sectors posted an average increase of approximately 1.5 per cent. The growth in service sector employment along with the rise in the number of women entering the labour force has resulted in an increase in part-time employment. The share of part-time employment, with respect to total employment, rose from 13.5 per cent in 1981 to 15.1 per cent in 1989.

Although overall unemployment rates for the past couple of years have declined to match pre-recession rates, there are a number of other labour market characteristics whose performance still reflect the impact that the 1981-82 downturn had on the economy. For example, the number of persons unemployed in 1989 continued to be well above the levels of the pre-recession era. Unemployment among men, aged 25 and over, was approximately 42 per cent higher than in 1981, even though their participation rate declined by 3 percentage points. Ontario, Quebec and Nova Scotia were the only provinces with lower unemployment rates in 1989 than in 1981, while Alberta, Saskatchewan and Prince Edward Island continued to experience rates significantly above those of the pre-recession period.

Engineers at a lead-zinc mine near Faro, Yukon. In 1989, the labour force, in Canada, was composed of 12,486,000 employed and 1,018,000 unemployed persons.



Table 3. Unemployment rate by province, 1983-89

Province	1983	1984	1985	1986	1987	1988	1989
	%	%	%	%	%	%	%
Newfoundland	18.7	20.2	20.8	19.2	17.9	16.4	15.8
Prince Edward Island	12.2	12.8	13.3	13.4	13.2	13.0	14.1
Nova Scotia	13.2	13.0	13.6	13.1	12.3	10.2	9.9
New Brunswick	14.8	14.8	15.1	14.3	13.1	12.0	12.5
Quebec	13.9	12.8	11.8	11.0	10.3	9.4	9.3
Ontario	10.3	9.0	8.0	7.0	6.1	5.0	5.1
Manitoba	9.4	8.4	8.2	7.7	7.4	7.8	7.5
Saskatchewan	7.3	8.0	8.1	7.7	7.4	7.5	7.4
Alberta	10.6	11.1	10.0	9.8	9.6	8.0	7.2
British Columbia	13.8	14.7	14.1	12.5	11.9	10.3	9.1
Canada	11.8	11.2	10.5	9.5	8.8	7.8	7.5

Table 4. Unemployment insurance, 1979-88

Year	Benefits paid	Average weekly payment	Number of weeks paid	Number of initial and renewal claims received	Total number of beneficiaries
	\$'000,000	\$	'000	'000	'000
1979	4,008	108.63	36,896	2,600	2,333
1980	4,393	120.92	36,333	2,762	2,274
1981	4,828	130.45	37,011	2,947	2,432
1982	8,575	141.88	60,441	3,919	3,123
1983	10,169	152.72	66,585	3,434	3,396
1984	9,986	161.42	61,862	3,493	3,222
1985	10,227	171.05	59,788	3,312	3,181
1986	10,514	181.07	58,063	3,353	3,137
1987	10,441	190.28	54,875	3,221	3,080
1988	10,852	202.75	53,527	3,231	3,016

Unemployment Insurance

The Unemployment Insurance Program is administered by Employment and Immigration Canada. Covering approximately 95 per cent of the Canadian work force, the program provides financial assistance to workers who experience an interruption of earnings because of layoff, short hours, illness, pregnancy or adoption.



Grocery and perishables distribution centre, opened recently in Quebec City. In 1989, the Canadian labour force averaged 13,503,000 persons, or 67 per cent of the total population 15 years of age and over.

In 1988, payments to persons claiming unemployment insurance benefits amounted to \$10.85 billion, with unemployment insurance the most important income support program in Canada. The increase in the disbursements over 1987 resulted from an advance in the average weekly payment to \$202.75. While the number of initial and renewal claims received remained virtually unchanged in 1988 at 3.23 million, the number of benefit weeks decreased 2.5 per cent to 53.53 million.

The maximum weekly benefit in 1990 was \$384. This was calculated as 60 per cent of a beneficiary's weekly insurable earnings. The employee's contribution rate was 2.25 per cent, and with maximum weekly insurable earnings of \$640, workers contributed up to \$14.40 per week in 1990. Generally, employers pay 1.4 times the amount contributed by employees.

Help-wanted Index

The Help-wanted Index (1981 = 100) serves as an indicator of labour market conditions by counting the number of help-wanted advertisements published in 22 major metropolitan area newspapers. The index is an early indicator of economic activity because changes in the level of advertising signal changes in labour market conditions.

The index is quite sensitive to changes in the level of economic activity. For example, it reflected the recession of the early 1980s when the index fell from 107 in May 1981 to 46, 15 months later. Since 1982, the index has advanced every year; it reached 154 in March 1989. The Help-wanted Index correlates well with other labour market indicators.

Help-wanted Index and Unemployment Rate

Index
(1981 = 100)



Note: Quarterly data

Work Injuries Statistics

Over one million Canadians are injured every year in work-related accidents. About half of these injuries are sufficiently severe that employees need to take time off work to recuperate. In 1988, there were 617,997 work-related injuries and illnesses for which time-loss or permanent disability claims were accepted by provincial and territorial workers' compensation boards.

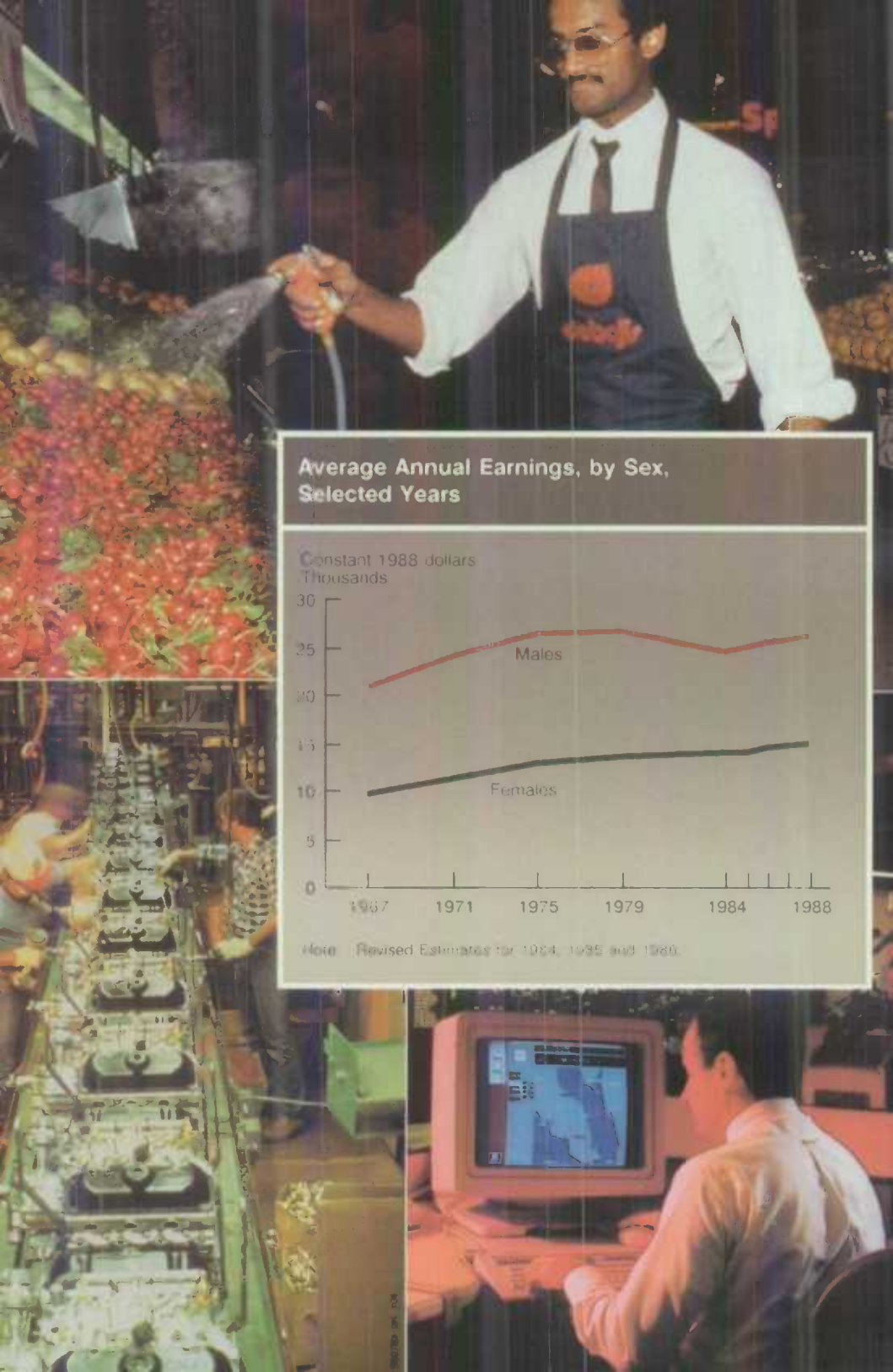
In 1988, to recuperate from accidents, overexertion injuries required workers to take time off work most often (50 per cent); next were impact injuries (23 per cent), and body surface wounds (17 per cent). Overexertion injuries are mainly sprains and strains; over one half of these injuries resulted in injuries to the back. Of all accepted time-loss injuries, the back was the most frequently injured part of the body (27 per cent); followed by the wrist, hand or finger (22 per cent); and the ankle, foot or toe (10 per cent).

Wages and Salaries

Statistics Canada's survey of employment, payrolls and hours estimated that in 1988 there were 10,106,900 employees with average weekly earnings at \$463.80 per week. More than 66 per cent were employed in Ontario and Quebec, while another 20 per cent worked in Alberta and British Columbia. In terms of highest average weekly earnings however, Ontario and Quebec ranked 3rd and 6th, respectively, of all provinces and territories, while British Columbia and Alberta ranked 4th and 5th. The highest average weekly earnings were paid in the Northwest Territories and the Yukon where a combined total of 30,200 employees were working in 1988. Prince Edward Island registered the lowest average weekly earnings with \$379.26.

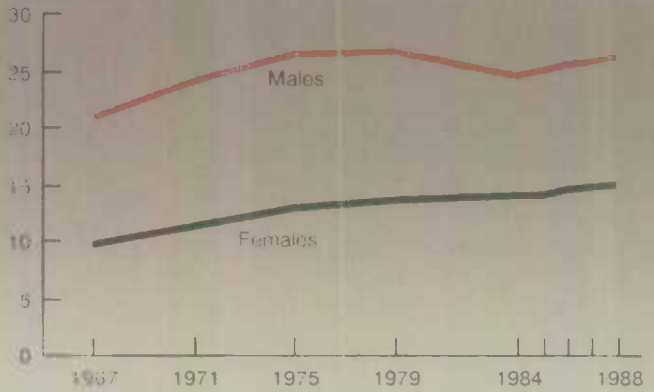
Saskatoon, Sask. In 1988, there were 10,106,900 employees in Canada with average weekly earnings at \$463.80. In Saskatchewan, the number employed was 299,100 with average weekly earnings at \$411.30.





Average Annual Earnings, by Sex, Selected Years

Constant 1988 dollars
Thousands



Note: Revised Estimates for 1984, 1985 and 1986.

Table 5. Employment and average weekly earnings¹, 1988

Province or territory	Number employed	Average weekly earnings ²
	'000	\$
Newfoundland	143.5	443.99
Prince Edward Island	36.2	379.26
Nova Scotia	283.6	417.92
New Brunswick	217.2	421.15
Quebec	2,519.9	454.01
Ontario	4,172.0	482.68
Manitoba	388.7	422.05
Saskatchewan	299.1	411.30
Alberta	936.9	462.76
British Columbia	1,079.5	466.52
Yukon	10.3	556.24
Northwest Territories	19.9	621.17
Canada	10,106.9	463.80

¹ Data are for the Industrial aggregate which is the sum of all industries with the exception of agriculture, fishing and trapping, religious organizations, private households and the military personnel.

² Includes overtime.

The highest average weekly earnings were paid by the two industries with the lowest employment levels; the mines, quarries and oil wells industry and the forestry industry. The community, business and personal services along with trade were the only two to pay below the Canadian industrial aggregate average. These industries were the 1st and 3rd largest employers, respectively, and between them accounted for 53 per cent of all employees. In 1988, the manufacturing industry was the 2nd largest employer, with 19 per cent of all industrial workers; average weekly earnings for hourly paid employees were \$498.27 and the average hourly earnings were \$12.85.

Labour Organizations

Membership in labour organizations active in Canada totalled 3,944,300 in 1989. This figure was 16.1 per cent higher than in 1980. About 57.8 per cent of the members were in unions affiliated with the Canadian Labour Congress (CLC); 21.5 per cent were in unions affiliated with other federations; and the remaining 20.5 per cent were members of unaffiliated national and international unions and independent local organizations. Of all union members, 32.4 per cent belonged to international unions with headquarters in the United States.

Fifteen unions reported memberships of 50,000 or more in 1989. The five largest unions were the Canadian Union of Public Employees (356,000); the National Union of Provincial Government Employees (297,200); the Public Service Alliance of Canada (171,900); the United Food and Commercial Workers International Union (170,000); and the National Automobile, Aerospace and Agricultural Implement Workers Union of Canada (160,400).

Labour Relations

Employer-employee relations in all sections of Canadian business and industry are regulated and fostered by the federal and provincial departments of labour, each within its area of jurisdiction; however, Labour Canada's direct concern is with enterprises and their employees, numbering approximately 600,000, within the federal jurisdiction.

Labour Canada has four major goals: to promote and sustain stable industrial relations, a fair return for work, and a working environment favouring the physical and social well-being of Canadians; to protect the rights and interests of all involved in the world of work; to promote equitable access to work opportunities for all Canadians; and to foster a climate for improved consultation and communication among government, labour and management.

Calgary, Alta. The highest average weekly earnings were paid in the Northwest Territories and the Yukon; Ontario ranked 3rd, British Columbia 4th, and Alberta ranked 5th.





Coal shipping terminal at Roberts Bank, BC.

THE SERVICE INDUSTRIES

Transportation

Transportation has played an important role in the history of Canada and in the shaping of its economic fabric. Over the years, the form of transport has evolved from the voyageur's canoe, to the dominance of rail and presently to an increasing dependence on air and motor vehicle transport. Correspondingly, dramatic changes in the for-hire carriage of goods have occurred in the span of two generations. In 1930, railways earned an estimated 85 per cent of Canada's freight revenue; by 1960, their share had dropped to less than 50 per cent. For-hire trucks accounted for 2 per cent of the total freight revenue in 1930 and 30 per cent in 1960. By 1987, the percentage distribution between the different modes had shifted to 54 per cent for-hire trucking, 36 per cent rail, 6 per cent marine and 4 per cent air.

Air Transport

In 1988, the 60 airports with Transport Canada air traffic control towers handled 5.7 million landings and take-offs. Of these, 3.5 million were itinerant movements (landings or take-offs by aircraft that enter or leave the tower control zone), an increase of 3.2 per cent over 1987. Most of these movements were performed by piston engined aircraft, but their share dropped from 48 per cent in 1986 to 44 per cent in 1988. Second were jets, with a 28 per cent share in 1988, down from 29 per cent in 1986. Turbo-props have shown a marked increase over several years, moving up from 9 per cent of itinerant movements in 1980 to 23 per cent in 1988. The remaining movements were by helicopters, with a 5 per cent share. As of December 31, 1988, there were 25,592 civil aircraft registered in Canada.

In 1988, Toronto International Airport, now Pearson International, had more scheduled traffic than any other Canadian airport. Toronto, the centre of regional and transcontinental air travel, is included in seven of the top 10 city pairs for domestic scheduled air passenger travel. (City pairs include the city of origin and the city of destination.) Patterns of passenger travel flow east and west from Toronto. Regionally, Montreal, Ottawa and Toronto predominate in the East, and Calgary, Edmonton and Vancouver in Western Canada.

Calgary, International Airport.



Table 1. Revenue passengers and cargo, top 10 Canadian airports, major scheduled services, 1988

Rank ¹	Airport	Flights	Passen- gers ²	Cargo ²
		No.	'000	'000 kg
1	Toronto International	188,038	16,760	257 619
2	Vancouver International	78,741	6,920	100 869
3	Montreal International	77,171	5,475	31 128
4	Calgary International	69,797	4,134	30 700
5	Ottawa International	38,127	2,309	6 188
6	Winnipeg International	37,179	2,195	14 369
7	Edmonton International	31,050	1,913	22 730
8	Halifax International	28,722	1,725	22 253
9	Mirabel International	18,786	1,320	93 375
10	Edmonton Municipal	11,482	677	1 370

¹ Airports are ranked according to total deplaned and enplaned passengers.

² Figures are total deplaned and enplaned passengers and cargo.

Table 2. Commercial air transport services selected financial and operational statistics, 1987 and 1988¹

		Major air carriers ²		All other air carriers		All air carriers ⁵	
		1987	1988	1987	1988	1987	1988
Number of carriers		3	3	296	277	299	280
Operations							
Passengers	'000	24,516	26,632	7,774	9,383	32,290	36,015
Passenger-kilometres ³	'000 000	39 858	45 969	1 786	2 769	41 644	48 738
Goods tonne-kilometres ³	'000 000	1 203	1 364	36	29	1 239	1 393
Hours flown	'000	652	739	1,239	1,334	1,891	2,073
Revenues and expenses							
Total operating revenues	\$'000,000	4,924	5,513	1,350	1,615	6,274	7,128
Total operating expenses	\$'000,000	4,665	5,353	1,246	1,515	5,911	6,868
Fuel consumption⁴							
Turbine fuel	'000 000 L	3 484	3 860	519	640	4 003	4 500
Gasoline	'000 000 L	—	—	50	40	50	40

¹ Preliminary data.

² Major air carriers included Air Canada, Canadian Airlines International Ltd. and Wardair in 1987 and 1988.

³ Unit toll services only.

⁴ Excludes small carriers.

⁵ Excludes carriers conducting only specialty flying services.

— Nil or zero.

Canada's top 10 airports registered 81 per cent of all flight take-offs and landings in scheduled services, 89 per cent of all passenger travel and 94 per cent of all cargo movement. Among these, the Pearson International, Vancouver International and Montreal International airports accounted for 48 per cent of flights, 60 per cent of passengers and 63 per cent of cargo; Mirabel International contributed another 15 per cent to the cargo volume.

The scheduled international routes of the two largest Canadian air carriers — Air Canada and Canadian Airlines International Ltd. (formed in 1987) — form a vast network connecting Canada to every major continent. Canadian airlines also fly charters to destinations around the world.

From 1987 to 1988, Canada's major air carriers reported increases of 9 per cent in the number of passengers carried and 15 per cent in passenger-kilometres. Many short-haul domestic routes were dropped in order to concentrate on long-haul markets. These short-haul routes are now serviced by regional carriers. Considerable growth was experienced by Canada's other air carriers, including regionals, as passengers carried increased by 21 per cent and passenger-kilometres increased by 55 per cent over the same period. Consumption of turbine fuel increased by 12 per cent to 4,500 million litres, in 1988, for all carriers.

While the net operating profit for the major carriers dropped from \$259 million in 1987 to \$160 million in 1988, Canada's other carriers maintained a consistent performance, with the equivalent financial result reported at \$104 million in 1987 and \$100 million in 1988.

Railways

Historically, railways have played a central role in the political integration, settlement and economic development of Canada. In 1850, there were 106 km (kilometres) of railway in all of British North America; 80 years later, Canada had 91 065 km of track in operation. From 1930, growth was slow, reaching 96 958 km by 1974; by 1987, length of track in

In 1989, the Alberta Wheat Pool handled 6 035 529 tonnes of grain at country elevators, an increase of 300 000 tonnes over the previous year.



use had decreased to 94 184 km. Two continent-wide railways, Canadian National and Canadian Pacific, spanned 7 000 km from Atlantic to Pacific over vast stretches of rock and muskeg, flat prairie and mountain ranges to make possible the settlement of Western Canada. Today, these railways offer multi-modal transportation services, with emphasis on quick, cheap and efficient long-distance movement of bulk commodities and containers. Intercity passenger services are provided by VIA Rail Canada. Provincially operated railways including the British Columbia Railway, British Columbia Hydro's railway, Ontario Northland, GO Transit, and a number of other railways, complete Canada's rail system.

In 1987, 291 million metric tonnes of revenue freight were carried by rail, up 21.2 per cent from the 1982 low. The number of passengers carried reached 24 million in 1987, slightly above the 1986 figure. The number of employees was down to 82,181, a 3 per cent drop from the 1986 figure and a 27 per cent drop from the 1979 peak of 112,307 employees.

Table 3. Railways operating in Canada, selected financial and operational statistics, 1986 and 1987

		Transcontinental railways ¹		Other railways and companies reporting under the Railway Act		All railways and companies	
		1986	1987	1986	1987	1986	1987
Number of companies		3	3	26	25	29	28
Operating revenues	\$'000,000	6,897	7,223	673	676	7,570	7,899
Freight revenues	\$'000,000	5,654	5,999	562	563	6,217	6,562
Passenger revenues	\$'000,000	205	195	45	50	250	245
Operating expenses	\$'000,000	6,237	6,289	550	550	6,787	6,838
Revenue freight carried	'000 t	190 178	202 500	89 174	88 067	279 353	290 566
Revenue passengers carried	'000	6,286	5,865	16,705	17,836	22,991	23,701
Revenue per tonne-kilometre of freight	\$	2.56	2.96	2.35	2.41	2.54	2.45
Average length of haul	km	1 161	1 207	269	264	876	922
Average passenger journey	km	360	357	34	35	123	114

¹ Transcontinental railways include Canadian National Railways, Canadian Pacific Limited and VIA Rail Canada Inc.



Canadian National operations management centre in Montreal, Que., shows rail stationing screens.

Motor Vehicle Transportation

The principal means of passenger transportation remains the motor vehicle. Registrations of all road motor vehicles for 1987 totalled 15.9 million, up 8.5 per cent since 1983. Passenger automobile registrations, at 11.8 million, predominated with 74.2 per cent of the total. Trucks and buses consisted of 22 per cent of the total. Motorcycles were less than a half million in total, and accounted for 3 per cent in 1987.

