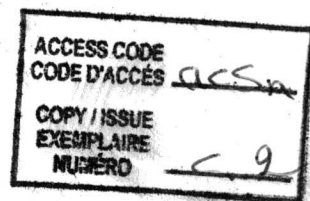


The public finance aspects of health services in Canada / J. Hanson. acsn

c. 2

pco pco



ROYAL COMMISSION ON HEALTH SERVICES



LIBR-00132

THE PUBLIC FINANCE ASPECTS OF HEALTH SERVICES IN CANADA

Eric J. Hanson

Publication of this study by the Royal Commission on Health Services does not necessarily involve acceptance by the Commissioners of all the statements and opinions therein contained.



Mr. Justice Emmet M. Hall — Chairman
Miss A. Girard, D.M. Baltzan, O.J. Firestone, O.B. Shoop, A.F. Van Wart
B.R. Blisshen — Director of Research
Pierre Jobin — Medical Consultant Malcolm Taylor — Research Consultant

© Crown Copyrights reserved

Available by mail from the Queen's Printer, Ottawa,
and at the following Canadian Government bookshops:

OTTAWA

Daly Building, Corner Mackenzie and Rideau

TORONTO

Mackenzie Building, 36 Adelaide St. East

MONTREAL

Aeterna-Vie Building, 1182 St. Catherine St. West

or through your bookseller

A deposit copy of this publication is also available
for reference in public libraries across Canada

Price \$3.00 Catalogue No. Z1-1961/3-1/5

Price subject to change without notice

ROGER DUHAMEL, F.R.S.C.

Queen's Printer and Controller of Stationery

Ottawa, Canada

1963

TABLE OF CONTENTS

	Page
Preface.....	XIII
List of Text Tables	VII
List of Appendix Tables	IX

CHAPTER I – INTRODUCTION

A. Introduction	1
B. Scope of Public Health Services.....	1
C. Health Services as a Social Want.....	3
D. Problem of Optimum Resource Allocation.....	4

CHAPTER II – TRENDS IN CANADIAN PUBLIC FINANCE

A. Introduction	7
B. The Public Sector in the Canadian Economy	8
C. The Relationships of the Three Levels of Government	13

CHAPTER III – TRENDS IN GOVERNMENT EXPENDITURE ON HEALTH SERVICES IN CANADA

A. General Developments	19
B. The Trend of Government Expenditure on Health and Social Welfare	21
C. The Trend in Government Expenditures on Health Services.....	22
1. Hospital Expenditures.....	25
2. Medical, Dental and Allied Services.....	25
3. General and Public Health Expenditures	26
4. Total Government Expenditures on Health Services.....	27
D. Government Expenditures in Real Terms.....	28

CHAPTER IV – ROLE OF FEDERAL GOVERNMENT

A. General Post-war Developments.....	31
B. The Post-war Pattern of Federal Health Expenditures.....	33
1. Hospital and Medical Services.....	33
(a) Indians and Eskimos.....	33
(b) Sick Mariners.....	33
(c) Hospital Insurance and Diagnostic Services.....	34
(d) Department of Veterans Affairs.....	36
(e) Miscellaneous.....	36
2. Consulting and Advisory Services.....	37
3. Examination Services.....	37
4. Inspection and Enforcement Services.....	38
5. Extension of Provincial Health Services.....	38
6. Grants to Voluntary Health Organizations.....	39
7. General Administration.....	39
8. Miscellaneous Health Services.....	39
C. Intergovernmental Arrangements and Transfer Payments.....	40
1. General Health Grants.....	40
(a) Surveys of Health Facilities and Services and of Sickness Experience.....	40
(b) Hospital Construction Grants.....	40

	Page
(c) Cancer Control.....	42
(d) Crippled Children.....	42
(e) Medical Rehabilitation.....	42
(f) General Public Health.....	43
(g) Professional Training.....	43
(h) Venereal Diseases.....	43
(i) Mental Health.....	43
(j) Tuberculosis Control.....	43
(k) Public Health Research.....	43
(l) Laboratory and Radiological Services.....	43
(m) Child and Maternal Health.....	44
2. Hospital Insurance.....	45
D. Summary.....	46

CHAPTER V – ROLE OF PROVINCIAL AND MUNICIPAL GOVERNMENTS

A. Provincial Governments.....	47
1. General Post-war Developments.....	47
(a) General Health.....	48
(b) Public Health.....	48
(1) Environmental Health.....	48
(2) Communicable Disease Control.....	49
(3) Mental Health.....	49
(4) Cancer.....	49
(5) Maternal and Child Health.....	49
(6) Public Health Nursing.....	49
(7) Health Education.....	50
(8) Dental Health.....	50
(9) Laboratory Services.....	50
(10) Local Health Services.....	50
(11) Other Health Services.....	50
(c) Medical, Dental and Allied Services.....	51
(d) Hospital Care.....	51
(e) Medical Aid and Hospitalization under Workmen's Compensation Acts.....	52
2. Comparisons of Expenditures on the Main Categories.....	52
(a) Total Expenditures.....	52
(b) Provincial Comparisons.....	54
3. The Yukon and Northwest Territories.....	56
4. Intergovernmental Transfer Payments.....	56
B. The Role of Municipal Governments.....	56

CHAPTER VI – PROJECTIONS OF GOVERNMENT EXPENDITURES

A. Projections of Population and Gross National Product.....	59
B. Projections of Government Expenditure.....	61
C. Projections of Federal Government Expenditures.....	63
1. Expenditure on Goods and Services.....	63
2. Transfer Payments and Subsidies.....	64
D. Projections of Provincial Government Expenditures.....	67
1. Expenditures on Goods and Services.....	67
2. Transfer Payments and Subsidies.....	67

	Page
E. Projections of Municipal Government Expenditures.....	68
1. Expenditures on Goods and Services.....	68
2. Transfer Payments.....	69
F. Summary	70
 CHAPTER VII – PROJECTIONS OF GOVERNMENT REVENUES	
A. Economic Aspects of Government Revenues and Expenditures.....	71
B. Projections of Federal Government Revenues	73
C. Projections of Provincial Government Revenues	76
D. Projections of Municipal Government Revenues.....	78
E. Summary	79
 CHAPTER VIII – PROJECTIONS OF INTERGOVERNMENTAL TRANSFER PAYMENTS	
A. Federal Government Transfer Payments	81
B. Provincial Government Transfer Payments	84
C. Municipal Government Transfer Payments.....	86
D. Summary	87
 CHAPTER IX – PROJECTIONS OF GOVERNMENT EXPENDITURES ON HEALTH SERVICES	
A. Introduction	89
B. Total Expenditure on Health Services.....	89
C. Total Government Expenditure on Health Services	91
D. Expenditure on Sanitation and Waste Removal.....	92
E. Intergovernmental Transfer Payments	93
 CHAPTER X – FINANCING HEALTH SERVICES IN THE FUTURE	
A. Sources of Revenue of all Governments, 1961–1966.....	99
B. Financing Health Services.....	101
1. Federal Government.....	102
2. Provincial Governments.....	106
3. Municipal Governments	107
C. Projections for 1971 to 1991	107
 CHAPTER XI – CONCLUSIONS	
A. The Optimum Level of Health Services.....	109
B. Sources of Revenue.....	111
C. The Allocation of Health Services among the Three Levels of Government ..	112
D. Intergovernmental Relations and Transfers.....	113
E. Transfer Techniques.....	115
F. Proposed Changes in the Federal Health Grants Structure.....	116
G. Summary	122

APPENDICES

Page

Appendix A	National Income Data Relating to Public Finance, Canada, 1946-1962.....	127
Appendix B	Government Expenditures on Health Services, Canada, 1947-1962.....	133
Appendix C	Expenditures on Health Services and Other Public Finance Data, Government of Canada, Fiscal Years, 1947-1963	139
Appendix D	Expenditure on Health Services and Other Public Finance Data, Provincial Governments, Canada, Fiscal Years, 1947-1963	149
Appendix E	Expenditures on Health Services and Other Public Finance Data, Municipal Governments, Canada, 1947-1962.....	155
Appendix F	Projections of Population, Gross National Product, Government Expenditures, Government Revenues, and Intergovernmental Transfer Payments, Canada, 1966-1991	161
Appendix G	Fiscal Capacities of Provincial Governments.....	173
A.	Introduction	174
B.	Revenues of Provincial-Municipal Governments.....	174
Total Revenues.....		175
Provincial-Municipal Taxation		175
Receipts from the Federal Government		176
Revenue from Other Sources		176
Revenue Contributions by Level of Government.....		177
Comparisons of Taxable Capacities.....		177
C.	Expenditures of Provincial-Municipal Governments.....	178
D.	Appraisal of Fiscal Capacities.....	179
Appendix H	Fiscal Capacities and Health Expenditures of Provincial Governments	199

LIST OF TEXT TABLES

Table		Page
1	Gross National Expenditure at Market Prices, Canada, 1949, 1955 and 1962.....	10
2	Total Expenditures — All Governments, Canada, 1949, 1955 and 1962.....	11
3	Total Revenue — All Governments, Canada, 1949, 1955 and 1962.....	12
4	Total Government Expenditure by Levels of Government, Canada, 1949, 1955 and 1962.....	14
5	Total Government Revenue by Levels of Government, Canada, 1949, 1955 and 1962.....	15
6	Intergovernmental Transfer Payments, Canada, 1949, 1955 and 1962.....	16
7	Surpluses and Deficits, All Levels of Government, Canada, 1946–1962.....	17
8	Total Net General Expenditure on Health, All Governments, Canada, 1947–1962.....	23
9	Total Net General Expenditure on Hospital Care, All Governments, Canada, 1947–1962.....	24
10	Total Net General Expenditure on Medical, Dental and Allied Services, All Governments, Canada, 1947–1962.....	26
11	Total Net General Expenditure on General and Public Health, All Governments, Canada, 1947–1962.....	27
12	Total Net General Expenditure on Health, All Governments, Canada, 1947–1962, By Function.....	28
13	Selected Implicit Price Indexes, Canada, Selected Years, 1946–1962.....	29
14	Net General Expenditure on Health, All Governments, Canada, Selected Years, 1947–1962.....	30
15	Net Ordinary and Capital Expenditure on Health Services, Government of Canada, Selected Fiscal Years, 1947–1962.....	32
16	Net Ordinary and Capital Expenditure on Hospital and Medical Services, Canada, Selected Fiscal Years, 1947–1962.....	34
17	Health Services Grants Paid to Provincial Governments by the Government of Canada, Canada, Selected Fiscal Years, 1948–1962.....	41
18	Federal Health Grants Amounts Available and Amounts Expended, by Provinces, from Inception of Programme to March 31, 1962.....	44
19	Total Net General Expenditure on Health, Provincial Governments, Canada, Selected Years, 1947–1963.....	53
20	Total Net General Expenditure on Health, Provincial Governments, Canada, Selected Years, 1947–1963, Comparative Data.....	53
21	Total Net General Expenditure on Health, Provincial Governments, Canada, Selected Years, 1951–1962.....	54
22	Total Net General Expenditure on Health, Provincial Governments, Canada, Fiscal Years, 1951–52 and 1961–62,..... (Per Capita, in Dollars).....	55
23	Total Net General Expenditure on Health, Provincial Governments, Canada, Fiscal Years, 1951–52 and 1961–62, (As Per Cent).....	55
24	Net General Expenditure on Health, and Sanitation and Waste Removal, Municipal Governments, Canada, Selected Years, 1947–1962.....	57

Table		Page
25	Net General Expenditure on Health, and Sanitation, Municipal Governments, Canada, 1957-1962.....	58
26	Projections of Population and Gross National Product, 1961-1991.....	60
27	Projections of Government Expenditure on Goods and Services, 1961-1991.....	61
28	Projections of Transfer Payments by All Governments, 1961-1991.....	62
29	Projections of Expenditure, Federal Government, 1961-1991.....	66
30	Projections of Expenditure, Provincial Governments, 1961-1991.....	68
31	Projections of Expenditure, Municipal Governments, 1961-1991.....	69
32	Projections of Revenue, Federal Government, 1961-1991.....	74
33	Projections of Revenue, Provincial Governments, 1961-1991.....	77
34	Projections of Revenue, Municipal Governments, 1961-1991.....	78
35	Projected Federal Government Transfer Payments to Provincial and Local Governments, 1966-1991.....	82
36	Projected Intergovernmental Transfers of Provincial Governments, 1966-1991.....	85
37	Projected Intergovernmental Transfer Payments of Municipal Governments, 1966-1991.....	86
38	Government Expenditure on Health Services 1961, and Projections 1966 to 1991, by Reference to the High Projection of GNE.....	91
39	Government Expenditure on Sanitation and Waste Removal 1961, and Projections 1966 to 1991, by Reference to the High Projection of GNE.....	93
40	Expenditure on Health Services, Federal Government, Intergovernmental Data 1956 and 1961, and Projections 1966-1991.....	94
41	Expenditure on Health Services, Provincial Governments, Intergovernmental Data 1956 and 1961, and Projections 1966-1991.....	95
42	Expenditure on Health Services, Municipal Governments, Intergovernmental Data 1956 and 1961, and Projections 1966-1991.....	96
43	Per Capita Cost of In-Patient Services, Canada and the Provinces, 1960, 1961 and 1962.....	118
44	Per Capita Payments to the Provinces and Percentage of the Cost of the Plan Paid by the Federal Government, 1960-1962.....	118
45	Provincial Per Capita Income, 1959-1962.....	119
46	Hypothetical Distribution of Costs of Hospital Insurance Based on Adjustments for Personal Income per Capita, Provinces of Canada, 1962.....	120
47	Suggested Federal Grants for Hospital Insurance to the Provinces of Canada, Calendar Year 1962.....	122

LIST OF APPENDIX TABLES

Appendix A		Page
Table		
A-1	Gross National Expenditure and Government Expenditure on Goods and Services, Canada, 1946-1962.....	128
A-2	Total Expenditure, All Governments, Canada, 1946-1962.....	129
A-3	Total Revenue, All Governments, Canada, 1946-1962.....	130
A-4	Expenditure, Revenue and Intergovernmental Transfers by Levels of Government, Canada, 1946-1962.....	131
Appendix B		
Table		
B-1	Net General Expenditure on Health Services, by Function, All Governments in Canada, 1947-1962.....	134
B-2	Net General Expenditure on Health and Sanitation, All Governments in Canada, Percentage Relationships, 1947-1962.....	136
Appendix C		
Table		
C-1	Net Ordinary and Capital Expenditure on Health Services, Government of Canada, Fiscal Years, 1947-1963.....	140
C-2	Net Ordinary and Capital Expenditure on Hospital and Medical Services, Government of Canada, Fiscal Years, 1947-1963.....	141
C-3	Net for Health Services Paid to Provincial Governments by the Government of Canada, Fiscal Years, 1947-1963.....	142
C-4	Estimated Net General Expenditure on Health Services, by Functions, Government of Canada, Fiscal Years, 1947-1963.....	144
C-5	Budgetary Revenue, Government of Canada, Fiscal Years, 1947-1963..	145
C-6	Revenue from Income and Sales Taxes, Government of Canada, Fiscal Years, 1947-1963.....	146
C-7	Budgetary Expenditure, Government of Canada, Fiscal Years, 1947-1963.....	147
C-8	Revenue and Expenditure, Government of Canada, Fiscal Years, 1947-1963.....	148
Appendix D		
Table		
D-1	Net General Expenditure on Health Services, Provincial Governments in Canada, by Function, Fiscal Years, 1947-1963.....	150
D-2	Net General Expenditure on Health Services, Including Workmen's Compensation, Provincial Governments in Canada, by Provinces, Fiscal Years, 1947-1963.....	151
D-3	Estimated Net General Expenditure on Health Services, by Functions, Provincial Governments of Canada, Fiscal Years, 1947-1963.....	152
D-4	Net General Expenditure Provincial Governments, Canada, by Provinces, Fiscal Years, 1947-1963.....	153

Appendix E

Table		Page
E-1	Estimated Net General Expenditure on Health Services and Sanitation, Municipal Governments in Canada, by Functions, 1947-1962.....	156
E-2	Estimated Net General Expenditure on Health Services, Municipal Governments in Canada, by Provinces, 1947-1962.....	157
E-3	Estimated Net General Expenditure on Sanitation and Waste Removal, Municipal Governments, by Provinces, 1947-1962.....	158
E-4	Net General Expenditure, Municipal Governments, by Provinces, 1947-1962.....	159

Appendix F

Table		
F-1	Population, Gross National Product and Government Expenditures, Canada, Selected Years, 1926-1961 and Projections, 1966-1991....	162
F-2	Projections of Government Expenditure by Level of Government, Percentages of Gross National Expenditure by Reference to 1957 Constant Dollars, Selected Years, 1926-1961 and Projections, 1966-1991.....	163
F-3	Government Expenditure on Health Services and Sanitation, Selected Years, 1947-1961 and Projections, 1966-1991.....	164
F-4	Expenditure on Health Services by Level of Government, 1956 and 1961, and Projections, 1966-1991.....	165
F-5	Revenues, Government of Canada, Selected Years, 1926-1961 and Projections, 1966-1991.....	166
F-6	Revenues, Provincial Governments, Canada, Selected Years, 1926-1961 and Projections, 1966-1991.....	167
F-7	Revenues, Municipal Governments, Canada, Selected Years, 1926-1961 and Projections, 1966-1991.....	168
F-8	Government Expenditures and Revenues by Level of Government, Canada, Selected Years, 1947-1961, and Projections, 1966-1991....	169
F-9	Intergovernmental Transfer Payments, by Level of Government, Canada, Selected Years, 1947-1961 and Projections, 1966-1991.....	170
F-10	Projections of Intergovernmental Transfer Payments, Canada, 1966-1991.....	171

Appendix G

Table		
G-1	General Revenue, Provincial Governments, Canada, Fiscal Year, 1960-61.....	181
G-2	General Revenue, Municipal Governments, Canada, 1960.....	182
G-3	Combined General Revenue and Taxation, Provincial and Municipal Governments, Canada, 1960-61.....	183
G-4	Revenue from the Government of Canada and Local Governments, Provincial Governments, Canada, 1960.....	184
G-5	Combined Provincial-Municipal Revenues, Per Capita, Canada, 1952 and 1960.....	185
G-6	Sources of Provincial-Municipal Revenues, 1960.....	186
G-7	Combined Provincial-Municipal Taxation, by Sources and Level of Government, 1960.....	187

TABLE OF CONTENTS

XI

Table		Page
G-8	Combined Provincial-Municipal Revenue Received from the Federal Government, by Type of Receipt, 1960	188
G-9	Combined Provincial-Municipal Revenue from Other Sources, 1960	189
G-10	Combined Provincial-Municipal Revenues, Classified as Tax Revenue, 1960	190
G-11	General Expenditures, Provincial Governments, Canada, 1960-61	191
G-12	General Expenditure, Municipal Governments, Canada, 1960-61	192
G-13	Amounts Paid to Other Governments - Provincial Governments, Canada, 1960-61	193
G-14	Combined General Provincial-Municipal Expenditure, by Functions and Provinces, Canada, 1960-61	194
G-15	Combined Provincial-Municipal Expenditure on All Functions, per Capita and as Percentage of Personal Income, Canada, 1952 and 1960	195
G-16	Combined General Provincial-Municipal Expenditures, by Functions and Provinces, Canada, 1960-61	196
G-17	Requirements of Provincial-Municipal Governments to Finance Equalized Expenditure, per Capita, Canada, 1960	197

Appendix H

Table		
H-1	Expenditures on Health Services, Provincial Governments, Canada, 1960-61	202
H-2	Expenditures on Health and Sanitation, Municipal Governments, Canada, 1960-61	203
H-3	Grants-in-Aid and Shared-cost Contributions Received from the Government of Canada and Local Governments, Re Health and Hospital Services, Canada, 1960-61	204
H-4	Combined Provincial-Municipal Expenditure on Health Services, Canada, 1960	205
H-5	Combined Provincial-Municipal Expenditure on Health Services and Sanitation, per Capita, and Percentage Comparisons, Canada, 1960 ..	206

Preface

This study reviews the role of Canadian governments in the provision of health services in the past, and it projects their potential activities in the future. Until recent years the development of health services by governments in Canada was a gradual and even slow process, and the expenditures involved constituted a relatively small fraction of total government expenditure. During the last six years there has been a sharp upward movement in government expenditures on health services with the development of a national programme of hospital insurance to which the Federal Government contributes substantially. It is to be expected that health services provided by governments will continue to expand in the future.

