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# Perspective Canada 

A Compendium of Social Statistics

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The poblication is a compuntian of some of the mafer social statistical time series available in Canada. Although there has been a growing demand for the construction of social indicators, there is no consensus on how to define them. It may very well turn out that for a period of time at least, social indicators will be those social statistics which by constant use in analysis and reference will be perceived as barometers of social change.

This volume contains data that have this potential use. The selection criteria included the relevance of the statistics to social concerns, their ability to portray change over time, and their potential for showing distributional aspects by geography, occupation, age, sex, schooling and other characteristics.

Much of this report was prepared in the Office of the Senior Adviser on Integration, with considerable assistance from other groups in Statistics Canada, and other federal government departments. This help is gratefully acknowledged. Statistics Canada would welcome comments and suggestions for improvement to this report. These should be addressed to H.J. Adler, Senior Adviser on Integration.

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## Contents

TABLES, CHARTS, AND MAPS ..... vii
INTRODUCTION ..... xix
INTRODUCTORY ISODEMOGRAPHIC MAPS ..... xxv
1 POPULATION GROWTH, DISTRIBUTION AND COMPOSITION ..... 1
2 FAMILY FORMATION AND COMPOSITION ..... 15
3 HEALTH ..... 25
4 EDUCATION ..... 63
5 ALLOCATION OF TIME ..... 95
6 WORK ..... 111
7 INCOME ..... 149
8 CONSUMPTION OF GOODS AND SERVICES ..... 175
9 QUALITY OF THE ENVIRONMENT ..... 193
10 HOUSING ..... 205
11 BILINGUALISM ..... 219
12 NATIVE PEOPLES ..... 235
13 CULTURAL DIVERSITY ..... 255
14 CRIMINAL JUSTICE ..... 285
SOURCES ..... 303
FURTHER READING ..... 315

## Tables, Charts, and Maps

## Chapter 1 <br> POPULATION GROWTH, DISTRIBUTION AND COMPOSITION

| Table 1.1 | Total Population and Urban-rural Population Distribution |  |
| :--- | :--- | :--- |
| Table 1.2 | Components of Population Growth |  |
| Table 1.3 | Components of Population Change |  |
| Chart 1.4 | Annual Growth Rates of the Canadian Population |  |
| Chart 1.5 | Crude Birth Rate and Total Fertility Rate |  |
| Chart 1.6 | Immigration Rate |  |
| Table 1.7 | Provincial Total Fertility Rates |  |
| Table 1.8 | Urban Population as a Percentage of Total Population |  |
| Chart 1.9 | Provincial Shares of the National Population |  |
| Table 1.10 | Population in Census Metropolitan Areas as a Percentage of Total Population |  |
| Table 1.11 | Central City and Suburban Percentage Shares of Census Metropolitan Area Populations |  |
| Table 1.12 | Sex Ratios by Five-year Age Groups |  |
| Table 1.13 | Median Age and Dependency Ratios |  |
| Table | 1.14 | Population Distribution by Broad Age Groups, Roughly Corresponding to Major Life-cycle |
| Table | 1.15 | Stages |
| Chart | 1.16 | Percentage Distribution of Persons 20-54 Years of Age by Marital Status and Sex |

## Chapter 2

FAMILY FORMATION AND COMPOSITION

| Table | 2.1 | Number and Average Annual Growth Rate of Census Families |
| :--- | :--- | :--- |
| Table | 2.2 | Crude Marriage and Divorce Rates and Marriage and Divorce Rate Indices, 1971 |
| Chart | 2.3 | Crude Marriage Rates and Marriage Rate Index |
| Chart | 2.4 | Divorce Rate Index |
| Table | 2.5 | Divorce Rates, by Age at Divorce, 1971 |
| Chart | 2.6 | Divorce Rates, by Age at Divorce, 1971 |
| Chart | 2.7 | Mean Age of Marriage and Mean Age at Child-bearing |
| Table 2.8 | Index of Marriage Dissolution due to Death of Husband |  |
| Table 2.9 | Average Size of Census Families |  |
| Table 2.10 | Average Number of Children Living at Home, by Age of Family Head |  |
| Chart 2.11 | Census Families by Number of Children Living at Home |  |
| Table 2.12 | Census Families by Marital Status and Sex of Head |  |

## Chapter 3 <br> HEALTH

| Table 3.1 | Average Life Expectancy at Selected Ages |  |
| :--- | :--- | :--- |
| Chart | 3.2 | Average Life Expectancy at Selected Ages |
| Chart | 3.3 | Regional Variation in Life Expectancy |
| Table 3.4 | Age-specific Death Rates |  |
| Chart 3.5 | Death Rates by Cause |  |
| Chart 3.6 | Major Causes of Death, 1972 |  |


| Table | 3.7 | Potential Years of Life Lost Through Death Prior to Age 70, 1971 |
| :---: | :---: | :---: |
| Chart | 3.8 | Potential Years of Life Lost Through Death Prior to Age 70, 1971 |
| Table | 3.9 | Infant Mortality |
| Chart | 3.10 | Infant Mortality |
| Chart | 3.11 | Death Rates for Smoking-related Diseases |
| Map | 3.12 | Deaths from Heart Disease, by County |
| Chart | 3.13 | Incidence of Notifiable Diseases |
| Table | 3.14 | Tuberculosis Among Inuit, Registered Indians and Other Canadians |
| Table | 3.15 | Hospitalizations by Cause, 1970 |
| Chart | 3.16 | Days of Hospitalization by Diagnosis, 1970 |
| Chart | 3.17 | Hospitalization by Cause and Age Group, 1970 |
| Chart | 3.18 | Hospitalizations for Selected Diseases |
| Table | 3.19 | Psychiatric Inpatient Facilities: First Admissions, Readmissions and Patients on Books |
| Chart | 3.20 | Psychiatric Inpatient Facilities: First Admissions, Readmissions, Patients on Books, Discharges and Deaths |
| Chart | 3.21 | Psychiatric Inpatient Facilities: First Admissions by Diagnosis |
| Chart | 3.22 | Psychiatric Inpatient Facilities: Patients on Books by Diagnosis |
| Table | 3.23 | Psychiatric Inpatient Facilities: First Admissions and Patients on Books by Diagnosis, 1969 |
| Chart | 3.24 | Psychiatric Inpatient Facilities: First Admissions by Diagnosis, Age and Sex, 1971 |
| Table | 3.25 | Patients with a Psychiatric Diagnosis Leaving Inpatient Facilities, 1970 |
| Chart | 3.26 | Suicide Rate for Selected Cities, 1965-67 |
| Chart | 3.27 | Suicide Rate |
| Chart | 3.28 | Suicide Rate by Age and Sex, 1971 |
| Table | 3.29 | Suicides by Cause, 1971 |
| Table | 3.30 | Expenditures on Personal Health Care |
| Chart | 3.31 | Expenditures per Person on Personal Health Care |
| Table | 3.32 | Public General and Allied Special Hospitals |
| Chart | 3.33 | Cost per Patient Day by Type of Public Hospital |
| Chart | 3.34 | Cost per Patient Day, 1956 and 1971 |
| Chart | 3.35 | Population per Physician, 1971 |
| Table | 3.36 | Expenditure per Person on Dentists' Services |
| Chart | 3.37 | Population per Dentist, 1971 |
| Table | 3.38 | Population Visiting a Dentist During 1967 |
| Table | 3.39 | Main Causes of Disability, 1965 |
| Table | 3.40 | Persons with Deficient Diets, 1970-72 |
| Chart | 3.41 | Overweight Adults, 1970.72 |
| Chart | 3.42 | Regular Smokers |
| Chart | 3.43 | Consumption per Person of Alcoholic Beverages |
| Chart | 3.44 | Participation in Sports and Physical Activities, January-March 1972 |
| Chart | 3.45 | Participation in Sports and Physical Activities, by Province, January-March 1972 |

## Chapter 4 EDUCATION

Table 4
Table 4.2
Chart 4.3
Table 4.4
Table 4.5
Table 4.6
Table 4.7
Table 4.8
Chart 4.9
Chart 4.10
Chart 4.11
Table 4.12
Table 4.13
Table 4.14
Chart 4.15
Table 4.16
Chart 4.17
Table 4.18
Chart 4.19
Table 4.20
Chart 4.21
Chart 4.22
Chart 4.23
Table 4.24
Table 4.25
Table 4.26
Table 4.27
Table 4.28
Table 4.29
Table 4.30

Table 4.31
Table 4.32
Table 4.33
Table 4.34
Table 4.35
Table 4.36
Table 4.37
Table 4.38

Chart 4.39
Table 4.40

Educational Attainment of Population 14 Years of Age and Over Enrolments in Schools at the Elementary-secondary Level Total Pre-grade 1 Enrolment Related to 5 -year Old Population Percentage of the Population Aged 15 to 17 Years Attending School Children Receiving Special Education, 1966 Enrolment in Second-language Study Students' Facility in Both Official Languages, 1971 Registrations in Continuing Education Programs Registrations in Continuing Education Programs, by Sex, 1971-72 Estimated Student Retention Population Enrolled in Schools, 1968-69 Post-secondary Enrolment Full-time Enrolment in Community Colleges Women as a Percentage of Total Post-secondary Enrolment University Enrolment by Sex Full-time University Undergraduates by Field of Specialization Specializations of Undergraduates Full-time Post-secondary Enrolment (Non-university) by Field of Specialization Full-time Post-secondary Enrolment (Non-university) by Field of Specialization Non-credit Continuing Education in Universities and Community Colleges, 1971-72 Non-credit Continuing Education in Universities and Community Colleges, 1971-72 Percentage Distribution of Individuals by Income Groups and Education, 1971 Labour Force Participation Rates by Education Attained, April 1972 Degrees Awarded by Universities and Colleges, by Field of Study Completions of Community College Courses Internal Rates of Return to Individuals

Enrolments in Canada Manpower Training Program Enrolment in Publicly-supported Retraining Programs in Business and Industry, 1971 Employees Enrolled in Organized Training in Industry, 1969-70

Elementary and Secondary Enrolments in the Yukon, Northwest Territories and Arctic Quebec

Enrolment in Federal Schools for Indians and Inuit Language of Communication in Private Nursery Schools and Kindergartens, 1972.73 Language of Instruction in Elementary and Secondary Schools, 1971

Post-secondary Attendance by Parental Income, Academic Year 1968-69
Educational Level by Educational Level of Parents, 1966
Occupation of Parents of Post-secondary Students, 1968-69
Reasons Given for Leaving University, 1971-72
Total Full-time University Teachers, by Sex, showing Distributions by Degree and by Age, 1970-71
Pupil-teacher Ratios in Elementary and Secondary Schools
Expenditures on Education in Relation to Selected Indicators, and Level of Study

## Chapter 5

## ALLOCATION OF TIME

Table 5.1
Table 5.2 $\quad$ Standard Hours of Work $\quad$ Employees who received Nine Days or More Paid Holidays, by Industry

## Chapter 6 WORK

Table 6.1
Chart 6.2 Participation Rates by Sex and Marital Status
Chart $6.3 \quad$ Participation Rates by Age Group
Chart 6.4 Sex and Age Composition of the Labour Force
Chart 6.5 Weeks Employed in 1970, by Age, Sex and Marital Status
Table 6.6 The Employed by Class of Worker
Table 6.7 Proportion of Women in Major Occupational Groups
Table 6.8 Employed by Occupational Group and Sex
Table $6.9 \quad$ Employment by Industry
Chart 6.10 Employment by Industry and Region, November 1973
Chart 6.11 Unemployment Rates by Age
Chart 6.12 Unemployment Rates for Men and Women
Chart 6.13 Unemployment Rates by Region
Table 6.14 Unemployment by Occupation
Chart 6.15 Unemployment Rates by Educational Attainment
Chart 6.16 Unemployed Persons by Duration of Unemployment
Chart 6.17 Men and Women not in the Labour Force by Reason
Table 6.18 Family Status of Unemployed Persons
Chart 6.19 Families with Unemployment by Number of Other Members Employed
Table 6.20

Weekly Incomes Under Selected Programs for Certain Provinces, January 1, 1974

## Chapter 6 <br> WORK - Concluded

| Table | 6.21 | Job Vacancies in Selected Occupational Groups |
| :---: | :---: | :---: |
| Chart | 6.22 | Job Vacancies by Occupational Group |
| Table | 6.23 | Job Vacancies in Selected Industrial Groups |
| Chart | 6.24 | Current Full-time Vacancies by Industrial Division |
| Chart | 6.25 | Job Vacancies by Region, January 1971 to August 1973 |
| Table | 6.26 | Labour Costs in Selected Industries |
| Table | 6.27 | Actual and Deflated Weekly Wages - Industrial Composite |
| Table | 6.28 | Average Hourly Earnings by Industry - November 1973 |
| Table | 6.29 | Average Hourly Earnings in Manufacturing and Minimum Hourly Wages by Province |
| Table | 6.30 | Average Earnings of Women and Men Full-year Workers by Occupational Group, 1971 |
| Chart | 6.31 | Hours Worked per Week |
| Table | 6.32 | Employees with Two Weeks Paid Vacation After One Year or Less Employment |
| Chart | 6.33 | Percentage of Employees who receive Two Weeks Paid Vacation After One Year or Less Employment, by Industry |
| Chart | 6.34 | Percentage of Employees who receive Nine Days or More Paid Holidays, by Industry |
| Table | 6.35 | Distribution of Selected Perquisites by Industry for Office and Non-office Workers |
| Table | 6.36 | Employees covered by Collective Agreements, by Industry |
| Table | 6.37 | Employees covered by Collective Agreements, 1971, by Province |
| Chart | 6.38 | Union Membership |
| Table | 6.39 | Union Membership by Type of Union and Affiliation, 1972 |
| Chart | 6.40 | Union Membership by Industry |
| Chart | 6.41 | Time Lost from Strikes and Lockouts |
| Table | 6.42 | Intrinsic and Extrinsic Job Satisfaction by Industry, 1968 |
| Table | 6.43 | Job Satisfaction and Interest, 1968 |

## Chapter 7 INCOME

Table 7.1
Table 7.2
Table 7.3
Table 7.4
Chart 7.5
Chart 7.6
Chart 7.7
Chart 7.8
Chart 7.9
Table 7.10
Table 7.11
Table 7.12
Chart 7.13
Chart 7.14

Income Recipients by Income Group and Sex, 1971
Families and Unattached Individuals by Income Group, 1971
Distribution of Income Among Individuals
Distribution of Income Among Families and Unattached Individuals
Mean Income of Families, Unattached Individuals, and All Individuals
Upper Limits of the Income Quintiles for Families and Unattached Individuals
Shares of Total Income Going to Each Quintile of Families and Unattached Individuals
Families in Each Income Quintile by Major Source of Income, 1971
Lorenz Curve - Income of Families and Unattached Individuals, 1971
Occurrence of Low Income Families and Unattached Individuals
Comparison of Low Income and Other Families
Assets and Debts, by Income Group, 1970
Families and Unattached Individuals reporting Selected Assets, by Income Group, 1970
Composition of Total Assets of Families and Unattached Individuals, 1970

CHAPTER 7
INCOME - Concluded

| Chart 7.15 | Composition of Total Debts of Families and Unattached Individuals, 1970 |  |
| :--- | :--- | :--- |
| Chart | 7.16 | Families and Unattached Individuals Reporting Selected Debts, 1970 |
| Table 7.17 | Liquid Assets and Consumer Debts of Families, by Age of Head and Income Group, <br> 1970 |  |
| Cable 7.18 | Cumulative Shares of Total Assets, 1970 |  |
| Table 7.19 | Composition of Total Income of Families and Unattached Individuals |  |
| Table 7.20 | Composition of Total Family Income |  |
| Table 7.21 | Family Income, 1970 |  |

## Chapter 8

CONSUMPTION OF GOODS AND SERVICES

| Chart 8.1 | Gross National Expenditure per Person |
| :--- | :--- | :--- |
| Chart 8.2 | Disposition of Total Personal Income |
| Table 8.3 | Personal Expenditure on Consumer Goods and Services |
| Chart 8.4 | Major Items of Expenditure on Consumer Goods and Services |
| Table 8.5 | Expenditure of All Levels of Government, by Function |
| Chart 8.6 | Expenditure of All Governments, by Function |
| Table 8.7 | Patterns of Family Expenditure |
| Table 8.8 | Patterns of Family Expenditure |
| Table 8.9 | Shelter Expenses of Tenants and Homeowners, Major Cities |
| Chart 8.10 | Patterns of Family Expenditure by Family Income Quintile, 1969 |
| Chart 8.11 | Patterns of Family Expenditure by Province, 1969 |
| Chart 8.12 | Families reporting Selected Expenditures, by Income Group, 1969 |
| Chart 8.13 | Families reporting Expenditure on Food While on Vacation, 1969 |
| Chart 8.14 | Expenditure on Selected Items by Family Income Quintile, 1969 |

## Chapter 9 <br> QUALITY OF THE ENVIRONMENT

| Table 9.1 | Sulphur Dioxide Levels in Air, Selected Cities |
| :--- | :--- | :--- |
| Chart 9.2 | Sulphur Dioxide Levels in Air, Selected Cities |
| Table 9.3 | Suspended Particulate Levels in Air, Selected Cities |
| Chart 9.4 | Suspended Particulate Levels in Air, Selected Cities |
| Chart 9.5 | Air Pollutant Emissions by Source; 1970 Estimates |
| Chart 9.6 | Beta Radioactivity in Precipitation and in Surface Air |
| Chart 9.7 | Radioactive Fallout Content in Whole Milk |
| Chart 9.8 | Percentage of Energy supplied by Different Sources |
| Chart 9.9 | Energy Consumption, by Sector of Economy |
| Chart 9.10 | Distribution of Population by Density of Settlement, 1971 |
| Chart 9.11 | Land Use by Region, 1968 |
| Chart 9.12 | Area of Improved Farmland |

## Chapter 10 HOUSING

Table 10.1
Population in Private Households
Table 10.2
Chart 10.3
Table 10.4
Chart 10.5
Chart 10.6

Table 10.7
Table 10.8
Chart 10.9
Table 10.10
Table 10.11
Dwelling Starts in Metropolitan and Major Urban Areas
Dwelling Starts, by Type of Unit
Dwelling Starts, by Province
Dwelling Starts, by Type of Unit and by Province, 1971
Apartment Building Completions by Size of Building, for Selected Metropolitan Areas (Total for 1970 and 1971)

Chart 10.12
Table 10.13
Table 10.14
Table 10.15
Table 10.16
Table 10.17
Chart 10.18

## Chapter 11 BILINGUALISM

Table 11.1
Chart 11.2
Table 11.3
Table 11.4
Table 11.5
Chart 11.6
Map 11.7
Map 11.8
Table 11.9
Chart 11.10
Table 11.11

Table 11.12

Table 11.13
Table 11.14
Table 11.15
Table 11.16
Table 11.17
Table 11.18
Population by Mother Tongue, 1971
Population by Mother Tongue
Language Most Often Spoken at Home, 1971
Language Retention by Age, 1971
Population by Official Languages
Population by Official Languages, 1971
French Speaking Population by Census Division, 1971
Population Speaking Both English and French, by Census Division, 1971
Official Language of Specified Ethnic Groups
Official Language of Specified Ethnic Groups, 1971
Students Enrolled in Minority Language Courses as a Percentage of Enrolment in Majority Language Schools
Students Enrolled in Minority Language Courses as a Percentage of Enrolment in Majority Language Schools, 1971-72
Students Enrolled in Minority Language as Language of Instruction
Students' Perception of Their Facility in English and French, by Grade and Province, 1971
Public and Private Elementary and Secondary Schools by Language of Instruction, 1972
Use of Language in Communication at Work for Certain Language Groups, Quebec, 1970
Use of French by Occupation and by Language Group in Quebec, 1970
Radio Stations by Language, 1973

## Chapter 11

BILINGUALISM - Concluded
Table 11.19 Television Stations by Language, 1973
Table 11.20
Table 11.21
Table 11.22
Table 11.23
Table 11.24

Table 11.25
Table 11.26

Circulation of Daily Newspapers by Language, 1973
Weekly Newspapers by Language, 1973
General Interest Magazines by Language
University Recruitment Within the Federal Public Service
Bilingual Ability of Appointees to Executive (SX) Category Within the Federal Public Service

Language Characteristics of Selected Employees in the Federal Public Service, 1972
Number of Students in Federal Government Language Programs, by Job Category, 1971.72

## Chapter 12 NATIVE PEOPLES

Map 12.1
Table 12.2
Table 12.3
Chart 12.4
Chart 12.5
Chart 12.6
Table 12.7
Table 12.8
Table 12.9
Table 12.10

Table 12.12
Chart 12.13
Table 12.14
Table 12.15
Table 12.16
Table 12.17
Chart 12.18
Chart 12.19
Table 12.20

Table 12.23

Table 12.25
Table 12.26
Table 12.27

Chart 12.11 Indian and Inuit Population as compared to the Total Canadian Population: Distribution by Age and Sex, 1961 and 1971

Table 12.21 Persons of Indian-Inuit Mother Tongue as a Percentage of Persons of Indian-Inuit Ethnic Group

Table 12.22 Persons Speaking Indian or Inuit at Home by Mother Tongue and Ethnic Origin, 1971
Enrollment of Registered Indians by Type of School
Table 12.24 Educational Attainment by Mother Tongue and Age, 1971
Native Indian Population by Census Division, 1971
Culture Areas, Linguistic Groups and Their Locations, Native Indians
Population Counts of the Native Peoples
Crude Birth Rates
Crude Death Rates
Natural Increase
Enfranchisements of Registered Indians
Indian and Inuit Population by Place of Residence
Indians and Inuit in Urban Centres
Registered Indians by Type of Residence

Age Structure of the Registered Indian Population
Infant Mortality
Selected Causes of Hospitalization of Inuit in the Northwest Territories
Selected Causes of Death of Inuit in the Northwest Territories
Indian Housing on Reserves
Condition of Housing on Reserves
Housing on Indian Reserves by Number of Rooms per House
Housing on Indian Reserves with Specified Facilities
Mother Tongue of Persons of Indian and Inuit Ethnic Groups

Persons Speaking Indian or Inuit at Home by Mother Tongue and Ethnic Origin, 1971

Social Assistance to Indians residing on Reserves, 1972.73
Indian Economic Account, Loans approved by Purpose
Indian Craft Industries

## Chapter 13 <br> CULTURAL DIVERSITY

Table 13.1
Table 13.2
Table 13.3
Chart 13.4
Table 13.5
Chart 13.6
Table 13.7
Map 13.8
Map 13.9
Map 13.10
Map 13.11
Chart 13.12
Table 13.13
Table 13.14
Table 13.15
Chart 13.16
Table 13.17
Chart 13.18
Chart 13.19
Table 13.20
Chart 13.21
Table 13.22
Table 13.23
Table 13.24
Table 13.25
Chart 13.26
Table 13.27
Table 13.28
Table 13.29
Chapter 14

## CRIMINAL JUSTICE

Population by Mother Tongue
Mother Tongue other than English or French
Mother Tongue and Language Spoken in the Home, 1971
Mother Tongue and Language Spoken in the Home, 1971
Population by Ethnic Group
Ethnic Groups other than British and French
Population by Ethnic Group, Canada and the Provinces, 1971
German Population by Census Division, 1971
Italian Population by Census Division, 1971
Ukrainian Population by Census Division, 1971
Netherland Population by Census Division, 1971
Birthplace of Foreign Born Population
Population by Birthplace, by Province, 1971
Immigrants by Ethnic Origin
Immigrants by Place of Former Residence
Immigrants by Region of Former Residence
Immigration in the Context of Canadian Population Growth
Immigration as a Percentage of Population Growth
Immigrants by Intended Occupation, 1951 and 1971
Income Group of Families by Year of Immigration of Head, 1969
Canadian and Foreign Born Families by Income Group, 1969
Age by Ethnic Group, 1971
Educational Attainment by Mother Tongue, 1971
Ethnic Group by Occupational Group, 1971
Population by Religion
Population by Religion
Cultural Organizations
Foreign Language Media
Types of Restaurants in Selected Cities, 1973

Table 14.1
Actual Offences Reported, by Offence Group
Chart 14.2 Offence Rate, by Offence Group
Table 14.3
Table 14.4
Chart 14.5
Table 14.6
Table 14.7
Table 14.8
Chart 14.9
Table 14.10

Offence Rate, by Province
Offence Rate, by Size of Municipality Offence Rate, by Size of Municipality
Percentage of Offences Cleared, by Offence Group
Adults Charged, by Offence Group
Juveniles Charged, by Offence Group
Rate of Charges Laid, Adults and Juveniles
Type of Trial for Adults Charged with an Indictable Offence

## Chapter 14 <br> CRIMINAL JUSTICE - Concluded

Chart $14.11 \quad$ Type of Trial for Adults Charged with an Indictable Offence
Table 14.12 Convictions for Indictable Offences, by Type of Offence
Chart 14.13 Convictions for Indictable Offences, by Type of Offence
Table 14.14 Sentences for Indictable Offences
Chart 14.15 Sentences for Indictable Offences
Table 14.16 Sentences for Indictable Offences, by Type of Offence, 1967
Table 14.17 Convictions for Summary Offences, by Offence Group
Table 14.18 Delinquencies, by Type of Offence
Table 14.19 Disposition of Juveniles Found Delinquent
Chart $14.20 \quad$ Correctional Institution Population, by Type of Institution
Table 14.21 Relationship of Murder Suspects and Victims
Table $14.22 \quad$ Percentage of Those Convicted for Indictable Offences who are Imprisoned
Table 14.23 Charges for Indictable Offences, by Sex
Chart 14.24 Sentences of Persons Convicted of Indictable Offences, by Sex

## Introduction

## QUALITY OF LIFE IN CANADA

As the 1960 s drew to a close, commitment to the single-minded pursuit of economic growth began to lessen in western societies. Policymakers and social scientists, as well as the media, commented increasingly on the "quality of life". The gist of this commentary was that there are several dimensions of individual and social well-being that need more attention by decision-makers and statisticians. As we move through the 1970s, the demands grow for a broad conception of the non. economic aspects of our life. Statistics Canada is moving on several fronts to make its statistical system increasing. ly responsive to these new demands. One facet of our activity is this compendium of social statistics.

Acknowledging that this publication is partly a response to growing public concern about the quality of life in Canada, it is appropriate to inquire as to its "message". We raise this question to make clear that statistics cannot in principle provide direct answers. In the first instance, a direct answer should be based on an assessment of the network of criteria for quality-of-life measurements that would be valid for most Canadians. We also need to know the relative importance of these criteria. Canada has yet to have a representative national inventory on this matter. Until one is conducted and shown to be reasonably accurate, it is best to leave Canadians to judge for themselves. This publication is issued in the belief that whatever an individual's criteria for assessing the quality of life, and however that quality is judged, it will be concerned with some questions for which the information in this compendium is relevant. To help Canadians make their own judgments and to provide insights into present conditions and possible ameliorations are the main reasons for issuing this compendium.

## RAISON D'ETRE OF THE PORTRAIT

This then is a statistical portrait of the Canadian people, their activities, and their environments. Like all portraits, it reflects selectivity by the art ist in the choice of themes and in the views from which various features are to be shown. Also, as the artist is limited to the tools available, so must this portrait be limited by the statistics currently at our disposal.

The presentation of a portrait often implies that there is some sense in which the artist sees the object of the portrait as a whole and something more than a mere collection of parts. The artist sees some interrelations among the parts, an organization or structure composed of the parts, which are integral to his image of the whole. Canadian society is the whole about which this portrait is concerned. In spite of the diversity of its peoples and its geography, Canada is organized by a
common political system, a substantial degree of integration of regional economies, a fairly uniform system of laws, and even large elements of commonality in cuitural heritage. For more than one hundred years, Canadian national institutions have guided the evolution of a distinctive form of adaptation to the environment and potentialities of the most northerly latitudes in the western hemisphere. This process is seen particularly in the reliance on a pattern of exports, and in development of sophisticated modern technologies, mainly in important urban centres that are primary sources of goods and services for the remainder of the country. The integrative forces of national institutions, transport networks, and markets are the clearly visible aspects, even though they are accompanied by major cultural variations associated with the diverse origins of the Canadian peoples. Furthermore, although the related political tensions may seem at various times to pose a threat to Canada as a whole, they have also spurred constant creativity in the political institutions that seek to strengthen the bonds among Canadian regions and take account of minority interests.

The information in this compendium should help the reader to make his own assessments of how Canada has been managing to deal with important social problems. To facilitate this appraisal, the following themes have been emphasized: population and family, health, schooling, the use of time, work, income, consumption, quality of the environment, housing, bilingualism, the native peoples, cultural diversity, and criminal justice.

## LIMITATIONS OF THE DATA; THE FRAME OF THE PORTRAIT

The data needed to paint the ideal portrait, even within the rather narrow frame outlined above, are by no means fully available. There is great unevenness in the adequacy of available information among the various subjects of interest. All of the themes chosen for emphasis in this portrait suffer from deficiencies in data. That deficiency is particularly notable with regard to time allocation, quality of the environment, cultural diversity, and criminal justice.

We would have liked to concentrate our data on the "results" of the various social processes in question. In most cases, this turned out to be impossible, not only because much of the material does not lend itself to this treatment, but mainly because there is a general paucity of operational concepts to measure "results". Many of our statistics, particularly those referring to health, education and justice deal with inputs, costs, or means. These may be defined as the physical or financial components that are used and become embodied in the production of goods and services, e.g. the number of
hospital beds, the monetary cost of running the school system, or the number of policemen employed. Data on outputs or products (i.e. the services or goods delivered to consumers) are available in some instances. One can think here of the number of students who have graduated, the "output" of patient-days by hospitals, crimes cleared, or statistical publications produced. There exist, however, precious few data on actual results achieved. These can be described as the improvement, enjoyment, welfare, or utilities that goods or services render to the final beneficiaries, e.g., health obtained, knowledge acquired, or security from crime or hazardous activity. It must be admitted also that notions of input, outputs and results are at times tenuous or even circular. Thus the graduation of physicians might be viewed as the output of the education industry as well as an input into medical services. Another way of differentiating is to think of the data as progressively less recognizable as physical or financial identities. Indeed, some result indicators may shade into perceptual measures that probe, for instance, how individuals perceive their health status, their place in society, or the satisfaction they obtain from the pursuit of education. Here, Canada is not alone in lacking official data.

In numerous instances, of course, many more detailed data exist than we have used. We have tried to illustrate the concerns with broad and summary information.

For the reader who wishes to pursue particular subjects in greater depth, and to the extent existing data permit, we have listed the statistical sources for each chapter, and have also provided short reading lists of mainly Canadian material. It should be stressed that the reading lists do not aim for rigorous academic completeness, but merely list writings that the reader can use as a first step towards deepening his knowledge of each subject.

The areas of concern selected for inclusion in this volume are those that focus on the individual, are social rather than economic in content, and can be at least minimally quantified. Excluded, therefore, are such problems as national identity, constitutional issues, alienation, inflation, or foreign control of industry. The truly fundamental problems of personal being such as the spiritual life, love, and friendship, are obviously outside the domain of numerical calculus.

In life, concems cannot be compartmentalized. They are interconnected and interrelated. Thus a healthy individual will, other things being equal, gain more from the educational process than a sick person. Members of one disadvantaged group such as low-income recipients frequently also find themselves among the less fortunates from the point of view of housing, justice, and the environment. Access to the benefits of publicly supported museums and theatres is obviously
circumscribed by geographical limits. In emphasizing the distributional aspects, by region, income, education or other variables, we have tried to show some of the interrelationships of the various concerns. These instances, however, are illustrative only, for it is impossible to deal with them exhaustively.

## HIGHLIGHTS

The chapters on population growth and family formation provide the essential framework of information within which the broad social concerns are described.

Without health, work cannot be carried out effectively or meaningfully, leisure time cannot be enjoyed, education is difficult to acquire and, for some disabilities, even the highest level of income is insufficient recompense. Thus if there is one fundamental concern, it is health - mental and physical. Statistically, however, health is measured mainly by its absence, and the concerns therefore deal with the prevalence of illness, the availability and accessibility of protective services, the external factors influencing health, and some of the costs of maintaining it.

Education, almost to the same degree as health, is a prerequisite for modern life. Personal enjoyment and fulfilment are generally assumed to be improved by education. The labour market demands a skilled work force and democracy presupposes a literate electorate. The acquisition and provision of education for personal development and economic, political and cultural participation are thus both personal and societal concerns.

The allocation of time between rest and work, effort and relaxation, is an ancient concern - and one which has found formal expression in both temporal and spiritual injunctions. Industrialization and specialization both of the work and recreational aspects of man's time have only heightened this concern. Associations, governments, businesses and religious institutions all endeavour to influence, allocate and legislate our use of time. The data pertaining to leisure and rest are not too plentiful, but that portion of time spent in paid work can be amply illustrated by statistics. The concern with work is, of course, broader than merely how long we perform it. The worthwhileness of work, both from a monetary and social point of view, touches most of us deeply. While, as usual, economic data pertaining to hours of work, pay, availability of employment and characteristics of the labour force predominate, statistics on the social aspects in terms of labour relations are not entirely lacking. Quantification of work satisfaction, on the other hand, is scarce because a good deal of both conceptual and statistical work remains to be done.

For many people a satisfactory income, and its concomitant command over goods and services, is
probably next to health in order of importance. Changes in levels of income, however, are often dependent on health, the educational attainments and skills of the working population, and the opportunities for gainful employment. It is only, therefore, after having dealt with these other aspects of the human condition that we focus on the level of income, its distribution between income classes of the population, its regional disparities, its basic sources as well as its final disposition on consumer goods and services, taxes and savings.

While the problems in health, education and the allocation of time have always, within certain limits, been subject to human influences and manipulations, the external environment was for a long time considered as both a given datum and limitless in its extent. We now know, however, that it is neither. It is very much subject to human violation - and hence human control. The degrees of violation and control are still largely subjects of research. While many natural phenomena are quantifi-
able and have indeed been measured, much work remains to be done in this area.

The problem of the adequacy, availability and equitable distribution of shelter has been of long-run human concern, but preoccupations of governments with housing, particularly with aid to individuals for its acquisition and with official encouragement for homeownership, are of more recent origin.

In addition to the physical external environment that influences the lifestyle of individuals, there are also social environmental factors that are part of the existing surroundings and which impinge on our daily lives. The question of language rights and their exercise as well as some other specific Canadian concerns are, we believe, currently pertinent Canadian issues. Thus chapters deal with bilingualism, native peoples and multiculturalism. The presence or absence of personal safety and free enjoyment of life and property are the concern of the chapter on criminal justice.

## Introductory Isodemographic Maps



TWO CARTOGRAPHIC FACES OF CANADA: Its Land and Its People


## Population Growth, Distribution and Composition 1



This chapter and the following one, on family formation and composition, provide some demographic background for this compendium of social statistics. The data deal with population growth and its components (natural increase and net migration); population distribution among provinces and the metropolitan, urban and rural areas; composition with respect to sex, age and marital status; and family formation, dissolution, and composition.

## POPULATION GROWTH AND DISTRIBUTION

Population growth and redistribution comprise two fundamental dimensions of change in Canadian society. A review of these changes starts naturally with consideration of the long-term change in national population size, and one important indicator of such change is the historical pattern of annual growth rates. These growth rates affect and are affected by major swings in the course of economic growth and social change. For example, those born during the post-war baby boom are now in the peak ages for family formation, and the consumer demands of these young families have helped to stimulate an expansion of economic activity. Associated in part, at least, with this same development are social changes that may be less apparent to the average observer but nevertheless of major importance, such as the trend towards smaller families and emerging new attitudes towards work. When this generation ages beyond the main years of family formation and is later replaced by the relatively small cohorts of the 1960 s and 1970s, further economic and social impacts can be expected.

## GROWTH COMPONENTS

Underlying the pattern of basic change in population size are the variations in the rates of births and deaths, and in historical waves of immigration and emigration. In studying fertility variations, it is important to appreciate the different properties of alternative fertility indicators. While the crude birth rate ${ }^{1}$ roughly measures the relative weight of births in the population each year, it is strongly influenced by the age distribution of the population. Hence the importance of other indicators that are less sensitive to these effects, such as the total fertility rate ${ }^{1}$ - the sum of age-specific birth rates. With regard to external migration, it is very important to note that there is no direct measure of total Canadian emigration currently available. Annual figures on Canadian emigration to the United States are made available by the U.S. and Statistics Canada is making strong efforts now to obtain similar working agreements with a number of other countries; since

[^0]figures on total emigration are generally indirect estimates, their accuracy cannot be easily assessed.

## PROVINCIAL SHARES

The current and future distribution of population across Canada is, and will be, the result of migration (internal and extemal) and regional differences in birth and death rates. Recent shifts in the rank order of provinces regarding the crude birth rate, and the implied changes in the provincial shares of the national population, are especially notable at this time.

## METROPOLITAN GROWTH

Canada has changed from a predominantly rural society to one of the most highly urbanized societies in the world. Close to 60 per cent of the national population now resides in metropolitan areas, and projections indicate that the proportion will rise substantially by the end of this century. Much of this rapid metropolitan growth in the past has been due to heavy streams of internal and extemal migration to these areas. However, within each area (and particularly as its population gets larger and larger) the natural increase of its own population increasingly becomes the predominant force. Meanwhile, this swelling of big-city populations has pushed beyond the urban core areas to cause the so-called "suburban" population explosion, with all of its implications for the use of land that once was rural.

## POPULATION COMPOSITION

The concept of "population composition" generally refers to the distribution of population according to such variables as sex, age, ethnic origin, language, and education. Some of these aspects of population composition are reviewed in other chapters of this compendium. This chapter deals with three of the most basic aspects of demographic composition - sex, age, and marital status. Each of these can be a powerful element in social change, and each in turn is affected by various developments in the society. For example, as the age composition changes, so can the crude birth rate. Similarly, the educational-attainment variations within the population can be key factors influencing income levels and problems associated with low-income status and regional income disparities. There are, indeed, few Canadian social problems that are not crucially affected by some population-composition variable.

A dramatic illustration of the influence of age composition on social concerns and attitudes is the obvious impact of the post-war baby boom on the entertainment industry in the past nine years. We will likely see another dramatic illustration later in this
century when the age distribution becomes relatively "fat" at the middle and older ages, and relatively "thin" at the ages of labour-force entry and family formation.

## CONCEPTS AND DEFINITIONS

## URBAN AND RURAL POPULATION

The urban population figures for the 1871-1911 period refer to incorporated cities, towns and villages of 1,000 and over only. From 1921 to 1951 the percentages are estimates based on the 1961 Census definition of "urban" which includes:
(a) incorporated cities, towns and villages of 1,000 and over (CTVs)
(b) unincorporated towns and villages of 1,000 and over
(c) unincorporated suburbs adjacent to CTVs of 5,000 and over and which had a population density of 1,000 persons per square mile.
In 1971, the percentage of urban population is based on the 1971 Census definition of urban which was changed only slightly from the 1961 definition (see 1971 Census bul., 1.1-9, Catalogue 92-709).

Cities of 100,000 population and over are defined by the municipal boundaries of each city. They are not to be confused with census metropolitan areas (CMAs) or urban agglomerations that include built-up areas surrounding the municipal "city".

## COMPONENTS OF POPULATION CHANGE

The rate of natural increase (NI) is 100 times the difference between births and deaths, divided by the population at the start of the period in question.

The net migration rate is the rate of the actual increase minus the rate of natural increase.

## CRUDE BIRTH RATE

The crude birth rate (CBR) is the number of births per 1,000 of mid-year population. The CBR measures the relative weight of births in the population, and it is affected by the age-sex composition of the population.

## TOTAL FERTILITY RATE

The total fertility rate (TFR) is 1,000 times the sum of the age-specific fertility rates.

Age-specific fertility rate at age " $a$ " is equal
to: $\frac{\text { number of births among women at age "a" }}{\text { total number of women at age "a" }}$

The TFR for a given year is an index of the level of fertility among women in the childbearing ages of that year.

## IMMIGRANTS

It should be noted that the number of immigrants entering Canada during a year is not necessarily equal to the number of immigrants that would be counted in the population at the end of that year. The former number is reduced by such factors as mortality and emigration.

## CENSUS METROPOLITAN AREAS

A census metropolitan area is defined generally as the main labour market area that includes and surrounds a continuous built-up area, where the latter area has a population of 100,000 or more. Following is a list of 1971 CMAs used to calculate the percentage share of population living in CMAs from I951 to 1971:

| New foundland . . . . . . | St. John's |
| :--- | :--- | :--- |
| Nova Scotia . . . . Halifax |  |

New Brunswick . . . . . Saint John
Québec .......... Chicoutimi-Jonquière,
Ontario . . . . . . . . . Hamilton, Kitchener,
London, Ottawa-Hull,
St. Catharines, Sudbury,
Thunder Bay, Toronto, Windsor
Manitoba ........ Winnipeg
Saskatchewan ...... Regina, Saskatoon
Alberta . . . . . . . . . . Calgary, Edmonton
British Columbia . . . Vancouver, Victoria
The reader should note that CMA populations are based on 1971 CMA boundaries. Accordingly, those areas which only became CMAs in 1971 are included as CMAs prior to 1971. Secondly, as the 1971 CMA boundaries are kept constant for all dates prior to 1971, the CMA populations are larger than they would be if the boundaries of the pertinent census year were used.

## DEPENDENCY RATIOS

The youth and old-age dependency ratios reflect features of the age composition. The former shows the relation between the size of the child population and that of the mostly-working age population. The old-age dependency ratio shows the relation between the size of the mostly retired population and that of the mostly working-age population.

Table 1.1

## TOTAL POPULATION AND URBAN-RURAL POPULATION DISTRIBUTION1

|  | Total population | Rural population | Rural farm population | Urban population | CITIES POPULATIO <br> Population | 100,000 AND OVER <br> Number of cities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | thousands |  |  |  |  |  |
| 1871 | 3,689 | 81.7 |  | 18.3 | - | - |
| 1881 | 4,325 | 76.7 | . | 23.3 | - | - |
| 1891 | 4,833 | 70.2 |  | 29.8 | - | - |
| 1901 | 5,371 | 65.1 | . | 34.9 | 8.9 | 2 |
| 1911 | 7,207 | 58.2 | . . | 41.8 | 15.0 | 4 |
| 1921 | 8,788 | 52.6 | . . | 47.4 | 18.9 | 6 |
| 1931 | 10,377 | 47.5 | 32.0 | 52.5 | 22.5 | 7 |
| 1941 | 11,507 | 44.3 | 26.2 | 55.7 | 23.0 | 8 |
| 1951 | 14,009 | 37.6 | 19.7 | 62.4 | 23.3 | 10 |
| 1961 | 18,238 | 30.3 | 11.8 | 69.7 | 22.8 | 12 |
| 1971 | 21,568 | 23.9 | 6.6 | 76.1 | 26.8 | 19 |

1) See Concepts and Definitions for a definition of "urban".

Table 1.2
COMPONENTS OF POPULATION GROWTH

|  | Population at beginning of period | Actual in. crease ${ }^{1}$ | Births | Deaths | Natural increase ${ }^{2}$ | Immigrants | Emigrants ${ }^{3}$ | Net migration ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | ousands |  |  |  |
| 1921-31 | 8,788 | 1,589 | 2,415 | 1,055 | 1,360 | 1,203 | 974 | 229 |
| 1931-41 | 10,377 | 1,130 | 2,294 | 1,072 | 1,222 | 150 | 242 | -92 |
| 1941-515 | 11,507 | 2,141 | 3,186 | 1,214 | 1,972 | 548 | 379 | 169 |
| 1951-61 | 14,009 | 4,229 | 4,468 | 1,320 | 3.148 | 1.543 | 462 | 1,081 |
| 1961.71 | 18,238 | 3,330 | 4,105 | 1,497 | 2,608 | 1.429 | 699 | 730 |
| 1) The actual increase in population is the difference between the population at the beginning of the decade and the population at the end of the decade. <br> 2) Natural increase is the difference between births and deaths. <br> 3) The number of emigrants shown is a residual estimate, subject to a large margin of error. The nesidual method is used here because Canada does not have complete coverage of emigrants to all countries. Therefore, the number of emigrants is the difference between net migration and the number of immigrants. <br> 4) Not migration is the difference between the actual increase and the natural incresse. <br> 5) Newfoundland is excluded prior to the 1951-61 decade. |  |  |  |  |  |  |  |  |

Table 1.3
COMPONENTS OF POPULATION CHANGE1

|  | 1921-31 | 1931-41 | 1941.51 | 1951-61 | 1961-71 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | rates of actual change for the decade |  |  |  |  |
| CANADA | 18.1 | 10.9 | 18.6 | 30.2 | 18.3 |
| Newfoundland | - . |  |  | 26.7 | 14.0 |
| Prince Edward Island | - 0.7 | 8.0 | 3.6 | 6.3 | 6.7 |
| Nova Scotia | - 2.1 | 12.7 | 11.2 | 14.7 | 7.0 |
| New Brunswick | 5.2 | 12.0 | 12.7 | 15.9 | 6.1 |
| Quebec | 21.8 | 15.9 | 21.7 | 29.7 | 14.6 |
| Ontario | 17.0 | 10.4 | 21.4 | 35.6 | 23.5 |
| Manitoba | 14.8 | 4.2 | 6.4 | 18.7 | 7.2 |
| Saskatchewan | 21.7 | - 2.8 | - 7.2 | 11.2 | 0.1 |
| Alberta | 24.3 | 8.8 | 18.0 |  |  |
| British Columbia | 32.3 | 17.8 | 42.5 | 39.8 | 34.1 |
| Yukon and Northwest Territories | 10.1 | 25.1 | 48.2 | 49.9 | 41.4 |
|  | rates of natural increase |  |  |  |  |
| CANADA | 15.4 | 11.8 | 17.1 | 22.4 | 14.3 |
| Newfoundland | . . |  |  | 30.7 | 23.7 |
| Prince Edward Island | 9.3 | 11.0 | 16.6 | 17.9 | 13.1 |
| Nova Scotia | 9.7 | 11.2 | 17.9 | 20.0 | 13.2 |
| New Brunswick | 14.6 | 14.5 | 21.8 | 23.2 | 14.8 |
| Quebec | 20.9 | 16.0 | 22.1 | 24.6 | 14.2 |
| Ontario | 11.6 | 8.1 | 13.3 | 20.7 | 13.8 |
| Manitoba | 16.0 | 11.2 | 14.7 | 19.3 | 13.0 |
| Saskatchewan | $20.1$ | 14.3 | 15.1 | 20.7 | 13.7 |
| Alberta | 17.8 | 14.5 | 18.9 | 28.2 |  |
| British Columbia | $9.1$ | $5.9$ | $14.2$ | $19.2$ | $11.8$ |
| Yukon and Northwest Territories | $-\quad 1.2$ | 3.2 | 15.6 | $36.0$ | $35.8$ |
|  | net migration rates |  |  |  |  |
| CANADA | 2.7 | - 0.9 | 1.5 | 7.7 | 4.0 |
| Newfoundland |  |  | . $\cdot$ | - 4.0 |  |
| Prince Edward Island | $-10.0$ | $-\quad 3.0$ | - 13.1 | - 11.6 | $-6.4$ |
| Nova Scotia | - 11.7 | 1.5 | - 6.7 | - 5.3 |  |
| New Brunswick |  | $-2.4$ | - 9.1 | - 7.2 |  |
| Quebec | 0.9 | - 0.1 | - 0.4 | 5.1 | 0.4 |
| Ontario | 5.4 | 2.3 | 8.0 | 14.9 | 9.7 |
| Manitoba | - 1.2 | - 7.0 | $-8.3$ | $-0.6$ | $-5.6$ |
| Saskatchewan | $1.6$ | - 17.1 | $-22.3$ | $-9.5$ | $-13.6$ |
| Alberta | 6.5 | - 5.7 | - 0.9 | 13.5 | 4.2 |
| British Columbia | 23.3 | 11.9 | 28.2 | 20.6 | 22.3 |
| Yukon and Northwest Territories | 11.3 | 21.8 | 32.6 | 13.9 | 5.6 |

1) See Concepts and Definitions for an explanation of the components of population change.

## Chart 1.4

## ANNUAL GROWTH RATES OF THE CANADIAN POPULATION



## Chart 1.5

## CRUDE BIRTH RATE AND TOTAL FERTILITY RATE (1,2)



## Chart 1.6

IMMIGRATION RATE(1)

(1) 1 mmigration rate $=1000 \underset{(\text { Population })}{(1 \text { mmigrants })}$

Table 1.7
PROVINCIAL TOTAL FERTILITY RATES

|  | 1931 | 1941 | 1951 | 1956 | 1961 | 1966 | 1971 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CANADA | 3,200 | 2,832 | 3,503 | 3,858 | 3,840 | 2,812 | 2,190 |
| Prince Edward Island | 3,521 | 3,228 | 4,189 | 4,542 | 4,881 | 3,578 | 2,890 |
| Nova Scotia | 3,397 | 3,097 | 3,682 | 4,092 | 4,159 | 3,150 | 2,501 |
| New Brunswick | 3,990 | 3,688 | 4,378 | 4,576 | 4,543 | 3,312 | 2,670 |
| Quebec | 4,001 | 3,389 | 3,775 | 3,904 | 3,700 | 2,646 | 1,889 |
| Ontario | 2,648 | 2,403 | 3,222 | 3,657 | 3,742 | 2,790 | 2,221 |
| Manitoba | 2,815 | 2,506 | 3,302 | 3,680 | 3,936 | 2,944 | 2,542 |
| Saskatchewan | 3,478 | 2,809 | 3,590 | 4,077 | 4,221 | 3,284 | 2,688 |
| Alberta | 3,377 | 2,833 | 3,721 | 4,282 | 4,267 | 3,066 | 2,435 |
| British Columbia | 2,171 | 2,305 | 3,201 | 3,899 | 3,785 | 2,659 | 2,135 |
| Yukon |  |  | 5,019 | 4,756 | 5,376 | 3,626 | 3,143 |
| Northwest Territories | . | . | 6,159 | 6,315 | 7,189 | 6,154 | 4,881 |

1) See Concepts and Definitions for an explanation; data for Newfoundland not available.

Table 1.8
URBAN POPULATION AS A PERCENTAGE OF TOTAL POPULATION1

|  | 1901 | 1911 | 1921 | 1931 | 1941 | 1951 | 1961 | 1971 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CANADA ${ }^{2}$ | 34.9 | 41,8 | 47.4 | 52.5 | 55.7 | 62.4 | 69.7 | 76.1 |
| Newfoundland | - | - | - | - | - | 43.3 | 50.7 | 57.2 |
| Prince Edward Island | 14.5 | 16.0 | 18.8 | 19.5 | 22.1 | 25.1 | 32.4 | 38.3 |
| Nova Scotia | 27.7 | 36.7 | 44.8 | 46.6 | 52.0 | 54.5 | 54.3 | 56.7 |
| New Brunswick | 23.1 | 26.7 | 35.2 | 35.4 | 38.7 | 42.8 | 46.5 | 56.9 |
| Quebec | 36.1 | 44.5 | 51.8 | 59.5 | 61.2 | 66.8 | 74.3 | 80.6 |
| Ontario | 40.3 | 49.5 | 58.8 | 63.1 | 67.5 | 72.5 | 77.3 | 82.4 |
| Manitoba | 24.9 | 39.3 | 41.5 | 45.2 | 45.7 | 56.0 | 63.9 | 69.5 |
| Saskatchewan | 6.1 | 16.1 | 16.8 | 20.3 | 21.3 | 30.4 | 43.0 | 53.0 |
| Alberta | 16.2 | 29.4 | 30.7 | 31.8 | 31.9 | 47.6 | 63.3 | 73.5 |
| British Columbia | 46.4 | 50.9 | 50.9 | 62.3 | 64.0 | 68.6 | 72.6 | 75.7 |

1) See Concepts and Definitions for a definition of "urban".
2) Excludes Yukon and Northwest Territories.

## Chart 1.9

## PROVINCIAL SHARES OF THE NATIONAL POPULATION



Table 1.10
POPULATION IN CENSUS METROPOLITAN AREAS AS A PERCENTAGE OF TOTAL POPULATION1

|  | 1951 | 1956 | 1961 | 1966 | 1971 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CANADA | 45.7 | 48.2 | 51.0 | 53.4 | 55.1 |
| Newfoundland | 22.0 | 22.0 | 23.3 | 23.8 | 25.2 |
| Prince Edward Island | - | - | - | - | - |
| Nova Scotia $^{\text {New 8runswick }}$ | 21.5 | 24.5 | 26.2 | 27.8 | 28.2 |
| Quebec² $_{\text {Ontario2 }}^{\text {Manitoba }}$ | 15.6 | 15.9 | 16.4 | 16.9 | 16.8 |
| Saskatchewan | 47.3 | 49.0 | 51.8 | 54.3 | 55.7 |
| Alberta | 57.8 | 60.0 | 62.0 | 64.5 | 65.8 |
| British Columbia | 46.0 | 48.6 | 51.7 | 52.8 | 54.7 |

1) Census Metropolitan Area (CMA) populations 1951 so 1971 are based on 1971 boundaries. See Concepis and Definitions for further clarification.
2) Ottawa. Hull is included as a CMA in Ontario.

Table 1.11
CENTRAL CITY AND SUBURBAN PERCENTAGE SHARES OF CENSUS METROPOLITAN AREA POPULATIONS ${ }^{1}$

|  | CENTRAL CITY PORTION |  | SUBURBAN PORTION |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 1951 | 1961 | 1971 | 1951 | 1961 | 1971 |
|  |  |  |  |  |  |  |
| Montreal | 67.3 | 56.8 | 44.3 | 32.7 | 43.2 | 55.7 |
| Toronto | 55.4 | 36.6 | 27.1 | 44.6 | 63.4 | 72.9 |
| Vancouver | 58.8 | 46.5 | 39.4 | 41.2 | 53.5 | 60.6 |
| Ottawa-Hull | 64.8 | 58.7 | 50.2 | 35.2 | 41.3 | 49.8 |
| Winnipeg | 66.1 | 55.8 | 45.6 | 33.9 | 44.2 | 54.4 |
| Hamilton | 79.8 | 68.3 | 62.0 | 20.2 | 31.7 | 38.0 |
| Edmonton | 89.4 | 91.0 | 88.4 | 10.6 | 9.0 | 11.6 |
| Quebec City | 58.3 | 48.5 | 38.7 | 41.7 | 51.5 | 61.3 |
| Calgary | 100.0 | 100.0 | 100.0 | - | - | - |
| St. Catharines-Niagara | 32.2 | 33.6 | 36.2 | 67.8 | 66.4 | 63.8 |
| London | 71.8 | 74.8 | 78.0 | 28.2 | 25.2 | 22.0 |
| Windsor | $\ldots$ | 81.1 | 78.6 | 18.9 | 21.4 |  |
| Kitchener | 47.1 | 48.9 | 49.3 | 52.9 | 51.1 | 50.7 |
| Halifax | 73.1 | 62.6 | 54.8 | 26.9 | 37.4 | 45.2 |
| Victoria | 44.7 | 35.3 | 31.5 | 55.3 | 64.7 | 68.5 |
| Sudbury | 70.6 | 62.9 | 58.2 | 29.4 | 37.1 | 41.8 |
| Regina | 98.2 | 98.6 | 99.1 | 1.8 | 1.4 | 0.9 |
| Chicoutimi - Jonquière | 26.9 | 24.8 | 25.4 | 73.1 | 75.2 | 74.6 |
| St. John's (Nfld.) | 67.2 | 69.9 | 66.8 | 32.8 | 30.1 | 33.2 |
| Saskatoon | 100.0 | 100.0 | 100.0 | - | - | - |
| Thunder Bay | 96.6 | 96.7 | 96.7 | 3.4 | 3.3 | 3.3 |
| Saint John (N.8.) | 89.5 | 88.1 | 83.4 | 10.5 | 11.9 | 16.6 |

[^1]Table 1.12
SEX RATIOS BY FIVE.YEAR AGE GROUPS1

| 1911 | 1921 | 1931 | 1941 | 1951 | 1961 | 1971 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


0. 4

5- 9
10-14

15-19
20-24
25-29

30-34
35-39
40.44

45-49
50.54

55-59

60-64
65-69
70.74

75-79
80.84

85-89
$90+$

1) Sex ratio $=1,000$ (males/females); excludes Newfoundiand in censuses prior to 1951.