A computer operations technician checks a high-tech intersection in Ottawa. A computer system receives new information on the traffic flow at stoplight-controlled intersections every second. Using metal detectors to sense vehicles in each lane, it automatically changes the timing of the signals. There are about 600 signal-equipped intersections in the region.





North Canal Road in the Yukon, travelled only during summer.

The annual survey of motor carriers of freight and household goods movers covers establishments reporting annual operating revenues of \$100,000 or more in the previous year. The number of carriers reporting increased from 4,583 in 1983 to 6,729 in 1987. In 1987, operating revenues stood at \$9.3 billion compared to \$6.1 billion in 1983. The corresponding expenses were \$8.9 billion in 1987 and \$5.8 billion in 1983. The net operating revenues have increased steadily from \$242 million in 1983 to \$408 million in 1987. In 1987, the average number of employees working reached 104,000 and pieces of revenue equipment operated reached 166,000.

Motor carriers providing passenger services are classified into three basic categories according to principal service, although a variety of services may be offered by a single operator. Of 1,144 motor carriers providing passenger services in 1987, 79 per cent were school bus operators. Urban transit operators accounted for only 7 per cent in number yet earned 67 per cent of the \$3,671 million in total operating revenues. The operating revenues of urban transit operators earning more than \$100,000 annually were \$2,444 million, those of intercity and other passenger bus service were \$347 million and \$711 million, respectively. The passenger bus industry offered employment to 71,752 employees in 1987 and operated 40,747 pieces of equipment.

Table 4. Motor carrier industry¹, 1987

		Motor carriers freight and household goods movers	Urban transit	Intercity passenger bus	Other passenger bus service ²
Establishments reporting	No.	6,729	77	35	1,032
Operating revenues	\$'000,000	9,345	2,444	347	881
Operating expenses	\$'000,000	8,937	2,147	321	784
Average number of employees including working owners	'000	104	36	5	28
Pieces of revenue equipment operated	'000	166	13	1	25

¹ Excluding establishments reporting gross annual revenue of less than \$100,000 for the previous year.

² Establishments engaged in limousine service to airports or stations, sightseeing, charter, tour and school bus service.

The Trans-Canada Highway by Lake of the Woods in British Columbia.

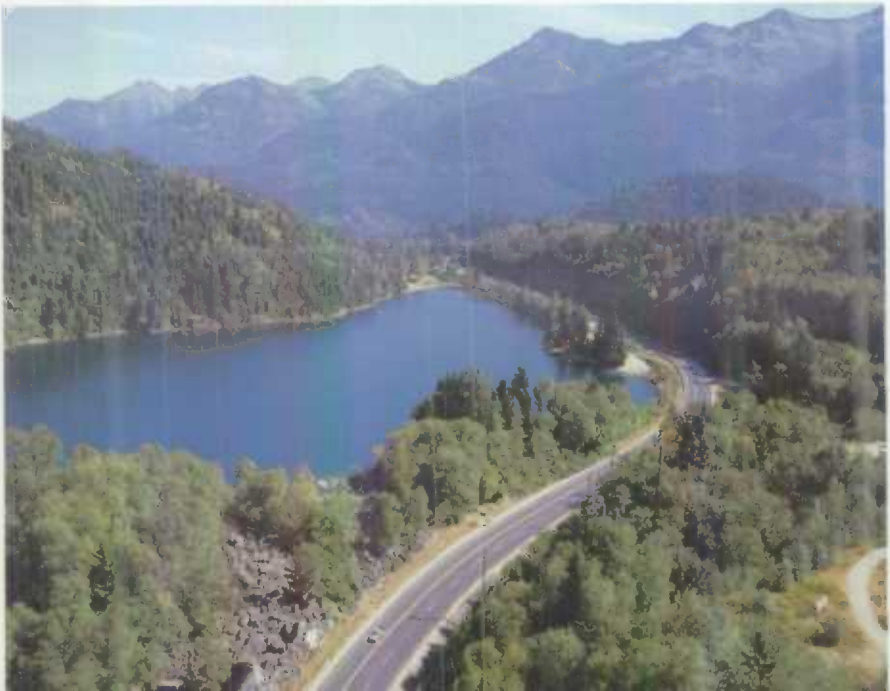


Table 5. Water transportation selected financial and operational statistics, 1983 and 1987

	Water transport industry ¹ (for-hire and sightseeing)		Other marine carriers (private and government)		Total water transportation	
	1983	1987	1983	1987	1983	1987
Number of carriers	252	237	79	66	331	303
Number of vessels	1,762	1,246	1,085	755	2,847	2,001
Operating revenues \$'000,000						
Transport of commodities	797	683	494	437	1,291	1,120
Transport of passengers	22	35	59	75	81	110
Towing	238	260	43	47	281	307
Charter revenues	207	183	32	17	239	200
Other vessel revenues ²	32	34	223	201	255	235
Total water transportation revenues	1,296	1,195	851	777	2,147	1,972
Other operating revenues	170	82	65	123	235	205
Total operating revenues	1,466	1,277	916	900	2,382	2,177
Operating expenses \$'000,000						
Vessel operating costs	1,053	915	884	953	1,937	1,868
Other operating costs	362	283	426	503	788	786
Total operating costs	1,415	1,198	1,310	1,456	2,725	2,654

¹ Excludes carriers reporting less than \$100,000 in operating revenues for the previous year.

² Includes subsidies.

Water Transport

During 1987, water transportation activities for 303 Canadian marine carriers generated operating revenues of \$2.2 billion. This figure was virtually the same as in 1983 when 331 carriers were surveyed. During both years, the transportation of commodities accounted for close to 60 per cent of the total while towing activities represented about 16 per cent. Charter revenues accounted for a slightly smaller share in 1987 than in 1983, at 10 per cent and 11 per cent, respectively.



Shipping containers at Halifax harbour.

The for-hire carriers contributed roughly 60 per cent of the total revenues during both 1987 and 1988. In 1987, 237 for-hire carriers reported \$1.2 billion in revenues. The transportation of commodities accounted for 57 per cent of total for-hire revenues in 1987; charter revenues generated \$183 million (15 per cent); and towing activities by for-hire carriers represented about 22 per cent of the total.

Water transportation revenues for private and government carriers totalled \$777 million in 1987, for 66 carriers, about \$73 million less than the revenues reported by 79 such carriers in 1988. In 1987, transportation of commodities registered the largest share of the total, 56 per cent; transportation of passengers generated \$75 million, and represented about 10 per cent of the total revenue for government and private carriers.

During 1988, 389.9 million tonnes of cargo were handled at Canadian ports in domestic and international shipping, compared to 362.6 million tonnes registered in 1987. The international sector accounted for more than 62 per cent of this total during both years. Almost 250 million tonnes were loaded and unloaded internationally in 1988, an increase of 8 per cent over 1987, and a record level of activity for the 1980s. In the domestic sector, about 70 million tonnes of freight were transported between Canadian ports during 1988; 4 per cent

more than the 1987 total and the highest activity level since 1983, when nearly 71 million tonnes were shipped.

Vancouver is Canada's most active port, due largely to the level of international shipping operations. The port loads coal, wheat, sulphur, potash and numerous other commodities bound for Japan, the USSR, and a number of other countries in every continent but Antarctica. In 1988, 62 million tonnes of freight were shipped internationally.

Sept-Îles (including Pointe Noire) was Canada's second most active port in terms of the tonnage handled during 1988, with a total of 23 million tonnes, including both domestic and international shipping. Iron ore and concentrates constitute the principal cargo shipped from Sept-Îles. During 1988, Sept-Îles shipped 15.8 million tonnes of iron ore to foreign countries.

In contrast, Montreal (including Contrecoeur) handles a wide variety of commodities and contributes significantly to the total cargo tonnage handled in both sectors. It is the leading container port in Canada, in terms of tonnage handled. In 1988, Montreal ranked fourth overall, and handled 21.8 million tonnes of freight; approximately 40 per cent of this freight was containerized.

Table 6. Cargo handled, top 10 Canadian ports, 1988 (thousand tonnes)

	International shipping		Domestic shipping		Total
	Cargo loaded	Cargo unloaded	Cargo loaded	Cargo unloaded	
Vancouver, BC	61 974	3 981	2 177	2 187	70 318
Sept-Îles, Que. ¹	16 278	979	4 815	972	23 043
Port-Cartier, Que.	17 878	1 103	1 557	1 940	22 478
Montreal, Que. ²	6 018	8 564	1 759	5 490	21 831
Quebec, Que. ³	4 598	7 040	2 341	3 750	17 730
Thunder Bay, Ont.	3 495	278	13 158	380	17 311
Halifax, NS	5 304	6 053	2 442	980	14 780
Saint John, NB	5 599	7 332	1 392	374	14 696
Hamilton, Ont.	649	6 325	374	5 586	12 933
Prince Rupert, BC	12 016	32	312	298	12 658

¹ Includes Pointe-Noire.

² Includes Contrecoeur.

³ Includes Lévis.



West Edmonton Mall in Alberta.

Domestic Trade

Retail and Consumer Services

Among the leading sectors of the Canadian economy, the retail trade industry is one of the most important in terms of its contribution to the nation's total production. Since the beginning of the 1980s, the retail sector has been subject to major changes and notable transformation. The introduction of new technologies aimed at increasing store productivity, the tremendous expansion of credit facilities to consumers, the employment of more aggressive marketing strategies such as the warehouse stores concept, no-name brand product sales, subsidized financing sales programs and a wide range of other measures intended to foster consumer spending, have contributed to create a new type of retail environment.

These incentives, along with relatively low interest rates and a moderation in the rate of inflation, as well as a decline in unemployment, provided the necessary elements to restore consumer confidence and generate a recovery in the retail industry following the recession of 1981-82.

The peak year of growth in the six-year period, 1983-88, was reached in 1985; led by record sales in the automotive sector, the volume of retail trade rose by 8 per cent and the total value by nearly 12 per cent over the previous year. Sales growth moderated in 1986 with volume increasing by 4 per cent and the total value by 8 per cent. In 1987, retail volume increased by 6 per cent and the total value by 10 per cent, while in 1988 the volume increased by 4 per cent and the value by 7.5 per cent. The total value of all retail trade amounted to \$165 billion in 1988, compared with \$154 billion in 1987.

Because of its demographic predominance, Ontario remained the largest market in Canada in 1988 with 38 per cent of total retail sales, followed by Quebec, with 25 per cent, and British Columbia, with 11 per cent. On a per capita basis, Ontario had the highest expenditure at \$6,740, followed by Alberta, \$6,660, and Nova Scotia, \$6,350. The national average per capita expenditure on consumer goods was \$6,370 in 1988.

Flea market near Fredericton, NB.





Fresh growers in the Kelowna area of British Columbia set up their booths at a market in Calgary and sell their products directly.

Retail trade activity is dominated by three business groups: automotive, food and general merchandise. Respectively they accounted for 32 per cent, 25 per cent and 13 per cent of all retail sales over the five-year period, 1984-88. The food and general merchandise groups, which include department stores, have displayed moderate and relatively stable rates of growth since 1983.

The more volatile automotive group was the most seriously affected by the recession of 1982, but also enjoyed the strongest recovery. Retail sales of motor vehicle dealers, the major component of this group, had declined in value by 13 per cent in 1982, but rose 19 per cent in 1983, 21 per cent in 1984 and 25 per cent in 1985 before moderating to an increase of 10 per cent in 1986. Sales rose 12 per cent in 1987 and 11 per cent in 1988. Automotive manufacturers have continued their efforts to stimulate sales through innovative financing programs. Sales of new motor vehicles amounted to a record 1,565,500 units in 1988, up 2 per cent from the 1,533,600 vehicles sold in 1987. Over 1,500,000 units were sold during each year of the 1985-88 period. Sales of passenger cars, at 1,056,300 units, were down slightly from the 1986 level. Sales of North American built automobiles averaged about 68 per cent of total passenger car sales during the 1985-88 period. Sales of commercial vehicles, of which 90 per cent are of North American manufacture, experienced relatively strong growth in recent years. Sales in 1988 were 509,200 units, an increase of 9 per cent from 1986.

Retail sales, by province, 1983-88 (million dollars)

Province or territory	1983	1984	1985	1986	1987	1988
Newfoundland	1,971	2,071	2,254	2,407	2,755	3,074
Prince Edward Island	472	521	548	577	641	704
Nova Scotia	3,534	4,048	4,580	4,796	5,225	5,606
New Brunswick	2,719	2,927	3,172	3,482	3,794	4,120
Quebec	25,784	29,006	31,782	34,593	38,865	41,616
Ontario	39,446	43,466	49,004	53,412	59,039	63,584
Manitoba	4,100	4,514	5,201	5,444	5,770	5,972
Saskatchewan	4,357	4,354	4,704	4,999	5,254	5,502
Alberta	11,304	11,833	13,524	14,338	14,855	15,954
British Columbia	12,257	13,005	14,304	15,567	17,117	18,609
Yukon and Northwest Territories	300	335	376	393	417	451
Canada	106,243	116,080	129,446	140,009	153,733	165,190

Expanded supermarkets offer special sections, such as this in-store bakery at a food market in Mississauga, Ont.





Eaton Centre in Toronto, Ont.

Each year, substantial volumes of goods are sold to consumers through channels other than retail stores, primarily by direct selling, vending machines and campus bookstores. In 1987, total sales of these non-store-retailing channels amounted to approximately \$3.5 billion. Of this total, the direct selling activities of manufacturers, mail-order agencies, book, newspaper and magazine publishers and other specialized agencies accounted for \$2.8 billion. Vending machine operators reported total sales of \$411 million and campus bookstores contributed an additional \$336 million during the 1987-88 academic year.

Total consumer expenditures on goods reached an estimated \$172 billion in 1987, or 53 per cent of total consumer expenditures. The remaining 47 per cent (\$152 billion) was devoted to the purchase of services, including rent costs, the largest single service expenditure item (\$58 billion). The value of expenditures on services offered by restaurants and hotels, the second largest service expenditure item, reached \$20 billion in 1987, a real growth of 14 per cent since 1984. The other major service expenditures were for recreational, educational and cultural services, for financial, legal and related services, and for transportation and communications services.

Wholesale Trade

The total volume of trade of the wholesale trade sector amounted to \$235.1 billion in 1986, up 2 per cent from 1985 and 9 per cent from 1984. The value of wholesale sales has increased each year since 1982 reflecting a renewed demand by retailers, industrial and commercial users, and by foreign markets, for goods handled by Canadian wholesalers, although part of the annual increases has been attributed to price increases. The volume of trade per wholesale establishment dropped to \$3.5 million in 1986 from \$3.6 million in 1985; it amounted to \$3.4 million in 1984. Four kind-of-business groups accounted for over 55 per cent of the total wholesale activity: the food products group with 17 per cent, the machinery and equipment groups with 16 per cent, the fossil fuel products group with 12 per cent, and the farm products group with 10 per cent.

Wholesale merchants (establishments primarily engaged in buying merchandise for resale to domestic and foreign users, retailers and other wholesalers) accounted for 85 per cent of the volume of trade. In 1986, the volume of trade totalled \$199.6 billion, up 2 per cent from 1985 and 10 per cent from 1984. The value of their net sales and receipts, which represented 94 per cent of their volume of trade, increased 2 per cent in 1986, compared

Wholesale trade, selected statistics, 1982-86

	Number of establishments	Volume of trade ¹	Net sales and receipts	Goods bought or sold on commission
		\$'000,000,000	\$'000,000,000	\$'000,000,000
Wholesale merchants				
1982	49,306	145.3	135.8	9.5
1983	50,515 ^f	158.9 ^f	148.6 ^f	10.3
1984	59,163	181.6	171.3	11.3
1985	60,039 ^f	195.3 ^f	183.6 ^f	11.7 ^f
1986	62,189	199.6	187.8	12.0
Agents and brokers				
1982	5,015	27.3	1.2	26.1
1983	4,805 ^f	31.2 ^f	1.3 ^f	30.0
1984	4,472	33.7	1.5	32.2
1985	4,800 ^f	36.4 ^f	1.6	34.8 ^f
1986	4,534	35.5	1.0	34.0
Wholesaling by manufacturers				
1982	6,186	18.8		
1983	6,126	21.4		
1984	6,075	25.1		
1985	5,069	27.8		
1986	4,859	27.9		

¹ In wholesaling by manufacturers, figures are the value of sales only.

^f Revised.



Cold storage warehouse with cartons of frozen meat in Montreal, Que.

with a rise of 3 per cent in 1985. The value of goods sold on commission increased one per cent in 1986, compared with an increase of 4 per cent in 1985.

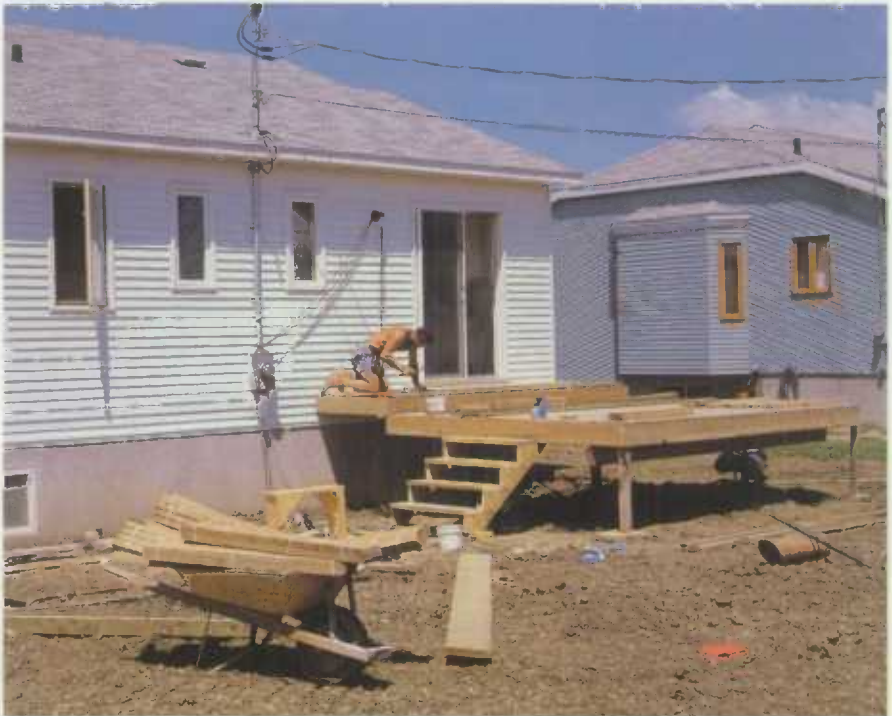
Agents and brokers (businesses primarily engaged in buying and/or selling products owned by others on a commission basis) accounted for the remaining 15 per cent of the total volume of wholesale trade. These establishments reported a total volume of trade in 1986 of \$35.5 billion, down 2 per cent from 1985 and up 5 per cent from 1984. The value of agents' and brokers' sales and receipts decreased in 1986 to \$1.0 billion from \$1.6 billion in 1985; the value of goods bought or sold on commission reported at \$33.9 billion in 1986, down from \$35.0 billion reported in 1985. The volume of trade per establishment was \$7.8 million in 1986, up slightly from 1985, and more than twice as high as the figure for wholesale merchants.

Wholesaling was a secondary activity for an estimated 14 per cent of all manufacturing establishments in 1986, particularly those with foreign affiliations. There were 4,859 manufacturing establishments engaged in wholesaling as a secondary activity in 1986 compared with 5,069 establishments in 1985. The average wholesale sales and receipts for these establishments in 1986 was \$5.8 million, up from \$5.5 million in 1985.

Consumer price index and major components for Canada, percentage change between annual average indexes

	1983 1982	1984 1983	1985 1984	1986 1985	1987 1986	1988 1987	1989 1988
All-items	5.8	4.4	4.0	4.1	4.4	4.1	5.0
Food	3.7	5.6	2.9	5.0	4.4	2.6	3.7
All-items excluding food	6.4	4.0	4.2	4.0	4.3	4.4	5.3
Housing	6.8	3.7	3.4	3.0	4.1	4.3	5.3
Clothing	4.0	2.5	2.8	2.8	4.2	5.2	4.1
Transportation	5.0	4.2	4.8	3.2	3.6	1.9	5.1
Health and personal care	6.9	3.9	3.6	4.2	5.0	4.4	4.4
Recreation, reading and education	6.5	3.4	4.0	4.7	5.4	5.6	4.4
Tobacco and alcohol	12.6	8.2	9.5	11.9	6.7	7.3	9.3
Goods	5.4	4.7	3.9	3.3	4.1	3.6	4.4
Services	6.5	3.8	3.9	5.1	4.8	4.6	5.8

Housing construction in Chambly, Que.





The produce department of a food market in Toronto, Ont.

Consumer Prices

The rate of increase in the Consumer Price Index (CPI) hovered between 4.0 per cent and 4.4 per cent over the time period 1984 through to 1988. These rates of change were considerably lower than those registered for the preceding three years (5.8 per cent in 1983, 10.8 per cent in 1982 and 12.5 per cent in 1981). In 1989, the annual change in the CPI was 5.0 per cent.

The acceleration in the all-items index in 1989 was due principally to increases in the housing, transportation and tobacco products and alcoholic beverages indexes. The food index also registered an acceleration in comparison to the rise in 1988, but the rate was noticeably slower than the rise in the overall CPI. In terms of goods and services, since 1985 (when the rise in the goods index was identical to that in the services index), the advances in the services index have been consistently greater than those in the goods index.

As prices rise, the purchasing power of money declines. The quantity of goods and services purchased with \$1.00 in 1989 could have been bought with 95.2 cents in 1988, 91.5 cents in 1987 and 87.7 cents in 1986.

Financial Institutions

Canada's financial community has witnessed profound changes in its environment over the past 10 years. While a large number of foreign banks and other financial concerns have become active in Canada, Canadian financial institutions, particularly the large banks, have significantly expanded their international activities. Increased competition during the last recession and since also have had a dramatic effect in a number of areas. A number of insurance companies and trust companies ceased operations; others merged or were purchased by individuals or corporations involved in other business areas. Two small Canadian banks suspended operations in September 1985, marking the first bank failures in 62 years; a third, ranked eighth in terms of assets, experienced a run on its deposits and merged with the sixth largest bank. These difficulties occasioned a continuing examination of the financial system and the federal government proposed a general strengthening of controls on banks and other federally-incorporated financial institutions; the provincial governments also strengthened their control and examination of institutions within their jurisdictions.