Accordingly projections have been made on the assumption that public health services, personal health care, and hospital care will be provided for all Canadians at adequate levels of service. These projections show that governments might be called upon to pay for some four-fifths of the cost by 1966 and almost six-sevenths over the long run. Such an expansion of government activity in the health field has a number of implications in the sphere of public finance. It is necessary to estimate the potential future level of all government expenditures, to indicate feasible sources of additional revenues, and to suggest workable inter-governmental relationships. These aspects are examined in this study in some detail and in quantitative manner.

In his study, *Canadian Economic Growth*, Professor T.M. Brown has provided the economic projections for the period 1961-1991. Projections of government expenditures, total and on health services, have been tied into the over-all economic projections. The estimates of total expenditures on health services made by Professor J.J. Madden in his *Economics of Health*, provided further guidance. The greatest emphasis in the present study is on the period 1961-1971 in the course of which it is assumed that major steps may be taken to round out the provision of health services in Canada, financed to a significant extent from the public sector.

I am indebted to my co-workers, especially Professors T.M. Brown and J.J. Madden, for their co-operation and assistance, as well as to my colleague at the University of Alberta, Mr. G.K. Goundrey, who helped to assemble data, in interviewing provincial officials, and made a special survey of the fiscal condition of the provinces. The members of the Commission and its secretariat were

very helpful. In particular, Dr. Malcolm Taylor provided valuable suggestions. Throughout a period of over two years, Professor Bernard Blishen, Director of Research, furnished guidance and encouragement at the right times. Professor O.J. Firestone, of the University of Ottawa, acted as editor of this study and I am very much obliged to him for his advice and help. I am grateful to the University of Alberta, which granted me leave-of-absence for the spring term of 1962 to serve as visiting professor at the Norwegian School of Economics and Business Administration; the latter proved to have an environment very conducive to research, and this enabled me to get a good start on this study. Finally, I wish to thank Mrs. H.M. Roney and her staff in Ottawa, and Miss Anne Tyler, Department of Political Economy, University of Alberta, Edmonton, for their typing and secretarial services.

Eric J. Hanson,
University of Alberta,
Edmonton,

June 1964.

CHAPTER I

INTRODUCTION

A. Introduction

In developed countries such as Canada the level of health services provided has increased greatly during recent decades. The long-term rise in output and income has enabled both individuals and governments to spend increasing amounts on health services, and the achievement of a high standard of such services for all citizens has become possible. Since some health services are not provided or only inadequately provided through the market mechanism, governments have increasingly become involved in purchasing health services for the community and individuals. There is, then, not only the question of the over-all expansion of health services consonant with economic growth, but also a question of division of expenditure between the private and public sector. It is the purpose of this study to examine public expenditure requirements in Canada and their financing.

B. Scope of Public Health Services

Health can be regarded as an economic good which can be bought on both a collective and on an individual basis. There has to be a good deal of co-operation in the provision of health services, and in general, in creating environmental conditions conducive to health. There have to be effective means to reconcile varying views on resource allocation for health services and to facilitate collective decision-making on the crucial matters of what and how much to provide. The late R.H. Tawney has said that a nation "can turn its resources in one direction, and fifty thousand of its members will live who would otherwise have died," or vice versa.¹

The economic resources that are available to a nation are limited. Therefore choices must be made with respect to the question of more health services and less of other goods, as well as the question of what health services to expand. In an economy in which per capita income is continuously growing these questions

¹ Tawney, R.H., *Equality*, Fourth Edition, London: George Allen and Unwin, 1952, p. 150. He adds also: "Though no individual, by taking thought, can add a cubit to his stature, a nation, by doing so, can add an inch to the height of some groups among its children and a pound to their weight".

are of a lesser urgency than in one where it is static or unstable. In an expanding economy, it is possible to have, over time, a little more of nearly everything producible. An important distinction must be made between an economy operating at full employment and one below that level. In the former case more services, e.g. on health, may be only obtainable at the expense of less services of another type. In the latter case, more health services may be obtainable by putting unused resources to work making it unnecessary to give up other services, or goods for that matter.

Many health services can be purchased by individuals. These include preventive and therapeutic medical care, hospital care, dental services, eye glasses, drugs and medicines. In developed industrialized societies, however, these services are increasingly being provided on a collective basis. Such societies, too, have found it necessary to provide a wide variety of so-called environmental services, from sanitation to the prevention of infectious diseases.

In discussing health services provided by public authorities we can distinguish among three chief categories which may be termed public health, medical care and hospital care. In its broadest sense, public health is an all-inclusive category, and public health administration an activity of tremendous scope. The latter is essentially concerned with the application of all scientific knowledge in maintaining and advancing the health of the individuals of a society.¹ It is necessary, however, to distinguish between the provision of direct medical and hospital care for individuals and that of other health services. Furthermore, while public welfare services promote health, and are, indeed, closely associated with the production of some health services, an analysis of them is outside the main scope of this study.

Even in the more restricted and workaday category which we call public health services many activities could be listed. Among environmental services are included government supervision to ensure the provision of pure water and milk supplies (and usually direct provision of water), pure food and drug supplies, and sewage disposal systems. Measures required to cope with air pollution and nuclear radiation hazards are emerging as new activities. The prevention of "nuisances" dates back to the towns of the middle ages, while the number and nature of "nuisances" has increased and changed respectively with the economic and social evolution of modern society. The condition of dwellings, office buildings, stores, warehouses and factories requires supervision by public authorities. Zoning and planning of land use have become important duties of governments. Inferior housing conditions are a menace to the health and welfare of a community; in

¹ The WHO Expert Committee on Public Health Administration has defined public health as "the science and art of preventing disease, prolonging life, and promoting health and efficiency through organized community efforts for the sanitation of the environment, the control of communicable infections, the education of the individual in personal hygiene, the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of social machinery to ensure for every individual a standard of living adequate for the maintenance of health, so organizing these benefits as to enable every citizen to realize his birth-right of health and longevity". WHO, *Expert Committee on Public Health Administration: First Report*, Geneva: 1952. This is a very broad definition which includes implicitly all health and public welfare services.

developed countries there are laws regulating the quality of the construction of buildings. In various countries the consensus of opinion has become such that governments have undertaken to provide both direct and indirect financial assistance to the construction of housing accommodation for low and moderate income groups. Governments also have programmes to deal with specific health problems of general concern. These include measures and facilities to deal with mental health, tuberculosis, cancer, venereal diseases, alcoholism, cerebral palsy, poliomyelitis and various other diseases and disabilities. The establishment of centres for the rehabilitation of handicapped persons is a further example. The above enumeration is by no means complete, but it is indicative of the wide range of public health services.

Public provision for hospital and medical care of individuals has a long history in various European countries. Some countries had hospital and medical schemes before World War I. These schemes were modest in scale to begin with, and initially the insurance principle was applied; gradually increasing assistance from government treasuries became necessary. There were marked expansions of public hospital and medical care systems in European countries after each of the two world wars.

The development of medical and hospital insurance in Canada and the United States, both private and public, has gathered momentum only within recent decades, especially after the great depression made obvious the deficiencies of an individualistic system of providing for medical and hospital care. North America remained largely rural in character and outlook far into this century, and the impact of industrialization on individuals and groups was less obvious than in Europe. During the postwar period it has become clear to many people on this continent that we live in a highly interdependent society.

Various forms of voluntary health care insurance were developed in most industrialized countries before governments took a hand. The voluntary principle, however, has been found inadequate because, among other reasons, it does not protect the groups with the lowest incomes; these are the ones also which need coverage more than any others. For example, the premiums payable under a voluntary scheme tend to be prohibitive for old-age pensioners with low income and wage-earners with large families. Even government-sponsored insurance schemes have proved inadequate because of the difficulty and impossibility of collecting large enough annual premiums from everyone to provide for the required expenditures. As a result, governments have become involved increasingly. It is now common practice in most countries to levy special taxes or to provide funds out of the general revenues to meet the needs.

C. Health Services as a Social Want

Under the market mechanism insufficient amounts of health services are produced. The deficiency is most marked in the sphere of public health where the provision of services must be undertaken by public authorities if they are to be

provided at all. Public health services benefit everyone in greater or lesser degree, and most individuals wish to see them produced. At the same time individuals can and do avoid paying for the service except by compulsion. Consequently the government imposes taxes and other charges. This is the general case for what are called collective goods or services satisfying social wants. As we have noted, hospital and medical care for individuals has also come to be a social want. Governments must accordingly take thought as to how much to provide of the various health services; there are other important social and private wants to be satisfied from the limited resources available.

Assuming full employment of available services, an additional expenditure on a given type of health service will require the withdrawal of resources from other sectors of the economy. Generally, it is the resources employed in producing other health services which are most suitable for transfer to the new service created by the additional expenditure. Therefore, immediate expansion of a service is not easy. If consumers and governments choose to spend more on medical examinations and preventive services, physicians will have less time for hospital visits, operations, and so forth, until additional physicians can be trained or suitable assistants provided. Increasing the number of students of given ability entering medical faculties reduces, other things equal, the proportion of students securing training in other faculties.

The process of resource allocation is slow and gradual. Within the context of a growing economy advancing technologically it is possible to increase the quantity and quality of the various consumer and capital goods produced in the economy. But the fundamental problem of resource allocation remains; there is the question of how much of additional resources made available by continuing economic growth shall be devoted to the production of the many alternative goods and services.

D. Problem of Optimum Resource Allocation

At any given time there is a certain cost structure for the various health services. Many factors determine the obtaining cost relationships. In both the private and the public sector decisions are made which lead to changes in outputs and costs of health services. There is a problem of optimum resource allocation within the health services sector of the economy.

If the sector were entirely private, and competitive in determining prices, we would have the usual solution of the competitive model in economic theory. The price of each service would tend to be equal to the marginal (incremental) cost as well as the lowest average cost of providing the service. With this condition obtaining for each service, the allocation of labour, land and capital among them would be at an optimum in the absence of external economies and indiscriminate benefits. Given no change in technology, resources would be utilized in such a way as to secure the maximum value product possible.

Under conditions of imperfect competition there can be a variety of cases. Presumably something less than the maximum value product obtainable under perfect competition would be produced in each case. We shall not dwell upon the various market structures and possibilities.

The question of securing an optimum becomes complex and often incapable of even approximate solution¹ when services are provided by the public sector. Essentially governments must try to make consumers reveal their preferences regarding social wants. This is done by various methods, from having consumers vote directly to the employment of intuitive judgment by political leaders and their advisers.

The fact is that decisions are made, and a good case can be made for explaining them in "marginal" terms. In budgeting, governments explicitly and implicitly weigh the alternative implications of the various proposed expenditure increases before them. Additional expenditures also imply additional taxes and, if the economy is operating at full employment levels, a reduction of resources utilized in the private sector.² The process of decision-making is far from precise, often vague, and at times may even be deemed irrational. But in a democratic country with a competent government which is sensitive to a consensus of opinion, there will be at least a tendency to grope toward an optimum solution.

The achievement of the optimum resource allocation would imply that the marginal cost equalled the marginal benefit for each health service. In turn, it would mean that this condition obtained in the production of every good and service provided by both the public and private sectors.³

Normative theories of public expenditure are useful in providing conceptual frames of reference and in pressing home the point that governments, however much they would like to increase expenditures, are faced with real limitations. There are many alternative policies which can be adopted. Unfortunately it is difficult to measure and test empirically the degree to which conditions fall short of being ideal.⁴

To come to grips with the problem of deciding upon the most satisfactory and generally approved level of health services we need to examine the order of magnitude of income and expenditure generally. This involves tracing the trend of government expenditures and related variables in the economy. Furthermore we need to provide a picture of the scope of public health expenditures.

¹ In cases where it is not possible for technological reasons to have perfect competition, total value product would be greater under the most appropriate market structure than under others.

² In a growing economy it is a question of what fraction of the additional resources available is to be devoted to the production of collective services.

³ Ability to measure social costs and social benefits is implicit in this discussion.

⁴ For a survey of welfare theories of government expenditures and taxation, see Musgrave, R.A., *The Theory of Public Finance*, (New York: McGraw-Hill, 1960), especially Chapters 4-6.

Trends in Canadian Public Finance

A. Introduction

Our society uses the institution of government to undertake a variety of tasks. Collective needs as well as various problems arise because men live in association and are interdependent in economic and social respects. Government is the only universal agency in the nation, and it is the only institution which can enforce its laws and regulations. Hence men turn to it when common issues cannot be resolved voluntarily. Democratic government is an agency which enables men to transcend exclusively individual and selfish drives and to provide calculated beneficial effects in the interests of all, or at least a substantial portion of the nation's individuals. Many different arrangements for social and economic control result from a complex process of discussion, negotiation, voting, decision-making, and budgeting. Throughout this procedure there is an emphasis upon finding out what is the common interest and discovering the means for achieving tolerable solutions in the interdependent society of today.

A number of factors exert an upward pressure on government expenditures in developing and developed countries. The higher the level of income per capita, the higher the percentage of the national income devoted to public services tends to be. This is the result of the process of industrialization and advancing technology, specialization and the division of labour, and of urbanization and the need for spatial organization of economic and social activities. Fundamentally, the development of government is part and parcel of the whole process of economic growth.

In Western countries, then, the expansion of government activities has been, and continues to be, more a matter rooted in technological than in ideological factors. It is the sheer force of necessity in an interdependent, industrialized, and specialized society which is responsible for the growth of the public sector.

To be specific, many expenditures on private goods increase the need for expenditures on public goods and services. An obvious case is the automobile; the more private expenditure on automobiles, the more public outlays are required for roads, traffic signals, policemen, hospitals, and cemeteries. There are many

examples, and what is involved is what Galbraith has called "social balance".¹ Certain functions such as education and health services are significantly large. They are also services for which the demand grows rapidly as incomes rise. If this is accompanied by a high birth rate, as in Canada, the upward pressure on expenditures is intensified.

Another factor of importance is the high proportion of services provided in the public sector. The level of wages and salaries in it is related to the level in the private sector. In a developed country productivity in the goods producing industries is high; this makes it possible to pay high wages and salaries in the goods producing industries. But in an interdependent society the high level of earnings in the commodity sector will influence the level and rates of earnings in the service sector. As a result service industries, both public and private, must offer wage and salary rates at levels which will attract the labour required to perform services. At the same time these industries need a high proportion of labour, and indeed, in the more recent period employment in them has expanded more rapidly than in the goods producing industries. But when employment in the latter sector declines while the labour force continues to expand rapidly, the upward trend of wages and salaries in the service industries may be retarded. Allowing for such divergent trends, an important objective of government must be to attempt to raise productivity in the public sector.

Increasing specialization and economic interdependence, manifesting themselves in political processes, have increased the need for government transfer payments such as old age pensions, unemployment assistance, and various other social security categories. The size of these payments is related to the general level of income so that as the national income increases, transfer payments also grow. Finally, advancing technology makes heavy demands in the sphere of defence, transportation, hospital services, and higher education.

B. The Public Sector in the Canadian Economy

In Canada government has generally played an important role. During the decades following Confederation we had subsidized railway construction, protective tariff policies, and the encouragement of immigration. The first World War also brought extension of government activities, particularly in munition industries and in manpower utilization. The automobile committed provincial governments to large road-building programs in the 1920's. The depression and the second World War necessitated much government action, both federal and provincial. Again World War II brought increasing government control covering all the essential sectors of the economy. Since the war, rapid urbanization, a high rate of population growth, and technological changes have pushed government expenditures upward in various fields.

It is difficult to measure the influence of government, for governments do more than produce goods and services. They also render assistance; various

¹ Galbraith, J.K., *The Affluent Society*, Boston: Houghton Mifflin Company, 1958, Chapter 18.

industries and businesses are given tariff protection and subsidies, and many individuals receive transfer payments; all of these measures redistribute income. The taxation system also has redistributive effects. The resulting income distribution affects the allocation of resources between the private and public sector profoundly, and also within these sectors. Governments also regulate a number of matters in the private sector; they have long-range plans and projects which affect some industries and communities vitally; finally, they are expected to do their best to maintain full employment and to encourage economic growth.