Table 1.13
MEDIAN AGE AND DEPENDENCY RATIOS1

|  | Median age 1 | Youth dependency ratio ${ }^{2}$ | Old-age dependency ratio ${ }^{3}$ |
| :---: | :---: | :---: | :---: |
|  | years |  |  |
| 1901 | 22.7 | 56.8 | 8.3 |
| 1911 | 23.8 | 52.9 | 7.5 |
| 1921 | 23.9 | 56.6 | 7.9 |
| 1931 | 24.7 | 50.3 | 8.8 |
| 1941 | 27.0 | 42.4 | 10.2 |
| 1951 | 27.7 | 49.0 | 12.5 |
| 1961 | 26.3 | 58.1 | 13.1 |
| 1971 | 26.3 | 47.5 | 13.0 |
| Newfoundland | 20.7 | 65.9 | 10.9 |
| Prince Edward Island | 24.8 | 55.4 | 19.3 |
| Nova Scotia | 25.4 | 50.6 | 15.2 |
| New Brunswick | 23.9 | 53.9 | 14.5 |
| Quebec | 25.6 | 46.6 | 10.8 |
| Ontario | 27.2 | 45.5 | 13.3 |
| Manitoba | 26.8 | 47.3 | 15.8 |
| Saskatchewan | 26.7 | 50.9 | 17.2 |
| Alberta | 24.9 | 51.7 | 11.9 |
| British Columbia | 28.0 | 44.5 | 15.0 |
| Yukon | 24.1 | 55.3 | 4.4 |
| Northwest Territories | 19.1 | 78.2 | 3.9 |
| 1) Fifty per cent of the pop <br> 2) $\left(\frac{\text { Persons aged 0-14 }}{\text { Persons aged 15-64 }}\right) \times 1$ <br> 3) (Persons aged 65 and ov |  |  |  |

Table 1.14
POPULATION DISTRIBUTION BY BROAD AGE GROUPS, ROUGHLY CORRESPONDING TO MAJOR LIFE-CYCLE STAGES1

|  | Age span | 1891 | 1901 | 1911 | 1921 | 1931 | 1941 | 1951 | 1961 | 1971 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | years |  |  |  |  | per cent |  |  |  |  |
| ALL AGES |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Childhood | 0.8 | 22.5 | 21.3 | 21.2 | 21.7 | 19.1 | 16.4 | 20.4 | 21.6 | 16.7 |
| Infancy <br> Early childhood <br> Late childhood | Under 1 1.5 6.8 | $\begin{array}{r} 2.5 \\ 12.6 \\ 7.4 \end{array}$ | $\begin{array}{r} 2.4 \\ 12.0 \\ 6.9 \end{array}$ | $\begin{array}{r} 2.6 \\ 12.1 \\ 6.5 \end{array}$ | $\begin{array}{r} 2.3 \\ 12.2 \\ 7.2 \end{array}$ | $\begin{array}{r} 1.9 \\ 10.6 \\ 6.6 \end{array}$ | $\begin{aligned} & 1.9 \\ & 9.0 \\ & 5.4 \end{aligned}$ | $\begin{array}{r} 2.5 \\ 11.9 \\ 6.0 \end{array}$ | $\begin{array}{r} 2.6 \\ 12.2 \\ 6.8 \end{array}$ | $\begin{aligned} & 1.6 \\ & 8.7 \\ & 6.4 \end{aligned}$ |
| Youth | $9-17$ | 20.4 | 19.4 | 17.5 | 18.3 | 18.6 | 17.3 | 14.4 | 17.3 | 19.0 |
| Pre-adolescence Early adolescence Late adolescence | $\begin{array}{r} 9-11 \\ 12.14 \\ 15-17 \end{array}$ | $\begin{aligned} & 7.1 \\ & 6.8 \\ & 6.6 \end{aligned}$ | $\begin{aligned} & 6.7 \\ & 6.4 \\ & 6.3 \end{aligned}$ | $\begin{aligned} & 6.1 \\ & 5.8 \\ & 5.7 \end{aligned}$ | $\begin{aligned} & 6.6 \\ & 6.0 \\ & 5.6 \end{aligned}$ | 6.4 <br> 6.2 <br> 6.1 | $\begin{aligned} & 5.6 \\ & 5.8 \\ & 5.9 \end{aligned}$ | $\begin{aligned} & 5.2 \\ & 4.7 \\ & 4.5 \end{aligned}$ | $\begin{aligned} & 6.5 \\ & 5.9 \\ & 5.0 \end{aligned}$ | $\begin{aligned} & 6.5 \\ & 6.4 \\ & 6.1 \end{aligned}$ |
| Adulthood | 18-64 | 52.5 | 54.3 | 56.7 | 55.2 | 56.7 | 59.6 | 57.4 | 53.5 | 56.2 |
| Early maturity Maturity Middle age | $\begin{aligned} & 18.24 \\ & 25-44 \\ & 45-64 \end{aligned}$ | $\begin{aligned} & 14.2 \\ & 25.4 \\ & 12.9 \end{aligned}$ | 13.7 26.6 14.0 | $\begin{aligned} & 13.7 \\ & 28.9 \\ & 14.1 \end{aligned}$ | 11.6 28.5 15.0 | 12.7 27.3 16.7 | 12.8 28.2 18.6 | $\begin{aligned} & 10.8 \\ & 28.8 \\ & 17.7 \end{aligned}$ | $\begin{array}{r} 9.4 \\ 26.7 \\ 17.4 \end{array}$ | 12.5 25.1 18.6 |
| Old age | 65 and over | 4.6 | 5.0 | 4.6 | 4.8 | 5.6 | 6.7 | 7.8 | 7.6 | 8.1 |
| Early old age Advanced old age | $65-74$ 75 and over | 3.1 1.5 | 3.4 1.6 | 3.1 1.5 | 3.3 1.5 | 3.9 1.7 | 4.6 2.1 | 5.3 2.4 | 4.9 2.8 | 5.0 3.1 |

Table 1.15
PERCENTAGE DISTRIBUTION OF PERSONS 20-54 YEARS OF AGE BY MARITAL STATUS AND SEX

MARITAL STATUS

|  | Total | Single | Married | Widowed | Divorced |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL POPULATION: |  |  |  |  |  |
| 1911 | 100.0 | 35.7 | 61.6 | 2.6 | 0.1 |
| 1921 | 100.0 | 29.6 | 67.2 | 3.1 | 0.1 |
| 1931 | 100.0 | 31.6 | 65.5 | 2.8 | 0.1 |
| 1941 | 100.0 | 31.8 | 65.6 | 2.3 | 0.2 |
| 1951 | 100.0 | 24.1 | 73.7 | 1.9 | 0.4 |
| 1961 | 100.0 | 19.5 | 78.4 | 1.7 | 0.5 |
| 1971 | 100.0 | 20.0 | 77.1 | 1.5 | 1.4 |
| Males: |  |  |  |  |  |
| 1911 | 100.0 | 42.1 | 56.1 | 1.7 | 0.1 |
| 1921 | 100.0 | 34.4 | 63.4 | 2.1 | 0.1 |
| 1931 | 100.0 | 36.4 | 61.6 | 1.8 | 0.1 |
| 1941 | 100.0 | 36.4 | 62.0 | 1.4 | 0.2 |
| 1951 | 100.0 | 28.1 | 70.7 | 0.8 | 0.3 |
| 1961 | 100.0 | 23.6 | 75.3 | 0.7 | 0.4 |
| 1971 | 100.0 | 24.0 | 74.3 | 0.6 | 1.1 |
| Females: |  |  |  |  |  |
| 1911 | 100.0 | 27.9 | 68.3 | 3.7 | 0.1 |
| 1921 | 100.0 | 24.3 | 71.3 | 4.2 | 0.2 |
| 1931 | 100.0 | 26.2 | 69.8 | 3.8 | 0.1 |
| 1941 | 100.0 | 27.0 | 69.4 | 3.4 | 0.2 |
| 1951 | 100.0 | 20.0 | 76.6 | 2.9 | 0.5 |
| 1961 | 100.0 | 15.2 | 81.5 | 2.7 | 0.6 |
| 1971 | 100.0 | 16.0 | 79.9 | 2.4 | 1.6 |

Chart 1.16
DISTRIBUTION OF PERSONS 20-54 YEARS OF AGE BY MARITAL STATUS


## Family Formation and Composition

2

Basic to the organization of any society, the family can be viewed as performing several major social functions. Among these are the replacement of population and the transmission of the cultural heritage and changes in myths, values and customs from one generation to another. This institution is thus the primary vehicle of informal education in the formative years, and some studies suggest that it also crucially affects the success of the individual's formal education. In another area of social functions, the role of the family in the satisfaction of individuals' emotional needs is widely known. Therefore, any serious consideration of Canadian social concerns must involve an inquiry about what is happening to the family institution in this country.

Such an inquiry must be many-sided. It starts with the numbers of families and the historical pattern of their numerical growth, which is largely the result of the processes of family formation and dissolution within Canada. Most family formation is identifiable in terms of legal marriage arrangements and the statistics they generate, although informal or exotic marriage arrangements have always been with us. Some family dissolution is identifiable through legal separation, divorce actions and deaths, and the statistics they generate; but dissolution through informal separation is also important, though much less easily identified in available statistics. Immigration and emigration also influence the numbers of families. It follows from these observations that statistical reporting of the major processes of family formation and dissolution is fraught with many pitfalls, and currently available data cannot be considered adequate.

The subject of family composition, in terms of the different members and their respective roles, is also of vital importance. For different composition criteria, different type-of-family classifications can be developed, and the distributions of families by type comprise an important feature of the portrait of any society. Long-term trends of change in type-of-family distributions are by themselves major aspects of social change in Canadian communities. Type-of-family classifications may focus on such considerations as the number of generations represented in a family, the presence of both parents, the marital status of the family head, the pattern of relations among the various members of the family, and the numbers and age distribution of individual members (especially children). Thus the subject of family" composition is complex, and available statistics do not permit a full portrait.

The identification of a family unit in the Census of Canada is based upon relationships among the residents of a single dwelling. Respondents to the census questionnaire report their relationships to the identified household head, and on the basis of these reports, family units are identified.

Essentially, the family unit is a group of related persons. However, two different kinds of units are reflected in census data. The first is the census family - generally, a husband and wife (plus any nevermarried children) or a parent with one or more never-married children, provided that all live in the same dwelling. There may be more than one census family in a single household. The second type is the economic family - a group of two or more persons living in the same dwelling and related to each other by blood, marriage, or adoption. All family data shown in this chapter refer to the census family concept.

Because of the major ethnic variations within Canada, some of them linked to regional location, it is important to show the main patterns of at least regional variations in the formation and dissolution processes and in family composition. Here again the data we can bring to bear upon this effort are inadequate, at least in their coverage.

We can reflect some aspects of family-formation processes and their changes through marriage rates and data on average age at first marriage by sex. Historical patterns and provincial and other regional breakdowns also point up important variations over time and by geographical areas. Average age at first marriage, for example, can often indicate the population's potential for growth. One small aspect of dissolution processes is reflected in the series on divorce rates. Two important aspects of family composition shown below are number of persons per family and the number of children per family. In Canada, average family size has undergone changes both at the national and the provincial levels. Also given below are data on the percentage distribution of families by the number of children and by age of parents. With regard to the population replacement function of families, age profiles of fertility rates reflect the ages at which this function is most highly concentrated, and long-run changes in the mean and the modal ages of child-bearing are major indicators of cultural change in any society.

## CONCEPTS AND DEFINITIONS

## CRUDE MARRIAGE RATE

The crude marriage rate is defined as the ratio of registered marriages in a given year to every 1,000 of the mid-year population. The crude marriage rate only measures the relative weights of marriage in the total population. Its denominator includes the population not eligible to marry, such as those already married, separated, or too young to marry.

## MARRIAGE RATE INDEX

The marriage rate index is equal to:
$1000 \times\left[\begin{array}{c}\text { number of registered marriages in the year } \\ 0.6 \text { (number unmarried women } 15 \text { and over) }+ \\ 0.4 \text { (number of unmarried men } 15 \text { and over) }\end{array}\right]$

The 0.6 (women) +0.4 (men) is a weighted average of the mid-year numbers of unmarried men and women. The marriage rate index more closely relates the marriages to the population which is likely to get married than does the crude marriage rate.

## CRUDE DIVORCE RATE

The crude divorce rate is the number of divorces per 100,000 of mid-year population. The crude divorce rate measures only the relative weight of divorces in the total population. The denominator of the ratio includes persons who are ineligible for divorce - e.g., those who are single, too young to be married, widowed and divorced prior to year of observation and still not remarried.

## DIVORCE RATE INDEX

The divorce rate index is equal to: 100,000 number of divorces half the number of married persons

The index is a better approximation to a valid divorce rate than the crude divorce rate.

NOTE: Due to the significant easing of divorce laws in 1969, divorce rates prior to 1969 are not comparable and therefore are not shown.

## MEAN AGE AT CHILDBEARING

The mean age at childbearing is a weighted average of the ages at which women bear children. In this case, the weight for a given age is the ratio of the age-specific fertility rate at that age to the sum of all age-specific fertility rates.

The points in Chart 2.7 are based upon the age-specific fertility rates of one calendar year. They characterize the fertility pattern of that year and not that of any real cohort of women. The reader should focus on the historical "trend" of the numbers, and avoid interpreting any single point in the chart as if it refers to a generation of Canadian women.

Table 2.1.
NUMBER AND AVERAGE ANNUAL GROWTH RATE1 OF CENSUS FAMILIES2

|  | THOUSANDS OF FAMILIES |  |  |  | AVERAGE ANNUAL GROWTH RATE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1941 | 1951 | 1961 | 1971 | $1941-513$ | 1951-61 | $1961-71$ |
| CANADA | 2,525.3 | 3,287.4 | 4,147.4 | 5,070.7 | 2.7 | 2.6 | 2.2 |
| Newfoundland | - | 74.9 | 89.3 | 108.1 | - | 1.9 | 2.1 |
| Prince Edward Island | 19.6 | 21.4 | 22.0 | 24.3 | 0.9 | 0.3 | 1.0 |
| Nova Scotia | 123.6 | 145.1 | 161.9 | 180.7 | 1.8 | 1.2 | 1.2 |
| New Brunswick | 93.5 | 111.6 | 124.7 | 140.4 | 1.9 | 1.2 | 1.3 |
| Quebec | 647.9 | 856.0 | 1,103.8 | 1,357.2 | 3.2 | 2.9 | 2.3 |
| Ontario | 909.2 | 1,162.8 | 1,511.5 | 1,881.8 | 2.8 | 3.0 | 2.4 |
| Manitoba | 166.2 | 191.3 | 215.8 | 236.0 | 1.5 | 1.3 | 0.9 |
| Saskatchewan | 190.1 | 196.2 | 211.8 | 215.8 | 3.2 | 0.8 | 0.2 |
| Alberta | 175.7 | 223.3 | 305.7 | 382.1 | 2.7 | 3.7 | 2.5 |
| British Columbia | 199.4 | 299.8 | 394.0 | 533.6 | 5.0 | 3.1 | 3.5 |
| Yukon and Northwest |  |  |  |  |  |  |  |
| Territories | $\cdots$ | 4.9 | 7.1 | 10.6 | . | 4.3 | 5.0 |

1) The average annual growth rate for census families is 100 times the absolute change in the number of families divided by the product of (a) the number of vears over which the change is measured, and ( $b$ ) the number of families at the start of the period in question.
2) A census family consists of a husband and wife (with or without children who have never been married, regardless of age) or a parent with one or more children never married, living in the same owelling. A family may consist also, of a man or woman living with a guardianship child or a ward under 21 vears for whorn no pay was received.
3) Not including Newfoundland.

Table 2.2
CRUDE MARRIAGE AND DIVORCE RATES AND MARRIAGE AND DIVORCE RATE INDICES, 19711

|  | Marriages <br> per 1,000 <br> population | Divorces <br> per 100,000 <br> population | Marriage <br> rate index | Divorce <br> rate index |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| CANADA | 9 | 137 | 70 | 606 |
| Newfoundland | 9 | 29 | 79 | 144 |
| Prince Edward Island | 9 | 53 | 64 | 256 |
| Nova Scotia | 9 | 91 | 68 | 418 |
| New Brunswick | 10 | 76 | 76 | 359 |
| Quebec | 8 | 86 | 60 | 401 |
| Ontario | 9 | 158 | 75 | 669 |
| Manitoba | 9 | 139 | 73 | 606 |
| Saskatchewan | 8 | 88 | 69 | 389 |
| Alberta | 10 | 224 | 84 | 990 |
| British Columbia | 9 | 226 | 77 | 948 |
| Yukon | 9 | 256 | 89 | 1,164 |
| Northwest Territories | 7 | 14 | 71 | 80 |

[^2]
## Chart 2.3

CRUDE MARRIAGE RATES AND MARRIAGE RATE INDEX(1)


Chart 2.4
DIVORCE RATE INDEX


Table 2.5
DIVORCE RATES, BY AGE AT DIVORCE, 1971

|  | WIVES |  |  | HUSBANDS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Married female population | Divorces | Rate per 1,000 married women | Married male population | Divorces | ```Rate per 1,000 married men``` |
| 15.19 years | 75,715 | 173 | 2.28 | 15,950 | 11 | 0.69 |
| 20.24 | 527,870 | 3,941 | 7.46 | 301,400 | 1,713 | 5.68 |
| 25.29 | 646,655 | 6,214 | 9.61 | 587,165 | 5,381 | 9.16 |
| 30-34 | 567,730 | 4,868 | 8.57 | 562,645 | 5,199 | 9.24 |
| 35-39 " | 550.725 | 3,976 | 7.22 | 566,770 | 4,459 | 7.87 |
| 40-44 | 548,860 | 3,595 | 6.55 | 566,005 | 3,968 | 7.01 |
| 45-49 | 538,220 | 2,787 | 5.18 | 540,720 | 3,222 | 5.96 |
| 50-54 | 435,440 | 1,779 | 4.08 | 456,600 | 2,214 | 4.85 |
| 55-59 " | 360,635 | 1,028 | 2.85 | 408,315 | 1.462 | 3.58 |
| 60.64 " | 259,945 | 505 | 1.94 | 321,620 | 923 | 2.87 |
| 65-69 | 170,810 | 224 | 1.31 | 230,045 | 445 | 1.93 |
| 70 years and over | 198,295 | 515 | 2.60 | 323,525 | 608 | 1.88 |

Chart 2.6

## DIVORCE RATES, BY AGE AT DIVORCE, 1971



## Chart 2.7

## MEAN AGE OF MARRIAGE(1) AND MEAN AGE AT CHILD-BEARING(2)


(1) Of never previously married brides and grooms; data for 1926-1939 are not comparable to the later data.
(2)See Concepts and Definitions for explanation.

Table 2.8
INDEX OF MARRIAGE DISSOLUTION DUE TO DEATH OF HUSBAND ${ }^{1}$

|  | 1941 | 1951 | 1961 | 1971 |
| :---: | :---: | :---: | :---: | :---: |
|  | rate per 1.000 married males |  |  |  |
| TOTALS | 12 | 11 | 11 | 11 |
| 15-19 years | 3 | 1 | 1 | 1 |
| $20-24$ | 2 | 1 | 1 | 1 |
| 25-29 " | 2 | 1 | 1 | 1 |
| 30-34 " | 2 | 2 | 1 | 1 |
| 35-39 " | 3 | 2 | 2 | 2 |
| 40-44 " | 4 | 3 | 3 | 3 |
| 45.49 | 6 | 6 | 5 | 5 |
| 50-54 | 10 | 9 | 9 | 8 |
| 55-59 " | 15 | 15 | 14 | 13 |
| 60-64 " | 22 | 22 | 22 | 21 |
| 65-69 " | 33 | 32 | 33 | 32 |
| 70.74 | 53 | 50 | 49 | 48 |
| 75-79 | 86 | 80 | 74 | 72 |
| 8084 " | 132 | 124 | 112 | 107 |
| 85-89 " | 187 | 187 | 166 | 156 |
| 90 years and over | 297 | 292 | 252 | 211 |

1) The index of marriage dissolution due to death of husband is one thousand times the deaths of married males aged " $A$ " in a given year, divided by the number of married males. The reader should note that this index is merelv a death rate among married men, and it is only assumed to reflect the rate of dissolution of husband-wife families due to death of the husband. The index assumes the married men who died were almost all members of husband wife families shortly before death and that its denominator suitably approximates the mid-year population of husband-wife families.

Table 2.9
AVERAGE SIZE OF CENSUS FAMILIES

|  | AVERAGE NUMBER OF PERSONS PER FAMILY |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1941 | 1951 | 1961 | 1971 |
| CANADA | 3.9 | 3.7 | 3.9 | 3.7 |
| Newfoundland | - | 4.4 | 4.7 | 4.4 |
| Prince Edward Island | 4.2 | 4.0 | 4.2 | 4.0 |
| Nova Scotia | 4.0 | 3.9 | 4.0 | 3.8 |
| New Brunswick | 4.3 | 4.1 | 4.3 | 4.0 |
| Quebec | 4.5 | 4.2 | 4.2 | 3.9 |
| Ontario | 3.6 | 3.4 | 3.6 | 3.6 |
| Manitoba | 3.8 | 3.6 | 3.7 | 3.6 |
| Saskatchewan | 4.1 | 3.7 | 3.8 | 3.7 |
| Alberta | 3.9 | 3.7 | 3.8 | 3.7 |
| British Columbia | 3.4 | 3.3 | 3.6 | 3.5 |
| Yukon and Northwest Territories |  | 3.9 | 4.3 | 4.3 |

Table 2.10
AVERAGE NUMBER OF CHILDREN LIVING AT HOME,1 BY AGE OF FAMILY HEAD²

|  | 1941 | 1951 | 1961 | 1971 |
| :---: | :---: | :---: | :---: | :---: |
| All family heads | 1.9 | 1.7 | 1.9 | 1.7 |
| Under 35 years | 1.4 | 1.5 | 1.9 | 1.5 |
| Under 25 years |  |  | 1.0 | 0.7 |
| 25.34 years |  | . | 2.0 | 1.7 |
| 35-44 years | 2.6 | 2.5 | 2.8 | 2.7 |
| 45.64 | 2.2 | 1.7 | 1.8 | 1.6 |
| 45.54 years | . | 2.2 | 2.3 | 2.1 |
| 55.64 " |  | 1.1 | 1.0 | 1.0 |
| 65 years and over | 0.5 | 0.3 | 0.2 | 0.2 |
| Husband-wife families | 1.9 | 1.7 | 1.9 | 1.7 |
| Under 35 years | 1.3 | 1.5 | 1.8 | 1.4 |
| Under 25 years | . | . . | 0.9 | 0.6 |
| 25-34 years |  |  | 2.0 | 1.6 |
| 35.44 years | 2.6 | 2.5 | 2.9 | 2.7 |
| 45-64 | 2.2 | 1.8 | 1.8 | 1.6 |
| 45.54 years | . . | 2.3 | 2.3 | 2.2 |
| 55-64 " |  | 1.1 | 1.0 | 0.9 |
| 65 years and over | 0.5 | 0.3 | 0.2 | 0.2 |

1) Children 24 vears of age and under.
2) Heads of family inctude single, married, widowed and divorced male and fermale heads, except in 1941 where single heads of family are not invalable br age:

Chart 2.11
CENSUS FAMILIES BY NUMBER OF CHILDREN (1) LIVING AT HOME (2)

(1) Children 24 years of age and under.
(2) Excludes Newfoundland, the Yukon and the Northwest Territories in 1941.

Table 2.12
CENSUS FAMILIES BY MARITAL STATUS AND SEX OF HEAD¹

|  | 19412 | 1951 | 1961 | 1971 |
| :---: | :---: | :---: | :---: | :---: |
|  | thousands of families |  |  |  |
| Total families | 2,509.7 | 3,287.4 | 4,147.4 | 5,070.7 |
| Both parents at home | 2,202.7 | 2,961.7 | 3,800.0 | 4,591.9 |
| One parent at home | 307.0 | 325.7 | 347.4 | 478.8 |
|  |  | percentag | tribution |  |
| Total families | 100.0 | 100.0 | 100.0 | 100.0 |
| Both parents at home | 87.8 | 90.1 | 91.6 | 90.6 |
| One parent at home | 12.2 | 9.9 | 8.4 | 9.4 |
| Female parent only | 9.0 | 7.6 | 6.6 | 7.4 |
| Married, spouse absent ${ }^{3}$ | 1.3 | 2.2 | 2.0 | 2.4 |
| Widowed | 6.5 | 5.0 | 4.1 | 3.6 |
| Divorced ${ }^{4}$ | 1.1 | 0.2 | 0.3 | 0.9 |
| Single | 0.2 | 0.1 | 0.2 | 0.5 |
| Male parent only | 3.2 | 2.3 | 1.8 | 2.0 |
| Married, spouse absent ${ }^{3}$ | 0.4 | 0.6 | 0.7 | 0.8 |
| Widowed | 2.4 | 1.6 | 1.0 | 0.8 |
| Divorced ${ }^{4}$ | 0.3 | 0.1 | 0.1 | 0.2 |
| Single | 0.1 | . . | 0.1 | 0.2 |

[^3]













All aspirations of a better quality of life are based on the assumption that people have sufficient health to enjoy it. In evaluating the overall health of the population, one must distinguish measures of ill health from those of health. Social concerns relate not so much to the number of people who suffer from specific illnesses, but rather to the general level of health, particularly in terms of the life cycle, social background, and geographical location. Nevertheless, traditional statistical measures - e.g. life expectancy, death rates by cause (indicating risk), and hospital admissions - form an extensive body of data from which one could infer the general level of health of the population. The following analysis and supporting statistics draw attention to the use and limitations of current data for evaluating health conditions and suggest desirable new directions for the development of social indicators in health.

The probability of achieving good health and attaining long life have always been influenced by social and natural environments. Indeed, it is the awareness of the impact of external forces on the individual's state of health that has led to the establishment and legal enforcement of public health measures. Traditionally, these have been limited to the field of sanitation, food inspection, and protection (through inoculation) against epidemic diseases. The development of "welfare state" ideology has, however, extended collective responsibility to the curative aspects of health. In Canada, the provincial health and hospitalization schemes can be viewed as the recognition of the principle that health services should be accessible by all, rather than only by those able to pay. Recently, we have seen an increasing interest in the question of preventive health care, with concerns about both detecting latent ill health and creating a higher level of public awareness of how to lead a healthier life.

The next step in this progression of health concerns will undoubtedly be the promotion of positive health. Here the question is not how sick are Canadians, but how fit are they? But there is still a great deal of controversy over whether it is possible to measure positive health statistically, especially if one includes the concept of positive mental health. Although it is feasible to measure certain aspects of physical health (e.g. eyesight, hearing, teeth, and endurance), it is quite another matter to relate these physiological characteristics to the more abstract notion of general physical health. ${ }^{1}$

The close relationship between health levels and social conditions directs attention to identifying the health status of people in the context of their way of life, position in the community, work condition, dietary

[^4]habits and physical environment. The medical profession is increasingly aware that to approach sickness purely in terms of organic malfunction is insufficient - that the identification of conditions such as social stress and life crises ought to play an important role in modern diagnostic methods. ${ }^{2}$ Statistical inquiry could throw light on these issues to the extent that health data are linked to the social, economic and geographical characteristics of the population.

Although modern technology has contributed to the improvement of the health and longevity of the population, there are emerging a number of questions on disturbing side-effects:

1. Has the higher probability of survival of infants increased the incidence of genetic defects in the population?
2 . Is there an increase in social stress as a result of the rapidly changing social and technological environment? If so, what is the impact of this on mental and physical health?
2. What are the long-term effects of the increasing number of new and potent drugs being used to treat physical and mental illnesses?
3. Has the general nutritional level of food intake of the population deteriorated? ${ }^{3}$ What are the long-term effects of residues of chemical fertilizers, pesticides and food additives? Has the quality of meat been affected by accelerated "factory line" production?
4. What is the impact of environmental pollution on health? (There is some evidence that respiratory diseases, allergies and fatigue can be traced to polluted air and exposure to noise, but apart from the causes célèbres - e.g. mercury poisoning in Japan, the great London fog of the winter of 1952 - conclusive evidence of the long-term effects on health of our increasingly polluted environment has yet to be assembled.)
In this chapter, we have selected from currently available data a set of statistics that hopefully will enable the reader to make broad inferences of some of the underlying health trends of the population. Health statistics are hard to interpret due to the complex nature

[^5]of the phenomena to be measured. In addition, one must keep in mind that data are drawn from a limited universe, i.e. the bulk of the information is derived from institutional and administrative records, and the coverage is thus restricted to people who pass through the institutions (hospital admissions) or are subject to specific events (reportable diseases or deaths).

We have divided the statistics into four areas: physical health, mental health, accessibility of medical services, and some ad hoc data on fitness.

## PHYSICAL HEALTH

Average life expectancy has traditionally been interpreted as an indicator of general health conditions, and any gains have thus been viewed as evidence of improved health of the population. ${ }^{4}$ Lately, however, additional gains in life expectancy have been small. Most of the increases in the past 35 years can be attributed to the drop in infant mortality and the virtual elimination of infectious diseases as a cause of death, rather than to people living to an older age. Recent discussion of longevity as a health indicator has focused on the measurement of expectation of life in terms of years of healthy life, in which periods of illness or serious chronic disabilities are deducted from the total. 5

Mortality statistics are the most consistent, universal set of records available for inferring the long-run trends in health. The spectacular decline in death rates from infectious diseases, and in infant mortality, has resulted in more people living to old age. This has contributed to the change in the age structure of the population, and has caused the relative rise in the death rates of illnesses associated with old age. Heart diseases and cancer now account for almost two-thirds of all deaths, of which almost 75 per cent take place among the 65 -years-and-over age group. Today the use of mortality rates as a measure of health conditions in developed western nations is of decreasing interest. It has largely become an indicator of the cause of death at old age.

A fruitful approach to the use of these statistics is to focus attention on death prior to old age. In evaluating the relative seriousness of the cause of deaths, one should take into account not only their rates, but also the average age of the victims. In Table 3.7 and Chart 3.8 there is an attempt to indicate "premature death" by ranking the causes of death based on the difference between the age of 70 and the actual age of death. To draw the line of "old age" at 70 is somewhat

[^6]arbitrary, although 70 is in fact the approximate expectation of life at birth (and the biblical decree on man's allotted time on earth happens also to be three score and ten!) In a strict actuarial sense it would be invalid to measure the loss of potential life without taking into account the increased risk of dying from other causes. In other words, inherent in any survival calculation is the assumption that if one cause of death is eliminated, the likelihood of dying from the remaining causes would be greater.

The most direct statistical measure of illness in the population is derived from the diagnostic records of hospital morbidity and from the records of public health authorities on notifiable diseases. The former are statistics on cases rather than number of persons, i.e. the total number of cases is always greater than the number of patients since some of them may have entered hospital more than once in a year. Notifiable diseases are the number of cases reported by doctors from a selected list of contagious diseases. The interest in this information stems from the time when public health authorities were concerned about the potential outbreak of epidemics. In Canada today, however, this is of relatively minor importance. Moreover, there is some question on the quality of these data due to under-reporting.

Hospital morbidity records are of limited use in evaluating the overall condition of health of the population. In the first place, hospitalization takes place usually in the more severe cases of illness. Furthermore, the accessibility to hospitals, the attitudes of patients and doctors to hospitalization, and new methods that allow patients to be treated outside hospitals may influence morbidity rates. In addition, more sophisticated testing techniques have enabled doctors to identify morbid conditions more precisely, thus causing some difficulties in comparability over time.

A key indicator of health would be a measure of the prevalence of ill health in the population. 6 This would require a measure that captures the whole range of disabilities from minor ailments and mild chronic conditions to severe illness and disability. Indeed, it is in the low range of this spectrum that the greatest impact is felt, notably in terms of absenteeism in industry, health conditions of people in poverty, and the impact of environmental pollution. One of the more promising approaches would be to measure health in gradations of disability, e.g. an index based on the number of days people are unable to carry out their normal activity. Perhaps this could then be graded in terms of degrees of limitation of activity, e.g. "stay at home", "confined to bed", "hospitalization".

[^7]Another approach now being considered in the field of health statistics is the use of the extensive diagnostic records of doctors from the provincial health schemes. Unfortunately, both conceptual and technical questions must be resolved before useful data can be derived.

There is a serious lack of data about the chronically disabled in the population. The measurement problem here is that there is no clear-cut line between the able and the disabled. Surveys on chronic conditions by the U.S. Department of Health, Education and Welfare have measured the prevalence of chronic disability in terms of limitation of activity. ${ }^{7}$ In Canada, the Department of Health and Welfare produced in 1965 an admittedly crude estimate that there were in this country more than four million chronically disabled (about one-fifth of the population), of whom half had mental and emotional disorders.

## MENTAL HEALTH

Manifestations of mental illness are often associated with one's inability to cope with demands and stresses of life. Thus changes in the number of people with psychiatric conditions may be linked to social stress. Unfortunately, there are both statistical and conceptual issues that make the data on mental health particularly difficult to interpret. When using the data in this compendium, the following should be bome in mind:
1.Statistics on mental health are drawn from the public records of hospitals' in-patient facilities. These include the more serious cases but omit an increasingly large number of patients being treated by out-patient facilities and private practice, as well as some who are not treated at all.
2. Changing methods of treatment have resulted in greater emphasis on short-term treatment. This means greater turnover of patients and a consequential increase in first admissions and readmissions, and a relative decline in "patients on books".
3. The number of people treated is closely related to availability of facilities. An apparent increase in admissions may, at times, reflect the structural change of facilities, e.g. the introduction of alcoholic treatment centres in Quebec starting in 1964.

[^8]4. Statistics may reflect changing attitudes; certain conditions may be recognized as mental illness which previously may have been passed off as "bad habits". Alcoholism is a case in point. On the other hand, the greater societal tolerance of "abnormal" behaviour may result in a reduction of people classified as mentally ill.
5. When anti-social behaviour expresses itself in criminal activity, the more rigid criteria of insanity in the law books will find these people counted in penal rather than mental institutions.
6. The lack of medical consensus and scientific certainty on the nature and cause of mental illness (apart from cases that can be directly related to physical abnormalities, such as genetic defects, brain tumors and diseases of the central nervous system) are additional reasons why it is difficult to interpret the data.
For instance, for taxonomic purposes, mental illnesses have been defined generally by subjective rather than objective criteria, thus "patients are described as psychotic when their mental functioning is sufficiently impaired to grossly interfere with their capacity to meet the ordinary demands of life", ${ }^{8}$ while neurotic patients are characterized by anxiety though, unlike the psychotics, they are aware that their mental functioning is disturbed.

## ADEQUACY AND ACCESSIBILITY OF HEALTH CARE

One of the prime areas of social concern is the population's access to medical facilities. The provincial health plans have largely mitigated the "ability to pay" aspect of medical care, but even so there are still some medical services that are not covered (e.g. dental care) and, in certain areas, there is a shortage of medical facilities.

An additional concern is the adequacy of health services. This should be evaluated in terms of both availability and quality. It may be, for instance, that the facilities are getting better but the quality of the service is deteriorating. One approach that might capture both availability and quality would be to weigh subjective evaluation (through attitudinal and perception surveys) against that of an objective count of facilities.

[^9]In this area, apart from hospital costs and capacities, practically no statistics are available. In this section, we have, therefore, attempted to present a perspective on accessibility and adequacies by presenting some of the more interesting time series on hospitals, such as capacity, admissions, length of stay, and cost per patient. The institutional data have been supplemented to some extent with estimates of personal health expenditures, and the number of persons per doctor and per dentist.

## FITNESS

The most relevant statistics on health are those that attempt to measure the individual's state of physical and mental well-being. It is for this reason that health authorities are concemed about the development of statistical measures on physical fitness, participation in active sports, dietary habits, degrees of disability, and the involvement of people in activities that are known to be harmful to health - such as over-indulgence in eating, smoking and drinking.

This section is made up essentially of a selection of ad hoc data from a variety of sources that illustrate some of these aspects of health. It is clearly an underdeveloped area of statistical work. The recent Nutrition Canada Survey carried out by Department of National Health and Welfare is the beginning of an inquiry into this new area. ${ }^{9}$

## CONCEPTS AND DEFINITIONS

## LIFE EXPECTANCV AND LIFE TABLES

Table 3.1 is derived from life tables and shows life expectancy at various ages, i.e the expected years left at a given age.

Life tables are the calculation of the survival probabilities of a cohort of 100,000 people. These tables show how, on the basis of mortality rates at each age of the given years, these 100,000 people are reduced in number by death. Since these calculations are based on current mortality patterns, there is an assumption that the mortality rates in the given year remain constant during the life of the individual.

For the years 1931 to 1961, life expectancy was calculated using an average of the mortality rates of the three years centered around the census year. The 1971

[^10]values were calculated using only one year's death rates. In addition, the 1971 Canada values were found using a complete life table whereas the provincial values were calculated using an abridged life table.

## STANDARDIZED (AGE-ADJUSTED) DEATH RATES

When crude death rates are compared over a period of time, a difficulty arises: while the death rate for each age group may remain constant, changes in the age composition of the population may bring changes in the overall rate of mortality. This factor may be offset by standardizing the rates - that is, by applying the death rates for each age group in each year to an arbitrary standard population, usually the actual population in one particular year (in this instance, the 1956 census population). It can thus be calculated what the overall death rate would have been in each year, had the age and sex composition of the population remained constant over the whole period.

## INFANT MORTALITY

Deaths of children less than one year old.

## NEONATAL MORTALITY

Deaths of infants less than 28 days old.

## POST-NEONATAL MORTALITY

Deaths of infants between four weeks and one year of age.

## ENDOGENOUS MORTALITY

Infant deaths due to congenital or inherited diseases.

## EXOGENOUS MORTALITY

Infant deaths due to causes or diseases other than congenital or inherited diseases.

The exogenous death rate was found using the Bourgeois-Pichat method which gives a good approximation to the actual rate. The method is as follows:

Exogenous Death Rate $=1.228 \times$ Post-
Neonatal Death Rate
It then follows that:
Endogenous Death Rate $=$ Total Infant
Death Rate - Exogenous Death Rate

## PERINATAL MORTALITY

Deaths of infants under one week of age plus stillbirths. A stillbirth is the death of a foetus of 28 or more weeks gestation.

## POTENTIAL YEARS OF LIFE LOST DUE TO DEATH PRIOR TO AGE 70

The life years lost were calculated for each five-year age group with the exception of the first age
group, which was disaggregated into 0.1 and 1.4 years of age. Therefore, for each cause of death the number of years lost was

$$
=\sum_{\mathrm{Ad}=}^{67.5} \mathrm{~N}(70-\mathrm{Ad})
$$

where $1 d=$ mean age of death for each age group $N=$ number in eath ate group dying of a particular disease

The calculations were based on causes of death selected from the Intermediate A List of causes of death, an international classification developed by the U.N. The major causes were included in the table as well as those of interest with respect to today's lifestyle. Some diseases were logically grouped so that their sometimes small but significant impact would not be lost.

## PHYSICIANS IN ACTIVE FEE PRACTICE

A civilian physician whose main employ is in the provision of personal medical care services, and whose professional ineome is manly from services rendered


Table 3.1
AVERAGE LIFE EXPECTANCY AT SELECTED AGES1

|  | CANADA |  | ATLANTIC REGION |  | QUEBEC |  | ONTARIO |  | PRAIRIE REGION |  | BRITISH COLUMBIA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $F$ | M | F | M | $F$ | M | F | M | F | M | F |
| At birth: |  |  |  |  |  |  |  |  |  |  |  |  |
| 1931 | 60.0 | 62.1 | 60.2 | 61.9 | 56.2 | 57.8 | 61.3 | 63.9 | 63.5 | 65.5 | 62.2 | 65.3 |
| 1941 | 63.0 | 66.3 | 61.7 | 64.6 | 60.2 | 63.1 | 64.6 | 68.4 | 65.4 | 68.2 | 63.7 | 69.0 |
| 1951 | 66.3 | 70.8 | 66.6 | 70.5 | 64.4 | 68.6 | 66.9 | 71.9 | 68.4 | 72.3 | 66.7 | 72.4 |
| 1961 | 68.4 | 74.2 | 68.6 | 73.9 | 67.3 | 72.8 | 68.3 | 74.4 | 69.8 | 75.7 | 68.9 | 75.4 |
| 19712 | 69.4 | 76.5 | 69.1 | 76.5 | 68.5 | 75.5 | 69.8 | 77.1 | 70.6 | 77.6 | 69.7 | 77.0 |
| At 1 year: ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1931 | 64.7 | 65.7 | 64.8 | 65.4 | 62.5 | 62.6 | 65.1 | 66.8 | 67.2 | 68.3 | 64.6 | 67.2 |
| 1941 | 66.1 | 68.7 | 65.7 | 67.8 | 64.5 | 66.3 | 66.7 | 70.1 | 68.0 | 70.2 | 65.4 | 70.2 |
| 1951 | 68.3 | 72.3 | 69.1 | 72.4 | 67.2 | 70.7 | 68.3 | 72.9 | 69.9 | 73.4 | 68.0 | 73.3 |
| 1961 | 69.5 | 75.0 | 70.1 | 75.1 | 68.7 | 73.8 | 69.1 | 75.0 | 71.0 | 76.4 | 69.8 | 76.0 |
| 19712 | 69.8 | 76.6 | 69.7 | 76.8 | 68.9 | 75.8 | 70.0 | 77.1 | 71.1 | 77.8 | 70.2 | 77.3 |
| At 20 years: |  |  |  |  |  |  |  |  |  |  |  |  |
| 1931 | 49.1 | 49.8 | 49.2 | 49.6 | 47.8 | 47.7 | 48.8 | 50.1 | 51.0 | 51.7 | 48.7 | 51.2 |
| 1941 | 49.6 | 51.8 | 49.4 | 51.3 | 48.4 | 49.9 | 49.6 | 52.4 | 51.3 | 53.1 | 49.0 | 53.1 |
| 1951 | 50.8 | 54.4 | 51.6 | 54.5 | 49.8 | 52.9 | 50.6 | 54.8 | 52.2 | 55.5 | 50.4 | 55.5 |
| 1961 | 51.5 | 56.7 | 52.2 | 56.8 | 50.8 | 55.5 | 51.0 | 56.5 | 52.9 | 58.1 | 51.9 | 57.6 |
| 19712 | 51.8 | 58.3 | 51.7 | 58.4 | 50.9 | 57.4 | 51.9 | 58.7 | 53.2 | 59.5 | 52.2 | 59.0 |
| At 65 years: |  |  |  |  |  |  |  |  |  |  |  |  |
| 1931 | 13.0 | 13.7 | 13.6 | 14.6 | 12.6 | 13.2 | 12.7 | 13.5 | 13.6 | 14.4 | 13.4 | 14.6 |
| 1941 | 12.8 | 14.1 | 13.1 | 14.5 | 12.4 | 13.4 | 12.6 | 14.0 | 13.4 | 14.6 | 13.0 | 14.8 |
| 1951 | 13.3 | 15.0 | 13.9 | 15.4 | 12.8 | 14.2 | 13.1 | 14.9 | 13.9 | 15.5 | 13.5 | 15.9 |
| 1961 | 13.5 | 16.1 | 14.2 | 16.4 | 13.2 | 15.3 | 13.1 | 15.9 | 14.2 | 17.0 | 14.0 | 16.9 |
| 19712 | 13.8 | 17.5 | 14.0 | 17.6 | 13.3 | 16.8 | 13.6 | 17.9 | 14.8 | 18.5 | 14.5 | 18.5 |

1) For an explanation of Life Expectancy see Concepts and Definitions.
2) Provisional values.

## Chart 3.2

AVERAGE LIFE EXPECTANCY AT SELECTED AGES


## Chart 3.3

REGIONAL VARIATION IN LIFE EXPECTANCY


Table 3.4
AGE-SPECIFIC DEATH RATES

|  | MALE |  | FEMALE |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1926 | 1971 | 1926 | 1971 |
|  | rate per 1,000 population |  |  |  |
| Under 1 year | 112.9 | 20.4 | 90.0 | 15.2 |
| 1. 4 years | 9.0 | 0.9 | 8.2 | 0.8 |
| 5. 9 " | 2.5 | 0.6 | 2.1 | 0.4 |
| 10.14 " | 2.1 | 0.5 | 1.8 | 0.3 |
| 15.19 " | 2.9 | 1.4 | 2.9 | 0.6 |
| 20-24 | 3.5 | 1.8 | 4.0 | 0.6 |
| 25.29 " | 3.5 | 1.5 | 4.1 | 0.6 |
| 30-34 " | 3.7 | 1.6 | 4.6 | 0.9 |
| 35-39 | 4.8 | 2.2 | 5.6 | 1.3 |
| 40-44 | 5.9 | 3.6 | 6.1 | 2.1 |
| 45-49 " | 7.4 | 5.7 | 7.5 | 3.0 |
| 50-54 | 10.1 | 9.3 | 9.5 | 4.6 |
| 55-59 " | 15.7 | 14.6 | 13.5 | 7.2 |
| 60-64 | 23.7 | 22.9 | 21.0 | 11.0 |
| 65.69 | 38.1 | 34.7 | 35.0 | 17.3 |
| 70.74 | 62.6 | 51.9 | 54.0 | 28.3 |
| 75-79 | 101.6 | 79.0 | 92.8 | 48.1 |
| 80.84 | 152.5 | 118.8 | 144.5 | 82.4 |
| 85 + years | 252.6 | 198.5 | 274.3 | 163.3 |
| ALL AGES | 11.9 | 8.5 | 10.9 | 6.1 |

Chart 3.5
DEATH RATES BY CAUSE (1)


## Chart 3.6

MAJOR CAUSES OF DEATH, 1972(1)
Number of deaths in thousands
12 -

Number of deaths in thousands


[^11]
## Chart 3.6 (cont'd)

MAJOR CAUSES OF DEATH, 1972(1)

Number of deaths in thousands
12 -

Number of deaths in thousands

Females
$11-$

Perinatal mortality
$10-$ $\square$ Cancer
$9-$ 8 -


Respiratory diseases
$7-$


Other accidents and suicide
$6-\quad \square$
All other causes
$5-$

4 -

(1) The death of persons 85 years of age and over were not plotted because these data are aggregated and therefore would give a distorted curve. The curve would eventually drop to zero.

Table 3.7
POTENTIAL YEARS OF LIFE LOST THROUGH DEATH PRIOR TO AGE 70, 19711

|  | TOTAL |  | MALE |  | FEMALE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deaths | Years lost | Deaths | Years lost | Deaths | Years lost |
| Motor vehicle accidents | 5,323 | 212,900 | 3,861 | 154,000 | 1,462 | 58,900 |
| All other accidents | 4,764 | 178,800 | 3,662 | 136,000 | 1,102 | 42,800 |
| Ischaemic heart disease ${ }^{2}$ | 18,549 | 193,400 | 14.276 | 156,900 | 4,273 | 36,500 |
| Respiratory system | 3,936 | 102,500 | 2,626 | 59,900 | 1,310 | 42,600 |
| Lung cancer | 3,436 | 37,000 | 2,913 | 30,000 | 523 | 7.000 |
| Suicide | 2,396 | 69,400 | 1,742 | 51,600 | 654 | 17,800 |
| Breast cancer | 1,989 | 29,500 | 13 | 200 | 1,976 | 29,300 |
| Cancer of uterus and ovary | 1,308 | 20,100 | - | - | 1,308 | 20,100 |
| Cerebrovascular disease ${ }^{3}$ | 3,912 | 45,900 | 2,189 | 24,100 | 1,723 | 21,800 |
| Gastro-intestinal cancer | 3,725 | 41,500 | 2,183 | 23,800 | 1,542 | 17,700 |
| Perinatal mortality ${ }^{4}$ | 3,299 | 229,300 | 1,969 | 136,800 | 1,330 | 92,400 |
| Congenital anomalies | 1,928 | 121,500 | 1,037 | 65,600 | 891 | 56,000 |
| Other causes | 20,605 | 401,400 | 12,605 | 239,000 | 8,000 | 162,300 |
| ALL CAUSES ${ }^{5}$ | 75,170 | 1,683,100 | 49,076 | 1,077,900 | 26,094 | 605,100 |

[^12]
## Chart 3.8

## POTENTIAL YEARS OF LIFE LOST THROUGH DEATH PRIOR TO AGE 70, 1971



Table 3.9
INFANT MORTALITY ${ }^{1}$

|  | Neonatal <br> mortality | Post <br> neonatal <br> mortality | Exogenous <br> mortality | Endogenous <br> mortality | Total <br> infant <br> mortality | Perinatal <br> mortality |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 38 | 64 | rate per 1,000 live births |  |  |  |
| 1931 | 35 | 51 | 79 | 23 | 102 | 65 |
| 1941 | 31 | 30 | 63 | 23 | 86 | 59 |
|  |  | 37 | 24 | 61 | 48 |  |
| 1951 | 23 | 16 |  |  |  |  |
| 1961 | 18 | 9 | 11 | 19 | 39 | 36 |
| 1971 | 12 | 5 | 6 | 16 | 27 | 28 |
| 1972 | 12 | 5 | 6 | 11 | 17 | 20 |

1/ For a detailed explanation of infant mortality see Concepts and Definitions.

Chart 3.10
INFANT MORTALITY


Chart 3.11
DEATH RATES FOR SMOKING-RELATED DISEASES(1)



Chart 3.13
INCIDENCE OF NOTIFIABLE DISEASES


Table 3.14
TUBERCULOSIS AMONG INUIT, REGISTERED INDIANS AND OTHER CANADIANS

|  | Total <br> Canada | InuitRegistered <br> Indians | Other |
| :--- | :--- | :--- | :--- | :--- |

Table 3.15
HOSPITALIZATIONS BY CAUSE, $1970^{1}$

|  | HOSPITAL Male | ZATIONS <br> Female | Average length of stay | Hospitalization rate (per 100,000 population) all ages |
| :---: | :---: | :---: | :---: | :---: |
|  | per cent |  | days |  |
| Infectious and parasitic diseases | 3.8 | 2.7 | 9.4 | 512 |
| Cancers | 4.9 | 5.9 | 17.9 | 884 |
| Endocrine, nutritional and metabolic diseases | 2.0 | 2.1 | 18.2 | 328 |
| Diseases of the blood and blood-forming organs | 0.9 | 0.8 | 11.1 | 133 |
| Mental disorders | 3.7 | 3.6 | 17.4 | 584 |
| Diseases of the nervous system and sense organs | 4.8 | 3.4 | 17.7 | 650 |
| Diseases of the circulatory system | 12.0 | 7.6 | 23.5 | 1,520 |
| Diseases of the respiratory system | 19.5 | 11.8 | 7.2 | 2,426 |
| Diseases of the digestive system | 14.6 | 10.1 | 10.3 | 1,935 |
| Diseases of the genito-urinary system | 7.5 | 10.9 | 8.3 | 1,541 |
| Complications of pregnancy, child-birth and the puerperium | - | 24.9 | 5.7 | 4,737 |
| Diseases of skin and subcutaneous tissue | 2.4 | 1.5 | 10.5 | 303 |
| Diseases of musculoskeletal system and connective tissue | 4.6 | 3.4 | 15.8 | 625 |
| Congenital anomalies | 1.4 | 0.8 | 13.5 | 172 |
| Symptoms and ill-defined conditions | 3.4 | 2.5 | 7.3 | 465 |
| Accidents, poisonings and violence | 13.5 | 6.2 | 11.2 | 1,492 |
| Supplementary classifications | 1.0 | 1.8 | 20.3 | 239 |
| ALL CAUSES | 100.0 | 100.0 | 11.7 | 16,173 |
| number | 1,425,126 | 2,024,197 |  |  |

## Chart 3.16

DAYS OF HOSPITALIZATION BY DIAGNOSIS, 1970(1)

(11) Total number of days of hospitalization: 40,357,019.

Chart 3.17
HOSPITALIZATION RATES BY CAUSE(1) AND AGE GROUP, 1970

Thousands 40 -
(1) Excluding maternity related causes.

## Chart 3.18 <br> HOSPITALIZATIONS FOR SELECTED DISEASES(1)

Rate per 100,000 population
Rate per 100,000 population

(1) Newborns, the Yukon and the Northwest Territories are excluded from the counts. Ontario is also excluded from the rates for chronic bronchitis and cancer of the respiratory system. Data are not avaliable for 1963 and 1965.
12) There was change in the classification of diseases in 1969, therefore the rates of 1969 and 1970 are not strictly comparable to the previous rates for infectious and parasitic diseases.

Table 3.19
PSYCHIATRIC INPATIENT FACILITIES: FIRST ADMISSIONS, ${ }^{1}$ READMISSIONS ${ }^{2}$ AND PATIENTS ON BOOKS ${ }^{3}$

|  | FIRST ADMISSIONS |  |  | READMISSIONS |  |  | PATIENTS ON BOOKS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1951 | 1961 | 1971 | 1951 | 1961 | 1971 | 1951 | 1961 | 1971 |
|  | rates per 100,000 |  |  | numbers |  |  | rates per 100,000 |  |  |
| CANADA | 78 | 153 | 260 | 3,572 | 17,661 | 50,144 | 431 | 415 | 291 |
| Newfoundland | 48 | 83 | 124 | 69 | 388 | 834 | 193 | 204 | 139 |
| Prince Edward Island | 90 | 224 | 223 | 56 | 240 | 494 | 297 | 497 | 91 |
| Nova Scotia | 74 | 143 | 320 | 152 | 848 | 2,497 | 395 | 325 | 230 |
| New Brunswick | 69 | 145 | 194 | 164 | 649 | 2,197 | 336 | 376 | 231 |
| Quebec | 56 | 106 | 244 | 750 | 2,693 | 8,842 | 428 | 437 | 350 |
| Ontario | 80 | 177 | 302 | 1,153 | 6,113 | 22,223 | 452 | 421 | 252 |
| Manitoba | 75 | 197 | 337 | 311 | 1,105 | 3,206 | 446 | 441 | 347 |
| Saskatchewan | 124 | 197 | 207 | 310 | 1,370 | 2,178 | 591 | 509 | 242 |
| Alberta | 69 | 128 | 237 | 321 | 1,222 | 3,377 | 374 | 353 | 325 |
| British Columbia | 136 | 205 | 200 | 286 | 3,033 | 4,296 | 427 | 423 | 328 |

1) First admission is defined as the admission to a psychiatric inpatient facility of a person who has no record of previous care in any such facility.
2) Readmission is defined as the admission of a person to a psychiartic inpatient facility who has a record of previous care in any such facility.
3) Patients on books is defined as a census of patients actually resident in a psychiatric inpatient facility as well as those absent on probationary leave, boarding in approved homes or otherwise absent from the institution but not officially separared or discharged. The census is taken at year end.

Chart 3.20
PSYCHIATRIC INPATIENT FACILITIES:
FIRST ADMISSIONS, READMISSIONS, PATIENTS ON BOOKS, DISCHARGES AND DEATHS


Chart 3.21
PSYCHIATRIC INPATIENT FACILITIES:
FIRST ADMISSIONS BY DIAGNOSIS
Rate per 100,000 population
Rate per 100,000 population


Chart 3.22
PSYCHIATRIC INPATIENT FACILITIES:
PATIENTS ON BOOKS BY DIAGNOSIS


Table 3.23
PSYCHIATRIC INPATIENT FACILITIES: FIRST ADMISSIONS AND PATIENTS ON BOOKS BY DIAGNOSIS, 1969


## Chart 3.24

PSYCHIATRIC INPATIENT FACILITIES:
FIRST ADMISSIONS BY DIAGNOSIS, AGE AND SEX, 1971
Rate per 100,000 population


Table 3.25
PATIENTS WITH A PSYCHIATRIC DIAGNOSIS LEAVING 1 INPATIENT FACILITIES, 1970

|  | Male | Female | Total |
| :--- | :--- | :--- | ---: |
|  |  |  |  |
| Separations from non-psychiatric wards of general hospitals | 38,058 | 48,924 | 86,982 |
| Separations from psychiatric inpatient facilities ${ }^{2}$ | 54,376 | 50,085 | 104,461 |
| TOTALS | 92,434 | 99,009 | 191,443 |

1) Includes discharges and deaths.
2) Includes parients from the psychietric units of public general hospitals.

Chart 3.26
SUICIDE RATE FOR SELECTED CITIES, 1965-67(1, 2)
Rate per 100,000 population
Rate per 100,000 population
30 - - 30

(1) There is a great deal of controversy over the reliability of these statistics as it is well known that there is a tendency to attribute death to other causes rather than suicide due to the social stigma attached to suicide. It may be that part of the regional differences are accounted for by the variations in attitudes towards suicide.
(2) The deaths were averaged over the years 1965-1967 and then the rates were calculated. The rates are per 100,000 population.

Chart 3.27
SUICIDE RATE


## Chart 3.28

## SUICIDE RATE BY AGE AND SEX, 1971



Table 3.29
SUICIDES BY CAUSE, 1971

|  | Male | Female | Total |
| :---: | :---: | :---: | :---: |
| Poisonings | 441 | 383 | 824 |
| Liquids and solids | 247 | 344 | 591 |
| Gases | 194 | 39 | 233 |
| Hanging and suffocation | 360 | 107 | 467 |
| Drowning | 81 | 64 | 145 |
| Firearms and explosives | 847 | 77 | 924 |
| Sharp instruments | 30 | 13 | 43 |
| Jumping | 59 | 26 | 85 |
| Other | 48 | 23 | 71 |
| TOTALS | 1,866 | 693 | 2,559 |

Table 3.30

## EXPENDITURES ON PERSONAL HEALTH CARE ${ }^{1}$

|  | Hospital <br> services | Physicians' <br> services | Dentists' <br> services | Prescribed <br> drugs |
| :--- | ---: | ---: | ---: | ---: |
| 1956 | 633.0 |  |  |  |
| 1961 | 949.0 | 277.9 | 99.0 | 68.7 |
| 1966 | $1,264.2$ | 538.3 | 116.7 | 135.8 |
| 1971 | $1,538.3$ | 863.9 | 140.6 | 236.9 |

1) Annual expenditures in millions of constant 1961 dollars.