Bank of Canada

The Bank of Canada is Canada's central bank and the agency directly responsible for monetary policy. It has the sole right to issue notes for circulation in Canada. These notes,

Dressed for the occasion, an examiner at the Canadian Bank Note Co. Ltd., in Ottawa, checks some of the last batch of \$1 bills. The last of the \$1 notes went into circulation in June 1989. One-dollar banknotes had been printed by the Bank Note Co. since 1897. The \$1 metal loonie, nicknamed the loonie because it bears the loon on its face, is replacing the \$1 bill.





Toronto, Ont.

together with the coinage produced by the Royal Canadian Mint, make up the currency in circulation and are the means of payment in cash transactions. Control over the level of currency in circulation and over the amount of cash reserves available to the banking system enables the Bank of Canada to influence the level of interest rates in Canada and the external value of the Canadian dollar, thereby affecting the level of spending and the rate of inflation. Since the recession of 1981-82 the thrust of monetary policy has been to support the economic recovery in the context of further declines in the rate of inflation.

The principal techniques used by the Bank of Canada to alter cash reserves involve changes in its holdings of Government of Canada securities and the transfer of government deposits between the central bank and the chartered banks. By modifying the availability of cash reserves relative to the amount that banks desire, or need to hold in order to meet their statutory requirements, the Bank of Canada can influence their willingness to bid for new deposits or to make loans. These actions, in turn, affect short-term interest rates and influence the public's desire to hold money.

The Bank of Canada is also empowered to require chartered banks to hold secondary reserves, and to make short-term advances to members of the Canadian Payments Association experiencing temporary clearing shortfalls. The Bank of Canada has also been called upon occasionally to relieve more persistent liquidity problems experienced by some chartered banks. Such loans have been for larger amounts and for a more extended period. The minimum rate at which it is willing to make advances, known as the Bank Rate, is determined by the Bank of Canada. All advances must be fully secured.

In addition to its responsibility for monetary policy, the Bank of Canada acts as fiscal agent for the Government of Canada. In this role, it undertakes the management of the public debt for the government, operates a deposit account through which flow virtually all of the government's receipts and expenditures, handles foreign exchange transactions for the government and generally acts as an advisor on economic and financial matters.

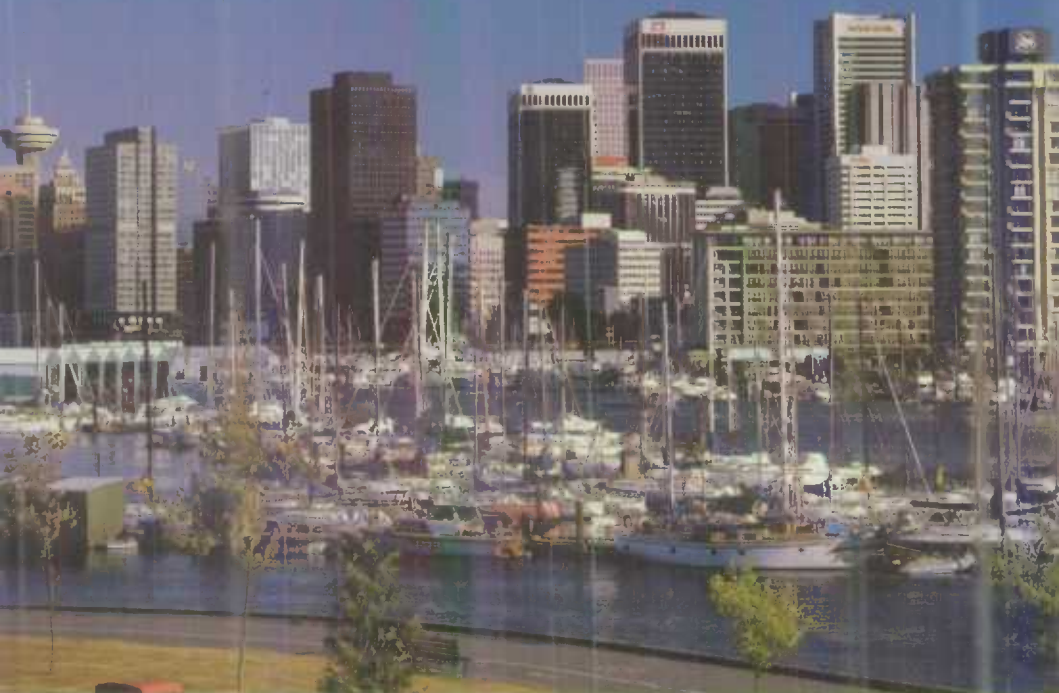
Chartered Banks

The chartered banks are the largest deposit-taking institutions in Canada and a major source of short- to medium-term financing. They are major participants in the Canadian short-term money market and it is primarily through their response to the Bank of Canada's cash management that the influence of the central bank is transmitted to the money market and to credit markets generally. In addition to their domestic activities, the chartered banks have an extensive foreign currency business and maintain offices and branches in major financial centres around the world.

Canada's chartered banks operate under the Bank Act which regulates certain internal aspects of bank operations such as the issuing of stock, the setting aside of reserves, etc. Under the revised Bank Act, enacted in December 1980, foreign banks are permitted to incorporate subsidiaries by letters patent. On October 31, 1989 the banking system consisted of eight operating Canadian-owned banks and 57 foreign-owned banks. The assets controlled by these banks as of that date were valued at \$532.0 billion (\$370.7 billion in Canadian dollars and \$161.3 billion in foreign currency).

The 1990 silver dollar, designed by artist David Craig, celebrates the 300th anniversary of Henry Kelsey's exploration of the prairies. This coin is the first to feature the new effigy of Queen Elizabeth II.





Vancouver, BC

Canadian banks generally accept various types of deposits from the public including accounts payable on demand, both chequing and non-chequing notice deposits, and fixed-term deposits. In addition to holding a portfolio of securities, they typically make loans under a wide variety of conditions for commercial, industrial, and agricultural purposes, and they account for a major share of the consumer credit extended and a significant share of residential mortgages. While many loans are relatively short-term, the banks also provide term loans to businesses and farmers, and invest in non-residential mortgages. Under the current revision to the Bank Act, banks may also carry out certain types of leasing and factoring activities through subsidiaries. Banks also generally deal in foreign exchange, receive and pay out bank notes, provide safekeeping facilities and perform various other services.

Other Financial Institutions

In addition to the chartered banks, a wide range of other financial institutions serves the diverse needs of the community. The growth and development of such institutions has been particularly rapid during the past two or three decades, in large part reflecting the

expansion of the Canadian economy and the increasing complexity of financial markets. While there is a degree of specialization in the different types of institutions, this is lessening and there is considerable competition. Among the more important non-bank deposit-taking institutions are: trust and mortgage loan companies, credit unions and caisses populaires. Other major institutions include: sales finance and consumer loan companies, life insurance companies and various types of investment companies. Stockbrokers and investment dealers also play an important role in financial markets, although the major investment dealers are subsidiaries of chartered banks. A number of institutions, including government agencies, specialize in medium- to long-term financing for small businesses, farmers and exporters or in particular types of lending such as leasing.

There are currently about 90 deposit-taking trust and mortgage loan companies in Canada, most of which have branch networks. They compete with the chartered banks for deposits, mainly through the sale of fixed-term debentures and investment certificates, and hold a major share of their assets in the form of mortgages. In addition to their deposit-taking activities trust companies are also the only corporate entities which can offer fiduciary services. As such, they may act, for example, as executors, administrators or receivers of trusts of all types. They may also act as agents for stock and bond issues, as real estate agents and managers, investment managers, custodians, and administrators of pension plans. Trust and mortgage loan companies which are licensed and supervised either by the Office of the Superintendent of Financial Institutions Canada or by provincial authorities, held assets estimated at \$195.6 billion at the end of 1988.

Credit unions and caisses populaires are also an important part of the financial system. Most of them are formed on the basis of a common bond, such as employment, or organized on community lines; they differ from other financial institutions in their co-operative nature and local character. Shares are sold to members, but most of the funds come from members' deposits and their assets are held largely in the form of mortgages and personal loans to members. Credit unions operate under provincial legislation; nearly all belong to central credit unions operating within their respective provinces. Most of the central credit unions outside Quebec are members/shareholders of the Canadian Co-operative Credit Society, an umbrella organization which operates under the Federal Co-operative Credit Societies Act.

Insurance

At the end of 1988, Canadians owned over \$995 billion worth of life insurance, with an average of \$109,000 in force per household.

The Canadian life insurance business consists of about 250 companies and fraternal benefit societies, over 75 per cent of which hold a federal certificate of registration. The latter group of companies writes more than 91 per cent of the total life insurance business of the industry and holds assets in Canada of over \$101 billion. In addition, most of these companies sell accident and sickness insurance policies that cover expenses resulting from illness and compensate policyholders for wages not received during illness.

About 330 companies, of which approximately 75 per cent hold a federal certificate of registration, sell property, automobile, liability and other casualty lines of insurance. The federally registered companies selling these lines of insurance have assets in Canada of over \$26 billion.



Staff at Revenue Canada's facilities centre, in Ottawa, processing income tax returns.

The Public Sector

Governments exist, as their name suggests to govern the jurisdiction which elected them. Governments in Canada are headed, in the case of the federal and provincial jurisdictions, by Cabinets; and, in the case of local governments, by mayors or some form of municipal executive. The public sector for the country as a whole is composed of government departments and agencies, as well as government business enterprises. The latter are companies that are owned in whole or in part by a level of government but which operate in the market place in a similar fashion to that of private enterprises, including the ability to incur profits and losses. The impact of the public sector is felt through the laws that are passed, regulations that are enforced and through economic activity, including spending, taxation and the market activities of government business enterprises.

In Canada, governments at three different levels are major employers as well as very important buyers of goods and services. In 1988, local, provincial and federal governments employed 1.2 million Canadians, or over 9.5 per cent of the total employed labour force that year. An additional 352,000 people were employed by government business enterprises. Combined expenditure of all levels of government were \$266.0 billion.

Federal Government

In 1988-89, the federal government spent \$145 billion while it collected revenues of approximately \$118 billion. Social services including health, welfare and pension programs accounted for 33 per cent of federal spending. Other significant components include resource conservation and industrial development, equalization payments to many of the provinces and defence spending. Payment of debt charges are also a significant area of expenditures.

The major components of federal revenue were, personal income tax (41 per cent), corporation income tax (10 per cent) and general sales tax (14 per cent). Other significant sources of federal revenue were various health and social insurance levies, including collections for unemployment insurance and the Canada Pension Plan.

Federal, provincial and local government finance, 1988-89 (million dollars)

Source or function	Federal government	Provincial government	Local government
REVENUE BY SOURCE			
Major components include:			
Income taxes	60,800	37,176	...
Consumption taxes	23,489	23,873	...
Health, social insurance and pension levies	17,686 ¹	11,365 ²	...
Real property taxes	1,158	14,912
Natural resources revenue	154	5,094	...
Sales of goods and services	2,669	2,493	5,121
Return on investment	7,177	11,669	1,252
Transfers from other levels of government	114	24,139	22,653
Total gross general revenue	117,988	126,525	48,857
EXPENDITURE BY FUNCTION			
Major components include:			
Health	8,026	33,603	2,845
Social services	49,056	21,773	2,076
Protection of person and property	13,637	4,063	4,156
Education	4,215	24,910	20,005
General purpose transfers to other levels of government (Specific purpose transfers included in functions above)	8,743	2,528	...
Total gross general expenditure	144,752	130,013	50,028

¹ Includes unemployment insurance contributions.

² Includes workers' compensation.

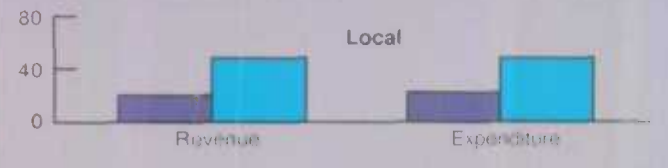
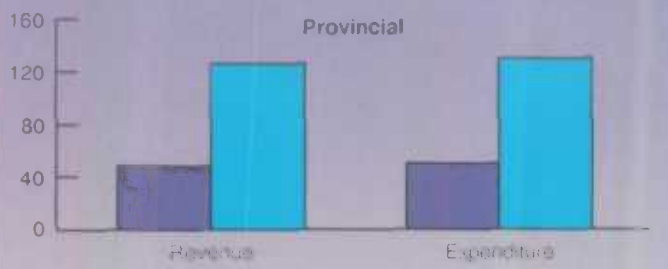
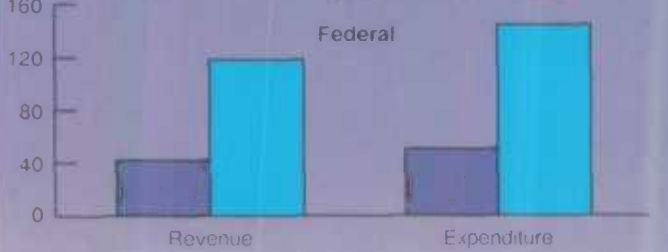
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Federal, Provincial and Local Government Finance

Current million dollars

1978-79 1988-89



The financial assets of the federal government amounted to \$107.5 billion while total liabilities were \$360.7 billion at the end of March 1988. Of these assets, 22 per cent were held in the form of loans and advances and 70 per cent pertained to investments in securities. Total liabilities consisted primarily of bonds and debentures (31 per cent) and treasury bills (23 per cent).

Federal government employment in December 1988 was 367,700, or 3 per cent of the total employed labour force in Canada. The total payroll for federal employees in 1988 was \$12.4 billion.

Federal Government Business Enterprises

Federal Government Business Enterprises (GBES) operate in most sectors of the economy including financial, resource, transportation, manufacturing, mining and utilities. Some well known federal GBES include Canada Post, the CBC, and the Canadian National Railway. In 1988, federal GBES showed a total profit of \$3.2 billion and employed approximately 197,000 people with an estimated payroll of \$6.6 billion.

Employment of federal, provincial and local governments (as at December 30, 1988)

Province	Federal government ¹	Provincial governments ²	Local governments ³	All governments	Percentage of the employed labour force by province ⁴
	Employees	Employees	Employees	Employees	
	No.	No.	No.	No.	
Newfoundland and Labrador	7,657	22,867	2,569	33,093	17
Prince Edward Island	3,332	4,630	337	8,299	15
Nova Scotia	31,656	23,182	7,439	62,277	17
New Brunswick	12,861	36,000	4,039	52,900	19
Quebec	66,180	102,122	63,680	231,982	7
Ontario	140,777	130,950	148,953	420,680	8
Manitoba	16,489	19,223	10,283	45,995	9
Saskatchewan	9,646	21,134	10,449	41,229	9
Alberta	24,642	69,727	32,010	126,379	10
British Columbia	35,726	49,626	30,527	115,879	8
Yukon	1,108	2,489	229	3,826	...
Northwest Territories	1,473	5,766	1,195	8,434	...
Outside Canada	16,111	16,111	...
Total employees	367,658	487,716	311,710	1,167,084	10

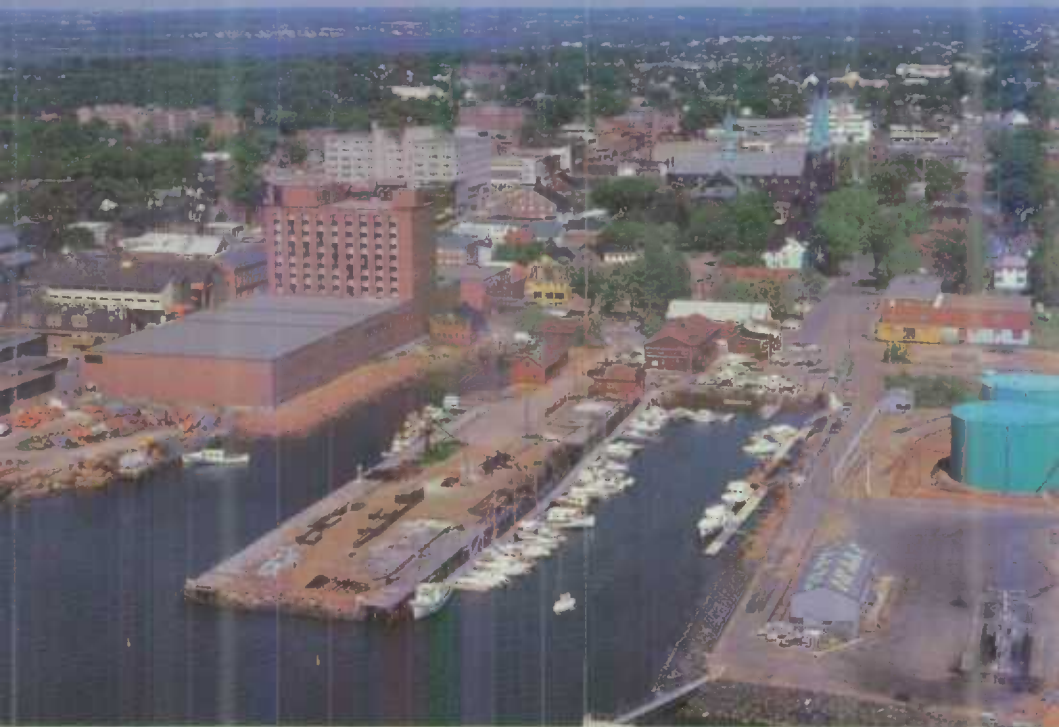
¹ Includes members of the Canadian Armed Forces.

² New Brunswick includes employees of local school boards.

³ Employees of local school boards and hospitals are not included.

⁴ Based on the Labour Force Survey, total employment, unadjusted for December 1988.

... Not applicable.



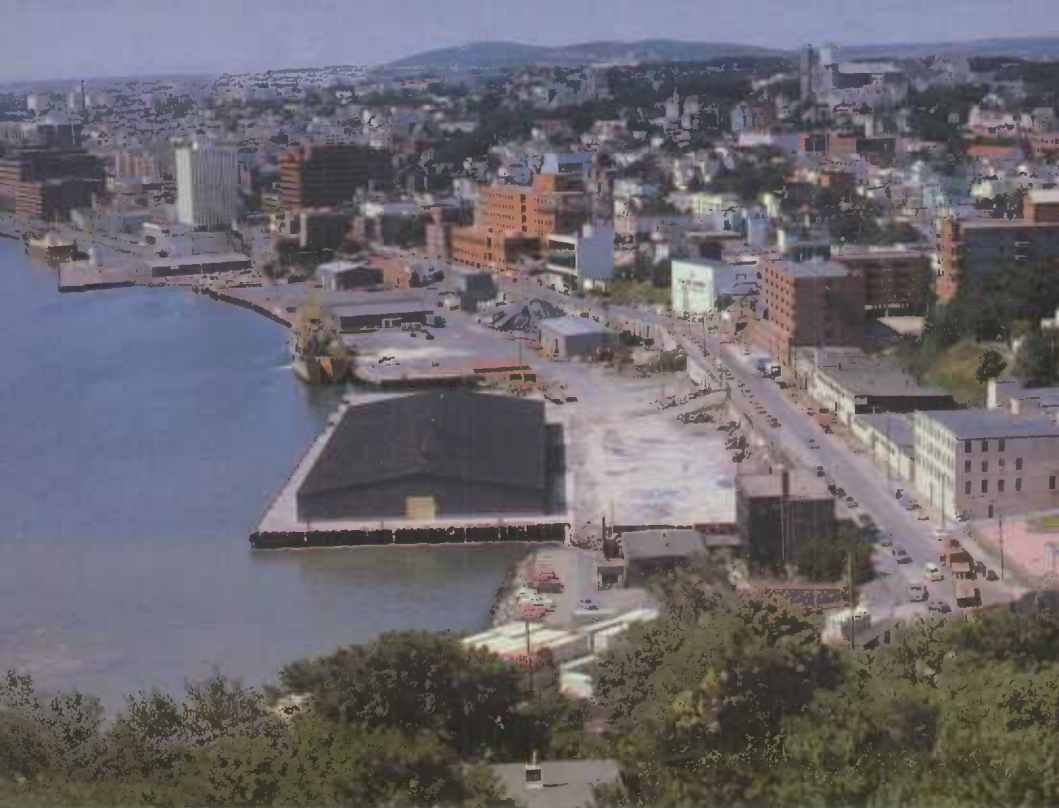
Charlottetown, P.E.I.

Provincial Governments

In 1988-89, total revenue of provincial governments was \$126.6 billion and total expenditure \$130.1 billion. Personal income taxes (25 per cent), transfers from the federal government (18 per cent) and general sales taxes (12 per cent) were the major sources of revenue for the provinces. Other significant sources of revenue included health insurance premiums, natural resources levies, corporation income taxes, and motive fuel taxes. Provincial expenditures consisted mainly of health (26 per cent), education (19 per cent) and social service (16 per cent) expenditures, reflecting the provinces' constitutional jurisdictions.

Total provincial assets at the end of March 1988, were \$112.6 billion and liabilities were \$169.0 billion. These assets were held primarily as investments in securities (59 per cent) and as cash on hand or on deposit (22 per cent) while the majority of liabilities were in the form of bonds and debentures (62 per cent).

Together, the provinces and territories employed 487,700 in December 1988. This number represented 4 per cent of the employed labour force throughout the country. As a proportion of total provincial employment, provincial government employment ranged from 19 per cent in New Brunswick to 7 per cent for Quebec. The total wage bill for provincial and territorial employees amounted to \$13.8 billion.



St. John's, Nfld.

Provincial Government Business Enterprises

Provincial Government Business Enterprises (GBEs) operate in many sectors of the economy. Some examples of provincial GBEs include Ontario Hydro, the Manitoba Public Insurance Corporation and Alberta Telephones. In 1987, total profits of provincial GBEs was \$3.8 billion and total employment was 155,000 with a total payroll of \$5.5 billion.

Local Governments

For 1988, local government revenues were \$48.8 billion and expenditures were \$50.0 billion. Real property taxes and transfers from provincial governments were the main sources of revenue. Education, transportation and communication, protection of persons and property, and the environment constituted the major local expenditures.