Nevertheless we can obtain an idea of the trend and order of magnitude of government activity by reference to levels of expenditures and revenues and their relationships to the national income. The public sector provides a variety of services for public consumption; it also engages in public investment for the future provision of goods and services. Finally, it makes outlays on transfer payments and subsidies; these have redistributive effects as well as repercussions on the allocation of resources.

It is evident that the government must utilize some of the productive capacity of the country to perform these tasks. To obtain the services of economic resources government must obtain funds by collecting taxes and other revenues, or by borrowing. Regardless of the method of financing there has to be a transfer of factors of production, under full employment conditions, from the private to the public sector when government expands its output of goods and services.

In the private sector goods and services are offered on the market and are evaluated by the public by what is often called dollar-voting. Rightly or wrongly, only those goods and services will be produced in the long run whose prices cover the costs of production. In general, this also applies to publicly-owned enterprises such as utilities. In the public sector, however, there are produced goods and services which the market or dollar-voting system will not bring forth, but which are deemed necessary by some kind of public consensus. Defence, education, public health, highways, and many more examples can be cited. These goods and services yield external economies and indiscriminate benefits, and individuals cannot be excluded from obtaining benefits from them. In the market economy individuals are excluded from enjoying the goods and services produced in the private sector if they are unwilling or unable to pay the prices for them. To finance the production of the public sector taxes and levies which are compulsory are introduced. The level of taxation and expenditure and the distribution of tax levies and of public services in any given country will depend upon the complex set of economic, political, institutional, and social factors which are peculiar to the country.

Table 1 provides data on Gross National Expenditure in Canada for 1949, 1955, and 1962. This shows the total supply of goods and services in these years, as indicated by the Gross National Product (equals Gross National Expenditure). The goods and services produced in the public sector was valued at \$2.1 billion in 1949, and equalled 13 per cent of the total goods and services produced. In 1962 the public sector produced goods and services valued at \$7.7 billion, or 19.2 per cent of the Gross National Product. Two main qualifications should be made.

First, government business enterprises (e.g. utilities and government railways) and private non-commercial institutions (e.g. universities and hospitals) are included in the private sector. Thus the public sector, as shown in the national accounts, includes mainly purely collective goods and services such as defence, elementary and secondary education, highways, and so on. Second, goods and services produced in the private sector are, by and large, valued at their market prices, while those in the public sector are valued at the cost of materials and the wages and salaries paid by the government.

TABLE 1
GROSS NATIONAL EXPENDITURE AT MARKET PRICES,
CANADA, 1949, 1955 AND 1962
(In Billions of Current Dollars)

	1949	1955	1962
I. PRIVATE SECTOR			
A. Personal expenditure on goods and services (a)	10.9	17.4	25.7
B. Business gross fixed capital formation (b)	3.0	5.2	7.0
C. Value of physical change in inventories	0.1	0.3	0.6
D. Exports of goods and services	4.0	5.8	8.2
E. Less imports of goods and services	-3.9	-6.4	-9.0
Total, Private Sector	14.1	22.3	32.5
II. PUBLIC SECTOR			
A. Public consumption	1.6	3.8	5.9
B. Fixed capital formation	0.5	1.0	1.8
Total, Public Sector	2.1	4.8	7.7
III. TOTAL GROSS NATIONAL EXPENDITURE	16.3	27.1	40.2
Total Public Sector as Per Cent of GNE	13.0	17.7	19.2

(a) Includes products sold by government-owned business enterprises to consumers.

(b) Includes gross fixed capital formation of government-owned business enterprises.

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*. The first year for which data on public gross capital formation is available is 1949. See Appendix A, Table A-1.

The data for the public sector in Table 1 do not show total government expenditures; they indicate only expenditures on collective goods and services. In addition governments make transfer payments of various kinds, no goods and services are produced when such payments are made, and therefore they are excluded in estimating the Gross National Product. They are payments which represent transfers of product and income. Table 2 shows the total expenditure of all governments in Canada, including transfer payments, for three post-war years.

Total government expenditures increased by about \$9.2 billion during the period 1949-1962, while the total Gross National Product rose by \$24.1 billion.

The government expenditure increased from 22.8 per cent to 32 per cent of GNE. Expenditure on defence rose to a peak percentage of Gross National Expenditure during the middle fifties and has declined since. The expenditure on other goods and services expanded steadily between 1949–1962 from nearly 11 per cent to 15 per cent of GNE. This is attributable partly to a general expansion of output of government goods and services, and partly to the more rapid rise of costs in the public than in the private sector. (See Section D in Chapter III.)

TABLE 2
TOTAL EXPENDITURES – ALL GOVERNMENTS,
CANADA, 1949, 1955 AND 1962
(In Millions of Current Dollars)

Item	1949	1955	1962
I. PURCHASE OF GOODS AND SERVICES			
A. Defence	361	1,760	1,680
B. Other	1,766	3,032	6,041
Total, Goods and Services	2,127	4,792	7,721
II. TRANSFER PAYMENTS AND SUBSIDIES			
A. Interest on public debt	572	669	1,274
B. Other transfer payments	948	1,737	3,652
C. Subsidies	77	82	291
Total, Transfer Payments and Subsidies	1,597	2,488	5,217
III. TOTAL EXPENDITURE, ALL GOVERNMENTS	3,724	7,280	12,938
IV. GROSS NATIONAL PRODUCT	16,343	27,132	40,401
(Per Cent of Gross National Expenditure)			
1. Defence	2.2	6.5	4.1
2. Other goods and services	10.8	11.1	15.0
3. Interest on public debt	3.5	2.5	3.1
4. Other transfer payments and subsidies	6.3	6.7	9.8
TOTAL EXPENDITURE	22.8	26.8	32.0

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926–1956 and 1962*. The first year for which data on public gross capital formation is available is 1949. See Appendix A, Table A–2.

Interest on the public debt as a percentage of GNE declined during the early 1950's but increased during the later years of the decade as the Federal Government refunded much of its debt at higher interest rates and as provincial-municipal borrowing for capital projects increased rapidly. Other transfer payments increased both in absolute and relative terms throughout the period. Universal old age pensions were introduced in 1951, and unemployment insurance

benefits were raised substantially during the late 1950's. Furthermore, the scale of payments was generally increased in response to the rising price level.

Table 3 provides an over-all view of the growth of government revenues during the post-war period. The yield of direct taxes increased from 9.5 per cent to 11.4 per cent of GNE between 1949 and 1962, and that of indirect taxes from 11.5 per cent to 13.7 per cent. Investment income grew from 2.6 per cent to 3 per cent of GNE, and employer and employee contributions to public pension and social security funds rose from 1.5 per cent to 2 per cent. In all, total revenue equalled about 30 per cent of GNE in 1962 as against 25 per cent in 1949.

The relative levels of government revenue and expenditure are comparable to those of other developed countries. With respect to expenditure as a per cent

TABLE 3
TOTAL REVENUE — ALL GOVERNMENTS,
CANADA, 1949, 1955 AND 1962
(In Millions of Dollars)

Item	1949	1955	1962
I. DIRECT TAXES			
A. On persons	789	1,499	2,714
B. On corporations	718	1,272	1,750
C. Withholding taxes	47	67	125
TOTAL, DIRECT TAXES	1,554	2,838	4,589
II. INDIRECT TAXES^(a)	1,885	3,319	5,552
III. INVESTMENT INCOME^(b)	419	753	1,211
IV. OTHER^(c)	239	476	816
TOTAL REVENUE, ALL GOVERNMENTS	4,097	7,386	12,168
(Per Cent of Gross National Expenditure)			
1. Direct taxes	9.5	10.4	11.4
2. Indirect taxes ^(a)	11.5	12.2	13.7
3. Investment Income ^(b)	2.6	2.8	3.0
4. Other ^(c)	1.5	1.8	2.0
TOTAL REVENUE	25.1	27.2	30.1

(a) Includes customs import duties, excise duties, excise taxes, amusement taxes, gasoline taxes, licences and fees, real property taxes, retail sales taxes, and miscellaneous.

(b) Includes interest on government-held public funds, loans, advances and investments, and also profits (net of losses) of government business enterprises.

(c) Includes contributions to public service pensions, unemployment insurance, workmen's compensation, and industrial employees' vacations.

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*. The first year for which data on public gross capital formation is available is 1949. See Appendix A, Table A-3.

of GNE, countries like the United States, the United Kingdom, Norway, Sweden, France, Finland, New Zealand, and Australia have levels equal to or above that of Canada. Some other developed countries, for example, Austria, Belgium, Italy, and the Netherlands, fall somewhat below Canada. In under-developed countries the level of government expenditure is relatively low for a variety of reasons, and in any event, the percentage of GNE is significantly lower than in the developed countries.¹

With respect to the over-all level of taxation, about one dozen developed countries, including the United States, rank above Canada, while a few developed and all under-developed countries fall below. A table published in a recent issue of the *Canadian Tax Journal*, sets out data for forty countries of total taxes as a proportion of Gross National Product in 1961.² In this group France leads with 36.2 per cent, and Canada ranks thirteenth with 25.8 per cent, just below the United States with 27.9 per cent. Twenty-two countries, nearly all in the under-developed category, had levels below 20 per cent, with Nigeria at the bottom of the list with 8.6 per cent.

International comparisons have to be made in guarded fashion, but it appears that Canada does not have a disproportionately large public sector. If anything, it seems to be somewhat smaller than the average for the group of developed countries of the world. Part of the reason for this is, that unlike nearly all developed countries (except the United States), Canada still does not have complete social security coverage; and medical care insurance, for example, remains as one of the main omissions.

C. The Relationships of the Three Levels of Government

Canada is a federation with three levels of government. There is a long history of fiscal negotiations between the federal and provincial governments.³ The Federal Government now makes a variety of transfer payments to the provinces, and even to the municipalities. Through the years each province has evolved its own set of transfer payments to its local governments; there are also some flows from municipal to provincial treasuries in some provinces, but these are minor. It is not the intention to discuss the details here.⁴

¹ See United Nations, Department of Economic and Social Affairs, *Report on the world Social Situation*, New York, 1961, Chapter IV, especially Table 3; p. 71. This statement is developed in an article by Harley, H. Hinrichs and Richard Bird, "Government Revenue Shares in Developed and Less Developed Countries", *Canadian Tax Journal*, September-October, 1963, pp. 431-437.

² *Canadian Tax Journal*, Canadian Tax Foundation, Toronto, November-December, 1963, pp. 494 and 495. Data derived from the United Nations Statistical Office, *Yearbook of National Accounts Statistics*, 1962.

³ For a recent and compact discussion of federal-provincial fiscal relations in Canada, see Burns, R.M., "Recent Developments in Federal-Provincial Fiscal Arrangements in Canada" *National Tax Journal*, September 1962, pp. 225-238. For details regarding the latest tax arrangements, see Canadian Tax Foundation, *Tax Memo*, May 1962.

⁴ Much useful information on provincial-municipal fiscal arrangements is available in the Canadian Tax foundation publication, *Local Finance*, Toronto, July 1959 to May 1962, (Numbers 1 to 13 inclusive).

Table 4 sets out expenditure data for the three levels of government between 1949 and 1962. During this period expenditures of all levels of government increased at a more rapid rate than the Gross National Product. Federal expenditures rose from 12.1 per cent to 15.5 per cent during 1949-1962, provincial outlays from 5.7 per cent to 8 per cent and the municipal disbursements from 4.9 per cent to 8.6 per cent. The provincial and municipal governments expanded their activities relatively more rapidly than the Federal Government. As a result the ratio of their expenditures increased from 47 per cent of total government expenditures to 52 per cent during the period 1949-1962. These levels of government have been required to provide an increasing quantity of collective goods and services which are associated with a growing population, urbanization, and rising incomes. The functions in question are generally such that they can be provided and administered more readily by provincial and municipal governments rather than by the federal one.

TABLE 4
TOTAL GOVERNMENT EXPENDITURE^(a) BY LEVELS OF GOVERNMENT,
CANADA, 1949, 1955 AND 1962

Item	1949	1955	1962
I. IN MILLIONS OF DOLLARS			
A. Federal ^(b)	1,987	4,311	6,245
B. Provincial ^(c)	928	1,413	3,235
C. Municipal ^(d)	809	1,556	3,458
TOTAL EXPENDITURE	3,724	7,280	12,938
II. AS PER CENT OF TOTAL EXPENDITURE			
A. Federal	53.4	59.2	48.3
B. Provincial	24.9	19.4	25.0
C. Municipal	21.7	21.4	26.7
TOTAL EXPENDITURE	100.0	100.0	100.0
III. AS PER CENT OF GROSS NATIONAL PRODUCT			
A. Federal	12.1	15.8	15.5
B. Provincial	5.7	5.2	8.0
C. Municipal	4.9	5.7	8.6
TOTAL EXPENDITURE	22.8	26.8	32.1

(a) Excludes intergovernmental transfers.

(b) Excludes transfers to provinces and municipalities.

(c) Excludes transfers to municipalities.

(d) Excludes transfers to provinces.

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*. The first year for which data on public gross capital formation is available is 1949. See Appendix A, Table A-4.

Table 5 shows the total revenues collected by the three levels of government during 1949, 1955 and 1962. In terms of GNE, federal revenues rose from 16.3 per cent to 17.1 per cent in the period 1949–1962, that of the provinces from 5.4 per cent to 8.1 per cent, and that of the municipalities from 3.4 per cent to 4.9 per cent. The proportion of total government revenue collected by the provincial and municipal governments increased from 35 per cent to 43 per cent over the period 1949–1962.

TABLE 5
TOTAL GOVERNMENT REVENUE^(a) BY LEVELS OF GOVERNMENT,
CANADA, 1949, 1955 AND 1962

Item	1949	1955	1962
I. IN MILLIONS OF DOLLARS			
A. Federal Government	2,654	4,937	6,907
B. Provincial Governments	887	1,409	3,285
C. Municipal Governments	556	1,040	1,976
TOTAL REVENUE	4,097	7,386	12,168
II. AS PER CENT OF TOTAL REVENUE			
A. Federal Government	64.8	66.8	56.8
B. Provincial Governments	21.6	19.1	27.0
C. Municipal Governments	13.6	14.1	16.2
TOTAL REVENUE	100.0	100.0	100.0
III. AS PER CENT OF GROSS NATIONAL PRODUCT			
A. Federal Government	16.3	18.2	17.1
B. Provincial Governments	5.4	5.2	8.1
C. Municipal Governments	3.4	3.8	4.9
TOTAL REVENUE	25.1	27.2	30.1

(a) Excludes intergovernmental transfers.

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926–1956 and 1962*. The first year for which data on public gross capital formation is available is 1949, Appendix A, Table A–4.

Despite substantial revenue increases, induced by the growth of national income and the introduction of new taxes (e.g., sales taxes), the provincial and municipal governments continued to be short of funds required to meet the demands for growing services. This led to a significant increase in fiscal transfer payments from the Federal Government to the provincial and municipal governments, and from the provincial to the municipal authorities. Table 6 provides a summary of the situation for 1949, 1955 and 1962.

TABLE 6
INTERGOVERNMENTAL TRANSFER PAYMENTS, CANADA,
1949, 1955 AND 1962

Item	1949	1955	1962
<i>IN MILLIONS OF DOLLARS</i>			
1. Federal Government:			
(a) To provinces	187	443	1,094
(b) To municipalities	—	7	42
TOTAL FEDERAL	187	450	1,136
2. Provincial Governments:			
To municipal	157	327	1,050
3. Municipal Governments:			
To provincial	10	22	17
TOTAL TRANSFER PAYMENTS	354	799	2,203

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*. The first year for which data on public gross capital formation is available is 1949. See Appendix A, Table A-4.

Table 7 shows the surpluses and deficits of the three levels of government between 1946 and 1962, including intergovernmental transfer payments. The Federal Government had deficits in 1946, 1954 and during the period 1958-1962. If transfers to the provinces and municipalities are excluded, only 1946 and 1958 are deficit years.

The provincial governments have had few deficit years during the postwar era. They have, however, received substantial transfer payments from the Federal Government throughout the period which assisted them materially in balancing their budgets.

Even more than the provincial governments, the local governments have found it difficult to raise the necessary revenue to carry out effectively all the functions they were required to perform. They have had deficits throughout the whole post-war period; these would have been larger but for transfer payments received from provincial and federal governments.

The revenue-expenditure relationships of the three levels of government are reflected in the changes in their debt positions during the post-war period. The direct funded debt outstanding of the Federal Government declined from \$16.8 billion to \$14.4 billion during the period 1946-1957, and then rose to \$17 billion by the end of 1961, a level very little above that of 1946.¹ In relative terms the debt of 1946 was much higher than that of 1961. In 1946 it was 142 per cent of GNE while in 1961 it was only 46 per cent. The interest on the federal public debt was 3.7 per cent of GNE in 1946, and only 2.1 per cent in 1961.

¹ Bank of Canada, *Statistical Summary, Supplements, 1960 and 1961*, Ottawa.

TABLE 7
SURPLUSES AND DEFICITS, (a)
ALL LEVELS OF GOVERNMENT, CANADA, 1946-1962
(In Millions of Dollars)

Year	Federal Govern- ment	Provincial Govern- ments	Municipal Govern- ments	All Govern- ments
1946	- 248	97	- 3	- 154
1947	684	107	- 38	753
1948	760	32	- 84	708
1949	480	- 1	-106	373
1950	635	63	-113	585
1951	1,021	78	-114	985
1952	253	143	-143	253
1953	142	203	-170	175
1954	- 100	155	-186	- 131
1955	176	134	-204	106
1956	544	79	-273	350
1957	249	144	-293	100
1958	- 757	66	-316	-1,007
1959	- 327	112	-341	- 556
1960	- 238	- 92	-381	- 711
1961	- 453	- 91	-361	- 905
1962	- 474	111	-407	- 770

(a) After intergovernmental transfers.

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*. The first year for which data on public gross capital formation is available is 1949.