Chart 3.31
EXPENDITURES PER PERSON ON PERSONAL HEALTH CARE(1)


[^13]Table 3.32
PUBLIC GENERAL AND ALLIED SPECIAL HOSPITALS 1

|  | Operating hospitals | Rated bed capacity per 1,000 population | Admissions | Average daily number of patients | Average length of stay | Cost per patient day |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | days | current \$ |
| 1953 | 857 | 5.13 | 1,932,598 | 59,912 | 10.9 |  |
| $1956$ | $909$ | 5.37 | 2,273,290 | $69,336$ | 11.0 | 14.91 |
| 1961 | 946 | 5.51 | 2,961,322 | 81,920 | 11.1 | 23.10 |
| 1966 | 1,027 | 6.11 | 3,042,777 | 98,372 | 11.7 | 36.06 |
| 1971 | 1,043 | 6.41 | 3,555,838 | 112,078 | 11.3 | 61.58 |

1) General hospitals are defined as hospitals primarily for diagnosis and short-term treatment for a wide range of diseases of inluries. Mental and ruberculosis hospitals are excluded. Allied special hospitals include children's, chronic, convalescent, rehabilitation and other hospitats.

Chart 3.33
COST PER PATIENT DAY BY TYPE OF PUBLIC HOSPITAL(1)


Chart 3.34
COST PER PATIENT DAY, 1956 AND 1971


Chart 3.35
POPULATION PER PHYSICIAN, 1971(1)


Table 3.36
EXPENDITURE PER PERSON ON DENTISTS' SERVICES1


1) Annual expenditure in constant 1961 dollars.

Chart 3.37
POPULATION PER DENTIST, 1971

(1) Canada includes the Yuk on and the Northwest Territories.

Table 3.38
POPULATION VISITING A DENTIST DURING 1967

|  | Canada | Atlantic | Quebec | Ontario | Prairie | British Columbia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | percentage of the population |  |  |  |  |  |
| ALL AGES | 41.8 | 31.0 | 33.3 | 47.9 | 46.0 | 48.5 |
| 0.13 years | 44.5 | 29.9 | 38.5 | 49.0 | 49.4 | 54.3 |
| 14. 16 years: |  |  |  |  |  |  |
| Male | 54.1 | 43.5 | 43.8 | 62.4 | 56.7 | 69.1 |
| Female | 61.3 | 51.5 | 46.9 | 69.4 | 70.7 | 71.7 |
| 17. 24 years: |  |  |  |  |  |  |
| Male | 47.3 | 37.1 | 40.1 | 53.2 | 52.5 | 55.0 |
| Female | 55.6 | 47.7 | 45.5 | 63.3 | 61.9 | 62.8 |
| 25-34 years: |  |  |  |  |  |  |
| Male | 40.9 | 33.7 | 29.1 | 47.5 | 47.6 | 48.0 |
| Female | 47.7 | 42.3 | 33.9 | 55.7 | 55.0 | 55.6 |
| $35+$ years: |  |  |  |  |  |  |
| Male | 32.8 | 20.9 | 24.1 | 39.6 | 35.7 | 37.1 |
| Female | 32.7 | 22.3 | 22.5 | 40.5 | 34.7 | 36.9 |

Table 3.39
MAIN CAUSES OF DISABILITY, 1965


Table 3.40
PERSONS WITH DEFICIENT DIETS, 1 1970-72

|  | NUTRIENT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Protein | Iron | Calcium | Vitamin $A$ | Vitamin C |
|  | per cent |  |  |  |  |
| 0- 4 years | 1.1 | 23.5 | 13.1 | 3.2 | 3.9 |
| 5. 9 | 0.1 | 13.9 | 14.8 | 5.0 | 2.2 |
| 10-19 years: |  |  |  |  |  |
| Male | 1.1 | 17.0 | 20.3 | 10.8 | 2.8 |
| Female | 3.5 | 40.0 | 34.9 | 25.5 | 4.7 |
| 20-39 years: |  |  |  |  |  |
| Male | 1.6 | 3.8 | 8.6 | 14.3 | 3.5 |
| Female | 9.2 | 37.7 | 19.3 | 24.4 | 5.8 |
| 40.64 years: |  |  |  |  |  |
| Male | 7.2 | 3.5 | 4.4 | 15.1 | 3.4 |
| Female | 11.1 | 30.7 | 17.8 | 29.6 | 4.2 |
| 65 + years: |  |  |  |  |  |
| Male | 7.1 | 4.9 | 9.9 | 23.1 | 4.0 |
| Female | 14.5 | 8.4 | 20.0 | 32.1 | 1.9 |
| Pregnant women ${ }^{2}$ | 3.3 | 24.8 | 19.9 | 10.9 | 2.0 |

1) Percentages of the general population assessed as having inadequate intakes of these nutrients in their diets. 2) Includes volunteers, does not constitute a probability sample.

Chart 3.41
OVERWEIGHT ADULTS, 1970-72


Chart 3.42
REGULAR SMOKERS


Chart 3.43
CONSUMPTION PER PERSON OF ALCOHOLIC BEVERAGES (1)

(1) For persons age 15 and over.

## Chart 3.44

PARTICIPATION IN SPORTS AND PHYSICAL ACTIVITIES, JANUARY-MARCH 1972(1)

(1) Percentage of persons 14 vears of age and over indicating participation per week in at least one hour of sports lbowling, curling, hockev, badminton, etc.l and/or one hour or more of physical activity (jogging, cycling, exercise programs, etc.), between January and March 1972.

Chart 3.45
PARTICIPATION IN SPORTS AND PHYSICAL ACTIVITIES, BY PROVINCE, JANUARY-MARCH 1972(1)


[^14]Education 4

Like the possession of health, education is a vital concern both to individuals and society as a whole. Acquisition of basic skills and knowledge, continuing self-development through advanced learning, extension of the economic potential of individuals, transmission of cultural values, increasing equality of opportunity - these are some of the broad concerns of education, and they frequently interact, and reinforce each other.

To what degree will informal leaming through work experience be valued in the 1970s? What emphasis is placed on learning not only technical knowledge, but also social skills needed for familial, occupational and community living? What proportion of the Canadian people, and who, are getting more education? To what extent do education systems help Canadians achieve their educational and occupational aspirations? Are the benefits from formal education in proportion to the nature and magnitude of our allocation of resources to the educational system? Are teachers increasingly more qualified to teach pupils of varied cultural and economic backgrounds?

Such questions are socially (and economically) relevant, but it is extremely difficult to measure the many subtle and subjective benefits of education. No satisfactory output or "result" measures exist as yet in Canada. Consequently, such proxy measures as enrolment at various levels, average number of years of education, degrees granted, retention of students, student participation rates, and some tentative indications of the monetary rates of return from various levels of education, have traditionally been used and are included in this chapter. Also shown are measures that illustrate a few special Canadian concerns such as enrolments in northern schools, second-language training, and the development of community colleges.

## ACQUISITION OF BASIC KNOWLEDGE AND SKILLS

In Canada today, basic education comprises formal schooling up to the end of secondary school. At that point, students from a wide range of cultural and economic backgrounds have hopefully acquired the minimum basic knowledge, skills, values and social graces needed to participate in community life and the work world. Over the last decade, an increasing proportion of Canada's school-age population has reached this basic standard. Growth in basic formal education has also taken place at the lower end of the school spectrum, with a marked increase in the proportion of young children attending classes before entering Grade I. A nother noteworthy change has been the increasingly large percentage of elementary students, and the substantial percentage of secondary students, leaming the second official language. The 1971 Student Census
provided evidence that in each province, with each higher grade, an increasing proportion of students perceive themselves as being conversant in both official languages.

## CONTINUING SELF-DEVELOPMENT THROUGH ADVANCED LEARNING

Self-development, one of the fundamental concerns of all educational efforts, continues beyond the basic level. It is difficult to judge what proportion of this process is accomplished by informal or formal means. Statistically, however, it is only the latter we can capture, and even here the emphasis has traditionally been on education provided by universities. Advanced education is valued by Canadians as an end in itself, as a factor contributing to increased income potential, and as an element of personal enrichment. Over the decade of the 1960 s an increasing proportion of the population attained a university education.

Today in Canada, opportunities for advanced education are reflected in the wide array of postsecondary programs for full- and part-time students. In the last 10 years, there has been a remarkable expansion in attendance at all types of post-secondary institutions. In addition, a substantial change in the composition of post-secondary institutions has taken place. Nurse training, once provided in hospitals, is now increasingly offered at universities and colleges. Normal schools and teachers' colleges, which formerly provided teacher training, have been greatly reduced; almost all teacher training is now given at universities. At the same time, community colleges have incorporated classical colleges, institutes of technology, junior colleges and regional and vocational colleges, thereby expanding significantly.

However, there still are approximately twice as many students enrolled in the traditional universities as in community colleges. Largely due to university transfer programs, (i.e. a program allowing a student who studies in a community college to obtain university credits for his work) the previously sharp distinctions between these kinds of post-secondary education have become blurred. ${ }^{1}$

The full-time enrolment ratio of females in postsecondary education as a whole has remained virtually unchanged over the last decade, although the ratios decreased in non-university programs and increased substantially in universities. However, "many fields of learning still remain substantially male preserves", ${ }^{2}$ particularly in the high-ranking professions.

[^15]One important aspect of the propensity to obtain advanced learning is the fact that many people no longer regard education as an activity to be completed before entering adulthood, but rather as a continuous lifelong process. Evidence of this can be found both in the numerous resources available at community colleges and universities for adult continuing education, and in the substantial numbers of enrolments in these programs. This continued education is chiefly in the form of professional updating, vocational upgrading and retraining, or selfenrichment.

## ECONOMIC POTENTIAL OF INDIVIDUALS

Although many factors influence the difference in earnings between individuals (e.g. ability, socioeconomic status, energy, health, social skills), evidence shows that formal educational attaimment affects the income potential of individuals and of society.

Proxy measures for this potential are licences and degrees issued, and levels and types of education completed. For the potential to be realized, these certifications have to find their reward in the market place. Over the decade, Bachelor's and Master's degrees awarded have increased, but with the rates varying considerably by field of specialization.

There is some evidence from benefit-cost calculation that the individual's return from investment in additional education has declined from 1961 to 1967.3 This may imply that the economic reward for skills derived from education has declined.

Adult upgrading and retraining, which in large part is covered by a major federal government program, is designed to increase the employability and potential earning abilities of those finding it difficult to compete in the labour market and thus to actively participate in the economy. The program assists over 300,000 people annually at a cost to the federal government of some $\$ 300$ million.

## LIMITATIONS OF THE DATA

The available statistics have a number of limitations. Derived chiefly as by-products from public admin. istration records of provincial and local authorities, the statistics illustrate trends in the "stock" of students, i.e. the total number of students at a particular time in different sectors of the education system. Frequently they also lack comparability from province to province in terms of consistency, definitions, and institutional arrangements.

[^16]Present data do not permit monitoring what is being leamed by the student as he progresses through the system, thereby concealing whether students are more educated or have simply participated in the system longer. In the United States, the National Assessment of Educational Progress regularly undertakes a nationwide program to test literacy, mathematics and reading skills of different age groups; there is in Canada at the present time no similar national program.

Data on the cognitive skills of students across Canada are nceded, logether with statistics on the individual's attitudes to school and work, and on his educational and occupational aspirations.

## TRANSMISSION OF MINORITY CULTURES

Not many statistics on the mechanism by which minority cultural values are generally transmitted exist, but there are a few data on how this process is carried out by the education system. One measure is the changing enrolments in the Yukon and Northwest Territories, where the majority population group is comprised of Inuit, Indians and Métis. At the beginning of the decade over half the children were enrolled in federal schools taught in English by English-speaking teachers. By 1969 all pupils were being enrolled in territorially controlled public schools where, increasingly, native curricular materials are taught in the native languages. The number of private nursery schools and kindergartens sponsored by various cultural groups which offer programs in their relevant language of communication, using related curricular materials, is also evidence of this transmission process.

## EQUALITY OF OPPORTUNITY

It has long been held that the larger the proportion of the people acquiring basic and advanced education, the greater will be the equality of opportunity. However, recent evidence suggests that schooling as a means of increasing equality may be overrated. ${ }^{4}$ As was mentioned earlier, educational opportunity itself is distributed unequally, and access to higher learning continues to be unequal for males and females, particularly in professions traditionally reserved for males.

Differential access to post-secondary education is indicated by the high proportion of students whose parental incomes are high. As well, one finds an over-representation of post-secondary students with fathers in professional and managerial occupations. In addition, there is evidence that the mother's educational attainment influences the level of schooling in the next generation.

[^17]
## OTHER SELECTED DATA

Although the emphasis in this and other chapters has been on so-called output measures, input data should not be entirely ignored. They both aid in the evaluation of the efficiency with which output is produced and serve as an indicator of the priority with which society regards certain goal areas. Many input measures exist in education and a few of the more relevant ones have been included here

Because of the importance of teachers in the learning process, it is desirable to develop indicators to gauge their effectiveness. Unfortunately, many determinants of good teaching are difficult to quantify. As a result, traditionally used measures of teaching quality have been statistics on academic qualifications of teachers, and student-teacher ratios, although these are now in question. Evidence suggests that performance of students improves with increased qualifications of their teachers, but these are of less importance than socioeconomic status of students.

## CONCEPTS AND DEFINITIONS

## EDUCATION JURISDICTION

Under the British North America Act, Section 93, the provinces are responsible for the education of all persons. Exceptions to the above are federally sponsored schools for Indian students and children of servicemen in Europe. The federal government helps finance postsecondary education in the provinces, participates in informal education, and makes grants-in-aid for research personnel and equipment.

Responsibility for education in the Northwest Territories was moved from the federal Department of Indian and Northem Affairs to the new N.W.T. Department of Education; the official transfer occurred in the Mackenzie District in April 1969 and in the Franklin and Keewatin Districts in April 1970. The majority of schools in the Yukon have always been classified as public and have been administered directly by the Yukon Department of Education in Whitehorse.

## COMMUNITY COLLEGES AND CEGEPS

"Community college" is a generic term encompassing all post-secondary non-degree-granting institutions, chiefly provincially supported. The basic programs are (1) technical, and (2) university transfer programs. The latter permit the student to transfer to a university and gain credit for work completed in the college. Five provinces do not have university transfer courses.

In Quebec, the Collèges d'enseignement général et professionnel, called CEGEPs, which offer three-year technical studies and two-year academic programs, were inaugurated in the mid-1960s. Unlike the university
transfer programs in other provinces, the Quebec CEGEP academic programs are prerequisites for entrance to universities in Quebec.

## PRE-GRADE I EDUCATION

Public pre-Grade I education is administered within the public elementary schools in provinces that have legislated for these extended structures.

Newfoundland, Nova Scotia, Quebec, Ontario, Manitoba, Saskatchewan and British Columbia offer kindergarten education to five-year-olds. However, it should be noted that these services are found mostly in the larger urban centres. Throughout Canada there are an increasing number of nursery schools and kindergartens which are privately operated for children from three to five years of age.

## THE 1971 STUDENT CENSUS

The Student Census, conducted by Statistics Canada, was designed to complement the main 1971 Census. It yielded information on the social characteristics of the student population in 20 metropolitan areas in Canada classified by grade, school, school board, and province. Student characteristics include: sex, age, mother tongue, language facility, size of family, mass media utilization, part-time work, and geographic mobility.

## RATES OF RETURN

The internal rates of retum represent the discount rates at which the present values of calculated benefits equal the present value of costs. The underlying assumption of these measures are that the costs to individuals in acquiring additional education is a kind of investment. The returns on this investment are the higher earnings made possible by further education. To calculate these returns one must estimate the cost to the individual by imputing the direct expenditures (fees, books, travel, and other "out of pocket costs") and the indirect costs such as forgone earnings. The benefits are estimates of the stream of additional earnings that can be accounted for by the additional education during the individual's working life.

The internal rates of retum in the chart can be interpreted as the value of the investment in education to the individual. The higher the rates of return the better.

However, whether the benefits in relationship to the costs are worthwhile, is a matter of subjective evaluation. If the individual views education in terms of potential earning, these calculations are of importance. If, on the other hand, education is considered as enjoyment and the benefits are perceived as cultural or self-developmental attributes, then these calculations are not relevant to the individual.

Table 4.1
EDUCATIONAL ATTAINMENT OF POPULATION 14 YEARS OF AGE AND OVER

| ELEMENTARY | SECONDARY | UNIVERSITY |
| :---: | :---: | :---: | :---: | :---: |
| Not |  |  |
| complete 1 |  |  | Complete Some Complete Some Complete


|  | thousands | per cent |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1960 | 11,699 | 24.1 | 23.6 | 31.3 | 14.1 | 3.8 | 3.1 |
| 1965 | 12,930 | 20.4 | 20.5 | 35.3 | 15.2 | 5.0 | 3.6 |
| 1966 | 13,305 | 19.5 | 18.3 | 36.4 | 16.1 | 5.7 | 4.0 |
| 1967 | 13,717 | 17.5 | 18.3 | 35.8 | 17.9 | 5.4 | 4.0 |
| 1969 | 14,470 | 16.8 | 15.4 | 36.2 | 18.9 | 6.9 | 4.8 |
| 1972 | 15,673 |  |  | 35.0 |  |  | 5.9 |

Table 4.2
ENROLMENTS IN SCHOOLS AT THE ELEMENTARY-SECONDARY LEVEL

|  | 1960 | 1962 | 1964 | 1966 | 1968 | 1970 | 1972 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | thousands |  |  |  |  |  |  |
| Public schools | 3,989 | 4,373 | 4,744 | 5,076 | 5,455 | 5,650 | 5,582 |
| Federal schools | 44 | 45 | 46 | 47 | - 46 | - 34 | 5,582 |
| Private schools | 168 | 191 | 204 | 189 | 146 | 145 | 152 |
| Private kindergartens and nursery schools 1 | $\cdots$ | $\ldots$ | $\ldots$ | 40 | 47 | 52 | 45 |
| TOTALS | 4,201 | 4,609 | 4,994 | 5,352 | 5,694 | 5,881 | 5,813 |

Chart 4.3

## TOTAL PRE-GRADE I ENROLMENT RELATED TO 5-YEAR OLD POPULATION


(1) Data not available for earlier years.
(2) Includes public kindergartens and nursery schools.

Table 4.4
PERCENTAGE OF THE POPULATION AGED 15 to 17 YEARS ATTENDING SCHOOL'

|  | 1961 |  | 1966 |  | 1971 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |
|  | per cent |  |  |  |  |  |
| Newfoundland: |  |  |  |  |  |  |
| 15 years | 95.2 | 96.1 | 87.2 | 89.4 | 93.0 | 92.0 |
| 16 " | 72.9 | 64.6 | 78.4 | 71.6 | 75.6 | 73.6 |
| 17 " | 39.7 | 30.4 | 46.9 | 35.7 | 45.9 | 40.1 |
| Prince Edward Island: |  |  |  |  |  |  |
| 15 years | 84.5 | 102.1 | 85.8 | 93.0 | 88.3 | 96.3 |
| 16 " | 67.3 | 80.9 | 66.8 | 78.4 | 82.1 | 88.7 |
| 17 | 44.6 | 47.9 | 54.1 | 60.9 | 59.2 | 60.4 |
| Nova Scotia: |  |  |  |  |  |  |
| 15 years | 92.2 | 94.8 | 94.1 | 93.5 | 91.7 | 93.4 |
| $16^{\prime \prime}$ | 68.5 | 70.2 | 78.9 | 82.0 | 79.6 | 81.9 |
| 17 | 46.4 | 41.6 | 56.2 | 57.2 | 60.2 | 60.2 |
| New Brunswick: |  |  |  |  |  |  |
| 15 years | 88.9 | 89.5 | 89.5 | 90.6 | 92.2 | 92.7 |
| 16 " | 62.2 | 63.7 | 74.9 | 78.6 | 82.9 | 82.9 |
| 17 " | 48.7 | 42.7 | 58.2 | 57.3 | 63.4 | 58.2 |
| Quebec: |  |  |  |  |  |  |
| 15 years | 77.9 | 68.9 | 87.1 | 84.9 |  | . |
| 16 " | 53.9 | 40.7 | 71.2 | 64.1 | - | - |
| 17 " | 29.0 | 14.2 | 46.6 | 34.7 | - |  |
| Ontario: |  |  |  |  |  |  |
| 15 years | 90.8 | 90.7 | 99.3 | 99.1 | 99.5 | 98.2 |
| 16 " | 75.9 | 75.3 | 90.5 | 89.1 | 91.3 | 89.8 |
| $17^{\prime \prime}$ | 61.8 | 54.7 | 72.6 | 65.3 | 79.8 | 73.8 |
| Manitoba: |  |  |  |  |  |  |
| 15 years | 94.3 | 95.0 | 97.9 | 96.8 | 94.3 | 96.7 |
| 16 " | 75.2 | 74.6 | 88.2 | 86.4 | 88.2 | 89.2 |
| 17 | 59.2 | 46.8 | 67.3 | 60.5 | 66.7 | 63.3 |
| Saskatchewan: |  |  |  |  |  |  |
| 15 years | 92.1 | 97.3 | 97.5 | 97.5 | 94.0 | 95.7 |
| 16 " | 79.5 | 80.6 | 88.2 | 88.4 | 85.8 | 87.6 |
| 17 | 61.5 | 57.6 | 68.6 | 64.5 | 63.4 | 60.4 |
| Alberta: |  |  |  |  |  |  |
| 15 years | 93.1 | 96.0 | 94.4 | 95.6 | 96.1 | 96.4 |
| 16 " | 80.9 | 81.1 | 87.4 | 87.8 | 88.1 | 89.8 |
| 17 | 63.8 | 57.4 | 66.8 | 60.7 | 68.8 | 62.3 |
| British Columbia: |  |  |  |  |  |  |
| 15 years | 112.4 | 115.7 | 106.1 | 104.9 | 95.1 | 96.0 |
| 16 " | 97.2 | 95.9 | 99.0 | 99.5 | 88.9 | 87.6 |
| 17 | 84.2 | 82.7 | 90.1 | 86.3 | 64.0 | 57.5 |
| CANADA: ${ }^{2}$ |  |  |  |  |  |  |
| 15 years | 88.9 | 86.9 | 94.6 | 93.9 | 96.7 | 96.6 |
| 16 " | 69.9 | 65.1 | 83.3 | 80.6 | 88.3 | 87.8 |
| 17 | 50.8 | 41.4 | 63.1 | 55.3 | 71.1 | 65.8 |

1) Elementary and secondary levels of public, private and federal schools.
2) Excluding Quebec for 1971.

Note: In relating enrolment figures to population data, percentages over $100 \%$ are shown, suggesting that there are more pupils in school than there are in the population. This anomaly occurs mainly because the data for pupils and the figures for population are derived from different sources, the former being school enrolment data and the latter Census of Canada figures.

Table 4.5
CHILDREN RECEIVING SPECIAL EDUCATION, 1966

| Reason for special education |  |  |  | Male | Female |
| :--- | ---: | ---: | :---: | :---: | :---: |
| Gifted |  |  |  |  |  |
| Retarded readers | 4,276 | 4,230 |  |  |  |
| Mentally retarded | 8,098 | 4,010 |  |  |  |
| Emotionally disturbed | 18,869 | 12,018 |  |  |  |
| Visual handicap | 1,788 | 1,014 |  |  |  |
| Hearing handicap | 656 | 445 |  |  |  |
| Speech defect | 2,041 | 1,737 |  |  |  |
| Orthopaedic cases | 17,815 | 10,031 |  |  |  |
| Cerebral palsy | 642 | 513 |  |  |  |
| Special health problems | 722 | 617 |  |  |  |
| Neurologically impaired | 939 | 757 |  |  |  |
| Double handicap | 627 | 273 |  |  |  |
| Triple handicap | 1,382 | 668 |  |  |  |
| 1) Distribution by sex is estimated. | 331 | 220 |  |  |  |

Table 4.6

## ENROLMENT IN SECOND-LANGUAGE STUDY



## Table 4.7

## STUDENTS' FACILITY IN BOTH OFFICIAL LANGUAGES, 19711

| Multi- |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | All <br> grade ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| grades |  |  |  |  |  |  |  |  |  |  |

1) The data used in this table are from the 1971 Student Census Project which includes Grades 6 to 13 in all classrooms in centres of 100,000 population and more in Canada. Each student made a value judgment of his ability when answering the survey question, "Can you speak English or French well enough to conduct a conversation?"
2) If a classroom comprised more than one grade, the results were tabulated under the category multi-grade.
3) Excludes Prince Edward island.

Table 4.8
REGISTRATIONS IN CONTINUING EDUCATION PROGRAMS ${ }^{1}$

|  | $1970-71$ |  | $1971-72$ |  |
| :--- | ---: | :---: | ---: | :---: |
|  | Total | Percentage <br> male | Total | Percentage <br> male |
| School boards/department of education: |  |  |  |  |
| Academic | 260,903 | 54.1 | 222,615 | 50.1 |
| Vocational | 163,495 | 54.7 | 141,480 | 55.1 |
| Hobby skills | 222,474 | 15.2 | 243,481 | 85.7 |
| Liberal arts | 36,181 | 38.3 | 38,487 | 62.1 |
| Social education | 57,250 | 43.5 | 77,826 | 58.5 |
| Recreational | 38,064 | 38.0 | 43,038 | 66.9 |
| Driver education and related | 16,936 | 31.6 | 21,533 | 54.5 |
| Provincial correspondence schools: |  |  |  |  |
| Academic | 84,490 | 8.1 | 93,106 | 44.5 |
| Vocational and other | 32,884 | 6.3 | 31,012 | 87.2 |
| Provincial vocational schools: |  |  |  |  |
| Academic upgrading | 61,727 | 66.8 | 71,247 | 37.6 |
| Occupational training | 23,573 | 14.6 | 25,764 | 72.7 |
| TOTALS | 997,977 | 37.7 | $1,009,589$ | 61.6 |

1) Includes enrolment in both day and evening programs.

Chart 4.9
REGISTRATIONS IN CONTINUING EDUCATION PROGRAMS, BY SEX, 1971-72

School Boards/Department of Education


Provincial Correspondence Schools


Provincial Vocational Schools


Chart 4.10
ESTIMATED STUDENT RETENTION(1)

(1) Retention rate is defined as the relationship of enrolment to a particular point of time in the educational system. This rate, expressed as a percentage, shows what proportion of grade two pupils reach grade six. twelve, or post-secondary graduation.
(2) Through pursuit of either full-time or part-time studies.

## Chart 4.11

POPULATION ENROLLED IN SCHOOLS(1) 1968-69


(1) Fult-time only, but excludes pupils in schools for the handicappad, and students in trade schools and apprenticeship programs, and includes those in private nurseries and kindergartens.

Table 4.12
POST-SECONDARY ENROLMENT

|  | 1962-63 | 1964-65 | 1966-67 | 1968-69 | 1970-71 | 1971.72 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Full-time enrolment: |  |  |  |  |  |  |
| Non-university: 1 |  |  |  |  |  |  |
| Career | 55,216 | 65,179 | 77,527 | 101,658 | 117,478 | 118,946 |
| University transfer ${ }^{2}$ | 388 | 833 | 2,676 | 27,870 | 48,601 | 54,833 |
| Universities and colleges: ${ }^{3}$ |  |  |  |  |  |  |
| University level | $141,000$ | $177,405$ | 229,996 | 265,500 | 308,135 | 314,664 |
| Non-university level | $117$ | $194$ |  | $343$ | 1,334 | 8,3624 |
| TOTALS | 196,721 | 243,611 | 310,540 | 395,371 | 475,548 | 496,805 |
| Part-time enrolment: ${ }^{5}$ |  |  |  |  |  |  |
| Undergraduate | 38,697 | 56,556 | 75,703 | 93,617 | 154,356 | 142,171 |
| Graduate | 5,351 | 7,268 | 10,111 | 10,484 | 14,370 | 18,029 |
| TOTALS | 44,048 | 63,824 | 85,814 | 104,101 | 168,726 | 160,200 |
| 1) Includes community colleges, In 1970-71 enrolments in com <br> 2) Academic students at CEGEPs <br> 3) Degree-granting institutions and <br> 4) In 1971-72 Ryerson Polytec the non-university level and are <br> 5) Includes students taking no community colleges. CEGEP a | chers' colles ity colleges community filiated colle Institute be luded in this dit extensi mic enrolm | hospital and <br> d CEGEPs c <br> olleges <br> came a degre igure. courses lex included on | egional schoo tituted almos <br> anting institu <br> in 1971.72 <br> for 1970-71. | of nursing, in $5 \%$ of the to <br> n, but the b <br> and students | tutes of tech non-univers <br> of their stud university | logy, CEGEP <br> ts were still <br> sfer courses |

Table 4.13
FULL-TIME ENROLMENT IN COMMUNITY COLLEGES


1) The technical programs subsume the technical, health, business and applied arts programs.
2) Unlike the community colleges in other provinces, the academic programs (university transfer) in the CEGEPS are prerequisites for entrance to universities in Quebec.

Table 4.14
WOMEN AS A PERCENTAGE OF TOTAL POST-SECONDARY ENROLMENT

|  | 1960-61 | 1962-63 | $1964-65$ | 1966-67 | 1968-69 | 1970.71 | 1971.72 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | per cent |  |  |  |
| Full-time enrolment: |  |  |  |  |  |  |  |
| Non-university level 1 | 70.8 | 69.7 | 63.3 | 55.8 | 52.0 | 49.4 | 48.1 |
| University level2 | 24.3 | 27.0 | 29.7 | 32.5 | 34.2 | 35.9 | 36.2 |
| Undergraduate ${ }^{3}$ | 24.8 | 27.8 | 30.8 | 33.8 | 35.7 | 37.3 | 38.2 |
| Graduate | 15.1 | 15.1 | 16.8 | 18.0 | 18.6 | 22.3 | 22.6 |
| TOTAL POST-SECONDARY | 38.3 | 39.1 | 38.8 | 38.3 | 38.8 | 39.3 | 39.7 |
| Part-time enrolment: 4 |  |  |  |  |  |  |  |
| Undergraduate | . . | 41.2 | 40.7 | 43.0 | 43.0 | 44.0 | 47.75 |
| Graduate | . | 17.1 | 19.1 | 22.9 | 21.8 | 23.7 | 24.1 |
| TOTAL UNIVERSITY | . | 38.3 | 38.3 | 40.6 | 40.8 | 42.3 | 45.05 |

1/ Includes students in post-secondary non-university level programs, regardiess of type of institution attended, predominantly community colleges and CEGEPs,
2) Includes students in programs at the university tevel, regardless of type of institution attended, including community colleges and CEGEPs.
3) Includes students in university transfer, CEGEP academic.
4) Includes some students taking non-credit extension courses and students enrolled in university transfer courses given in community colleges. CEGEP academic enrolment included only for 1970.71.
5) Excludes students zaking non-credit courses, includes estimates.

## Chart 4.15

UNIVERSITY ENROLMENT BY SEX


Table 4.16
FULL-TIME UNIVERSITY UNDERGRADUATES BY FIELD OF SPECIALIZATION

|  | 1960 | 1962 | 1964 | 1966 | 1968 | 1970 | 1971 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arts | 42,670 | 55,628 | 69,404 | 94,142 | 114,288 | 135,711 | 128,008 |
| Pure science | 9,795 | 14,439 | 21,198 | 28,564 | 42,549 | 53,522 | 63,594 |
| Agriculture and forestry | 2,572 | 2,816 | 3,261 | 3,692 | 4,101 | 4,499 | 4,362 |
| Environmental design ${ }^{1}$ | 753 | 747 | 933 | 1,174 | 1,543 | 2,447 | 2,592 |
| Commerce ${ }^{2}$ | 6,544 | 7,655 | 9,471 | 11,880 | 16,410 | 19,908 | 22,053 |
| Education | 11,587 | 15,875 | 20,399 | 26,952 | 29,314 | 39,251 | 38,514 |
| Engineering and applied science | 14,632 | 14,369 | 15,276 | 18,498 | 22,173 | 22,859 | 21,377 |
| Fine and applied arts, and music | 488 | $719$ | 995 | 1,629 | 3,297 | 8,130 | 6,252 |
| Law | 2,480 | 2,892 | 3,520 | 4,464 | 5,735 | 7,260 | 7.770 |
| Medicine | 4,244 | 4,306 | 4,635 | 4,795 | 5,245 | 7,931 | 6.403 |
| Dentistry, pharmacy and nursing | 4,196 | 5,011 | 5,914 | 6,575 | 7.287 | 8,825 | 9,017 |
| Other health professions ${ }^{3}$ | 1,062 | 1,336 | 1,569 | 1,720 | 2,178 | 2,954 | 11,2375 |
| Social work | 618 | 539 | 572 | 757 | 1,368 | 2,204 | 2,248 |
| Theology | 3,306 | 3,042 | 3,076 | 2,754 | 2,295 | 2,675 | 2,288 |
| Other ${ }^{4}$ | 2,399 | 3,578 | 4,218 | 5,357 | 9,467 | 5,388 | 7,874 |
| TOTALS | 107.346 | 132,952 | 164,441 | 212,953 | 267,250 | 323,564 | 333,589 |

1) Includes architecture, community, regional and urban planning, environmental studies, and landscape architecture.
2) Includes business administration.
3) Includes audiology, speech pathology, chiropractic, optometry, physiotherapy, veterinary medicine, and miscellaneous health professions.
4) Includes iournalism, library science, secretarial science, household science, and unclassified.
5) In 1970 there were 5,158 students classified (excluding private colleges) in arts and science, who were reclassified in 1971.

## Chart 4.17

SPECIALIZATIONS OF UNDERGRADUATES


Table 4.18
FULL-TIME POST-SECONDARY ENROLMENT (NON-UNIVERSITY) BY FIELD OF SPECIALIZATION

|  | $1960-61$ | $1962-63$ | $1964-65$ | $1966-67$ | $1968-69$ | $1970-71$ | $1971-72$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| Applied arts | 687 | 608 | 2,923 | 3,201 | 6,351 | 9,590 | 11,966 |
| Business and commercial | 656 | 1,218 | 2,712 | 5,197 | 14,762 | 27,004 | 31,446 |
| Nursing R.N. diploma | 20,727 | 22,630 | 23,405 | 23,931 | 25,100 | 26,545 | 26,034 |
| Teacher training | 19,109 | 21,032 | 21,863 | 23,129 | 23,625 | 10,8481 | 5,684 |
| Technologies: |  |  |  |  |  |  |  |
| $\quad$ Architectural | 574 | 862 | 446 | 681 | 1,240 | 1,187 | 1,489 |
| Engineering | 5,637 | 7,738 | 12,295 | 15,899 | 17,243 | 19,610 | 26,978 |
| Food | 121 | 180 | 120 | 239 | 368 | 123 | 725 |
| Medical and dental | - | 66 | 403 | 1,869 | 3,256 | 3,608 | 4,146 |
| Natural resources | - | 209 | 670 | 1,280 | 2,695 | 4,808 | 5,110 |
| Social welfare and recreation | - | - | 25 | 862 | 2,318 | 5,289 | 6,417 |
| Miscellaneous or not classified | 1,768 | 790 | 511 | 1,580 | 5,043 | 10,200 | 7,313 |
| TOTALS | 49,279 | 55,333 | 65,373 | 77,868 | 102,001 | 118,8122 | 127,308 |

1) The trend since 1970 has been to phase out teachers colleges, which at one time (along with nursing education in hospitals) was a principal post-secondary non-university institution. Professional teacher training is now obtained at universities.
2) By 1970 , almost all past-secondary non-university anrolments were taken in community colleges and CEGEPs, other than nursing enrolments.

Chart 4.19
FULL-TIME POST-SECONDARY ENROLMENT (NON-UNIVERSITY) BY FIELD OF SPECIALIZATION


Table 4.20
NON-CREDIT CONTINUING EDUCATION IN UNIVERSITIES AND COMMUNITY COLLEGES, 1971.72

UNIVERSITIES
COMMUNITY COLLEGES

|  | Professional development ${ }^{1}$ | General interest | Association diploma ${ }^{1}$ | Professional development ${ }^{1}$ | General interest | Association diploma ${ }^{1}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Newfoundland | 284 | 1,685 | 617 | 3,126 | 207 | - | 5,919 |
| Prince Edward Island | 188 | 206 | 38 | 333 | 109 | - | 874 |
| Nova Scotia | 2,554 | 1,182 | 359 | 228 | 58 | - | 4,381 |
| New Brunswick | 505 | 1,860 | 114 | - | - | - | 2,479 |
| Quebec | 9,261 | 7,997 | 9,950 | 2,890 | 2,530 | 170 | 32,798 |
| Ontario | 26,207 | 11,597 | 10,248 | 12,935 | 33,438 | 21 | 94,446 |
| Manitoba | 2,502 | 1,488 | 2,412 | 4,646 | 1,954 | 36 | 13,038 |
| Saskatchewan | 4,637 | 3,944 | 1,120 | 1,456 | 122 | - | 11,279 |
| Alberta | 8,318 | 11,155 | 3,136 | 8,968 | 6,232 | 92 | 37,901 |
| British Columbia | 12,128 | 11,149 | 9,241 | 3,663 | 10,022 | - | 46,203 |
| CANADA | 66,584 | 52,263 | 37,235 | 38,245 | 54,672 | 319 | 249,318 |

1) The professional development category in continuing education refers to refresher or development courses of special interest to members of the professional and business community. Association diploma courses conducted through or by the universities can be applied toward a diploma awarded by a specific professional association.

## Chart 4.21

NON-CREDIT CONTINUING EDUCATION IN UNIVERSITIES AND COMMUNITY COLLEGES, 1971-72



## Chart 4.23 <br> LABOUR FORCE PARTICIPATION RATES BY EDUCATION ATTAINED, APRIL 1972(1)



## Table 4.24 <br> DEGREES AWARDED BY UNIVERSITIES AND COLLEGES, BY FIELD OF STUDY

```
1960-61 1962-63 1964-65 1966-67 1968-69
```

Masters' degrees:

| Agricultural and biological science | 147 | 192 | 239 | 347 | 376 | 552 | 544 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Education | 227 | 338 | 390 | 525 | 902 | 1,421 | 1,721 |
| Engineering | 243 | 295 | 445 | 550 | 932 | 1,175 | 1,026 |
| Health professions | 83 | 108 | 154 | 227 | 246 | 277 | 292 |
| Humanities | 466 | 536 | 699 | 1,133 | 1.484 | 2,084 | 2,359 |
| Mathematics and physics | 282 | 344 | 402 | 613 | 693 | 949 | 957 |
| Social sciences | 779 | 942 | 1,252 | 1,870 | 2,402 | 3,180 | 3,359 |
| TOTALS | 2,227 | 2,755 | 3,581 | 5.265 | 7,035 | 9,638 | 10,258 |
| Total masters' degrees as a percentage of population age 22 | 1.0 | 1.2 | 1.4 | 1.8 | 2.1 | 2.6 | 2.8 |
| Bachelors' degrees: |  |  |  |  |  |  |  |
| Arts and sciences | 9,301 | 12,731 | 17.513 | 24,774 | 31,717 | 35,079 | 38.494 |
| Agriculture | 311 | 357 | 443 | 508 | 537 | 573 | 617 |
| Commerce | 1,151 | 1,238 | 1,678 | 1,870 | 2,386 | 3,345 | 3,656 |
| Education | 2,885 | 4,261 | 5,917 | 7,767 | 10,066 | 15,209 | 16,019 |
| Engineering | 2,603 | 2,402 | 2,491 | 2,664 | 3,306 | 4,410 | 4,539 |
| Law | 700 | 623 | 740 | 1,093 | 1,322 | 1,949 | 2,152 |
| Medicine | 842 | 826 | 1,033 | 987 | 1,019 | 1,133 | 1,550 |
| Other medical sciences | 777 | 953 | 1,285 | 1,529 | 1,897 | 2,582 | 2,304 |
| Other | 1.227 | 1,548 | 1,955 | 2,035 | 2,445 | 2,820 | 3,233 |
| TOTALS | 19,797 | 24,939 | 33,055 | 43,227 | 54,695 | 67,100 | 72,564 |
| Total bachelors' degrees as a percentage of population age 21 | 8.3 | 10.0 | 12.2 | 14.5 | 15.7 | 17.5 | 19.5 |

Table 4.25
COMPLETIONS OF COMMUNITY COLLEGE COURSES

1970-71

| TECHNICAL | UNIVERSITY | TECHNICAL | UNIVERSITY |
| :---: | :---: | :---: | :---: |
| PROGRAM | TRANSFER | PROGRAM | TRANSFER |
|  | PROGRAM |  | PROGRAM |

Number \begin{tabular}{c}
Percent <br>
female

 Number 

Percent <br>
female

 Number 

Per cent <br>
female

$\quad$ Number 

Per cent <br>
female
\end{tabular}

| Newfoundland | 167 | 19.2 | - | - | 215 | 16.7 | - | - |
| :--- | ---: | :---: | :---: | ---: | ---: | ---: | ---: | ---: |
| Prince Edward Island | 10 | - | - | - | 44 | 52.3 | - | - |
| Nova Scotia | 326 | 30.4 | 37 | 10.8 | 354 | 22.0 | 36 | 5.6 |
|  |  |  |  |  |  |  |  |  |
|  | 194 | 8,8 | - | - | 193 | 14.0 | - | - |
| New Brunswick | 2,690 | 51.2 | 5,922 | 41.8 | 2,652 | 67.6 | 8,227 | 44.2 |
| Quebec | 7,787 | 1 | - | - | 8,687 | 1 | - | - |
| Ontario |  |  |  |  |  |  |  | - |

Table 4.26
INTERNAL RATES OF RETURN TO INDIVIDUALS1

1967
per cent

High school education, male

University education, male
14.9
12.7

1) See Concepts and Definitions.

## Table 4.27 ENROLMENTS IN CANADA MANPOWER TRAINING PROGRAM1

| $1967-68$ | $1968-692$ | $1969-70^{2}$ | $1970-71$ | $1971-72$ |
| :--- | :--- | :--- | :--- | :--- |


| Public and private institutions | 152,1673 | 266,2003 | 269,8913 | 319,971 | 276,632 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Skill training | $\ldots$ | $\ldots$ | $\ldots$ | 155,719 | 143,828 |
| Language training | $\ldots$ | $\ldots$ | $\ldots$ | 13,193 | 12,527 |
| Basic education upgrading | $\ldots$ | $\ldots$ | $\ldots$ | 977,136 | 74,124 |
| Apprenticeship training | $\ldots$ | $\ldots$ | $\ldots$ | 53,923 | 46,153 |
|  |  |  |  |  |  |
| Training in industry | 31,373 | 35,000 | 35,008 | 24,875 | 31,520 |
| TOTALS | 183,540 | 301,200 | 304,899 | 344,846 | 308,152 |

1) Includes full-and part-time enrolment
2) For these two fiscal vears the numbers refer to "authorizations" rather than "enrolments", and are therefore slightly inflated. 3) Breakdown not available for these years.

## Table 4.28

## ENROLMENT IN PUBLICLY-SUPPORTED RETRAINING PROGRAMS IN BUSINESS AND INDUSTRY, $1971^{11}$

|  | Enrolments |
| :---: | :---: |
| Newfoundland | 1,373 |
| Prince Edward Island | 253 |
| Nova Scotia | 1,394 |
| New Brunswick | 1,030 |
| Quebec | 6,1072 |
| Ontario | 63,115 |
| Manitoba | 4,397 |
| Saskatchewan | 1,030 |
| Alberta | 2,833 |
| British Columbia | 3,979 |
| Northwest Territories | 231 |
| CANADA | 85,742 |

EMPLOYEES ENROLLED IN ORGANIZED TRAINING IN INDUSTRY, 1969-701

OCCUPATIONAL TRAINING
Non-apprenticed
Industry group
Trades
and other
manual

skills $\quad$ Clerical $\quad$ Sales \begin{tabular}{c}
Non- <br>
manage- <br>
ment

$\quad$

Regi <br>
tere
\end{tabular}

Apprentices

| Non- | Manage |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | ment and | Lan- | Safety | Other |
| regis- |  |  |  |  |

Total

| Forestry | 876 | 4 | - | 18 | 129 | - | 1,017 | 3 | 2,395 | - | 4,442 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mines | 8,209 | 226 | 68 | 1,053 | 1,229 | 411 | 6,695 | 218 | 16,707 | - | 34,816 |
| Food | 1,267 | 115 | 2,438 | 411 | 115 | 18 | 2,477 | 251 | 2,224 | - | 9,316 |
| Rubber | 883 | 98 | 298 | 364 | 29 | 10 | 943 | 121 | 1,975 | - | 4,721 |
| Textiles | 3,179 | 39 | 44 | 112 | 250 | 87 | 945 | 125 | 1,931 | - | 6,712 |
| Wood | 6,403 | 267 | 109 | 320 | 1,139 | 38 | 6,080 | 299 | 14,651 | - | 29,306 |
| Printing | 947 | 321 | 365 | 197 | 498 | 284 | 313 | 72 | 1,687 | - | 4,684 |
| Metal | 3,210 | 161 | 214 | 1,019 | 753 | 453 | 4,491 | 344 | 2,683 | 11 | 13,339 |
| Machinery | 19,566 | 4,558 | 1,173 | 4,999 | 592 | 185 | 11,327 | 1,154 | 39,274 | 1 | 82,829 |
| Petroleum | 4,385 | 542 | 1,176 | 870 | 258 | 173 | 5,555 | 318 | 12,455 | - | 25,732 |
| Construction | 675 | 31 | 26 | 69 | 2,798 | 31 | 603 | 7 | 583 | - | 4,823 |
| Transportation | 41,777 | 12,447 | 6,172 | 4,699 | 655 | 2,428 | 18,769 | 1,937 | 30,064 | - | 118,948 |
| Trade | 11,837 | 4,562 | 21,563 | 2,168 | 1,267 | 241 | 8,607 | 458 | 21,002 | - | 71,705 |
| Finance | 1,636 | 8,778 | 8,692 | 15,240 | 19 | 12 | 9,116 | 326 | 5,763 | - | 49,582 |
| Personal services | 4,824 | 1,184 | 1,111 | 3,061 | 237 | 23 | 3,544 | 291 | 8,608 | - | 22,883 |
| Non-classified | 69 | 28 | 1,157 | 41 | 15 | - | 177 | 6 | 1,215 | - | 2,708 |
| TOTALS 1 | 109,743 | 33,361 | 44,606 | 34,641 | 9,983 | 4,394 | 80,659 | 5,930 | 163,217 | 12 | 486,546 |

1) Includes both publicly-supported and privately-supported training. Publicly-supported training programs are made available by industry to its emplovees under cost-sharing agreements with the federal government. This financial assistance is provided under terms of the Occupational Training of Adults Act (OTA) and administered by the programs branch of the Department of Manpower and Immigration.

Table 4.30

## ELEMENTARY AND SECONDARY ENROLMENTS IN THE YUKON, NORTHWEST TERRITORIES AND ARCTIC QUEBEC

|  | PUBLIC | NORTHERN <br> ADMINISTRATION | INDIAN |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1960-61$ | $1969-70$ | $1960-61$ | $1969-70$ | $1960-61$ | $1969-70$ |

1) As of 1969-70 the territorial government assumed responsibility for all schooling in the Northwest Territories. Prior to that, responsibility was carried by the federal government, under Northern Administration of the Department of Indian A ffairs and Northern Development.

Table 4.31
ENROLMENT IN FEDERAL SCHOOLS FOR INDIANS AND INUIT1

|  | 1952.53 | 1961-62 | 1962-63 | 1971.72 |
| :---: | :---: | :---: | :---: | :---: |
| Newfoundland | - | - | - | - |
| Prince Edward Island | 52 | 40 | 33 | 66 |
| Nova Scotia | 605 | 804 | 806 | 565 |
| New Brunswick | 388 | 640 | 639 | 671 |
| Quebec ${ }^{2}$ | 2,426 | 2,895 | 2,871 | 4,658 |
| Ontario | 5,861 | 7,619 | 7,280 | 7.157 |
| Manitoba | 3,562 | 5,734 | 5,839 | 6,064 |
| Saskatchewan | 3,609 | 5,228 | 5,263 | 3,358 |
| Alberta | 3,272 | 4,671 | 4,527 | 3,595 |
| British Columbia | 5,447 | 5,812 | 5,953 | 3,108 |
| Yukon ${ }^{3}$ | 294 | 162 | 112 | 3,108 |
| Northwest Territories ${ }^{3}$ | . . | 4,330 | 4,429 | - |
| CANADA | 25,516 | 37,935 | 37.752 | 29,242 |

1) Administered by the Department of Indian Affairs and Northern Development.
2) As of 1960.61, Quebec figures include Arctic Quebec; prior to that year the figures of the Northwest Territories included those of Artic Quebec.
3) As of 1969.70 , all enrolments for the Yukon and Northwest Territories have been reported as public school enrolments; that is, responsibility for education now rests with the territorial departments of education.

Table 4.32
LANGUAGE OF COMMUNICATION IN PRIVATE NURSERY SCHOOLS AND KINDERGARTENS, 1972.73

|  | New-foundland | Prince <br> Edward <br> Island | Nova Scotia | New Brunswick | Ontario | Manitoba | Alberta | British Columbia | 8 provinces ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First language: |  |  |  |  |  |  |  |  |  |
| English | 1 | 20 | 11 | 14 | 516 | 34 | 251 | 233 | 1,080 |
| French | - | - | - | 2 | 5 | 3 | 3 | 1 | 14 |
| Other | - | - | - | - | 3 | 2 | 1 | 4 | 10 |
| Second language: <br> English |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| French | - | 1 | 1 | - | 47 | 2 | 19 | 13 | 83 |
| Other | - | - | - | - | 14 | 3 | 2 | 4 | 23 |
| No second language | 1 | 19 | 10 | 16 | 461 | 32 | 230 | 217 | 986 |

1) Excluding Quebec and Saskatchewan.

Table 4.33
LANGUAGE OF INSTRUCTION IN ELEMENTARY AND SECONDARY SCHOOLS, 1971

|  | English schools | French schools ${ }^{1}$ | Total |
| :---: | :---: | :---: | :---: |
| Newfoundland | 791 | 1 | 792 |
| Prince Edward Island | 177 | 7 | 184 |
| Nova Scotia | 647 | 32 | 679 |
| New Brunswick | 370 | 196 | 566 |
| Quebec | 519 | 3,506 | 4,025 |
| Ontario | 4,677 | 391 | 5,068 |
| Manitoba | 751 | 52 | 803 |
| Saskatchewan | 1,039 | 13 | 1,052 |
| Alberta | 1,267 | 36 | 1,303 |
| British Columbia | 1,656 | 1 | 1,657 |
| CANADA | 11,894 | 4,235 | 16,129 |

1) Includes some bilingual schools in some provinces.

Table 4.34
POST-SECONDARY ATTENDANCE BY PARENTAL INCOME, ACADEMIC YEAR 1968-691

| Family income group | Graduated <br> from university <br> $1968-69$ | University <br> under- <br> graduate | Community <br> colleges <br> and CEGEPs | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |

Table 4.35
EDUCATIONAL LEVEL BY EDUCATIONAL LEVEL OF PARENTS, $1966{ }^{1}$

| Father | LL OF EDUCATIONMother | LEVEL OF EDUCATION OF CHILDREN |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | University | Secondary | Elementary |
|  |  | per cent |  |  |  |
| University | University | 100.0 | 51.0 | 46.1 | 2 |
| Secondary | Secondary | 100.0 | 18.8 | 74.9 | 6.3 |
| Elementary | Elementary | 100.0 | 4.8 | 42.9 | 52.3 |
| University | Secondary | 100.0 | 35.8 | 59.7 | 4.5 |
| Secondary | University | 100.0 | 38.4 | 57.6 | 2 |
| University | Elementary | 100.0 | 17.2 | 64.3 | 18.5 |
| Elementary | University | 100.0 | 24.8 | 59.7 | 15.5 |
| Secondary | Elementary | 100.0 | 10.3 | 68.9 | 20.8 |
| Elementary | Secondary | 100.0 | 9.8 | 70.1 | 20.1 |

[^18]Table 4.36
OCCUPATION OF PARENTS OF POST-SECONDARY STUDENTS, 1968-69

|  | Occupation of father | Occupation of all males in labour force | Occupation of mother | Occupation of all females in labour force |
| :---: | :---: | :---: | :---: | :---: |
|  | per cent |  |  |  |
| Managerial | 22 | 12 | 2 | 4 |
| Professional and technical | 16 | 11 | 7 | 17 |
| Clerical and sales | 21 | 13 | 14 | 40 |
| Craftsmen and production workers | 6 | 32 | 1 | 10 |
| Labourers | 9 | 6 | 2 | 1 |
| Service | 6 | 7 | 2 | 23 |
| Farming | 9 | 12 | 2 | 3 |
| Other | 11 | 7 | 701 | 2 |
| TOTALS | 100 | 100 | 100 | 100 |

Table 4.37
REASONS GIVEN FOR LEAVING UNIVERSITY, 1971-721


Table 4.38
TOTAL FULL-TIME UNIVERSITY TEACHERS, BY SEX, SHOWING DISTRIBUTIONS BY DEGREE AND BY AGE, 1970-71


1) There were 121 teachers who did not report some of the information required.

Chart 4.39
PUPIL-TEACHER RATIOS IN ELEMENTARY AND SECONDARY SCHOOLS(1)


[^19]Table 4.40
EXPENDITURES ON EDUCATION IN RELATION TO SELECTED INDICATORS, AND LEVEL OF STUDY


Table 4.40
EXPENDITURES ON EDUCATION IN RELATION TO SELECTED INDICATORS, AND LEVEL OF STUDY - Concluded



## Allocation of Time <br> 5

The way people spend their time has always been of vital concern to mankind and its lawmakers. Injunctions on how man ought to allocate his time can be found in many ancient religious scriptures. Although they were expressed in ritualistic terms, they had in fact significant socio-economic implications. The allocation of the seventh day for rest is, of course, the most familiar example. Modern man tends to view the allocation of time in socio-conomic rather than religious terms. This view in its most extreme form suggests that the allocation of time can be rigorously analyzed in terms of forgone earnings. ${ }^{1}$

Industrialization revolutionized the concept of time. The complex interrelated nature of production and scheduling demanded a precision in time governed by the clock, rather than the natural daily and seasonal rhythm prevalent in agricultural societies. Rigid time scheduling became the order of work life and the "slave to the clock" syndrome has permeated all aspects of life, even to the point of setting aside time for leisure. Recent research indicates that individuals have quite different biological time cycles, and suggests that these should be recognized by a greater degree of flexibility in time-use patterns, allowing for individual preferences.

In the section of this chapter on employment time, attention is focused on the individual's choice of working cycle at three different levels - the daily, yearly, and the total life cycle. In the section on leisure time, a major consideration is the individual's ability to enjoy and use this time according to his own wishes. This leads to the corollary concern that there be adequate facilities to enable people to enjoy leisure time.

## EMPLOYMENT TIME

It is difficult to delineate precisely the boundary between work, maintenance and leisure activities because they tend to shade into each other. Employment

[^20]time and non-employment time, however, can be pragmatically separated by the use of the definition of employment time as that which takes place in recurring market activities (physical or mental) involving direct economic gain.

The diminution of formal work time has taken place on three levels: the daily-weekly, the yearly, and the total life cycle. Technological innovation, shifts in the work force from agriculture to industry, and expansion of the trade union movement contributed to the decline in the standard hours of work per day and per week, especially prior to the Second World War. The post-war period also witnessed a reduction in standard working hours (although at a slower rate) with a trend towards stabilization at approximately a five-day, 40 hour week. Recently, however, there have been some interesting experiments related to the shortened week where the same number of weekly hours of work is compressed into four or even three days. Another recent innovation in the work week has been the "flexible hours" system, giving the employees some degree of freedom in choosing their daily hours of work subject to the constraints of working during "core hours" and completing a weekly quota of hours.

The yearly work pattern has undergone changes during the last two decades, with prevalence of paid holidays and vacations, as well as the trend towards longer vacations.

Until now, a man's life cycle could be neatly divided into three stages. During the first stage, which might be called "pre-fabour-force", a person acquires training and skills which enable him to find a gainful occupation. The second stage generally starts some time between the age of 18 and 25 , and consists of working years. Retirement is the last stage.

This three-stage cycle appears to be undergoing significant changes. As the level of technology in modern society has increased, both the demands for a more educated labour force and the opportunities for gaining that education have increased, with the result that the average age of first entrance into the labour force has shifted upwards. At the other end of the life cycle the average age of formal retirement appears to have been reduced, influenced no doubt by the provision of both organized and personal schemes for the maintenance of income.