At the end of 1987, estimated financial assets for local governments amounted to \$17.5 billion and liabilities totalled \$37.7 billion.

As of December 1988, the number of local government employees, excluding schools, hospitals and enterprises, was 311,700 and accounted for 2.6 per cent of the total employed labour force. Total gross pay was \$8.6 billion during the calendar year 1988, excluding payments for supplementary income.



Harvesting wheat in Saskatchewan.

GOODS-PRODUCING INDUSTRIES

Agriculture

A Changing Industry

The agriculture industry continues to change as the trend to larger and fewer farming units continues. The number of Census-farms peaked at 733,000 in 1941. By 1981, the number of farms had declined to 318,000, although the volume of agricultural production was about 175 per cent greater than in 1941. The number of farms has continued to decline to 293,000 Census-farms reported by the 1986 Census of Agriculture. The production of agricultural products is concentrated in a relatively small proportion of Census-farms. A total of 20 per cent of Census-farms, with sales in excess of \$100,000 annually, produce 68 per cent of the sales of agricultural products.

In 1931, the farm population represented over 31 per cent of Canada's total population. By 1986, the proportion had fallen to under 4 per cent and about one million persons were part of the farm population.

Despite a decrease in the number of farms, the number of female farm operators increased by 18 per cent from 11,235 in 1981 to 13,300 in 1986. Women operators represented 5 per cent of all operators in 1986.

In 1986, there were 260,310 farm families in Canada, a decrease of 8 per cent since 1981. Between 1980 and 1985, average total family income decreased from \$37,343 (in 1985 constant dollars) to \$35,382. For the general population, average total family income went down from \$39,106 in 1980 to \$38,652 in 1985. The total income of farm families includes three sources: net farm income which represented 23 per cent of the total income in 1985, off-farm employment (55 per cent) and other income (22 per cent).

Farm Income, Expenses and Investment

Agriculture plays a significant role in Canada's economy, and is an important source of foreign exchange. During the six-year period, 1983-88, 47 per cent of every dollar earned by Canadian farmers was earned on the export market and agricultural products accounted for 8 per cent of all export sales. Agriculture is particularly significant in the Prairie provinces where about half of Canada's total net farm income is earned. In 1988, total net farm income (which accounts for changes in on-farm inventory) was \$3.5 billion, down 16 per cent from 1987. This decrease can be attributed to the 1988 drought which significantly reduced crop production and year-end farm grain stocks.

Farm near Plaster Rock, NB.





Farming near St. André, Que.

Total farm cash receipts reached a record level of \$22.1 billion in 1988. This increase was due to higher cereal and oilseed receipts which resulted from rising crop prices. Drought-reduced production in much of North America resulted in tighter supplies internationally and higher export prices. Livestock and animal product receipts were \$10.6 billion while direct program payments were \$3.3 billion, both unchanged from 1987.

Farm operating expenses and depreciation charges in 1988 rose for the first time since 1985 to reach \$17.5 billion. Total rebates, which reduce expenses, dropped 15 per cent from 1987 while most major farm expenses rose. Over 50 per cent of the increase was due to higher feed expenses, reflecting increased grain prices. The 1988 drought reduced feed supplies throughout North America and increased prices. Higher expenditures for interest, stabilization premiums and wages also contributed to the increase.

Larger farm size and mechanization raised the total capital investment in farming almost fivefold during the 1971 to 1986 period. Total capital investment, however, has been declining since 1982 largely as a consequence of declining farmland values. Outstanding farm debt, meanwhile, fell for the second consecutive year to \$22.7 billion. By the end of 1988, farm debt outstanding was 4 per cent below the 1986 record. Chartered banks continued to be the major lenders, financing 38 per cent of the debt, followed by the Farm Credit Corporation and other federal government agencies, financing 18 per cent.

National and provincial programs have been established, by federal and provincial governments, to help farmers, allowing them to receive loans and to be covered against natural catastrophies by crop insurance programs. To remedy fluctuating farm product prices, farmers are eligible for revenue stabilization programs. Marketing boards insure the stability of markets.

Agriculture Canada employs more than 900 researchers and professionals who conduct over 50 per cent of the agricultural and food research. Food processing, animal and vegetal protection and production, improvement of the market quality of Canadian products, soil and water conservation, the fight against parasites and the use of energy, are among the areas of research.

To lay the foundations of a stronger and more dynamic farm-produce sector, Agriculture Canada has launched the most comprehensive revision of the national farm policy to date. This policy is based on the awareness of the markets, the sector's autonomy, the protection of the environment and the regional diversity. The subsequent strategy will allow the Canadian agriculture industry to take advantage of opportunities and meet new challenges.

Pool elevator near Glenboro, Man.





Harvesting wheat near High River, Alta.

Field Crops

The major portion of Canadian cropland is used for the production of cereal grains, oilseeds and forage crops. In 1989, 22 million hectares of cereal grains were grown; this area represents approximately 66 per cent of total cropland. Oilseeds were grown on 4 million hectares, or 12 per cent of cropland. Another 19 per cent of cropland, or 6 million hectares, was utilized for the production of forage crops such as tame hay and fodder corn. Less than one million hectares were seeded to other field crops such as field peas, mustard seed or lentils.

A total of 48 million tonnes of cereal grains were produced in 1989. In the 1988-89 crop year, 4 million tonnes of cereal grains were processed by domestic manufacturing and food processing industries; 18 million tonnes were fed to livestock and 16 million tonnes were exported. Five million tonnes of oilseeds were produced in 1989. In the 1988-89 crop year, 2 million tonnes were processed domestically and 3 million were exported. Cereals and oilseeds represent the majority of all Canadian agriculture export earnings and are an important source of foreign exchange.

Wheat is Canada's dominant crop, in terms of both production and export value. In 1989, 24 million tonnes of wheat were produced. In the 1988-89 crop year, with a drought-reduced crop of only 16 million tonnes, 12 million tonnes were exported, 78 per cent of total production. The hard spring wheat produced on the Canadian Prairies is world renowned for its quality. In Saskatchewan, the major wheat growing province, wheat accounted for 32 per cent of 1989 provincial farm cash receipts.

Table 1. Production and area of the major Canadian field crops, 1986-89

Item	Production				Area
	1986 ^f	1987 ^f	1988	1989	1989
	'000 t	'000 t	'000 t	'000 t	'000 ha
Winter wheat	1 981.4	1 257.2	1 346.9	1 336.7	419.8
Spring wheat	25 499.9	20 720.3	12 670.2	18 948.2	10 608.0
Durum wheat	3 897.0	4 014.0	1 979.0	4 098.0	2 611.0
All wheat	31 378.3	25 991.5	15 996.1	24 382.9	13 638.8
Oats for grain	3 251.2	2 995.1	2 993.1	3 548.9	1 708.9
Barley for grain	14 568.7	13 957.0	10 212.3	11 672.4	4 657.9
All rye	608.9	492.3	267.9	835.4	485.3
Corn for grain	5 911.5	7 014.8	5 369.2	6 400.4	1 014.4
Flaxseed	1 026.3	729.0	372.9	530.6	640.4
Canola/rapeseed	3 786.4	3 846.2	4 311.0	3 057.6	2 907.7
Soybeans	960.0	1 269.8	1 152.6	1 219.0	539.5
Mustard seed	226.9	132.2	121.1	165.1	214.5
Dry peas	238.2	441.6	346.9	274.4	178.0
Lentils	170.4	313.6	58.6	105.3	115.1
Canary seed	126.1	99.6	59.9	124.7	129.2
Sunflower seed	36.3	52.4	47.6	69.4	56.6
Tame hay	30 204.3	30 840.0	29 025.6	30 836.7	5 923.4
Fodder corn	8 357.0	8 691.0	6 993.0	7 222.0	240.1

^f Revised.

Canadian feed grains, mainly oats and barley on the Prairies and corn in Ontario and Quebec, are largely consumed by the Canadian livestock industry. Of the 20 million tonnes of feed grains produced in 1988, 16 million were fed to livestock.

Oilseeds, including canola, flaxseed, soybeans and sunflower seed, are also a major commodity group. These crops are processed to produce cooking and industrial oils and high protein meal for livestock feed. Most canola, flaxseed and sunflower seed are produced on the Prairies, while soybean production is concentrated in southwestern Ontario. In the 1988-89 crop year, 45 per cent of the canola and virtually all of the flaxseed produced were exported.

The production of forage crops is important in Eastern Canada and British Columbia, due to the emphasis on livestock production in these regions. In 1989, Quebec and Ontario produced 6 million tonnes of fodder corn and 14 million tonnes of tame hay, 44 per cent of total Canadian production.



Apple blossoms in the Annapolis Valley of Nova Scotia.

Horticultural Crops

A wide variety of fruits and vegetables are grown in Canada for domestic and export markets. Farm cash receipts for fruits and vegetables amounted to almost one billion dollars in 1988. The most important fruit crop is apples, with commercial apple orchards located in British Columbia, Ontario, Quebec, New Brunswick and Nova Scotia. Other tender fruits grown in Canada include pears, peaches, cherries, plums and grapes, grown mainly in the Niagara region of southern Ontario and the Okanagan Valley of British Columbia.

Potatoes generate a significant proportion of farm receipts in certain regions of the country; the bulk of the crop originates in the Maritimes. In 1989, 2.8 million tonnes of potatoes were produced in Canada.

Mushrooms are cultivated in buildings under climate controlled conditions without light. The mushroom industry has expanded in recent years to meet increasing demand. In 1988, production exceeded 50 million kilograms, with farm sales of approximately \$148 million.

The greenhouse industry is a producer of horticulture products such as cut flowers and potted plants and vegetables. In 1988, 1,200 greenhouses reported farm sales of \$449 million, 86 per cent from sales of plants and 14 per cent from sales of vegetables. The most popular greenhouse products are tomatoes, cucumbers, bedding plants, cut flowers and potted plants.

Canada also has a thriving nursery industry supplying young trees, shrubs and sod. Sales in 1988 totalled over \$297 million, 29 per cent of which were receipts from the sale of sod. Other nursery products include fruit trees, hedging and shade trees. Nursery stock, which is grown out-of-doors, occupied almost 39 000 ha of land in 1988.

Approximately 75 per cent of the world's maple syrup is produced in Canada. Quebec accounts for approximately 93 per cent of the Canadian production; Ontario, New Brunswick and Nova Scotia are also involved in this industry. Maple syrup, including the quantity made into maple sugar, taffy and butter, earned Canadian farmers \$96 million in 1988; the largest export market was the United States where sales totalled over \$31 million.

Hilling young potato plants near Souris West, PEI.





Holland Marsh, Ont.

Honey is produced commercially in all provinces, except Newfoundland; the Prairie provinces produce most of Canada's crop. In 1988, 37 000 tonnes of honey were produced, with a farm value above \$45 million.

Livestock and Dairy Products

Commercial sales of livestock and poultry, important sources of income, are approximately equal to the sales from crops in an average year. In 1988, cattle and calves totalled 12.1 million head. Cattle slaughtered in federally inspected plants during that year totalled 2.8 million head, with an additional 374,700 head exported for slaughter in the United States.

In 1988, there were 10.9 million pigs on Canadian farms. A total of 14.5 million pigs were slaughtered in federally inspected establishments, amounting to 1.2 million tonnes of dressed pork; 27 per cent was exported.

Sheep and lambs numbered 696,700 head on July 1, 1988. Federally inspected slaughter of sheep and lambs increased in 1988 to a total of about 168,300 head or 3 440 tonnes of dressed meat. In 1988, imports of mutton and lamb at 14 000 tonnes outstripped exports which totalled 170 tonnes or 2.5 per cent of total Canadian production.



With self-serve water on tap, pigs learn how to activate the spout for a drink, on a farm near 1st Town, Alta.

Table 2. Inventory of selected classes of livestock on farms in Canada, January 1, 1981-90 (thousands)

Year	Total cattle	Milk cows and heifers	Beef cows and heifers	Total pigs	Total sheep
1981	12,165.9	2,465.5	4,541.7	10,189.7	529.9
1982	12,162.5	2,486.2	4,568.1	9,969.6	571.6
1983	11,860.8	2,422.4	4,447.2	9,889.6	565.5
1984	11,629.4	2,349.1	4,360.2	10,345.9	550.3
1985	11,329.5	2,281.1	4,258.0	10,572.6	513.5
1986	10,955.8	2,195.3	4,130.6	9,967.0	489.5
1987 ^f	10,802.4	2,155.9	4,146.8	9,996.0	481.1
1988 ^f	10,818.1	2,089.8	4,187.8	10,658.0	475.4
1989 ^f	11,016.1	2,081.6	4,346.2	11,018.3	481.2
1990	11,200.6	2,055.4	4,454.5	10,694.0	512.8

^f Revised.



Fall cattle drive in the Alberta foothills. Cattle are rounded up in early November and driven to winter forage on the prairies or sent to market.

Spring cattle drive.



Table 3. Estimated meat production and consumption, 1982-89

Animal	Year	Animals slaughtered	Production	Imports	Exports	Domestic consumption
		'000	t	t	t	t
Beef	1982	3,788.1	986 493	86 306	82 772	992 442
	1983	3,708.8	992 745	90 650	82 375	996 623
	1984	3,565.9	948 414	113 624	104 526	959 498
	1985	3,603.0	985 250	113 643	116 492	980 505
	1986	3,530.4	990 482	109 848	102 326	1 002 412
	1987 ^f	3,262.6	932 429	133 589	88 873	978 705
	1988 ^f	3,157.2	927 702	153 064	82 492	993 162
	1989	3,198.8	931 046	158 494	103 964	985 908
Veal	1982	597.7	38 662	1 808	465	40 113
	1983	618.8	39 711	833	303	39 804
	1984	651.9	42 308	1 211	570	43 362
	1985	631.8	43 539	1 201	615	43 969
	1986	619.9	45 152	1 708	2 279	44 642
	1987 ^f	564.6	44 762	1 204	3 547	42 805
	1988 ^f	546.0	45 007	..	3 684	39 968
	1989	560.9	48 549	..	4 091	45 328
Mutton & lamb	1982	415.1	7 773	10 475	117	18 047
	1983	454.2	8 464	13 792	197	19 652
	1984	467.5	8 902	9 834	39	21 568
	1985	418.7	8 205	11 719	98	19 042
	1986	396.9	7 972	16 210	53	23 365
	1987 ^f	382.0	7 571	15 048	56	23 080
	1988 ^f	390.2	7 769	13 999	70	22 060
	1989	414.4	8 142	12 349	126	20 713
Pork	1982	13,458.1	1 005 916	18 799	207 898	715 859
	1983	13,702.5	1 029 608	24 167	201 205	745 513
	1984	13,886.0	1 043 772	18 215	223 869	730 003
	1985	14,452.0	1 088 418	21 229	250 806	748 813
	1986	14,443.7	1 097 339	17 879	271 898	731 202
	1987 ^f	14,853.9	1 130 882	22 077	301 086	734 929
	1988 ^f	15,553.2	1 190 400	14 436	318 787	759 415
	1989	15,530.0	1 184 108	12 509	304 817	770 345

^f Revised.

.. Not available.

Total farm sales of milk in 1988 amounted to 7.6 million kL (kilolitres). Approximately 64 per cent was sold as industrial milk for use in the production of butter, cheese, yogurt, ice cream and concentrated milk products; fluid milk sales accounted for the other 36 per cent. Canadian milk production is concentrated in Ontario and Quebec. In 1988, Quebec produced 47 per cent of total Canadian industrial milk; Ontario produced 37 per cent of the fluid milk. Farm value of milk produced in 1988 amounted to \$3.3 billion. The number of dairy cows was estimated at 1,428,500 head on July 1, 1988.



Farm Land as a Percentage of Total Land, 1990

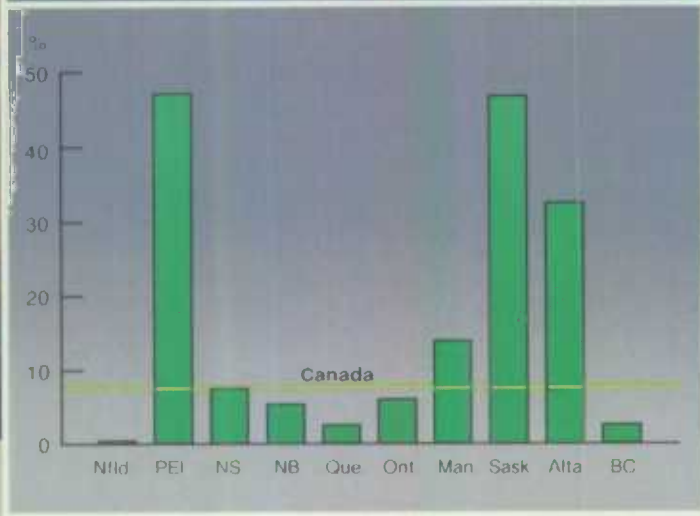




Table 4. Farm sales of milk and cream, Canada, 1984-88 (kilolitres)

Year	Fluid purposes	Delivered as milk	Delivered as cream	Total farm sales
1984	2 598 245	4 674 293	194 435	7 466 973
1985	2 612 187	4 461 176	190 150	7 263 513
1986	2 680 310	4 440 604	184 260	7 305 174
1987	2 719 544	4 468 620	177 315	7 365 479
1988	2 739 367	4 689 359	173 070	7 601 796

Farmers using modern technology





Production of poultry has increased steadily in recent years while the production of eggs has remained fairly stable.

Poultry and Eggs

The production of eggs, broiler chickens and turkeys is highly specialized and concentrated. The producers operate under supply-management programs operated by provincial producer marketing boards. Provincial level production activities are co-ordinated by national agencies — the Canadian Egg Marketing Agency, the Canadian Chicken Marketing Agency and the Canadian Turkey Marketing Agency, which operate under federal government charters.

Production of poultry has increased steadily in recent years while the production of eggs has remained fairly stable. Chicken is the major poultry product consumed by Canadians; per capita consumption reached 22.6 kg in 1988. Ontario accounted for almost 35 per cent of chicken production, in 1988, Quebec (31 per cent) and British Columbia (11 per cent). Turkey production is more heavily concentrated; in 1988, 43 per cent of the production was in Ontario and 22 per cent in Quebec.

Ontario produced 38 per cent of eggs in Canada, in 1988, followed by Quebec (17 per cent), British Columbia (12 per cent) and Manitoba (12 per cent). Per capita consumption of eggs totalled 17.09 dozen in 1988, a slight increase over the 1987 level.

Furs

With recent increased demand and prices, the value of pelts from fur farms totalled \$59 million in 1987-88 and the value of wildlife pelts totalled \$65 million. In 1986-87 wildlife and fur farm production was valued at \$155 million.



Farmland in the Fraser River Valley, near Chilliwack, BC.

Table 5. Estimated poultry and egg production, 1984-88

	Year	Birds slaughtered	Weight	Value
		'000	t	\$'000
Chicken	1984	295,616	427 401	701,654
	1985	324,383	472 112	711,984
	1986	347,862	487 696	747,873
	1987	385,451	530 847 [†]	777,567
	1988	388,409	537 363	837,351
Turkey	1984	16,265	97 721	176,148
	1985	17,002	102 442	177,725
	1986	17,061	104 906	181,906
	1987	18,251	115 170	194,734
	1988	18,840	119 403	206,818
Stewing hen	1984	22,155	33 361	15,006
	1985	22,180	33 362	15,110
	1986	23,666	35 875	16,235
	1987	24,429	37 142	17,043
	1988	24,609	36 730	18,214
Eggs		Layers	Dozens of eggs	Value
		'000	'000	\$'000
	1984	22,931	477,529	510,354
	1985	22,754	472,152	503,184
	1986	22,582	472,262	494,183
	1987	22,573	475,468	492,644
	1988	22,421	476,748	524,402

[†] Revised.

Per Capita Food Consumption

Total Canadian consumption of fruit reached a high of 104 kg per person in 1984 but has since declined to 89 kg in 1988. Fresh fruits remain by far the most popular products led by apples, citrus fruits, grapes and bananas which accounted for 74 per cent of Canadian fresh fruit consumption.

Over recent years, total consumption of vegetables has levelled off to the 1988 level of 66 kg per person. The recent growth in attention to nutrition is reflected in the consumption of fresh vegetables, which reached 86 per cent of total vegetable consumption in 1988. Per capita consumption of potatoes which varies from year to year, totalled 68 kg per person in 1988.

Per capita consumption of partly skimmed or 2% milk rose from 61 L in 1985 to 65 L in 1988, while consumption of homogenized whole milk (3.2% butter fat) dropped from 32L to 28L during the same period. A similar substitution from butter to margarine, occurred in the 1970s. By 1988, consumption of margarine was 5.8 kg per capita per year, 52 per cent higher than that of butter at 3.8 kg. The popularity of cheese continues to increase. In 1988, consumption of cheddar cheese reached 2.8 kg per capita and variety cheese 4.5 kg per capita, both the highest in history. Consumption of yogurt also reached a new high of 3.2 L per capita in 1988.

Meat continues to be consumed in significant quantities by Canadians, however, the proportion of beef, pork, poultry and fish tends to fluctuate, following production and price cycles. While this cyclical effect occurs traditionally as consumers switch between beef and pork — chicken and fish have become relatively important. In 1988, per capita disappearance of pork was 29 kg with beef at 38 kg; per capita consumption of poultry climbed to 29 kg and fish reached 8 kg.

Consumption of coffee has remained relatively constant over the past 20 years, decreasing from a high of 4.8 kg per capita in 1981 to 4.3 kg in 1988. Consumption of alcoholic beverages has somewhat stabilized. Wine consumption which peaked in 1986 at 11.4 L per person, fell to 9.4 L per person by 1988. Per capita consumption of beer in 1988 was 82.4 L, while that of distilled spirits was 6.3 L; both relatively unchanged since 1985-86.

Harvesting tomatoes, near Leamington, Ont.