The total direct debt of the provincial governments increased from \$1.8 billion at the end of 1946 to \$4 billion at the end of 1961.¹ The provincial debt was about 15 per cent of GNE in 1946, and 11 per cent in 1961. The interest on the provincial debt was 0.6 per cent of GNE and almost 14 per cent of provincial government revenue (excluding transfers from other governments) in 1946. In 1961 it was 0.4 per cent of GNE and a little over 6 per cent of the "own" revenue of the provinces. It appears that the financial condition of the provincial governments, in the aggregate, is not critical. There are, however, considerable variations among the provinces, which the aggregates tend to conceal.

Finally, the total direct bonded debt of the municipal governments increased from \$0.8 billion to \$4.4 billion during the period 1946-1961,² and from 7 per cent to 12 per cent of GNE. The interest on municipal debt rose from 0.3 per cent to 0.5 per cent of GNE between 1946-1961 and from about 9½ per cent to about 10½ per cent of the "own" revenue of the municipalities. Thus the debt trends of the municipalities have been opposite to those of the senior governments relatively to GNE and government revenue.

¹ *Ibid.*

² *Ibid.*

Trends in Government Expenditure on Health Services in Canada

A. General Developments

Governments in Canada played a minor role in the provision of health services before the twentieth century. The population of the country was largely rural, and there was little done, except in the few cities, to provide public sanitation and preventive health services. Licensed medical practitioners and hospitals were few in number. In high degree, people used home remedies and patent medicines, the sale of which was a thriving and largely unregulated business. When people became ill they went to bed at home, attended by whatever family members or other persons had time and skills. Most babies were born in the homes. In French-Canada the religious orders played a significant part in providing medical and hospital care. In all provinces persons with varying degrees of training and skill provided medical advice upon private request.

Gradually the number of qualified medical practitioners increased.¹ Hospitals were established in increasing numbers by Catholic orders and Protestant denominations, and by private charitable organizations. Some attempts were made in urban areas to check epidemics of cholera and other diseases. But at the time of Confederation in 1867 there was as yet little awareness of any need for governments to take appropriate responsibilities for health services and spend significant sums for such purposes. The administration of public health "was still in a very primitive stage".²

This attitude is reflected in the British North America Act which makes no mention of public health specifically. Health was viewed as being largely a personal matter, with some exceptions, such as the control of epidemics, sanitary conditions, and the care of paupers and the insane. The B.N.A. Act did enumerate "quarantine and the establishment and maintenance of marine hospitals" as a federal responsibility in Section 91 (11). The provinces were responsible for "the establishment,

¹ For an account of early legislation with respect to the licensing of physicians, see Taylor, Malcolm G., "The Role of the Medical Profession in the Formulation and Execution of Public Policy", *Canadian Journal of Economics and Political Science*, Toronto: February 1960, pp. 109 and 110.

² Government of Canada, *Report of the Royal Commission on Dominion-Provincial Relations* (henceforth Sirois Report), Ottawa: King's Printer, 1940, Book II, p. 32.

maintenance, and management of hospitals, asylums, charities, and eleemosynary institutions in and for the province, other than marine hospitals" (Section 92 (7)) and "generally all matters of a merely local or private nature in the province" (Section 92 (16)). The latter section presumably left the provinces with jurisdiction over local and regional public health matters.

Historically all three levels of government have developed different spheres of activity in the public health field with relatively little duplication of services. The great problem at all levels of government has been to provide sufficient satisfactory services, and in 1940 the *Rowell-Sirois Report* stated that there was "little overlapping of functional activities" and that, if anything, the Commission was "impressed by the inadequacy of health services, considering the need, rather than by the existence of duplication".¹

Urban municipalities early became involved in providing for local sanitation, control of infectious diseases, inspection of food offered for sale and of hotels and restaurants, the health inspection of school children, and the provision of municipal hospitals. The rural municipalities have played a small role throughout the history of Canada in the sphere of public health. The main function entailing substantial expenditure has been to finance medical and hospital care for needy persons. In recent decades, however, they have established rural hospitals and nursing services under provincial government supervision. By and large, the municipalities in Canada have provided "field" activities of public health, increasingly under the aegis of their provincial governments, though there is considerable independence among the health boards of the large urban centres.

The provincial governments did little before World War I in the sphere of public health. During and after the war all the provinces established Departments of Health and broadened the scope of their activities. There has been an expansion in the provision of hospital services via insurance and other schemes, of institutional care (e.g., mental and tuberculosis hospitals), of health education and of preventive health services. Increasing efforts have been devoted to the licensing of medical practitioners, nurses and allied health service personnel, and some efforts have been made to stimulate research in the health field.

The Federal Government also did little before World War I, confining its activities chiefly to those set out in Section 91 (11) quoted above. During the inter-war period the Federal Government became committed to the provision of after-care for war veterans. It also made initial attempts at stimulating the undertaking of certain health services by the provinces through a system of grants-in-aid. There was a growing emphasis on the supervision of food and drug standards, narcotic control and child welfare. Ever since Confederation the Federal Government has been responsible for the medical care of Indians, Eskimos and other wards of the government. During the more recent period the Federal Government initiated large health grants programmes and made continuous attempts to promote the achievement of high national standards for health services, to provide auxiliary services, and to encourage and undertake health research. The details are discussed in Chapter IV.

¹ *Ibid.*, Book II, p. 34.

B. The Trend of Government Expenditure on Health and Social Welfare

Estimates of public health expenditures are not readily available for the whole period since Confederation. The Royal Commission on Dominion-Provincial Relations made estimates of public welfare expenditure, including health, for selected years between 1874 and 1937. The estimate for 1874 is \$1.4 million, of which public health probably accounted for about one-half. By the turn of the century the total had risen to about \$5 million annually. For 1913 it was \$15 million, about six per cent of all government expenditure and 0.6 per cent of GNE.¹ In that year the municipal governments made half of the expenditure, the provincial about one-third, and the federal one-sixth. Estimates of expenditure on capital account are not available, nor are estimates of expenditure on sanitation and waste removal, and allied health services. Nevertheless, one can conclude that expenditures on public health were small, considerably below one-half of one per cent of GNE, even after making allowances for capital expenditures. There were, however, large capital outlays on water supply and sewage systems by the rapidly growing urban centres during the settlement and boom period preceding World War I.

Public health and welfare expenditure on current account increased materially after World War I and reached a total of \$84 million in 1930, about 10 per cent of total current government expenditure and 1.5 per cent of GNE. Of this total the provincial and municipal governments spent about two-fifths each, and the Federal Government the remaining one-fifth.² In addition, there were capital outlays for which estimates are not available.

During the 1930's large outlays on relief became necessary, and after World War II expenditure on public health and social welfare increased greatly with the expansion and initiation of various federal and provincial programmes. Two series of estimates are available of combined current and capital expenditures on public health and welfare for the period since 1930. One series is provided by the Public Finance Section of the Dominion Bureau of Statistics in conjunction with series for all other government functions as well. Because of its consistency relative to all levels of government and their expenditures, this series is used in the ensuing discussion in this chapter. The other is a series prepared by the Department of National Health and Welfare. It has been set up for special purposes and to provide as comprehensive a view of public health and welfare services as possible. It includes, for example, veterans' pensions and after-care, certain workmen's compensation benefits, and other items which are classified under other categories than health and welfare in the Dominion Bureau of Statistics series. We shall utilize this series in the examination of health expenditures of each level of government in subsequent chapters. In this chapter, with its purpose of indicating general trends, it is convenient and useful to employ the Dominion Bureau of Statistics series.

¹ The data for Gross National Expenditure or Product are drawn from Firestone, O.J., *Income and Wealth, Series VII, Canada's Economic Development, 1867-1953*, Bowes and Bowes, London, 1958, pp. 66 and 276. The data for public welfare expenditures are derived from the *Sirois Report*, Book I, pp. 82, 106 and 244.

² *Sirois Report*, Book I, p. 75.

The net general expenditure¹ on public health and welfare, according to the Dominion Bureau of Statistics series, was \$208 million in 1939, about 21 per cent of total government expenditure and 4.5 per cent of GNE. During the war years federal expenditure on health and welfare increased somewhat, but provincial and municipal expenditure fell as relief payments declined to almost zero with the achievement of full employment in the economy. At the same time the GNE doubled in terms of current dollars between 1939 and 1944. In the latter year net general expenditures on health and welfare amounted to some \$200 million, a mere 4 per cent of total government expenditure and only 1.7 per cent of GNE.

There was, however, a tremendous interest in the potential expansion of health and welfare services which the Beveridge Report in England and the Marsh Report in Canada had served to highlight. The Federal Government enacted an unemployment insurance measure in 1941 and began to pay family allowances in 1945. It became necessary to increase old age pensions in view of the rising cost of living. The Federal Government prepared draft plans for health and welfare schemes for the post-war period which were not accepted by the provinces during the immediate post-war federal-provincial financial negotiations. During ensuing years, however, universal old age pensions, expanded welfare services, health insurance schemes and national health programmes have been instituted and developed. The depression experience had left a deep impression on millions of people; the need for an expansion of health and welfare services became obvious, and the Federal Government in particular recognized this.

By 1946 net general expenditure on health and welfare had jumped to \$500 million, and in subsequent years the increases have been substantial and rapid. For 1961 the estimated total is nearly \$2.7 billion. One cannot obtain proper perspective of this post-war rise without reference to the very great upward trend in the GNE and indeed, all categories of spending. It has been possible to increase substantially health and welfare expenditure because of the expansion of the GNE which rose from \$11.8 billion in 1946 to \$37.4 billion in 1961 in current dollars. Increases in the National output of the order of \$26 billion made it possible for Canadians to pay for higher health and welfare expenditures which over the same period rose by \$2.2 billion (from \$0.5 billion to \$2.7 billion). The proportion of GNE devoted to health and welfare expenditures rose over this 15 year period from 4.2 per cent to 7.2 per cent.²

C. The Trend in Government Expenditures on Health Services

Canadian government expenditure on health services has, to say the least, been minimal until recent years. Estimates of expenditure are not available for years

¹ Net general expenditure includes both current and capital expenditure, but it excludes provision for debt retirement. Grants-in-aid and cost-sharing contributions for specific purposes are included in the expenditure of the paying government. Institutional revenues and interest earnings have been deducted from related expenditures (e.g., fees from patients in government hospitals have been deducted from gross health expenditures). The concept of net expenditure, then, implies the net cost of the various services to each level of government.

² The comparisons could be made in real terms yielding substantially the same result. Minor differences would arise from the use of special deflators for GNE and government services and payments.

preceding the 1930's, but the estimates for the whole category of "health and social welfare" set out in the preceding section indicate a very low level of government expenditure on health services before World War II.

At the end of the war public expenditure on health services excluding sanitation and waste removal, was small compared to total government expenditure. There has been a striking rise in the level of expenditure during the post-war years, from \$167 million in 1947 to more than \$1,100 million in 1961. Health outlays have advanced to absorb nearly ten per cent of total government expenditure and 3 per cent of GNE in 1961.¹ These estimates differ somewhat from those of the DBS in its series on government expenditures. Table 8 provides a summary view of the net general expenditure on health by levels of government.

Excluding expenditure on sanitation and waste removal, the Federal Government increased its expenditure on health services from 34 per cent of total health expen-

TABLE 8
TOTAL NET GENERAL EXPENDITURE ON HEALTH
ALL GOVERNMENTS CANADA, 1947-1962

(In Millions of Current Dollars)

Year	Federal	Pro- vincial	Muni- cipal	Total	Sanitation and Waste Removal	Total, Including Sanitation
1947	57	87	27	171	29	200
1948	60	114	31	205	35	240
1949	69	156	38	263	37	300
1950	72	172	43	287	41	328
1951	82	190	51	323	50	373
1952	88	210	53	351	53	404
1953	94	229	54	377	71	448
1954	100	257	67	424	140	564
1955	103	271	69	443	107	550
1956	112	288	74	474	130	604
1957	118	332	85	535	130	665
1958	186	363	80	629	130	759
1959	280	470	72	822	147	969
1960	330	554	69	953	153	1,106
1961	429	621	72	1,122	166	1,288
1962	484	719	77	1,280	177	1,457

Source: See Appendix B, Table B-L.

¹ These figures are based upon estimates made by the federal Department of National Health and Welfare. See Government of Canada, Department of National Health and Welfare, *Government Expenditures and Related Data on Health and Social Welfare, 1947 to 1953*, Ottawa: Queen's Printer, June 1955, and *Government Expenditures on Health and Social Welfare, Canada, 1927 to 1959*, Ottawa: Queen's Printer, December 1961. The series for health services begins with 1947. Both of these bulletins (Social Security Series, Numbers 14 and 16) have been prepared by Mr. C.D. Allen and assistants, Research and Statistics Division of the federal department on the basis of data in the federal public accounts and the Dominion Bureau of Statistics estimates employed in the previous section of this chapter.

diture in 1947 to 38 per cent in 1962, the provincial governments increased from 51 per cent of the total to 56 per cent, while the municipal contribution fell from 15 per cent to 6 per cent. The latter, then, have become of minor importance in financing health services. The data in Table 8 indicate the net cost of health services to each level of government (i.e., the financial contribution of each); the municipal governments actually expend larger amounts on health services than the net figures indicate. Local authorities also spend large sums on sanitation and waste removal, and estimates of such expenditures have been added in Table 8; this function is performed almost entirely by local governments.

Several broad categories of health services may be distinguished at this stage. The first, and by far the largest in terms of total expenditure, is hospital care; a second is medical and dental services; a third is general and public health; and fourth, there is sanitation and waste removal.

TABLE 9
TOTAL NET GENERAL EXPENDITURE ON HOSPITAL CARE,
ALL GOVERNMENTS, CANADA, 1947-1962

(In Millions of Current Dollars)

Year	Federal Grants to Provinces ^(a)	Other Federal ^(b)	Provincial ^(c)	Municipal ^(d)	Total Government
1947	—	36	71	15	122
1948	2	32	94	17	145
1949	7	33	135	22	197
1950	7	33	148	27	215
1951	9	35	163	33	240
1952	10	37	178	34	259
1953	9	39	195	34	277
1954	10	40	221	44	315
1955	11	40	230	45	326
1956	11	44	246	47	348
1957	8	49	285	55	397
1958	72	50	309	50	481
1959	166	48	413	43	670
1960	307	50	489	40	786
1961	302	53	549	41	945
1962	354	48	627	42	1,071

(a) Grants for hospital construction, 1948-1962, under federal health programme and grant for hospital insurance and diagnostic services, 1958-1962.

(b) Two-thirds of expenditure on hospital services and medical services for veterans, Indians, Eskimos, sick mariners, etc., as per data of Department of National Health and Welfare. The other third has been allocated to "medical, dental and allied services" in the next table.

(c) Includes workmen's compensation, mental hospitals, tuberculosis hospitals, hospital insurance schemes, grants and miscellaneous net of grants from the federal government. There are probably some medical services included under mental and tuberculosis hospitals.

(d) Includes hospital insurance, grants and miscellaneous net of grants from provinces.

Source: See Appendix Tables labelled B, C, D and E.

1. Hospital Expenditures

Hospitals are operated by all levels of government and various institutions, but until recently, much of the financing of services has been private. In addition there is a number of private hospitals. *Public* hospitals are recognized as such by provincial governments and they are obliged to accept indigent patients. They receive financial support from municipal and provincial governments to meet operating deficits and to assist them in meeting construction costs. Second, there are *private* hospitals, most of which have been established as profit-making enterprises, but some are owned by religious bodies and orders and provide services only to members or adherents. They are not obliged to accept indigents. Third, there are *federal* hospitals which are administered by the Departments of National Health and Welfare, Veterans' Affairs, and National Defence and provide hospital care for veterans, sick mariners, servicemen, Indians, Eskimos, and other persons for whose hospital care the Federal Government is responsible.

During the 1950's public hospitals accounted for about four-fifths of all reporting hospitals in Canada.¹ Private hospitals constituted over one-seventh of the total, and federal less than five per cent.

Table 9 provides a summary of the expenditure trends, by level of government, on hospital care for the years 1947-1962. Expenditures doubled over this period during which British Columbia and Saskatchewan introduced hospital insurance. Newfoundland is not included in the years 1947 to 1949, and its inclusion after 1949 accentuates the rise in expenditures indicated. Government outlays almost doubled during 1952-1958, and more than doubled between the years 1958 and 1962, with the rapid development of provincial-federal hospital insurance schemes. The provincial governments have accounted for the largest portion throughout the period, followed by the Federal Government whose expenditures rose markedly. Municipal expenditures declined both in absolute and in relative terms in recent years.

During the post-war period the government share of total expenditures on hospitals in Canada has risen rapidly. Before the early 1950's the government proportion was less than one-half of the aggregate. In 1953 total expenditures on hospitals, operating and capital, was an estimated \$522 million,² of which governments accounted for an estimated \$277 million, or 53 per cent. In 1961 total expenditures on hospitals was an estimated \$1,105 million,³ of which governments accounted for \$945 million. This represents 85 per cent of the total, and there is every indication that the government proportion has increased further since 1961.

2. Medical, Dental and Allied Services

Government expenditures on medical, dental and allied services have risen moderately during the post-war period. Table 10 provides estimates for the three

¹ The number of hospitals is currently about 1,500 and has risen by nearly 50 per cent since 1945.

² Estimates from Madden, J.J., *The Economics of Health*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer.

³ *Ibid.*

levels of government for the period 1947-1961. The total for all governments increased from \$28 million in 1947 to an estimated \$72 million in 1961. The provincial portion increased more rapidly than the federal and municipal.

TABLE 10
TOTAL NET GENERAL EXPENDITURE ON
MEDICAL, DENTAL AND ALLIED SERVICES,
ALL GOVERNMENTS, CANADA 1947-1962

(In Millions of Current Dollars)

Year	Federal ^(a)	Provincial ^(b)	Municipal ^(c)	Total
1947.....	18	5	5	28
1948.....	16	8	6	30
1949.....	16	9	7	32
1950.....	16	11	7	34
1951.....	17	12	8	37
1952.....	18	15	8	41
1953.....	19	15	8	42
1954.....	20	16	11	47
1955.....	20	17	11	48
1956.....	23	18	12	53
1957.....	24	20	15	59
1958.....	24	23	14	61
1959.....	23	25	11	59
1960.....	29	28	9	66
1961.....	30	32	10	72
1962.....	32	46	12	90

(a) One-third of expenditure on hospital and medical services for veterans, Indians, Eskimos, sick mariners, etc., has been allocated as medical. See Table 9, footnote (b).