Human capital acquired in the earlier years seems to depreciate much faster now in an area of rapid technological advancement. Thus there is a need for people to acquire new training and skills to be able to compete effectively in the labour market. Some employers are providing additional training for their employees. The idea of sabbatical leave is attracting attention outside the academic community where it has been established for some time. Finally, it can be
speculated that in future people might spread their "retirement" over the whole life-span instead of delaying it to a single lump towards the end of their lives when their ability to enjoy it is not at its peak. As a result of these changes, the individual may in the future exercise more choice in determining the pattern of his whole life cycle.

Employment time is shown in order to get some idea of the amount of free time available to people. These tables were obtained from either the regular Statistics Canada monthly Labour Force Survey or from the Department of Labour's annual Survey of Working Conditions in Canadian Industry. The latter survey is designed to cover firms having 20 or more employees in any of the preceding 12 months and is thus not representative of the working conditions in smaller establishments. The distribution of the standard weekly hours of work is shown. Paid holidays and paid vacations, average expected years spent in labour force, prior to entry into labour force, and in retirement are also given.

## LEISURE TIME

Leisure time is that portion of time which most reflects the individual's own tastes, values and temperament. Although there is no dispute over the decrease in employment time, the resultant increase in noncmployment time may not have given rise to a corresponding increase in discretionary or leisure time. Since at this stage of statistical development we have not undertaken a national time-budget survey in Canada, one cannot make definite statements about the overall use of non-employment time. One can speculate that increasing urbanization has absorbed some of the available supply of non-employment time in expanded maintenance activities and travel to work. The increase in participation of married women in the labour force has involved men and children in a greater number of household activities.

In formal time budgeting, leisure tends to be relegated to a residual category after accounting for work, obligatory duties, maintenance, and sleep. Quite frequently, leisure time is associated with discretionary time, a time when choice of activity or non-activity is paramount. Enforced idleness (e.g. retirement, unemployment, sickness) is not necessarily leisure time, as the individual might rather choose to work. Social pressures may put people in ambiguous situations so that they may be engaged in a so-called leisure activity which they do not enjoy or, of course, they may be engaged in an "obligatory activity" which they do enjoy. It is important, therefore, to view leisure in the psychological context; a conscious awareness that one is engaged in an activity of one's own choosing for the sake of enjoyment.

One may also speculate that life in a highly organized society and exposure to formal education has
had a detrimental effect on the ability to take a more independent, inquisitive and self-sufficient approach to discretionary time. It has been suggested that the over-organization of modern life has affected even the leisure area, as is evident in such practices as "canned" laughter and applause during many entertainment performances on radio and television. ${ }^{2}$

Despite the subjective elements that permeate leisure and maintenance time, time-budget studies carried out elsewhere have permitted some meaningful comments on both aspects of time. ${ }^{3}$ Plans for a time-use survey across Canada are now being explored. Data from this survey will permit cross-classifications between patterns of time use (particularly leisure time use) and socio-demographic and socio-economic characteristics of the respondents. Hopefully, it will indicate how patterns of leisure activities vary between weekdays and weekends, and between the seasons. Periodic repetitions of this survey would permit the identification of future variations in leisure patterns.

Since more details of work and work time will be given in the next chapter, the bulk of the data contained here relates to the use of leisure time. Both because of the difficulty of defining leisure objectively and because of its subjective elements, data pertaining to leisure vary in amount and quality. The data we do have, however, come to grips only indirectly with such basic concerns as how leisure time is spent, how activities are distributed throughout the population, and how these distributions are changing over time.

Indirect statistics, such as consumption of leisurerelated goods and services, and the percentage of households possessing leisure-related goods, are also shown.

## FUTURE DEVELOPMENT

There are many areas in leisure time in which there is a dearth of statistical information. For example, we have very few data on home entertaining, on library use (other than stock and circulation figures), on the content of books read and television programs watched, or on membership and participation in social clubs, youth organizations and other more formally organized recreation. Data on how people spend their vacations are also sparse. Cross-classifications by socio-economic and socio-demographic variables could improve the data and reveal interesting problems and changes therein. The existence of statistical information in the areas listed could facilitate the task of policy-makers from all levels of government and private organizations regarding decisions on needed facilities and services.

[^21]
## Table 5.1

## STANDARD HOURS OF WORK

Standard work week ${ }^{1}$

1951
1957
1961
1966
1971

| Office workers | 38.6 | 37.9 | 37.7 | 37.4 | 37.6 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Plant workers | 43.6 | 41.6 | 41.3 | 41.0 | 39.3 |

1) Standard work week relates to manufacturing. The standard working hours are specified in a collective agreement, or fixed by the emplover for his workers.

Table 5.2
EMPLOYEES WHO RECEIVED NINE DAYS OR MORE PAID HOLIDAYS„' BY INDUSTRY

|  | 1961 |  | 1971 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Office | Non-office | Office | Non-office |
|  |  | per |  |  |
| Manufacturing | 29 | 19 | 83 | 75 |
| Mining | . | 11 | 90 | 80 |
| Transportation, communication and public utilities | 36 | 25 | 95 | 92 |
| Service | $\ldots$ | 14 | 77 | 54 |
| Trade | 50 | 44 | 72 | 61 |
| Finance and insurance | 65 | . | 85 | 59 |
| Logging | . | . | 84 | 72 |
| Public administration | .. | $\cdots$ | 100 | 100 |

Table 5.3
EMPLOYEES WHO RECEIVED TWO WEEKS PAID VACATION,1 BY INDUSTRY

|  | Office | Non-office | Office | Non-office |
| :---: | :---: | :---: | :---: | :---: |
|  | per cent |  |  |  |
| Manufacturing | 82 | 23 | 91 | 77 |
| Mining | .. | 8 | 94 | 84 |
| Transportation, communication and public utilities | 69 | 33 | 91 | 90 |
| Service | . | 22 | 86 | 76 |
| Trade | 79 | 67 | 90 | 84 |
| Finance and insurance | 98 | . . | 97 | 71 |
| Logging | . | . . | 91 | 82 |
| Public administration | . | . | 81 | 86 |

## Chart 5.4 <br> LIFE CYCLE OF CANADIAN MALES 14 YEARS OF AGE AND OVER



1) Average expected number of years may be interrupted by a return to school, travel, etc.

## Chart 5.5 <br> PARTICIPATION BY DIFFERENT AGE GROUPS IN LEISURE-TIME ACTIVITIES, 1972(1)



[^22]Table 5.6
ATTENDANCE AT PAID AND FREE EVENTS, BY DIFFERENT AGE GROUPS, 19721

|  | PAID |  |  |  | FREE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All ages | $14.24$ <br> years | $\begin{aligned} & 25-64 \\ & \text { years } \end{aligned}$ | 65 years and over | All ages | $14.24$ <br> years | 25-64 years | 65 years and over |
| Live theatre | 11.3 | 17.3 | 8.8 | 3.9 | 2.0 | 4.7 | 1.0 | 0.3 |
| Opera or operetta | 1.7 | 1.8 | 1.6 | 1.1 | 0.3 | 0.5 | 0.2 | 0.3 |
| Ballet | 1.1 | 1.4 | 1.0 | 0.5 | 0.2 | 0.5 | 0.1 | 0.0 |
| Classical music performance | 6.5 | 8.1 | 5.7 | 3.2 | 2.6 | 4.6 | 1.8 | 1.0 |
| Other musical performances | 13.3 | 28.9 | 7.3 | 1.5 | 4.1 | 9.5 | 1.9 | 0.8 |
| Other live performances | 11.9 | 15.6 | 10.3 | 4.7 | 4.1 | 6.5 | 3.1 | 1.0 |
| Visit to museum | 4.8 | 6.8 | 3.9 | 1.6 | 2.8 | 4.6 | 2.0 | 1.4 |
| Visit to public art gallery | 3.4 | 4.9 | 2.8 | 1.3 | 3.7 | 5.7 | 2.8 | 1.2 |
| Visit to historic site or building | 5.8 | 8.3 | 4.7 | 2.0 | 5.2 | 7.9 | 4.0 | 1.6 |
| Exhibition, fair or carnival | 12.5 | 18.3 | 10.2 | 3.3 | 5.5 | 9.4 | 4.0 | 0.9 |
| Movie | 38.2 | 61.1 | 29.3 | 8.5 | 4.6 | 9.3 | 2.7 | 1.1 |
| Sport events | 23.4 | 37.7 | 17.9 | 4.3 | 12.8 | 22.8 | 9.0 | 1.9 |

1) Percentage of selected age groups who attended the specified events at least once during the survey period of $21 / 2$ months duration from lan. 1, 1972. It is reasonable to assume that the figures are biased to winter events

Table 5.7
POPULATION INVOLVED IN FORMAL EDUCATION AS A LEISURE-TIME ACTIVITY, $1972{ }^{1}$
NUMBER OF HOURS PER WEEK2

Table 5.8
PARTICIPATION IN SELECTED SPORTS, BY PROVINCE, $1972^{1}$


Table 5.9
TRAVEL IN THE UNITED STATES BY CANADIAN RESIDENTS

|  | 1968 | 1969 | 1970 | 1971 | 1972 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Table 5.10

## OVERSEAS TRAVEL BY CANADIAN RESIDENTS

|  | TRIPS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1968 | 1969 | 1970 | 1971 | 1972 |
|  |  |  | per cent |  |  |
| United Kingdom and Western Europe | 61.0 | 59.1 | 55.6 | 53.7 | 58.4 |
| Bermuda, Caribbean, and Mexico | 25.2 | 22.8 | 22.2 | 26.4 | 21.7 |
| Hawail | 4.6 | 3.5 | 3.2 | 4.4 | 4.1 |
| All other countries | 9.2 | 14.6 | 19.0 | 15.5 | 15.8 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number '000 | 638.0 | 852.0 | 1,099.0 | 1,197.0 | 1,228.01 |
| Percentage of these trips for purposes of holiday, recreation and visiting friends or relatives: |  |  |  |  |  |
| Holiday and recreation | 55.3 | 56.5 | 57.4 | 61.4 | 61.0 |
| Visiting friends or relatives | 31.8 | 31.6 | 29.7 | 26.1 | 28.9 |

Chart 5.11
VISITORS(1) TO PROVINCIAL AND NATIONAL PARKS


1) Includes all visitors regardless of country of residence, i.e. includes visitors from the United States and overseas.

Table 5.12
SALES OF HUNTING LICENCES ${ }^{1}$

|  | $1966-67$ | $1968-69$ | $1970-71$ | $1971-72$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |

1) Figures must be viewed with caution for a number of reasons. Hunting licences vary from province to province and are sold to non-residents of Canada as well as residents. Hunting permits are sold only to persons age 14 and over. One hunter may purchase several types of licences, so the number of licences sold does not indicate the number of persons purchasing.
2) Ontario figures prior to 1968 may nor be strictly comparable with those for $1968-71$ due to changes in the format of presentation of the source documents.

Table 5.13
NUMBER OF ANG LING LICENCES ISSUED

| $1966-67$ | $1968-69$ | $1970-71$ | $1971-72$ |
| :--- | :--- | :--- | :--- |


|  | thousands |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| CANADA | $1,848.6$ | $2,165.8$ | $2,729.3$ | $2,165.5$ |
| Newfoundland | 16.6 | 17.0 | 17.8 | 17.3 |
| Prince Edward Island | 10.4 | 11.2 | 12.0 | 12.3 |
| Nova Scotia | 69.3 | 73.7 | 76.4 | 76.7 |
| New Brunswick | 64.1 | 69.7 | 71.0 | 15.3 |
| Quebec | 421.2 | 502.8 | 532.1 | 530.9 |
| Ontario | 584.7 | 698.9 | $1,167.91$ | 644.8 |
| Manitoba | 104.6 | 119.9 | 117.4 | 138.3 |
| Saskatchewan | 110.0 | 130.4 | 132.8 | 139.4 |
| Alberta | 133.2 | 141.4 | 149.0 | 160.3 |
| British Columbia | 289.4 | 328.8 | 376.2 | 357.5 |
| Yukon | 9.6 | 10.5 | 10.1 | 6.9 |
| Northwest Territories | 4.5 | 5.6 | 6.0 | 6.6 |
| National Parks | 31.0 | 55.9 | 60.6 | 66.1 |

1) Ontario residents were required to procure fishing licences for fishing within Ontario as of 1969. This accounts for the considerable increase in the figures between 1968 and 1970. Fishing licences in Ontario were required by resident males 19 years of age and over in the years 1968.70 but are no longer required; residents of the western provinces are considered as residents of Ontario for purpose of fishing in this province and no fonger require a ficence to fish; data for fishing licences sold in Ontario represent persons who are resident of Quabec, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland, Northwest Territories, Yukon and other countries. In 1970-71, of the 7,167,900 licences sold in Ontario, 605,300 were sold to non-residents and 552,600 to residents.

Chart 5.14
HOUSEHOLDS WITH SELECTED ENTERTAINMENT EQUIPMENT


Table 5.15
HOUSEHOLDS WITH SELECTED RECREATIONAL EQUIPMENT, BY PROVINCE, 1973

HOUSEHOLDS WITH OUTDOOR RECREATIONAL EQUIPMENT

Boats ${ }^{1}$\begin{tabular}{c}
Overnight <br>
camping <br>
equipment ${ }^{1}$

$\quad$ Snowmobiles 

Adult-size <br>
bicycles
\end{tabular}

|  | per cent |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| CANADA | 12.4 | 17.7 | 9.2 | 29.1 |
| Newfoundland | 20.0 | 15.2 | 8.8 | 22.1 |
| Prince Edward Island | $\ldots$ | $\ldots$ | $\ldots$ | 21.4 |
| Nova Scotia | 13.2 | 14.8 | 7.0 | 23.8 |
| New Brunswick | 10.1 | 14.9 | 13.0 | 27.3 |
| Quebec | 8.3 | 13.2 | 12.0 | 27.1 |
| Ontario | 13.9 | 15.9 | 8.6 | 31.0 |
| Manitoba | 12.6 | 19.6 | 10.1 | 29.4 |
| Saskatchewan | 9.8 | 18.5 | 12.5 | 31.6 |
| Alberta | 11.7 | 30.3 | 8.3 | 31.2 |
| British Columbia | 17.5 | 27.3 | 2.5 | 28.3 |

HOUSEHOLDS WITH INDOOR RECREATIONAL EQUIPMENT

| Tape | Record <br> playing <br> recorders <br> equipment | Radios |
| :---: | :---: | :---: | :---: |$\quad$ TV sets $\quad$| FM |
| :---: |
| receivers |


| CANADA | 31.6 | 72.3 | 97.7 | 96.0 | 67.3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Newfoundland | 30.1 | 64.6 | 94.7 | 93.8 | 29.2 |
| Prince Edward Island | 28.6 | 60.7 | 85.7 | 96.4 | 42.9 |
| Nova Scotia | 29.9 | 66.4 | 98.1 | 95.8 | 52.8 |
| New Brunswick | 28.6 | 69.6 | 96.9 | 95.7 | 43.5 |
| Quebec | 23.8 | 71.3 | 97.5 | 97.2 | 73.5 |
| Ontario | 33.6 | 74.3 | 97.9 | 96.6 | 72.9 |
| Manitoba | 32.5 | 69.2 | 97.6 | 94.2 | 59.2 |
| Saskatchewan | 33.1 | 69.6 | 98.5 | 95.1 | 49.4 |
| Alberta | 37.0 | 73.2 | 97.9 | 94.0 | 60.0 |
| British Columbia | 40.1 | 73.6 | 98.0 | 94.3 | 65.2 |

Table 5.16
ESTIMATES OF CONSUMER EXPENDITURE ON RECREATION, IN CURRENT AND CONSTANT (1961) DOLLARS

|  | 1951 |  | 1961 | 19711 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CURRENT |  |  |  |  |


| Recreation goods: |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TV, radio, phonograph, records, etc. | 70.6 | 20.71 | 68.8 | 20.18 | 90.5 | 19.87 | 312.8 | 51.78 | 227.8 | 45.99 |
| Recreation vehicles (incl. boats) | 17.6 | 5,16 | 18.4 | 5.40 | 227.5 | 49.95 | 500.5 | 82.85 | 562.2 | 93.06 |
| Other recreation goods | 120.9 | 35.46 | 134.4 | 39.43 | 311.6 | 68.41 | 963.6 | 159.51 | 727.7 | 120.46 |
| Recreation services: |  |  |  |  |  |  |  |  |  |  |
| Cablevision | - |  | - | - | 6.6 | 1.45 | 87.5 | 14.48 | 87.5 | 14.48 |
| Motion pictures | 106.1 | 31.12 | 174.2 | 51.10 | 80.9 | 17.76 | 150.0 | 24.83 | 72.3 | 11.97 |
| Other recreation services | 111.6 | 32.74 | 172.0 | 50.45 | 234.6 | 51.50 | 626.2 | 103.66 | 437.2 | 72.37 |
| Total personal income: |  |  |  |  |  |  |  |  |  |  |
| Millions of current dollars |  | 16,791 |  |  | 30,104 |  | 73,391 |  |  |  |
| Number of households: |  |  |  |  |  |  |  |  |  |  |
| Millions |  | 3,4092 |  |  | 4,555 |  | 6,041 |  |  |  |
| Population: |  |  |  |  |  |  |  |  |  |  |
| Millions |  | 14,009 |  |  | 18,238 |  | 21,569 |  |  |  |

## Chart 5.17

STOCK AND CIRCULATION OF PUBLIC LIBRARIES PER PERSON
Ratio of books per person $5.0-$


Chart 5.18
STOCK AND CIRCULATION OF PUBLIC LIBRARIES PER PERSON, 1972


Table 5.19
MOTION PICTURE AND DRIVE-IN THEATRES

|  | ESTABLISHMENTS <br> Regular <br> motion <br> picture <br> theatres | Drive-in <br> theatres | Regular <br> motion <br> picture <br> theatres | Drive-in <br> theatres |
| :--- | :---: | :---: | :---: | :---: |
| 1951 | 1,808 | 82 | 239,132 | 6,555 |
| 1956 | 1,849 | 237 | 162,859 | 9,706 |
| 1961 | 1,341 | 238 | 97,945 | 9,474 |
| 1966 | 1,149 | 245 | 87,694 | 11,265 |
| 1969 | 1,157 | 271 | 78,918 | 11,308 |

Work
6

Any discussion of how Canadians use their time must take into account that most Canadian adults spend some 50 per cent of their waking hours earning a living.

The availability of work, its distribution as to occupation, what it pays, job conditions, and the satisfaction derived from work, are major areas of concern. This chapter provides statistical measures of some aspects of these concerns, and identifies those areas in which there should be more information.

The following material deals with employment, unemployment, growth of the labour force, the presence or absence of discrimination in employment, particular problems faced by the Canadian labour force, and occupational and industrial changes in the labour market. We also look for answers to such questions as: Who are the unemployed? How long are they without work? What hardships are encountered? What income supplements are available? Can underemployment be identified?

Job conditions and remuneration are indicated by data on pay and fringe benefits, hours worked, vacations and holidays, physical conditions and surroundings, labour relations, and safety. Finally, the chapter offers some tentative indicators of job satisfaction.

## EMPLOYMENT

## GROWTH OF LABOUR FORCE

Since 1900 the population of Canada 14 years of age and over has risen 343 per cent, but the labour force has grown 372 per cent; parallel figures since 1951 are 62 and 70 per cent. This development can be partly explained by the larger proportion of immigrants entering the labour force, but an even larger factor is the sharply rising number of working women. Between 1951 and 1972, the number of males in the labour force rose only 46 per cent while the number of women working or actively seeking work increased by 157 per cent.

## CHANGING PARTICIPATION RATES

Labour force participation rates change in many ways over time by sex, age, and area. The most marked changes in Canada in this century have been the drop in male participation (over 14 percentage points since 1911) and the rise in female participation. The decline in male participation can be attributed to both earlier retirement and to the longer period devoted to education. In the case of women, participation has risen from 16.1 per cent in 1901 to 37.1 per cent in 1972. It is the women in the 25.54 age group that have caused this dramatic rise; in 1941, this group constituted only nine per cent of the labour force, whereas they now account for over 18 per cent.

This development has heightened concerns about sex discrimination in its various forms - differential pay rates, barriers to advancement, and social and other pressures that constrain occupational choice - and most provinces now have adopted "equal pay for equal work" legislation, which, through difficult to enforce, is a necessary beginning to ensure equity of rewards. Statistics for 1969 show earning differentials between men and women in the same occupation ranging as high as 74 per cent, with a heavy concentration in the 25 to 30 per cent range. A more startling finding from a recent study of manufacturing industries ${ }^{1}$ showed that during the 20 years 1948-1968 only two of 12 manufacturing industries could show any substantial improvement in the female-to-male pay ratio. Half the industries showed no change and in the remaining four the women had lost ground.

Concentration on the traditionally female occupations is a major reason for lower earnings. The influx of women into the labour market in the 1960s did not significantly change the pattern, since most women found employment in the trade and service industries - as teachers, secretaries, waitresses, sales staff, etc - rather than through breaking new ground.

Some of the most significant recommendations of the Royal Commission on the Status of Women were directly concerned with equal pay for women, the elimination of discrimination on grounds of sex and/or marital status, the sex-typing of occupations, and the application of such employee benefits as pensions, unemployment insurance, and Workmen's Compensation in a non-discriminatory manner. ${ }^{2}$ Other equally disturbing discriminatory practices - which undoubtedly exist - can unfortunately not be demonstrated statistically at this time.

Over the past two decades, the most marked industrial changes in the labour force have been the rise in the service industries share of total employment (18 per cent in 1951 to 53 per cent in 1971) and the decline in the agricultural share from 18 to 6 per cent, leading to parallel shifts in the occupational distribution of the labour force.

## CANADA'S SPECIAL PROBLEMS

The Canadian labour force has specific regional attributes. Many areas are dependent on primary industries: portions of the coastal labour markets are closely tied to fishing and fish processing; the forested areas of British Columbia, New Brunswick, Quebec and Ontario demand parts of the labour force to be skilled in

[^23]logging and pulp and paper processing; grain and (more recently) seed production, and cattle raising, influence the composition of the prairie labour force; and the mineral industries exert location-specific pressures on the labour force. On the other hand, the fast-growing urban areas, where both labour and capital are concentrated, are the centres of secondary development and the rapid growth of the service industries. Over 35 per cent of Canada's population is concentrated in five metropolitan areas; 55 per cent is in 21 urban centres. The primary industries of the rural areas, once labour-intensive, are now moving via technological change to more capital-intensive situations, thus reinforcing the movement to the urban centres.

## UNEMPLOYMENT

The goal of "full employment" has long been of concern to Canadian governments, and since 1946 a major statistical effort towards the measurement of employment and unemployment has been maintained in Canada.

Perceptions of what constitutes full employment have varied at different times and in different places. One view has been that in typical Canadian economic circumstances a rate of unemployment lower than three per cent could not be expected over a long period of time. Others have suggested that an even higher rate would be realistic as a long-term goal. Over the past 20 years the unemployment rate in Canada has rarely been below four per cent.

The geographical distribution of unemployment, illustrated below, is an indicator of Canadian regional problems. Quebec and the Atlantic provinces have consistently higher unemployment rates than Ontario. Incidence also varies with age and sex, with teenagers (of both sexes) being hardest hit, while men aged 25 to 64 have relatively low rates at all times, and the unemployment rate among women in Canada is lower than for men - the opposite of the experience in most industrialized countries. Education is another main factor: the largest numbers of the Canadian unemployed are those with the least education, and their numbers are concentrated among labourers and unskilled workers. The proportion of unemployed who are heads of family units has fallen in recent years. While almost half the unemployed are out of work from one to three months, over the 1970-73 period there was an increase in the number of unemployed out of work for more than six months.

Other aspects of unemployment particularly relevant in Canada arise from mismatches between labour supply and labour demand, in terms of both qualifications and area. Manpower training and manpower mobility programs have been established to mitigate these problems.

Job Vacancy Survey results show that since 1971 job vacancies are increasingly concentrated in the manufacturing and service industries. Geographically, Ontario has had the most vacancies over the past three years, while in the Atlantic region, where the unemployment rates are highest, the number of vacant positions has been well below that for any other region since the beginning of 1973.

The degree of hardship encountered by those unable to find work is hard to assess because of its relationship to the previous standard of living experienced by the individual and that individual's subjective judgment of the situation. Data are available on some of the income supplements to which the unemployed have access and these can be related to current prices of such staples as housing and food. These data, however, cannot very easily be related even to objective standards of deprivation.

Closely related to the problems of unemployment are those of underemployment, which can be either "visible" or "disguised". The former includes involuntary part-time workers and can be measured with relative ease. "Disguised" underemployment, in which a person is working at less than his or her productive capacity, is much more difficult to capture statistically.
"Discouraged workers" - those who have withdrawn from the labour force because they believe jobs are unavailable - can be counted, although at present only those volunteering this information to the labour force survey are included in this category.

## QUALITY OF WORKING LIFE

## PAY AND FRINGE BENEFITS

Monetary compensation of the Canadian worker has improved steadily and impressively over the past three decades. It is difficult to choose any single statistic to represent this progress, but the most comprehensive series is the industrial composite of wages and salaries in Canada based on large establishments (employing 20 or more people but excluding agriculture, fishing, trapping, public administration, defence, domestic service, health and education). In current (actual) dollars, average weekly earnings (industrial composite) went up almost six-fold between 1941 and 1972 , rising from $\$ 26.65$ to $\$ 149.00$. More than half of this increase, however, was offset by the reduced purchasing power of the dollar as measured by the Consumer Price Index.

The provincial variations in these weekly earnings (industrial composite) are quite marked. The 1972 annual average ranged from $\$ 101.02$ in Prince Edward Island to $\$ 165.08$ in British Columbia. Generally, Quebec and the Atlantic provinces have lower wages than Ontario, the Prairie provinces and British Columbia.

Wage disparities could also be measured by sex, age, occupation, and educational attainment. At present, data by sex and industry only are available. They show wide disparities with respect to hourly-rated workers - in April 1973, for example, these ranged from a high of $\$ 5.65$ in construction to a low of $\$ 2.23$ for laundries and dry cleaners. The industry picture can be seriously distorted, however, because of variations in the proportion of non-hourly-rated salaried workers, weekly hours of work, and availability and conditions (premium pay) of overtime work.

Significant improvements have taken place in the area of fringe benefits (monetary and non-monetary). Data are now collected on the various items going to make up a wage packet and the surveys of individual industries show that employers are devoting up to 25 per cent of the total wage package to monetary rewards other than those for straight time worked.

## HOURS OF WORK

The Canadian work week has diminished dramatically since the Second World War. Today almost 78 per cent of the labour force works 44 hours or less per week, compared with 52 per cent in 1950. Although most agricultural workers still work long hours ( 59 per cent over 45 hours per week), there has been a drop in hours worked over the past 20 years even in this area.

Some new work-time experiments now are attracting attention. Some firms are trying a four-day week (though maintaining some 35 hours per week), while others are allowing employees to select some proportion of their work time, provided that a stated minimum number of hours are worked. The measures of weekly hours worked do not, of course, properly reflect the "work" year, generally reduced by increased vacations, statutory holidays, and sick and special leave. Nor do the weekly hours data capture those who find it necessary to take a second job or work overtime on a regular basis.

## VACATIONS AND PAID HOLIDAYS

The number of paid holidays and vacations have increased over the past 50 years throughout Canada. Most provinces have legislation that grants two weeks paid vacation. ${ }^{3}$ There are no definite standards concerning paid holidays, but most employees in Canada today can expect a minimum of nine statutory holidays each year. In this respect, there is a tendency for those employed by governments and large firms to fare better than those who are self-employed or working for smaller concerns. Closely allied to the subject of vacations is the academic concept of sabbatical leave which now is being seriously considered in other spheres. At this early stage, no statistics exist on this development.

[^24]In spite of widespread impressions about the dilution of the work ethic, there are not many studies exploring people's attitudes and opinions on this. In a study of U.S. workers conducted in 1960 by Weiss and Kahn, it was found that 80 per cent of male workers would continue to work even if they were not under economic compulsion to do so. But a 1969 survey reported a reduction in this proportion to 73.3 per cent. ${ }^{4}$ There are no Canadian studies to confirm (or deny) such a trend here. The discussions regarding the dilution of the work ethic have concentrated attention on the importance of making work rewarding and pleasant.

The importance of job-related satisfaction is now widely recognized by government and management, as well as unions. ${ }^{5}$ For instance, both management and unions appear to be concerned about the symptoms of dissatisfaction on the assembly line. Much of the concern relates to monotony and boredom associated with repetitive tasks (the so-called "blue collar blues"), although pressures and tensions generated by high-level occupations, such as managerial and professional jobs, are also recognized. ${ }^{6}$ It would, however, be a mistake to think that the so-called white collar and professional workers, and even managers and executives, are free from such maladies as boredom and monotony, or that blue collar workers are not subject to pressures of competition, fear of failure, and nervous tension.

One can separate extrinsic from intrinsic elements of job satisfaction. Extrinsic satisfaction is independent of the contents of the particular job and depends upon such general factors as pay, fringe benefits and work environment. Intrinsic satisfaction, on the other hand, is specific to the job content and depends upon such factors as monotony, challenge, accomplishment, and the usefulness of the job performed. Work is just beginning on the complex problems of measuring intrinsic satisfactions.

Data on job satisfaction in this chapter have been reproduced from a study by Jan J. Loubser in 1968. The findings, which include measures of both intrinsic and extrinsic aspects, appear to indicate a reasonably high level of overall job satisfaction, though with marked variations among industries and for different aspects of the job. The conclusions of the study are based, however, on a very small sample and may already have become outdated. There have been recent large-scale surveys in the United States that suggest increased

[^25]worker alienation. The findings have resulted in a lively controversy on the presence and magnitude of worker dissatisfaction and alienation. 7 These studies point out the possibility of measurement in the delicate area of intrinsic satisfaction through techniques pioneered by the Michigan Survey Research Center. The Faculty of Administrative Studies at York University has undertaken to launch a large-scale study on quality of employment in Canada. It is hoped that this will be followed by further Canadian investigations.

## PHYSICAL CONDITIONS

While the rewards of work are of prime importance, the conditions within which work is carried out are of concern to every worker. In Canada there are no national standards on physical surroundings, safety precautions, and special amenities available to workers. Each province has legislation concerning industrial safety including noise levels, spatial displacement of personnel, machine protections, protective clothing, noxious gases, and material emissions. Subsidized cafeterias, recreational facilities, day-care centres, sports programs and other employer-sponsored facilities are made available on a voluntary basis by some employers, but no data on these are available.

## LABOUR RELATIONS

Union membership in Canada has grown from【33,000 in 1911 to over $2,250,000$ today, and organized labour now constitutes over one-third of Canada's paid, non-agricultural workers.

Several factors set the Canadian labour scene apart from those of other countries. Because Canada is a federal state with labour concerns falling mainly within provincial jurisdictions, the federal government has limited powers, compared with the national governments of countries such as Sweden, Britain, and even the United States. Secondly, union participation varies widely across Canada according to industrial structure, regional attitudes, and other factors. Finally, some 60 per cent of union members in Canada belong to international unions with headquarters in the United States.

The industrial composition of union membership has also changed significantly over the years in Canada. The most marked changes have been the decline in membership in the railway unions, and the growth of public administration unions. The traditional view of organized labour only occurring among the blue collar workers of primary and secondary industry has been altered over the past decade as office employees (particularly in public service) and other white collar workers and professional employees have become unionized.

[^26]
## CONCLUSIONS

While in many respects the Canadian work scene is well documented statistically, there is a paucity of data on some of the newer areas of concern. Certain aspects of the quality of working life are particularly difficult to measure. The problems of varying provincial legislative standards and the value judgments inherent as to what constitute "good" conditions make statistical appraisal a monumental undertaking.

## CONCEPTS AND DEFINITIONS

Four primary sources of statistical material are used in this chapter:

1. The Monthly Labour Force Survey
2. The Decennial Census
3. The Annual Survey of Working Conditions in Canadian Industry
4. Job Vacancy Survey

## MONTHLY LABOUR FORCE SURVEY

This is the most important source of regular labour force data in Canada. The survey covers the civilian non-institutional population aged 14 years and over. Each month a sample of 30,000 households representing a cross-section of the Canadian population is asked by trained enumerators to answer questions relating to the labour force experience of each member of the household aged 14 years and over during the week preceding the survey. Supplementary questions are sometimes added to the regular questionnaire to elicit information about various socio-economic aspects of the labour force. Key definitions follow:

Labour Force means all those persons reported to have either worked (employed) or looked for work (unemployed) during the reference week for pay or profit.

Employed refers to any person aged 14 years or over who worked for "pay, profit or related business ends" at any time during the reference week. A person who both worked and looked for work during the week is classified as employed. So, too, is the person who had a job but did not work or look for work in the reference week.

Unemployed means 'without work and looking for work" during the reference week. However, the survey does not ask any questions on specific job-seeking activity or on the current availability of the unemployed person for work.

The Unemployment Rate is the percentage of the labour force that is unemployed.

## DECENNIAL CENSUS

The labour force data in this report pertaining to the period before 1951 have been derived from the decennial population censuses and exclude the province of Newfoundland, but include members of the armed forces, residents of the Yukon and Northwest Territories, and Indians on reserves. Although the census data were adjusted to conform to the Labour Force Survey definitions, the two sets of statistics are not strictly comparable.

## THE ANNUAL SURVEY OF WORKING CONDITIONS IN CANADIAN INDUSTRY

This survey is designed to cover firms having 20 or more employees in any of the preceding 12 months, and is thus not representative of the working conditions in smaller establishments. The information is separately provided for office and non-office workers. "Office" employees include supervisory, professional and technical staff, and personnel engaged in clerical, accounting, secretarial, sales, executive, and administrative activities. "Non-office" employees are those non-supervisory
workers who are directly engaged in producing goods and services and the provision of maintenance and auxiliary services closely associated with production operations.

## JOB VACANCY SURVEY

The figures on vacancies are estimated from a survey conducted every two weeks by Statistics Canada. Some 37,000 employers are surveyed by mail with a sub-sample ( $1 / 6$ ) being further surveyed by interview (large firms by visit and smaller firms by phone). The survey excludes agriculture, fishing and trapping, households and non-civilians.

## JOB SATISFACTION DATA

These data were taken from Study No. 12 of the Task Force on Labour Relations by J.J. Loubser and M. Fullan entitled Industrial Conversion and Workers' Attitudes to Change in Different Industries. A sample of 2,832 male hourly-rated workers in 16 firms selected from six industries (automobile, chemical, electrical products, oil, printing and steel) was used.

Table 6.1

## LABOUR FORCE BY SEX, SHOWING PARTICIPATION RATES

|  | POPULATION 14 YEARS AND OVER |  |  | LABOUR FORCE |  |  | PARTICIPATION RATE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total |
|  | thousands |  |  | thousands |  |  | per cent |  |  |
| 1901 | 1,829 | 1.729 | 3,558 | 1,606 | 279 | 1,885 | 87.8 | 16.1 | 53.0 |
| 1911 | 2,629 | 2,245 | 4,874 | 2,381 | 418 | 2,799 | 90.6 | 18.6 | 57.4 |
| 1921 | 3,055 | 2,820 | 5,875 | 2,742 | 561 | 3,303 | 89.8 | 19.9 | 56.2 |
| 1931 | 3,775 | 3,452 | 7,227 | 3,291 | 751 | 4,042 | 87.2 | 21.8 | 55.9 |
| 1941 | 4,338 | 4,097 | 8,435 | 3,713 | 939 | 4,652 | 85.6 | 22.9 | 55.2 |
| 1951 | 4,857 | 4,874 | 9,732 | 4,076 | 1,147 | 5,223 | 83.9 | 23.5 | 53.7 |
| 1956 | 5,398 | 5,409 | 10,807 | 4,437 | 1,346 | 5,782 | 82.2 | 24.9 | 53.5 |
| 1961 | 5,991 | 6,061 | 12,053 | 4,782 | 1,739 | 6,521 | 79.8 | 28.7 | 54.1 |
| 1966 | 6,678 | 6,796 | 13,475 | 5,193 | 2,227 | 7,420 | 77.8 | 32.8 | 55.1 |
| 1971 | 7,622 | 7,766 | 15,388 | 5,800 | 2,831 | 8,631 | 76.1 | 36.5 | 56.1 |
| 1972 | 7,795 | 7.952 | 15,747 | 5,938 | 2,953 | 8,891 | 76.2 | 37.1 | 56.5 |
| 1973 | 7,978 | 8,146 | 16,125 | 6,127 | 3,152 | 9,279 | 76.8 | 38.7 | 57.5 |

Notes: 1. Newfoundland not included 1901 to 1941.
2. Figures for 1901 to 1941 are adjusted to include residents of the Yukon and Northwest Territories, Indians on reserves, and members of the armed forces but 3. Current Labour Force Survey definitions apply from 1951 to 1973 and these figures include Newfoundland.

## Chart 6.2

## PARTICIPATION RATES BY SEX AND MARITAL STATUS



Newfoundland not included for 1921 to 1941.
Note: Figures for 1921 to 1941 adjusted to include residents of Yukon and Northwest Territories, Indians living on reserves and members of the Armed Forces, and to exclude inmates of institutions.

## Chart 6.3

PARTICIPATION RATES BY AGE GROUP


## Chart 6.4

SEX AND AGE COMPOSITION OF THE LABOUR FORCE


1951
Labour Force $=5.2$ million


Both Sexes 14-24 $\square$
$\square$ Males 25-54

## Females 25-54 88 isify Both Sexes 55+

1971

1961
Labour Force $=6.5$ million



Chart 6.5
WEEKS EMPLOYED IN 1970 , BY AGE, SEX AND MARITAL STATUS


Table 6.6
THE EMPLOYED BY CLASS OF WORKER

|  | $\begin{array}{c}\text { Paid } \\ \text { workers }\end{array}$ | SELF-EMPLOYED |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| On own |  |  |  |
| account |  |  |  |\(\left.\quad \begin{array}{c}Unpaid family <br>

workers\end{array} \quad $$
\begin{array}{c}\text { Total } \\
\text { employed }\end{array}
$$\right]\)

Table 6.7
PROPORTION OF WOMEN IN MAJOR OCCUPATIONAL GROUPS

|  | 1951 | 1961 | 1971 |
| :---: | :---: | :---: | :---: |
|  | percentage of total employment in group |  |  |
| Managerial | 11.1 | 11.1 | 9.3 |
| Professional and technical | 35.3 | 42.0 | 41.1 |
| Clerical | 56.2 | 62.4 | 72.2 |
| Service | 44.6 | 48.7 | 60.1 |
| Transportation and communication | 7.7 | 9.0 | 9.7 |
| Farmers and farm workers | 7.6 | 8.3 | 12.9 |
| Logging, hunting and fishing | - | - | - |
| Mining, quarrying, etc. | - | - | - |
| Crafts and production process | 14.6 | 14.6 | 14.1 |
| Labourers | - | - | 8.0 |
| ALL OCCUPATIONS | 22.0 | 27.7 | 33.3 |

Table 6.8
EMPLOYED BY OCCUPATIONAL GROUP AND SEX


Table 6.9
EMPLOYMENT BY INDUSTRY

|  | 1951 | 1961 | 1971 |
| :--- | ---: | ---: | ---: |
|  |  | per cent |  |
| Agriculture | 18.4 | 11.2 | 6.3 |
| Forestry | 2.3 | 1.4 | 0.9 |
| Fishing and trapping | 0.6 | 0.3 | 0.3 |
| Mining | 1.5 | 1.3 | 1.6 |
| Manufacturing | 26.5 | 24.0 | 22.2 |
| Construction | 6.8 | 6.2 | 6.2 |
| Transport, utilities and communication | 8.8 | 9.3 | 8.7 |
| Trade | 14.1 | 16.9 | 16.5 |
| Finance, insurance and real estate | 3.0 | 3.9 | 4.8 |
| Service | 18.0 | 25.3 | 32.7 |
| ALL INDUSTRIES |  | 100.0 | 100.0 |
|  |  | 5,097 | 6,055 |

## Chart 6.10

EMPLOYMENT BY INDUSTRY AND REGION, NOVEMBER 1973



Chart 6.12
UNEMPLOYMENT RATES FOR MEN AND WOMEN


Chart 6.13
UNEMPLOYMENT RATES BY REGION


Table 6.14
UNEMPLOYMENT BY OCCUPATION1

|  | 1961 |  | 1971 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Unem ployment rate | Per cent distribution of the unemployed | Unemployment rate | Per cent distribution of the unemployed |
| Office and professional2 | 2.5 | 14 | 2.9 | 20 |
| Transportation | 10.2 | 9 | 7.4 | 5 |
| Service and recreation | 5.6 | 8 | 5.7 | 11 |
| Primary ${ }^{3}$ | 6.8 | 13 | 5.8 | 7 |
| Crafts, production process and related | 9.2 | 32 | 8.0 | 30 |
| Labourers and unskilled (not primary) | 21.7 | 18 | 16.7 | 13 |
| Never worked ${ }^{4}$ | - | 7 | - | 13 |
| ALL OCCUPATIONS | 7.1 | 100 | 6.4 | 100 |

1) Occupational groups shown refer to the last job held before the survey period.
2) Includes managerial, professional, technical, clerical, sales and communications occupations.
3) Includes farmers, farm workers, fishermen, trappers, hunters, loggers, miners and related.
4) Comprises unemployed persons who never had a full-time civilian job lasting two weeks or more.

Chart 6.15
UNEMPLOYMENT RATES BY EDUCATIONAL ATTAINMENT


Chart 6.16
UNEMPLOYED PERSONS BY DURATION OF UNEMPLOYMENT


## Chart 6.17

MEN AND WOMEN NOT IN THE LABOUR FORCE BY REASON


Table 6.18
FAMILY STATUS OF UNEMPLOYED PERSONS

MEMBERS OF FAMILY UNITS

|  | MEMBERS OF FAMILY UNITS |  |  | Unattached individuals ${ }^{2}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Head of unit ${ }^{1}$ | Single sons or daughters | Other relatives |  |  |
|  |  |  | per cent |  |  |
| 1961 | 46 | 34 | 11 | 9 | 100 |
| 1966 | 41 | 37 | 14 | 8 | 100 |
| 1971 | 37 | 37 | 16 | 10 | 100 |

1) The person mainly responsible for the maintenance of the unit; in families consisting of a husband and wife (with or without unmarried childrenl, the husband is always designated as the head.
2) Person Ifving alone or who is not related to anyone in the dwelling where he or she is living.

Chart 6.19
FAMILIES WITH UNEMPLOYMENT BY NUMBER OF OTHER MEMBERS EMPLOYED


Table 6.20
WEEKLY ${ }^{1}$ INCOMES UNDER SELECTED PROGRAMS FOR CERTAIN PROVINCES, JANUARY 1, 1974

|  | Prince <br> Edward <br> Island | New <br> Brunswick | Quebec | Ontario | Alberta | British <br> Columbia |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## Table 6.21 <br> JOB VACANCIES IN SE LECTED OCCUPATIONAL GROUPS (ANNUAL AVERAGES)

|  | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: |
|  |  | thousand |  |
| CANADA: |  |  |  |
| All occupations | 32.6 | 58.3 | 78.0 |
| ATLANTIC: |  |  |  |
| All occupations | 3.3 | 4.5 | 5.6 |
| QUEBEC: |  |  |  |
| All occupations | 6.6 | 14.7 | 20.5 |
| Clerical and related | 0.9 | 1.9 | 2.5 |
| Sales | 1.2 | 1.6 | 1.5 |
| Service | 0.7 | 1.8 | 2.3 |
| Product fabricating, assembling and repair | 1.2 | 3.7 | 4.1 |
| ONTARIO: |  |  |  |
| All occupations | 13.1 | 23.7 | 30.2 |
| Managerial, administrative and related | 0.5 | 0.8 | 1.0 |
| Natural sciences, engineering, mathematics | 0.8 | 0.9 | 2.0 |
| Medicine and health | 0.8 | 0.9 | 1.3 |
| Clerical and related | 2.4 | 3.5 | 4.3 |
| Sales | 1.7 | 2.8 | 2.4 |
| Service | 1.0 | 2.7 | 3.4 |
| Machining and related | 0.6 | 1.9 | 3.2 |
| Product fabricating, assembly and repair | 1.7 | 4.3 | 5.0 |
| Construction trades | 0.9 | 1.4 | 1.6 |
| PRAIRIES: 1 |  |  |  |
| All occupations | 5.6 | 10.4 | 13.0 |
| Clerical and related | 0.8 | 1.2 | 1.6 |
| Sales | 0.7 | 1.2 | 1.3 |
| Service | 0.5 | 1.2 | 2.1 |
| Product fabricating, assembly and repair | 1.2 | 1.9 | 2.1 |
| PACIFIC: ${ }^{2}$ |  |  |  |
| All occupations | 3.8 | 5.0 | 8.4 |
| Clerical and related | 0.5 | 0.8 | 1.4 |
| Service | 0.5 | 0.9 | 1.2 |
| Product fabricating, assembly and repair | 0.5 | 0.9 | 1.1 |

1) Includes Northwest Territories.
2) Includes Yukon Territory.

## Chart 6.22

JOB VACANCIES BY OCCUPATIONAL GROUP


Table 6.23
JOB VACANCIES IN SELECTED INDUSTRIAL GROUPS (ANNUAL AVERAGES)

|  | 1971 | 1972 | 1973 |
| :---: | :---: | :---: | :---: |
|  |  | thousar |  |
| CANADA: |  |  |  |
| All industries | 32.6 | 58.3 | 78.1 |
| ATLANTIC: |  |  |  |
| All industries | 3.4 | 4.5 | 5.7 |
| Manufacturing | 0.6 | 1.0 | 1.8 |
| Trade | 0.6 | 1.0 | 1.0 |
| Community, business and personal services | 1.1 | 1.0 | 1.2 |
| QUEBEC: |  |  |  |
| All industries | 6.6 | 14.7 | 20.6 |
| Manufacturing | 2.2 | 5.4 | 8.6 |
| Trade | 1.0 | 2.4 | 2.8 |
| Finance, insurance and real estate | 0.9 | 1.0 | 1.2 |
| Community, business and personal services | 1.5 | 3.2 | 4.6 |
| ONTARIO: |  |  |  |
| All industries | 13.1 | 23.7 | 30.2 |
| Manufacturing | 3.4 | 8.8 | 11.5 |
| Construction | 0.7 | 1.2 | 2.0 |
| Transportation and communication | 0.8 | 0.8 | 1.2 |
| Trade | 2.4 | 4.0 | 4.6 |
| Finance, insurance and real estate | 1.1 | 2.2 | 1.8 |
| Community, business and personal services | 3.1 | 5.2 | 7.2 |
| Public administration and defence | 1.2 | 1.2 | 1.6 |
| PRAIRIE: 1 |  |  |  |
| All industries | 5.7 | 10.4 | 13.1 |
| Manufacturing | 1.5 | 1.7 | 2.3 |
| Trade | 1.3 | 2.5 | 2.4 |
| Community, business and personal services | 1.3 | 2.4 | 3.7 |
| Public administration and defence | 0.5 | 0.7 | 1.3 |
| PACIFIC: ${ }^{2}$ |  |  |  |
| All industries | 3.8 | 5.0 | 8.5 |
| Manufacturing | 0.6 | 0.9 | 1.6 |
| Trade | 0.7 | 1.0 | 1.5 |
| Community, business and personal services | 0.9 | 1.4 | 2.3 |

## 1) Includes Northwest Territories.

2) Includes Yukon Territory.

Chart 6.24
CURRENT FULL-TIME VACANCIES BY INDUSTRIAL DIVISION(1)


## Chart 6.25

JOB VACANCIES BY REGION, JANUARY 1971 to AUGUST 1973(1)

(1) Three-month moving averages.

Table 6.26

## LABOUR COSTS IN SELECTED INDUSTRIES

|  |  | Manufacturing 1968 | Mines, quarries and oil wells 1969 | Finance, insurance and real estate 1970 | Transportation, communication and other utilities 1971 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | 81.5 | 78.0 | 82.0 | 75.4 |
| Premium pay ${ }^{1}$ |  | 2.3 | 5.3 | 1.7 | 6.4 |
| Pay for time not worked ${ }^{2}$ |  | 7.4 | 7.4 | 8.2 | 9.1 |
| Other direct pay ${ }^{3}$ |  | 1.2 | 1.7 | 1.5 | 0.8 |
| Workmen's compensation |  | 0.9 | 2.3 | - | 0.7 |
| Unemployment insurance |  | 0.7 | 0.7 | 0.6 | 0.6 |
| Canada/Quebec pension plan |  | 1.1 | 1.0 | 1.1 | 1.0 |
| Benefit plans ${ }^{4}$ |  | 4.9 | 3.6 | 4.9 | 6.0 |
| TOTALS |  | 100.0 | 100.0 | 100.0 | 100.0 |
|  | \$ | 6,729 | 8,702 | 6,826 | 8,523 |

[^27]Table 6.27
ACTUAL AND DEFLATED WEEKLY WAGES - INDUSTRIAL COMPOSITE

| 1941 | 26.65 | 49.44 |
| :--- | ---: | :---: |
| 1951 | 50.04 | 56.86 |
| 1961 | 78.24 | 78.24 |
| 1962 |  | 79.58 |
| 1963 | 80.54 | 80.84 |
| 1964 | 83.27 | 82.54 |
| 1965 | 86.51 | 84.74 |
| 1966 |  | 91.01 |
| 1967 | 96.34 | 86.48 |
| 1968 | 102.83 | 89.11 |
| 1969 |  | 91.49 |
| 1970 | 109.88 | 93.73 |
|  | 117.63 | 97.78 |
| 1971 | 126.82 | 103.18 |
| 1972 |  | 137.64 |
| 1973 | 149.22 | 106.73 |

Table 6.28
AVERAGE HOURLY EARNINGS BY INDUSTRY - NOVEMBER 1973

|  | Hourly earnings |
| :--- | :---: |
|  | dollars |
| MINING, INCLUDING MILLING | 5.01 |
| MANUFACTURING: |  |
| Durable goods | 4.28 |
| Non-durable goods | 3.64 |
| CONSTRUCTION: |  |
| Building | 6.18 |
| Engineering | 5.56 |
|  |  |
| OTHER INDUSTRIES: | 4.84 |
| Urban transit | 3.43 |
| Highway and bridge maintenance | 2.34 |
| Laundries, cleaners and pressers | 2.41 |
| Hotels, restaurants and taverns |  |

Table 6.29
AVERAGE HOURLY EARNINGS IN MANUFACTURING ${ }^{1}$ AND MINIMUM HOURLY WAGES BY PROVINCE
$\left.\begin{array}{lcc}\hline & \begin{array}{c}\text { Average hourly earnings } \\ \text { in manufacturing } \\ \text { December 1973p }\end{array} & \begin{array}{c}\text { Minimum hourly wage } \\ \text { rates as at } \\ \text { July } 1,1974\end{array} \\ \hline & & \text { dollars per hour }\end{array}\right]$

Table 6.30
AVERAGE EARNINGS OF WOMEN AND MEN FULL-YEAR1 WORKERS BY OCCUPATIONAL GROUP, 1971

|  | Women | MenWomen's salary <br> as a per cent of <br> men's salary |  |
| :--- | :---: | :---: | :---: |
| Managerial | dollars | per cent |  |
| Professional and technical | 5,366 | 11,128 | 48.2 |
| Clerical | 7,276 | 12,104 | 60.1 |
| Sales | 4,610 | 7,226 | 63.8 |
| Service and recreation | 2,947 | 7,896 | 37.3 |
| Transportation and communication | 3,000 | 6,379 | 47.0 |
| Farmers, loggers and fishermen | 4,672 | 7,571 | 61.7 |
| Miners, craftsmen, etc. | 2 | 3,819 | - |
| Labourers | 3,966 | 8,077 | 49.1 |

1) Those workers who reported having worked 50 to 52 weeks.
2) Sample too small for reliable estimate.

## Chart 6.31

HOURS WORKED PER WEEK


Table 6.32
EMPLOYEES WITH TWO WEEKS PAID VACATION AFTER ONE YEAR OR LESS EMPLOYMENT
\(\left.$$
\begin{array}{lll}\hline & \begin{array}{c}\text { TYPE OF EMPLOYEE } \\
\text { Office }\end{array}
$$ <br>

\hline \& Non-office\end{array}\right]\)| per cent |
| :--- |
| 1963 |
| 1964 |
| 1965 |
| 1966 |

Chart 6.33
PERCENTAGE OF EMPLOYEES WHO RECEIVE TWO WEEKS PAID VACATION AFTER ONE YEAR OR LESS EMPLOYMENT, BY INDUSTRY


Chart 6.34
PERCENTAGE OF EMPLOYEES WHO RECEIVE NINE DAYS OR MORE PAID HOLIDAYS(1), BY INDUSTRY


Table 6.35
DISTRIBUTION OF SELECTED PERQUISITES BY INDUSTRY FOR OFFICE AND NON-OFFICE WORKERS
Disanpor

|  | All industries | Logging | Mining | Manufacturing | Transportation and communication | Trade | Finance | Service | Public administration |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | per cent |  |  |  |  |
| Participating in profit sharing plans (1969): |  |  |  |  |  |  |  |  |  |
| Office | 10 | 2 | 6 | 14 | 2 | 29 | 8 | 16 | - |
| Non-office | 8 | 2 | 3 | 6 | 1 | 31 | 2 | 3 | - |
| Participating in private pension plans (1969): |  |  |  |  |  |  |  |  |  |
| Office | 73 | 71 | 70 | 71 | 86 | 49 | 76 | 42 | 93 |
| Non-office | 71 | 51 | 71 | 68 | 891 | 691 | 54 | 63 | 97 |
| Receive notice of layoff resulting from technological change (1971): |  |  |  |  |  |  |  |  |  |
| Office | 7 | 29 | 2 | 9 | 23 | 4 | 1 | 8 | 2 |
| Non-office | 14 | 31 | 9 | 14 | 41 | 3 | - | 7 | 4 |
| Receives time and a half or more for overtime worked on normal working day (1969): |  |  |  |  |  |  |  |  |  |
| Office | 52 | 23 | 57 | 50 | 72 | 52 | 61 | 34 | 46 |
| Non-office | 78 | 82 | 87 | 89 | 801 | 721 | 61 | 58 | 73 |
| Regularly work shift work (1969): |  |  |  |  |  |  |  |  |  |
| Office | 49 | 20 | 42 | 30 | 73 | 10 | 46 | 41 | 90 |
| Non-office | 71 | 66 | 91 | 75 | 831 | 301 | 25 | 77 | 94 |

Table 6.36
EMPLOYEES COVERED BY COLLECTIVE AGREEMENTS, BY INDUSTRY

|  | Office | Non-office | Office | Non-office |
| :---: | :---: | :---: | :---: | :---: |
| Manufacturing | 7 | 67 | 8 | 72 |
| Mining | 1 | 78 | 7 | 76 |
| Transportation, communication and public utilities | 42 | 84 | 46 | 84 |
| Service | 1 | 30 | 19 | 37 |
| Trade | 3 | 16 | 3 | 22 |
| Finance and insurance | 1 | 0.2 | 2 | 9 |
| Logging | 1 | 1 | 28 | 77 |
| Public administration | 1 | 1 | 74 | 84 |

Table 6.37
EMPLOYEES COVERED BY COLLECTIVE AGREEMENTS, 1971, BY PROVINCE

|  | Office workers | Non-office workers | Special workers ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
|  |  | per cent |  |
| Newfoundland | 31 | 70 | 41 |
| Prince Edward Island | 19 | 41 | 12 |
| Nova Scotia | 24 | 59 | 23 |
| New Brunswick | 40 | 66 | 64 |
| Quebec | 29 | 68 | 68 |
| Ontario | 26 | 65 | 43 |
| Manitoba | 30 | 61 | 50 |
| Saskatchewan | 39 | 52 | 60 |
| Alberta | 34 | 57 | 51 |
| British Columbia | 25 | 70 | 60 |
| CANADA | 28 | 65 | 53 |

Chart 6.38
UNION MEMBERSHIP
Thousands
Thousands

(1) Data up to and including 1949 are as at December 31. In 1950 the reference date was moved ahead by one day to January 1. 1951. The deta on subsequent years are also as at January 1.