Forestry

Canada's forests are our most valuable natural resource; economic, social and environmental benefits are derived from this resource. The forest covers nearly one-half of Canada's land mass. Productive forests which supply timber for pulp, paper, plywood, lumber and other products occupy 2.2 million square kilometres. The world's largest exporter of forest products, Canada accounts for 22 per cent of all forest products traded in world markets. The forest products industry is Canada's largest manufacturing industry in terms of value-added, employment and wages. The industry ships over \$30 billion in goods per year and adds more to Canada's positive trade balance than any other industry. Regionally, the forest industry is the mainstay for some 300 single industry communities and employs approximately 300,000 Canadians. In addition, the forest resource is a major factor in the multibillion dollar tourist and outdoor recreation industry. The forest also moderates weather, regulates stream flow, minimizes soil erosion, and provides fish and wildlife habitat.

Logs on the Ottawa River.





Gatineau River, Que. The forest covers nearly one-half of Canada's land mass.

Eighty per cent of Canada's productive forests are under the jurisdiction of the provinces. The area of the country's productive forest administered by the federal government totals 12 per cent. The total area of privately-owned forest land is 8 per cent, most of it located in Eastern Canada. There are over 400,000 private woodlot owners in Canada.

The provincial governments administer and protect the productive forest area and make it available to private industry through leases and other arrangements. Governments, industry and the public in Canada have been strongly challenged in recent years to improve the national forest base. The challenge has been twofold: the need to develop the new, intensively-managed forest to take the place of the existing forest within approximately 30 years and, at the same time, the need to keep today's mature and over-mature forests sufficiently productive and competitive to meet the requirements of industry into the next century.

Table 6. Principal statistics — forest industries, 1983-87

	Establishments	Employees	Salaries and wages	Value of shipments, other revenue	Census value added ¹
	<i>No.</i>	<i>No.</i>	<i>\$'000,000</i>	<i>\$'000,000</i>	<i>\$'000,000</i>
Logging					
1983	3,508	45,943	1,219	5,829	2,152
1984	3,694	51,173	1,324	6,246	2,192
1985	3,739	45,962	1,294	6,427	2,184
1986	4,000	45,760	1,313	6,709	2,297
1987	3,503	44,156	1,387	7,799	2,376
Wood industries					
1983	3,453	101,965	2,427	9,675	3,993
1984	3,561	102,941	2,541	10,280	4,051
1985	3,476	107,560	2,740	11,456	4,688
1986	3,578	110,966	2,856	12,827	5,523
1987	3,423	121,644	3,304	15,031	6,547
Paper and allied industries					
1983	672	114,308	3,341	15,755	5,940
1984	678	115,799	3,516	18,155	7,492
1985	688	114,187	3,745	18,844	7,524
1986	698	117,063	4,003	20,996	8,917
1987	694	119,346	4,185	23,993	10,995

¹ Census value added is total value added as calculated by the census of manufacturers.

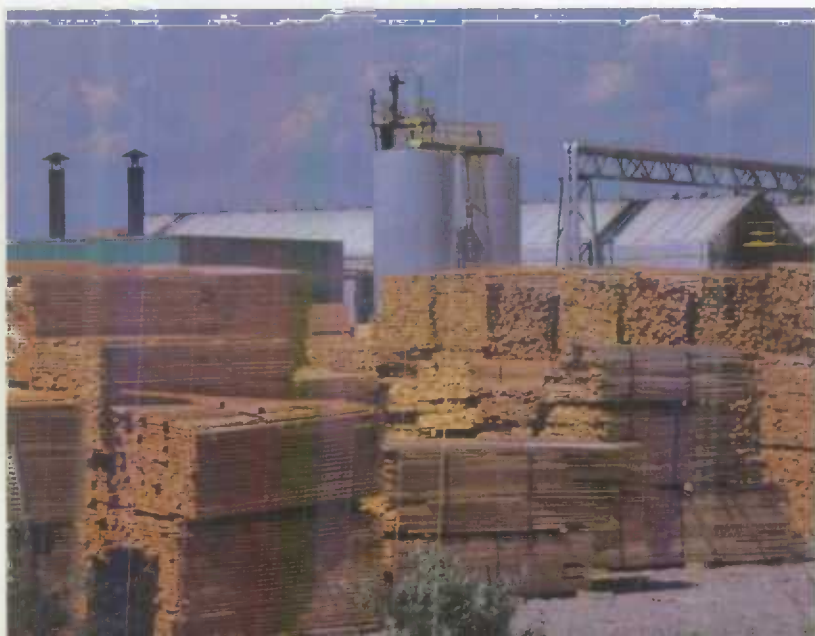
Pulp mill on Vancouver Island, BC.





Loading logs in New Brunswick.

Lumber yard at Grand Falls, NB.





Fire look-out station on a mountain peak in the Elk Valley of southern British Columbia.

Fire-fighting crew in British Columbia, mixing fire retardant to be dropped by water bomber on a forest fire.





Waterfall on the Coquitlam River, Man.

Significant developments have occurred in Canada over the last decade concerning the need to improve the forests. New legislation has been adopted in most provinces, enabling industry and governments to jointly manage Crown-owned forests. Federal-provincial forestry agreements have significantly increased the financial support from the federal government for forestry. These initiatives from all parts of the forest sector indicate that Canadians recognize the importance of forest renewal to Canada's economic, social and environmental prosperity.

Forest management is challenged to ensure that the older forest is protected and carefully utilized until the managed forest is mature. This is essential since fire, insects and disease exact a heavy toll on Canada's forest resource. In fact, as many trees are lost to fire, insects and disease as are harvested each year. Along with protection, high utilization standards are also in place to ensure extensive utilization of the old forest. In addition, new technology allows the use of species which were formerly unused by the industry.

Protection, increased utilization, and rapid regeneration by intensive management will ensure that the forest remains Canada's most important renewable resource.



Pulp and paper plant at Port Alberni, BC.

Forest Industries

The forest products group is composed of industries that produce and transform wood fibre. The group includes the logging industry, the wood products industries and the paper and allied products industries.

Canada has a very extensive forest area. This resource, through proper management, has become the basis for a world-scale industry. Canada is the world's largest producer of newsprint and the second largest producer of pulp.

The forest industries represent an important sector of Canada's goods-producing industries; employment exceeded 285,100 persons in 1987. The value of shipments of forest products approached \$47 billion in 1987 and the value of exports was nearly \$21 billion. The industry plays a role in the economic activity of every province and territory. However, the major activities are concentrated in three provinces, British Columbia, Quebec and Ontario. These three together account for about 88 per cent of the output of the forest industry.

Fisheries

Canada's commercial fishing industry is one of the largest in the world, with approximately 93,000 commercial fishermen (85,000 in marine fisheries and 8,000 in freshwater) and 36,000 vessels.

Canada protects its fisheries industry through participation on 10 international commissions and by means of regulatory measures and resource management programs within its 200-mile coastal limit.

It has been more than a decade since Canada took control over harvesting efforts within the 200-mile limit. Fish stocks have been significantly rebuilt through rigorous measures designed to conserve and enhance them. Management initiatives include: the application of Total Allowable Catches, increased surveillance and enforcement, fleet and gear sector quotas, regulations governing fishing effort, and limits on vessel size and numbers.

The landings for 1988 reached record highs — 1.63 million tonnes valued at \$1.64 billion, an increase from the 1.01 million tonnes and the \$390 million value in 1976 (prior to the 200-mile fisheries jurisdiction).

Eighty-one per cent of landings occurred in the Atlantic, 16 per cent in the Pacific and 3 per cent in the freshwater fishery. In Atlantic Canada, the inshore fisheries accounted for 65 per cent of the total landings and 80 per cent of the landed value for the region. The remaining 35 per cent of the landed weight and 20 per cent of landed value came from the large offshore trawlers. The total landings of approximately 1.32 million tonnes from the Atlantic region in 1988 was processed into an estimated \$3.2 billion worth of fish products, a record value of production from the Atlantic Coast.

Saint Cova, NB





Salvage Cove, Nfld.

Fishing harbour at Bayview, PEI.





Pelly's Cove, NS.

On the Pacific Coast, landings in 1988 continued to rise in both volume and value. The largest increase in this region appeared in Pacific salmon which rose by 31 per cent in weight and 47 per cent in value over the previous year. The total Pacific Coast landings amounted to 65 847 t — valued at \$533 million. Inland fisheries also showed increases in 1988, landed weight was up 4 per cent to 52 000 t and the landed value was up 3 per cent to \$78 million.

The volume of Canadian fish exports in 1988 reached 616 852 t — up 5 per cent from the 1987 levels. The value decreased 2.6 per cent from the previous year to \$2.7 billion. The United States received 56 per cent of the export volume. The other two major markets were Japan and the European Economic Community, which received 15 and 14 per cent, respectively.

Fishing near Vancouver Island, BC.



Minerals and Energy

Canadian minerals continued to be a leading sector of the economy in 1989. The value of Canada's mineral production totalled \$39.1 billion in 1989 compared with \$37.0 billion in 1988, an increase of nearly 6 per cent. All regions participated in the strong performance. However, weak markets for potash caused slowdowns in Saskatchewan and New Brunswick while closures of gold mines affected overall production in Manitoba.

As a whole, the non-fuel mineral sector accounted for \$19.8 billion, or 51 per cent of the overall value of mineral production. Fuels, comprising petroleum, natural gas and its by-products and coal, accounted for the remaining 49 per cent. The metallic-minerals sector performed well with value of production reaching \$14.3 billion, up 5.3 per cent over the \$13.6 billion reported in 1988. The value of production of the non-metallics declined from \$2.7 billion in 1988 to \$2.5 billion in 1989, a decrease of 6.5 per cent. The value of production for structural materials, such as cement, and sand and gravel, remained unchanged from the \$2.9 billion recorded in 1988. Crude petroleum remained the leading Canadian mineral commodity in 1989 with a production value of \$10.7 billion, an increase of more than 16 per cent over the previous year.

Weak prices that have plagued the energy sector for several years were showing some evidence of improvement in 1989, at year-end. Conversely, near-capacity output and firm prices kept the production of nickel, copper, zinc and iron ore at record levels, while gold production, although encountering softer prices, continued on a rising trend.

Mining engineers studying core samples taken at the Wellgreen project in the Yukon. The Wellgreen project contains one of the largest niobium group element deposits in Western Canada.





Gold mining at Hemlo, Ont.

Minerals

Nickel produced the major share among the metals, in 1989, as Canada's nickel mines in Ontario and Manitoba yielded nickel valued at \$3.1 billion. Zinc and copper were valued, in 1989, at \$2.8 billion and \$2.4 billion, respectively. British Columbia and Ontario accounted for about 83 per cent of all copper production in Canada, while the Northwest Territories, Ontario and New Brunswick accounted for more than 60 per cent of Canadian zinc production.

Exploration activity remained focused on gold in 1989. While output was up by nearly 18 per cent, the value of production at \$2.3 billion was unchanged from the previous year, a reflection of weaker prices. Nearly 74 per cent of Canada's gold production came from Ontario and Quebec. As a result of the closing of primary silver mines in Northern Ontario and the Yukon, the value of Canada's silver production declined from \$386 million in 1988 to \$263 million in 1989. All domestic production of silver will now be by-product silver from base-metal or gold-mine operations.

Canada's aluminum production is derived from imported bauxite ore, with eight smelters located in Quebec and one in British Columbia. Aluminum output, which reached nearly 1.6 million tonnes in 1989, has increased rapidly in recent years as a result of the addition of new smelters and expansions.

Table 7. Mineral production, by class and province, 1986-89 (thousand dollars)

	1986	1987	1988	1989 ¹
Canada				
Metals	8,797,705 ^f	10,962,122	13,607,895	14,328,979
Non-metals	2,522,182 ^f	2,381,433	2,717,192	2,540,886
Fossil fuels	18,763,327	20,273,699	17,772,949	19,361,190
Structural materials	2,341,123 ^f	2,743,770	2,863,171	2,890,762
Total ²	32,445,952 ^f	36,361,024	36,961,207	39,121,818
Newfoundland	817,339	742,818	863,748	959,213
Prince Edward Island	1,754	2,541	2,138	2,177
Nova Scotia	366,718	406,639	453,073	442,638
New Brunswick	501,572 ^f	623,611	910,803	909,547
Quebec	2,190,538	2,780,144	2,711,389	2,812,402
Ontario	4,824,740 ^f	5,652,000	6,896,291	7,308,805
Manitoba	763,892	1,000,046	1,626,564	1,686,833
Saskatchewan	2,524,555	3,150,831	3,043,056	3,017,193
Alberta	16,330,582 ^f	17,079,970	15,061,958	16,207,199
British Columbia	3,159,868 ^f	3,614,728	3,943,091	4,091,222
Yukon	176,101	437,199	492,199	539,880
Northwest Territories	788,287	870,494	956,897	1,144,709

¹ Preliminary estimates.

² Totals may not agree with components due to the inclusion of confidential data, not published at the detail level or due to rounding.

^f Revised.

The production of iron ore remained relatively stable in 1989 but, because of better prices, its value increased nearly 13 per cent to \$1.5 billion. Iron ore is mined in western Labrador, northeastern Quebec and Ontario.

Not all markets were favourable. For example, uranium faced depressed prices and potash faced sluggish demand. Uranium, valued at \$1.0 billion in 1989, is produced exclusively from mining in Ontario and Saskatchewan.

Canada has the world's largest reserves of potash, and with one-quarter of the world's production, is second only to the USSR. The value of Canadian potash production in 1989 was nearly \$1.0 billion. About 95 per cent of the world's potash is used as fertilizer.

The principal coal producing provinces are British Columbia, Alberta, Nova Scotia, Saskatchewan and New Brunswick. The industry produced 71 million tonnes of coal in 1989, slightly surpassing the record output of the previous year.



A sulphur recovery plant, north of Calgary, Alta.

Canada's production of sulphur in all forms was valued at nearly \$524 million in 1989. Close to 90 per cent of sulphur production comes from the processing of sour natural gas. Because of its by-product nature, sulphur output in Canada is not influenced by price. Two-thirds of all sulphuric acid, the commercially refined product of most sulphur, is used in the manufacture of fertilizers and industrial chemicals.

Nearly 70 per cent of Canada's asbestos production, valued at about \$260 million in 1989, came from the province of Quebec; the remainder came from British Columbia and Newfoundland. The value of salt production in Canada totalled \$270.2 million in 1989. Ontario's share represented 65 per cent of Canadian tonnage.

Cement, with a value of production that reached nearly \$1.0 billion in 1989, was the most valuable structural material produced in Canada. Nearly 65 per cent of the production value of cement originated in Ontario and Quebec.

In addition to those minerals already noted, Canada produces a large number of other mineral products. These mineral products include silver, tantalum, molybdenum, titanium and magnesium, and industrial mineral products such as peat and dimension stone. Sand and gravel, with a production value of about \$860 million in 1989, are particularly noteworthy because of their essential use in construction and their availability in all provinces and the territories. While each of these minerals may be relatively small in value, in aggregate they contribute significantly to economic activity at both the regional and national level.

Table 8. Selected mineral production, by kind, 1986-89

Mineral	Unit	1986	1987 ^f	1988	1989 ¹
		'000	'000	'000	'000
Metallics					
Antimony	kg	3 805	3 706	3 171	2 422
Bismuth	kg	153	165	181	164
Cadmium	kg	1 484	1 481	1 664	1 692
Cobalt	kg	2 297	2 490	2 398	2 337
Copper	kg	698 527	794 149	758 478	706 117
Gold	g	102 899	115 818	134 813	158 440
Iron ore	t	36 167	37 702	39 934	40 773
Lead	kg	334 342	373 215	351 148	275 800
Molybdenum	kg	11 251	14 771	13 535	13 716
Nickel	kg	163 639 ^f	189 086	198 744	196 133
Platinum group	g	12 190	10 930	12 541	10 375
Selenium	kg	353 ^f	430	321	363
Silver	kg	1 088	1 375	1 443	1 262
Tungsten	kg	2 470	—	—	—
Uranium	kg	11 502	13 612	12 066	11 564
Zinc	kg	988 173	1 157 93		
			6	1 370 000	1 315 274
Non-metallics					
Asbestos	t	662	665	710	691
Gypsum	t	8 803	9 094	9 512	8 457
Nepheline syenite	t	467	506	540	626
Peat	t	738	662	736	695
Potash	t	6 753 ^f	7 668	8 154	7 036
Quartz	t	2 640	2 662	—	—
Salt	t	10 332	10 129	10 687	11 350
Soapstone, talc, pyrophyllite	t	123	136	146	146
Sodium sulphate	t	371	342	331	370
Sulphur in smelter gas	t	758	723	856	831
Sulphur, elemental	t	6 966	5 809	5 981	5 183
Structural materials					
Cement	t	10 611	12 603	12 350	12 550
Lime	t	2 243	2 330	2 518	2 616
Sand and gravel	t	257 677 ^f	278 916	289 763	277 122
Stone	t	97 602	113 291	122 030	116 657
Mineral fuels					
Coal	t	57 811	61 211	70 644	71 000
Natural gas	'000m ³	71 896	78 267	90 911	92 837
Natural gas by-products	m ³	19 127	21 560	22 556	23 144
Petroleum, crude	m ³	85 468	89 140	93 806	90 427

¹ Preliminary estimates.

— Nil or zero.

^f Revised.

The Department of Energy, Mines and Resources is the focal point for the mineral and energy sectors. This department is responsible for national policies concerning minerals, metals, energy and other non-renewable resources; for formulating plans for the economically sustainable development and use of these resources; for conducting research, geological studies and technical surveys; for preparing and publishing reports and maps; and for investigating environmental phenomena and conducting research related to environmental problems.

The Fossil Fuels

Canada is a fortunate nation, endowed with significant reserves of most forms of energy. However, the proven reserves of hydrocarbon energy represent relatively few years of oil production. Therefore, the federal government, in collaboration with the provinces, has launched a number of programs to conserve energy and to develop alternative energy sources.

High on the government's list of priorities is the discovery of more rational ways to use our fossil fuel legacy. The conversion from oil to more abundant domestic fuels — primarily electricity and natural gas — is also a national priority.

Crude oil operation near Swift Current, Sask.



The search for new energy supplies has meant planning the development of oil sands and of offshore resources. It has also entailed research into new ways to extract energy resources — heavy oil upgrading, the fluidized-bed combustion of coal, and coal gasification and liquefaction.

In 1988, the petroleum industry extracted approximately \$16 billion in hydrocarbon products, with Alberta accounting for 87 per cent of the value of all crude oil, natural gas and gas by-products produced.

In addition to these reserves, Canada also possesses abundant tar sands. According to one estimate, ultimate recoverable reserves of synthetic crude oil from Alberta's bituminous tar sands amount to 47 billion cubic meters; 8.5 billion cubic meters of this amount can be recovered by methods currently in use at two plants operating near Fort McMurray. Different techniques will have to be incorporated to recover the remainder.

To find and develop new conventional reserves as production depletes present supplies, \$5.1 billion of capital expenditures were undertaken in 1988. Twenty-four per cent of the \$1.7 billion allocated for exploration drilling in 1988 was spent in the frontier areas of the Canadian North and offshore research. A further \$3.3 billion was spent on development, \$4.7 billion for operations and \$2.8 billion for royalties in the oil and gas industries.

A new seismic oil and gas plant facility at Rainbow, Alta.





Underground drilling at Continuous Mining Systems in Sudbury, Ont. The new underground drill has gained acceptance in foreign markets, particularly in South America, Australia and China.

Domestic demand, including refinery consumption, of refined petroleum products totalled 88 938 602 m³ (cubic metres) in 1988, including 34 141 439 m³ of motor gasoline, 24 095 368 m³ of middle distillates, 8 965 939 m³ of heavy fuel oils and 21 735 856 m³ of other products.

Coal production in Canada increased from 61.2 million tonnes in 1987 to 70.6 million tonnes in 1988 and its value remained relatively stable at \$1.8 billion, compared to \$1.7 billion in 1987. Exports to 19 countries amounted to 31 732 000 tonnes. Japan (63 per cent), South Korea (14 per cent) and Brazil (5 per cent) were the principal customers.

Electricity

Canada's total generating capacity increased from a modest 133 MW (megawatts) in 1900 to approximately 100 984 MW in 1988. These facilities produced 489 044 GWh (gigawatt hours) of electric energy in 1988; 62.1 per cent of this total was generated in hydroelectric stations. Energy exported to the US exceeded the energy imported by 26 876 GWh, bringing the total available to Canadian users to 462 168 GWh.

Although water power traditionally has been — and still is — the main source of electrical energy in Canada, thermal sources are becoming more important and this trend is expected to continue. The choice between the development of a hydroelectric power site



Gentilly II nuclear plant, Gentilly, Que.

Table 9. Production of electricity, by province, 1988 (gigawatt hours)

Province or territory	Type of generating capacity			Total
	Hydro	Steam conventional	Steam nuclear	
Newfoundland	39 731	1 419	—	41 150
Prince Edward Island	—	218	—	218
Nova Scotia	1 107	7 785	—	8 892
New Brunswick	2 580	7 850	5 342	15 772
Quebec	143 391	332	5 282	149 005
Ontario	38 314	36 877	67 552	142 743
Manitoba	15 379	929	—	16 308
Saskatchewan	2 343	10 594	—	12 937
Alberta	1 431	38 741	—	40 172
British Columbia	58 573	2 369	—	60 942
Yukon	409	30	—	439
Northwest Territories	288	178	—	466
Total	303 546	107 322	78 176	489 044

— Nil or zero.



Giant hydro pylons dwarf housing at Lavul, Que.

and the construction of a thermal generating station must take into account a number of complex considerations, the most important of which are economic. The heavy capital costs involved in constructing a hydroelectric project are offset by maintenance and operating costs considerably lower than those for a thermal plant. The long life of a hydro plant and its dependability and flexibility in meeting varying loads are added advantages. Also important is the fact that water is a renewable resource. The thermal station, on the other hand, can be located close to areas where power is needed, with a consequent saving in transmission costs; however, pollution problems at these plants are a concern.

The marked trend toward the development of thermal stations that became apparent in the 1950s can be explained to some extent by the fact that, in many parts of Canada, most of the hydroelectric sites within economic transmission distance of load centres had been developed and planners have had to turn to other sources of electrical energy. Although recent advances in extra-high voltage transmission techniques have given impetus to the development of hydroelectric sites previously considered too remote, thermal stations will probably be the more important of the two sources in the long run.