(b) As per DBS estimates plus one-third of expenditure by workmen's compensation boards on hospital and medical care.

(c) Separate estimates are not available. The figures are estimates related to hospital care expenditures of municipalities.

3. General and Public Health Expenditures

Expenditures on general and public health is practically all governmental. It is a relatively small part of total expenditures on health services. Between 1947 and 1961 the expenditures on general and public health rose from \$21 million to an estimated \$105 million. Including the municipal expenditures on sanitation and waste removal, the total increased from about \$50 million in 1947 to over \$270 million in 1961. Expenditures on sanitation and waste removal were substantially larger than expenditures on general and public health throughout the post-war period. Table 11 provides a summary.

TABLE 11

TOTAL NET GENERAL EXPENDITURE ON GENERAL AND PUBLIC HEALTH
ALL GOVERNMENTS, CANADA, 1947-1962

(In Millions of Current Dollars)

Year	Federal ^(a)	Provincial ^(b)	Municipal		Total	Total Excluding Municipal Sanitation
			General and Public Health ^(b)	Sanitation ^(b)		
1947.....	3	11	7	29	50	21
1948.....	10	12	8	35	65	30
1949.....	13	12	9	37	71	34
1950.....	16	13	9	41	79	38
1951.....	21	15	10	50	96	46
1952.....	23	17	11	53	104	51
1953.....	27	19	12	71	129	58
1954.....	30	20	12	140	202	62
1955.....	32	24	13	107	176	69
1956.....	34	24	15	130	203	73
1957.....	37	27	15	130	209	79
1958.....	40	31	16	130	217	87
1959.....	43	32	18	147	240	93
1960.....	44	37	20	153	254	101
1961.....	44	40	21	166	271	105
1962.....	50	46	23	177	293	119

(a) From estimates of Department of National Health and Welfare. Includes health grants to the provinces.

(b) From estimates in Appendix tables B, C, D and E.

4. Total Government Expenditures on Health Services

A summary of total government expenditures on health services by function is provided in Table 12. Including sanitation and waste removal, the total rose from an estimated \$200 million to an estimated \$1,457 million between 1947 and 1962. This represented an increase from 1.5 per cent to 3.6 per cent of GNE. Excluding sanitation and waste removal, the increase was from an estimated \$171 million to about \$1,280 million, and from 1.3 per cent to 3.2 per cent of GNE. Thus public expenditure on health services (including sanitation) increased markedly, and by 1962 it exceeded three-fifths of all expenditure on health in Canada, both public and private,¹ as against a little over two-fifths during the early 1950's.

¹ This statement is made on the basis of estimates in *ibid.*

TABLE 12
TOTAL NET GENERAL EXPENDITURE ON HEALTH
ALL GOVERNMENTS, CANADA, 1947-1962
BY FUNCTION
(In Millions of Current Dollars)

Year	Hospital Care	Medical, Dental and Allied Services	General and Public Health	Total, Excluding Sanitation	Municipal Sanitation and Waste Removal	Total, Including Sanitation
1947	122	28	21	171	29	200
1948	145	30	30	205	35	240
1949	197	32	34	263	37	300
1950	215	34	38	287	41	328
1951	240	37	46	323	50	373
1952	259	41	51	351	53	404
1953	277	42	58	377	71	448
1954	315	47	62	424	140	564
1955	326	48	69	443	107	550
1956	348	53	73	474	130	604
1957	397	59	79	535	130	665
1958	481	61	87	629	130	759
1959	670	59	93	822	147	969
1960	786	66	101	953	153	1,106
1961	945	72	105	1,122	166	1,288
1962	1,071	90	119	1,280	177	1,457

Source: Appendix Table B-1 and subsequent Tables C-1, C-2, C-3, C-4, D-1, D-2, D-3, E-1, E-2, and E-3. It should be noted that the estimates in this study vary somewhat from those of J. J. Madden, *The Economics of Health*, because of differences in methods of estimation.

D. Government Expenditures in Real Terms

Comparisons of components of expenditure with GNE in terms of current dollars provide a measure of the relative amount of current purchasing power which is devoted to given goods or services. For example, government expenditure on goods and services in Canada averaged 16.4 per cent of the total GNE for the fifteen years 1946-1961. This is not an adequate measurement, however, of the volume of government goods and services purchased by the general public. The level of prices of government goods and services changed at rates differing from changes in the levels of prices of consumer goods and services, capital goods, exports and imports. Table 13 sets out some comparisons.

The indexes in the table are implicit currently weighted indexes which reflect not only pure price changes but also changing expenditure patterns within

TABLE 13

SELECTED IMPLICIT PRICE INDEXES, CANADA, SELECTED YEARS, 1946-1962
1949 = 100

Year	Consumer Goods and Services	Government Goods and Services	Total Gross National Expenditure
1946	78	78	78
1951	114	117	114
1956	121	142	128
1962	134	170	144

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*.

and among major groups. For the three categories shown in Table 13, the price indexes moved evenly between 1946 and 1949. After the latter date the government index increased much more markedly, 70 per cent between 1949 and 1962, as against a rise of 34 per cent for consumer and 44 per cent for all goods and services over the same period. Indeed, the index for current government goods and services rose by 82 per cent, while the price index of government fixed capital formation increased 39 per cent.

The explanation for the great rise in the cost of government goods and services particularly operating expenditures, centres largely around adjustments in wages and salaries in the public sector which were depressed relatively to those in the private sector for many years. Wages and salaries make up a large part of the cost of government goods and services. During the 1950's it became necessary to increase the remuneration of civil servants, school teachers, nurses, and other personnel in order to secure a balance with the higher level of remuneration in the private sector. The major upward adjustments of wages and salaries which occurred during the 1950's, especially during the last part of the decade, were made to enable the public sector to retain the services of personnel and to recruit new labour effectively.

Deflating government expenditures on goods and services by the implicit price index for these, one arrives at expenditures in real terms. These increased from \$2.3 billion to \$4.5 billion over the period 1946-1962, compared with a rise from \$1.8 billion to \$7.7 billion in current dollars.¹ Government expenditures on goods and services in real terms averaged 15.4 per cent of GNE over the 16-year period 1946-1962 as against 16.6 per cent on a straight current dollar comparison. For the five-year period 1958-1962 the difference is greater, government expenditures in constant dollars averaging 16.4 per cent and in current dollars 18.9 per cent.

Expenditures on public health services are mainly on goods and services in contrast to welfare expenditure which consists chiefly of transfer payments. One can secure an approximation of the volume or standard of health services by using the implicit price index for government goods and services as a deflator (see Table 14).

¹ Appendix A, Table A-2.

TABLE 14
NET GENERAL EXPENDITURE ON HEALTH, (a) ALL GOVERNMENTS, CANADA,
SELECTED YEARS, 1947-1962

Item	1947	1951	1956	1962
Total, millions of current dollars.....	200	373	604	1,457
Total, millions of constant (1949) dollars ^(b)	240	320	425	855
As per cent of Gross National Product:				
1. Current dollars	1.5	1.8	2.0	3.6
2. Constant dollars.....	1.5	1.7	1.8	3.0
Per capita in constant (1949) dollars	19.10	22.85	26.45	46.00

(a) Includes sanitation and waste removal.

(b) Deflated by the implicit price index for government goods and services.

One notes that the increase of expenditure on public health services has been much less marked in real terms than in current dollars. In relation to GNE there was little divergence before 1956. After that date the "real" ratio was significantly lower than the "monetary" ratio. Growth in the real per capita level of services was small during the first half of the 1950's. During the latter half the real per capita level increased markedly, mainly because of the introduction of hospital insurance plans across the nation. Accompanying this was a decrease in private expenditures on hospital services.

Role of Federal Government

A. General Post-war Developments

Before World War II the federal Government played a small but important part in providing health services. The major expenditure was on the after-care of veterans; this has been an item of consequence in federal budgets since the first world war. Expenditure on medical and hospital services for Indians and Eskimos was of a much smaller order of magnitude than that for veterans. Other expenditures, on health services for indigent immigrants, sick mariners and prisoners, special technical and examination services (e.g., quarantine), food and drug control, research and statistics, were also small.

Since the end of World War II, federal expenditures on health services have increased rapidly. This is fundamentally a result of the growing industrialization and urbanization of Canada which has created new sets of conditions under which people work and live as well as acceptance of insistent public demands for increased health services provided in the public sector. Medical discoveries have multiplied and the technical standards of health care have risen. The public has come to request, implicitly and explicitly, that all individuals be protected and this has lent widespread support to the idea of providing a national minimum of health services. Only one government, the federal, has the resources to deal with health matters on a national scale, and increasingly it has taken the initiative in encouraging the provinces to improve the levels of services provided.

The Department of National Health and Welfare has prepared reports on government expenditures on health and social welfare in Canada for the period 1927–1959. These provide a useful and convenient basis for summarising the trends in both federal and provincial activities.¹ In this Chapter we shall deal with the federal developments. We have also made estimates for the fiscal years 1959–1962

¹ Government of Canada, Department of National Health and Welfare, *op. cit.*

from data in the federal public accounts and from other sources.¹ The statistical series for health expenditure embraces the period for the fiscal years 1947-1959.²

Federal expenditure on health services increased from \$57 million in the fiscal year 1947-48 to an estimated \$484 million in the fiscal year 1962-63, a rise of 750 per cent. In terms of constant (1949) dollars the rise was from \$68 million to an estimated \$284 million, an advance of nearly 300 per cent. Per capita expenditures in constant dollars declined from \$5.45 in the fiscal year

TABLE 15

NET ORDINARY AND CAPITAL EXPENDITURE ON HEALTH SERVICES,
GOVERNMENT OF CANADA, SELECTED FISCAL YEARS, 1947-1962
(In Millions of Dollars)

Fiscal Year ^(a)	1947-48	1960-61	1961-62 ^(b)	1962-63 ^(c)
A. Hospital and medical services	53.8	269.3	366.1	417.2
B. Consulting and advisory services	0.5	2.0	2.3	2.5
C. Examination services	0.8	3.0	3.0	3.0
D. Inspection and enforcement services	0.9	3.7	4.0	4.4
E. Extension of provincial health services.....	0.2	48.0	49.0	50.3
F. Grants to voluntary health organizations	0.1	0.2	0.2	0.2
G. General administration	0.3	1.2	1.4	1.5
H. Miscellaneous	0.1	2.8	3.0	5.3
TOTAL EXPENDITURE.....	56.8	330.2	429.0	484.4
TOTAL IN CONSTANT (1949) DOLLARS: (d)				
Millions of dollars	68.2	207.0	264.3	284.0
Dollars per capita	5.45	11.60	14.50	15.30

(a) April 1 to March 31.

(b) Preliminary data.

(c) Estimates.

(d) Deflation by the Dominion Bureau of Statistics implicit price index for government goods and services. Estimated for 1962-63.

Source: See Appendix C, Table C-1.

¹ Much information is available in the annual publication of the Canadian Tax Foundation, *The National Finances*, which provides summaries of yearly developments in various fields of federal activity. See also *Canada Year Book, 1962*, Ottawa: Queen's Printer, pp. 222-232, for an article on recent federal developments.

² The series for 1927 to 1959 combines both health and social welfare expenditure.

1947-48 to \$5.05 in the fiscal year 1954-55. Since the middle of the 1950's the expenditures per capita in constant dollars have risen substantially, reaching \$11.60 in the fiscal year 1960-61, an estimated \$14.50 in the fiscal year 1961-62, and an estimated \$15.30 in the fiscal year 1962-63. Data on federal expenditure on health services are set out in Table 15 for the fiscal year 1947-48 and for the last three years.

B. The Post-war Pattern of Federal Health Expenditures

1. Hospital and Medical Services

Federal expenditures on medical and hospital services increased from \$54 million in the fiscal year 1947-48 to an estimated \$417 million in the fiscal year 1962-63. In the former year such expenditures constituted nearly 95 per cent of total federal health expenditures; currently they represent over 85 per cent. This category, then, is of major importance in the federal pattern of health expenditures. Table 16 provides the details for selected years.

- (a) *Indians and Eskimos* - Expenditure on providing health and medical services for Indians and Eskimos increased from \$5½ million in the fiscal year 1947-48 to almost \$25 million in 1962-63. Services are provided by the Department of National Health and Welfare and cover a registered population of about 185,000 Indians and nearly 12,000 Eskimos. The Directorate of Indian and Northern Health Services administers the programme in collaboration with the Department of Citizenship and Immigration (which has jurisdiction over Indians) and the Department of Northern Affairs (Eskimos). Currently there are over 20 hospitals, 30 clinics, about 40 nursing stations and about 80 other health centres with full-time medical officers, graduate nurses and other personnel, serving over 2,000 small and scattered groups. Private practitioners, provincial agencies and community agencies also provide services for fees where federal government facilities are not available. Much emphasis is put upon preventive measures such as vaccinations, early treatment of diseases, field X-ray surveys and health education.¹

Included in the totals in Table 16 are federal expenditures on health services (Northern Health Service) in the Yukon and the Northwest Territories. In these areas the Federal Government provides public health, hospitalization, and other health services to the population. An initial expenditure of \$82,000 was made in the fiscal year 1955-56, and it is currently about \$3 million annually. The large increase is attributable to the introduction of hospital insurance.

- (b) *Sick Mariners* - The Department of National Health and Welfare provides hospital and medical services for crew members of foreign ships arriving in Canada and of Canadian coastal vessels in interprovincial trade. Crew members of Canadian fishing and government vessels may participate on a voluntary basis. Tonnage duties are levied which defrayed more than half to all the cost of the service. The annual expenditure runs at about \$1 million.

¹ See *Canada Year Book*, 1962, Ottawa: Queen's Printer, pp. 230 and 231.

TABLE 16
NET ORDINARY AND CAPITAL EXPENDITURE
ON HOSPITAL AND MEDICAL SERVICES,
CANADA, SELECTED FISCAL YEARS, 1947-1962
(In Millions of Current Dollars)

Fiscal Years	1947-48	1954-55	1960-61	1961-62 ^(a)	1962-63 ^(b)
A. Department of National Health and Welfare.....	5.7	16.4	213.3	308.9	360.0
1. Eskimos and Indians ^(c)	5.5	15.5	23.0	24.0	24.3
2. Sick mariners ^(d)	0.2	0.9	0.9	1.0	1.0
3. Hospital insurance and diagnostic services ^(e)	—	—	189.4	283.9	336.7
B. Department of Veterans Affairs ...	48.1	43.9	49.8	49.5	46.9
1. Treatment services	40.5	39.0	42.3	42.5	42.9
2. Prosthetic services	0.6	1.0	1.4	1.5	1.5
3. Hospital construction, improvements, etc.	7.0	3.9	6.1	5.5	2.5
C. Other Departments	0.1	0.3	6.3	7.9	8.3
1. Contributory medical insurance for government employees ^(f)	—	—	6.0	7.6	8.0
2. Miscellaneous ^(g)	0.1	0.3	0.3	0.3	0.3
TOTAL, ALL DEPARTMENTS..	53.8	60.6	269.3	366.1	417.2

(a) Preliminary data.

(b) Estimates.

(c) Includes the Northern Health Service, begun in the fiscal year 1958-59.

(d) For the fiscal year 1947-48 the figure is net after deduction of tonnage levies.

(e) The first expenditure on this programme was made in the fiscal year 1958-59.

(f) Introduced July 1, 1960.

(g) Department of Citizenship and Immigration and Department of Labour re immigrants, and the Department of Justice re prisoners.

Source: Appendix C, Table C-2.

(c) *Hospital Insurance and Diagnostic Services* — During the last six years the Federal Government has entered the field of hospital insurance. An initial expenditure of \$54.7 million was made in the fiscal year 1958-59; in the subsequent four years the appropriations rose to \$150.6 million, \$189.4 million, \$283.9 million, and \$336.7 million. This is the result of a long period of planning and preparation as part of the National Health Programme announced by the Federal Government as far back as May, 1948. Indeed, hospital insurance was proposed at the Federal-Provincial Conference on Reconstruction immediately after World War II, but like the other health programme proposals, it was not accepted at the time.

The programme set out in 1948 had several aims. It was proposed, first, to survey existing public health services; second, to improve and expand public health

services; third, to facilitate the construction of hospitals; and fourth, to pave the way for health insurance. To this end the Federal Government provided ten categories of grants-in-aid to the provinces and payments began during the fiscal year 1948-49. This programme is discussed in a subsequent section.

Health insurance continued to be discussed by the federal and provincial governments. In October 1955, a federal-provincial conference was set up to deal with health insurance, and in January 1956, a sub-committee consisting of the Federal Ministers of National Health and Welfare and of Finance and of Provincial Treasurers and Ministers of Health had meetings. The Federal Government offered to provide grants-in-aid to provinces enacting legislation for the operation of hospital care insurance programmes. The original proposal spelled out a formula under which the Federal Government would pay a fraction of defined shareable operating costs of hospital (standard ward) care. The specific figures set out for determining the fraction were 25 per cent of the per capita shareable costs in the province, plus 25 per cent of the average per capita shareable costs in Canada as a whole, multiplied by the population covered by the provincial programme.

The Minister of National Health and Welfare summarized the proposals at the hearings of the Special Committee on Estimates in the Canadian House of Commons in 1956. Very briefly, they were as follows. First, the Federal Government would assist technically and financially any province in setting up a provincially administered health insurance scheme, involving no constitutional change or interference in provincial affairs, as soon as a majority of provincial governments representing a majority of the Canadian people were ready to proceed. Second, priority should be given the development of plans to cover diagnostic services and hospital care; further services could be considered after the establishment of hospital insurance. Third, provincial hospital insurance plans should make coverage universally applicable to all persons in the province and might provide special diagnostic services to persons in hospital (and within an agreed period of time to persons outside of hospitals) as well as set a limit on co-insurance or deterrent charges to prevent the placing of excessive financial burdens on patients at the time of receipt of services. Fourth, shareable costs would be determined on the basis of normal operating and maintenance costs insofar as these relate to ward care, but would not include capital costs (depreciation, interest, amortization of debentures, etc.), nor extra costs properly attributable to the provision of semi-private and private ward care, nor the uninsured portion of a patient's hospitalization costs, nor provincial administrative costs. Costs of care provided to patients entitled to care under DVA, workmen's compensation, insurance claims, or similar arrangements would also be deducted in determining shareable costs. Fifth, there would be excluded the costs of caring for patients in tubercular and mental hospitals under the control of the provinces and subsidized by the provinces. The minister pointed out that (aside from psychiatric and tuberculosis control services in the general hospitals), tuberculosis and mental hospitals were financed almost entirely from general revenues and not from insurance. British

Columbia and Saskatchewan, the two provinces with well-established hospital insurance schemes, kept the financing of these special hospitals separate from the insurance plan. Finally, the minister set out the formula agreed upon previously for determining the federal share of costs.