Table 6.39
UNION MEMBERSHIP BY TYPE OF UNION AND AFFILIATION, 1972

|  | Unions | Locals | MEMBERSHIP |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  | Number | Percentage |  |
|  |  |  |  |  |  |
| International unions | 99 | 4,914 | $1,411,852$ | 59.6 |  |
| AFL-CIO/CLC | 84 | 4,463 | $1,195,398$ |  | 50.4 |
| CLC only | 4 | 146 | 115,671 | 619 |  |
| AFL-CIO only | 5 | 8 | 100,164 |  | - |
| Unaffiliated unions | 6 | 297 | 1.2 |  |  |
| National unions | 68 | 5,278 | 892,691 | 37.7 |  |
| CLC | 19 | 2,862 | 401,098 |  | 16.9 |
| CNTU | 12 | 1,135 | 218,526 |  | 9.2 |
| CCU | 4 | 27 | 10,511 |  | 0.4 |
| Unaffiliated unions | 33 | 1,254 | 262,556 |  | 11.1 |
| Directly chartered local unions | 129 | 129 | 12,885 | 0.5 |  |
| CLC | 128 | 128 | 12,790 |  | 0.5 |
| CNTU | 1 | 1 | 95 |  | - |
| Independent local organizations | 141 | 141 | 53,213 | 2.2 |  |
| TOTALS | 437 | 10,462 | $2,370,641$ | 100.0 |  |

## Chart 6.40

UNION MEMBERSHIP BY INDUSTRY


Chart 6.41
TIME LOST FROM STRIKES AND LOCKOUTS(1)

$$
\begin{gathered}
\% \\
0.50-
\end{gathered}
$$

$$
\begin{gathered}
\% \\
-0.50
\end{gathered}
$$



INTRINSIC AND EXTRINSIC JOB SATISFACTION1 BY INDUSTRY, 1968

DEGREE OF SATISFACTION

|  | INTRINSIC |  |  |  | EXTRINSIC |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High | Medium | Low | Total | High | Medium | Low | Total |
|  | per cent |  |  |  |  |  |  |  |
| Automobile manufacture | 14.7 | 41.4 | 43.9 | 100.0 | 34.4 | 46.7 | 18.9 | 100.0 |
| Chemical | 20.3 | 51.4 | 28.3 | 100.0 | 31.4 | 43.1 | 25.5 | 100.0 |
| Electrical | 24.6 | 50.8 | 24.6 | 100.0 | 28.1 | 44.6 | 27.3 | 100.0 |
| Oil | 26.8 | 53.1 | 20.1 | 100.0 | 56.7 | 36.6 | 6.7 | 100.0 |
| Printing | 18.0 | 51.2 | 30.8 | 100.0 | 29.6 | 48.2 | 22.2 | 100.0 |
| Steel | 16.7 | 53.6 | 29.7 | 100.0 | 31.8 | 48.6 | 19.6 | 100.0 |
| TOTALS | 20.2 | 50.1 | 29.7 | 100.0 | 35.9 | 44.6 | 19.5 | 100.0 |

1) Intrinsic satisfaction was measured as a response to the question: "How satisfied are you with the following aspects of your job? the recognition you get from your job; your control over the pace and quality of your work; the extent to which you can use vour skills; the feeling of accomplishment from the work you are doing."

Extrinsic satisfaction was measured as a response to the question: "How satisfied are you with the following aspects of your job? the conditions under which you have to work (lighting, etc.); the opportunity for advancement; the amount of pay; the amount of security."

INDUSTRY

QUESTION: Which one of the following statements comes closest
to describing how you feel about your present job?

## RESPONSES OF EMPLOYEES: ${ }^{1}$

Job is interesting nearly all the time
Some dull stretches now and then
Most of job is dull and monotonous
Completely dull and monotonous

QUESTION: Taking into consideration all the things about your job, how satisfied or dissatisfied are you with it?

RESPONSES OF EMPLOYEES: ${ }^{2}$

| Very satisfied | 11.0 | 16.0 | 19.7 | 24.8 | 17.0 | 15.7 | 17.6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Fairly satisfied | 46.2 | 53.8 | 49.7 | 51.1 | 50.8 | 51.3 | 50.1 |
| Neither satisfied nor dissatisfied | 20.8 | 11.8 | 15.7 | 12.8 | 12.8 | 15.7 | 15.0 |
| Fairly dissatisfied | 15.0 | 12.5 | 9.1 | 8.9 | 14.3 | 11.2 | 12.0 |
| Very dissatisfied | 7.0 | 5.9 | 5.8 | 2.4 | 5.1 | 6.1 | 5.5 |

[^28]2) Total number of respondents $2,816$.

Income

Income and wealth give individuals command over goods and services, and convey social and economic status. Changes in these circumstances - or the prospect of future change - can alter the sense of well-being of individuals and hence the welfare of the nation. The level of income and wealth in a country, and the way it is distributed among individuals and families, across regions, between the sexes, and among the occupations (to cite only a few distributional aspects) are issues which have occupied peoples and governments for a long time.

In the broadest sense, everybody has income in one form or another. But this universality of income makes it necessary to define it carefully. The measurement of the level of "real" income and its distribution in a country is, of course, a crude approximation, and has to be qualified by conceptual and methodological considerations. The importance of measuring the level of, and changes in, real income has been recognized in the nearly universal application of national accounting systems. However, statistics on the distribution of income, by size, are not so generally available.

## DATA

Administrative data such as tax statistics usually suffer from weaknesses that make them only remote proxies for measuring the distribution of income in the context of general public welfare. Income for tax purposes may be much more restrictive than total consumer purchasing power. Moreover, tax statistics usually cover only a fraction of the population - those who either pay taxes, or are compelled to file a tax return - and tax-filing units are not necessarily closely related to decision-making units of consumers. ${ }^{1}$

Some countries have taken household surveys or included income questions in censuses to obtain data on income distribution by size. These lend themselves more readily to analyses with welfare implications. Canada is one of the few countries that has had a regular survey program over the last two decades. Surveys of Consumer Finances have, since 1951, produced comprehensive and conceptually consistent income distribution data for selected years.

There is a high correlation between income and wealth. Visible wealth also tends to confer on the

[^29]individual or family the more intangible elements of social prestige and position in the social hierarchy. In the final analysis, the distribution of the command over goods and services rests on both incomes and wealth. The Canadian Surveys of Consumer Finances have on four occasions obtained data on the assets and debts of families. These statistics, although selective in terms of the assets covered, and imperfect in terms of the quality of the data obtained, can indicate the broad distribution of Canadian wealth, and they are included in this chapter.

## INCOME CONCEPT

The distributions by size of money income before taxes are not an ideal way to measure the distribution of purchasing power among the population. Direct taxes, such as income taxes, have not been subtracted and, in the case of a progressive taxation system, pre-tax money income distributions overstate the degree of inequality. On the other hand, money income received is a fairly restricted concept and excludes income in kind such as home-produced food and fuel, imputed rents on owneroccupied homes, meals and free accomodation received in lieu of wages, as well as capital gains, gifts, lump-sum settlements from insurance policies, income tax or pension plan refunds, etc. ${ }^{2}$ On balance, if these items were included, the distributions might show more inequality. Although money income is thus imperfect for analyzing welfare, it is easier to collect data of uniform and acceptable quality on this basis than on a broader income concept, and it also represents by far the most important part of any broader income concept one would have ideally chosen.

## UNIT OF ANALYSIS

The income tables in this chapter are for all income recipients, and for all family units. For analysis with welfare implications, the family series is the most useful; it covers all related individuals living in the same household, and regards them as one consumer decisionmaking unit - a group of individuals dependent on a common or pooled income for major items of expenditure. Individuals living alone, or in households where they are unrelated to anybody else, form a separate statistical group, and in most of the following tables data for these unattached individuals are shown separately.

Some data on individual income recipients is presented because it is of interest in its own right, such as for analyzing differences in income and earnings of

[^30]males and females. And because families act as redistributors of income earned by some of their members, individual-income data can help explain the changes in family incomes.

## CHANGES IN THE INCOME DISTRIBUTION

The historical data illustrate the steady rise in average incomes over the 1951.71 period. Family incomes on average rose in current dollars by 50 per cent from 1951 to 1961, and by 95 per cent from 1961 to 1971. In real terms - after allowing for inflation - they increased by 32 per cent over the first decade, and by 46 per cent over the second decade. ${ }^{3}$ Behind these increases were such factors as the rising incomes of individuals, and the increasing number of married women taking jobs outside the home. In 1951, wives contributed only 4 to 5 per cent of the total family income; by 1961, their contribution had increased to 8 per cent, and in 1971, it was nearly 14 per cent. ${ }^{4}$ At the same time the contribution of children and other relatives decreased rather than increased.

Government transfer payments have increased substantially in absolute terms over the past two decades. However, as a proportion of total family income, transfer payments rose from 5.2 per cent in 1951 to 6.6 per cent in 1961 and have since declined, with the 1971 level estimated at 6.1 per cent of total family income. This suggests rising transfer payments have not been a major factor in raising the overall level of family incomes, although their impact on the incomes of some families may have been very important. Transfer payments have also been relatively more important to unattached individuals than to families; in 1971, 10.2 per cent of these individuals' income originated in transfer payments.

While average incomes have risen, there is little evidence that money income has become more equally distributed. Indeed, some analysis for the 1967-71 period seems to indicate that money income became more unequally distributed. These changes in inequality are, however, relatively minor, and in any event are based on inadequate data. Moreover, it is difficult to assess how family income distribution has been affected by changes in the size and nature of families in response to demographic and economic changes. For example, increases in old age pensions may act as an incentive for elderly couples or persons to set up their own households rather than live with relatives, thus creating an

[^31]illusion of lower family incomes. Local initiative program grants or student loans may do the same for young people. As family statistics are compiled in these series, both developments may (if substantial enough) lower the average income per family unit and increase inequality - although it probably is a "better" situation in a social welfare sense because it is preferred by most.

An intriguing question arises from the increased labour force activity of married women: How does it affect family income distribution? With smaller families and rising educational levels, the increasing numbers of working couples could increase the unequal distribution of family purchasing power.

It should be emphasized again that findings about widening income inequality are based on an analysis of money income only. It is possible that if the distribution of goods and services free of charge or at reduced cost (e.g. education, health services, subsidized housing) were taken into account and the analysis done on some other broader income concept, the results would be different.

## LOW INCOMES

Canada has no official poverty lines. For statistical purposes, low income cut-offs were developed to analyze the 1961 Census data. ${ }^{5}$ These cut-offs were set for family units of $1,2,3,4$ and 5 or more persons, at $\$ 1,500, \$ 2,500, \$ 3,000, \$ 3,500$, and $\$ 4,000$, respectively, in 1961. These limits have been adjusted for the rise in the Consumer Price Index, and the tabulations for 1967 and 1971 were produced on the bases of these adjusted limits. According to the data, the proportion of low income families had dropped from 18.4 per cent in 1967 to 15.9 per cent in 1971 , and the incidence of low income among unattached individuals decreased from 39 to 37.6 per cent over the same period. In spite of this minor improvement, the characteristics of the low income population have stayed largely the same. Among low income families, less than half had heads who did not work, and 22 to 24 per cent had heads who had a broken employment record during the year. ${ }^{6}$ The incidence of low income among families with female heads is very high and rising (from 36 per cent in 1967 to 44 per cent in 1971), and these families account for 15 to 20 per cent of all low income families.

It is important to emphasize that low income is here being defined in monetary terms. It must be recognized that other aspects of the level of living such as the state of health, the ability of people to participate in community life, and the prospects for providing

[^32]children with an adequate education, are all relevant in judging whether a person has an adequate income. These, however, are variables that are difficult or impossible to measure.

Comparisons over time suffer from the inadequate adjustment of the low income cut-offs. These limits when originally developed for 1961 were selected on the basis of the observation that urban families with incomes below these limits spent 70 per cent or more of their income on the basic necessities of food, shelter and clothing, and that all urban families (regardless of income and family size) spent about 50 per cent of their income on these items. Choosing 70 per cent as the "hardship ratio" in relation to the national average of 50 per cent reflected in a way an arbitrary decision, but recognized the principle that low income should be defined in relation to general living standards.

National family expenditure data for 1969 indicate that the overall ratio of expenditures on necessities to income has fallen from 50 to 42 per cent. Thus to retain relativity, the "hardship ratio" should be dropped and the income cut-offs raised. If this were done (and research on the problem is in progress) the number of families perceived to be in the low income group would be increased.

## REGIONAL INCOME DISPARITY

Persistent regional income disparities have been a continuing concern in Canadian politics and economics. These disparities can also be illustrated by the most recent average family income figures for 1971.7

|  | dollars |
| :---: | :---: |
| Canada | 10,368 |
| Atlantic provinces | 7,936 |
| Quebec | 9,919 |
| Ontario | 11,483 |
| Prairie provinces | 9,309 |
| British Columbia | 11,212 |

Underlying these differences are the varying 1971 income patterns found in rural areas compared with those in urban centres:

|  | dollars |
| :--- | ---: |
| All families . . . . . . . . | 10,368 |
| In metropolitan centres . . | 11,560 |
| In other cities ........ | 9,917 |
| In small urban areas . . . . | 9,145 |
| In rural areas . . . . . . . | 7,627 |

It is apparent that part of the regional income disparity can be explained by the different urbanization pattems in a province or region. It is interesting to speculate that family income differences by city size are largely due to differences in wage rates and employment opportunities, particularly for secondary eamers in the family. Of course, other factors such as tastes, customs, and work-leisure choices may also play a role. It is also

[^33]possible that, on the basis of a broader income concept than that of money income received, the differences by degree of urbanization would be reduced - families in rural and small urban areas usually have more income in kind than families in large cities.

## DISTRIBUTION OF WEALTH

Information on assets, debts and net worth for family units indicates that the composition of these items and the main relationships of the incidence and average value of assets and debts and various socioeconomic characteristics of families stay largely the same and change only slowly over time. In the spring of 1970 , as well as in earlier years for which data are available, the market value of homes accounted for more than half of the net worth of all Canadian families. Clearly, for home-owning families (approximately 65 per cent of all families), the equity in this property is even more important. Asset and debt patterns vary by income groups and age as well as other family characteristics. As expected, high incomes and high assets are closely associated; however, it should be noted that lower income families have fewer debts and that net worth may not be as unequally distributed as is generally believed.

An older study using asset and debt data collected in 1964 indicates that taking overall economic status into account, rather than income only, makes quite a difference for certain subgroups of low income families. ${ }^{8}$ Older couples in particular seem to have access to more resources than their current incomes indicate. On the other hand, large families among the low income population - most of them containing young children - have little in terms of net worth and thus have to depend completely on their inadequate income.

## CONCLUSIONS

In summary, this review of the distribution of money income and wealth among Canadians indicates that although considerable gains in real income have materialized during the last two decades and most Canadians are better off - their levels of living have risen - the relative distribution has changed very little. These conclusions are drawn with many reservations in view of measurement problems and data interpretation.

## CONCEPTS AND DEFINITIONS

The estimates presented here are based upon information collected from samples of Canadian house-

[^34]holds in the Survey of Consumer Finances. The concepts, definitions, and methods used in preparing these estimates have remained largely unchanged over the period covered here, although the frequency of the surveys has varied (since 1971 they have been conducted annually). The samples were selected by multi-stage probability sampling, within the framework of the Canadian Labour Force Sample. Sample sizes were as shown at the bottom of this page.

The estimates exclude families whose major source of income was military pay and allowances. Similarly, individual income distributions exclude all those individuals whose major source of income was military pay and allowances. Excluded are also inmates of institutions, persons residing on Indian reservations, residents of the Yukon and Northwest Territories, and Canadians temporarily abroad.

The terms used in this chapter are defined as follows:

Family means a group of individuals sharing a common dwelling unit and related by blood, marriage, or adoption.

Unattached individual refers to a person living by himself or in a household where he is not related to other household members.

Family unit designates, collectively, unattached individuals and families with two or more members. Table headings always specify whether families only, or families and unattached individuals, are included.

Farm and non-farm rest on a distinction between farming and other income. For purposes of these surveys an individual was considered to be a farmer if more than half of his income originated in net income from farming. A family containing at least one such individual was defined to be a farm family.

Total income of a unit consists of wages and salaries, net income from self-employment, investment income, government transfer payments, miscellaneous income (retirement pensions, annuities, scholarships, alimony, and other items not specified above). The income concept used in the surveys and the censuses approximates the monetary income received by private households as measured in the personal income series in the National Accounts.

Low income was delineated by the following income cut-offs:


Assets include cash on hand, bank deposits, other (savings) deposits, Government of Canada bonds, other bonds, publicly traded stocks, shares in investment clubs, other financial assets, miscellaneous (such as loans to other persons, oil royalties, patents, copyrights, etc.), market value of home, market value of vacation home, investment in other real estate, and value of automobiles.

Several groupings of the above asset items have been combined and are defined below:
(a) Deposit holdings: sum of the second and third items above.
(b) Bond holdings: sum of the fourth and fifth items above.
(c) Liquid asset holdings: sum of the first five items above.
(d) Financial asset holdings: sum of the first nine items above.
(e) Total asset holdings: sum of all the items above.
Debts include charge accounts and instalment debt, secured bank loans, other collateral bank loans, home improvement loans, other bank loans, loans from consumer loan companies, loans from Credit Unions and Caisses Populaires, other institutional loans, miscellaneous debts and loans, and mortgage debt on homes and vacation homes.

Aggregate items are defined as:
(a) Consumer debt: sum of the first, third, fifth, sixth and seventh items above.
(b) Personal debt: sum of the first nine items above.
(c) Total debt: sum of all the items above.

Net worth is defined as the difference between total assets and total indebtedness.

|  | 1951 | 1957 | 1961 | 1967 | $1969 / 70$ | 1971 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| All individuals | 8,799 | 12,314 | 16,299 | 37,985 | 17,608 | 42,717 |
| Families | 4,552 | 6,272 | 8,340 | 18,143 | 8,085 | 19,011 |
| Unattached individuals | 1,089 | 1,475 | 2,045 | 4,135 | 1,715 | 4,712 |
| All family units | 5,641 | 7,747 | 10,385 | 22,278 | 9,800 | 23,723 |

Table 7.1
INCOME RECIPIENTS BY INCOME GROUP AND SEX, 1971


Table 7.2
FAMILIES AND UNATTACHED INDIVIDUALS BY INCOME GROUP, 1971


## Table 7.3

DISTRIBUTION OF INCOME AMONG INDIVIDUALS1
$1951 \quad 1957 \quad 1961 \quad 1967 \quad 1971$ Male Female

| Mean income | $\$$ | 2,086 | 2,812 | 3,191 | 4,222 | 5,371 | 7,004 | 2,948 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Median income | $\$$ | 1,768 | 2,351 | 2,651 | 3,553 | 4,170 | 6,331 | 2,000 |
| Gini coefficient ${ }^{2}$ |  | 0.4322 | 0.4188 | 0.4271 | 0.4472 | 0.4843 | 0.4203 | 0.4874 |


| Upper limit of: 3 | dollars |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Lowest quintile | 510 | 790 | 816 | 1,200 | 1,225 | 2,000 | 720 |
| Second quintile | 1,410 | 1,900 | 2,050 | 2,628 | 2,916 | 5,002 | 1,560 |
| Middle quintile | 2,210 | 3,000 | 3,349 | 4,464 | 5,468 | 7,529 | 2,881 |
| Fourth quintile | 3,100 | 4,150 | 4,800 | 6,500 | 8,632 | 10,215 | 4,919 |

Shares of total income going to:3 per cent

| Lowest quintile | 3.2 | 3.3 | 3.1 | 2.7 | 2.0 | 2.8 | 1.9 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Second quintile | 9.2 | 9.5 | 8.9 | 8.4 | 7.2 | 10.0 | 7.8 |
| Middle quintile | 17.4 | 17.5 | 17.2 | 16.8 | 15.5 | 18.0 | 14.1 |
| Fourth quintile | 25.2 | 25.4 | 26.0 | 25.8 | 26.0 | 25.1 | 26.3 |
| Top quintile | 45.0 | 44.3 | 44.8 | 46.3 | 49.2 | 44.1 | 50.0 |

[^35]
## Table 7.4 <br> DISTRIBUTION OF INCOME AMONG FAMILIES AND UNATTACHED INDIVIDUALS1

ALL UNITS<br>1971<br>\(19511957196119671971 \begin{gathered}Unat- Families<br>tached\end{gathered}\)

| Mean income | $\$$ | 3,185 | 4,269 | 4,815 | 6,519 | 8,845 | 4,346 | 10,368 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Median income | $\$$ | 2,703 | 3,624 | 4,262 | 5,859 | 7,832 | 3,214 | 9,347 |
| Gini coefficient ${ }^{2}$ |  | 0.3904 | 0.3810 | 0.3679 | 0.3789 | 0.4001 | 0.4655 | 0.3433 |

dollars

Upper limit of: ${ }^{3}$

| Lowest quintile | 1,260 | 1,650 | 1,930 | 2,592 | 3,110 | 1,384 | 4,927 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second quintile | 2,310 | 3,040 | 3,586 | 4,824 | 6,275 | 2,199 | 8,044 |
| Middle quintile | 3,180 | 4,200 | 4,950 | 6,807 | 9,295 | 4,296 | 10,669 |
| Fourth quintile | 4,320 | 5,870 | 6,630 | $\mathbf{9 , 4 6 8}$ | 12,941 | 6,959 | $\mathbf{1 4 , 1 9 6}$ |

per cent

Shares of total income going to: ${ }^{3}$

| Lowest quintile | 4.4 | 4.2 | 4.2 | 4.2 | 3.6 | 2.9 | 5.6 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Second quintile | 11.2 | 11.9 | 11.9 | 11.4 | 10.6 | 8.0 | 12.6 |
| Middle quintile | 18.3 | 18.0 | 18.3 | 17.8 | 17.6 | 14.8 | 18.0 |
| Fourth quintile | 23.3 | 24.5 | 24.5 | 24.6 | 24.9 | 25.8 | 23.7 |
| Fifth quintile | 42.8 | 41.4 | 41.1 | 42.0 | 43.3 | 48.6 | 40.0 |

1) Farmers not included before 1967. This, however, has little effect on the comparability. All data shown are in current dollars.
2) The Gini coefficient measures the inequality of income distribution. lits value ranges from 0 to 1. The higher the value the grearer the degree of inequality.
3) Each quintile contains one fifth of all income necipients; for example, the lowest quintile contains the fifth of the recipients with the lowest incomes.

Chart 7.5
MEAN INCOME OF FAMILIES, UNATTACHED INDIVIDUALS, AND ALL INDIVIDUALS


Chart 7.6
UPPER LIMITS OF INCOME QUINTILES FOR FAMILIES AND UNATTACHED INDIVIDUALS


Chart 7.7
SHARES OF TOTAL INCOME GOING TO EACH QUINTILE OF FAMILIES AND UNATTACHED INDIVIDUALS


Chart 7.8
FAMILIES IN EACH INCOME QUINTILE BY MAJOR SOURCE OF INCOME, 1971


Chart 7.9
LORENZ CURVE(1) - INCOME OF FAMILIES AND UNATTACHED INDIVIDUALS, 1971

Cumulative proportion of total income


[^36] of income distribution as measured by this method.

Table 7.10 OCCURRENCE OF LOW INCOME1 FAMILIES AND UNATTACHED INDIVIDUALS

|  | PERCENTAGE OF ALL FAMILIES |  | PERCENTAGE OF ALL INDIVIDUALS |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1967 | 1971 | 1967 | 1971 |
| ALL UNITS | 18.4 | 15.9 | 39.0 | 37.6 |
| Province: |  |  |  |  |
| Newfoundland | 40.1 | 33.7 | 58.7 | 55.8 |
| Prince Edward Island | 52.5 | 34.0 | 59.8 | 55.1 |
| Nova Scotia | 30.2 | 23.0 | 49.5 | 44.1 |
| New Brunswick | 30.1 | 24.1 | 44.8 | 48.3 |
| Quebec | 19.9 | 17.7 | 42.0 | 39.6 |
| Ontario | 12.2 | 11.2 | 33.1 | 32.6 |
| Manitoba | 20.4 | 19.4 | 41.0 | 37.2 |
| Saskatchewan | 27.2 | 27.9 | 42.1 | 37.8 |
| Alberta | 21.8 | 17.9 | 36.6 | 35.9 |
| British Columbia | 15.9 | 12.0 | 41.2 | 41.9 |
| Area of residence: |  |  |  |  |
| Metropolitan centres ( $30,000+$ ) | 10.6 | 10.7 | 32.0 | 31.8 |
| Other cities ( $15,000-29,999$ ) | 15.6 | 15.7 | 50.9 | 42.8 |
| Small urban areas (less than 15,000) | 21.8 | 17.1 | 50.9 | 49.7 |
| Rural areas | 40.5 | 31.0 | 58.3 | 54.8 |
| Weeks worked by head in reference year: |  |  |  |  |
| None | 49.2 | 48.7 | 75.2 | 71.9 |
| 1. 9 weeks | 56.8 | 55.3 | 84.2 | 78.8 |
| $10 \cdot 19$ | 46.2 | 36.7 | 63.4 | 66.7 |
| 20-29 " | 41.3 | 28.8 | 43.6 | 37.5 |
| $30 \cdot 39$ | 30.1 | 19.9 | 28.1 | 25.1 |
| $40-49$ | $18.4$ | 11.4 | 21.5 | 10.3 |
| 50-52" | 10.1 | 7.3 | 14.0 | 11.1 |
| Age of head: |  |  |  |  |
| 14-24 years | 14.6 | 17.4 | 38.2 | 39.0 |
| 25-34 " | 14.9 | 12.4 | 12.3 | 15.8 |
| 35-44 " | 15.7 | 13.1 | 15.9 | 22.2 |
| $45-54$ | 14.6 | 11.9 | 25.4 | 26.8 |
| $55-64$ | 17.7 | 16.2 | 40.1 | 36.0 |
| $65-69$ | 31.1 | 26.7 | 56.0 | 50.2 |
| 70 years and over | 42.0 | 39.1 | 68.5 | 65.3 |
| Current employment status of head: ${ }^{2}$ |  |  |  |  |
| Employee | 8.7 | 7.3 | 21.1 | 21.3 |
| Self-employed | 34.3 | 25.5 | 41.9 | 34.4 |
| Not in labour force | 45.9 | 44.0 | 71.0 | 67.1 |
| Current occupation of head in reference week: ${ }^{2}$ |  |  |  |  |
| Managerial | 6.5 | 6.0 | 9.9 | 11.3 |
| Professional and technical | 3.3 | 3.3 | 21.1 | 16.3 |
| Clerical | 6.0 | 4.4 | 15.9 | 13.8 |
| Sales | 6.4 | 6.8 | 16.9 | 20.0 |
| Service and recreation | 15.8 | 14.5 | 40.2 | 41.5 |
| Transportation and communication | 14.3 | 10.5 | 13.9 | 16.1 |

Table 7.10
OCCURRENCE OF LOW INCOME1 FAMILIES AND UNATTACHED INDIVIDUALS - Concluded

|  | PERCENTAGE OF ALL FAMILIES |  | PERCENTAGE OF ALL INDIVIDUALS |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1967 | 1971 | 1967 | 1971 |
| Current occupation of head in reference week ${ }^{2}$ - |  |  |  |  |
|  |  |  |  |  |
| Farmers and farm workers | 52.4 | 43.5 | 51.4 | 63.5 |
| Loggers and fishermen | 38.3 | 32.1 | 55.2 | 31.5 |
| Miners | 8.0 | 7.8 | 16.6 | 16.5 |
| Craftsmen | 9.2 | 7.4 | 13.0 | 15.5 |
| Labourers | 21.0 | 17.3 | 26.2 | 29.3 |
| Did not work | 45.9 | 44.3 | 71.1 | 67.4 |
| Schooling of head: |  |  |  |  |
| None or some elementary | 37.0 | 43.4 | 62.7 | 73.4 |
| Completed elementary or some high school ${ }^{3}$ | 17.3 | 18.8 | 39.6 | 44.6 |
| Completed high school or some university ${ }^{4}$ | 8.3 | 7.5 | 29.2 | 26.5 |
| University degree | 3.5 | 3.8 | 9.3 | 15.0 |
| Farm: |  |  |  |  |
| Resident on farm | 48.7 | 37.3 | 61.7 | 56.7 |
| Not resident on farm | 15.5 | 14.1 | 38.0 | 36.8 |
| Major source of income: |  |  |  |  |
| No income | 100.0 | 100.0 | 100.0 | 100.0 |
| Wages and salaries | 9.0 | 6.2 | 18.2 | 15.7 |
| Net income from self-employment | 40.4 | 34.0 | 40.3 | 41.1 |
| Transfer payments | 75.8 | 75.7 | 88.6 | 87.6 |
| Investment income | 26.1 | 18.8 | 32.0 | 20.6 |
| Pensions | 26.1 | 14.1 | 26.8 | 8.2 |
| Miscellaneous income | 43.6 | 29.1 | 33.5 | 30.3 |
| Family characteristics: 37.6 |  |  |  |  |
| Unattached individual |  |  | 39.0 | 37.6 |
| Married couples only | 22.4 | 18.1 | ... | ... |
| Married couples with single children | 15.3 | 11.8 | . . | . . |
| Married couples with married children | 9.4 | 8.5 | .. . | . . |
| Married couples with relatives other than children | 14.7 | 13.1 | ... | . . . |
| Other families | 33.4 | 38.8 | . . | . . . |
| Number of children under 16 years: |  |  |  |  |
| No children | 19.3 | 16.9 | 39.0 | 37.6 |
| One child | 13.9 | 12.7 | ... | ... |
| Two children | 14.1 | 13.8 | . . | ... |
| Three children | 19.3 | 16.9 | . . . | ... |
| Four or more children | 25.7 | 22.3 | -. | . . |
| Sex of head: |  |  |  |  |
| Male | 16.2 | 13.7 | 30.2 | 31.9 |
| Female | 36.3 | 43.7 | 47.3 | 43.1 |

[^37]Table 7.11

## COMPARISON OF LOW INCOME 1 AND OTHER FAMILIES

|  | PERCENTAGE OF LOW INCOME FAMILIES |  | PERCENTAGE OF OTHER FAMILIES |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1967 | 1971 | 1967 | 1971 |
| CANADA TOTAL | 100.0 | 100.0 | 100.0 | 100.0 |
| Province: |  |  |  |  |
| Newfoundland | 4.4 | 4.3 | 1.5 | 1.6 |
| Prince Edward Island | 1.4 | 1.0 | 0.3 | 0.4 |
| Nova Scotia | 5.6 | 5.0 | 2.9 | 3.2 |
| New Brunswick | 4.4 | 4.1 | 2.3 | 2.4 |
| Quebec | 29.9 | 29.9 | 27.0 | 26.4 |
| Ontario | 24.4 | 26.1 | 39.5 | 39.3 |
| Manitoba | 5.3 | 5.7 | 4.7 | 4.5 |
| Saskatchewan | 7.2 | 7.4 | 4.3 | 3.6 |
| Alberta | 8.5 | 8.5 | 6.9 | 7.4 |
| British Columbia | 8.8 | 8.0 | 10.5 | 11.2 |
| Area of residence (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| Metropolitan centres (30,000 +) | 34.9 | 41.5 | 66.5 | 65.4 |
| Other cities (15,000 29,999) | 5.7 | 5.8 | 7.0 | 5.9 |
| Small urban areas (less than 15,000 ) | 14.3 | 12.9 | 11.6 | 11.9 |
| Rural areas | 45.1 | 39.8 | 15.0 | 16.8 |
| Weeks worked by head in reference year (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| None | 35.9 | 46.1 | 8.4 | 9.2 |
| 1. 9 weeks | 3.3 | 3.3 | 0.6 | 0.5 |
| $10 \cdot 19$ | 3.9 | 4.0 | 1.0 | 1.3 |
| $20.29$ | 6.0 | 6.3 | 1.9 | 3.0 |
| $30-39$ | 6.1 | 4.4 | 3.2 | 3.3 |
| $40 \cdot 49$ | 5.5 | 4.4 | 5.5 | 6.4 |
| 50-52" | 39.3 | 31.5 | 79.4 | 76.2 |
| Age of head (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| 14.24 years 25.34 | 4.2 | 7.1 | 5.5 | 6.4 |
| $25 \cdot 34$ | 17.1 | 17.7 | 22.1 | 23.8 |
| 35-44 " | 21.1 | 19.2 | 25.6 | 24.2 |
| $45 \cdot 54$ | 16.5 | 15.4 | 21.8 | 21.6 |
| $55 \cdot 64$ | 14.2 | 14.8 | 14.9 | 14.4 |
| $65.69$ | 8.5 | 8.5 | 4.2 | 4.2 |
| 70 years and over | 18.3 | 17.3 | 5.7 | 5.1 |
| Current employment status of head ${ }^{2}$ (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| Employee | 33.0 | 32.0 | 77.7 | 77.1 |
| Self-employed | 26.7 | 20.8 | 11.5 | 11.5 |
| Not in labour force | 40.4 | 47.1 | 10.7 | 11.4 |
| Current occupation of head in reference week ${ }^{2}$ (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| Managerial | 4.0 | 4.6 | 12.8 | 13.7 |
| Professional and technical | 1.7 | 2.2 | 11.2 | 12.5 |
| Clerical | 1.9 | 1.5 | 6.7 | 6.4 |

Table 7.11
COMPARISON OF LOW INCOME ${ }^{1}$ AND OTHER FAMILIES - Concluded

|  | PERCENTAGE OF LOW INCOME FAMILIES |  | PERCENTAGE OF OTHER FAMILIES |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1967 | 1971 | 1967 | 1971 |
| Current occupation of head in reference week ${ }^{2}$ (total) - |  |  |  |  |
|  |  |  |  |  |
| Sales | 1.5 | 1.9 | 4.9 | 4.9 |
| Service and recreation | 5.4 | 5.4 | 6.5 | 6.0 |
| Transportation and communication | 4.7 | 3.7 | 6.3 | 6.1 |
| Farmers and farm workers | 19.7 | 14.6 | 4.0 | 3.6 |
| Loggers and fishermen | 2.4 | 1.8 | 0.9 | 0.7 |
| Miners | 0.4 | 0.5 | 1.0 | 1.0 |
| Craftsmen | 14.2 | 12.8 | 31.7 | 30.6 |
| Labourers | 3.9 | 3.7 | 3.3 | 3.4 |
| Did not work | 40.3 | 47.1 | 10.7 | 11.2 |
| Schooling of head (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| None or some elementary | 41.1 | 16.4 | 15.8 | 4.0 |
| Completed elementary or some high school ${ }^{3}$ | 47.6 | 68.5 | 51.4 | 56.2 |
| Completed high school or some university ${ }^{4}$ | 10.0 | 13.4 | 24.7 | 31.4 |
| University degree | 1.3 | 1.8 | 8.0 | 8.4 |
| Farm (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| Resident on farm | 23.1 | 18.4 | 5.5 | 5.9 |
| Not resident on farm | 76.9 | 81.6 | 94.5 | 94.1 |
| Major source of income (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| No income | 1.7 | 2.0 | .- | -- |
| Wages and salaries | 38.1 | 30.4 | 87.5 | 87.9 |
| Net income from self employment | 21.4 | 13.5 | 7.1 | 5.0 |
| Transfer payments | 33.7 | 49.1 | 2.4 | 3.0 |
| Investment income | 2.4 | 2.5 | 1.5 | 2.1 |
| Pensions | 2.0 | 1.4 | 1.3 | 1.6 |
| Miscellaneous | 0.7 | 0.9 | 0.2 | 0.4 |
| Family characteristics (total) : | 100.0 | 100.0 | 100.0 | 100.0 |
| Unattached individual | -• | ... | ... | ... |
| Married couple only | 27.7 | 29.0 | 21.7 | 24.8 |
| Married couple with single children | 51.3 | 43.9 | 63.8 | 62.4 |
| Married couple with married children | 2.5 | 2.2 | 5.4 | 4.5 |
| Married couple with relatives other than children | 0.9 | 0.9 | 1.2 | 1.2 |
| Other families | 17.7 | 24.0 | 8.0 | 7.2 |
| Number of children under 16 (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| No children | 41.7 | 44.2 | 39.4 | 41.2 |
| One child | 13.4 | 15.9 | 18.7 | 20.8 |
| Two children | 15.2 | 16.1 | 18.9 | 19.1 |
| Three children | 12.3 | 11.4 | 11.6 | 10.7 |
| Four or more children | 17.5 | 12.4 | 11.4 | 8.2 |
| Sex of head (total): | 100.0 | 100.0 | 100.0 | 100.0 |
| Male | 85.2 | 79.6 | 94.1 | 95.0 |
| Female | 14.8 | 20.4 | 5.9 | 5.0 |

For footnotes see Table 7.10.

Table 7.12
ASSETS AND DEBTS, BY INCOME GROUP, 1970

per cent

All families and unattached individuals:

| Under $\$ 1,000$ | 21.1 | 7.1 | 3.1 | 65.6 | 3.2 | 100.0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\$ 1,000-\$ 1,999$ | 23.2 | 5.2 | 2.8 | 66.9 | 1.9 | 100.0 |
| $2,000-2,999$ | 24.4 | 7.2 | 3.6 | 61.9 | 2.9 | 100.0 |
| $3,000-3,999$ | 23.1 | 6.8 | 9.7 | 56.7 | 3.7 | 100.0 |
| $4,000-4,999$ | 25.0 | 7.2 | 6.5 | 56.4 | 4.8 | 100.0 |
| $5,000-5,999$ | 23.9 | 7.0 | 7.7 | 55.7 | 5.7 | 100.0 |
|  | 18.5 | 7.0 | 6.2 | 62.0 | 6.2 | 100.0 |
| $6,000-6,999$ | $1600-1,2$ | 5.7 | 5.8 | 66.3 | 5.9 | 100.0 |
| $10,000-14,999$ | 14.1 | 8.5 | 7.2 | 64.4 | 5.8 | 100.0 |
| $15,000-24,999$ | 18.2 | 12.5 | 10.4 | 54.3 | 4.7 | 100.0 |
| 25,000 and over | 18.2 | 28.0 | 16.5 | 34.6 | 2.7 | 100.0 |
|  |  |  |  |  |  |  |
| TOTALS | 18.1 | 9.7 | 7.9 | 59.3 | 5.0 | 100.0 |

Families:

| Under $\$ 1,000$ | 16.8 | 6.3 | 4.6 | 68.1 | 4.1 | 100.0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\$ 1,000-\$ 1,999$ | 15.7 | 5.7 | 1.4 | 74.1 | 3.2 | 100.0 |
| $2,000-2,999$ | 19.4 | 4.8 | 3.0 | 69.7 | 3.1 | 100.0 |
| $3,000-3,999$ | 20.9 | 6.6 | 8.9 | 60.1 | 3.5 | 100.0 |
| $4,000-4,999$ | 21.3 | 7.0 | 7.2 | 60.0 | 4.5 | 100.0 |
| $5,000-5,999$ | 21.7 | 6.4 | 5.1 | 61.7 | 5.2 | 100.0 |
| $6,000-6,999$ | 16.5 | 6.2 | 6.4 | 65.3 | 5.6 | 100.0 |
| $7,000-9,999$ | 13.8 | 5.2 | 5.6 | 6.5 | 5.9 | 100.0 |
| $10,000-14,999$ | 13.3 | 7.9 | 6.9 | 66.2 | 5.8 | 100.0 |
| $15,000-24,999$ | 17.4 | 12.1 | 10.7 | 55.0 | 4.7 | 100.0 |
| 25,000 and over | 17.5 | 25.8 | 16.6 | 37.3 | 2.8 | 100.0 |
|  |  |  |  |  |  |  |
| TOTALS | 16.0 | 9.3 | 7.9 | 61.7 | 5.0 | 100.0 |

See footnotels) at end of table.

Table 7.12
ASSETS AND DEBTS, BY INCOME GROUP, 1970 - Concluded

## DEBTS BY TYPE OF DEBT AS A PER CENT OF TOTAL ASSETS

| 1969 income group | Consumer debt | Other personal debt ${ }^{2}$ | Mortgage on home and vacation home | Total debt | Net worth ${ }^{3}$ as a \% of total assets | Average net worth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |



[^38]
## Chart 7.13 <br> FAMILIES AND UNATTACHED INDIVIDUALS REPORTING SELECTED ASSETS, BY INCOME GROUPS, 1970



Chart 7.14
COMPOSITION OF TOTAL ASSETS OF FAMILIES AND UNATTACHED INDIVIDUALS, 1970


Chart 7.15
COMPOSITION OF TOTAL DEBTS OF FAMILIES AND UNATTACHED INDIVIDUALS, 1970


## Chart 7.16

FAMILIES AND UNATTACHED INDIVIDUALS REPORTING SELECTED DEBTS, 1970


Table 7.17
LIQUID ASSETS AND CONSUMER DEBTS OF FAMILIES, BY AGE OF HEAD AND INCOME GROUP, 1970

FAMILY INCOME 1969

| Under | $\$ 3,000-$ | $\$ 5,000-$ | $\$ 7,000-$ | $\$ 10,000-\$ 15,000$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\$ 3,000$ | 4,999 | 6,999 | 9,999 | 14,999 | and over | Total


dollars

| Average liquid assets, holders only: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 34 years and under | 451 | 652 | 848 | 1,122 | 1,631 | 3,944 | 1,280 |
| 35-44 years | 1,336 | 1,192 | 1,056 | 1,667 | 2,153 | 7,495 | 2,461 |
| 45-54 | 1,367 | 3,456 | 2,213 | 2,992 | 3,799 | 8,649 | 4,060 |
| 55-64 | 2,804 | 3,717 | 4,119 | 4,355 | 5,858 | 14,730 | 5.791 |
| 65 years and over | 3,098 | 6,260 | 9,935 | 9,785 |  |  | 7,464 |
| All families | 2,207 | 3,184 | 2,901 | 2,493 | 3,305 | 9,445 | 3,588 |
| Average liquid assets, all families: |  |  |  |  |  |  |  |
| 34 years and under | 335 | 561 | 805 | 1,091 | 1,612 | 3,944 | 1,209 |
| 35-44 years | 997 | 1,012 | 979 | 1,574 | 2,099 | 7,460 | 2,299 |
| 45-54 | 1,078 | 2,924 | 2,026 | 2,829 | 3,691 | 8,436 | 3,782 |
| 55-64 | 2,508 | 3,330 | 3,849 | 4,200 | 5.727 | 14,126 | 5,465 |
| 65 years and over | 2,752 | 5,942 | 9,479 | 9,650 | 14,9 |  | 6,978 |
| All families | 1,835 | 2,816 | 2,717 | 2,391 | 3,229 | 9,287 | 3,365 |

Table 7.17
LIQUID ASSETS AND CONSUMER DEBTS OF FAMILIES, BY AGE OF HEAD AND INCOME GROUP, 1970 - Concluded

|  | FAMILY INCOME 1969 |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under $\$ 3,000$ | $\begin{gathered} \$ 3,000= \\ 4,999 \end{gathered}$ | $\begin{array}{r} \$ 5,000 \\ 6,999 \end{array}$ | $\begin{gathered} \$ 7,000- \\ 9,999 \end{gathered}$ | \$10,000-\$15,000 <br> 14,999 and over |  |
|  |  |  |  | dollars |  |  |
| A verage consumer debt, debtors only: |  |  |  |  |  |  |
| 34 years and under | 1,074 | 1,341 | 1,690 | 2,055 | 1,848 2,648 | 1,833 |
| 35-44 years | 1,284 | 1.259 | 1,367 | 1,536 | 1,669 2,625 | 1,657 |
| 45-54" | 1,062 | 1,727 | 1,356 | 1,485 | 1,517 2,193 | 1,606 |
| 55-64 " | 969 | 1,363 | 1,097 | 1,453 | 1,512 2,431 | 1,493 |
| 65 years and over | 442 | 499 | 1,088 | 725 | 1,351 | 819 |
| All families | 1,006 | 1,315 | 1.451 | 1,714 | 1,668 2,425 | 1,650 |
| Average consumer debt, all families: |  |  |  |  |  |  |
| 34 years and under | 601 | 948 | 1,275 | 1,561 | 1,344 1,962 | 1,337 |
| 35.44 years | 683 | 748 | 816 | 968 | 1,104 1,715 | 1,038 |
| 45-54 " | 375 | 953 | 814 | 910 | 1,031 1,363 | 973 |
| 55-64 " | 320 | 532 | 465 | 837 | 731 1,113 | 686 |
| 65 years and over | 54 | 91 | 310 | 220 | 433 | 172 |
| All families | 320 | 631 | 841 | 1,113 | 1,076 1,458 | 944 |

Table 7.18
CUMULATIVE SHARES OF TOTAL ASSETS, 19701


## Table 7.19 <br> COMPOSITION OF TOTALINCOME OF FAMILIES AND UNATTACHED INDIVIDUALS



Table 7.20
COMPOSITION OF TOTAL FAMILY INCOME

|  | ALL FAMILIES |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1951 | 1957 | 1961 | 1967 | 1971 |
|  |  |  |  | per cent |  |
|  |  |  |  |  |  |
| Wages and salaries | 78.8 | 78.9 | 78.9 | 80.9 | 81.7 |
| Net income from self-employment | 10.7 | 11.1 | 9.8 | 8.4 | 5.9 |
| Transfer payments | 5.2 | 6.1 | 6.6 | 6.1 | 6.1 |
| Investment income | 4.3 | 2.9 | 3.4 | 3.1 | 4.3 |
| Miscellaneous | 1.1 | 1.0 | 1.3 | 1.6 | 2.0 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table 7.21
FAMILY INCOME, 1970

| Income group | Canada | New-foundland | Prince <br> Edward <br> Island | Nova Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia | Yukon | Northwest Territories |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under \$1,0001 | 2.6 | 3.2 | 2.4 | 2.5 | 2.8 | 2.3 | 2.1 | 3.7 | 6.1 | 3.8 | 2.4 | 3.6 | 9.1 |
| \$ 1,000-\$ 3,999 | 14.4 | 31.0 | 28.4 | 21.0 | 22.4 | 14.8 | 10.3 | 18.1 | 25.0 | 15.3 | 12.8 | 9.9 | 22.1 |
| 4,000 - 6,999 | 20.2 | 28.3 | 29.1 | 27.5 | 27.7 | 23.4 | 16.8 | 21.1 | 23.4 | 18.9 | 17.2 | 11.4 | 14.4 |
| 7,000- 9,999 | 24.1 | 18.9 | 20.9 | 23.8 | 24.3 | 24.7 | 24.2 | 24.4 | 20.9 | 23.2 | 25.0 | 17.5 | 16.8 |
| 10,000-14,999 | 24.8 | 13.2 | 13.0 | 17.6 | 16.4 | 22.2 | 29.1 | 22.3 | 17.1 | 25.1 | 27.8 | 34.6 | 23.1 |
| 15,000 - 19,999 | 8.3 | 3.3 | 3.8 | 4.7 | 4.0 | 7.5 | 10.5 | 6.4 | 4.5 | 8.2 | 9.0 | 15.7 | 9.7 |
| 20,000 - 24,999 | 2.8 | 1.1 | 1.1 | 1.4 | 1.2 | 2.5 | 3.5 | 1.9 | 1.4 | 2.7 | 2.9 | 4.6 | 3.1 |
| 25,000 and over | 2.8 | 1.0 | 1.3 | 1.5 | 1.2 | 2.6 | 3.5 | 2.1 | 1.6 | 2.8 | 2.9 | 2.7 | 1.7 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Average income \$ | 9,600 | 6,680 | 6,989 | 7,858 | 7,479 | 9,260 | 10,661 | 8,646 | 7,328 | 9,475 | 10,019 | 11,194 | 8,449 |
| Number of families '000 | 5,076.1 | 108.2 | 24.4 | 181.5 | 140.7 | 1,357.4 | 1,883.8 | 235.8 | 216.3 | 382.7 | 534.7 | 4.0 | 6.6 |

## Consumption of Goods and Services 8

Although the income of the family or the individual is the single most important means of acquiring goods and services, it is by no means the only one. In the first place a large (and increasing) part of total consumption in society is financed by the public purse. Secondly, goods and services produced in the household add to real consumption but are excluded from the "market calculus".

The long-run economic growth in Canada has resulted in a general expectation of a continuing increase in total consumption of goods and services. At the same time there has also been a distinct shift towards the acceptance of "welfare state" ideology, reflected in increasing government expenditures on health, education, and social welfare.

Personal expenditure is clearly related to income. However, the issue of who benefits from collective goods and services is not so clearly understood. Certain kinds of public expenditures have redistributional objectives that favour lower income groups - for example, social welfare services and subsidized housing. But who, or which specific social group, benefits from expenditures on such items as higher education, highway construction, and National Parks? Public facilities are, of course, available to all in principle, but in reality there is probably a distinct bias in terms of actual use. Airports are one example. Their effective use is limited to those who can afford air travel.

The uncritical acceptance that increasing consump. tion per head is an evident measure that society is "better off" is now being seriously questioned. Some of these questions address themselves to the concern of the global effect on society and the environment of the continuous increase of the production of goods and services. There has also been a shift away from considering consumption in straightforward economic terms (the market value of goods and services) to evaluating consumption in relation to quality, range of choice, and access to private and public goods and services. 1

Part of this new emphasis can be traced to the awareness that it is not the market value of the goods and services per se that reflect social well-being, but the satisfaction and services derived from them. In the real world, consumption is a total experience rather than an "inventory" of separate items. For example, the satisfaction and services derived from the motor car cannot be divorced from traffic congestion, pollution, nor the pleasure of motoring in the countryside. Clearly, the conceptual image of what is a desirable way of measuring consumption and the practical means of attaining it are worlds apart.

Nevertheless, recent statistical research on the development of "net social benefit" measures are begin-

[^39]ning to open the way for conceptual frameworks for more pertinent measures of consumption. ${ }^{2}$ One of the major concerns in this "new accounting" is how to evaluate the benefits obtained from the consumption of collective goods and services. We have recently witnessed a substantial increase in public expenditures. In the 1950s, expenditures at all levels of government accounted for about 26 per cent to 28 per cent of Gross National Product; the proportion steadily increased through the 1960s so that by 1971 it had reached 37 per cent. Part of these expenditures merely redistribute income in the form of transfer payments - e.g. pensions, family allowances, unemployment benefits, welfare assistance, and interest on public debt. These, of course, complement the general household expenditure. Transfer payments to persons, excluding interest on public debt, have accounted for about 20 to 25 per cent of total government expenditures in the past decade. What remains may properly be called "collective expenditure". The latter can be further distinguished between expenditures that directly benefit individuals, such as health care, education and social services, and those for the common good, such as administration, defence, and economic infrastructure. From the data it is evident that the most rapid increases in expenditure were those associated with direct benefit to the individual. Expenditures on health, education and social welfare accounted for about 30 per cent of the total in 1956; by 1970 they had reached 50 per cent of the total.

A further step in the attempt to measure "real" consumption in society is to evaluate the functional role of the family in relation to both its production and consumption of goods and services. More than 90 per cent of Canadians live in family units characterized by "dependence on a common or pooled income for the major items of expense and living in the same dwelling". ${ }^{3}$ Clearly, with pooled income and expenditure a family unit can enjoy a wider range of goods and services than they could as individuals.

What is perhaps more important is the "nonmarket" goods and services derived from the "unpaid" services of family members. On a conceptual level one can view the family as a production unit which combines time, effort and market goods to produce more basic commodities such as clean homes, cooked meals, homemade furniture, and flower gardens. In this context, new goods and services are produced which complement and, in some cases, substitute for goods and services that are purchased.

[^40]Statistical information in this section is expressed exclusively in terms of expenditure. On theoretical grounds one would prefer to measure consumption in actual quantities of goods - e.g. pounds of butter, square feet of living space, number of haircuts - with perhaps adjustments for quality. ${ }^{4}$ But that would require a different approach from the conventional measures of consumption. In fact most people keep records of expenditure, rather than quantities consumed, thus expenditure is utilized as a convenient proxy for actual consumption. The problem of relative price changes is somewhat offset by converting current dollar values to "constant dollars", which simply adjusts all price changes to those in some given base year. Unfortunately, the adjustment becomes increasingly unreliable the further the data are from the "benchmark" year.

Data in this chapter have been selected to illustrate three basic themes: (i) 20-year trends (1951-71) of aggregate personal expenditure in the economy as provided by National Accounts; (ii) the growth of public goods and services from public expenditure accounts of federal, provincial and municipal governments; and (iii) detailed expenditure and distributional aspects of household expenditure from sample surveys.

## PERSONAL EXPENDITURE

The most comprehensive picture of personal expenditure is derived from the National Accounts. These estimates are largely built upon information from retail trade, and revenue of personal services. They also include, however, some imputed estimates of "goods in kind", e.g. farm goods produced and consumed in farm households, and "imputed rent of owner-occupied home"; never theless, the line is drawn at consumption of goods and services produced in the household. Some notable observations are the increasing share of personal income that is claimed for the public purse - which in 1951 was just under 10 per cent, and by 1971 climbed to 20 per cent - and the very slight decline of the share of after-tax expenditures for the necessities of life (food, shelter, clothes). Within the latter group of expenditures there has been a decrease in the share of income spent on food with an almost equal compensatory increase in shelter, while the share spent on clothing has remained practically unchanged. If we consider that in a highly urbanized society we may have to add transport and communication to the traditional "necessities", then we find in fact that the share of these expenditures has slightly increased over the past 20 years. In absolute

[^41]terms, however, there has been a real increase per capita expenditure at constant prices in all categories of expenditure - suggesting that we have more goods and services in total.

## GOVERNMENT EXPENDITURE

Statistics of government expenditure are drawn from administrative records that show departmental spending, and which in some cases can be further identified with specific programs. The classification of these data by function is somewhat arbitrary. In the first place, government activity is generally interrelated, which makes it difficult to separate the varied activities by function, e.g. education in defence expenditure. Secondly, there is an element of ambiguity. For example, do the expenditures on sewers belong to health or public works? Nevertheless, it is useful to classify expenditure by function to highlight certain trends. It is quite significant that the most rapid increase in collective expenditure is in the fields of health, education, and social welfare, which undoubtedly reflect some basic underlying changes in the social structure.

## HOUSEHOLD EXPENDITURE

The statistics on household surveys of families permit one to analyze in greater detail the expenditure patterns and distributional characteristics. These complement the estimates on personal consumption in the National Accounts but are not directly comparable due to conceptual differences.

Household surveys on family expenditure have been conducted on a continuous basis since 1953; time series, however, are only possible for the years 1964, 1967 and 1969 due to changes in coverage and definitions from the earlier surveys. The 1964 and 1967 surveys were based on a sample of 11 cities. ${ }^{5}$ The 1969 national survey was designed to include as part of the sample the same cities as the earlier surveys.

The 1969 survey was the first family expenditure survey of national scope since 1948 and was designed to provide information for families and unattached individuals living in private households in all areas of Canada, both urban and rural, except the Yukon and the Northwest Territories.

## CONCEPTS AND DEFINITIONS

There are some major conceptual differences between family expenditure derived from household surveys, and personal expenditure on consumer goods and services from the National Accounts. Apart from

[^42]differences in geographic coverage and the more restrictive private-dwelling coverage for the household surveys, the main conceptual differences arise due to the following:

1. The National Accounts include in personal expenditure certain imputed items, e.g. farm products consumed directly in farm households, imputed rent from owner-occupied dwellings, and estimated services rendered by banks and other financial institutions without specific charge. (These at least are fairly well defined, and in total they added $\$ 3,720$ million to personal expenditure in 1969, i.e. 7.8 per cent of the total).

2 . Govermment hospital and medical insurance premiums, and fees for motor vehicle licences and permits are included with direct taxes in the National Accounts rather than in personal expenditure on consumer goods and services.
3. Operating expenses of associations of individuals or private non-profit corporations such as universities, churches, etc., are incorporated in personal expenditure on consumer goods and services. In family
expenditure, only the fees of university and other non-profit organizations are included.

## FAMILY

The spending unit is defined as a group of persons dependent on a common or pooled income for the major items of expense, and living in the same dwelling, or as one financially independent individual living alone. Never-married sons or daughters living with their parents are considered as part of their parents' spending unit. In the great majority of cases, the members of spending units of two or more are related by blood, marriage or adoption and are thus consistent with the "economic family" definition employed in surveys of family income - "a group of individuals sharing a common dwelling unit and related by blood, marriage or adoption". (The definition of family employed by the population census restricts the family to husband, wife and any unmarried children living with them, or one parent and unmarried children.) It should be noted that according to the "economic family" definition, unrelated persons living in the same household would be counted as unattached individuals, whereas in the expenditure survey it is possible for two or more unrelated persons to comprise one spending unit.

Chart 8.1
GROSS NATIONAL EXPENDITURE(1) PER PERSON


Chart 8.2
DISPOSITION OF TOTAL PERSONAL INCOME


Table 8.3
PERSONAL EXPENDITURE ON CONSUMER GOODS AND SERVICES

|  | 1952 | 1962 | 1972 | 1952 | 1962 | 1972 |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |

1) includes, for example, jewellery, toilet articles, haircuts, and financial, legal and other services.

## Chart 8.4

MAJOR ITEMS OF EXPENDITURE ON CONSUMER GOODS AND SERVICES


Table 8.5
EXPENDITURE OF ALL LEVELS OF GOVERNMENT, BY FUNCTION1

| Function | 1956 | 1961 | 1966 |
| :--- | :--- | ---: | ---: | ---: |
|  |  |  |  |

1) Consolidated accounts of gross expenditure by federal, provincisland municipal governmentre
2) Consolidated accounts of gross expenditure by federal, provincia/ and municipal governments consumed from those that are collectively financed and individually consumed. Clearly, this distinction is not pure, as there are many shades of grey, with perhaps defence expenditure as the extreme case of the $A$ group and veterans' persion as the extreme example of the $B$ group. Health expenditure is probably a good example of the grey aree, with public hea/th clearlly being collectively consumed and medicare being individually consumed.
3) Rounded to the nearest million dollara.
4) Interest payments on public debt are excluded.