Substantial amounts of water power have been developed in all provinces except Prince Edward Island, where there are no large streams. Quebec, the richest province in water power resources, with over 40 per cent of the total for Canada, has the most developed capacity. Plans for the development of a number of rivers flowing into James Bay are becoming a reality.

Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Saskatchewan, Alberta and the Northwest Territories depend on thermal stations for most of their power requirements. Quebec's wealth of water power has so far limited the application of thermal power in that province to local use. Manitoba and British Columbia both have some thermal capacity, but hydroelectricity still predominates.

Development of commercial electric power generation in thermal plants using the heat generated by nuclear reactors is one of Canada's major contributions to energy resource technology. This development has centred around the CANDU reactor, developed by Atomic Energy of Canada Limited, which uses a natural uranium fuel with a heavy water moderator; heavy water as a moderator provides a high-energy yield and facilitates the handling of spent fuel. The first experimental reactor went into use in 1962 at Rolphton, Ont., with a capacity of 20MW. Since then, six major nuclear projects have been undertaken. Nuclear plants are located at Point Lepreau, NB, Gentilly, Que., and Pickering and Bruce in Ontario. Another plant is under construction at Darlington in Ontario.

W.A.C. Bennet Dam at Hudson Hope, BC.





Research in acoustics is conducted in the anechoic chamber, a specially constructed room designed to minimize sound reflections in the National Research Council.

The National Research Council

The National Research Council (NRC) is Canada's leading science and technology agency. In partnership with industry, NRC carries out research and development and helps Canadian firms improve productivity, develop new products and solve technical problems in such areas as transportation, construction, biotechnology, manufacturing systems, and industrial materials.

NRC produces benefits for the people of Canada in other areas — health care, public safety, and national security — in collaboration with universities, government departments and private sector organizations. Long-term R&D with the Bank of Canada, for example, has resulted in an optical thin film coating designed and developed by NRC to prevent forgery. New \$50 bills incorporate the security device, placing Canada at the forefront of counterfeit-proofing. And, a promising new technique has recently been discovered for identifying cancer in its earliest stages.

As a contributor to the development of the national science and technology infrastructure, NRC maintains such national facilities as wind tunnels for aerodynamic research, marine dynamics facilities, and astrophysical observatories used by clients in industry, government and the universities. World-class electronic networks of scientific and technical information are brought to clients through NRC's Canada Institute for Scientific and Technical Information; and thousands of companies are assisted annually through Canada's most effective technology network, NRC's Industrial Research Assistance Program.



A cement plant on the Bow River in Alberta.



A subway car manufacturing plant in Quebec.

Manufacturing

Manufacturing industries constitute one of the largest sectors of the Canadian economy, accounting for 19.0 per cent of the Gross Domestic Product and 16.0 per cent of all employment. These industries have an important role in the economy, particularly in the areas of the demand for capital goods, productivity and exports.

The manufacturing sector contributed \$118.5 billion, total value added, to the Canadian economy in 1987, a 10.2 per cent increase over the 1986 level of \$107.6 billion. The five most important areas which contributed to this growth were the transportation, food, paper, chemical and electrical industries.



The industrial waterfront at Hamilton, Ont.

Table 10. Manufacturing industries, selected years, 1961 to 1987¹

Year	Establishments	Employees	Salaries and wages	Value of shipments and other revenue	Total value added
	<i>No.</i>	<i>No.</i>	<i>\$'000,000</i>	<i>\$'000,000</i>	<i>\$'000,000</i>
1961	33,357	1,352,605	5,702	25,896	10,932
1971	31,908	1,628,404	12,130	57,479	23,188
1981	34,063	1,846,645	37,021	218,284	78,316
1982	34,121	1,702,303	37,625	214,201	73,348
1983	35,287	1,671,140	39,609	231,884	81,719
1984	36,464	1,722,045	43,076	264,396	94,110
1985	36,854	1,766,763	46,208	287,654	101,363
1986	38,380	1,808,716	48,749	293,937	107,582
1987	36,790	1,864,008	51,832	314,319	118,515

¹ Data for 1961 are based on the 1960 Standard Industrial Classification (SIC), for 1971 on the 1970 SIC and for 1981 to 1987 on the 1980 SIC.

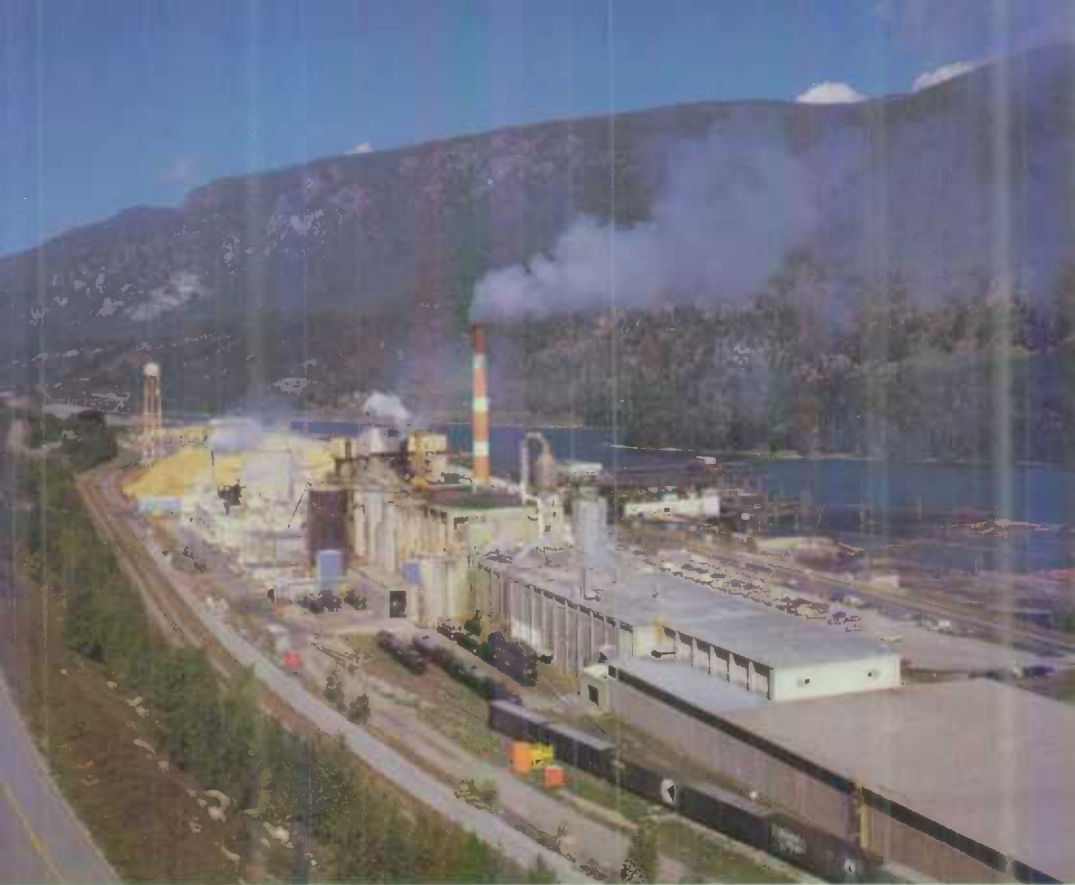


Fertilizer plant at Carleton Place, Ont.



Steel billets leaving the reheating furnace to be rolled into wire rod at a rolling mill operation in L'Orignal, Ont.

An analysis of the distribution of manufacturing industries across the country shows that they remain concentrated in Ontario. In 1987, Ontario accounted for 52.9 per cent, total value added, of the manufacturing industries, followed by Quebec and British Columbia. These three provinces together accounted for 87.5 per cent of Canadian manufacturing activity. However, in terms of year-to-year change, a different pattern emerges. In 1987, the province of New Brunswick showed the largest increase with 31.8 per cent growth over 1986, followed by 20.0 per cent for British Columbia and 18.3 per cent for Saskatchewan.



Pulp plant near Castlegar, BC.

Manufacturing activity is highly mechanized and represents a large market for capital goods. In 1987, total expenditures on machinery and equipment were \$39.4 billion; about 34 per cent of this total, or \$13.3 billion, represented investment in manufacturing facilities. High levels of investment have a positive influence on productivity. Throughout the 1980s, annual productivity gains (defined as changes in output per person hour) in the manufacturing sector averaged 2.6 per cent.

Canada is very involved in trade, and exports have played a significant role in the development of the manufacturing sector of the economy. In total, exports of fabricated materials and end products (roughly equivalent to manufactured products) increased from \$55.0 billion in 1981 to \$92.5 billion in 1987.

In addition to this strong growth, there was an important shift in the nature of Canada's exports of manufactured goods. In 1981, exports of highly manufactured end products were \$25.5 billion, or 46 per cent of the total. By 1987, they accounted for 56 per cent — a reflection of the increased sophistication of Canadian manufacturing processes.



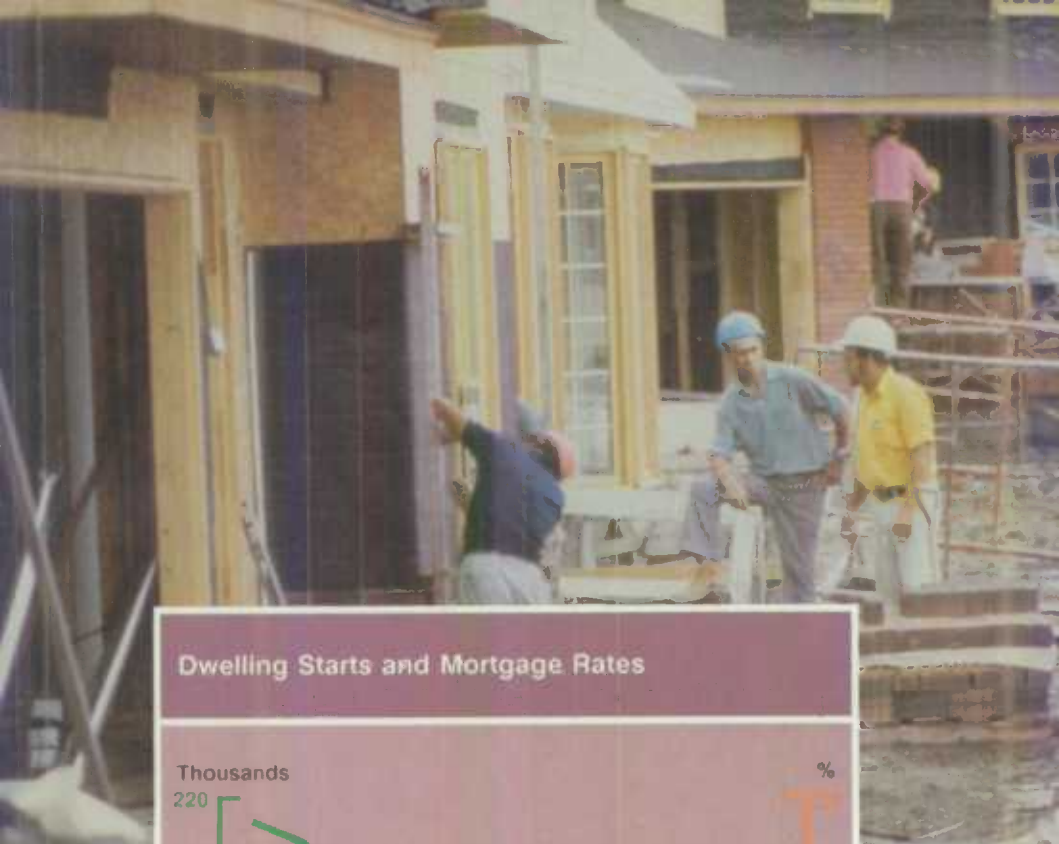
Edmonton, Alta.

Construction and Housing

Non-residential Construction

The non-residential construction sector appears to have been recovering in recent years from losses of the 1981-82 economic recession. Figures for the value of construction projects performed each year since 1985, when growth of more than 10 per cent was recorded, seem to confirm this upward trend. Except for 1986 (-2 per cent), construction expenditures have increased — by 7.9 per cent in 1987 and 12.6 per cent in 1988 — and the anticipated figure for 1989 is about 7.5 per cent, mainly as a result of increased activity in engineering construction. Repairs continue to account for a significant proportion of expenditures, with an average annual increase of nearly 11 per cent for the period 1985-89.

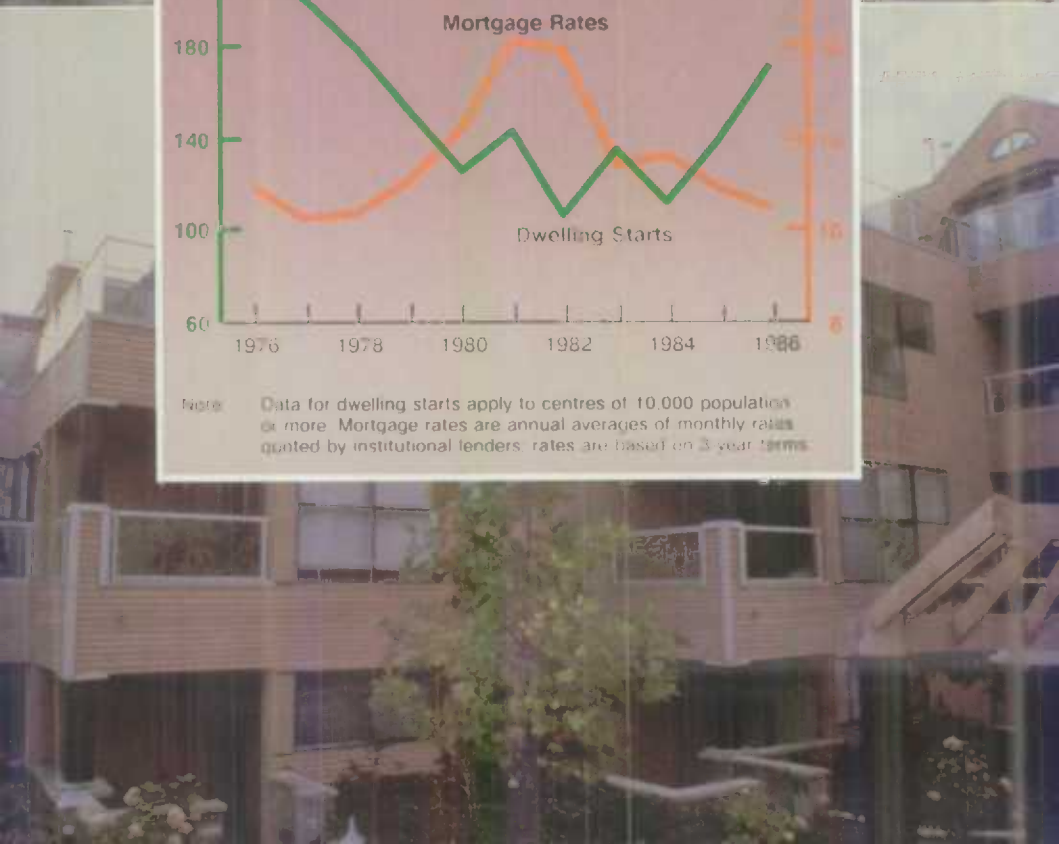
Commercial-building construction, the most active sector in recent years, is now apparently slackening. Its growth rate has constantly declined from a high of 31 per cent in 1985, and construction projections for 1989 indicated that the increase for that year would be less than 10 per cent. This slowdown is attributable to reduced activity in construction and in renovation of office buildings and shopping centres.



Dwelling Starts and Mortgage Rates



Note: Data for dwelling starts apply to centres of 10,000 population or more. Mortgage rates are annual averages of monthly rates quoted by institutional lenders; rates are based on 3 year terms.



Industrial-building construction is showing signs of sustained growth. Except for a small decline (-1.5 per cent) in 1986, this sector has posted relatively significant increases in recent years: 10.5 per cent in 1984, 28.1 per cent in 1985 and 11.4 per cent in 1987. Data currently available for 1988 (9.5 per cent) and 1989 (24.2 per cent) indicate that the trend will continue.

The recovery in institutional-building construction, which began in 1985, is apparently being sustained. Despite the small increase (one per cent) anticipated for 1988, expenditure intentions for 1989 indicated a more substantial rise of about 8 per cent, with the emphasis shifting from school-building construction to hospital-building construction and other institutional buildings, a category which includes museums, post offices, libraries and penitentiaries.

The engineering-construction sector has never really recovered, having failed to climb to the pre-recession level of \$27 billion. However, expenditure intentions in the sectors where this type of work is usually carried out suggested a significant increase for 1989.

Flin Flon, Man.





Construction near Vinson, Que.

At the regional level, commercial-building construction expenditure levels have been relatively significant, particularly in Quebec and Ontario, where the 1988 figures were almost twice those of 1985. Over the same period institutional-building construction expenditures were extremely strong in Ontario, (+ 79 per cent) but quite weak in Quebec, (+ 4 per cent). Industrial-building construction was especially vigorous in Western Canada, where expenditures increased by 47 per cent; by contrast, this sector declined in Quebec and Ontario. Expenditure intentions for 1989 did not appear to indicate changes in this regional pattern, except that industrial-building expenditures in Quebec will begin to rise again.

New residential in A. Ont.





Edmunston, NB.

Housing

Total housing starts exceeded 200,000 units, in 1989, for the third consecutive year while existing units sales matched the record level of activity set in 1988. Total housing starts at 215,382 units were down a modest 3 per cent from the level of 222,562 units in 1988 and 12 per cent from the peak in the current cycle of 245,986 units in 1987.

After a strong start at the beginning of the year, with starts averaging a Seasonally Adjusted Annual Rate (SAAR) of 219,000 units in the first quarter, total starts slowed in the second quarter to 209,000 units. There was a modest recovery in activity to 219,000 units in the third quarter and 218,000 units in the fourth quarter of 1989.

Single-detached starts accounted for 58.5 per cent of total starts, up slightly from 1988. The 125,968 new single units represented a 1.9 per cent decline from the 128,465 units started in 1988. Construction of multiple-family dwellings reached 89,414 units compared to 1988 activity with 94,097 units.

Rural senior citizen housing at Moosomin, Sask.





Halifax harbour in Nova Scotia.

FOREIGN ECONOMIC RELATIONS

Merchandise Trade

The merchandise trade surplus, the excess of exports over imports, was \$9.8 billion in 1988, on a balance-of-payments basis. In the period from 1985 to 1988, the value of exports increased, on average, 5.4 per cent each year, while imports increased at an average of 8.7 per cent per annum. The export price index (1981 = 100) increased 2.6 per cent, in 1988, to a level of 101.8 following an increase of 1.1 per cent in the previous year. The corresponding import price index decreased 1.6 per cent in 1988 to 110.5, after a smaller decrease of 0.5 per cent in the previous year. The index of volume of exports (1981 = 100), on a balance-of-payment basis, rose 10.0 per cent, in 1988, to 164.6. The index of volume of imports, on the same basis, increased 14.6 per cent to 165.5.

Exports

The United States is Canada's most important foreign customer; in 1988, it accounted for 73.0 per cent (\$98,219 million) of domestic exports. Other leading export destinations were Japan (6.5 per cent) and the United Kingdom (2.6 per cent), followed by the People's



Lumber at Coquitlam mill in British Columbia, ready for export to Japan and Europe.

Table 1. Domestic exports¹ by leading countries, 1985-88² (million dollars)

Country	1985	1986	1987	1988
United States	90,344	90,319	91,756	98,219
Japan	5,745	5,942	7,036	8,686
United Kingdom ³	2,313	2,566	2,850	3,465
China, People's Republic of	1,259	1,119	1,432	2,596
Germany, Federal Republic of ³	1,189	1,255	1,515	1,693
Netherlands ³	929	978	1,021	1,394
Korea, South	776	968	1,167	1,193
France ³	714	965	1,037	1,180
Belgium-Luxembourg ³	703	823	1,137	1,149
USSR	1,608	1,216	801	1,142
Italy	525	695	843	1,101
Taiwan	430	611	757	968
Australia	625	624	689	841
Sub-total	107,160	108,081	112,041	123,627
Total domestic exports	116,145	116,733	121,462	134,509

¹ Values are customs-based, reflecting values as shown on customs entries.

² Countries are ranked according to 1988 values.

³ Due to trans-shipments via the Netherlands and Belgium-Luxembourg, exports to and imports from these countries tend to be overstated, whereas exports to and imports from Germany, France and some other European countries may be under-represented by these data.

Table 2. Exports by commodities, 1985-88¹ (million dollars)²

Commodity	1985	1986	1987 ³	1988
Live animals	467	346	366	613
Meat and fish	2,658	3,405	3,812	3,670
Cereals and preparations	4,538	3,870	4,131	5,177
Other food, feed, beverages and tobacco	1,995	2,256	2,300	2,266
Metal ores, concentrates and scrap	3,536	3,492	3,920	4,265
Other crude materials, inedible	15,870	11,899	12,880	12,983
Wood and paper	15,686	17,291	20,383	21,680
Textiles	283	356	425	525
Chemicals	5,475	5,519	6,136	7,707
Iron and steel	2,371	2,415	2,668	2,428
Non-ferrous metals	5,967	7,370	6,423	8,996
Other fabricated materials, inedible	7,061	5,491	5,786	6,189
Industrial machinery	3,059	3,455	3,459	3,731
Agricultural machinery and tractors	524	465	551	703
Transportation equipment	36,256	38,025	35,998	39,344
Other equipment and tools	3,731	4,274	5,007	6,280
Other end products, inedible	6,305	6,485	6,888	7,260
Other domestic exports	365	317	328	691
Total	116,145	116,733	121,462	134,509

¹ Due to "truncation", totals may not equal the sum of their components.

² Values are customs-based, reflecting values as shown on customs entries.

³ Includes export tax, starting in 1987.

Republic of China, the Federal Republic of Germany, the Netherlands and South Korea, each with a one per cent share. France, Belgium-Luxembourg, the Soviet Union, Taiwan and Australia each accounted for between 0.6 and 0.9 per cent of domestic exports. Exports to the Soviet Union showed a marked increase between 1987 and 1988 (42.6 per cent), while exports to Taiwan, Belgium-Luxembourg and South Korea also grew. The 13 leading destinations accounted for 92.0 per cent of domestic exports in 1988.