In 1956, British Columbia and Saskatchewan had complete plans in operation and Alberta and Newfoundland had programmes with wide coverage. These four provinces represented a little less than one-quarter of the population of Canada. This was insufficient for federal participation under the proposals of 1956. The Hospital Insurance and Diagnostic Services Act was passed by Parliament in 1957, containing substantially the proposals set out above. In 1958, however, the restriction requiring the participation of a majority of the provinces was removed.

Five provinces, Newfoundland, Manitoba, Saskatchewan, Alberta and British Columbia, signed agreements with the Federal Government and started their plans on July 1, 1958. The other provinces followed rapidly. Ontario and Nova Scotia initiated operations January 1, 1959, New Brunswick on July 1, 1959, Prince Edward Island on October 1, 1959, and finally Quebec on January 1, 1961. Hospital insurance plans were also provided for the Northwest Territories (April 1, 1960) and in the Yukon (July 1, 1960). This made national coverage virtually complete.

- (d) *Department of Veterans Affairs* – The Department of Veterans Affairs provides treatment services, prosthetic services and hospital accommodation for disabled war veterans. Members of the Armed Forces, the R.C.M.P., and wards of other governments or departments may also be accommodated upon request. A variety of regulations determine eligibility of individuals for treatment and hospitalization.¹ Essentially there are about 150,000 war pensioners who are eligible for care. The department operates 15 institutions with about 9,000 beds; in addition, services are provided in pavilions under the authority of the department, but which are attached to, and operated by, public hospitals in Ottawa, Regina and Edmonton.

The level of expenditures on health services by the department has not changed much during the postwar period. In the fiscal year 1947–48 the total spent was \$48.1 million; it declined to \$43.9 million in the fiscal year 1954–55. Since that time costs of providing services have increased materially, and in 1960–61 the expenditure was \$49.8 million. For the fiscal year 1962–63 the estimated expenditure is \$46.9 million.

- (e) *Miscellaneous* – The Department of Citizenship and Immigration shares with certain provinces the costs of hospital and medical care provided for immigrants after their arrival in Canada and for a period not exceeding one year. The Department of Labour pays part of the expenses for indigent immigrant workers who have been in Canada less than six months and who are not covered by federal-provincial agreements or provincial legislation; costs are shared equally between the federal government and certain provinces. The

¹ For details, see *Canada Year Book*, 1962, Ottawa: Queen's Printer, p. 275.

Department of Justice incurs expenditures for hospital and medical services rendered to prisoners. Altogether the expenditure of these three departments runs at about \$300,000 annually.

A recent measure, introduced in 1960, is a contributory medical insurance scheme for members of the civil service, the armed forces, the R.C.M.P., and employees of crown corporations. The scheme was extended to include retired personnel as of February, 1962. The appropriation for the fiscal year 1962-63 was \$8 million.

2. Consulting and Advisory Services

The Department of National Health and Welfare provides a variety of consulting and advisory services, administered by several divisions.¹ These services are made available to the provinces, to other parts of the federal department, and to other federal departments. Specific research projects are undertaken. The Blindness Control Division reviews eye reports and issues blindness certificates to the provinces in processing applications for blindness allowances. A treatment scheme provides for services to restore the vision of some recipients of blindness allowances; this is undertaken jointly with the provinces. The Child and Maternal Health Division provides consultation services to provincial health departments and other health agencies. The Dental Health Division provides general consultant services, and does research on such topics as fluoridation and other matters pertaining to tooth decay. The Epidemiology Division does research on certain diseases, advises provincial departments regarding outbreaks of infectious diseases, and in general studies the prevention and control of such diseases. The Hospital Design Division approves and amends plans for hospital construction in cases where hospitals are to be built with financial assistance through the Hospital Construction Grants programme. The Mental Health Division advises on the disposition of the mental health grants. The Nutrition Division does research on the feeding of groups of people, food habits and nutrition problems; it also compiles the table of food values recommended for Canada. The Occupational Health Division provides a variety of clinical, laboratory and educational services relating to occupational health problems. A Health Insurance Section does health insurance studies and administers the National Health Grants programme.

Expenditure on all the consulting and advisory services increased from nearly \$½ million in the fiscal year 1947-48 to an estimated \$2½ million in the fiscal year 1962-63.²

3. Examination Services

The Medical Advisory Services is a major group of the Health Branch of the Department of National Health and Welfare. The division administers the Quarantine

¹ See Cameron, G.D.W., "The Department of National Health and Welfare", *Canadian Journal of Public Health*, Toronto: August, 1959, pp. 319-336, for a detailed account of all the administrative functions and divisions of the department. See also *Canada Year Book*, 1962, Ottawa: Queen's Printer, pp. 222 and 223 and 229-232.

² See Table 15.

Act and the Leprosy Act; this involves the inspection of incoming traffic to Canada by all modes of transportation with the object of preventing the entry of infectious diseases. A special aspect of this work involves medical examinations of immigrants overseas and about 60 medical officers are stationed in various countries from which there is a substantial flow of immigrants; the services of local physicians are utilized in many other countries. Expenditure on immigration medical services has accounted for about two-thirds of total expenditure on examination services during the post-war period. Another examination service is provided by the Civil Aviation Medical Division which acts as adviser to the federal Department of Transport, to the medical profession, and to civil aviation organizations on all problems pertaining to the health and safety of civilian air crew, ground crew, and airline passengers. In addition, it performs a variety of educational and co-ordinating activities in the field of aviation medicine. Finally, a Civil Service Health Division provides diagnostic and advisory services (outdoor) to a number of federal government employees. Treatment is restricted to emergency cases. A nursing counsellor service and an advisory service are provided in the various government departments to deal with working conditions. The Division of Medical Advisory Services also administers the Sick Mariners programme.

Total expenditure on examination services increased from \$0.8 million in the fiscal year 1947-48 to an estimated \$3 million in the fiscal year 1962-63.¹

4. Inspection and Enforcement Services

Several agencies in the Department of National Health and Welfare provide inspection and enforcement services. The Laboratory of Hygiene is the national public health reference laboratory and conducts research in public health and clinical laboratory fields. The Food and Drug Directorate administers Canada's Food and Drugs Act and the Proprietary or Patent Medicine Act. There is one central laboratory in Ottawa as well as five regional ones. The functions and activities are varied and involved and need not detain us here.² The Division of Narcotic Control administers the Opium and Narcotic Drug Act.³ Finally, the Public Health Engineering Division administers regulations regarding water for drinking and culinary purposes on common carriers in interprovincial and international traffic. It also deals with problems of water supply, sewage disposal and sanitation on federal property, including national parks and northern areas.

Expenditures on inspection and enforcement services increased from \$0.9 million in the fiscal year 1947-48 to an estimated \$4.4 million in the fiscal year 1962-63.⁴

5. Extension of Provincial Health Services

Various health programmes were proposed by the Federal Government at the Federal-Provincial Conference on Reconstruction in 1945-46. None of these were

¹ See Table 15.

² For details, see Cameron, *op. cit.*, p. 325, and *Canada Year Book, 1961*, Ottawa: Queen's Printer, pp. 242-248.

³ See Cameron, *op. cit.*, p. 333, for details.

⁴ See Table 15.

put into effect at the time. Essentially they were part of a whole package of revenue and expenditure proposals of the senior government which the provincial governments rejected. The Federal Government then proceeded in piecemeal fashion in federal-provincial matters.

In May 1948, the Federal Government announced a National Health Programme which provided a scheme of grants-in-aid to the provinces. The purposes of the programme were to assist the provinces in surveying their health services and facilities, to share in the cost of the new hospital construction, and to make annual grants to improve and extend provincial services in specific health fields. An underlying motive was to lay the groundwork for a comprehensive national health insurance plan.

Total federal expenditure on health grants to the provinces increased from \$7.8 million in the fiscal year 1948-49 to an estimated \$50.3 million in the fiscal year 1962-63. During the last five years the level of expenditure has varied between \$45 million and \$50 million. The details are discussed in a subsequent section.

6. Grants to Voluntary Health Organizations

The Department of National Health and Welfare makes grants to voluntary health organizations. Some examples of these are the Canadian Mental Health Association, the Health League of Canada, the Canadian Public Health Association, the Canadian National Institute for the Blind, the Victorian Order of Nurses, the Canadian Psychological Association and various others. Grants are also provided for world congresses on medical matters. The total expenditure is relatively small and has fluctuated around \$150,000 during the last fifteen years. There has been no significant change during this period.

7. General Administration

The cost of administering the Department of National Health and Welfare is a minor item also in total federal expenditures on health. In the fiscal year 1947-48 it was about 0.5 per cent of total federal health outlay. Despite a considerable rise in the absolute level of spending on administration, the percentage fell to 0.3 by the fiscal year 1961-62. The expenditures increased from \$329,000 in the fiscal year 1947-48 to an estimated \$1,500,000 in 1962-63.

8. Miscellaneous Health Services

The Department of National Health and Welfare makes miscellaneous grants and the Department of Veterans Affairs expends funds on medical research and education. The National Research Council provides grants-in-aid for medical research.¹ The Department of Public Works constructs water and sanitation facilities in the territories and in national parks. Total miscellaneous expenditures increased from \$129,000 in the fiscal year 1947-48 to an estimated \$5.3 million in the fiscal year 1962-63.² The largest item of expenditure in this category is that of the National Research Council for medical research.

¹ These functions were transferred to the Medical Research Council established in November 1960.

² See Table 15.

Finally, there is an item which has not been included under federal expenditure on health services. In late 1960 the Federal Government authorized the Central Mortgage and Housing Corporation to make loans to municipalities for the construction or expansion of sewage treatment projects. In order to get the programme under way rapidly so as to counteract unemployment the federal government offered to pay 25 per cent of the loan and interest on it for projects completed before March 31, 1963. Smaller grants were to be paid for projects incomplete on that date. The total expenditure was limited to \$100 million by the legislation of 1960, but this limit was raised to \$200 million in September 1961. By June 30, 1961, a total of \$30 million had been approved for 72 projects. The Federal Government also provides medical and hospital care for the Armed Forces. The expenditures required are included under defence.

C. Intergovernmental Arrangements and Transfer Payments

As indicated above, the Federal Government makes substantial transfers to the provincial governments in the form of grants for hospital insurance, diagnostic services, and general health services. In fact, about four-fifths of total federal health expenditure currently consists of such transfers. Table 17 provides data on the growth of federal transfer payments to the provinces since the fiscal year 1948-49 and for the five recent years. There is no question but that they have become of primary significance in the federal health budget and this development deserves detailed discussion.

1. General Health Grants

The Federal Government had paid the provinces some small grants before the National Health Grant Programme was initiated in 1948, and the total in the fiscal year 1947-48 was only about one-quarter million dollars. The new programme, introduced after the post-war tax rental agreements had been negotiated, provided for grants to be paid for ten different activities, with varying formulae of allocation for each among the provinces. In 1953 three additional grants were introduced. By 1960 the federal and provincial governments agreed to various modifications in the structure of grants in the light of changes brought about by the introduction of hospital insurance in the Canadian provinces. The current grant programmes are emphasized in this discussion, but reference is made to those which have been terminated or merged.

- (a) *Surveys of Health Facilities and Services and of Sickness Experience* - The Federal Government spent \$0.5 million on grants for health surveys during the five fiscal years 1948-1953. These survey grants were terminated after 1953. A Canada sickness survey was begun in 1950 to record day-to-day experiences of a sample group of 10,000 Canadian families on frequency and duration of illness and disability and of the cost of health care. This survey provided basic information for all health plans.
- (b) *Hospital Construction Grants* - In 1948 grants were initiated to assist the provinces to reduce the shortage of hospital beds. These amounted to \$1,000 per

TABLE 17
HEALTH SERVICES GRANTS PAID TO PROVINCIAL GOVERNMENTS
BY THE GOVERNMENT OF CANADA,
CANADA, SELECTED FISCAL YEARS, 1948-1962
(In Millions of Current Dollars)

	1948-49	1958-59	1959-60	1960-61	1961-62 (a)	1962-63 (b)
A. Hospital Insurance and Diagnostic Services.....	—	54.7	150.6	189.4	283.9	336.7
B. General Health Grants.....	7.8	45.9	46.0	48.2	49.2	50.3
1. Hospital construction....	2.2	16.8	14.9	17.6		
2. General Public Health...	0.8	7.2	8.6	10.5		
3. Tuberculosis control	2.6	3.7	3.8	3.4		
4. Mental health.....	0.4	6.8	7.7	8.1		
5. Venereal disease control.	0.1	0.4	0.4			
6. Crippled children	0.1	0.4	0.5			
7. Professional training	0.2	0.6	0.7	1.3		
8. Cancer control	0.9	3.4	3.3	3.0		
9. Public health research...	0.0	0.5	0.4	1.5		
10. Laboratory and radiological services..	—	3.5	3.0			
11. Medical rehabilitation ...	—	0.7	0.7	1.2		
12. Child and maternal health	—	1.7	1.8	1.4		
13. Other	0.4	0.1	0.2	0.2		
TOTAL GRANTS.....	7.8	100.6	196.7	237.6	333.1	387.0
Grants as per cent of total Federal Expenditure on Health Services	14	54	70	71	77	80

(a) Preliminary data.

(b) Estimates.

Source: Appendix C, Table C-3.

active treatment bed and \$1,500 per chronic bed; the provinces were required to match the federal grants. The amount of the grants was increased to \$2,000 per active treatment and chronic bed on January 1, 1958. Grants of a lesser magnitude were provided for assisting in the construction of residences of nurses and quarters for interns.

The number of beds approved for grants purposes during the thirteen-year period from April 1, 1948 to March 31, 1961 was as follows by category:

Active treatment	55,068
Mental	20,651
Chronic-convalescent	9,214
Tuberculosis	5,362
Total —	90,295

A total of 17,777 beds were approved in nurses' residences, 542 for interns, as well as 11,656 bassinets, and floor areas for the training of nurses, laboratories, and community health centres.

The regulations for the fiscal year 1962-63 provide for grants of \$2,000 per hospital bed and \$750 for living quarters of nurses and interns; funds are also provided for assistance in renovations of hospital and health facilities not in excess of the above amounts or equal to one-third of the cost, whichever is less. In all cases the provinces must match or exceed the federal contribution which shall not exceed one-third of the actual total cost. The allocation among the ten provinces for the fiscal year 1962-63 was \$20.4 million plus revotes of \$10.6 million of funds not utilized in previous years for projects approved as far back as 1953.¹

Between April 1, 1948 and March 31, 1961, the Federal Government allocated \$153.6 million for hospital construction grants according to its regulations. Of this a total of \$133.8 million was spent, or about 87 per cent. The provinces, for financial reasons and lags in construction programmes, failed to utilize the total amounts made available.

- (c) *Cancer Control* – The cancer control grant, introduced in 1948, is designed to assist in financing approved programmes for the detection and treatment of cancer. The Federal Government will pay up to one-half of the amount expended by provincial governments. For the fiscal year 1962-63 an amount of \$3.5 million was made available of which a flat \$10,000 was to be paid to each province, with the rest allocated on the basis of population. Thus funds are made available without reference to the programme a province may have. As in the case of the hospital construction grants, as well as nearly all the health grants, the provinces have not utilized fully the appropriations available. For the 13-year period 1948-1961 (fiscal years) a total of \$46.6 million was available, of which \$32.1 million, or 69 per cent, was paid out to the provinces.
- (d) *Crippled Children* – The Federal Government has paid grants to the provinces to assist in approved programmes for the prevention and treatment of crippling conditions in children, including rehabilitation and training. From 1948 to 1961 a total of \$6.2 million was made available, of which \$4.4 million, about 71 per cent, was expended. In 1960 this grant was merged with that for medical rehabilitation (see below).
- (e) *Medical Rehabilitation* – A grant for approved programmes of medical rehabilitation of adults was begun in 1953. Between 1953 and 1961 a total of \$6.5 million was allotted by the Federal Government for this purpose, of which \$3 million, about 46 per cent, was spent. The grant for the rehabilitation of crippled children was combined with that for adult programmes. In the fiscal year 1962-63 the Federal Government allotted funds to cover one-half of the expenditures of a province on approved rehabilitation programmes. The

¹ Detailed regulations are set out in Government of Canada, P.C. 1962-12/463 April 5, 1962, pp. 22-29.

formula of allocation among the provinces provides for \$10,000 to each province, and the rest out of the \$2.6 million voted for 1962-63 being distributed on a population basis.