Chart 8.6
EXPENDITURE OF ALL LEVELS OF GOVERNMENT, BY FUNCTION(1)


[^43]
## Table 8.7 <br> PATTERNS OF FAMILY EXPENDITURE 1

196419671969

|  |  | per cent |  |
| :---: | :---: | :---: | :---: |
| Food | 21.0 | 19.5 | 17.6 |
| Shelter ${ }^{2}$ | 16.3 | 15.5 | 15.6 |
| Living quarters | 13.0 | 12.5 | 12.9 |
| Water, power and fuel | 3.3 | 2.9 | 2.6 |
| Household operation | 4.0 | 4.0 | 3.8 |
| Furnishings and equipment | 4.5 | 4.4 | 4.6 |
| Household appliances | 1.2 | 1.1 | 1.1 |
| Other | 3.2 | 3.2 | 3.4 |
| Clothing | 8.7 | 8.5 | 8.1 |
| Personal care | 2.3 | 2.3 | 2.3 |
| Medical and health care | 3.9 | 3.4 | 3.2 |
| Smoking and alcoholic beverages | 4.0 | 4.0 | 3.6 |
| Travel and transportation | 12.4 | 11.6 | 12.1 |
| Automobile (and truck) | 10.4 | 9.5 | 9.6 |
| Purchase | 5.4 | 4.1 | 4.4 |
| Operation | 5.0 | 5.3 | 5.2 |
| Other | 1.9 | 2.2 | 2.4 |
| Recreation | 3.3 | 3.6 | 3.6 |
| Reading | 0.6 | 0.7 | 0.6 |
| Education | 0.9 | 0.9 | 1.0 |
| Miscellaneous expenses | 1.3 | 1.3 | 1.4 |
| Total current consumption | 83.1 | 79.6 | 77.5 |
| Personal taxes | 9.2 | 12.9 | 15.4 |
| Security | 4.8 | 5.1 | 4.7 |
| Gifts and contributions | 2.8 | 2.4 | 2.3 |

[^44]Table 8.8
PATTERNS OF FAMILY EXPENDITURE 1

|  |  | 1964 | 1967 | 1969 |
| :---: | :---: | :---: | :---: | :---: |
| FAMILY CHARACTERISTICS: |  |  |  |  |
| Average family size ${ }^{2}$ |  | 3.8 | 3.8 | 3.6 |
| No. of children under 16 |  | 1.4 | 1.4 | 1.3 |
| No. of adults 16-64 |  | 2.2 | 2.3 | 2.2 |
| No. of adults 65 and over |  | 0.2 | 0.2 | 0.2 |
| No. of full-time earners |  | 1.1 | 1.1 | 1.0 |
| Age of head |  | 45.0 | 44.6 | 44.1 |
| Net income before taxes | \$ | 7,065 | 9,061 | 10,417 |
| Other money receipts | \$ | 146 | 212 | 225 |
| Net change in assets and liabilities | \$ | 280 | 507 | 329 |
|  |  | per cent |  |  |
| Homeowners |  | 51 | 53 | 55 |
| Car or truck owners |  | 71 | 75 | 78 |
| With wife employed full-time |  | 15 | 16 | 16 |
|  |  |  | dollars |  |
| AVERAGE DOLLAR EXPENDITURE: ${ }^{3}$ |  |  |  |  |
| Food |  | 1,476 | 1,722 | 1,835 |
| Shelter ${ }^{4}$ |  | 1,147 | 1,368 | 1,621 |
| Living quarters |  | 915 | 1,110 | 1,351 |
| Water, power and fuel |  | 232 | 259 | 271 |
| Household operation |  | 282 | 349 | 397 |
| Furnishings and equipment |  | 313 | 385 | 475 |
| Household appliances |  | 85 | 101 | 116 |
| Other |  | 228 | 284 | 359 |
| Clothing |  | 614 | 749 | 845 |
| Personal care |  | 161 | 207 | 238 |
| Medical and health care |  | 277 | 299 | 336 |
| Smoking and alcoholic beverages |  | 279 | 354 | 376 |
| Travel and transportation |  | 870 | 1,028 | 1,252 |
| Automobile (and truck) |  | 733 | 838 | 998 |
| Purchase |  | 379 | 366 | 455 |
| Operation |  | 354 | 472 | 544 |
| Other |  | 137 | 190 | 253 |
| Recreation |  | 230 | 314 | 376 |
| Reading |  | 44 | 59 | 65 |
| Education |  | 64 | 79 | 104 |
| Miscellaneous expenses |  | 89 | 118 | 144 |
| Total current consumption |  | 5,846 | 7,031 | 8,063 |
| Personal taxes |  | 650 | 1,135 | 1,607 |
| Security |  | 336 | 453 | 491 |
| Gifts and contributions |  | 200 | 212 | 244 |
| TOTAL EXPENDITURE |  | 7,031 | 8,831 | 10,406 |

1) See footnote 1, Table 8.7
2) Family size: Family size or "year-equivalent persons" was computed by dividing the total number of weeks during which family members belonged to the unit in the survey year by 52 weeks. In this way, part-year members were counted as fractions of a year-equivalent person.
3) Average per family: The average dollar expenditure per family was based on all familias in each class, whether or not they reported purchases of a particular item.
4) See footnote 2, Table 8.7.

Table 8.9
SHELTER EXPENSES OF TENANTS AND HOMEOWNERS, MAJOR CITIES1


Chart 8.10
PATTERNS OF FAMILY(1) EXPENDITURE BY FAMILY INCOME QUINTILE, 1969


1) For the definition of the family see Concepts and Definitions.
2) Includes life insurance, unemployment insurance and pension plans.

Chart 8.11
PATTERNS OF FAMILY(1) EXPENDITURE BY PROVINCE, 1969


1) For the definition of the family see Concepts and Definitions.
2) Includes life insurance, unemployment insurance and pension plans.

Chart 8.12
FAMILIES(1) REPORTING SELECTED EXPENDITURES, BY INCOME GROUP, 1969


1) For the definition of the family see Concepts and Definitions

Chart 8.13
FAMILIES REPORTING EXPENDITURE ON FOOD WHILE ON VACATION, 1969(1)


1) For the definition of the family see Concepts and Definitions.

Chart 8.14
EXPENDITURE(1) ON SELECTED ITEMS BY FAMILY(2) INCOME QUINTILE, 1969(3)


1) As a percentage of current consumption which is total family expendirure excluding personal taxes, security and contributions.
2) For the definition of the family see Concepts and Definitions.
3) In urban centres of 30,000 or more population.

## Quality of the Environment <br> 9

Man's knowledge of his planet has evolved slowly through a succession of errors; typical of the strange beliefs that once flourished was the idea that the earth was supported by a giant turtle. Today, we are subject to more subtle misconceptions - about the capacity of our environment to absorb punishment, about the limitlessness of our natural resources, about our place in the complex mosaic of elements and life forms that make up our physical world.

Abundance tends to breed careless use of resources, whereas scarcity creates consciousness of the need for prudent management. Availability of fresh air and clean water was taken for granted as long as supplies were regarded as unlimited. Virtually inexhaustible wealth in other global resources, such as land, forests, fish and wildlife, has also been assumed until fairly recently.

Today a general consensus has emerged that many world problems hinge primarily on the fragile balance between the limited resources of the physical world, and the aspirations of a growing population for higher standards of living and thus greater demands on those resources and the whole environment. While the impact of a highly technological economy has certainly contributed in the past to damaging the environment, faith now is frequently pinned on the ability of new technology to save the world from ultimate destruction, by the provision of techniques for re-use, recycling or regeneration of resources and the control of pollutants.

The most visible environmental problems have been those of air and water pollution. Other direct pollutants, such as noise and radioactivity, have also received attention. Recently, the problems resulting from resource consumption have become more noticeable, especially in connection with non-renewable energy supplies. A third area of environmental concern, which in some senses is allencompassing, is the problem of land use, in its widest meaning - that is, how human activities are distributed and concentrated throughout the biosystem. Interest has been focussed on the problems of density in urban areas, although the biological impact of such large-area activities as forestry, agriculture, transport, and hydro-power generation may soon be seen to be of equal importance.

## INFORMATION ON THE ENVIRONMENT

In developing statistics on the "state of the environment", careful consideration must be given to providing suitable and objective information for different segments of the public that will have different interests, needs and concerns. There will be regional, local, age grouping, occupational, socictal, industrial, even political variants. Some are worried by noise, by automobile congestion, by unsightly garbage dumps, by
plumes from factory chimneys, by scum in streams and harbours, and so on. Others are concemed about real or potential lack of purity of drinking water, of bathing waters, of city air, of the fish they sometimes eat. Some are affected by direct effects of environmental degradation on renewable resources, such as fish, wildlife, forest and agriculture products.

To assist in the judicious management and protection of the environment, it is therefore necessary to collect and analyze data that can be used to assess environmental quality not only in relation to scientific guidelines, but also in relation to public perceptions and objectives.

Concern with the environment as a single system may be recent, but many statistics that have environmental relevance have been collected for a long time. The problem is that these series have been developed for separate and specific purposes, and thus integrating them often proves difficult if not impossible. For example, we have a series on acreage planted under different kinds of crops, from the Agricultural Census; elsewhere, there is some information about the area of land covered by urban and residential development. We have no integrated series, however, showing how these land uses relate; farmland may be lost to urban uses in one area, marginal farms may revert to forest in a second, while in a third, forest land may be brought under cultivation. We have little idea of the interrelation of these various changes. Similar problems arise in studying other parts of the environment.

The environment, whether air, land or water, is evidently very complex and may contain many contaminants, some with much more potential danger than others. This makes the aggregation of environmental data very difficult. While it is of value to state, for instance, that the average concentration of sulphur dioxide at a particular location in a particular city is $X$ parts per million over a period of a year, it is important to recognize that there are peaks in concentration, lasting for a few hours or less, and their frequency may be of much more consequence to the health of the people or other living things. Consequently, difficult methodological issues must be resolved before acceptable series can be developed.

It is important that, when statistics of environmental quality are presented, the purpose for which they are to be used is clearly understood. Unless this is so, misunderstanding will be the result.

In whichever way the natural environment is considered, there is a great need for more data for a wide variety of purposes. Researchers need very detailed information, managers and policymakers need information at an intermediate level of detail, while the public needs summary knowledge of the state of the environment, and how it is changing.

In collecting and processing this mass of data, there are special problems which are less germane in other areas of statistics. Most importantly, statistics on the environment are distinguished by the peculiar importance in them of geography and of actual physical location on the face of the earth.

The increased need for environmental statistics requires perhaps new perceptions on the part of both the data-gatherers and users; new breakdowns, such as by watersheds and ecological regions, will be needed. This requirement may, however, lead to organizational problems since ecosystems extend beyond the boundaries of any one province or country and the systems can only be studied and described as entities if the political units that contain them agree to collect and share information, using common standards and definitions.

Whereas the emphasis has been on "hard" statistics in the past, the new demands may be for an extension of the "soft" data dealing with new social values, perceptions and judgments. In the envisaged new effort, it is apparent that any reworking of traditional data must be accompanied by the production of new series. Such work can only move forward in step with the development of useful organizing concepts and models, intellectual toois that are essential in such a vast and formless field as the environment.

Economists have made much use of the basic concepts of accounting as a way of relating stocks and flows of economic goods. There is technical discussion at present on the possibility of using an accounting framework to look at environmental problems. One possible approach is to extend existing economicaccounts systems to include environmental effects which have not heretofore been treated as economic costs or benefits. Eventually, the effect of an investment in a specific industry might be analyzed for both conventional economic value and environmental costs and benefits.

Consideration is currently also being given to the production of accounts based on the principle of conservation of matter, which would trace the flow of specific materials between different producers and users. The essential complication of these systems is that they have no single unit of account, no universal exchange medium or "dollar", that would be equally meaningful for all environmentally important materials (for example, a pound of mercury and a pound of nitrogen are vastly different in their possible environmental impacts). This problem drastically increases the practical difficulties of developing and managing such statistical systems.

It is apparent that the evident complexity of the physical environment suggests that the development of
environmental indicators would be a useful endeavour. However, a great deal of development work lies ahead, particularly since existing data and statistical series are neither comprehensive nor appropriately integrated from the environmental point of view. The following tables are consequently selected at this stage merely for purposes of illustrating some of the areas of environmental concerns.

## DATA

The data selected exemplify the problems previously discussed; with few exceptions, these data are by-products of other work and the only geographic breakdowns available are on the basis of political jurisdiction.

Sulphur dioxide and suspended particulate levels in the air over commercial areas are shown for a number of Canadian cities. These cities have been selected from those with monitoring stations in commercial urban locations, reporting their results to Environment Canada.

The relative contributions of different sources of the major air pollutants are also illustrated.

The monitoring network for radioactive fallout was set up in response to public concern about the dangers of nuclear bomb testing in the atmosphere. Here is a case where an environmental problem can be seen receding in magnitude. However, the long-term effects of the fallout could significantly mar this apparent improvement.

Data on the production and use of energy have been included because they impinge in many ways upon our daily life. They are summarized from a detailed publication that traces energy use and production in Canada by province and economic sector, and have been corrected for inter-industry exchanges and losses.

Because of its major social importance, housing is covered separately in Chapter 10. Information on urban density has been included here because it relates more closely to urban structures and services than to housing per se. Density of settlement is calculated on a census tract basis. Thus, small concentrations of high density, such as single high-rise apartments, may not show up if they are distributed throughout otherwise low-density areas.

Major land uses in Canada, together with a time series on acreage of improved agricultural land ("improved" means that woodlots and other uncultivated non-grazing lands, which happen to be part of farm properties, have been excluded from the measurement), are included because of their importance as underlying environmental factors.

Table 9.1
SULPHUR DIOXIDE LEVELSIN AIR, SELECTED CITIES1

|  | 1970 | 1971 | 1972 |
| :---: | :---: | :---: | :---: |
|  | parts per hundred million |  |  |
| Halifax |  |  | 3.25 |
| Saint John | . |  | 4.40 |
| Montreal, 1125 Ontario St. | 5.43 | 4.06 | 3.70 |
| Montreal, 1212 Drummond St. | 9.94 | 8.01 | 6.61 |
| Hull | 2.38 | 1.65 | 1.33 |
| Ottawa | 4.46 | 2.15 | 3.03 |
| Toronto, 67 College St. | 7.10 | 5.17 | 2.97 |
| Toronto, City Hall |  | 4.10 | 2.05 |
| Hamilton | 3.72 | 2.91 | 1.65 |
| London | . |  | . 58 |
| Sarnia |  | $2.65$ | 1.93 |
| Windsor | 3.64 | 4.25 |  |
| Winnipeg | . . | . | . 97 |
| Regina | . | . | . 03 |
| Edmonton | . | . | . 10 |
| Calgary |  | . | . 45 |
| Vancouver |  | $\cdots$ | 1.89 |
| Victoria | . | . | 1.53 |

1) Annual arithmetic means: figure is estimated when date are not avallable for a complete year. Readings are for stations in commercial downtown core areas.

## Chart 9.2

## SULPHUR DIOXIDE LEVELS IN AIR, SELECTED CITIES (1)



1) Annual arithmetic means; figure is estimated when date are not available for a complete year. Aeadings are for stations in commercial downtown core areas.

* National Ambient Air Objectives - maximum accoptable levels.

Table 9.3
SUSPENDED PARTICULATE LEVELS IN AIR, SELECTED CITIES 1

|  | 1970 | 1971 | 1972 |
| :---: | :---: | :---: | :---: |
|  | micrograms per cubic metre ${ }^{2}$ |  |  |
| St. John's | . . | - | 54 |
| Fredericton | 33 | 36 | . . |
| Saint John | 61 | 54 | 46 |
| Moncton | 77 | 54 | 54 |
| Quebec | . | . | 83 |
| Chicoutimi | . | . | 75 |
| Montreal | . | 111 | 132 |
| Hull | 77 | 73 | 69 |
| Ottawa | 109 | 92 | 75 |
| Toronto | 110 | 99 | 92 |
| Hamilton | 140 | 142 | 133 |
| Peterborough | . | 61 | . . |
| London | . | 125 | 95 |
| Sarnia | . | 105 | 98 |
| Windsor | 142 | 122 | 91 |
| Sudbury | . | 110 | . |
| Sault Ste. Marie | . | 55 | 66 |
| Thunder Bay | . | 69 | 60 |
| Winnipeg | 76 | 73 | 75 |
| Regina | 66 | 57 | 49 |
| Saskatoon | . | 72 | 68 |
| Moose Jaw | . | $\ldots$ | 48 |
| Prince Albert | . | . | 51 |
| Edmonton | 80 | 60 | 66 |
| Calgary | 117 | 105 | 85 |
| Red Deer | 71 | 64 | 58 |
| Medicine Hat | 67 | 57 | 57 |
| Lethbridge | 34 | 41 | 37 |
| Vancouver | . | . . | 77 |
| Victoria | 52 | 59 | 44 |

Chart 9.4
SUSPENDED PARTICULATE LEVELS IN AIR, SELECTED CITIES(1)

I) A nnual geometric means; figure is estimated when data are not available for a complete vear. Readings are for stations in commercial downtown core areas.

* National Ambient Air Objectives - maximum acceptable levels.

Chart 9.5
AIR POLLUTANT EMISSIONS BY SOURCE; 1970 ESTIMATES


Chart 9.6
SETA RADIOACTIVITY IN PRECIPITATION AND IN SURFACE AIR


1) pico - one trillionth (10-12): micro - one millionth (10-6); curie - unit of radioactivity.

## Chart 9.7

RADIOACTIVE FALLOUT CONTENT IN WHOLE MILK


## Chart 9.8

PERCENTAGE OF ENERGY SUPPLIED BY DIFFERENT SOURCES


Chart 9.9
ENERGY CONSUMPTION, BY SECTOR OF ECONOMY


## Chart 9.10

DISTRIBUTION OF POPULATION BY DENSITY OF SETTLEMENT, 1971


Chart 9.11
LAND USE BY REGION, 1968


Chart 9.12
AREA OF IMPROVED FARMLAND (1)


1) Total area of all census farms fagricultural holdings of one acre or more with some income from sales of agricultural productsl.

## Housing 10

Besides influencing the individual's physical, social and psychological development, housing may also be regarded as a source of status, as a major personal or family asset, and as an element of family and community life and of the local environment.

Although the adequacy of housing is a major concern, defining adequate housing in a measurable way is very difficult. For example, substandard dwellings might be defined nowadays as those without plumbing. But that is only one kind of housing inadequacy, and an uncommon one. Other attributes such as the safety and sanitation of the dwelling, and the state of maintenance of essential household amenities, can also affect the adequacy of a home.

Another statistic frequently used to indicate the general quality of housing is the density of occupation - the number of persons per room. The census defines a crowded household as having more than one person per room. But this is necessarily a rough-andready measure; it does not take account of variations in the age and sex of household members, or the size of rooms, or of regional and local customs and standards.

## DATA

Most of the data selected are taken from the annual Central Mortgage and Housing Corporation publication, Canadian Housing Statistics, ${ }^{1}$ and the Statistics Canada publication, Household Facilities and Other Characteristics. In addition, some unpublished CMHC and Statistics Canada data have been used.

Data on households, together with statistics on the total housing supply, are designed to provide the background against which the rest of the chapter is set. While most Canadians live in private households, a small percentage of the population is resident in "collectives", such as military camps and homes for the aged. Collective dwellings are not discussed further in this chapter.

Information is given on trends in the type of living accommodations, showing, for example, the changing mix of housing starts for Canada, urban and other areas, and the provinces. Housing starts are reported here because they are a good indicator of housing trends. They show quite clearly the rising proportion of apartments started and the relative decline of single detached dwelling starts - though it should be remembered that the definition of an apartment building is rather broad. Although a common feature of many of our metropolises is the high-rise apartment building, CMHC and Statistics Canada do not separate high-rises from other apartment buildings in their statistics. However, data are available on apartment building comple-

[^45]tions by size of buildings (expressed as the number of dwelling units) for census metropolitan areas, from 1970 onwards. Data showing that the federal and provincial governments, under cost-sharing arrangements, are now financing an increasing number of housing projects for low-income groups are also presented.

The statistic commonly adopted to indicate housing availability is the vacancy rate. This information, however, is available on an annual or semi-annual basis only for apartment buildings of six or more units in census metropolitan areas. Comprehensive national information on vacancy rates and rental prices for all types of rental accommodation, along with price and quality of units being offered for sale, would enhance our ability to make judgments on the availability of housing for various groups in society.

Tenure is an important characteristic of the housing stock since both types of tenure (rental and ownership) represent differences in security and potential capital assets, as well as influencing residential mobility. These data show that there has been a slight decline in the proportion of homeownership in the last few years.

Information on the quality of services in dwellings, on crowding, and on the age of dwellings, is related, where possible, to household characteristics.

## CONCEPTS AND DEFINITIONS

Household refers to a person or group of persons occupying one dwelling. It usually consists of a family group, with or without lodgers, employees, etc. However, it may consist of two or more families sharing a dwelling, of a group of unrelated persons, or of one person living alone.

Collectives include hotels, large lodging houses, military camps, lumber camps, homes for the aged, religious institutions, etc. In certain instances, there may be private households occupying structurally separate dwellings on the grounds of the institution or camp (e.g. separate family living quarters for staff members). Such households are included in the count of private households.

Dwelling means a set of living quarters which (a) is structurally separate and (b) has a private entrance either from outside the building or from a common hall, lobby, vestibule or stairway inside the building. The entrance must be one that can be used without passing through anyone else's living quarters.

Housing start is the beginning of construction work on a building, usually when the concrete has been poured for the whole of the footing around the structure, or an equivalent stage where a basement will not be part of the structure.

Housing completion is the stage at which all the construction work on a dwelling unit has been performed, although in some circumstances a dwelling may be counted as completed where up to 10 per cent of the proposed work remains to be done.

A single detached dwelling or single house is a building containing only one dwelling unit, which is completely separated on all sides from any other dwelling or structure. A semi-detached dwelling is one of two dwellings located side-by-side in a building not adjoining another structure. A row house is a dwelling unit in a row of three or more attached dwellings separated by common walls extending from ground to roof. An apartment is a dwelling unit in a multi-dwelling structure other than a double house or row house; it includes structures commonly known as triplexes, double duplexes, and quadruplexes.

The definitions of census metropolitan, major urban, and rural areas, are the same here as in Chapter 1.

The number of rooms in a dwelling is determined by counting only those enclosed areas within a dwelling that are used for, or suitable for, year-round living purposes, including rooms occupied by servants, lodgers or members of lodging families. Kitchens are included in this count. Bathrooms, clothes closets, pantries, halls, and rooms used solely for business purposes, are not included. Kitchenettes are counted if the normal kitchen functions are carried out therein and if they contain at least a sink and some cooking facilities such as a range or stove.

Low income cut-off points are as defined in Chapter 7.

The period of construction indicates the completion date of the original construction without taking into consideration any minor or major modifications carried out subsequently.

## Table 10.1

POPULATION IN PRIVATE HOUSEHOLDS

|  | 1951 | 1961 | 1966 | 1971 |
| :--- | :---: | :---: | :---: | :---: |
|  |  | thousands |  |  |
| Number of persons in private households | 13,572 | 17,612 | 19,406 | 21,034 |
| Number of private households | 3,409 | 4,555 | 5,180 | 6,041 |

Table 10.2
DWELLING STARTS IN METROPOLITAN AND MAJOR URBAN AREAS
Single

detached \begin{tabular}{c}
Semi-detached <br>
and duplex

 Row 

Apartment <br>
and other
\end{tabular} Total

1956:

| CANADA | 90,620 | 9,441 | 2,263 | 24,987 | 127,311 |
| :--- | :--- | :--- | :--- | :--- | :--- |

1961:1

| Metropolitan Areas | 30,397 | 8,389 | 1,154 | 31,129 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Major Urban Areas | 9,045 | 676 | 131 | 2,204 |  |
| CANADA | 76,430 | 11,650 | 1,864 | 35,633 | 125,577 |

1966:2

| Metropolitan Areas | 36,309 | 4,947 | 4,154 | 44,986 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Major Urban Areas | 5,812 | 752 | 125 | 1,916 |  |
| CANADA | 70,642 | 7,281 | 5,000 | 51,551 | 134,474 |

1971:2

| Metropolitan Areas | 41,851 | 8,712 | 12,634 | 85,240 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Major Urban Areas | 8,091 | 1,394 | 1,059 | 7,315 |  |
| CANADA | 98,056 | 13,751 | 15,659 | 106,187 | 233,653 |
| 1) Dsta on 1956 Census Area definitions. <br> 2) Data on 1966 Census Area definitions. |  |  |  |  |  |

## Chart 10.3

## DWELLING STARTS, BY TYPE OF UNIT



Table 10.4
DWELLING STARTS, BY PROVINCE

|  | Single <br> detached | Semi- <br> detached | Row | Apartments | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| 1960-62: | 5,446 | - | - | 4 | 5,450 |
| Newfoundland | 1,165 | 202 | 127 | 65 | 1,559 |
| Prince Edward Island | 8,467 | 246 | 794 | 1,410 | 10,917 |
| Nova Scotia | 5,426 | 136 | 50 | 553 | 6,165 |
| New Brunswick | 4,339 | 17,963 | 1,284 | 34,370 | 102,956 |
| Quebec | 73,592 | 10,147 | 2,869 | 48,124 | 134,732 |
| Ontario | 10,577 | 822 | 448 | 3,652 | 15,499 |
| Manitoba | 1,689 | 462 | 108 | 1,458 | 14,717 |
| Saskatchewan | 25,435 | 1,620 | 1,090 | 7,324 | 35,469 |
| Alberta | 25,908 | 726 | 1,137 | 9,295 | 37,066 |
| British Columbia |  |  |  |  |  |
|  |  |  |  |  |  |
| 1969-71: | 7,199 | 416 | 596 | 590 | 8,801 |
| Newfoundland | 2,489 | 186 | 28 | 211 | 2,914 |
| Prince Edward Island | 10,940 | 1,044 | 646 | 7,398 | 20,028 |
| Nova Scotia | 7,362 | 857 | 665 | 2,892 | 11,776 |
| New Brunswick | 49,403 | 6,052 | 5,721 | 81,137 | 142,313 |
| Ouebec | 83,221 | 16,947 | 21,647 | 126,286 | 248,101 |
| Ontario | 10,102 | 2,189 | 2,465 | 16,738 | 31,494 |
| Manitoba | 7,346 | 616 | 192 | 2,599 | 10,753 |
| Saskatchewan | 24,714 | 2,878 | 6,781 | 30,142 | 64515 |
| Aberta | 44,433 | 3,765 | 4,694 | 41,009 | 9,901 |
| British Columbia |  |  |  |  |  |

Chart 10.5
DWELLING STARTS, BY TYPE OF UNIT AND BY PROVINCE, 1971


## Chart 10.6

APARTMENT BUILDING COMPLETIONS BY SIZE OF BUILDING, FOR SELECTED METROPOLITAN AREAS (TOTAL FOR 1970 \& 1971)


Table 10.7
LOW INCOME UNITS BUILT UNDER THE NATIONAL HOUSING ACT, BY TYPE OF SUBSIDY1

| Section 40 (NHA) | 8,597 | 8,901 | 9,074 | 8,553 | 10,561 | 10,211 | 16,888 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Section 44 (NHA) | 1,045 | 3,688 | 7,341 | 14,135 | 25,105 | 36,044 | 50,984 |
| TOTALS | 9,642 | 12,589 | 16,415 | 22,688 | 35,666 | 46,255 | 67,872 |
| 11 Rent |  |  |  |  |  |  |  |

1) Rental subsidies for low income groups under the National Housing Act (NHA) may take two forms. Under Section 40 of the NHA, federal-provincial partnership arrangements for financing rental projects provide for the sharing of operating losses on the basis of $75 \%$ by the federal government and $25 \%$ by the provincial partner. Arrangements may be made with any province, municipality or public housing agency under Section 44 of the Act for the contribution of up to $50 \%$ of the operating loss of providing housing accommodation for individuals and families of low income. Originally this activity related to loans for public housing projects financed under Section 43, and in 1967 included certain projects financed under Section 15.

## Table 10.8

NATIONAL HOUSING STOCK, BY TYPE OF DWELLING

|  | 1951 | 1961 | 1971 |
| :--- | :---: | :---: | :---: |
| Single detached | 66.7 | per cent |  |
| Single attached | 7.0 | 65.4 | 59.4 |
| Apartment or flat | 26.0 | 8.9 | 11.3 |
| Mobile home | $0.3^{1}$ | 0.4 | 28.2 |
|  |  |  | 1.1 |
| TOTALS | 100.0 | 100.0 | 100.0 |

1) Percentage classified as "other"; there was no separate class for mobile home in the 1951 Census.

Chart 10.9
TYPE OF DWELLING IN SELECTED CENSUS METROPOLITAN AREAS(1), 1971

(1) Mobile home population is less than $1 \%$ in these cities.

Table 10.10
APARTMENT VACANCY RATES,1 FOR CENSUS METROPOLITAN AREAS²

|  | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | percentage of total apartment units |  |  |  |  |  |  |
| Calgary | 8.0 | 5.8 | 1.6 | 1.3 | 1.7 | 5.8 | 10.7 |
| Edmonton | 6.5 | 2.8 | 2.8 | 2.8 | 3.7 | 5.7 | 6.3 |
| Halifax | 5.4 | 3.8 | 2.8 | 0.5 | 0.5 | 2.6 | 4.1 |
| Hamilton | 1.4 | 1.5 | 1.4 | 1.9 | 1.3 | 2.9 | 2.2 |
| Montreal | . | 4.5 | 1.2 | 5.0 | 7.6 | 8.2 | 7.2 |
| Ottawa-Hull | 9.1 | 7.6 | 2.1 | 1.5 | 1.7 | 2.2 | 2.1 |
| Quebec | - | 4.8 | 2.2 | 2.2 | 2.8 | 3.8 | 4.8 |
| Toronto | 1.6 | 1.0 | 1.2 | 1.5 | 2.7 | 2.8 | 3.0 |
| Vancouver | 4.0 | 1.5 | 1.0 | 1.3 | 1.2 | 2.7 | 4.1 |
| Windsor | - | $\cdots$ | 1.1 | 1.6 | 0.6 | 0.9 | 2.1 |
| Winnipeg | 4.9 | 4.1 | 1.7 | 1.6 | 1.6 | 2.6 | 3.5 |

[^46]Table 10.11

## OCCUPIED DWELLINGS BY TENURE, BY REGION ${ }^{1}$

|  | Atlantic Provinces | Quebec | Ontario | Prairie Provinces | British Columbia | Canada |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | thousands of dwellings |  |  |  |  |  |
| Owned: |  |  |  |  |  |  |
| 1956 | 325 | 526 | 1,005 | 549 | 280 | 2,685 |
| 1966 | 345 | 678 | 1,328 | 661 | 381 | 3,393 |
| 1971 | 349 | 784 | 1.453 | 669 | 422 | 3,678 |
| Rented, cash: |  |  |  |  |  |  |
| $1956$ | $71$ | 500 |  | 173 | 98 | 1,176 |
| $1966$ | $95$ | $691$ | $519$ | 217 | 145 | 1,667 |
| 1971 | 110 | 726 | 684 | 286 | 208 | 2,014 |
| Rented, other: ${ }^{2}$ |  |  |  |  |  |  |
| 1956 | 4 | 19 | 31 | 45 | 10 | 113 |
| 1966 | - | 15 | 22 | 17 | 7 | 66 |
| 1971 | - | 26 | 26 | 16 | 10 | 87 |

1) By definition the number of households is equal to the number of occupied dwellings. See Concepts and Definitions for further information.
These figures do not always add to totals because of the problem of small sample size. For more detailed information see Section VI of the "Household Facilities and Equipment Survey, May 1971". Catalogue 64202.
2) Includes dwellings: (a) occupied rent free or under share cropping agreements; (b) for which rent was paid in kind or by services; (c) for which rent also includes rent for business premises.

## Chart 10.12

OCCUPIED DWELLINGS BY TENURE


Table 10.13
OCCUPIED DWELLINGS LACKING SELECTED AMENITIES, BY REGION

|  | Canada | Atlantic Provinces | Quebec | Ontario | Prairie Provinces | British Columbia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | percentage of all occupied dwellings |  |  |  |  |  |
| Piped running water:1 |  |  |  |  |  |  |
| 1956 | 18.2 | 34.2 | 5.0 | 11.5 | 46.3 | 5.7 |
| 1966 | 5.5 | 14.6 | 1.0 | 2.4 | 16.2 | 2.3 |
| 1971 | 2.7 | 9.6 | 0.3 | 1.1 | 8.0 | 1.3 |
| Exclusive use of bath or shower: |  |  |  |  |  |  |
| 1956 | 30.5 | 56.4 | 26.9 | 18.9 | 51.8 | 12.4 |
| 1966 | 11.5 | 31.7 | 10.5 | 5.4 | 20.0 | 4.3 |
| 1971 | 7.4 | 27.1 | 5.8 | 3.6 | 12.3 | 3.3 |
| Exclusive use of flush toilet: |  |  |  |  |  |  |
| 1956 | 26.9 | 50.0 | 11.1 | 18.2 | 58.0 | 14.2 |
| 1966 | 7.5 | 25.0 | 1.8 | 4.6 | 21.6 | 3.9 |
| 1971 | 4.6 | 17.5 | 0.6 | 2.4 | 12.0 | 2.2 |

1) Means piped running water inside the dwelling.

Table 10.14
HOUSEHOLDS LACKING CERTAIN AMENITIES, BY INCOME LEVEL, 19681

|  | Total | PROPORTION WITHOUT <br> Running <br> water |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | thousands | Bath <br> facilities | Flush <br> toilets |  |



Table 10.16
CROWDING IN FAMILIES WITH CHILDREN LIVING AT HOME, BY FAMILY INCOME, 1968

|  | Families with children <br> living at home ${ }^{1}$ | Percentage with <br> more than one <br> person per room |
| :--- | :---: | :---: |
| Under $\$ 4,000$ | thousands |  |
| $\$ 4,000-\$ 9,999$ | 333 | 26.3 |
| $10,000-14,999$ | 1,590 | 21.8 |
| 15,000 and over | 421 | 17.8 |
| TOTALS | 142 | 16.3 |
| 1/ One-family households, made up of married couples with unmarried children under sixteen vears of age living at home. |  |  |

Table 10.17
SELECTED CHARACTERISTICS OF HOUSEHOLDS ABOVE AND BELOW INCOME CUT-OFF POINTS, $1968{ }^{1}$

|  | Below income cut-off | Above income cut-off |
| :---: | :---: | :---: |
| Estimated numbers | 793,000 | 3,535,000 |
| Percentage distribution by household size: |  |  |
| 2.3 persons | 49.8 | 45.2 |
| 4.5 " | 28.8 | 36.5 |
| 6 or more persons | 21.4 | 18.3 |
| Average family size | 3.99 | 4.03 |
| Percentage distribution by number of rooms: |  |  |
| 7.4 persons | 32.3 | 23.6 |
| 5-6 " | 43.8 | 51.9 |
| 7 or more persons | 23.9 | 24.5 |
| Average number of rooms | 5.39 | 5.59 |
| Average number of persons per room | 0.74 | 0.72 |
| Percentage of households with one or more persons per room | 32.7 | 26.1 |

1) For a definition of the tem "income cut-off point", see Concepts and Definitions in Chapter 7.

## Chart 10.18

AGE OF DWELLING BY INCOME OF HOUSEHOLD, 1968


## Bilingualism 11

Language rights of English and French-speaking groups have been a lively issue in Canadian history since the time of the Treaty of Utrecht in 1713 when Acadia became a British colony. The problem was enlarged in 1763 when the whole of Canada became British. Attempts at solutions were numerous, but it was not until 1848 that the French language gained equal status with that of English in the proceedings of the legislative council and assembly. The British North America Act of 1867 made French an official language equal to English for all federal and Quebec statutes and in all federal and Quebee courts.

However, these linguistic guarantees in the British North America Act are fairly limited. They do not cover language use in administrative law or in certain provincial courts (other than in Quebec), or in the actual conduct of government and administration.

Increasing concern with language rights in the post-war period resulted in the creation, in 1963, of the Royal Commission on Bilingualism and Biculturalism. The Commission's mandate was to "recommend steps to develop the Canadian Confederation on the basis of an equal partnership between the two founding races, taking into account the contributions made by other ethnic groups". ${ }^{1}$ As a result of the Commission's work, the "Official Languages Act" was passed in 1971. It extended the recognition of French as one of Canada's official languages and created the Office of the Commissioner of Official Languages.

The basic language concern today is that all Canadians should be able to use the official language of their choice in all aspects of their life: to be educated at all levels, to work and progress in their careers, to benefit from cultural entertainment and mass media, to participate in associations or religious groups, and to communicate easily with government agencies and political institutions.

Bilingualism does not imply that all Canadians must speak both English and French; it endeavours to ensure equality of opportunity to use either language. It also encourages learning both languages and provides aids for that purpose. At the same time, it is realized that an effective bilingual policy requires a sufficient number of the minority language population in any given area. ${ }^{2}$

Significant developments in law with respect to linguistic policies following the $\mathrm{B} \& \mathrm{~B}$ recommendations have also been paralleled in the fields of education and employment. Extensive efforts have been made by the Department of the Secretary of State to promote not only the teaching of French as a second language, but also the use of French as a language of instruction. In

[^47]the employment field, language training programs have been developed in the federal Public Service to teach the other official language to unilingual employees in order that Canadians can communicate with their government in the language of their choice.

## DATA

The data included in this chapter deal with the official linguistic characteristics of the Canadian population. They indicate the percentage of people who are unilingua! French, unilingual English, and bilingual. However, it should be borne in mind that data on the ability to speak both languages are ambiguous because they do not take into account different levels of bilingual skill and, in most instances, leave the assessment of this ability to each individual.

Canada's bilingual character implies that its residents should be taught in the official language of their choice wherever possible. Enrolments in second-officiallanguage courses and schools where the second language is the language of instruction give some indication of the degree with which this is taking place.

Work takes a considerable portion of an individual's life and ideally, in a bilingual setting, he should be able to work in the official language of his choice, for his own sense of well-being as well as from the point of view of efficiency. Data on language use on the job, which are unfortunately available only for the province of Quebec, are displayed here.

Some indication of the availability of mass media information and entertainment in each of the official languages is also given, as are the language characteristics of the staff in the federal Public Service as well as the number of employees taking language training.

There are a number of other areas that one would like to explore were the data readily available. For instance, little is known about the results of learning a second language at different ages, through different means or in different surroundings. ${ }^{3}$ Because concern has also been expressed that a language can become so dangerously impoverished as to be unused for a large segment of daily activities, such as in the field of work and technology ${ }^{4}$, information on use by occupations, indust ries and income might give further indication of the state of bilingualism. The number of government language training graduates who actually use their new skills might also serve as an indicator of the success of the federal government's bilingual policy in the Public Service.

[^48]Table 11.1
POPULATION BY MOTHER TONGUE, 1971

|  | LINGUISTIC GROUP |  | PROVINCIAL POPULATION |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | English | French | English | French | Other | Total |
|  | per cent |  |  |  |  |  |
| CANADA | 100.0 | 100.0 | 60.2 | 26.9 | 12.9 | 100.0 |
| Newfoundland | 4.0 | 0.1 | 98.5 | 0.7 | 0.8 | 100.0 |
| Prince Edward Island | 0.8 | 0.1 | 92.4 | 6.6 | 1.0 | 100.0 |
| Nova Scotia | 5.7 | 0.7 | 93.0 | 5.0 | 2.0 | 100.0 |
| New Brunswick | 3.2 | 3.7 | 64.7 | 34.0 | 1.3 | 100.0 |
| Quebec | 6.1 | 84.1 | 13.1 | 80.7 | 6.2 | 100.0 |
| Ontario | 46.0 | 8.3 | 77.5 | 6.3 | 16.2 | 100.0 |
| Manitoba | 5.1 | 1.0 | 67.1 | 6.1 | 26.8 | 100.0 |
| Saskatchewan | 5.3 | 0.5 | 74.1 | 3.4 | 22.5 | 100.0 |
| Alberta | 9.7 | 0.8 | 77.6 | 2.9 | 19.5 | 100.0 |
| British Columbia | 13.9 | 0.7 | 82.7 | 1.7 | 15.6 | 100.0 |
| Yukon | 0.1 | - | 83.4 | 2.4 | 14.2 | 100.0 |
| Northwest Territories | 0.1 | - | 46.9 | 3.3 | 49.8 | 100.0 |

Chart 11.2
POPULATION BY MOTHER TONGUE


Table 11.3
LANGUAGE MOST OFTEN SPOKEN AT HOME, 1971

|  | English | French | Other | Total |
| :--- | ---: | ---: | ---: | ---: |
|  |  | per cent |  |  |
| CANADA | 67.1 | 18.0 | 14.9 | 100.0 |
| Newfoundland | 99.1 | 0.4 | 0.5 | 100.0 |
| Prince Edward Island | 95.7 | 3.9 | 0.4 | 100.0 |
| Nova Scotia | 95.5 | 3.5 | 1.0 | 100.0 |
| New Brunswick | 67.9 | 31.4 | 0.7 | 100.0 |
| Quebec | 14.7 | 80.8 | 4.5 | 100.0 |
| Ontario | 85.1 | 4.6 | 10.3 | 100.0 |
| Manitoba | 82.6 | 4.0 | 13.4 | 100.0 |
| Saskatchewan | 89.9 | 1.7 | 8.4 | 100.0 |
| Alberta | 90.8 | 1.4 | 7.8 | 100.0 |
| British Columbia | 92.8 | 0.5 | 6.7 | 100.0 |
| Yukon | 95.0 | 0.7 | 4.3 | 100.0 |
| Northwest Territories | 58.1 | 1.7 | 40.2 | 100.0 |

## Table 11.4

LANGUAGE RETENTION BY AGE, 1971

LANGUAGE IN HOME

| Age and mother tongue | English |  |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | French | Other |  |
|  | per cent |  |  |  |
| 0-4 years: |  |  |  |  |
| English | 98.4 | 0.4 | 1.2 | 100.0 |
| French | 2.5 | 97.3 | 0.2 | 100.0 |
| 5-9 years: |  |  |  |  |
| English | 98.7 | 0.4 | 0.9 | 100.0 |
| French | 3.1 | 96.8 | 0.1 | 100.0 |
| 10-14 years: |  |  |  |  |
| English | 99.0 | 0.4 | 0.7 | 100.0 |
| French | 3.3 | 96.6 | 0.1 | 100.0 |
| 15-19 years: |  |  |  |  |
| English | 99.0 | 0.4 | 0.6 | 100.0 |
| French | 4.1 | 95.8 | 0.1 | 100.0 |
| 20.24 years: |  |  |  |  |
| English | 98.8 | 0.6 | 0.5 | 100.0 |
| French | 6.6 | 93.2 | 0.2 | 100.0 |
| 25-44 years: |  |  |  |  |
| English | 98.7 | 0.7 | 0.6 | 100.0 |
| French | 8.3 | 91.5 | 0.2 | 100.0 |
| $45+$ years: |  |  |  |  |
| English | 98.9 | 0.6 | 0.5 | 100.0 |
| French | 7.8 | 92.0 | 0.2 | 100.0 |

Table 11.5
POPULATION BY OFFICIAL LANGUAGES

|  | ENGLISH ONLY |  | FRENCH ONLY |  | BOTH ENGLISH AND FRENCH |  | NEITHER ENGLISH NOR FRENCH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1961 | 1971 | 1961 | 1971 | 1961 | 1971 | 1961 | 1971 |
|  | per cent |  |  |  |  |  |  |  |
| Newfoundland | 98.5 | 98.0 | 0.1 | 0.1 | 1.2 | 1.8 | 0.2 | 0.1 |
| Prince Edward Island | 91.1 | 91.2 | 1.2 | 0.6 | 7.6 | 8.2 | 0.2 | 0.1 |
| Nova Scotia | 92.9 | 92.6 | 0.8 | 0.5 | 6.1 | 6.7 | 0.2 | 0.2 |
| New Brunswick | 62.0 | 62.5 | 8.7 | 15.9 | 19.0 | 21.5 | 0.2 | 0.1 |
| Quebec | 11.6 | 10.5 | 1.9 | 60.9 | 25.5 | 27.6 | 1.1 | 1.0 |
| Ontario | 89.0 | 87.3 | 1.5 | 1.2 | 7.9 | 9.3 | 1.6 | 2.2 |
| Manitoba | 89.6 | 89.2 | 0.9 | 0.5 | 7.4 | 8.2 | 2.1 | 2.1 |
| Saskatchewan | 93.6 | 93.6 | 0.4 | 0.2 | 4.5 | 5.0 | 1.5 | 1.2 |
| Alberta | 94.1 | 93.7 | 0.4 | 0.2 | 4.3 | 5.0 | 1.2 | 1.1 |
| British Columbia | 95.3 | 94.1 | 0.2 | 0.1 | 3.5 | 4.6 | 1.0 | 1.2 |
| Yukon | 93.5 | 93.2 | 0.3 | 0.1 | 5.6 | 6.6 | 0.6 | 0.1 |
| Northwest Territories | 58.9 | 73.3 | 0.5 | 0.3 | 7.0 | 6.1 | 33.6 | 20.3 |
| CANADA | 67.4 | 67.1 | 19.1 | 18.0 | 12.2 | 13.4 | 1.3 | 1.5 |

Chart 11.6
POPULATION BY OFFICIAL LANGUAGES, 1971




Table 11.9
OFFICIAL LANGUAGE OF SPECIFIED ETHNIC GROUPS

|  | CONVERSE IN NEITHER ENGLISH NOR FRENCH |  | CONVERSE IN ENGLISH ONLY |  | CONVERSE IN FRENCH ONLY |  | CONVERSE IN BOTH ENGLISH AND FRENCH |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1961 | 1971 | 1961 | 1971 | 1961 | 1971 | 1961 | 1971 |  |
|  | per cent |  |  |  |  |  |  |  |  |
| British | 0.1 | - | 95.5 | 94.1 | 0.4 | 0.6 | 4.0 | 5.3 | 100.0 |
| French | 0.2 | - | 8.6 | 8.2 | 61.2 | 60.1 | 30.1 | 31.7 | 100.0 |
| German | 1.3 | 11.2 | 95.7 | 94.0 | 0.5 | 0.8 | 2.6 | 4.0 | 100.0 |
| Italian | 17.4 | 16.6 | 65.2 | 63.3 | 6.8 | 6.0 | 10.6 | 14.1 | 100.0 |
| Jewish | 1.3 | 0.9 | 79.9 | 74.3 | 0.5 | 1.4 | 18.4 | 23.4 | 100.0 |
| Netherlands | 1.6 | 0.7 | 95.3 | 94,6 | 0.2 | 0.3 | 2.9 | 4.4 | 100.0 |
| Polish | 2.5 | 2.6 | 91.3 | 89.6 | 0.7 | 0.7 | 5.5 | 7.1 | 100.0 |
| Russian | 2.7 | 3.8 | 90.3 | 89.3 | 0.5 | 0.6 | 6.5 | 6.3 | 100.0 |
| Scandinavian | 0.2 | 0.2 | 97.4 | 96.6 | 0.3 | 0.3 | 2.1 | 2.9 | 100.0 |
| Ukrainian | 2.5 | 2.0 | 94.6 | 93.6 | 0.2 | 0.2 | 2.6 | 4.2 | 100.0 |
| Other European | 4.9 | 9.2 | 85.4 | 79.8 | 2.0 | 2.2 | 7.7 | 8.8 | 100.0 |
| Asiatic | 11.2 | 12.0 | 80.9 | 78.3 | 1.3 | 1.6 | 6.6 | 8.1 | 100.0 |
| TOTALS | 1.3 | 1.5 | 67.4 | 67.1 | 19.1 | 18.0 | 12.2 | 13.4 | 100.0 |

Chart 11.10
OFFICIAL LANGUAGE OF SPECIFIED ETHNIC GROUPS, 1971


Table 11.11
STUDENTS ENROLLED IN MINORITY LANGUAGE COURSES AS A PERCENTAGE OF ENROLMENT IN MAJORITY LANGUAGE SCHOOLS1

|  | QUEBEC |  | ALL OTHER PROVINCES |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Elementary | Secondary | Elementary | Secondary |
| 1970-71 | 35.8 | 99.9 | 29.2 | 55.7 |
| 1971 -72 | 35.5 | 100.0 | 30.8 | 53.2 |
| $1972-73$ | 33.4 | 100.0 | 33.3 | 47.0 |

Table 11.12
STUDENTS ENROLLED IN MINORITY LANGUAGE COURSES AS A PERCENTAGE OF ENROLMENT IN MAJORITY LANGUAGE SCHOOLS, 1971-721

|  | New- <br> found- <br> land | Prince <br> Island | Nova <br> Scotia | New <br> Bruns- <br> wick | Quebec Ontario Manitoba | Saskat- <br> chewan |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

1) See footnote 1, Table 11.11.

Table 11.13
STUDENTS ENROLLED IN MINORITY LANGUAGE AS LANGUAGE OF INSTRUCTION1,2

|  | QUEBEC |  | ALL OTHER PROVINCES |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Elementary | Secondary | Elementary | Secondary |
| $1970-71$ | 143.9 | 82.0 | 99.2 | 47.5 |
| 1971.72 | 139.5 | 85.0 | 97.1 | 47.2 |
| 1972.73 | 133.4 | 88.6 | 99.2 | 44.9 |

1) See footnote 1, Table 11.11.
2) Language of instruction refers to the language in which the student takes all of his courses, not simply language courses. The percentages are based on the estimate, derived from 1961 Census data, of the school age population having the minority language as mother tongue.

Table 11.14
STUDENTS' PERCEPTION OF THEIR FACILITY IN ENGLISH AND FRENCH, BY GRADE AND PROVINCE, 19711,2

|  |  |  |  |  | DE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|  |  |  |  |  | ent |  |  |  |
| Newfoundland: |  |  |  |  |  |  |  |  |
| English only | 93.2 | 98.3 | 97.7 | 95.6 | 98.1 | 97.6 | 100.0 | 91.4 |
| French only | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 |
| Both | 6.8 | 1.7 | 2.1 | 4.4 | 1.8 | 2.3 | 0.0 | 8.6 |
| Nova Scotia: |  |  |  |  |  |  |  |  |
| English only | 98.4 | 97.7 | 95.6 | 94.0 | 93.3 | 88.5 | 85.8 |  |
| French only | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 | 0.1 |  |
| Both | 1.4 | 2.2 | 3.6 | 5.0 | 6.5 | 10.5 | 13.7 | - |
| New Brunswick: |  |  |  |  |  |  |  |  |
| English only | 94.4 | 93.6 | 94.7 | 94.2 | 93.9 | 91.3 | 89.8 | - |
| French only | 0.3 | 0.1 | 0.2 | 0.3 | 0.1 | 1.2 | 0.1 |  |
| Both | 5.3 | 6.3 | 5.1 | 5.4 | 5.8 | 7.3 | 9.8 |  |
| Quebec: |  |  |  |  |  |  |  |  |
| English only | 36.1 | 18.2 | 13.3 | 9.2 | 5.9 | 6.5 | 0.3 | 0.0 |
| French only | 47.2 | 56.4 | 60.9 | 65.1 | 62.2 | 51.4 | 50.2 | 64.1 |
| Both | 16.3 | 25.0 | 25.2 | 25.4 | 31.4 | 41.9 | 49.5 | 35.9 |
| Ontario: |  |  |  |  |  |  |  |  |
| English only | 93.6 | 90.3 | 89.6 | 86.4 | 83.8 | 80.5 | 77.5 | 68.1 |
| French only | 0.4 | 0.5 | 0.5 | 0.7 | 0.7 | 0.7 | 1.0 | 0.7 |
| Both | 5.5 | 8.9 | 9.6 | 12.7 | 14.9 | 18.6 | 21.1 | 31.1 |
| Manitoba: |  |  |  |  |  |  |  |  |
| English only | 92.1 | 90.4 | 90.3 | 91.2 | 88.2 | 85.4 | 87.9 | 93.3 |
| French only | 0.6 | 0.6 | 0.8 | 0.4 | 0.5 | 0.7 | 0.2 | 0.0 |
| Both | 6.9 | 8.2 | 8.8 | 8.1 | 10.5 | 13.5 | 11.4 | 6.7 |
| Saskatchewan: |  |  |  |  |  |  |  |  |
| English only | 98.2 | 97.4 | 95.9 | 97.0 | 94.2 | 94.4 | 91.1 | - |
| French only | 0.5 | 0.0 | 0.7 | 0.1 | 0.0 | 0.9 | 0.3 | - |
| Both | 1.2 | 2.5 | 3.4 | 2.8 | 5.7 | 4.7 | 8.5 | - |
| Alberta: |  |  |  |  |  |  |  |  |
| English only | 95.3 | 94.8 | 94.6 | 93.9 | 88.7 | 86.1 | 84.6 | - |
| French only | 0.7 | 0.3 | 0.2 | 0.1 | 0.1 | 0.4 | 0.0 | - |
| Both | 3.7 | 4.5 | 5.0 | 5.7 | 11.0 | 13.4 | 15.3 | - |
| British Columbia |  |  |  |  |  |  |  |  |
| English only | 97.7 | 97.8 | 93.2 | 91.8 | 90.2 | 86.4 | 86.4 | 90.9 |
| French only | 0.1 | 0.1 | 0.5 | 0.7 | 0.8 | 0.8 | 0.3 | 0.0 |
| Both | 2.0 | 1.9 | 6.2 | 7.3 | 8.7 | 12.4 | 12.9 | 9.1 |
| CANADA: |  |  |  |  |  |  |  |  |
| English only | 90.6 | 80.5 | 82.4 | 77.9 | 72.3 | 68.8 | 74.8 | 68.1 |
| French only | 3.8 | 9.9 | 7.7 | 10.1 | 11.9 | 10.7 | 5.0 | 0.9 |
| Both | 5.3 | 9.3 | 9.6 | 11.7 | 15.4 | 20.3 | 19.9 | 30.9 |

Table 11.15
PUBLIC AND PRIVATE ELEMENTARY AND SECONDARY SCHOOLS BY LANGUAGE OF INSTRUCTION, 1972

|  | PUBLIC |  | PRIVATE |  | TOTAL |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | English | French ${ }^{1}$ | English | French ${ }^{1}$ | English | French ${ }^{1}$ |  |
| Newfoundland | 764 | - | 2 | 1 | 766 | 1 | 767 |
| Prince Edward Island | 102 | 2 | - | - | 102 | 2 | 104 |
| Nova Scotia | 641 | 30 | 6 | 2 | 647 | 32 | 679 |
| New Brunswick | 343 | 201 | 9 | 1 | 352 | 202 | 554 |
| Quebec ${ }^{2}$ | 461 | 3,232 | 58 | 274 | 519 | 3,506 | 4,025 |
| Ontario ${ }^{2}$ | 4,414 | 381 | 272 | $10^{3}$ | 4,686 | 391 | 5,077 |
| Manitoba | 722 | 53 | 42 | 2 | 764 | 55 | 819 |
| Saskatchewan | 1,025 | 12 | 12 | 1 | 1,037 | 13 | 1,050 |
| Alberta | 1,242 | 35 | 33 | 1 | 1,275 | 36 | 1,311 |
| British Columbia | 1,558 | 1 | 142 | - | 1,700 | 1 | 1,701 |
| CANADA | 11,272 | 3,947 | 576 | 292 | 11,848 | 4,239 | 16,087 |

1) Includes some bilingual schools in some provinces.
2) 1971 data.
3) Estimate.

Table 11.16
USE OF LANGUAGE IN COMMUNICATION AT WORK FOR CERTAIN LANGUAGE GROUPS, QUEBEC, 1970

## LANGUAGE USE

|  | Almost <br> exclusively <br> French | Almost <br> exclusively <br> English | Both <br> languages | Other <br> languages | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| prench-speaking | 64 | 3 | 32 | 1 | 100 |
| English-speaking | 5 | 63 | 32 | $\ldots$ | 100 |
| Other | 14 | 36 | 40 | 10 | 100 |
| TOTALS | 000 | 1,207 | 334 | 764 | 36 |

Table 11.17

## USE OF FRENCH BY OCCUPATION AND BY LANGUAGE GROUP IN QUEBEC, 1970

|  | French- <br> speaking <br> persons | English- <br> speaking <br> persons | Other |
| :--- | :---: | :---: | :---: |
|  |  | percentage of work time |  |
| Administrators | 83.2 | 16.4 | 35.0 |
| Professionals | 88.1 | 15.7 | 26.5 |
| Office workers | 78.7 | 14.3 | 33.1 |
| Salesmen | 83.3 | 19.6 | 39.6 |
| Service employees | 87.1 | 21.1 | 36.3 |
| Transport employees | 85.0 | 19.1 | 26.3 |
|  |  | 22.3 | 34.2 |
| Foremen | 87.7 | 24.0 | 37.8 |
| Laborers in the secondary sector | 90.6 | 12.41 | 100.01 |

1) Estimate based on fewer than 30 cases studied.