The value of exports of transportation equipment increased 9.3 per cent, from 1987 to 1988, to \$39,344 million or 29.3 per cent of domestic exports. In the 1985-88 period, the value of exports of transportation equipment ranged from a low of 29.3 per cent in 1988 to a high of 32.6 per cent in 1986, of total domestic exports. Exports of wood and paper accounted for 16.1 per cent of total domestic exports in 1988, compared with 13.5 per cent in 1985. The value of crude petroleum exports fell by 32.4 per cent in the 1985-88 period.

Table 3. Imports¹, by leading countries, 1985-88² (million dollars)

Country ³	1985 [†]	1986 [†]	1987 [†]	1988
United States	72,020	75,227	76,716	86,509
Japan	6,731	8,367	8,351	9,265
United Kingdom	2,997	3,573	4,276	4,635
Germany, Federal Republic of	2,790	3,572	3,649	3,847
France	1,428	1,664	1,590	2,864
Korea, South	1,652	1,798	1,912	2,271
Taiwan	1,377	1,876	2,166	2,258
Italy	1,411	1,750	1,793	1,954
Mexico	1,325	1,163	1,165	1,331
Brazil	810	828	858	1,193
Hong Kong	851	1,002	1,097	1,153
China, People's Republic of	438	593	812	955
Sweden	689	785	892	932
Netherlands	590	664	742	762
Sub-total	95,109	102,862	106,019	119,929
Total imports	104,355	112,511	116,238	131,664

¹ Values are customs-based by country of origin, reflecting values as shown on customs entries.

² Countries are ranked according to 1988 values.

³ This list of countries was developed to indicate trade figures; its scope does not reflect the views of the Government of Canada on international issues of recognition, sovereignty or jurisdiction.

[†] Revised.

Natural gas exports were 37.0 per cent lower, compared with 1985, reflecting lower prices and soft demand for natural gas. Export of ferrous and non-ferrous metals, in ore and in fabricated form, contributed about 16.3 per cent to domestic exports. The value of exports of agricultural machinery and tractors, along with industrial machinery, increased 23.4 per cent in the 1985-88 period, while its share of domestic exports rose slightly from 3.1 per cent in 1985 to 3.3 per cent in 1988.

Imports

The value of imports from the United States increased 20.0 per cent in the 1985-88 period, while imports from other countries in the same period rose 39.6 per cent. The United States' share of total imports decreased from 69.0 per cent in 1985 to 65.7 per cent in 1988. Though still an important component of imports from the United States, transportation equipment fell from 34.1 per cent of total imports in 1985 to 30.8 per cent of total imports in 1988.

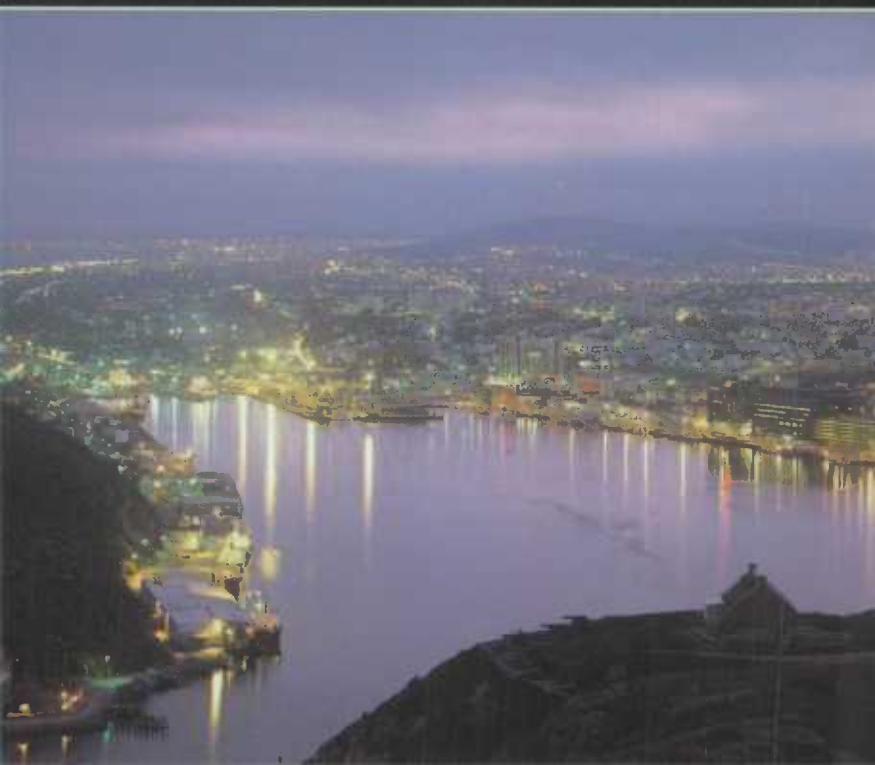
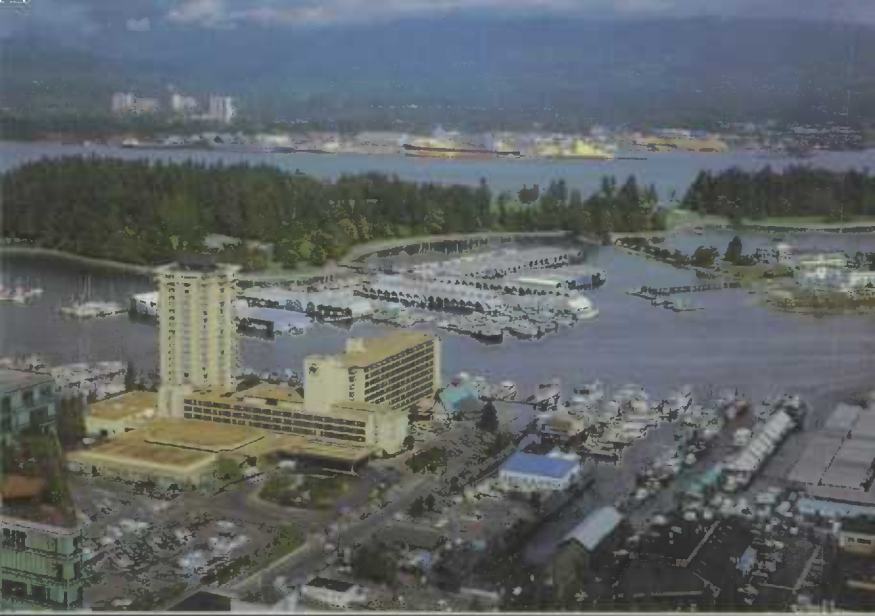
After the United States, Japan is the second ranking supplier of imports. In 1988, Japan's share was 7.0 per cent of total imports, followed by the United Kingdom (3.5 per cent) and the Federal Republic of Germany (2.9 per cent). Taiwan, South Korea, Italy, France and Mexico recorded import shares of between 0.8 per cent and 2.2 per cent each.

End products accounted for 68.1 per cent of total imports in 1988; fabricated materials, 19.1 per cent; crude materials, 5.3 per cent; and food, feed, beverages, tobacco and live animals, 5.9 per cent. End products include general purpose machinery, special industry machinery, agricultural machinery and tractors, transportation equipment and other equipment and tools. Transportation equipment is one of Canada's biggest imports; its value increased 14.6 per cent in the 1985-88 period. However, the share represented by transportation equipment fell from 34.1 per cent of total imports in 1985 to 30.8 per cent of total imports in 1988. Imports of general purpose machinery, together with special industry machinery recorded a 44.5 per cent increase between 1985 and 1988. Imports of agricultural machinery and tractors decreased by 3.8 per cent during the same period.

Table 4. Imports¹ by commodities, 1985-88 (million dollars)

Commodity	1985	1986	1987	1988
Live animals	109	159	162	118
Meat and fish	921	1,064	1,234	1,282
Fruits and vegetables	2,208	2,373	2,501	2,636
Other food, feed, beverages and tobacco	2,670	3,105	2,894	3,106
Metal ores, concentrates and scrap	1,659	1,957	1,644	1,511
Other crude materials, inedible	6,193	5,308	5,761	5,455
Wood and paper	1,483	1,743	1,975	2,282
Textiles	1,886	2,105	2,261	2,161
Chemicals	5,443	5,841	6,228	7,579
Iron and steel	2,008	1,840	2,076	3,032
Non-ferrous metals	2,601	3,074	2,486	2,911
Other fabricated materials, inedible	5,316	5,380	5,830	7,210
General purpose machinery	2,953	3,401	3,481	4,829
Special industry machinery	4,974	5,783	6,147	6,624
Agricultural machinery and tractors	1,739	1,727	1,658	1,673
Transportation equipment	35,573	38,068	37,620	40,592
Other equipment and tools	15,410	16,781	18,497	23,114
Other end products, inedible	9,679	11,059	11,792	12,885
Other imports	1,629	1,743	1,992	2,664
Total	104,355	112,511	116,238	131,664

¹ Values are customs-based, reflecting values as shown on customs entries.





1. Vancouver, BC.
2. St. John's, Nfld.
3. Quebec City, Que.
4. Prince Rupert, BC.



Common Conversion Factors from SI Metric to Canadian Imperial Units

Length

1 mm	=	0.03937 in.
1 cm	=	0.3937 in.
1 m	=	3.28084 ft.
1 km	=	0.62137 mi.

Area

1 km ²	=	0.3861 sq. mi.
1 ha	=	2.47105 acres
1 m ²	=	0.000247 acres

Mass (Weight)

1 kg	=	2.204622 lbs.
1 kg	=	0.0011023 tons (short)
1 kg	=	0.000984 tons (long)
1 kg	=	32.1507 troy ounces
1 g	=	0.0321507 troy ounces
1 t	=	1.102311 tons (short)
1 t	=	0.9842065 tons (long)

Volume and Capacity

1 m ³	=	220 gal.
1 m ³	=	35.31466 cu. ft.
1 m ³	=	423.78 board feet
1 dm ³	=	0.423776 board feet
1 m ³	=	6.28982 barrels
1 litre	=	0.219969 gal.
1 dm ³	=	0.027496 bushels
1 m ³	=	27.4962 bushels

Mass in SI Metric to Average Capacity in Canadian Imperial Units for Common Field Crops

Wheat, soybeans, potatoes, peas	1 t	=	36.74 bushels
Rye, flax, corn	1 t	=	39.37 bushels
Rapeseed, mustard seed	1 t	=	44.09 bushels
Barley, buckwheat	1 t	=	45.93 bushels
Mixed grains	1 t	=	48.99 bushels
Oats	1 t	=	64.84 bushels
Sunflower seed	1 t	=	91.86 bushels

Temperature

9/5 temperature in °C + 32 = temperature in °F

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Vancouver.

Back. Michael Slobodian

Louis Robitaille in Les Grands Ballets Canadiens Production, *L'Après-midi d'un faune*.

Malak

Algonquin Park, Ont.

- ii Frontispiece. Malak
Lake Louise, Alta.
- viii Malak
- 2 Malak
- 3 George Hunter
- 4 George Hunter
- 5 Malak
- 6 Sandy Black
- 7 George Hunter
- 9 George Hunter
- 10 Mike Beedell
- 11 Malak
- 12 Richard Harrington
- 13 Malak
- 14 Mike Beedell
- 15 Environment Canada (2)
- 16 *The Ottawa Citizen* (top); Deryk Bodington (bottom)
- 17 *The Ottawa Citizen* (top); Deryk Bodington (bottom)
- 18 Deryk Bodington
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- 28 Employment and Immigration Canada
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- 35 Saskatchewan Economic Development and Tourism
- 36 Dept. of the Secretary of State
- 37 George Hunter
- 38-39 Mike Beedell (4)
- 40 George Hunter

- 41 Deryk Bodington
42 Hans Blohm/Indian and Northern Affairs Canada
43 Mike Beedell
44 Richard Harrington
45 Richard Harrington
48-49 (1) Malak; (2) George Hunter; (3) Deryk Bodington; (4) George Hunter
50 George Hunter
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54 *Winnipeg Free Press*
55 Mike Beedell
57 Pierre St-Jacques; Industry, Science and Technology Canada
59 Deryk Bodington
60 Tibor Bogнар/Réflexion Photothèque
61 Charlottetown Festival
62 CFCF Inc.
63 The Vancouver Playhouse
64 Alberta Ballet
65 National Ballet of Canada
67 The Citadel Theatre
68 La La La Human Steps
69 The National Film Board
70 Malak
71 Malak
72 Malak
73 Malak
74 Anthony Scullion/Museum of Science and Technology
75 National Library of Canada
77 National Archives of Canada
78 Canadian Broadcasting Corporation
79 Deryk Bodington
81 Malak
82 Parks Canada
83 Mike Beedell
85 Parks Canada
86-87 (1) Sandy Black; (2) Deryk Bodington; (3) Malak; (4) Parks Canada
88 Saskatchewan Economic Development and Tourism
89 George Hunter
90 Deryk Bodington
91 Telesat Canada
93 BC Tel
95 Harrison Baker/Indian and Northern Affairs Canada
97 Richard Harrington

- 98 Canada Post
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- 144 George Hunter

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152 George Hunter
153 George Hunter
155 Deryk Bodington
157 Canadian National (top); Chris Mikula/*The Ottawa Citizen* (bottom)
158 George Hunter
159 George Hunter
161 Malak
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166 The Oshawa Group Ltd.
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172 John Major/*The Ottawa Citizen*
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177 *The Ottawa Citizen*
179 Industry, Science and Technology Canada; Employment and Immigration Canada
181 George Hunter
182 Malak
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184 Malak
185 Malak
186 George Hunter
187 Malak
189 Malak
190 George Hunter
191 Malak
192 Deryk Bodington
193 Deryk Bodington (top); G. Patrick Green (bottom)
195 SSC Photo Centre; Employment and Immigration Canada; Agriculture Canada
196 Agriculture Canada (2)
197 Agriculture Canada
198 George Hunter
199 Agriculture Canada

200	Malak
201	Malak
202	G. Patrick Green
203	Malak (2)
204	Deryk Bodington (2)
205	Malak
206	George Hunter
207	Malak
208	Malak (top); George Hunter (bottom)
209	George Hunter (top); G. Patrick Green (bottom)
210	Galactic Resources Ltd.
211	George Hunter
213	Deryk Bodington
215	Saskoil
216	North Canadian Oils Ltd.
217	INCO Limited
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219	Perry Mastrovito/Réflexion Photothèque
220	George Hunter
221	National Research Council Canada
222	Deryk Bodington (top); George Hunter (bottom)
223	Malak
224	Deryk Bodington (top); IVACO (bottom)
225	George Hunter
226	George Hunter
227	Industry, Science and Technology Canada; Employment and Immigration Canada
228	Malak
229	Malak (top); ENSCOR Ltd. (bottom)
230	Malak (top); Canada Mortgage and Housing Corporation (bottom)
231	Malak
232	George Hunter
236-237	(1) Deryk Bodington; (2) Malak; (3), (4) George Hunter
238	Mike Beedell

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For Further Reading

Selected publications from Statistics Canada

The Land

- *In the Footsteps of Jacques Cartier: 450 Years Later: A Statistical Portrait*, 52 p., 1984. 11-606. Outlines some of the changes that have occurred to the explorer's initial landfalls of Gaspé, Quebec City and Montreal since his arrival in Canada 450 years ago.
- *Canada Year Book 1990*, biennial. 11-402. Reviews the key social, economic and political developments of Canada in the 1980s.
- *Metropolitan Atlas Series*, 1989. 98-101 to 98-112. Presents data on key demographic, social and economic characteristics for the census tracts of 12 Census Metropolitan Areas. Combines maps, charts and text.
- *Perspectives Canada III*, 312 p., 1980. 11-511. Contains selected statistical series describing the quality of life experienced by Canadians and the major social trends affecting Canadian society. Chapter on environment includes information on climate variability.

Population

- *Canada's Population from Ocean to Ocean*, 31 p., 1989. 98-120. Explores changes in the size and geographic distribution of Canada's population since 1871, with an emphasis on the changes that have occurred in recent years.
- *Canadian Social Trends*, quarterly. 11-008. Discusses the social, economic and demographic changes affecting the lives of Canadians.
- *Women in Canada: A Statistical Report*, 203 p., 1990. 89-503. Documents the evolving status of women in Canada since 1970 with respect to their family status, education, health, labour force participation, income, criminal activity and victimization.
- *Fertility in Canada: From Baby-boom to Baby-bust*, 156 p., 1984. 91-524. Analyses levels and trends in fertility, emerging reproductive patterns, birth control, factors in the current fertility decline, future course, and an international perspective.
- *Families in Canada*, 45 p., 1990. 98-127. Examines the diversity of family forms and patterns plus regional and cultural differences in marriage, divorce and cohabitation.
- *Family Expenditure in Canada*, Irregular. 62-555. Offers a comprehensive look at the budgets of families and unattached individuals belonging to a variety of demographic and economic groups. Also covers special topics such as expenditures of the elderly, mortgage interest and principal, child care and clothing of individuals.
- *The Family in Canada — Selected Highlights*, 47 p., 1989. 89-509. Focuses on the stages of contemporary family life and the changes that have occurred in recent times.
- *Youth in Canada*, 49 p., 1989. 89-511. Provides an insight into young people between the ages of 15 and 24 by exploring their demographic and cultural characteristics, living arrangements, educational attainment, labour force activity and health.

- *Canada's Youth*, 39 p., 1989. 98-124. Analyzes changes in the demographic, social and economic characteristics of Canadians aged 15 to 24. Combines information from the 1981 and 1986 Censuses of Population and Housing.
- *Canada's Seniors*, 55 p., 1988. 98-121. Places the aging of Canada's population in perspective by introducing data from other countries. Explores regional differences in age structures across Canada and documents recent changes in marital status and living arrangements.
- *The Seniors Boom: Dramatic Increase in Longevity and Prospects for Better Health*, 46 p., 1986. 89-515. Charts Statistics Canada's latest projections of what will happen as the baby boomers pass through their senior years and explores aspects of lifestyles that appear to promote better health among the elderly.
- *Dimensions — Language Retention and Transfer*, 637 p., 1989. 93-153. Provides data on language retention and transfer from the 1986 Census plus selected figures from the 1981 Census.
- *Canada — A Linguistic Profile*, 37 p., 1990. 98-131. Examines language diversity, language mobility and bilingualism.
- *Ethnic Diversity in Canada*, 48 p., 1990. 98-132. Reviews the changing ethnic profile of Canada and the geographic distribution of major ethnic groups.
- *Profile of Ethnic Groups*, 383 p., 1989. 93-154. Provides detailed information on the demographic, social and economic characteristics of Canada's 76 ethnic groups and categories.
- *Immigrants in Canada: Selected Highlights*, 56 p., 1990. 89-510. Presents a comprehensive portrait of immigration since 1852 and of Canada's immigrant population today. Examines factors including demographics, education, place of birth, labour force activity, income and citizenship, as well as selected family and household characteristics.
- *Profile of the Immigrant Population*, 309 p., 1989. 93-155. A detailed examination of changing patterns of immigration in recent years.
- *Caribbean Immigrants*, 85 p., 1989. 91-536. Using census data, examines the economic adaptation of Caribbean immigrants.

Education

- *Universities, Enrolment and Degrees*, annual. 81-204. Presents data on undergraduate and graduate enrolment, full-time and part-time studies, and on degrees, diplomas and certificates granted in Canadian universities.
- *Elementary-Secondary School Enrolment*, annual. 81-210. Presents elementary and secondary school enrolment statistics. Includes data for provincial public school systems, private schools and schools operated under the auspices of the Government of Canada.
- *Minority and Second Language Education, Elementary and Secondary Levels*, annual. 81-257. Supplies data on enrolment and participation rates for second language education programs in public schools, at elementary and secondary levels in Canada.

- *Advance Statistics of Education*, annual. 81-220. Provides a brief summary of basic education statistics including: number of educational institutions, teaching staff and enrolment; number of graduates at post-secondary levels; and global estimates of expenditures on education by sources of funds.
- *Tuition and Living Accommodation Costs at Canadian Universities*, annual. 81-219. Provides data on typical tuition and other academic fees and living accommodation costs at university-operated residences.
- *Educational Attainment of Canadians*, 50 p., 1989. 98-134. Provides information about changes in educational attainment between 1961 and 1986, by province and territory.

Arts and Culture

- *Heritage Institutions*, annual. 87-207. Contains survey highlights and statistical tables on non-profit heritage institutions, including museums, art galleries, archives, historic sites, nature parks, and other related institutions.
- *Culture Statistics, Television Viewing in Canada*, annual. 87-208. Analyzes Canadians' television viewing patterns beginning with survey data from the fall of 1985.
- *Performing Arts*, annual. 87-209. Presents current data on Canada's professional, non-profit performing arts companies.
- *Arts and Culture: A Statistical Profile*, 44 p., 1985. 87-527. Presents highlights on Canada's arts and culture, covering topics such as the labour force, heritage institutions and producers and distributors of cultural goods.
- *Motion Picture Production*, annual. 63-206. Supplies data on the motion picture industry: production, employees, salaries, gross revenue, and an analysis of types of film produced.
- *Focus on Culture*, quarterly. 87-004. Uses tables, graphs and an easy-to-read format to present informative articles on the recording industry, television viewing, the performing arts and government expenditures on culture.

Leisure

- *Domestic Travel, Canadians Travelling in Canada*, annual. 87-504. Presents data, charts, maps and analytical text on trips and socio-economic characteristics of travellers.
- *Tourism in Canada*, biennial. 87-401. Using analytical texts, charts and tables, investigates topics such as visitors to Canada, Canadian travellers, industries comprising the tourism sector, employment and the economic significance of tourism.
- *Travel-log — Touriscope*, quarterly. 87-003. Presents a diverse range of tourism topics in an easy-to-read, attractive format combining the latest data from several tourism-related surveys conducted by Statistics Canada.

- *International Travel — Travel Between Canada and Other Countries*, annual. 66-201. Provides a profile of international travellers by province/country of residence, area of destination, mode of transportation, purpose, length of stay, expenditures, age group and sex.