- (f) *General Public Health* – Grants for general public health cover a variety of activities; the emphasis is upon extending and improving health services, including the training of personnel and the conduct of surveys and studies. For the fiscal year 1962-63 a total of \$14.5 million was voted, to be distributed to the provinces on the basis of \$50,000 per province plus 80 cents per capita. Between 1948 and 1961 a total of \$98.5 million was made available, of which \$68 million, or 69 per cent, was spent.
- (g) *Professional Training* – A specific grant programme to assist in programmes for the training of health and hospital personnel has been in force since 1948. During 1948-1961 a total of \$7.9 million was voted for this purpose, of which \$7.7 million, or nearly all, was spent. In the fiscal year 1962-63 the formula of allocation to the provinces was \$10,000 per province plus 10 cents per capita, and the total amount voted was \$1.8 million.
- (h) *Venereal Diseases* – Grants for the control and treatment of venereal diseases were paid before 1948, and were thus part of federal expenditures before the National Health Grants Programme came into effect. Between 1948 and 1961 a total of \$6 million was provided, out of which \$5.1 million, or 86 per cent was expended. In 1960 the programme was incorporated into the grants for general public health (see above).
- (i) *Mental Health* – Grants are paid to assist in extended programmes for the prevention and treatment of mental illness, including rehabilitation and free treatment. During 1948-1961 a total of \$83 million was provided, out of which \$65.4 million, about 79 per cent, was spent. In the fiscal year 1962-63 the amount of \$8.7 million was allocated; the basis of distribution is \$25,000 per province, and the balance of the funds available on a per capita basis.
- (j) *Tuberculosis Control* – In 1948 the federal Government began to pay grants to assist in extended programmes for the prevention and treatment of tuberculosis, including rehabilitation and free treatment. For the fiscal year 1962-63 an amount of \$3.5 million was provided, distributed on the basis of \$10,000 per province plus 50 per cent of the balance on the basis of population and the remaining fifty per cent on the basis of the average number of deaths from tuberculosis in each province over the previous five years. Between 1948 and 1961 the Federal Government voted \$52 million for the purpose, of which \$48.4 million, or 93 per cent, was expended.
- (k) *Public Health Research* – Grants to assist in stimulating and developing public health research have been paid by the Federal Government since 1948. A total of \$6.9 million was made available between 1948-1961, of which \$5.8 million, or 84 per cent, was spent. In the fiscal year 1962-63 a vote of \$1.8 million was made available, to be distributed on the basis of 10 cents per capita.
- (l) *Laboratory and Radiological Services* – A grant for the Development of laboratory and radiological services was introduced in 1953. During the seven-year

period 1953 to 1960 a total of \$47.4 million was made available under the formula specified, but great difficulties, particularly in securing personnel, were encountered, and only \$14.5 million, about 30 per cent, was spent. In 1960 these grants were merged with those for general public health.

- (m) *Child and Maternal Health* – Grants to assist the provinces to accelerate and intensify programmes for the improvement of maternity, infant and child care, were first paid in the fiscal year 1953–54. Between 1953 and 1961 a total of \$13.3 million was made available, of which \$8.8 million, or 66 per cent, was expended. In the fiscal year 1962–63 an amount of \$1.7 million was allotted for this purpose, to be distributed on the basis of \$10,000 to each province, 50 per cent of the balance on the basis of the average number of births over the previous five years, and the other 50 per cent on the basis of the average number of infant deaths over the previous five years.

All told the Federal Government made \$603.5 million available for grants during the fourteen-year period from April 1, 1948 to March 31, 1962. Of this \$443.8 million, about 73.5 per cent, was taken up and used by the provinces. Table 18 provides details for the provinces.

The usual criticism of matching grants, that they put pressures on the treasuries of less well endowed fiscal units and ease the financial condition of wealthier ones which can readily take advantage of such grants, cannot be applied in summary if one examines the data in Table 18. For example, Ontario,

TABLE 18
FEDERAL HEALTH GRANTS
AMOUNTS AVAILABLE AND AMOUNTS EXPENDED, BY PROVINCES,
FROM INCEPTION OF PROGRAMME TO MARCH 31, 1962
(In Millions of Dollars)

Province or Territory	Amount Available	Amount Expended	Amount Expended as Per Cent of Amount Available
Newfoundland	19.3	11.5	59.6
Prince Edward Island	5.2	4.0	76.9
Nova Scotia	29.4	21.5	73.1
New Brunswick	24.5	18.2	74.3
Quebec	171.2	132.4	77.3
Ontario	192.9	128.8	66.8
Manitoba	32.9	26.0	79.0
Saskatchewan	35.7	28.9	81.0
Alberta	40.7	31.8	78.1
British Columbia	50.0	39.9	79.8
Yukon and Northwest Territories	1.6	0.7	43.8
TOTAL	603.5	443.8	73.5

Source: Canadian Tax Foundation, *The National Finances, 1962–63*, p. 90. The data are derived from *House of Commons Committee on Estimates, April 12, 1960, Appendix "C", Public Accounts; Budget Papers.*

which together with British Columbia, has the highest per capita personal income in Canada, spent only two-thirds of its allotment. Provinces with relatively low personal income per capita such as Prince Edward Island, New Brunswick, and Nova Scotia, spent about three-quarters of their allotments. Nevertheless the fact remains that the provinces did not expend all of the allotted funds. Finally, the province with the lowest fiscal capacity in Canada, Newfoundland, spent only three-fifths of allotted funds.

Other factors besides fiscal capacity have influenced the provincial expenditure levels on the health programmes assisted by federal grants. There have been difficulties in obtaining qualified personnel and suitable facilities. It has taken time to plan and develop programmes. The Federal Government has introduced increasingly flexible features in recent years; thus grants not used for one purpose may be transferred to another programme; as noted above, too, some grants have been merged with others to facilitate adjustments. The question of grants-in-aid is one to which we shall return in a subsequent chapter.

2. Hospital Insurance

The federal Hospital Insurance and Diagnostic Services Act was passed in 1957, providing for grants-in-aid to the provinces to assist in meeting the cost of certain hospital services. The provincial governments determine the methods of financing and administration of hospital plans. The Federal Government pays each province the aggregate of (a) 25 per cent of the per capita cost of specified in-patient services in Canada at large, and (b) 25 per cent of the per capita cost of specified in-patient services in the province in question, multiplied by the average for the year of the number of insured persons in the province. On the average, the Federal Government pays about one-half of the shareable costs. In low-cost provinces the federal proportion is somewhat higher, and in high-cost provinces somewhat lower. It should be emphasized that shareable costs are notably below the total actual costs of hospital care incurred in Canada.

The in-patient benefits provided for under shareable costs include standard ward accommodation and meals, nursing service, drugs, surgical supplies, the use of operating rooms, case rooms, and anaesthetic facilities, the use of radiotherapy and physiotherapy facilities (if available), and other services specified by agreement. The same benefits may be provided for out-patients under cost-sharing arrangements with the Federal Government, but this is voluntary as far as the provinces are concerned. All the provinces provide in-patient services, and all of them, except Alberta, provide out-patient services on an emergency basis.

In general, federal legislation covers services provided by active treatment, chronic and convalescent hospitals. Excluded are services provided for under other statutes of both the federal and provincial governments. Thus the costs of caring for patients under workmen's compensation and veterans' provisions, in tuberculosis hospitals and sanitoriums, in mental institutions, in nursing homes, in homes for the aged, in infirmaries and other institutions providing custodial care, are not shareable. The shareable costs are confined to normal operating and maintenance costs, and excluded are capital charges such as expenditures on land,

buildings, physical plant, capital debt and debt interest, as well as depreciation allowances on capital assets. By and large, this leaves a substantial portion to be financed by the provinces and other agencies.

Hospitals which participate in insurance programmes are called budget review hospitals, by far the largest number listed in the agreements, and contract hospitals which are private or industrial ones. Some federal hospitals also provide services. The budget review hospitals include general hospitals, some special hospitals, and chronic hospitals.

The amounts expended by the Federal Government have increased substantially since 1958-59, the first year of the programme, when nearly \$55 million was spent by the Federal Government. For the fiscal year 1962-63 the federal expenditure was \$337 million.

D. Summary

The Federal Government has increased its expenditure on health services substantially during the post-war years. On the whole the senior government restricts its direct activities in the health sphere to those which would not ordinarily be performed by the provincial governments. In general it is felt that the provincial governments, and even local authorities, can provide and administer most health services as efficiently and economically, perhaps even more so, than the Federal Government. Thus federal expenditures, excluding grants to provinces, are not of major significance in the total Canadian picture. In the fiscal year 1949-50 it was about \$54 million and in the fiscal year 1962-63 an estimated \$97 million. In terms of constant 1949 dollars the expenditure for 1962-63 is only about \$60 million; on a per capita basis the constant dollar expenditure has declined since 1949. The major development, then, in federal health service activities, has been a vigorous expansion of grants to induce, encourage, assist, and in some ways possibly even coerce provinces to set up and administer health programmes. Prominent among the motives for this federal policy has been the desire to establish adequate standards of service throughout the nation.

Role of Provincial and Municipal Governments

A. Provincial Governments

Provincial Governments in Canada have traditionally played a major role in the provision of public health services, and they are continuing to occupy the centre of the stage.

With the recent establishment of a national hospital insurance programme provincial governments have increased their expenditures markedly. As health services and health insurance systems are expanded in the future, the provincial governments can be expected to continue to be the major operative level of government in the health field.

Provincial governments have evolved close working relationships with their municipal governments and voluntary agencies in the public health field through the years. There are considerable variations in provincial-municipal relations among the provinces arising out of the diversity of factors which have influenced the evolution of the Canadian federation generally. During the post-war period federal-provincial co-operation in providing public health services has developed rapidly.

1. General Post-war Developments

In the fiscal year 1947-48 the net general expenditure of the provincial governments on public health amounted to \$87 million, over half the total spent by all governments. The estimated total for the fiscal year 1962-63 is about \$720 million, nearly three-fifths of the net general expenditure of all three levels of government.¹ The major factor accounting for the large expenditure increase is undoubtedly the introduction of national hospital insurance, but there has also been a significant rise in the expenditure on other kinds of health services.

¹ Municipal expenditure on sanitation and waste removal is not included in making inter-governmental comparisons.

Federal government statisticians distinguish among five main categories of provincial government health services.¹ These are general health, public health, medical and dental and allied services, hospital care, and medical aid and hospitalization covered under workmen's compensation arrangements.

- (a) *General Health* – Provincial expenditure on "general health" includes outlays on general administration of public health departments and their activities, on planning, on research and statistics (including vital and health statistics), on personnel training, and on miscellaneous general services. Altogether it is a minor item. Between the fiscal years 1947–48 and 1959–60 the net general expenditure on "general health" increased from \$2.2 million to \$7.8 million.² Currently the annual expenditure on general health is about \$10 million, but this is not much more than 1½ per cent of total provincial net general expenditure on health services, and a little more than 50 cents per capita.

The question arises whether enough is being spent, particularly on planning and research, to provide adequate over-all information and assessment of the problems that face provincial administrators. There is a tendency to skimp, Parkinson's Law to the contrary, on activities which do not furnish immediate services or results. The variety and complexity of health services are such that the problems that arise in planning and providing for them require continuous attention and analysis.

- (b) *Public Health* – Expenditure on "public health" covers such a variety of services that cataloguing becomes necessary:

(1) *Environmental Health*

This relates to activities involving control of harmful factors in the physical environment which become particularly prominent in urban and industrialized communities. They are social costs arising out of the whole process of economic growth. Since they cannot be allocated readily among individuals and business firms whose actions give rise to them, they are met by collective (i.e., government) action.³ Among the most common and pressing environmental health services required are community sanitation which embraces public activities aimed to ensure pure water, milk, and food supplies, to provide and supervise sewage disposal systems, to deal with air pollution (and currently with radiation

¹ The Dominion Bureau of Statistics provides series covering budgetary expenditure of the provinces. These include the first four categories. The Department of National Health and Welfare series include the fifth category, workmen's compensation, which is not included in provincial budgets directly.

² See Appendix D, Table D-1.

³ A very wide variety of government services can be regarded as goods and services purchased in the past. To state the matter differently economic growth and development builds in a demand for collective goods and services which must be met some time in the future. The so-called welfare state is a result of the process of economic development; it is not so much the result of changes in ethical and ideological principles in the developed society as such. Such principles are affected by the process of economic development, but they should not be regarded as the underlying basis of the welfare state.

hazards), to dispose of garbage and other wastes, and other related objectives. There must also be a concern about industrial health since industrialization leads to an increased incidence of accidents and certain diseases. Hence provincial departments of health and other agencies regulate working conditions by legislation and supervise industrial and other establishments accordingly.¹

(2) *Communicable Disease Control*

This includes immunization, isolation and quarantine activities (epidemiological control) for various communicable diseases (excluding the provision of isolation hospital care which is included under "hospital care" below). It also includes tuberculosis prevention,² venereal disease control and the prevention and control of poliomyelitis.

(3) *Mental Health*

This includes the rehabilitation of discharged patients of mental hospitals, the operation of mental health clinics, the provision of psychiatric treatment outside hospitals, the training of psychiatric personnel, and the provision of related services.³

(4) *Cancer*

Provision is made for diagnosis, treatment, research and public education with respect to cancer.⁴ The programmes vary considerably among the provinces.

(5) *Maternal and Child Health*

Through public health nurses, provincial and local governments provide prenatal education, delivery and care of babies in remote areas, home visits, child health clinics and school health services.

(6) *Public Health Nursing*

There are large sparsely populated areas in Canada; the supply of practising physicians is insufficient to service these areas fully. Consequently, the provinces provide public health nurses to provide emergency and other services.

¹ Workmen's compensation legislation provides for cash benefits, medical aid, and hospitalization of employees injured on the job in all the Canadian provinces. The expenditures under this activity are dealt with in a subsequent section.

² Expenditure estimates include the outlays of diagnostic clinics where these can be segregated from the costs of tuberculosis hospitals.

³ The outlays on mental hospital construction and operation are included under "hospital care".

⁴ Outlays on medical and hospital care are not included under "public health".

(7) *Health Education*

Nearly all the provinces have health education units to provide information on health matters to the general public. Many communication media are used.

(8) *Dental Health*

All provinces have dental health divisions which provide training facilities in public health, operate preventive and treatment clinics for children, and encourage water fluoridation. The emphasis is on providing dental care for children, though the coverage varies widely, involving an investment which should yield high productive returns in the long run.

(9) *Laboratory Services*

The provinces have operated public health laboratories for generations since this is basic in controlling communicable diseases and in providing for adequate sanitation. The types of analyses undertaken have increased steadily through the years.

(10) *Local Health Services*

Some provinces have to provide practically all health services directly in all localities because of the lack of local governments or of local government activity in the field, e.g., Newfoundland. In most provinces, however, municipal authorities are active in the public health field. Within provincial departments, special divisions or branches co-operate with local governments in providing services, and attempt to co-ordinate provincial services which involve decentralization.

(11) *Other Health Services*

Among other health activities may be mentioned the provision of health education, technical guidance and research in nutrition. There are also programmes to assist children suffering from cerebral palsy, and to assist people with various types of chronic disabilities such as arthritis, diabetes, heart disease, paraplegia, visual impairments and auditory impairments. Furthermore, some provinces operate centres for the treatment of alcoholism, and for allied research and education.

Provincial government net general expenditure on the "public health" activities listed above increased from \$8.9 million in the fiscal year 1947-48 to \$23.9 million in the fiscal year 1959-60.¹ The estimated current annual rate of expenditure exceeds \$30 million, nearly 5 per cent of estimated total provincial net general expenditure on health

¹ Expenditure on sanitation and waste disposal included is very small since the major expenditure for this purpose is made by the municipal governments.

services. This level of spending strikes one as rather modest in the light of the variety of services required. All told the provincial gross expenditure on public health is currently about \$3 per capita.

- (c) *Medical, Dental and Allied Services* – Public medical care is provided on a limited basis by provincial governments in Canada. There are great variations among the provinces. Thus in Newfoundland children under 16 years of age are entitled to free medical and surgical care in hospitals; medical care is also provided for much of the population of the province under the Cottage Hospital Plan. In Manitoba and Saskatchewan, some locally operated municipal-doctor programmes have been in existence for many years. In the more recent period Nova Scotia, Ontario, Saskatchewan, Alberta and British Columbia have provided medical and hospital care for recipients of social assistance such as persons in receipt of old-age security supplements under a means test, old-age assistance, blindness and disability allowance, mother's allowances and certain child welfare cases. Again, there are variations among these provinces as to the categories covered. Indigents generally (and necessarily) receive medical and hospital care in all the provinces, with the financial responsibility being wholly provincial in some provinces, and shared between the province and the municipalities in others. In 1962 the province of Saskatchewan introduced the first comprehensive province-wide plan in Canada. Since then other provinces have begun to take action.

Expenditures under the category of "medical, dental and allied services" exclude outlays on hospital care (discussed below), but include sums paid out on administration of medical services, the cost of physicians' services, nursing services, dental care, pharmaceuticals and miscellaneous personal health services.

Between the fiscal year 1947–48 and the fiscal year 1959–60 the total net general expenditure of all the provinces on "medical, dental and allied services" increased from \$2.6 million to \$13.5 million. Currently the level of expenditure is increasing rapidly with the widening coverage of provincial medical care plans.

- (d) *Hospital Care* – This is the major category in provincial expenditures on health services. Included are the costs of administration of hospital programmes, the costs of licensing and supervising hospitals, the cost of planning facilities, and the costs of constructing and operating a variety of hospitals. The largest category consists of "general" hospitals which provide services for acute diseases, convalescent purposes, chronic diseases, isolation purposes and other purposes. Other major categories are mental and tuberculosis hospitals. In all cases some provinces have made substantial construction and operation grants in the past, and under the new national hospital insurance scheme all the provinces do so.

Between the fiscal year 1947–48 and the fiscal year 1959–60 total net general expenditure by all the provinces on hospital care increased from \$64.5 million to \$391.1 million. For 1962–63 it is estimated that over \$600 million was spent.

This is over five-sixths of provincial expenditure on health services, and about \$34 per capita for Canada.

- (e) *Medical Aid and Hospitalization under Workmen's Compensation Acts* – The final category of provincial expenditure on health services consists of outlays on medical aid and hospitalization under Workmen's Compensation Acts which have been passed in all provinces. Workmen's Compensation Boards operate under budgets separate from the general revenue budgets of the provincial governments and are financed by statutory contributions of employers. However, in order to obtain a complete picture of expenditure on health services, the expenditure of Workmen's Compensation Boards needs to be included. This is done in the national accounts which include both cash income benefits and payments for medical aid and hospitalization under provincial expenditure.

Between the calendar years 1947 and 1960 the outlays of Workmen's Compensation Boards in Canada on medical aid and hospitalization increased from \$9.2 million to \$35.9 million. Currently the annual rate is nearly \$40 million, over 6 per cent of total provincial net general expenditure on health services, and over \$2 per capita.

2. Comparisons of Expenditures on the Main Categories

It is convenient to summarize expenditure trends at this point to provide an over-all view.

- (a) *Total Expenditures* – The relative importance of the five categories of provincial expenditures on health services is presented in Table 19. Expenditures on hospital care were three-quarters and more of the total throughout the period 1947–1963; it is obviously the category of dominant importance.