Table 11.18
RADIO STATIONS BY LANGUAGE, 1973

|  | Canada | New-foundland | Prince <br> Edward <br> Island | Nova Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English | 263 | 17 | 2 | 18 | 10 | 11 | 88 | 14 | 18 | 28 | 57 |
| French | 73 | - | - | - | 1 | 58 | 10 | 1 | 1 | 1 | 1 |
| Bilingual | 3 | - | - | - | - | 3 | - | - | - | - | - |

Table 11.19
TELEVISION STATIONS BY LANGUAGE, 1973

|  | Canada | New-foundland | Prince <br> Edward <br> Island | Nova Scotia | New Bruns wick | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English | 65 | 4 | 1 | 7 | 2 | 2 | 21 | 6 | 7 | 6 | 9 |
| French | 15 | - | - | - | 1 | 12 | 1 | 1 | - | - | - |
| Bilingual | 2 | - | - | - | - | 2 | - | - | - | - | - |

Table 11.20
CIRCULATION1 OF DAILY NEWSPAPERS BY LANGUAGE, 1973

|  | New- <br> found- <br> land | Edward <br> Island | Nova <br> Scotia | New <br> Bruns- <br> wick |  | Quebec |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Table 11.21
WEEKLY NEWSPAPERS BY LANGUAGE, 1973

|  | English | French | Bilingual |
| :--- | :---: | :---: | :---: |
| CANADA | 765 | 123 | 60 |
| Newfoundland | 9 | - | - |
| Prince Edward Island | 2 | - | - |
| Nova Scotia | 30 | 1 | - |
| New Brunswick | 14 | 1 | 3 |
| Quebec | 18 | 116 | 55 |
| Ontario | 296 | 2 | 1 |
| Manitoba | 63 | 1 | 1 |
| Saskatchewan | 103 | - | - |
| Alberta | 118 | 1 | - |
| British Columbia | 112 | 1 | - |

Table 11.22
GENERAL INTEREST MAGAZINES BY LANGUAGE

|  | 1961 | 1971 | 1973 |
| :--- | ---: | ---: | ---: |
| English | 119 | 168 | 211 |
| French | 22 | 35 | 42 |
| Bilingual | 3 | 11 | 10 |

Table 11.23
UNIVERSITY RECRUITMENT WITHIN THE FEDERAL PUBLIC SERVICE

| Number of appointments |  | 1968 | 1969 | 1970 | 1971 | 1972 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | per cent |  |  |  |
|  |  |  | 71 | 77 | 76 | 72 |
| Anglophone ${ }^{1}$ | 20 | 29 | 23 | 243 | 28 |  |
| Francophone ${ }^{2}$ | 100 | 100 | 100 | 100 | 100 |  |
| TOTALS | number | 531 | 462 | 384 | 5893 | 861 |

[^49]2) Applicants who claimad to be French-speaking.
3) 9971 totals do not include the Special Francophone Recruitment Program which resulted in 258 Francophone apointments.

Table 11.24

## BILINGUAL ABILITY OF APPOINTEES TO EXECUTIVE (SX) CATEGORY1 WITHIN THE FEDERAL PUBLIC SERVICE

|  | 1968 | 1969 | 1970 | 1971 | 1972 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Unilingual | 66 | 69 | per cent | 71 | 66 | 59 |
| Bilingual: |  |  |  |  |  |  |
| Anglophone 2 | 16 | 19 | 13 | 15 | 20 |  |
| Francophone | 18 | 12 | 15 | 19 | 21 |  |
| TOTALS | 100 | 100 | 100 | 100 | 100 |  |
|  | number | 132 | 131 | 163 | 175 | 285 |

1) Executive ( $S X$ ) category refers to government top management positions.
2) Bilingual candidates who claim English as preferred working language.
3) Bilingual candidates who claim French as preferred working language.

Table 11.25

## LANGUAGE CHARACTERISTICS OF SELECTED EMPLOYEES IN THE FEDERAL

 PUBLIC SERVICE, $1972{ }^{1}$| Language group affiliation ${ }^{2}$ | Bilingual | Unilingual | Total |
| :--- | :---: | :---: | :---: |
|  |  | per cent |  |

Table 11.26
NUMBER OF STUDENTS IN FEDERAL GOVERNMENT LANGUAGE PROGRAMS, BY JOB CATEGORY, 1971-72

|  | STUDENTS |  |  | GRADUATED DURING THE YEAR |  |
| :--- | ---: | :---: | :---: | :---: | ---: |
|  | French <br> program | English <br> program | Total | French <br> program | English <br> program |
| Senior Executive (SX) | 146 | - | 146 | 27 | - |
| Scientific and professional | 1,154 | 237 | 1,391 | 126 | 58 |
| Administrative, foreign service | 2,439 | 284 | 2,723 | 244 | 68 |
| Technical | 535 | 74 | 609 | 40 | 14 |
| Administrative support | 810 | 294 | 1,104 | 16 | 56 |
| Operational | 24 | 28 | 52 | - | 4 |
| Other | 2,025 | 201 | 2,226 | 202 | 55 |
| TOTALS | 7,133 | 1,118 | 8,251 | 655 | 255 |

## Native <br> Peoples <br> 12

(1)

In the last few years there has been a very significant increase in the concern for the welfare and well-being of the Indian and Inuit populations in Canada. Until recently these people were largely ignored by the rest of Canada, or at the most regarded as carriers of an earlier civilization rather than as an integral part of Canadian society. The worldwide fame and recognition of Inuit art, the aboriginal land-claims disputes, controversy involving the legal definition of Indian women, and a generally more demanding and confident attitude on the part of the indigenous peoples have awakened the rest of Canada to the problems and the destiny of the native population.

This chapter portrays some of the basis sociodemographic aspects, past and present, of the native peoples. The social statistics presented are intended to indicate the relative sizes and characteristics of these groups.

It has been estimated that before the Europeans came to Canada there were 200,000 Indians and 10,000 Inuit belonging to many different and distinct cultures. Through wars and disease the number of Indians dropped to about 100,000 by 1901. This situation has now been reversed and the Indian population is increasing at about twice the rate of the rest of the Canadian population. The high proportion of young people in the native population is a force for social change, and they will be demanding more say in what is done for and by the Indian people.

Currently there is little consensus on what constitutes viable solutions to the problems of the native peoples and in some areas there is even disagreement as to what the problems are. That there is no unity of purpose among various organized groups of Indians and Inuit should not be surprising, since they are peoples from very different areas, cultures and linguistic groups, with varying aims and objectives. Most Indians live on 700 reserves, in 565 bands belonging to 10 major linguistic groups in six cultural areas. The Inuit live in more than 50 settlements scattered throughout the Northwest Territories and Arctic Quebec.

## INDIANS

It bears emphasis that the multiculturalism prevalent throughout Canada has a parallel in the rich diversity within the Indian culture, with its variations in songs, dances, tribal mythologies, religions, attitudes, and conceptions of life and work, and yet a common realization that they are part of the natural environment.

There are many old and new threats to the preservation of these cultures. The native peoples were quickly swamped by the values and mores of the Europeans. Their religions were taken from them, and, indeed, even until 1951, it was illegal for the tribes
concerned to hold their potlatch. Conversion to Christianity may have reduced the number of medicine men at the time when many Indians were dying from diseases and wars. More recently the growing migration of Indians to the cities has raised the fundamental issue of whether the reserves have helped to preserve traditions or have kept the Indians isolated from the mainstream of Canadian society and made them dependent on the government for their existence.

## INUIT

By and large, the Inuit have had a much shorter history of contact with Europeans. Until the Second World War they had only met with whalers, traders and missionaries, and the occasional explorer or law officer. There has been a dramatic change in the north over the post-war years. Opportunities arising at trading posts and from the construction of military installations by the Allies led to the congregation of Inuit in larger centres. Especially as some of these centres were phased out, social problems became highly visible. The Canadian govemment then invested a large effort in the development and administration of its northem territories: medical facilities, schools and housing were given high priority, with southern institutions essentially being transplanted to the north. It is only recently, however, that real progress has been made in tailoring these institutions to the needs of native northerners.

## METIS

The 1941 Census was the last to single out the Métis. ${ }^{1}$ Since many biological, socio-cultural and economic factors are taken into account in defining them, it is difficult to delineate them statistically, and only scattered data on them exist. Their numbers have been variously estimated as low as 60,000 and as high as 250,000 . Some hint of the numbers involved can be obtained by looking at those people of other than Indian ethnic origin who give Indian as their mother tongue (see Table 12.22), although this estimate would, of course, be on the low side.

The Métis suffer from the disadvantages identified with Indians, but they do not share the advantages of the Registered or Status Indian. ${ }^{2}$ They do not have reserve lands and they do not benefit from the special
'A term originally only applied to people of mixed Indian ano European blood, but more recently applied also to non-status Indians.
${ }^{2}$ Briefly, those entitled to be registered are persons who were considered Indians or members of an Indian Band on May 26, 1874, or are descendants through the male line of the above. These are the two main categories; for further explanation see the Indian Act, R.S.C. 149.
government programs for Indians, although certain other federal programs are designed for the benefit of this group.

## DATA

In the data below there are gaps and inconsistencies. It is difficult to get even an accurate count of the populations: of the Inuit because of their small numbers, isolation and migratory way of life; of Métis because of the problems described above; and of Indians mainly because of the definition of who is an Indian. The Department of Indian Affairs and Northern Development only counts registered Indians under its jurisdiction. When registered Indians become enfranchised, ${ }^{3}$ either through choice or through marriage to nonIndians in the case of women, then they cease to be

[^50]counted as Indians by the Department. The Census of Canada counts as Indian anyone who calls himself Indian, whether registered or not, and also anyone who can trace Indian ancestry through the father's line.

Few demographic data on the Inuit are available and it should be noted that most of the rates quoted apply only to the Inuit of the Northwest Territories where about 65 per cent of the Inuit live. Data for Indians, other than straight population counts, apply only to registered Indians and are collected by the Department of Indian Affairs and Northern Development.

Similar comments apply to the health data shown here. It is not possible to obtain hospitalization and death rates by cause for Indians in other than the north since these data are not collected by ethnic origin. It was not considered useful to give the rates for the Indians in the Northwest Territories because these comprise only about two per cent of all the Indians in Canada. Housing conditions on Indian reserves were included after "health" because housing conditions have an influence on health.


Table 12.2
CULTURE AREAS, LINGUISTIC GROUPS AND THEIR LOCATIONS, NATIVE INDIANS

Culture areas
Linguistic group
Location

| Algonkian | Algonkian <br> Iroquoian | Eastern and Central woodlands <br> Southern Quebec and <br> Southeastern Ontario |
| :--- | :--- | :--- |
| Plains | Algonkian <br> Athapaskan | Siouan <br> Salishan |
| Plateau | Athapaskan <br> Tlingit <br> Kootenayan | Interior plateau of British <br> Columbia and Yukon |
| Pacific Coast | Tsimshian <br> Haida <br> Salishan <br> Wakashan <br> Athapaskan | Coast of British Columbia |

Table 12.3
POPULATION COUNTS OF THE NATIVE PEOPLES

|  |  |  |  |
| :--- | :--- | :--- | :--- |

## Chart 12.4

## CRUDE BIRTH RATES



Chart 12.5

## CRUDE DEATH RATES



Chart 12.6
NATURAL INCREASE


Table 12.7

## ENFRANCHISEMENTS 1 OF REGISTERED INDIANS

| Fiscal year | ENFRA UPON A | SEMENTS CATION | ENFRAN FOLLOWIN TO A N | SMENTS AARRIAGE INDIAN | Total | Rate per 1,000 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Adults | Children ${ }^{2}$ | Women | Children ${ }^{2}$ |  | Indians |
| 1953 | 248 | 218 | 237 | 85 | 788 | 3 |
| 1955 | 192 | 130 | 337 | 97 | 756 | 3 |
| 1957 | 169 | 149 | 305 | 50 | 673 | 3 |
| 1959 | 221 | 248 | 433 | 221 | 1,123 | 6.1 |
| 1961 | 94 | 47 | 435 | 140 | 716 | 3.6 |
| 1963 | 46 | 38 | 287 | 102 | 473 | 2.2 |
| 1965 | 38 | 18 | 435 | 147 | 638 | 2.8 |
| 1967 | 62 | 28 | 470 | 56 | 616 | 2.6 |
| 1969 | 41 | 19 | 547 | 107 | 714 | 2.8 |
| 1971 | 14 | 4 | 267 | 19 | 304 | 1.1 |

1) On enfranchisement an Indian gives up his rights under the Indian Act.
2) Minor, unmarried children are automatically enfranchised with their parent(s).
3) These rates could not be calculated because there are no population data for these years.

Table 12.8
INDIAN AND INUIT POPULATION BY PLACE OF RESIDENCE

|  | URBAN AND RURAL DISTRIBUTION |  |
| :--- | :---: | :---: |
|  | 1961 | 19711 |
|  |  | per cent |
| Rural |  |  |
| Farm | 87.1 |  |
| Non-farm | 6.8 | 69.3 |
| Urban | 80.3 | 3.9 |
| Cities of: | 12.9 | 65.4 |
| $100,000+$ |  | 30.7 |
| $30,000-99,999$ | 6.6 |  |
| $10,000 \cdot 29,999$ | 1.3 | 15.9 |
| $5,000 \cdot 9,999$ | 1.1 | 2.9 |
| $2,500 \cdot 4,999$ | 0.8 | 4.5 |
| $1,000 \cdot 2,499$ | 0.9 | 2.0 |
|  | 2.2 | 1.6 |
| TOTALS |  | 3.8 |
| Number | 100.0 |  |

PROVINCIAL DISTRIBUTION, 1971

| Newfoundland | 0.4 | 6.0 | 0.7 |
| :---: | :---: | :---: | :---: |
| Prince Edward Island | 0.1 | - | 0.1 |
| Nova Scotia | 1.5 | 0.1 | 1.4 |
| New Brunswick | 1.3 | - | 1.3 |
| Quebec | 11.1 | 21.4 | 11.7 |
| Ontario | 21.2 | 4.3 | 20.2 |
| Manitoba | 14.6 | 0.7 | 13.8 |
| Saskatchewan | 13.7 | 0.4 | 13.0 |
| Alberta | 15.1 | 0.8 | 14.3 |
| British Columbia | 17.7 | 1.2 | 16.8 |
| Yukon | 0.9 | 0.1 | 0.8 |
| Northwest Territories | 2.4 | 65.0 | 5.9 |
| CANADA | 100.0 | 100.0 | 100.0 |
| Number | 295,215 | 17,550 | 312,765 |

Table 12.9
INDIANS AND INUIT IN URBAN CENTRES

|  | 1951 | 1961 | 19711 |
| :--- | ---: | :--- | :--- |
|  |  |  |  |
| Calgary |  |  |  |
| Edmonton | 62 | 335 | 2,265 |
| Hamilton | 616 | 995 | 4,260 |
|  | 493 | 841 | 1,470 |
| London |  |  |  |
| Montreal | 133 | 340 | 1,015 |
| Prince Albert | 296 | 507 | 3,215 |
|  | 211 | 225 | 1,045 |
| Prince Rupert |  |  |  |
| Regina | 160 | 880 | 1,780 |
| Saskatoon | 48 | 539 | 2,860 |
|  |  | 207 | 1,070 |
| Toronto | 805 |  |  |
| Vancouver | 239 | 1,196 | 2,990 |
| Winnipeg | 210 | 530 | 3,000 |

Note: The cities chosen were those which in 1971 had the largest number of Indian residents. The numbers are probably underestimated since many new arrivals in a city are itinerant and are, therefore, very difficult to count in a census.

Table 12.10
REGISTERED INDIANS BY TYPE OF RESIDENCE

On reserve On crown land | Other |
| :---: |
| (including |
| not known) |$\quad$ Total

|  | per cent |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  | number |
| 1959 | 73.2 | 9.9 | 16.9 | 100.0 | 179,126 |
| 1966 | 70.3 | 10.2 | 19.5 | 100.0 | 224,164 |
| 1967 | 69.0 | 9.2 | 21.8 | 100.0 | 230,902 |
| 1968 |  |  |  |  |  |
| 1969 | 68.1 | 9.1 | 22.8 | 100.0 | 237,490 |
| 1970 | 66.4 | 9.3 | 24.3 | 100.0 | 244,043 |
| 1971 | 65.2 | 9.3 | 25.5 | 100.0 | 250,781 |
| 1972 | 64.5 | 8.7 | 26.8 | 100.0 | 257,619 |

Chart 12.11
INDIAN AND INUIT POPULATION AS COMPARED TO THE TOTAL CANADIAN POPULATION:
DISTRIBUTION BY AGE AND SEX, 1961 AND 1971
1961


Table 12.12
age structure of THE REGISTERED INDIAN POPULATION

|  | AGE |  |  | DEPENDENCY RATIOS 1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 15 | 15-64 | $65+$ | All ages |  | Youth | Old age |
|  |  | per cent |  | number |  |  |  |
| 1924 | 32.2 | 51.2 | 5.9 | 100.0 | 104,8942 | 62.9 | 11.5 |
| 1929 | 32.6 | 51.7 | 6.4 | 100.0 | 108,0122 | 62.9 | 12.4 |
| 1934 | 34.7 | 55.4 | 6.2 | 100.0 | 112,5102 | 62.7 | 11.1 |
| 1939 | 37.5 | 56.1 | 6.4 | 100.0 | 118,378 | 66.9 | 11.4 |
| 1944 | 37.5 | 55.9 | 6.6 | 100.0 | 125,686 | 67.0 | 11.8 |
| 1949 | 40.6 | 53.8 | 5.6 | 100.0 | 136,407 | 75.4 | 10.3 |
| 1954 | 41.7 | 53.2 | 5.1 | 100.0 | 151,558 | 78.5 | 9.6 |
| 1959 | 44.2 | 50.4 | 4.5 | 100.0 | 179,126 ${ }^{2}$ | 87.7 | 8.9 |
| 1964 | 46.7 | 49.1 | 4.2 | 100.0 | 211,389 | 95.0 | 8.6 |
| 1968 | 46.8 | 49.0 | 4.2 | 100.0 | 237,490 | 95.6 | 8.6 |
| 1972 | 44.6 | 51.0 | 4.2 | 100.0 | 264,680 ${ }^{2}$ | 87.4 | 8.3 |

1) The youth and old age dependency ratios reflect the relationship between the mostly child population and the mostly retired population and the mostly-working age population.

$$
\begin{aligned}
& \text { Youth }=\left(\frac{\text { persons aged } 0.14}{\text { persons aged 15-64 }}\right) \times 100 . \\
& \text { Ord age }=\left(\frac{\text { persons aged } 65+}{\text { persons aged 15-64 }}\right) \times 100
\end{aligned}
$$

See Chapter 1 for the all-Canada dependency ratios.
2) All ages includes cases of age unknown.

## Chart 12.13

INFANT MORTALITY


Table 12.14
SELECTED CAUSES OF HOSPITALIZATION OF INUIT IN THE NORTHWEST TERRITORIES1

|  | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | Total Canadian population ${ }^{2}$ 1968 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | rate per 1,000 population |  |  |  |  |  |  |  |
| Respiratory system diseases | 204 | 90 | 78 | 83 | 72 | 67 | 65 | 24 |
| Symptoms, senility and illdefined conditions | 116 | 10 | 9 | 12 | 11 | 10 | 11 | 4 |
| Digestive system diseases | 80 | 23 | 24 | 30 | 23 | 25 | 17 | 21 |
| Accidents, poisonings and violence | 98 | 15 | 12 | 17 | 14 | 19 | 17 | 14 |
| Circulatory system diseases | 8 | 6 | 5 | 9 | 15 | 7 | 5 | 13 |
| Neoplasms | 2 | 1 | 2 | 4 | 3 | 5 | 3 | 9 |
| ALL CAUSES | 848 | 299 | 236 | 282 | 231 | 254 | 238 | 157 |
| Number of hospitalizations | 7.024 | 2,569 | 2,110 | 2,653 | 2,265 | 2,613 | 2,564 | 3,255,165 |

Table 12.15
SELECTED CAUSES OF DEATH OF INUIT IN THE NORTHWEST TERRITORIES

|  | 1960 | 1962 | 1964 | 1966 | 1968 | 1970 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | rate per 100,000 population |  |  |  |  |  |
| Pneumonia: |  |  |  |  |  |  |
| Inuit | 803 | 628 | 392 | 337 | 279 | 267 |
| All Canada | 30 | 28 | 26 | 27 | 26 | 25 |
| Diseases of early infancy and malformations: |  |  |  |  |  |  |
| Inuit | 290 | 169 | 134 | 204 | 158 | 155 |
| All Canada | 55 | 55 | 47 | 37 | 31 | 27 |
| Injuries and accidents: |  |  |  |  |  |  |
| Inuit | 252 | 229 | 347 | 174 | 298 | 198 |
| All Canada | 62 | 63 | 64 | 67 | 67 | 68 |
| Gastro-intestinal diseases: |  |  |  |  |  |  |
| Inuit | 126 | 109 | $56$ | $92$ | 9 | 34 |
| All Canada | $17$ | 15 | 15 | 14 | 13 |  |
| Cardiovascular diseases: |  |  |  |  |  |  |
| I nuit | 25 | $24$ | $45$ | 61 | 19 | 69 |
| All Canada | 281 | 279 | 277 | 274 | 270 | 261 |
| ALL CAUSES: |  |  |  |  |  |  |
| Inuit | $2,334$ | $2,306$ | 1,445 | 1,256 | 1,062 | 1,110 |
| All Canada | 782 | 773 | 756 | 749 | 740 | 732 |
| Number of deaths: |  |  |  |  |  |  |
| Inuit | 186 | 191 | 129 | 123 | 114 | 129 |
| All Canada | 139,693 | 143,699 | 145,850 | 149,863 | 153,196 | 155,961 |

1) Data are not comparable for this vear.

Table 12.16
INDIAN HOUSING ON RESERVES

|  | Number of <br> family units | Families needing <br> new houses | Total <br> houses | Occupied houses <br> needing major <br> repairs |
| :--- | :---: | :---: | :---: | :---: |
|  |  | per cent |  | per cent |
| 1958 | 25,979 | 31.6 | 22,809 | 8.0 |
| 1960 | 23,055 | 29.4 | 24,730 | 6.8 |
| 1963 | 29,101 | 20.3 | 25,123 | 7.3 |
| 1965 | 30,399 | 19.7 | 26,517 | 9.1 |
| 1967 | 31,280 | 24.3 | 27,430 | 11.1 |
| 1969 | 32,882 | 25.4 | 28,417 | 13.3 |
| 1971 | 33,550 | 25.4 | 29,935 | 15.9 |

Table 12.17
CONDITION OF HOUSING ON RESERVES


Chart 12.18
HOUSING ON INDIAN RESERVES BY NUMBER OF ROOMS PER HOUSE


## Chart 12.19

HOUSING ON INDIAN RESERVES WITH SPECIFIED FACILITIES


Table 12.20
MOTHER TONGUE OF PERSONS OF INDIAN AND INUIT ETHNIC GROUPS

|  | 1951 | 1961 | 1971 |
| :--- | :---: | :---: | ---: |
|  |  | per cent |  |
| Indian and Inuit languages | 82.6 | 71.4 | 53.9 |
| English | 15.4 | 26.7 | 40.5 |
| French | 1.5 | 1.7 | 4.3 |
| Other | 0.5 | 0.2 | 1.3 |
| TOTALS | 100.0 | 100.0 | 100.0 |
| Mother tongue is the language first spoken and stillunderstocd |  |  |  |

Table 12.21
PERSONS OF INDIAN-INUIT MOTHER TONGUE AS A PERCENTAGE OF PERSONS OF INDIAN-INUIT ETHNIC GROUP

|  | 1951 | 1961 | 1971 |
| :--- | :---: | :---: | :---: |
|  |  | per cent |  |
| Under 15 years | 85.0 |  | 59.5 |
| $15-24$ years | 87.1 | 75.1 | 53.2 |
| $25-44 "$ | 89.0 | 81.1 | 58.6 |
| $45-64$ | 91.1 | 87.4 | 66.2 |
| $65+$ | 94.4 | 91.0 | 73.2 |
| ALL AGES | 87.4 | 75.7 | 57.1 |

Note: Table 12.21 differs from 12.20 in that some of the persons in 12.21 with Indian-inuit mother fongue are of other than Indian or Invit ethnic origin.

Table 12.22
PERSONS SPEAKING INDIAN OR INUIT AT HOME BY MOTHER TONGUE AND ETHNIC ORIGIN, 1971

|  | ETHNIC ORIGIN |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Mother tongue |  |  | Orench | Other | Total

Table 12.23
ENROLMENT OF REGISTERED INDIANS BY TYPE OF SCHOOL ${ }^{1}$


Table 12.24
EDUCATIONAL ATTAINMENT BY MOTHER TONGUE AND AGE, 1971

|  | INDIANS AND INUIT |  | ALL CANADA |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 15-19 years | 20 years and over | 15-19 years | 20 years and over |
|  |  | per cent |  |  |
| Elementary | 58.7 | 79.6 | 12.8 | 36.8 |
| Secondary | 39.0 | 15.0 | 75.3 | 36.0 |
| Post-secondary | 1.8 | 3.8 | 7.0 | 15.4 |
| University | 0.5 | 1.7 | 4.9 | 11.9 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of persons | 18,355 | 83,655 | 2,112,700 | 13,076,805 |

Table 12.25
SOCIAL ASSISTANCE TO INDIANS RESIDING ON RESERVES, 1972.73

Administrative region

REASON FOR ASSISTANCE


All

Average monthly number of persons receiving assistance ${ }^{4}$

Distribution of assistance

| Maritimes | 15.4 | 15.9 | 68.7 | 100.0 | 5,621 |
| :--- | :---: | :---: | :---: | :---: | ---: |
| Quebec | 13.1 | 20.9 | 66.0 | 100.0 | 7,146 |
| Ontario | 36.6 | - | 63.4 | 100.0 | 7,754 |
|  |  |  |  |  |  |
| Manitoba | 20.6 | 19.3 | 60.1 | 100.0 | 15,126 |
| Saskatchewan | 11.7 | 26.5 | 61.8 | 100.0 | 19,137 |
| Alberta | 16.7 | 27.4 | 55.9 | 100.0 | 16,148 |
|  |  |  |  |  |  |
|  | 15.4 | 38.1 | 46.5 | 100.0 | 12,306 |
| British Columbia | 14.9 | 51.6 | 33.5 | 100.0 | 1,286 |
| Yukon | 17.5 | 23.8 | 58.7 | 100.0 | 84,524 |
| CANADA |  |  |  |  |  |

## Assistance per person

Total amount of assistance
dollars

| Maritimes | 581 | 549 | 486 | 511 | $2,869,565$ |
| :--- | :---: | :---: | :---: | :---: | ---: |
| Quebec | 451 | 380 | 362 | 377 | $2,697,047$ |
| Ontario | 428 | - | 428 | 428 | $3,319,658$ |
|  |  |  |  |  |  |
| Manitoba | 498 | 445 | 265 | 347 | $5,251,259$ |
| Saskatchewan | 481 | 450 | 432 | 442 | $8,464,499$ |
| Alberta | 464 | 477 | 328 | 391 | $6,321,123$ |
|  |  |  |  |  |  |
| British Columbia | 670 | 700 | 569 | 635 | $7,809,935$ |
| Yukon | 423 | 487 | 464 | 470 | 604,290 |
| CANADA | 498 | 514 | 395 | 442 | $37,337,376$ |

1) The family head or the single person is unable to work or has inadequate earnings because of physical or mental disability, including advanced age.
2) The family head or the single person is unable to work or has inadequate income because he or she is giving care to an incapacitated spouse or parent or is giving care and supervision to the dependent children in the family. Health and Social reasons are combined in Ontario.
3) The family head or the single person does not come within either of the first two categories and he or she is unable to work or has inadequate earnings because of a lack of employment or other earning opportunities.
4) Includes family members dependent on the head of the family.

Table 12.26
INDIAN ECONOMIC ACCOUNT, LOANS APPROVED BY PURPOSE

PURPOSE OF LOAN
Fiscal year


Table 12.27
INDIAN CRAFT INDUSTRIES

|  | ESTIMATED VAL | RODUCTIO | Actual sales from Arts and Crafts Centre. Ottawa |
| :---: | :---: | :---: | :---: |
|  | For personal use | For sales |  |
|  |  | dollars |  |
| 1961 | 276,354 | 407,606 | 15,410 |
| 1962 | 305,560 | 608,704 | 22,552 |
| 1963 | 321,964 | 633,683 | 40,052 |
| 1964 | 334,130 | 986,617 | 60,295 |
| 1965 | 299,640 | 1,033,146 | 64,175 |
| 1966 | 315,350 | 1,128,744 | 80,895 |
| 1967 | 248,055 | 1,041,302 | 112,866 |
| 1968 | 230,366 | 1,184,462 | 133,257 |
| 1969 | 210,725 | 1,264,397 | 155,000 |
| 1970 | 383,647 | 1,491,662 | 279,165 |
| 1971 |  |  | 406,482 |

## Cultural Diversity 13



Since 1608, when Champlain established a settlement at Quebec City, waves of people have been attracted to Canada by the prospects of adventure and improved opportunities, or have taken refuge here from persecution or deprivation in their homelands.

As the process of population formation and growth evolved, such phrases as "melting pot", "social mosaic", "cultural pluralism" and "national assimilation" have appeared. Currently, the concept of "multiculturalism" is used in Canada in connection with established government policies aimed at promoting the contributions of all ethnic groups to enhance a Canadian culture. It is a concept of a single society composed of the peoples of many other societies, and benefitting collectively from their individual contributions.

## LANGUAGE

Canada is legally a bilingual nation and the majority speak one of the two official languages, English or French. The concerns of bilingualism are covered in Chapter 11. However, in the 1971 census, 13 per cent of the population had a mother tongue that was neither French nor English, and 7 per cent of the population was using a third language at home. Thirty-three of these languages are identified in the data; their presence is a reflection of the variety of cultural milieu present in our country.

It would be false to assume that people have the same culture because they speak the same language. However, language use is a major part of any social system, and is worthy of statistical examination. The degree to which people cease speaking a third language in their home is one measure of their assimilation into the Canadian culture, even though they may continue to engage in activities particular to their place of origin.

## ORIGINS

There are several statistical series that can be used to help define the origins of people who are now Canadians. These show birthplace, country of former residence, and "ethnic origin". The latter are assigned national origins and, with a few exceptions, such as Jewish ${ }^{1}$, relate to the geographic origin of the paternal ancestors of the census respondent.

It is important to recognize that there are serious problems with the available statistics on ethnic origin. In

[^51]the census, for example, several respondents may report their ethnic origins largely according to their own personal perceptions and criteria. It is possible that the variation among respondents as to what "ethnic origin" means, and what criteria are pertinent to the identification of one's own ethnic origin, is so great that the statistics really ought to be used with extreme caution for certain detailed ethnic classifications. The problem of defining "e thnic origins" in such a way that consistent identifications and classifications can be made is very difficult and, as yet, the distinctions between some categories are unclear. Moreover, the conceptual problems are exacerbated by the fact that many native-born Canadians are on good ground when they argue that they ought to be able to report themselves as being of Canadian ethnic origin, and that statistics should clearly reflect such reports. In the data that follow, ethnic origin distribution and changes are shown for certain broad categories where these problems are partly attenuated. Nevertheless, even these figures should be used as indicators of broad pattems and trends and not of the precise relative sizes of properly measured ethnic groups in Canada. In addition, it is advisable to use ethnic origin data in conjunction with other data such as those on mother tongue, religion, and country of birth.

## MAJOR DEVELOPMENTS

Throughout most of Canada's history, the largest groups of people have been those of French and British origin. Canadians claiming a British background today account for 45 per cent of the population and those of French origin constitute 29 per cent. At the time of Confederation, the equivalent figures were 60 and 31 per cent, so that over time the most significant change has been the relative reduction of the British proportion and the rise in numbers of Canadians of other than French or British origin (from 8 per cent in 1871 to 27 per cent in 1971).

Of the non-British, non-French group, over 70 per cent trace their ethnic origin to seven groups - German, Italian, Ukrainian, Dutch, Scandinavian, native Indian and Inuit, and Polish - although over 100 such groups were identified in the 1971 Census.

Data on birthplace and immigration illustrate developments over time and show the various waves of immigration. ${ }^{2}$ The past decade has seen the rise in numbers of immigrants from Greece, Portugal, Asia and the United States, and a decline in the proportion from Britain.

[^52]
## CONCLUSION

The value and enrichment to Canada from her cultural diversity is complex and difficult to gauge. Culture in its broadest sense would include language, religion and philosophies of life, ethical and moral values, ways of preparing and using food, customs related to births, marriages and deaths, myths and folklore, art, and even sense of humour. Canadian
culture has evolved from the cultures of many other places and in the process of that evolution has generated aspects of all these items that are particularly Canadian. In spite of individual and governmental interest in multiculturalism, the extent to which each cultural group has contributed to Canadian life is still not something which can easily be quantified. We have identified some of these aspects in the data but the reader will recognize that these data are neither exhaustive nor all-inclusive.

Table 13.1
POPULATION BY MOTHER TONGUE

|  | 1941 |  | 1951 |  | 1961 |  | 1971 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | number | \% | number | \% | number | \% | number | \% |
| English | 6,488,190 | 56 | 8,280,809 | 59 | 10,660,534 | 58 | 12,973,810 | 60 |
| French | 3,354,753 | 29 | 4,068,850 | 29 | 5,123,151 | 28 | 5,793,650 | 27 |
| Other ${ }^{1}$ | 1,663,712 | 15 | 1,659,770 | 12 | 2,454,562 | 14 | 2,800,850 | 13 |
| TOTALS | 11,506,655 | 100 | 14,009,429 | 100 | 18,238,247 | 100 | 21,568,310 | 100 |

1) See Table 13.2.

Table 13.2
MOTHER TONGUE OTHER THAN ENGLISH OR FRENCH

| Language group | 1941 | 1951 | 1961 | 1971 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Arabic | 0.5 | 0.3 | 0.5 | 1.0 |
| Chinese | 2.0 | 1.7 | 2.0 | 3.4 |
| Czech and Slovak | 2.3 | 2.7 | 2.1 | 1.6 |
| Dutch | 3.2 | 5.3 | 6.9 | 5.2 |
| Finnish | 2.3 | 1.9 | 1.8 | 1.3 |
| German | 19.4 | 19.8 | 23.0 | 20.0 |
| Greek | 0.5 | 0.5 | 1.7 | 3.7 |
| Indian and Inuit | 7.9 | 8.7 | 6.8 | 6.4 |
| Indo-Pakistani | -- | 0.1 | 0.2 | 1.2 |
| Italian | 4.8 | 5.6 | 13.8 | 19.2 |
| Japanese | 1.4 | 1.1 | 0.7 | 0.6 |
| Magyar (Hungarian) | 2.8 | 2.6 | 3.5 | 3.1 |
| Polish | 7.7 | 7.8 | 6.6 | 4.8 |
| Portuguese | -- | -- | 0.7 | 3.1 |
| Russian | 3.2 | 2.4 | 1.7 | 1.1 |
| Scandinavian ${ }^{1}$ | 8.7 | 6.4 | 4.4 | 3.0 |
| Serbo-Croatian | 0.9 | 0.7 | 1.2 | 2.7 |
| Ukrainian | 18.8 | 21.2 | 14.7 | 11.1 |
| Yiddish | 7.8 | 6.2 | 3.4 | 1.8 |
| Other | 5.8 | 5.0 | 4.3 | 5.7 |
| TOTAL OF LANGUAGES OTHER THAN ENGLISH OR FRENCH | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,663,712 | 1,659,770 | 2,454,562 | 2,800,850 |

Table 13.3
MOTHER TONGUE AND LANGUAGE SPOKEN IN THE HOME, 1971

|  | Mother tongue (1) | Language of the home (2) | Percentage change from <br> (1) to (2) |
| :---: | :---: | :---: | :---: |
| English | 12,973,810 | 14,446,235 | + 11.3 |
| French | 5,793,650 | 5,546,025 | - 4.3 |
| German | 561,085 | 213,350 | - 62.0 |
| Italian | 538,360 | 425,235 | - 21.0 |
| Ukrainian | 309,855 | 144,760 | -53.3 |
| Native Indian | 164,525 | 122,205 | $-25.7$ |
| Netherlands | 144,925 | 36,170 | - 75.0 |
| Polish | 134,780 | 70,960 | - 47.4 |
| Greek | 104,455 | 86,830 | - 16.9 |
| Chinese | 94,855 | 77,890 | - 17.9 |
| Portuguese | 86,925 | 74,765 | - 14.0 |
| Magyar (Hungarian) | 86,835 | 50,670 | - 41.6 |
| Serbo-Croatian | 74,190 | 29,310 | - 60.5 |
| Yiddish | 49,890 | 26,330 | -47.2 |
| Other | 41,835 | 31,900 | - 23.8 |
| Finnish | 36,725 | 18,280 | - 50.2 |
| Indo-Pakistani | 32,555 | 23,110 | -29.0 |
| Russian | 31,745 | 12,590 | - 60.3 |
| Arabic | 28,550 | 15,260 | -46.5 |
| Czech | 27,780 | 15,090 | - 45.7 |
| Norwegian | 27,405 | 2,160 | - 92.1 |
| Danish | 27,395 | 4,690 | -82.9 |
| Spanish | 23,815 | 17,710 | - 25.6 |
| Swedish | 21,680 | 2,210 | -89.8 |
| Gaelic | 21,200 | 1,175 | -94.5 |
| Slovak | 17,370 | 9,465 | - 45.5 |
| Japanese | 16,890 | 10,500 | - 37.8 |
| Inuit | 15,295 | 15,080 | - 1.4 |
| Lithuanian | 14,725 | 9,985 | - 32.2 |
| Estonian | 14,520 | 10,110 | - 30.4 |
| Flemish | 14,240 | 3,190 | -77.6 |
| Lettish | 14,140 | 9,250 | - 34.6 |
| Romanian | 11,300 | 4,455 | -60.6 |
| Icelandic | 7,860 | 995 | -87.3 |
| Welsh | 3,160 | 370 | -88.3 |
| TOTALS | 21,568,310 | 21,568,310 |  |

Chart 13.4
MOTHER TONGUE AND LANGUAGE SPOKEN IN THE HOME, 1971


Table 13.5
POPULATION BY ETHNIC GROUP

|  | 1871 | 1911 | 1921 | 1931 | 1951 | 1961 | 1971 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | per cent |  |  |
|  |  |  |  |  |  |  |  |

Chart 13.6
ETHNIC GROUPS OTHER THAN BRITISH AND FRENCH


Table 13.7
POPULATION BY ETHNIC GROUPS, CANADA AND THE PROVINCES 1971

|  | New-foundland | Prince Edward Island | Nova Scotia | New Brunswick | Quebec | Ontario | Manitoba |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | per cent |  |  |  |
| British Isles | 93.9 | 82.7 | 77.5 | 57.7 | 10.8 | 59.3 | 41.9 |
| French | 3.0 | 13.8 | 10.1 | 37.1 | 79.1 | 9.6 | 8.9 |
| Austrian n.e.s. | -. | -- | .- | .- | -- | 0.2 | 0.3 |
| Belgian |  | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.9 |
| Chinese | 0.1 | .- | 0.1 | 0.1 | 0.2 | 0.5 | 0.3 |
| Czech | .- | -- | 0.1 | .- | 0.1 | 0.3 | 0.4 |
| Danish | -- | 0.1 | 0.1 | 0.3 | -- | 0.2 | 0.4 |
| Dutch | 0.1 | 1.1 | 1.9 | 0.8 | 0.2 | 2.7 | 3.6 |
| East Indian | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.4 | 0.3 |
| Estonian | - | . | .- | -- | - | 0.2 | $\ldots$ |
| Finnish | -- | -- | $\cdots$ | - | -. | 0.5 | 0.1 |
| German | 0.5 | 0.9 | 5.2 | 1.3 | 0.9 | 6.2 | 12.5 |
| Greek | -- | -- | 0.2 | 0.1 | 0.7 | 0.9 | 0.2 |
| Hungarian | - | $\cdots$ | 0.1 | 0.1 | 0.2 | 0.9 | 0.5 |
| Icelandic | - | -- | -- | . | .- | .- | 1.3 |
| Indian (native) | 0.2 | 0.3 | 0.6 | 0.6 | 0.5 | 0.8 | 4.4 |
| Inuit | 0.2 | -- | -- | - | 0.1 | -. | . |
| Italian | 0.1 | 0.1 | 0.5 | 0.2 | 2.8 | 6.0 | 1.1 |
| Japanese | -- | -- | - | -- | -- | 0.2 | 0.1 |
| Jewish | 0.1 | 0.1 | 0.3 | 0.2 | 1.9 | 1.8 | 2.0 |
| Latvian | -- | -- | -. | .. | .- | 0.2 | 0.1 |
| Lithuanian | -- | - | -- | $\cdots$ | 0.1 | 0.2 | 0.1 |
| Norwegian | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.3 | 0.9 |
| Polish | 0.1 | 0.1 | 0.4 | 0.1 | 0.4 | 1.9 | 4.3 |
| Portuguese | 0.1 | - | 0.1 | .. | 0.3 | 0.8 | 0.4 |
| Roumanian | -- | -- | -- | - | .- | 0.1 | 0.1 |
| Russian | - | - | $\cdots$ | -- | 0.1 | 0.2 | 0.4 |
| Slovak | - | -- | $\cdots$ | -- | -- | 0.2 | 0.1 |
| Spanish | - | - | 0.1 | $\cdots$ | 0.2 | 0.1 | 0.1 |
| Swedish | -- | $\cdots$ | 0.1 | 0.1 | . | 0.2 | 0.9 |
| Syrian-Lebanese | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 |
| Ukrainian |  | 0.1 | 0.3 | 0.1 | 0.3 | 2.1 | 11.6 |
| West Indian | - | -。 | 0.1 | - | 0.1 | 0.3 | 0.1 |
| Yugoslav | -- | $\cdots$ | - | -- | 0.1 | 0.9 | 0.3 |
| Others and unknown | 1.3 | 0.2 | 1.3 | 0.6 | 0.5 | 1.4 | 1.3 |
| totals | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 522,105 | 111,645 | 788,960 | 634,560 | 6,027,765 | 7,703,105 | 988,245 |

Table 13.7
POPULATION BY ETHNIC GROUPS, CANADA AND THE PROVINCES 1971 - Concluded

|  | Saskatchewan | Alberta | British Columbia | Yukon | Northwest Territories | Canada |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | per cent |  |  |  |
| British Isles | 42.1 | 46.7 | 57.8 | 48.5 | 25.2 | 44.6 |
| French | 6.1 | 5.8 | 4.4 | 6.7 | 6.5 | 28.7 |
| Austrian n.e.s. | 0.4 | 0.4 | 0.5 | 0.6 | 0.2 | 0.2 |
| Belgian | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 |
| Chinese | 0.5 | 0.8 | 2.0 | 0.5 | 0.3 | 0.6 |
| Czech | 0.5 | 0.6 | 0.4 | 0.4 | 0.2 | 0.3 |
| Danish | 0.6 | 1.2 | 1.0 | 0.8 | 0.5 | 0.4 |
| Dutch | 2.1 | 3.6 | 3.2 | 2.8 | 1.0 | 2.0 |
| East Indian | 0.2 | 0.3 | 0.9 | 0.1 | 0.2 | 0.3 |
| Estonian | 0 | 0.1 | 0.1 | 0.1 | - | 0.1 |
| Finnish | 0.2 | 0.2 | 0.5 | 0.5 | 0.1 | 0.3 |
| German | 19.4 | 14.2 | 9.0 | 8.5 | 3.8 | 6.1 |
| Greek | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 | 0.6 |
| Hungarian | 1.5 | 1.0 | 0.8 | 1.1 | 0.3 | 0.6 |
| Icelandic | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.1 |
| Indian (native) | 4.4 | 2.7 | 2.4 | 14.0 | 20.6 | 1.4 |
| Inuit |  | $\cdots$ | -- | 0.1 | 32.8 | 0.1 |
| Italian | 0.3 | 1.5 | 2.5 | 0.9 | 0.7 | 3.4 |
| Japanese | -- | 0.3 | 0.6 | 0.2 | -- | 0.2 |
| Jewish | 0.2 | 0.4 | 0.6 | 0.2 | 0.1 | 1.4 |
| Latvian | .- | 0.1 | 0.1 | 0.1 | .- | 0.1 |
| Lithuanian | 0.1 | 0.1 | 0.1 | 0.1 | -- | 0.1 |
| Norwegian | 3.9 | 3.2 | 2.4 | 2.6 | 1.5 | 0.8 |
| Polish | 2.9 | 2.7 | 1.4 | 1.3 | 0.8 | 1.5 |
| Portuguese | $\cdots$ | 0.1 | 0.4 | 0.1 | 0.1 | 0.4 |
| Roumanian | 0.6 | 0.3 | 0.2 | 0.4 | 0.1 | 0.1 |
| Russian | 1.1 | 0.6 | 1.1 | 0.4 | 0.2 | 0.3 |
| Slovak | 0.1 | 0.2 | 0.1 | - | 0.1 | 0.1 |
| Spanish | -- | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Swedish | 1.6 | 1.5 | 1.5 | 1.7 | 0.5 | 0.5 |
| Syrian-Lebanese | 0.1 | 0.1 | -- | -- | -- | 0.1 |
| Ukrainian | 9.3 | 8.3 | 2.8 | 3.3 | 1.8 | 2.7 |
| West Indian | .- | 0.1 | .- | 0.1 | . | 0.1 |
| Yugoslav | 0.2 | 0.5 | 0.7 | 0.8 | 0.3 | 0.5 |
| Others and unknown | 0.8 | 1.6 | 1.6 | 2.4 | 1.5 | 1.0 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 926,245 | 1,627,875 | 2,184,620 | 18,390 | 34,810 | 21,568,310 |






BIRTHPLACE OF FOREIGN BORN POPULATION


CATALOGUE
11-507
OCCASIONAL

## Perspective Canada

ERRATA

| Page | Table or Chart | Change |
| :---: | :---: | :---: |
| 40 | 3.9 | Insert subheading over last column "rate per 1,000 total births". |
| 72 | 4.8 | Last column incorrect: reads $50.1,55.1,85.7$, $62.1,58.5,66.9,54.5,44.5,87.2,37.6,72.7$, 61.6; <br> Should read: $49.9,44.9,14.3,37.9,41.5,33.1$, $45.5,55.5,12.8,62.4,27.3,38.4$. |
| 108 | 5.16 | In left hand stub, line 14 and line 16 change from millions to thousands. |
| 141 | 6.34 | Remove superscript (1) from title. |
| 224 | 11.3 | First line, column 2, change from 18.0 to 25.7 and column 3 , change from 14.9 to 7.2 . |
| 225 | 11.5 | Fifth line, column 3, change from 1.9 to 61.9 . |
| 247 | 12.15 | Add superscript (1) to final (6th) column, eighth line. <br> Add superscript <br> (1) to final (6th) column, eighth line. |
| 282 | 13.27 | Add "1972" after title. |
| 283 | 13.28 | Add superscripts (1) and (2) to the two column headings. Footnotes to read: <br> 1) As at February 1974 <br> 2) As at August 1972 |
| 297 | 14.14 | Fourth column, change last figure from 45,661 to 45,670 . |



Table 13.13
POPULATION BY BIRTHPLACE, BY PROVINCE, $1971^{\circ}$


Table 13.14
IMMIGRANTS BY ETHNIC ORIGIN

|  | 1910-19 | 1920-29 | 1930-39 | 1940-49 | 1950-59 | 1960-66 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | per cent |  |  |  |  |  |
| Armenian |  |  |  |  |  |  |
| British | $38.0$ | $43.5$ | $24.4$ | 44.8 | $27.2$ | $29.0$ |
|  |  |  |  | -- | -. | . . |
| Chinese | 1.7 | 0.5 | - | 0.2 | 1.4 | 2.3 |
| Czech and Slovak | 0.1 | 2.0 | 3.4 | 1.0 | 0.5 | 0.2 |
| East Indian and Pakistani | .- | - | 0.1 | 0.1 | 0.2 | 1.7 |
| Estonian | -- | -- | -- | 1.2 | 0.6 | 0.1 |
| Finnish | 0.6 | 2.2 | 1.3 | 0.1 | 1.0 | 0.5 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Greek | 0.3 | $0.3$ | $0.4$ | 0.5 | 2.2 | 4.8 |
| Hungarian | 0.3 |  |  |  |  |  |
| Italian | 3.6 | 2.2 | 1.6 | 2.7 |  |  |
| Japanese | 0.4 | 0.3 | 0.5 | - | 0.1 | 0.2 |
| Jewish | 1.8 | 3.8 | 3.4 | 4.3 | 2.1 | 2.0 |
| Latvian | -- | -- | -- | 1.5 | 0.5 | 0.1 |
| Lithuanian | $\cdots$ | 0.4 | 0.4 | 1.8 | 0.3 | 0.1 |
|  | 0.1 | -- | - - | 0.2 |  |  |
| Netherlander and Belgian | $0.9$ |  | $1.3$ | $6.3$ |  |  |
| Polish | $2.0$ | $3.7$ | $3.6$ | 6.9 | 2.9 | 2.3 |
| Portuguese | . | 0.1 | -. | -- | 1.1 |  |
|  |  |  |  |  |  |  |
| Russian and Ukrainian | $6.7$ | $5.2$ | $7.1$ | 5.0 | 1.5 | 0.3 |
| Scandinavian ${ }^{1}$ | 1.5 | 4.6 | 2.2 | 0.9 | 2.5 | 1.4 |
|  |  |  |  |  |  |  |
| Swiss | 0.1 | 0.4 | 0.3 | 0.2 | 0.6 | 0.8 |
| Yugoslavic | 0.4 | 1.5 | 1.6 | 1.1 | 1.8 | 2.6 |
| "From the U.S.A." | 37.3 | 18.9 | 38.2 | 16.4 | 6.3 | 5.8 |
| Other | 0.3 | 0.3 | 0.2 | 0.2 | 0.6 | 4.7 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of immigrants | 1,860,271 | 1,264,220 | 252,044 | 428,733 | 1,544,642 | 797,644 |

Table 13.15
IMMIGRANTS BY PLACE OF FORMER RESIDENCE

|  | 1940-49 |  | 1950-59 |  | 1960-69 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Per cent | Number | Percent |
| Africa | 916 | 0.2 | 9,676 | 0.6 | 30,363 | 2.2 |
| Australia and New Zealand | 2,466 | 0.6 | 15,980 | 1.0 | 30,630 | 2.2 |
| Britain ${ }^{1}$ | 168,687 | 39.3 | 411,532 | 26.6 | 336,374 | 24.6 |
| Central and South America | 2,060 | 0.5 | 15,745 | 1.0 | 26,345 | 1.9 |
| China, Hong Kong and Taiwan | 2,152 | 0.5 | 23,569 | 1.5 | 38,197 | 2.8 |
| Czechoslovakia | 5,303 | 1.2 | 5,802 | 0.4 | 3,212 | 0.2 |
| France | 3,599 | 0.8 | 40,217 | 2.6 | 53,011 | 3.9 |
| Germany and Austria | 7,881 | 1.8 | 258,421 | 16.8 | 102,687 | 7.5 |
| Greece | 2,084 | 0.5 | 33,213 | 2.2 | 59,655 | 4.4 |
| Hungary | 3,610 | 0.8 | 45,517 | 2.9 | 4,742 | 0.3 |
| India, Pakistan and Sri Lanka | 962 | 0.2 | 2,934 | 0.2 | 25,241 | 1.8 |
| Italy | 11,174 | 2.6 | 228,070 | 14.8 | 200,442 | 14.7 |
| Japan | 273 | 0.1 | 1,125 | 0.1 | 3,835 | 0.3 |
| Netherlands | 18,920 | 4.4 | 123,174 | 8.0 | 29,055 | 2.1 |
| Philippines | $\cdots$ | -- | -. | -- | 13,480 | 1.0 |
| Poland | 53,148 | 12.4 | 34,282 | 2.2 | 17,160 | 1.3 |
| Portugal | 125 | -- | 14,149 | 0.9 | 58,106 | 4.3 |
| Scandinavia ${ }^{2}$ | 4,215 | 1.0 | 42,630 | 2.8 | 16,528 | 1.2 |
| U.S.S.R. | 7,383 | 1.7 | 4,749 | 0.3 | 1,383 | 0.1 |
| United States | 70,201 | 16.5 | 97,811 | 6.3 | 153,609 | 11.3 |
| West Indies | 2,936 | 0.7 | 10,682 | 0.7 | 46,030 | 3.4 |
| Yugoslavia | 5,742 | 1.3 | 12,743 | 0.8 | 18,097 | 1.3 |
| Other | 54,896 | 12.9 | 112,621 | 7.3 | 97,843 | 7.2 |
| TOTALS | 428,733 | 100.0 | 1,544,642 | 100.0 | 1,366,025 | 100.0 |

$\overline{\text { See foomote(s) at end of table. }}$

Table 13.15
IMMIGRANTS BY PLACE OF FORMER RESIDENCE - Concluded

|  | 1970 |  | 1971 |  | 1972 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent | Number | Per cent | Number | Per cent |
| Africa | 2,863 | 1.9 | 2,841 | 2.3 | 8,308 | 6.8 |
| Australia and New Zealand | 4,385 | 3.0 | 2,902 | 2.4 | 2,143 | 1.7 |
| Britain ${ }^{1}$ | 26,497 | 17.9 | 15,451 | 12.8 | 18,197 | 14.8 |
| Central and South America | 5,641 | 3.8 | 5,670 | 4.7 | 6,521 | 5.3 |
| China, Hong Kong and Taiwan | 5,377 | 3.6 | 5,817 | 4.8 | 7,181 | 5.8 |
| Czechoslovakia | 763 | 0.5 | 283 | 0.2 | 154 | 0.1 |
| France | 4,410 | 3.0 | 2,966 | 2.4 | 2.742 | 2.2 |
| Germany and Austria | 4,938 | 3.4 | 2,682 | 2.2 | 2,390 | 1.9 |
| Greece | 6,327 | 4.3 | 4,769 | 3.9 | 4,016 | 3.3 |
| Hungary | 461 | 0.3 | 373 | 0.3 | 322 | 0.3 |
| India, Pakistan and Sri Lanka | 6,847 | 4.6 | 6,499 | 5.3 | 6,479 | 5.3 |
| Italy | 8,533 | 5.8 | 5,790 | 4.8 | 4,608 | 3.8 |
| Japan | 797 | 0.5 | 883 | 0.7 | 718 | 0.6 |
| Netherlands | 1,916 | 1.3 | 1,301 | 1.1 | 1,471 | 1.2 |
| Philippines | 3,240 | 2.2 | 4,180 | 3.4 | 3,946 | 3.2 |
| Poland | 723 | 0.5 | 1,132 | 0.9 | 1,321 | 1.1 |
| Portugal | 7,902 | 5.4 | 9,157 | 7.5 | 8,737 | 7.1 |
| Scandinavia ${ }^{2}$ | 1,269 | 0.9 | 903 | 0.7 | 966 | 0.8 |
| U.S.S.R. | 131 | 0.1 | 155 | 0.1 | 315 | 0.3 |
| United States | 24,424 | 16.5 | 24,366 | 20.0 | 22,618 | 18.3 |
| West Indies | 12,660 | 8.6 | 11,017 | 9.0 | 8,474 | 6.9 |
| Yugosiavia | 5,672 | 3.8 | 2,997 | 2.5 | 2,047 | 1.7 |
| Other | 11,937 | 8.1 | 9,766 | 8.0 | 9,186 | 7.5 |
| TOTALS | 147,713 | 100.0 | 121,900 | 100.0 | 122,860 | 100.0 |

Chart 13.16
IMMIGRANTS BY REGION OF FORMER RESIDENCE


Table 13.17
IMMIGRATION IN THE CONTEXT OF CANADIAN POPULATION GROWTH

|  | Popu- <br> lation at end of decade 1 | Growth in population | Immigration | Emigration ${ }^{2}$ | Gross immigration as a percentage of total population ${ }^{3}$ | IMMIGRATION AS A PERCENTAGE OF POPULATION GROWTH |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | thou | sands |  |  | per cent |  |
| 1851-61 | 3,230 | 793 | 209 | 85 | 6.5 | 26.4 | 15.5 |
| 1861.71 | 3,689 | 459 | 183 | 379 | 5.1 | 40.7 | -41.7 |
| 1871.81 | 4,325 | 636 | 353 | 440 | 8.2 | 55.5 | - 13.7 |
| 1881-91 | 4,833 | 508 | 903 | 1,109 | 23.0 | 177.8 | - 40.6 |
| 1891.01 | 5,371 | 538 | 326 | 506 | 9.4 | 60.6 | - 33.4 |
| 1901-11 | 7,207 | 1,836 | 1,759 | 1,043 | 24.4 | 95.8 | 38.0 |
| 1911-21 | 8,788 | 1,581 | 1,612 | 1,381 | 18.3 | 101.9 | 14.6 |
| 1921-31 | 10,377 | 1,589 | 1,203 | 974 | 11.6 | 75.7 | 14.4 |
| 1931-41 | 11,507 | 1,130 | 150 | 242 | 1.3 | 13.2 | - 8.1 |
| 1941-51 | 14,009 | 2,502 | 548 | 379 | 3.9 | 21.9 | 6.7 |
| 1951-61 | 18,238 | 4,229 | 1,543 | 462 | 8.4 | 36.4 | 25.5 |
| 1961-71 | 21,568 | 3,330 | 1,429 | 702 | 6.8 | 43.8 | 22.8 |

1) As at June.
2) Estimated.
3) Calculatod at and of decade.