Communications

- *Telecommunications Statistics*, annual. 56-201. Presents data on Canada's telecommunications carriers: revenues, expenses, number of messages sent, mileage operated, employees, salaries, wages, by company.
- *Telephone Statistics*, annual. 56-203. Includes information on number of telephone calls; telephones by type of service and organization; wire and pole-line mileage; employees, salaries and wages; assets, liabilities and net worth data; and revenue and expenditure by province.
- *Radio and Television Broadcasting*, annual. 56-204. Provides data on revenue and expenses by administrative department, area and revenue group; balance sheet data, property, plant and equipment and employee statistics.
- *Cable Television*, annual. 56-205. Supplies information on wireline facilities, subscribers and contracts by area; operating revenue and expenses by area and by revenue group; employee statistics by area; income and surplus accounts; and assets, liabilities and net worth data.

Health and Welfare

- *Canadian Youth: Perspectives on Their Health*, 91 p., 1985. 82-545. Examines recent trends and lifestyle habits, fertility, health status, and health care utilization of Canadians aged 15 to 24.
- *Cardiovascular Disease in Canada*, 181 p., 1986. 82-544. Places heart disease in context by reviewing major causes of death in Canada. Examines the causes of heart disease in detail and includes comparisons with other industrialized countries including the United States, Switzerland and Japan.
- *Nursing in Canada, 1988*, 42 p., 1990. 83-226. Discontinued. Includes a description of the socio-economic characteristics of registered nurses; an account of nursing education programs, enrolments and graduations; and the distribution of nurse educators in community colleges, hospitals and university schools of nursing.
- *Health Reports, Vol. 1, No. 1*, 1989, quarterly. 82-003. Replaces all of Health Division's annual publications with a single, comprehensive journal-style report. Combines tables and feature articles on topics such as cardiovascular disease, accidents and cancer.

Government and Legal System

- *Canadian Crime Statistics*, annual. 85-205. Summarizes some law enforcement activities in relation to crime and traffic offences as reported by municipal police forces in urban centres of 750 population and over, the Royal Canadian Mounted Police, the Ontario Provincial Police, the Quebec Police Force, the Railway and Ports Canada Police, New Brunswick Highway Patrol and Royal Newfoundland Constabulary.
- *Legal Aid in Canada*, annual. 85-216. Discontinued. Provides historical and current perspectives of legal aid and its application on a national scale.
- *Homicide in Canada, a Statistical Perspective*, annual. 85-209. Examines homicides reported to Canadian police forces, using tables, charts and narratives.
- *Profile of Courts in Canada, 1987-1988*, 161 p., 1989. 85-511. Presents detailed descriptive information on the operation of the court system across Canada, including a description of the levels and jurisdiction of the courts, the duties of the key functionaries, the structure and administration of the various court services branches, and local services to the courts.
- *Policing in Canada, 1986*, 85 p., 1986. 85-523. Provides qualitative information on policing services in Canada at the federal, provincial and municipal levels, as well as summary police strength statistics.
- *Juristat*, irregular. 85-002. Supplies readers with timely and succinct statistical information on various justice-related programs such as law enforcement, legal aid, adult and juvenile courts, and corrections.
- *Patterns of Criminal Victimization in Canada*, 145 p., 1990. 11-612 No. 2. Focuses on the crime victimization experience by measuring both those crimes reported to the police and those not reported, why victims decide to report incidents to the police, and Canadians' perceptions of the level of crime around them.

External Relations and Defence

- *Canadian International Trading Patterns*, 75 p., 1985. 65-503. Reviews Canada's trading relations with its principal partners between 1970 and 1984. Includes a calendar of events that have had a major impact on Canada's trade with other countries.
- *Canada's International Trade in Services, 1969 to 1984*, 52 p., 1986. 67-510. Analyzes important trends in this sector over 15 year period. Covers business services extensively, with detailed information available for the first time for 1983 and 1984, including regional and industrial breakdowns.
- *Preliminary Statement of Canadian International Trade*, monthly. 65-0011?. Releases preliminary merchandise trade data in advance of regular international trade publications.
- *Canada's International Investment Position*, annual. 67-202. Presents the external financial position of Canada in terms of foreign investments in Canada and Canadian investments abroad at years-end.

The Economy

- *Women in the Workplace: Selected Data*, 78 p., 1987. 71-534. Details such topics as education in relation to earnings, female to male income ratio, and employment of women with children.
- *Canada's Women*, annual. 71-205. Presents data from a new survey called the Labour Market Activity Survey. Focuses on the characteristics of jobs held by female workers (full/part year; wage/salary; union membership; pension plan coverage) and their annual labour market employment and unemployment patterns in 1986.
- *Women and the Labour Force*, 34 p., 1990. 98-125. Provides a descriptive analysis of women's labour force participation, employment conditions and unemployment as revealed by 1986 Census data.
- *Canada's Men*, annual. 71-206. Presents results from a new survey called the Labour Market Activity Survey. Focuses on the characteristics of jobs held by male workers (full/part year; wage/salary; union membership; pension plan coverage) and their annual labour market employment and unemployment patterns in 1986.
- *Canada's Youth*, annual. 71-207. Presents data from the Labour Market Activity Survey on youth aged 16 to 24: labour force participation, employment and unemployment, earnings as paid workers, duration of employment and unemployment, and satisfaction with level of employment during the year.
- *Canada's Older Workers*, annual. 71-208. Presents data from the Labour Market Activity Survey on older workers aged 45 to 69: labour force participation, employment and unemployment, earnings as paid workers, duration of employment and unemployment, and satisfaction with level of employment during the year.
- *The Decline of Unpaid Family Work in Canada*, 82 p., 1989. 71-535 No. 2. Profiles the evolution of farm employment in Canada from the end of the 19th Century to World War II; discusses post-war developments using historical Labour Force Survey data; and analyzes the 1975-1987 period in detail using demographic and job-related estimates of unpaid workers in all industries with emphasis on those employed in agriculture.
- *Enterprising Canadians: The Self-employed in Canada*, 200 p., 1988. 71-536. Provides a wealth of demographic and labour market facts on the self-employed. Highlights the dynamic role played by the self-employed in recent labour market developments.
- *Dimensions — Canadians and Their Occupations: A Profile*, 440 p., 1989. 93-157. Using 1986 Census data, offers an in-depth look at the Canadians who make up 200 selected occupations, reporting on their demographic, cultural and economic characteristics.
- *Perspectives on Labour and Income*, quarterly. 75-001. Examines recent labour market developments as well as current income and wealth issues.
- *The Nation — Labour Force Activity*, 357 p., 1989. 93-111. Summarizes 1986 Census findings about Canada's employed and unemployed population aged 15 and over.
- *The Nation — Employment Income Individuals*, 219 p., 1989. 93-115. Presents information from the 1986 Census for Canada, the provinces and territories, showing 1985 employment income for individuals, for a variety of demographic and social variables.

- *Trends in Occupation and Industry*, 37 p., 1989. 98-135. Documents changes in the number and types of jobs held by Canadians between 1971 and 1986 and looks at the industries in which those jobs were found. Examines changes in the distribution of workers in Canada's three largest labour markets — Toronto, Montreal and Vancouver.
- *Pension Plans in Canada*, biennial. 74-401. Includes all occupational pension plans sponsored by employers in both the public and private sectors.

Transportation

- *Canadian Civil Aviation*, annual. 51-206. Supplies operational and financial data of approximately 800 Canadian air carriers. Contains statements of income, balance sheets and data on flying expenses and aircraft fleet.
- *Aviation in Canada: Historical and Statistical Perspectives on Civil Aviation*, 210 p., 1986. 51-501. Presents an overview of both commercial and private aviation activity in Canada during the last 50 years. Deals with historical developments, government legislation and regulations, aircraft and passenger traffic and the growth of aircraft fleets.
- *Air Passenger Origin and Destination, Domestic Report*, annual. 51-204. Sets forth statistics on the volume of domestic air passenger traffic generated at Canadian cities and carried between pairs of Canadian points.
- *Railway Transport in Canada, General Statistics*, annual. 52-215. Provides annual financial and operational statistics on the Canadian railway system. Collects data on balance sheet, revenue and expenses, equipment and employment from 31 companies providing railway transport in Canada.
- *Passenger Bus and Urban Transit Statistics*, annual. 53-215. Supplies data on investment, operating revenues, expenses, etc., on intercity and rural bus companies and urban transit systems.

Domestic Trade, Wholesale Trade and Consumer Prices

- *Market Research Handbook*, annual. 63-224. Contains extensive socio-economic statistics for all those who study the Canadian consumer market — market researchers, strategists, product planners and sales leaders.
- *Wholesale Trade Statistics, Wholesale Merchants, Agents and Brokers*, annual. 63-226. Provides principal statistics (volume of trade, net sales and receipts, purchases, inventories, etc.) of wholesale merchant and agent and broker establishments, by kind of business.
- *The Consumer Price Index*, monthly. 62-001. Provides a descriptive capsule summary of retail price movements and the factors underlying them.

Financial Institutions

- *Credit Unions*, annual. 61-209. Provides a comprehensive report on the operation and financial performance of credit unions and caisses populaires operating in Canada. Covers topics such as number of members and employees, size and type of credit unions, balance sheets, operating statements, undistributed surplus statements and reserve accounts.
- *Small Business in Canada, a Statistical Profile*, annual. 61-231. Depicts small businesses in Canada by major industry group, i.e., Forestry, Mining, Manufacturing, Construction, Wholesale and Retail Trade, Real Estate Operators and Insurance Agencies, and Business and Personal Services. Includes selected income statement and balance sheet data.
- *Financial Institutions, Financial Statistics*, quarterly. 61-006. Focuses on the financial position and operations of financial institutions, financial intermediaries and investment funds operating in Canada.

Government Revenues and Expenditures

- *Consolidated Government Finance*, annual. 68-202. Consolidates the revenue and expenditure transactions of federal, provincial and local governments in Canada.
- *Local Government Finance, Revenue and Expenditure, Assets and Liabilities*, annual. 68-204. Presents provincial and national aggregates actual revenue and expenditure of local government. Includes details of financial assets and liabilities and long-term debt.
- *Provincial Government Finance, Revenue and Expenditure*, annual. 68-207. Uses standardized data drawn from provincial public accounts to provide forecasts of provincial government revenues by source and expenditures by function, with five-year summaries.
- *Provincial Government Finance, Assets, Liabilities, Source and Application of Funds*, annual. 68-209. Analyses financial assets and liabilities of provincial and territorial governments by province and territory.
- *Federal Government Finance, Revenue, Expenditure, Assets and Liabilities*, annual. 68-211. Analyses federal government revenue and expenditure, assets, liabilities and surplus within the financial management concepts, providing functional, economic cross-classifications together with analysis of sources and uses of funds, transfers to other levels of government, special fund operations and bonded debt.

Agriculture

- *Agriculture, 1986 Census*, 11 volumes, 1987. 96-102 to 96-112. Presents the results of the 1986 Census of Agriculture and provides statistics on crops, livestock, farm land, labour, capital and other variables.
- *Farming Facts*, annual. 21-522. Covers highlights on virtually every kind of Canadian agriculture activity — from oilseed production to honey and wax production.

- *Fur Production*, annual. 23-207. Covers the production of pelts by province and source (wildlife or ranch raised).
- *A Profile of Canadian Agriculture*, 190 p., 1989. 96-113. Presents the results of the most recent Census of Agriculture, using 50 maps and 28 charts. Covers a wide variety of topics including farm finance, land use, farm technology and management practices. Provides past Census information spanning four decades to give both an historic and a contemporary overview of the structure of agriculture in Canada.
- *Socio-economic Characteristics of the Farm Population*, 54 p., 1990. 96-114. Describes the characteristics of male and female farm operators, farm wives and families, and farms and farm dwellings, derived from linkage of databases from the 1986 Census of Agriculture and the Census of Population.

Forestry

- *Canadian Forestry Statistics*, annual. 25-202. Presents data on all aspects of the Canadian forest industry including estimates of primary forest production; principal statistics of the logging, wood, pulp, paper and allied industries; shipments and exports of principal commodities; imports of roundwood; and capital and repair expenditures of the forest industries.
- *Logging Industry*, annual. 25-201. Covers the principal statistics of the logging industry including the number of establishments, number of employees, salaries and wages, cost of fuel and electricity, cost of materials, value of shipments and value added.

Minerals and Energy

- *General Review of the Mineral Industries, Mines, Quarries and Oil Wells*, annual. 26-201. Provides comprehensive final statistics on the mining industry, including production and value of minerals by kind and by province; historical tables of values by main groups; average prices of leading minerals; and principal statistics by main group and by province.
- *Canada's Mineral Production, Preliminary Estimates*, annual. 26-202. Covers early estimates (released on the first of January) of mineral production by class, by province and by quantities and values.
- *Quarterly Report on Energy Supply-Demand in Canada*, quarterly. 57-003. Provides energy balance sheets in natural units and heat equivalents in primary and secondary forms, by province, each showing data on production, trade, interprovincial movements, conversion, and consumption by sector.
- *Electric Power Statistics*, monthly. 57-001. Supplies data on generation of electricity by utilities and industrial establishments, imports and exports, energy made available for use in Canada, and cumulative monthly totals for year to date, by province.

Manufacturing

- *Manufacturing Industries of Canada, National and Provincial Areas*, annual. 31-203. Provides principal statistics for Canada and provinces by industry and industry group, historical and other tabulations.
- *Industrial Research and Development Statistics, 1987*, 96 p., 1989. 88-202. Provides current and historical detailed statistics on industrial research and development in Canada.

Construction and Housing

- *Construction in Canada*, annual. 64-201. Presents total value of construction work performed, with analyses in current and constant dollars, by new and repair, by type of structure, by type of construction, by industry and by province.
- *Homeowner Repair and Renovation Expenditure in Canada, 1988*, 52 p., 1990. 62-201. Presents data covering the 10 provinces by size of area of residence, type of dwelling, value of dwelling, age of household head, income, age of the dwelling and length of occupancy.
- *Affordability of Housing in Canada*, 39 p., 1990. 98-130. Investigates how housing expenses vary for homeowners and tenants, where in Canada the problems are most acute, and the causes of affordability problems.

More information about these publications is available from Statistics Canada Regional Offices. See page 255.

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 St. John's, Newfoundland
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 Statistics Canada
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 Calgary, Alberta
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British Columbia and the Yukon

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 Statistics Canada
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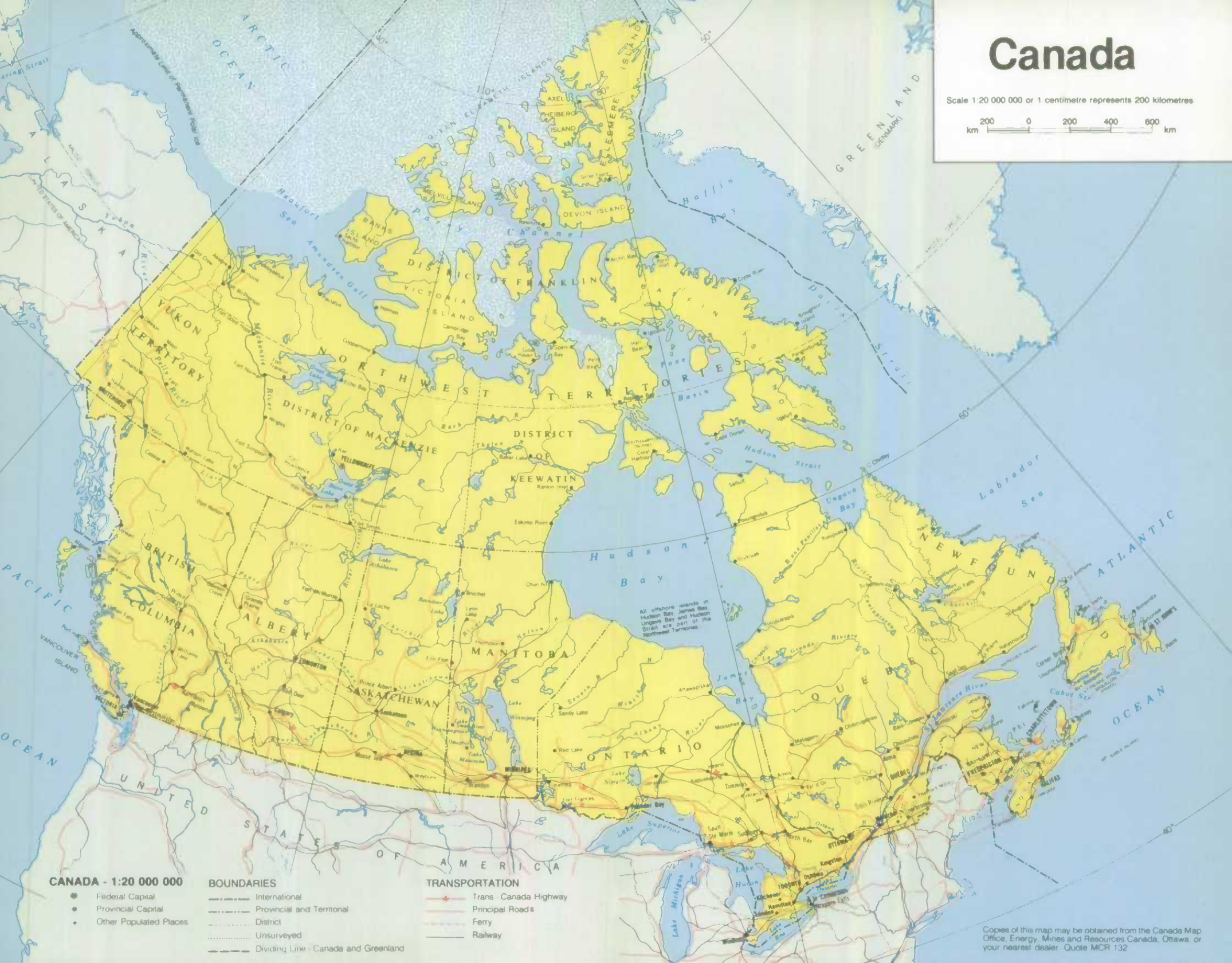
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Scale 1:20 000 000 or 1 centimetre represents 200 kilometres



CANADA - 1:20 000 000

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- Provincial Capital
- Other Populated Places

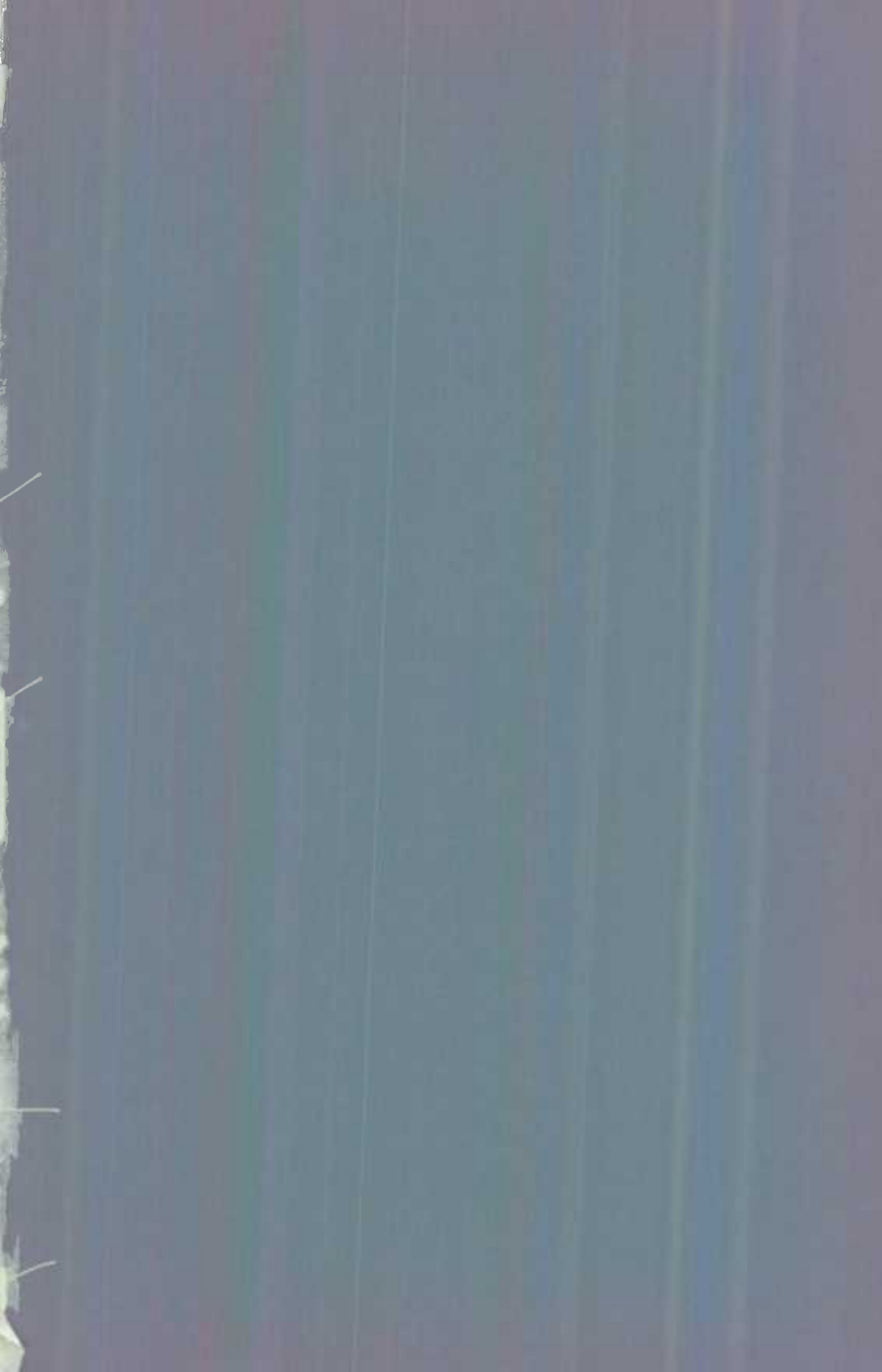
BOUNDARIES

- International
- Provincial and Territorial
- District
- Unsurveyed
- Dividing Line - Canada and Greenland

TRANSPORTATION

- Trans-Canada Highway
- Principal Roads
- Ferry
- Railway

All offshore islands in Hudson Bay, James Bay, Ungava Bay and Hudson Strait are part of the Northwest Territories.



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