Note: From 194\%, figures for Newfoundland ara included for population and population growth but not for immigration and emigration.

## Chart 13.18

IMMIGRATION AS A PERCENTAGE OF POPULATION GROWTH


Chart 13.19
IMMIGRANTS BY INTENDED OCCUPATION, 1951 AND 1971


Table 13.20
INCOME GROUP OF FAMILIES BY YEAR OF IMMIGRATION OF HEAD, 1969

|  | CANADIAN BORN |  | NON-CANADIAN BORN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Immigrated before 1946 | Immigrated 1946-1969 | Total |
|  |  |  | per ce |  |  |
| Under \$1,000 |  | 1.3 | 1.6 | 0.3 | 0.8 |
| \$ 1,000-\$ 1,999 |  | 2.9 | 5.2 | 1.1 | 2.6 |
| 2,000-2,999 |  | 6.8 | 14.9 | 2.3 | 6.9 |
| 3,000-3,999 |  | 6.4 | 13.3 | 4.3 | 7.6 |
| 4,000-4,999 |  | 7.4 | 8.2 | 5.7 | 6.6 |
| 5,000-5,999 |  | 8.0 | 7.1 | 7.4 | 7.3 |
| 6,000-6,999 |  | 8.5 | 7.0 | 7.3 | 7.2 |
| 7,000 - 7,999 |  | 9.2 | 7.3 | 10.1 | 9.1 |
| 8,000 - 8,999 |  | 8.7 | 6.8 | 11.4 | 9.7 |
| 9,000-9,999 |  | 7.4 | 4.4 | 11.2 | 8.7 |
| 10,000-11,999 |  | 12.1 | 10.3 | 15.2 | 13.4 |
| 12,000-14,999 |  | 10.8 | 5.6 | 11.3 | 9.2 |
| 15,000-24,999 |  | 8.7 | 6.5 | 10.8 | 9.2 |
| 25,000 and over |  | 1.8 | 1.6 | 1.8 | 1.7 |
| TOTALS |  | 100.0 | 100.0 | 100.0 | 100.0 |
| Average annual income | \$ | 8,917 | 7,330 | 9,919 | 8,969 |

Chart 13.21
CANADIAN AND FOREIGN BORN FAMILIES(1) BY INCOME GROUP, 1969


Table 13.22
AGE BY ETHNIC GROUP, 1971

|  | YEARS |  |  |  |  |  |  | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | | Total |
| :---: |
| persons |

Table 13.23
EDUCATIONAL ATTAINMENT BY MOTHER TONGUE, 19711

|  | Elementary | Secondary | Post-secondary | University |
| :--- | :---: | :---: | :---: | :---: |
|  |  | per cent |  |  |
| English | 26.2 | 42.5 | 17.5 | 13.8 |
| French | 49.5 | 29.0 | 12.8 | 8.7 |
| German | 47.0 | 25.7 | 18.7 | 8.6 |
| Indians and Inuit | 79.5 | 15.0 | 3.8 | 1.7 |
| Italian | 74.0 | 16.0 | 5.7 | 4.3 |
| Dutch | 37.6 | 30.7 | 21.6 | 10.1 |
| Scandinavian | 45.7 | 29.8 | 16.2 | 8.3 |
| Ukrainian | 54.8 | 27.3 | 9.9 | 8.0 |
| All other | 48.0 | 25.7 | 11.4 | 14.9 |
| TOTALS | 36.8 | 36.0 | 15.4 | 11.8 |
| 1/ Persons 20 years of age and over. |  |  |  |  |

Table 13.24
ETHNIC GROUP BY OCCUPATIONAL GROUP, 1971

|  | British Isles | French | German | Hungarian | Italian | Jewish | Netherlands |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | per cent |  |  |  |  |  |  |
| Managerial, administrative and related | 5.2 | 3.7 | 3.6 | 2.8 | 1.8 | 10.7 | 3.5 |
| Natural sciences, engineering and mathematics | 3.1 | 1.8 | 2.7 | 4.7 | 1.3 | 2.6 | 3.3 |
| Social sciences and related | 1.0 | 0.9 | 0.6 | 0.6 | 0.3 | 3.3 | 0.7 |
| Religion | 0.3 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | 0.4 |
| Teaching and related | 4.3 | 4.5 | 3.6 | 3.1 | 1.6 | 5.2 | 3.2 |
| Medicine and related | 4.1 | 3.6 | 3.5 | 3.4 | 1.1 | 4.9 | 3.6 |
| Art, literature, performing arts and related |  |  |  |  |  |  |  |
| Clerical and related | 18.5 | 14.7 | 13.4 | 11.5 | 9.7 | $18.8$ | 11.9 |
| Sales | 10.4 | 8.7 | 8.7 | 6.7 | 6.7 | 24.2 | 8.8 |
| Service | 10.6 | 11.2 | 10.6 | 11.9 | 13.0 | 4.9 | 10.6 |
| Farming, horticulture and animal-husbandry | 5.4 | 4.4 | 12.5 | 9.4 | 1.8 | 0.4 | 14.2 |
| Fishing, hunting, trapping and related | 0.4 | 0.2 | 0.1 | . | . | . | 0.2 |
| Forestry and logging | 0.6 | 1.3 | 0.5 | 0.4 | 0.2 | -- | 0.4 |
| Mining, quarrying including oil and gas field | 0.6 | 0.9 | 0.7 | 0.7 | 0.4 | -- | 0.4 |
| Processing | 3.1 | 4.9 | 3.7 | 4.2 | 6.2 | 1.4 | 3.8 |
| Machining | 2.4 | 2.8 | 3.4 | 5.8 | 5.2 | 0.6 | 3.1 |
| Production, fabrication, assembly and repair | 5.9 | 8.2 | 7.6 | 9.7 | 15.6 | 6.4 | 6.9 |
| Construction trades | 5.6 | 6.9 | 7.9 | 7.2 | 15.3 | 1.7 | 8.1 |
| Transport equipment operation | 4.2 | 4.5 | 3.5 | 2.5 | 2.6 | 1.7 | 3.5 |
| Material handling and related | 2.4 | 2.2 | 2.3 | 2.4 | 3.4 | 0.8 | 2.3 |
| Other crafts and equipment operation | 1.4 | 1.3 | 1.1 | 1.0 | 0.7 | 0.6 | 1.1 |
| Not stated and not elsewhere classified | 9.5 | 12.0 | 9.0 | 10.5 | 12.4 | 9.5 | 9.2 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

ETHNIC GROUP BY OCCUPATIONAL GROUP, 1971 - Concluded

|  | Polish | Russian | Scandinavian | Ukrainian | Asiatic | Native Indian | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | per cent |  |  |  |  |  |  |  |
| Managerial, administrative and related | 2.8 | 3.0 | 3.8 | 2.9 | 3.1 | 1.5 | 2.6 | 4.3 |
| Natural sciences, engineering and mathematics | 3.2 | 3.1 | 3.0 | 2.5 | 7.1 | 1.1 | 3.3 | 2.7 |
| Social sciences and related | 0.6 | 0.6 | 0.7 | 0.6 | 1.0 | 1.3 | 0.7 | 0.9 |
| Religion | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| Teaching and related | 3.0 | 3.5 | 4.0 | 3.5 | 4.7 | 1.6 | 3.0 | 4.1 |
| Medicine and related | 3.2 | 3.2 | 3.7 | 3.0 | 8.5 | 2.2 | 3.8 | 3.8 |
| Art, literature, performing arts and related | 0.7 | 1.1 | 0.8 | 0.7 | 0.9 | 1.1 | 1.0 | 0.9 |
| Clerical and related | 14.2 | 13.7 | 13.7 | 14.8 | 14.7 | 6.9 | 12.2 | 15.9 |
| Sales | 7.2 | 7.7 | 9.1 | 8.4 | 9.1 | 2.7 | 6.3 | 9.5 |
| Service | 13.1 | 11.6 | 10.7 | 12.9 | 16.9 | 12.4 | 15.7 | 11.2 |
| Farming, horticulture and animal-husbandary | 8.0 | 10.4 | 12.6 | 11.6 | 2.2 | 5.9 | 5.0 | 5.9 |
| Fishing, hunting, trapping and related | -- | 0.1 | 0.5 | 0.1 | 0.3 | 2.6 | 0.2 | 0.3 |
| Forestry and logging | 0.5 | 1.0 | 1.2 | 0.4 | 0.2 | 6.2 | 0.6 | 0.8 |
| Mining, quarrying including oil and gas field | 1.1 | 0.8 | 1.1 | 0.9 | 0.2 | 1.0 | 0.7 | 0.7 |
| Processing | 4.8 | 4.6 | 3.0 | 3.8 | 3.9 | 4.1 | 4.6 | 3.9 |
| Machining | 4.1 | 2.7 | 2.0 | 2.7 | 2.2 | 2.2 | 4.4 | 2.8 |
| Production, fabrication, assembly and repair | 8.9 | 6.4 | 5.2 | 6.9 | 8.0 | 4.4 | 11.0 | 7.4 |
| Construction trades | 6.7 | 7.4 | 8.0 | 6.5 | 2.0 | 9.8 | 7.4 | 6.5 |
| Transport equipment operation | 2.8 | 3.9 | 4.0 | 3.7 | 1.4 | 3.6 | 2.5 | 3.9 |
| Material handling and related | 2.9 | 3.0 | 2.6 | 2.8 | 2.0 | 3.1 | 2.5 | 2.4 |
| Other crafts and equipment operation | 1.0 | 1.1 | 1.2 | 1.1 | 0.8 | 0.7 | 1.0 | 1.3 |
| Not stated and not elsewhere classified | 11.1 | 10.9 | 8.9 | 10.1 | 10.7 | 25.5 | 11.4 | 10.5 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table 13.25
POPULATION BY RELIGION

| 1871 | 1901 | 1911 | 1921 | 1931 | 1951 | 1961 | 1971 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

per cent

| Anglican | 14.1 | 12.8 | 14.5 | 16.1 | 15.8 | 14.5 | 13.2 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Baptist | 6.8 | 6.0 | 5.3 | 4.8 | 4.3 | 3.7 | 3.3 |
| Greek Orthodox ${ }^{1}$ | $\ldots$ | 0.3 | 1.2 | 1.9 | 1.0 | 1.2 | 1.3 |


| Jehovah's Witnesses | $\ldots$ | $\ldots$ | $\ldots$ | 0.1 | 0.1 | 0.2 | 0.4 | 0.8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Jewish | $\ldots$ | 0.3 | 1.0 | 1.4 | 1.5 | 1.4 | 1.4 | 1.3 |
| Lutheran | 1.1 | 1.8 | 3.2 | 3.3 | 3.8 | 3.1 | 3.6 | 3.3 |


| Mennonite $^{2}$ | $\ldots$ | 0.6 | 0.6 | 0.7 | 0.9 | 0.9 | 0.8 | 0.8 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pentecostal | - | $\ldots$ | $\ldots$ | 0.1 | 0.3 | 0.7 | 0.8 | 1.0 |
| Presbyterian | 16.2 | 15.8 | 15.6 | 16.0 | 8.4 | 5.5 | 4.5 | 4.0 |


| Roman Catholic | 42.9 | 41.7 | 39.5 | 38.6 | 39.5 | 42.7 | 45.8 | 46.3 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Salvation Army | $\ldots$ | 0.2 | 0.3 | 0.3 | 0.3 | 0.5 | 0.5 | 0.6 |
| Ukrainian Catholic | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 1.8 | 2.8 | 1.0 | 1.1 |


| United Church |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 17.0 | 17.9 | 15.8 | 13.9 | 19.8 | 20.7 | 20.3 | 17.5 |
| Other | 1.7 | 2.2 | 2.4 | 2.5 | 2.3 | 1.7 | 3.1 | 2.6 |
| No religion | 0.2 | 0.4 | 0.6 | 0.3 | 0.2 | 0.4 | 4 | 4.3 |


| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Population in thousands | 3,689 | 5,371 | 7,207 | 8,788 | 10,377 | 14,009 | 18,238 | 21,568 |

Chart 13.26

## POPULATION BY RELIGION



Table 13.27
CULTURAL ORGANIZATIONS1

|  | Number of <br> organi- <br> zations |  | Number of <br> organi- <br> zations | Number of <br> organi- <br> zations |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| African | 8 | French | 7 | Norwegian |

1) In some cases only the head office of an organization is counted even though branches may exist in many centres. Also, if an orgenization does not advise the Secretary of State's office of its existence it will not be counted.

Table 13.28
FOREIGN LANGUAGE MEDIA

|  | Newspapers and periodicals | Radio broadcast time per week |
| :---: | :---: | :---: |
|  | number | hours and minutes |
| Arabic | 2 | 2:27 |
| Armenian | - | 1:30 |
| Belgian | - | . 55 |
| Bulgarian | - | 2:05 |
| Byelorussian | 1 | - |
| Chinese | 4 | 9:15 |
| Croatian, Serbian, Slovenian and Yugoslavian | 7 | 23:20 |
| Czech and Slovak | 4 | 1:54 |
| Danish | 1 | :59 |
| Dutch | 7 | 15:30 |
| Estonian | 2 | :57 |
| Finnish | 2 | 4:24 |
| German | 10 | 55:31 |
| Greek | 6 | 65:33 |
| Hindi | - | 10:22 |
| Hungarian | 8 | 5:38 |
| Icelandic | 1 | - |
| Italian | 19 | 156:05 |
| Japanese | 2 | 1:00 |
| Jewish | 4 | - |
| Korean | - | : 30 |
| Latvian | 1 | - |
| Lithuanian | 3 | 2:00 |
| Macedonian | - | 4:30 |
| Maltese | - | :30 |
| Norwegian | 1 | 1:30 |
| Pakistani | 1 | 1:35 |
| Polish | 4 | 13:45 |
| Portuguese | 6 | 23:27 |
| Russian | - | 5:40 |
| Spanish | 3 | 1:00 |
| Swedish | 2 | :58 |
| Ukrainian | 22 | 42:52 |

Table 13.29
TYPES OF RESTAURANTS IN SELECTED CITIES, 1973
Montreal Ottawa Toronto Edmonton Vancouver

|  |  | per cent |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| General 1 | 51.8 | 33.3 | 36.9 | 40.5 | 32.0 |
| Italian | 15.1 | 15.7 | 13.6 | 11.8 | 13.2 |
| Chinese | 5.7 | 15.3 | 8.5 | 11.8 | 11.2 |


| American $^{2}$ | 12.3 | 14.4 | 17.5 | 23.1 | 23.3 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| French | 1.5 | 10.3 | 1.5 | $\ldots$ | 1.0 |
| Steak | 6.5 | 5.7 | 14.7 | 6.6 | 11.2 |


| Delicatessen 3 | 4.6 | 2.1 | 2.9 | 0.8 | 2.4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Arab | 0.1 | 1.0 | 0.3 | $\ldots$ | $\ldots$ |
| Fish and chips | 0.4 | 0.6 | 0.7 | 1.3 | 2.0 |


| Indian | 0.7 | 0.4 | 1.0 | 0.5 | 0.7 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Japanese | 0.4 | 0.4 | 0.5 | 0.8 | 1.0 |
| Spanish | 0.4 | 0.2 | 0.3 | 0.5 | 0.7 |


| Hungarian | 0.4 | 0.2 | 1.3 | 1.8 | 1.1 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| African | $\ldots$ | 0.2 | 0.1 | $\ldots$ | $\ldots$ |
| Natural food | 0.1 | 0.2 | 0.2 | 0.5 | 0.2 |

[^53]100.0
3) Includes German and Austrian restaurants.

## Criminal Justice

 14All complex societies have devised systems to adjudicate between man and man, and state and man. To maintain these systems of justice at high levels of quality and effectiveness, both governments and citizens place heavy reliance on information about their use and development. As a nation, we want to know how law-abiding we are and how fair our legal system is. As individuals we want to know how safe we are from all kinds of criminal hurt and state harassment.

Informed decisions on the administration of justice require statistical information. Court statistics are one of the oldest statistical series in Canada but there are still important areas of justice for which statistical information is unavailable.

The Utopian ideal would be to have no crime at all, and no injustices by man to man, or between state and man. In practice, our best hope is to achieve a democratically chosen "acceptable" level of crime, balanced by a similarly chosen risk of state injustice (wrong arrest, unfair punishment, restraint, and surveillance), acceptable only to achieve the first goal. ${ }^{1}$ To know whether these goals are being reached, and to act on that knowledge, we must have information on what goes into the justice system, and what it all produces. The inputs are basically labour, goods and money. Conceptually, at least, they are easy to measure. The "output" would be mostly noneconomic results such as "security from physical attack" or "protection from unjust arrest", and these are far more difficult to quantify. All we have at present are negative measures counts of dishonesty and injustice. And even these are sparse. We know the number and kind of crimes reported to the police, but nothing of the crimes that go unreported. We have information on how reported crime rates vary by region and by size of community, but little information as to who the victims are. Accepting these limitations, what data do we want to have about the justice system?

An important measure of a police force's functioning would be how successful it is at solving crimes brought to its attention (i.e. its clearance rate), balanced against a measure of the frequency of unjustified arrests. Statistics are available on clearance rates for most police forces in Canada, but the way crimes are grouped makes comparison difficult. Within a given criminal code description, the statistics for each police force include a variety of criminal acts - some easy to solve, others in practice soluble only by chance. A burglar caught in the act by a patrolman is given equal weight in the statistics with a burglar apprehended only a ter a long investigation. Thus it is difficult to form any measure of the

[^54]effectiveness of the force without knowing the relative difficulty of its work.

Would the rate at which courts acquit those arraigned by each police force be a useful measure of police "fairness"? Perhaps. But there are no such data. In any event, such a measure would reflect the acts of two separate institutions, making any interpretation ambiguous.

Some aspects of how courts themselves are performing might be assessed by such measures as the time between arrest and trial, the extent to which accused persons have access to legal counsel, and the degree to which they are freed on bail before trial. But society's concerns are more basic. Were the judgments correct? Were the sentences appropriate? Such questions can be answered statistically only with great difficulty, if at all.

We do not have national data on how long accused persons wait for trial, whether they are released on bail or kept locked up, or on how these two factors affect the accused's chances in court. Similarly, we do not collect information on whether or not the accused had counsel. ${ }^{2}$ We do, however, have time series relating the type of trial to its outcome, by type of offence.

Some indication of the "correctness" of court judgments might be gained by knowing how often they were overturned by higher courts. This information is not now publicly available, although there is some information on how consistently similar offences receive similar sentences.

To judge the effectiveness of correction methods, detailed information on the rate at which offenders are rehabilitated is required. Negatively, we want to know how many offenders commit another offence within a specified time after their release (that is, the rate of recidivism). Unfortunately, most prison statistics are simple gate counts of entries and discharges, with a few personal characteristics also tabulated. No real measure of recidivism is attempted, and there is no information available on a national level on rehabilitation.

A problem cutting across the justice system is that of possible systematic unfairness. We know that a disproportionate number of offenders are young people and that people in prisons have lower than average levels of education. It also appears likely from the fragmentary data available that Indians and Métis make up a disproportionate percentage of prison populations. Without better social data on offenders, linked to their legal record, it is impossible to begin measuring whether the legal system discriminates overtly or otherwise against certain people.

[^55]Although in the near future the new integrated court reporting system will greatly improve the information available, such data as exist now do not allow us to follow criminals from arrest to trial to incarceration and back into the outside world. Yet such an approach is needed for effective analysis of the justice field.

## DATA

Clearance of crimes and laying of charges are both measures of the results of police activities. The rate of clearance varies with the crime. Acts such as public drunkenness "turn themselves in", so the clearance rate is high. Stealthy acts such as burglary are generally discovered after the fact, so finding the culprit is difficult and the clearance rate is low.

In the police statistics (on crimes committed), when several offences occur in one incident, only the most serious offence is counted. In reporting offences against the person, one offence is reported for each victim. In offences against property, one offence is reported for each distinct or separate act.

Reported crime statistics are also affected by the timing of events. For example, a crime can be committed in one year and solved in another. If, for instance, a rash of car thefts in 1973 is cleared up by the arrest of a ring of thieves in 1974, the rate of reported thefts could decline from 1973 to 1974, while the rate of charges being laid for car theft could go up.

When a suspect is charged, the crown prosecutor may decide that the offence was serious enough to proceed by indictment, or decide that it was less serious, and proceed summarily (see Concepts and Definitions). Data on indictable offences show the type of trial that accused persons underwent, the number of persons convicted, and the sentences received. Similar information is presented for persons convicted for summary offences. (Since all summary offences are handled in magistrates' courts, no data are given on type of trial.)

Since 1949, Statistics Canada has collected court statistics on the basis of persons rather than convictions. Thus a man convicted of eight counts of burglary would result in one being added to the count of persons convicted of burglary.

The treatment of juvenile offenders makes it difficult to relate the patterns of juvenile and adult crime. A large number of delinquencies are dealt with informally, outside the courts. Instead of being charged and tried, a juvenile may be turned over to his parents for correction, seen privately by a judge in his chambers, or counselled by a social worker. Until recently, there have been no statistics on the number of delinquency cases dealt with informally. Juveniles can be charged with offences (such as "immorality" under the Juvenile Delinquents Act) that do not apply to adults. Similarly,
the types of sentences available to a juvenile court judge are somewhat different from those used in adult court.

Data are presented to show the number of juveniles found delinquent, and the court's disposition of them as well as the number of offenders, both juvenile and adult, incarcerated in the various types of correctional institutions. (These figures result from a census taken in each institution on the first day of each year.)

## CONCEPTS AND DEFINITIONS

## INDICTABLE AND SUMMARY OFFENCES

An indictable offence is one regarded as an offence not only against a person but against the whole state. These offences are designated by statute, which also defines maximum punishment in each case; they demand a more formal hearing than ordinary offences.

Ordinary (summary) offences are those not expressly made indictable; they are, as a rule, minor. All provincial statutes and municipal by-laws are in this category (such as offences against traffic and liquor laws, and breaches of the peace). Maximum sentence for a summary offence is $\$ 500$ fine and/or six months' imprisonment.

Indictable offences are usually classified for statistical purposes as:
(1) Criminal Code offences, such as
(i) against the person (abduction, kidnapping, assaults, criminal negligence, incest, rape, libel, murder)
(ii) against property, with violence (breaking and entering, robbery, extortion)
(iii) against property, without violence (fraud, embezzlement, theft, receiving stolen goods)
(iv) malicious offences against property (arson, other malicious damages to property)
(v) forgery and offences against currency
(2) Federal Statutes, such as offences against the Customs Act, Excise Act, Food and Drug Act, Narcotic Control Act, Post Office Act
Summary offences are classified as
(a) Criminal Code (e.g. common assault, drunk and disorderly conduct, impaired driving, vagrancy)
(b) Federal Statutes (Customs Act, Juvenile Delinquents Act, Unemployment Insurance Act, Lord's Day Act)
(c) Provincial Statutes (game and fisheries offences, traffic offences, liquor control)
(d) Municipal By-Laws (intoxication, traffic offences)
Many offences can lead to either a summary or an indictable charge. The choice is up to the crown prosecutor; normally, he chooses the less serious charge.

## CLEARED, CHARGED

When a crime is "solved" - that is, when a charge has been laid - the offence is said to be cleared. ${ }^{3}$ Several persons may be charged with one crime, or one person may be charged with several crimes. Thus, through chance and police effort, a certain percentage of all reported crimes are cleared, and a number of people are charged, but the numbers of reported offences and of offenders may not correspond.

## PERSONS CONVICTED

While individuals may be charged with more than one offence, for statistical purposes only one offence is tabulated for each person convicted. This offence is selected according to the following criteria:
(1) If the person was tried on several charges, the offence selected is that for which proceedings were carried to the furthest stage - conviction and sentence.
(2) If there were several convictions, the offence selected is that for which the heaviest punishment was awarded.
(3) If the final result of proceedings on two or more charges was the same, the offence selected is the more serious one, as measured by the maximum penalty allowed by the law.
(4) If a person was prosecuted for one offence and convicted of another, for example, charged with non-capital murder and convicted of manslaughter, the offence selected is the one of which the person was convicted.

## TYPES OF TRIAL

The Criminal Code specifies the type of trial for certain offences. A judge and jury trial is mandatory for serious indictable offences such as murder, treason, rape, and manslaughter. For a number of less serious indictable offences, the Criminal Code gives a magistrate absolute jurisdiction. This group includes such acts as theft under $\$ 50$, obstructing a police officer, keeping a bawdy house, and common assault. For all indictable offences not otherwise specified, the type of trial is at the option of the accused, who may choose trial before a magistrate, judge alone, or judge and jury.

[^56]Summary offences are tried only by summary conviction court which is usually presided over by a magistrate.

## TYPES OF SENTENCE

A court may suspend a sentence, if the accused complies with a probation order requiring him to be on good behaviour and to appear before the court when required. There may also be optional conditions attached, including "to report to and be under the supervision of a probation officer or other person designated by the court". In this case, the accused would be counted as receiving a suspended sentence with probation. If a person on probation violates the terms of his probation order, the court can then impose the sentence it earlier suspended.

Persons sentenced to imprisonment for a period less than two years are placed under provincial jurisdiction and sent to a jail, prison or reformatory. If the sentence is for two years or over, the accused becomes a federal responsibility and is sent to a penitentiary.

## JUVENILE DELINOUENCY

"A juvenile delinquent, as defined in the Juvenile Delinquents Act, means any child who violates any provision of the Criminal Code or of any Dominion or Provincial Statute or of any By-Law or ordinance of any municipality, or who is guilty of sexual immorality or any similar form of vice, or who is liable by reason of any other act to be committed to an industrial school or juvenile reformatory under the provision of any Dominion or Provincial Statute."4

The upper age limit of children brought before the juvenile courts varies from province to province, between 16 and 18 years.

There is much variation across the country in the types of sentences given to juveniles. Most of the sentences are self-explanatory, except for the difference between "probation" and "final disposition suspended". In the first case, the judge finds the juvenile guilty of an offence, assesses a penalty, but then suspends it on condition that the juvenile behaves well in future. If he breaks the terms of his probation, the suspended sentence takes effect. In the second case, the court procedure is suspended before sentence is passed. If the juvenile remains on good behaviour, nothing happens; if not, the case is re-opened and a sentence may be passed.

In all juvenile cases, if the judge is dissatisfied with the juvenile's subsequent behaviour, the case can be reheard and a new judgment made. This is possible until the juvenile becomes of age.

[^57]Table 14.1
ACTUAL OFFENCES REPORTED, BY OFFENCE GROUP

|  | 1962 | 1964 | 1966 | 1968 | 1970 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  | per cent |  |  |
| Criminal Code ${ }^{1}$ | 64.6 | 65.2 | 64.2 | 67.2 | 70.5 |
| Federal Statutes | 3.9 | 3.5 | 3.3 | 3.4 | 3.5 |
| Provincial Statutes | 24.6 | 25.9 | 26.5 | 23.8 | 21.3 |
| Muricipal By-laws ${ }^{2}$ | 6.9 | 5.4 | 6.0 | 5.6 | 4.7 |
| TOTALS $_{\text {Thousands of offences }}$ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

1) From 1968 on, arson is included in Criminal Code offences (arson was not previously included in offence statistics). 2) Except traffic offences.

Chart 14.2
OFFENCE RATE(1), BY OFFENCE GROUP


1) Rate per 100.000 of population seven vears and alder.

Table 14.3
OFFENCE RATE BY PROVINCE ${ }^{3}$

|  | 1962 | 1964 | 1966 | 1968 | 1970 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CANADA | 5,165 | 5,986 | 6,517 | 7,508 | 8,459 |
| Newfoundland | 3,354 | 4,308 | 4,882 | 5,778 | 6,296 |
| Prince Edward Island | 4,445 | 5,556 | 6,858 | 7,543 | 8,001 |
| Nova Scotia | 4,738 | 5,876 | 6,149 | 6,704 | 7,520 |
| New Brunswick | 2,884 | 4,362 | 5,517 | 5,808 | 6,054 |
| Quebec | 3,310 | 3,674 | 4,069 | 4,880 | 5,329 |
| Ontario | 5,285 | 6,233 | 6,617 | 7,679 | 8,882 |
| Manitoba | 5,725 | 6,424 | 6,625 | 8,172 | 9,372 |
| Saskatchewan | 6,592 | 6,775 | 7.579 | 8,961 | 10,050 |
| Alberta | 7,596 | 8,599 | 9,483 | 10,704 | 12,471 |
| British Columbia | 8,760 | 10,389 | 11,232 | 12,067 | 12,732 |
| Yukon2 | . . | . . | . . | 28,675 | 33,331 |
| Northwest Territories ${ }^{2}$ | . . |  |  | 22,803 | 31,929 |

1) Rate per 100,000 of population seven vears and older.
2) Because of small population base, Yukon and Northwest Territories rates not calculated before 1967.

Table 14.4
OFFENCE RATE, BY SIZE OF MUNICIPALITY1

|  | 1962 | 1964 | 1966 | 1968 | 1970 |
| ---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 250,000 and over | 6,468 | 7,068 | 7,298 | 8,228 | 9,094 |
| $100,000 \cdot 250,000$ | 6,163 | 6,954 | 5,781 | 6,864 | 7,995 |
| $50,000 \cdot 100,000$ | 4,502 | 5,190 | 5,221 | 6,127 | 7,047 |
| $25,000 \cdot 50,000$ | 3,545 | 4,001 | 4,372 | 5,893 | 6,117 |
| $10,000 \cdot 25,000$ | 3,906 | 4,000 | 5,004 | 5,417 | 6,225 |
| $5,000-10,000$ | 3,312 | 3,395 | 4,539 | 5,446 | 6,047 |
| $2,500 \cdot 5,000$ | 3,440 | 4,148 | 5,392 | 6,052 | 7,200 |
| $750 \cdot 2,500$ | 4,663 | 4,988 | 6,155 | 5,492 | 7,338 |
| CANADA | 4,245 | 4,943 | 5,406 | 6,378 | 7,301 |

[^58]Chart 14.5
OFFENCE RATE, BY SIZE OF MUNICIPALITY
Rate per 100,000 Population
Rate per 100,000 Population


Table 14.6
PERCENTAGE OF OFFENCES CLEARED,1 BY OFFENCE GROUP

|  | 1962 | 1964 | 1966 | 19682 | 19702 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| Criminal Code | 36.5 | 37.7 | 37.7 | 36.2 | 35.9 |
| Federal Statutes | 85.2 | 84.2 | 87.6 | 86.1 | 84.0 |
| Provincial Statutes | 94.8 | 94.2 | 94.8 | 96.0 | 96.3 |
| Municipal By-laws | 88.6 | 82.0 | 88.0 | 87.3 | 86.6 |
| ALL OFFENCES | 56.3 | 56.4 | 57.5 | 55.0 | 52.8 |

[^59]Table 14.7
ADULTS CHARGED, BY OFFENCE GROUP

|  | 1962 | 1964 | 1966 | 1968 | 1970 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  | per cent |  |  |
| Criminal Code | 33.4 | 33.6 | 30.5 | 33.8 | 38.7 |
| Federal Statutes | 6.3 | 5.3 | 5.6 | 6.1 | 6.4 |
| Provincial Statutes | 49.3 | 53.1 | 54.7 | 50.0 | 46.3 |
| Municipal By-laws | 11.0 | 8.0 | 9.2 | 10.1 | 8.6 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Thousands charged | 369 | 409 | 468 | 491 | 509 |

Table 14.8
JUVENILES CHARGED, BY OFFENCE GROUP

|  | 1962 | 1964 | 1966 | 1968 | 1970 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Criminal Code | 82.4 | 80.5 | per cent |  |  |
| Federal Statutes | 2.6 | 3.4 | 2.0 | 79.0 | 82.9 |
| Provincial Statutes | 10.8 | 13.7 | 17.2 | 3.1 | 3.4 |
| Municipal By-laws | 4.2 | 2.4 | 5.4 | 4.8 | 11.4 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of juveniles | 31,913 | 45,464 | 52,956 | 66,327 | 63,140 |

Chart 14.9
RATE(1) OF CHARGES LAID, ADULTS AND JUVENILES


Table 14.10
TYPE OF TRIAL FOR ADULTS CHARGED WITH AN INDICTABLE OFFENCE

|  | 1951 | 1956 | 1961 | 1966 | 19711 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | per cent |  |  |  |
|  |  |  |  | 2.8 | 2.1 | 2.1 |
| Judge and jury | 7.0 | 4.1 | 6.1 | 4.8 | 3.7 |  |
| Judge without jury | 90.2 | 61.0 | 48.1 | 47.4 | 49.5 |  |
| Magistrate, jurisdiction with consent | 2 | 32.5 | 43.6 | 45.7 | 44.7 |  |
| Magistrate, absolute jurisdiction | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |
| TOTALS | 34,181 | 30,838 | 43,161 | 51,079 | 54,098 |  |

1) Excludes Quebec and Alberta.
2) Included in count for "Magistrate, jurisdiction with consent", in 1951.

## Chart 14.11

TYPE OF TRIAL FOR ADULTS CHARGED WITH AN INDICTABLE OFFENCE

(1) Excludes Quebec and Alberta
(2) Includes "magistrate, jurisdiction with consent" and "magistrate, absolute iurisdiction".

Table 14.12
CONVICTIONS FOR INDICTABLE OFFENCES, BY TYPE OF OFFENCE

|  | 1951 | 1956 | 1961 | 1966 | 19711 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  | per cent |  |  |
| Against the person | 17.7 | 18.0 | 14.5 | 15.2 | 12.1 |
| Against property, with violence | 13.4 | 16.7 | 20.3 | 17.4 | 16.0 |
| Against property, without violence | 42.8 | 42.8 | 51.3 | 52.5 | 55.7 |
| Malicious offences against property | 2.0 | 1.9 | 2.1 | 2.8 | 2.9 |
| Forgery, etc. | 2.0 | 2.5 | 3.3 | 2.5 | 2.6 |
| Other Criminal Code offences | 20.5 | 16.6 | 7.2 | 8.7 | 6.7 |
| Federal Statutes | 1.6 | 1.5 | 1.3 | 0.9 | 4.0 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

## Chart 14.13

CONVICTIONS FOR INDICTABLE OFFENCES, BY TYPE OF OFFENCE


[^60]Table 14.14
SENTENCES FOR INDICTABLE OFFENCES

|  | 1951 | 1956 | 1961 | 1966 | 19711 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  | per cent |  |  |
| Suspended sentence without probation | 6.3 | 11.4 | 11.6 | 12.5 | 7.0 |
| Suspended sentence with probation | 13.5 | 12.7 | 16.9 | 18.7 | 24.6 |
| Fine | 30.3 | 29.4 | 22.0 | 28.0 | 32.7 |
| Institution ${ }^{2}$ | 49.9 | 46.5 | 49.5 | 40.8 | 35.7 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sentences | 28,980 | 27,413 | 38,679 | 45,661 | 47,874 |

1) Excludes Quebec and Alberta.
2) Includes jails, reformatories, industrial farms, training schools and penitentiaries.

## Chart 14.15

SENTENCES FOR INDICTABLE OFFENCES


Table 14.16
SENTENCES FOR INDICTABLE OFFENCES, BY TYPE OF OFFENCE, 1967

|  | No. of persons convicted (100\%) | Suspended sentence without probation | Suspended sentence with probation | Fine | Institution |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | per cent |  |  |
| Against the person ${ }^{1}$ | 6,948 | 9.0 | 8.6 | 45.6 | 36.8 |
| Against property, with violence | 7,965 | 10.5 | 28.0 | 2.3 | 59.2 |
| Against property, without violence | 23,939 | 15.0 | 20.2 | 30.0 | 34.8 |
| Malicious offences against property | 1,250 | 13.6 | 22.2 | 34.8 | 29.4 |
| Forgery, etc. | 1,151 | 13.2 | 19.3 | 2.2 | 65.3 |
| Other Criminal Code | 3,989 | 8.0 | 8.2 | 43.8 | 40.0 |
| Federal Statutes | 428 | 7.9 | 11.9 | 6.1 | 74.1 |
| TOTAL NUMBER OF SENTENCES | 45,670 | 5,729 | 8,538 | 12,778 | 18,625 |

Table 14.17
CONVICTIONS FOR SUMMARY OFFENCES, BY OFFENCE GROUP

|  | 1956 | 1961 | 1966 | 19711 |
| :---: | :---: | :---: | :---: | :---: |
|  | per cent |  |  |  |
| Criminal Code | 5.5 | 6.8 | 5.7 | 7.3 |
| Federal Statutes | 2.5 | 2.6 | 1.6 | 2.1 |
| Provincial Statutes ${ }^{2}$ | 13.8 | 17.5 | 14.8 | 12.6 |
| Traffic offences (Provincial) | 49.7 | 53.7 | 57.1 | 69.8 |
| Municipal By-laws ${ }^{2}$ | 4.1 | 4.0 | 4.6 | 2.2 |
| Traffic Offences (Municipal) | 24.4 | 15.4 | 16.2 | 6.0 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 |
| Thousands of convictions | 1,138 | 1,321 | 1,942 | 1,439 |

Table 14.18
DELINQUENCIES, BY TYPE OF OFFENCE

|  | 1951 | 1956 | 1961 | 1966 | 1968 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | per cent |  |  |
| Criminal Code: |  |  |  |  |  |
| Against the person | 2.8 | 2.8 | 2.5 | 2.8 | 3.1 |
| Against property, with violence | 23.2 | 21.0 | 23.1 | 21.7 | 24.9 |
| Against property, without violence | 38.6 | 39.8 | 42.3 | 42.1 | 38.7 |
| Wilful acts against property | 11.5 | 9.3 | 8.2 | 8.3 | 6.6 |
| Other Criminal Code ${ }^{2}$ | 23.9 | 27.1 | 5.2 | 6.3 | 6.7 |
| Federal Statutes | 1 | 1 | 7.4 | 4.6 | 6.0 |
| Provincial Statutes | 1 | 1 | 7.2 | 10.8 | 9.7 |
| Municipal By-laws | 1 | 1 | 4.1 | 3.4 | 4.3 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of delinquencies | 6,644 | 8,985 | 15,215 | 20,310 | 27,142 |

Table 14.19
DISPOSITION OF JUVENILES FOUND DELINQUENT

|  | 1951 | 1956 | 1961 | 1966 | 1968 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Released on probation | 37.1 | 39.6 | 52.5 | 58.3 | 54.8 |
| Fine or restitution | 21.6 | 22.4 | 14.1 | 11.5 | 13.7 |
| Training school | 17.2 | 16.0 | 13.0 | 9.7 | 8.0 |
| Final disposition suspended | 18.8 | 17.6 | 16.2 | 16.1 | 18.7 |
| Other 1 | 5.3 | 4.4 | 4.2 | 4.4 | 4.8 |
| TOTALS | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of delinquencies | 6,644 | 8,985 | 15,215 | 20,310 | 27,142 |
| 1/ Incfudes reprimand, indefinite detention, and sma// numbers sent to mental hospital or sentenced to corporal punishment. |  |  |  |  |  |

## Chart 14.20

## CORRECTIONAL INSTITUTION POPULATION, BY TYPE OF INSTITUTION



Table 14.21
RELATIONSHIP OF MURDER SUSPECTS AND VICTIMS

|  | 1962 | 1964 | 1966 | 1968 | 1970 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| Domestic: | 61 | 56 | 68 | 89 | 85 |
| Immediate family | 12 | 8 | 9 | 15 | 13 |
| Kinship | 14 | 14 | 15 | 19 | 21 |
| Common-law |  |  | 45 | 69 | 77 |
| Not related: | 33 | 39 | 87 | 108 | 156 |
| Commission of criminal act | 65 | 89 | 224 | 300 | 352 |
| Other | 185 | 206 | 221 | 315 | 432 |
| TOTAL SUSPECTS1 | 217 | 218 |  |  |  |
| TOTAL VICTIMS |  |  |  |  |  |

1) In domestic murder incidents involving more than one suspect andfor victim, the incident is scored only once, and that according to the closest relationship of the accused to the victim(s).

Table 14.22
PERCENTAGE OF THOSE CONVICTED FOR INDICTABLE OFFENCES WHO ARE IMPRISONED ${ }^{1}$

|  | 1951 | 1956 | 1961 | 1966 | 1971 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Newfoundland | 43 | 44 | 53 | 32 | 27 |
| Prince Edward Island | 70 | 43 | 55 | 37 | 34 |
| Nova Scotia | 43 | 38 | 40 | 39 | 34 |
| New Brunswick | 48 | 59 | 49 | 45 | 34 |
| Quebec | 58 | 45 | 50 | 37 |  |
| Ontario | 50 | 47 | 47 | 39 | 33 |
| Manitoba | 45 | 40 | 38 | 36 | 37 |
| Saskatchewan | 56 | 44 | 51 | 41 | 38 |
| Alberta | 51 | 49 | 51 | 44 | . |
| British Columbia | 37 | 46 | 54 | 46 | 43 |
| CANADA | 50 | 46 | 49 | 40 |  |

1) Includes jail, reformetory, penitentiary, training school, and industrial farm.

Table 14.23
CHARGES FOR INDICTABLE OFFENCES, BY SEX


SENTENCES OF PERSONS CONVICTED OF INDICTABLE OFFENCES, BY SEX


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[^0]:    ${ }^{1}$ See Concepts and Definitions, below.

[^1]:    1) Constant 1971 boundaries were used to compute the population in the CMAs and their component parts prior to 1971.

    Some 1971 CMAs were not CMAs prior to 1971. See Concepts and Definitions for CMA definition.

[^2]:    1) See Concep:s and Definitions for an explanation of the rates and indices.
[^3]:    1) See Table 2.1 for definition of census family.
    2) Excludes Newfoundland, Yukon and the Northwest Territories in 1941.
    3) Spouse absent means that the lone parent is married but the spouse resides elsewhere. This includes permanently separated couples, except in 1941.
    4) Includes permanentlv separated in 1941.
[^4]:    ${ }^{1}$ For a discussion on the subject see N. Kohn, The Health of Canadian People Chap. 1, Royal Commission on Health Services (Ottawa: Queen's Printer, 1967).

[^5]:    ${ }^{2}$ A. Katz. "The Social Causes of Disease", The Social Organization of Health, edited by H.P. Dreitzel (New York: MacMillan Company, 1971).
    ${ }^{3}$ There seems to be some evidence that there is a much higher level of malnutrition and poot dietary habits among Canadians than previously assumed. A.J. Campbell, "The National Nutrition Survey of Canada", Camadian Nutrition Notes, Health and Welfare Canada (Ottawa: March 1970).

[^6]:    ${ }^{4}$ Methodology and the interpretation of Canadian life tables can be found in Life Tables, Canada and Provinces, 1965.1967, Statistics Canada, Catalogue 84-527.
    ${ }^{5}$ Moriyama, Iwao, "Problems in the Measurement of Health Studies", Indicators of Social Change, E.B. Sheldon and W.E. Moore (Eds.), (New York: Russell Sage Foundation, 1968).

[^7]:    ${ }^{6}$ The last and only time an attempt was made to measure directly the prevalence of illness in Canada was by The Conadian Sickness Survey, 1950-51, Statistics Canada, Catalogue 82-518.

[^8]:    ${ }^{7}$ Chronic Conditions Causing Activity Limitations 1963.65 Series 10, No. 51, Depariment of Health, Education and Welfare, (Washington: 1969).

[^9]:    ${ }^{8}$ Manual for the Classification of Psychiatric Diagnoses, Statistics Canada, April 1969, p. 13.

[^10]:    ${ }^{9}$ The Nutrition Canada Survey was the first national nutrition survey conducted in Canada. The field operations commenced in September 1970 and were completed in December 1972. Over 19,000 individuals of all ages had medical, dental and anthropometric examinations and a dietary interview, and most provided blood and urine samples for analysis. The data used below are from the initial report which was released in November 1973. During 1974, 12 more volumes, one for each province and one each for Indians and Inuit, will be published, providing more detailed analysis.

[^11]:    (1) The death of persons 85 years of age and over were not plotted because these data are aggregated and therefore would give a distorted curve. The curve would eventually drop to zero.

[^12]:    1) For an explanation of years lost see Concepts and Definitions.
    2) Ischaemic heart disease, more commonly known as arteriosclerotic or coronary heart disease, is a disease of the heart muscle due to a lack of blood being supplied to the muscle.
    3) Cerebrovascular disease is more commonly known as a stroke.
    4) Perinatal mortality is deaths of infants under one week of age and stillbirths.
    5) Totals may not add due to rounding.
[^13]:    (1) Expenditure in constant 1961 dollars.

[^14]:    (1) Pencentage of persons 14 vears of age and over indicating participation per week in at least one hour of soorts (bowling, curling, hockey, badminton, etc.) and/or one hour or more of physical activity ljogging, cycling, exercise programs, etc.), between January and March 1972.

[^15]:    ${ }^{1}$ See Concepts and Definitions, Community Colleges and CEGEPs.
    ${ }^{2}$ Report of the Royal Commission on the Status of Women in Canada (Ottawa: Queen's Printer, 1970), p. 9.

[^16]:    ${ }^{3}$ Economic Council of Canada, Eighth Annual Review (Ottawa: Qucen's Printer, 1971), Chapter 9. See also Concepts and Definitions, Rates of Return.

[^17]:    4Christopher Jencks, Inequality: A Reassessment of the Effect of Family and Schooling in America (New York: Basic Books, 1972).

[^18]:    2) Sample too small for reliable estimate.
[^19]:    (1) The number of pupils per full-time teacher.

[^20]:    ${ }^{1}$ See Gary Becker's arlicle on the allocation of time, in which he throws new insight on how time is allocated between consumptive and productive activity. The theory suggests that the consumption of goods and services cannot be separated from the time required to consume them; that production does not end at the enterprise but continues in the household, which combines inputs with time to produce goods and services. Thus production and consumption must be viewed as a continuum in which at one end we have pure production (work), and at the other end pure consumption (leisure). Most activities, however, fall in between the two, with a mixture of both leisure and work. It is then argued that for society as a whole, and for individuals, activities taking place in non-work time can be valued in terms of forgone earnings. This formulation of work and leisure permits one to examine the allocation of time in terms of substitution of goods for time, and the opportunity cost of leisure for work. A rise in earnings, for example, would lead to an increase in the opportunity cost of nonemployment time.
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[^21]:    ${ }^{2}$ Mordecai Roschwald, "Order and Over-Organization in America", The British Journal of Sociology, March, 1973.
    ${ }^{3}$ Vancouver Study, S.M. Weis and S.J. Scheu, Department of Sociology, University of British Columbia, 1973, as yet unpublished.
    Halifax Study, Andrew Harvey, Institute of Public Affairs, Dalhousie University, 1972, as yet unpublished.

[^22]:    1) The data cover a reference period of approximately $21 / 2$ months from Jan. 1, 1972. It is reasonable to assume, therefore, that the figures reflect seasonal variations in leisure activities. This table gives an estimate of the percentage of oeople by age group who participated in these activities by hours per week. Only conscious teisure time activities were to be reported, i.e. listening to the radio while driving should nor be included.
    2) Professional or semi-professional sport activities are not included.
[^23]:    ${ }^{1}$ Notes on Labour Statistics, 1971, Statistics Canada, Catalogue 72-207
    ${ }^{2}$ See specifically recommendations Nos. 4 to 68 inclusive of the Report of the Royal Commission on the Status of Women in Canade (Ottawa: Queen's Printer, 1970)

[^24]:    ${ }^{3}$ The exceptions being Prince Edward Island and Ontario with a minimum of one week (rising with length of service).

[^25]:    ${ }^{4}$ Survey of Working Conditions Survey Research Center, University of Michigan, November 1970, p. 4
    ${ }^{5}$ Sce "Measuring the Quality of Working Life", Dept. of Labour; a report on a seminar on that topic held in Ottawa on March 19 and 20, 1973.
    ${ }^{6}$ Work in America, Report of a Special Task Force to the Secretary of Health, Education and Welfare, U.S. Dept. of Health, Education and Welfare (Boston: M.I.T. Press, 1973)

[^26]:    ${ }^{7}$ Sheppard, Harold L. and Herrick, Neal Q., Where Have All the Robots Gone, Worker Dissatisfaction in the Seventies. (New York: Free Press, 1972)

[^27]:    1) Includes avertime, holiday and shift work.
    2) Includes paid halidays, vacations, sick and special leave.
    3) Includes bonuses, separation pay and tanable benefits.
    4) Includes private pension and health plans and provincial health plans.
[^28]:    1) Total number of respondents 2,811 .
[^29]:    ${ }^{1}$ In Canada, the Department of National Revenue publishes annual statistics on the distribution of income of tax-filers by size of their taxable income. This series extends back over the post-war period and is a valuable source of income data. However, due to the problems mentioned above, these data may not be suitable for many porposes. For example, it must be borne in mind that historically the Canadian tax-filer population has undergone a substantial change; as current incomes rose and exemptions stayed fixed in terms of current dollars, a larger and larger proportion of income recipients became tax-filers. Such statistics are also not suitable for international comparisons.

[^30]:    ${ }^{2}$ See Statistics Canada, Income Distributions by Size in Canada, 1971. Catalogue 13-207, and Concepts and Definitions at the close of this chapter, for more detail. In the same report, "Sources and Methods" (pp. 119-128) describes the methodology of data collection and estimation procedures and discusses the reliability of the estimates.

[^31]:    ${ }^{3}$ Deflated total incomes which contain a component of taxes and saving as well as income expended on goods and services were obtained by deflating average incomes in current dollars by the Consumer Price Index - a practice that can be defended on grounds of expediency rather than of conceptual correctness.
    ${ }^{4}$ Estimated from various unpublished tabulations.

[^32]:    ${ }^{5}$ See J.R. Podoluk, Incomes of Canadians, (Ottawa: Queen's Printer, 1968), Chapter 8. See also Economic Council, Fifth Annual Review (Ottawa: Queen's Printer, 1968), Chapter 6.
    ${ }^{6}$ Approximately half of the family heads, who in spite of working the full year could not bring their family incomes above the low income cut-off, were selfemployed, many of them farmers.

[^33]:    ${ }^{7}$ Sce Statistics Canada, Income Distributions by Size in Canada, 1971, Catalogue 13-207, Table 2, p. 20-21.

[^34]:    ${ }^{8}$ See G. Oja, "Problems of Defining Low Economic Status for Poverty Studies", Canadian Statistical Review, September, 1968.

[^35]:    If Farmers not included before 1967. This, however, has little effect on the comparability. All data shown are in current dollars.
    2) The Gini coefficient measures the inequality of income distribution. Its value ranges from 0 to 1. The higher the value the greater the degree of inequality.
    3) Each quintile contains one fifth of all income recipients; for example, the lowest quintile contains the fifth of the recipients with the lowest incomes.

[^36]:    1) The greater the area enclosed by the diagonal (or equality) line and the actual Lorenz curve, the greater the inequality
[^37]:    1) For an explanation of low income see the text.
    2) Current occupation and employment status of the head refer to the time of the survev. April 1968 for 1967 data, and April 1972 for 1971 data, and do not necessarily reflect the head's status for the income reporting periods, the 1967 and 1971 calendar years.
    3) For 1971 includes also those who had 5 years of elementary school or more, but who did not complere grade 8. (In 1967 these persons were included in "none or some elementary").
    4) For 1971 also inc/udes post-secondary non-university education (some or completed).
[^38]:    I) Non-liquid financial assets consist of stock holdings, mortgage holdings and other miscellaneous financial assets including loans to other persons.
    2) Other personal debt includes bank loans against collateral of securities, loans from insurance companies, home improvement loans and miscellaneous unsecured debts.
    3) Net worth $=$ Total assets - Total debt.

[^39]:    ${ }^{1}$ List of Social Concerns, OECD, Paris, 1973.

[^40]:    ${ }^{2}$ Statistics Canada will examine the possibilities for estimating non-market services and environmental disamenities in relation to the National Accounts.
    ${ }^{3}$ Definition of the family used in Family Expenditure data, Statistics Canada. See Concepts and Definitions in this chapter.

[^41]:    ${ }^{4}$ The difference between consumption and expenditure can be further defined in the concept of 'used up' properties of goods and services. Thus expenditure for an item may take place in one period but is used up over a number of subsequent periods, e.g. consumer durables; similarly goods may be purchased but never consumed, e.g. food wastage.

[^42]:    ${ }^{\text {S }}$ St. John's, Halifax, Quebec, Montreal, Ottawa, Toronto, Winnipeg, Regina, Saska toon, Edmonton and Vancouver.

[^43]:    1) Consolidated accounts of gross expenditure by federal, provincial and municipal governments.
    2) Includes mutual aid.
    3) Protection of persons and property.
    4) Includes transportation and communication, natural resources and primary industries and government enterprises,
    5) Includes other expenditures.
    6) Includes veterans" pensions.
[^44]:    1) For a definition of "family" see Concepts and Definitions. The sample for the three vears was based on 11 cities: St. John's, Halifax, Quebec, Montreal, Toronto, Ottawa, Winnipag, Regina, Saskatoon, Edmonton and Vancouver.
    2) Does not include repayment of the principal of the mortgage.
[^45]:    ${ }^{1}$ Housing not financed under the National Housing Act is ignored because it makes up only a small part of the market.

[^46]:    1) Vacancy rates (in privately initiated apartment structures of six units and over only) are the result of a sample survey carried out each June, in larger metropolitan areas. Commencing in 1970, the survey was also carried out in December in selected metropolitan arees
    2) Based on 1966 Census Aros definitions.
[^47]:    ${ }^{1}$ Report of the Royal Commission on Bilingualism and Bicul. turalism. Book 1, General Introduction, Appendix 1. p. 173, (Ottawa: Queen's Printer, 1967).
    ${ }^{2}$ The Royal Commission on Bilingualism and Biculturalism recommended that a minimum of 10 per cent of the population of a given area be considered adequate for viable bilingual districis.

[^48]:    ${ }^{3}$ Some research has been done in this area by Wallace Lambert and associates.
    Atritudes and Motivations in Second Language Learning. W. Lambert and R. Gardner, (Rowley, Maine: Newberry House, 1972).

    Bilingual Education of Children, the St. Lambert Experiment W. Lambert and G.R. Tucker, (Rowley, Maine: Newberry House, 1972).
    ${ }^{4}$ Jacques Brazeau, "Language Differences and Occupational Experience", Canadian Journal of Economics and Political Science, XXIX (1958), p. 536.

[^49]:    1) Applicants who claimed to be English-speaking.
[^50]:    ${ }^{3}$ On enfranchisement an Indian gives up his rights under the Indian Act. Enfranchisement in this sense is not synonymous with the possession of voting rights. All Indians were guaranteed the right to vote in 1960, before which time only about one in four were eligible.

[^51]:    ${ }^{1}$ Literally only a religious category. Also poor in the enumerative sense because in Jewish tradition, descent is matrilineal, so that a respondent may be Jewish because his or her mother was, but if the father was Polish, the census would categorize such a person as Polish.

[^52]:    ${ }^{2}$ Immigration figures are available by "ethnic origin" up to 1966, after which time only figures by "country of former residence" were collected.

[^53]:    TOTALS
    100.0
    100.0
    100.0
    100.0

    1) Includes restaurants with general and mixed menus, lunch counters and coffee shops, and unidentifiable.
    2) Includes all drive-ins such as burger places, Kentucky Fried Chicken and dairy bars,
[^54]:    ${ }^{1}$ Robert Evans, Jr., Policy Indicators for Canadian Public Order and Safery, Economic Council of Canada, Special Study No. 23, Ottawa, 1973.

[^55]:    ${ }^{2}$ A national integrated court reporting program that will collect data on these and other factors for all trials is being tested. The program has been operating in Quebec since 1968 and Alberta since 1970.

[^56]:    3"In certain limited circumstances clearances are made otherwise. The limitations of 'cleared otherwise' are indicated by the following examples: the offender has been committed to a mental hospital and it is unlikely he will be released; a person confesses to the offence and subsequently dies; diplomatic immunity; the offender is known and sufficient evidence has been obtained but the complainant refuses to prosecute". Crime Statistics, Slatistics Canada, Ottawa, Catalogue 85-205 - Introduction.

[^57]:    ${ }^{4}$ Juvenile Delinquents, Statistics Canada, Ottawa, Catalogue 85-202, 1971, p. 9.

[^58]:    1) Rate per 100,000 of population seven vears and older.
[^59]:    1) Cleared by charge or otherwise.
    2) From 1968 on, arson is included in Criminal Code offences (arson was not previously included in offence statistics).
[^60]:    1) Excludes A lberta and Quebec.