During 1947–1963 total provincial expenditure increased more than eight times in terms of current dollars (see Table 20). In terms of constant dollars the rise was fourfold. The increase in per capita expenditure in terms of constant dollars was 172 per cent, or about 7 per cent per year.

There was a considerable expansion of health expenditures relative to GNE from 0.7 per cent to 1.8 per cent in terms of current dollars. Allowing for the more rapid rise in the price index of government goods and services than in the index for all other goods and services, the expansion was somewhat less, from about 0.7 per cent to 1.5 per cent in constant dollar terms.

Expenditures on health absorbed about 12 per cent of total provincial expenditures in the fiscal year 1947–48, rising to 17 per cent in 1951–52, and then falling again during the 1950's. In recent years, for reasons mentioned previously, health expenditures have increased markedly, and in the fiscal year 1962–63 they represented an estimated 22 per cent of total provincial expenditures.

TABLE 19

**TOTAL NET GENERAL EXPENDITURE ON HEALTH,
PROVINCIAL GOVERNMENTS, CANADA, SELECTED YEARS, 1947-1963**
(In Millions of Dollars)

Category	1947-48 (a)	1951-52 (b)	1959-60 (c)	1962-63 (d)
General health.....	2.2	3.7	7.8	10.0
Public health.....	8.9	11.3	23.9	33.0
Medical, dental and allied services.....	2.6	7.0	13.5	36.0
Hospital care.....	64.5	151.8	391.1	602.0
TOTAL budgetary.....	78.2	173.8	436.3	681.1
Medical aid and hospitalization, Workmen's Compensation.....	9.2	15.6	34.0	38.0
TOTAL including Workmen's Compensation...	87.4	189.5	470.3	719.1

(a) First year for which data available on comparative basis. Excludes Newfoundland since this Province entered Confederation in 1949.

(b) First year for which Newfoundland data are comparable.

(c) Last year for which final, i.e., actual, figures are available.

(d) Estimated.

Source: See Appendix D, Table D-1.

TABLE 20

**TOTAL NET GENERAL EXPENDITURE ON HEALTH,
PROVINCIAL GOVERNMENTS, CANADA, SELECTED YEARS, 1947-1963,
COMPARATIVE DATA**

Item	1947-48	1951-52	1959-60	1962-63
1. Total, in millions of current dollars ^(a)	87.4	189.5	470.3	719.1
Index, 1947-48 = 100.....	100	217	540	823
2. Total, in millions of constant (1949) dollars ^(b)	104.9	162.5	301.5	422.0
Index, 1947-48 = 100.....	100	155	287	402
3. Per capita, in constant (1949) dollars.....	8.35	11.60	17.25	22.70
Index, 1947-48 = 100.....	100	139	207	272
4. Per cent of Gross National Product:				
Current dollar comparison.....	0.7	0.90	1.4	1.8
Constant dollar comparison.....	0.7	0.9	1.2	1.5
5. Total, excluding workmen's compensation:				
In millions of current dollars ^(c)	78.2	173.8	436.3	681.1
Per cent of total net general expenditure of provincial governments.....	12	17	17	22

(a) See Table 22.

(b) Deflated by the implicit index for government goods and services.

(c) See Table 22.

(b) *Provincial Comparisons* -- There are great variations in per capita expenditure on health services among the provinces. These can be explained in part by reference to the process of government policy-making over the years. Further, municipal governments play a larger role in this field in some provinces than in others. The timing of the inception of hospital insurance programmes has differed, with British Columbia and Saskatchewan leading in this respect. This is reflected in the high per capita figures for these provinces in 1951-52 relative to the other provinces (see Table 21).

In recent years differences in per capita expenditures among the provinces have narrowed. In the fiscal year 1951-52, the figures varied from \$5.60 (Manitoba) to \$32.20 (British Columbia), a difference of \$26.60, with large deviations from the national average of \$12.60. In the fiscal year 1961-62, eight provinces were within 25 per cent of the national average of \$34.05. The range was from \$23.15 (Newfoundland) to \$46.00 (Saskatchewan).

TABLE 21
TOTAL NET GENERAL EXPENDITURE ON HEALTH, PROVINCIAL
GOVERNMENTS, CANADA, SELECTED YEARS, 1951-1962
(Per Capita in Current Dollars)

Province	1951-52 (a)	1959-60 (b)	1961-62 (c)
Newfoundland.....	18.10	24.55	23.15
Prince Edward Island.....	10.10	26.55	26.40
Nova Scotia.....	9.80	21.25	29.05
New Brunswick.....	9.05	19.30	32.25
Quebec.....	8.35	16.85	28.50
Ontario.....	11.60	31.70	37.60
Manitoba.....	5.60	29.20	33.00
Saskatchewan.....	31.50	40.50	46.00
Alberta.....	15.30	31.15	36.60
British Columbia.....	32.20	35.10	37.40
All Provinces.....	12.60	26.95	34.05

(a) First year for which comparable data available for Newfoundland.

(b) Last year for which actual data available.

(c) Estimated.

Source: Appendix D, Table D-2, Population as per mid-year estimates of the Dominion Bureau of Statistics.

Some interesting observations may be made with respect to per capita expenditure in terms of constant dollars. Table 22 sets out the data. It appears that the level of provincial expenditure on health per capita has actually declined in Newfoundland and British Columbia during the ten-year period 1951-1961. There has also been little increase in Saskatchewan which, like British Columbia, had a high level of expenditure in the fiscal year 1951-52. It is

apparent that costs in terms of current dollars have increased sharply in recent years.

TABLE 22

TOTAL NET GENERAL EXPENDITURE ON HEALTH,
PROVINCIAL GOVERNMENTS, CANADA, FISCAL YEARS, 1951-52 AND 1961-62
Per Capita, in Constant (1949) Dollars(a)

Province	1951-52	1961-62	Change
Newfoundland.....	15.40	14.25	-1.15
Prince Edward Island.....	8.60	15.60	7.00
Nova Scotia.....	8.40	17.90	9.50
New Brunswick.....	7.75	19.80	12.05
Quebec.....	7.15	17.50	10.35
Ontario.....	9.90	23.20	13.30
Manitoba.....	4.80	20.40	15.60
Saskatchewan.....	27.00	28.30	1.30
Alberta.....	13.10	22.50	9.40
British Columbia.....	27.50	23.00	-4.50
All Provinces.....	10.80	21.00	10.20

(a) The data in Table 21 deflated by the implicit index for government goods and services.

There are also large variations among the provinces in the percentage of total provincial expenditure which is devoted to health. In the fiscal year 1951-52 Saskatchewan spent 36 per cent on health, the highest proportion by far, followed by 23 per cent for British Columbia and 22 per cent for Newfoundland. The percentages have declined in subsequent years in these provinces as competing demands and difficulties in raising revenues have made themselves felt. Table 23 provides a basis for further comparisons.

TABLE 23

TOTAL NET GENERAL EXPENDITURE ON HEALTH,
PROVINCIAL GOVERNMENTS, CANADA, FISCAL YEARS, 1951-52 AND 1961-62
(As Per Cent of Net General Expenditure
of Provinces for all Purposes)

Province	1951-52	1961-62
Newfoundland.....	22	15
Prince Edward Island.....	12	15
Nova Scotia.....	12	19
New Brunswick.....	11	22
Quebec.....	12	18
Ontario.....	14	21
Manitoba.....	12	22
Saskatchewan.....	36	27
Alberta.....	16	18
British Columbia.....	23	18
All Provinces.....	16	20

Source: Appendix D, Tables D-1 and D-4.

3. The Yukon and Northwest Territories

In the Yukon and Northwest Territories the territorial governments provide, in co-operation with the Federal Government, a number of health services for the population, excluding Eskimos and Indians. The Federal Government provides the latter groups with complete health services (see Chapter IV). In 1960 hospital insurance was introduced in the Yukon and Northwest Territories.

4. Intergovernmental Transfer Payments

The data presented in previous sections represent the net general expenditure of the provincial governments. In addition, the provinces received grants-in-aid for specific purposes from the federal and local governments; thus the gross expenditure of the provinces includes these transfer payments. In turn, the provinces make payments to the local governments.

The federal health and hospital grants to the provinces have been discussed in Chapter IV. These are substantial in amount, but they are essentially a financial burden on the Federal Government and not on the provincial governments. The net general expenditure of the provinces, as set out in previous sections represents the net cost of health services to those governments.

Provincial transfer payments to the local governments in the sphere of health services are minor in amount. They consist of grants for public health programmes, and for medical and hospital care. They increased from \$1.4 million in the fiscal year 1947-48 to \$4.7 million in the fiscal year 1959-60. Ontario and Alberta have accounted for two-thirds or more of the total during the period 1947-1960. In recent years the national total has increased markedly, and the estimate for the fiscal year 1962-63 is \$11.8 million. About half of this is accounted for by Quebec which began making public health transfer payments to its local governments in 1960. Transfer payments in Ontario and Alberta amounted to \$3 million and \$1.4 million respectively, while that for the remaining seven provinces was \$2 million.

In some provinces, notably Quebec and the four western provinces, there are also transfer payments for health expenditure purposes from the local to the provincial governments. The totals are comparable to the amounts paid by the provinces to municipal authorities. The level of transfers from local to provincial governments in Canada increased from \$2.7 million in the fiscal year 1947-48 to \$12.1 million in the fiscal year 1959-60. On the whole, health expenditure transfer payments between provincial and local governments are small relatively to the total expenditures on health by these two levels of government.

B. The Role of Municipal Governments

Municipal governments in Canada provide important health services particularly in the larger urban centres substantially involving capital and operating expenditures.

They are responsible for sanitation and waste removal. Through local health boards and districts they administer and provide a number of public health services akin to those of the provincial governments. They co-operate with provincial health departments in the provision of various services. Finally, many municipalities operate public hospitals and contribute financially for construction and operational purposes. The bulk of health expenditures are made by urban governments, while the expenditure by the rural municipalities is minimal. The latter do not provide water and sewage works for residents, other environmental health facilities are not required on the same basis, and most other health services are provided by the provinces. The main expenditure of the rural municipalities is on hospital care.

Net municipal general expenditures on health reached a peak of \$85 million in 1957, about three times the level of 1947 in terms of current dollars. Table 24 provides data for selected post-war years. Since 1957 municipal health expenditure has declined somewhat as municipal governments have been relieved of a considerable part of hospital costs through the implementation of provincially operated hospital insurance across the nation.

TABLE 24
NET GENERAL EXPENDITURE ON HEALTH AND SANITATION AND
WASTE REMOVAL, MUNICIPAL GOVERNMENTS, CANADA,
SELECTED YEARS, 1947-1962

Years	Health	Sanitation	Total
In millions of current dollars			
1947.....	27	29	56
1954.....	67	140	207
1957.....	85	130	215
1962(a).....	77	167	244
In millions of constant (1949) dollars(b)			
1947.....	32	35	67
1954.....	51	107	158
1957.....	57	87	144
1962.....	45	97	142
Per capita, constant (1949) dollars			
1947.....	2.55	2.80	5.35
1954.....	3.35	7.00	10.35
1957.....	3.40	5.20	8.60
1962.....	2.40	5.20	7.60

(a) Estimated.

(b) Deflated by implicit price index for government goods and services.

Source: See Appendix E.

Municipal health expenditures rose from 0.2 per cent of GNE to almost 0.3 per cent in the middle 1950's. Since then such expenditure has levelled off to

about 0.2 per cent of GNP. Expenditure on sanitation and waste removal exceeded 0.5 per cent during the middle 1950's. Since then it has fallen somewhat below this percentage.

Expenditure on hospital care has accounted for from over one-half to three-fifths of municipal health expenditure during the post-war period. In 1957 the net expenditure on hospital care was \$55 million out of a total of \$85 million on health. By 1961 hospital expenditure had fallen to \$41 million out of a total of \$72 million. Expenditure on other health increased considerably between 1957-1961, but the amounts involved are modest. Table 25 provides expenditure data for 1957-1962.

TABLE 25
NET GENERAL EXPENDITURE ON HEALTH AND SANITATION,
MUNICIPAL GOVERNMENTS, CANADA, 1957-1962
(In Millions of Dollars)

	1957	1958	1959	1960 (a)	1961 (b)	1962 (b)
Hospital Care.....	55	50	43	40	41	42
Other Health.....	30	30	29	29	31	35
Total Health.....	85	80	72	69	72	77
Sanitation and Waste Removal.....	130	130	147	153	166	167
TOTAL — Health and Sanitation.....	215	210	219	222	238	244

(a) Preliminary.

(b) Estimated.

Source: Appendix E.

The municipal governments of Canada are in high degree responsible for the provision of pure water supplies, sewage systems, and for waste removal. Because of the rapid rate of urbanization during the post-war period municipal expenditure on the construction and operation of water and sewage systems has been substantial. The amounts spent annually have consistently been much higher than expenditure on health. Between 1947 and 1962, net general expenditure increased from an estimated \$29 million to an estimated \$167 million.

In terms of constant dollars, there has been a decline in expenditures since 1957 on health services, but sanitation outlays have remained fairly constant. It appears that the role of municipal governments in financing health services is shrinking both in relative and absolute terms, while they still continue to have a major role in the field of sanitation. The municipal governments play an important role in the administration and provision of health services which can be expected to continue in the future as urbanization proceeds.

Projections of Government Expenditures

Any attempt to forecast future conditions and trends in any sphere of activity is fraught with uncertainty and difficulties. Nevertheless, it is a useful, and often essential, exercise which provides vision and perspective within a logical and systematic framework. The choice of period will depend upon purposes at hand and the curiosity of the investigator. Yearly forecasts are useful to provide short-term guidance to decision makers but they cover too short a period to provide appropriate assessments of trends and fundamental determinants. For providing policy guidance within the framework of a given structure of the economy an intermediate period of four to seven years seems appropriate. Long-range economic projections also have their uses if their limitations are borne in mind including changes brought about by potential wars and international upheavals, as well as by changes in technology and the structure of the economy which occur over time.

Nevertheless it is an appropriate and rewarding exercise to attempt to portray the long run, to glimpse the distant future, however vaguely and imperfectly. Professor Brown has quantified Gross National Product and Gross National Expenditure and its inapt components for the period 1966–1991 for Canada, providing a comprehensive picture of the potential growth of the economy.¹ We shall adopt his assumptions and conditions, and specify the prospective size and structure of the government sector, leading to an assessment of the place of health spending in the Canadian economy — past, present and future. The resulting projections are alternative possibilities rather than precise forecasts of what is to come. The kinds of policies adopted will influence future trends; yet we have in mind the things that are most likely to happen.

A. Projections of Population and Gross National Product

Here we take Projection No. 1 of Professor Brown as the framework for estimates of the growth of the government sector and health expenditures. This

¹ Brown, T.M., *Canadian Economic Growth*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, (in press).

projection utilizes the population projection of Dr. A. Stukel, assuming a net annual immigration of 50,000 per annum.¹ Professor Brown provides what we shall term a *high* projection, a *medium* one, and a *low* one. In his high projection he assumes that by 1966 the Canadian economy will achieve a "full employment" level with four per cent of the labour force unemployed, and that the Gross National Product in real terms will rise by 5.4 per cent per year until 1966, by 4.6 per cent annually, 1966–1971, and by rates between 4.3 and 4.5 per cent per year, 1971–1991. Under the medium projection the assumed labour productivity (2¾ per cent) is the same as under the high projection, but the rate of unemployment is at 5 per cent, 1966–1991. This projection yields a growth rate of 5 per cent per year until 1966, and between 4¼ and 4½ per cent thereafter. In the low projection labour productivity is set at 2¼ per cent and the level of unemployment at 5 per cent. This still provides an annual 4½ per cent growth of GNP until 1966, and 4 per cent per year thereafter. The several projections are set out in Table 26.

TABLE 26
PROJECTIONS OF POPULATION AND GROSS NATIONAL PRODUCT,
1961 – 1991

Year	Population (Thousands)	Gross National Product		
		High Projec- tion	Medium Projec- tion	Low Projec- tion
		(In Millions of Constant 1957 Dollars)		
1961	18,238	35,023	35,023	35,023
1966	20,296	44,916	44,449	43,377
1971	22,590	56,142	55,553	52,909
1976	25,234	69,719	68,994	64,126
1981	28,247	86,049	85,154	77,239
1986	31,546	106,479	105,372	93,275
1991	35,107	132,592	131,213	113,348

Source: Brown, T.M., *Canadian Economic Growth*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, (in press). See Appendix F, Table F-1. The 1961 data are the revised figures in Dominion Bureau of Statistics, *National Accounts, Income and Expenditure*, 1962 (Ottawa, 1963).

On the basis of these projections it is estimated that the population of Canada will nearly double, from 18.2 million to 35.1 million, during the period 1961–1991. The GNP will grow almost fourfold under both the high and medium forecasts, and considerably more than threefold under the low projection. The per capita product would nearly double under the high and medium projections, and would rise by more than two-thirds under the low one.

¹ Stukel, A., "Population Projections, 1961–1991", Appendix E, in Brown, T.M., *Canadian Economic Growth*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, (in press).

In our projections of government expenditures we shall refer only to the high and the low projections above; the high and the medium ones are close, and there is little need to make the exposition more detailed by taking the medium projection into account.

B. Projections of Government Expenditure

Within the framework of the national accounts government outlays are classified under two main categories, expenditure on goods and services and expenditure on transfer payments. The nature of these expenditures and the post-war trends of spending have been discussed in Chapter II. It remains to set out prospective levels of expenditure for the years 1961 to 1991.

Professor Brown, in his Projection No. 1 envisages that the expenditure on goods and services by governments will rise to 20.1 per cent in 1966, to 21.1 per cent in 1971, to 22.1 per cent in 1976, to 23.1 per cent in 1981, to 24.1 per cent in 1986, and to 25.1 per cent in 1991. This expenditure includes outlays on government consumption, government investment and defence. Here we take Brown's assumption that defence expenditure will equal 4 per cent of GNE throughout the whole period in question. This assumes that defence spending will increase in the future at the same rate as GNE rises, while expenditure on government consumption and investment will expand relatively to GNE. Table 27 sets out estimates of government expenditure under the high and low GNE projections.

TABLE 27
PROJECTIONS OF GOVERNMENT EXPENDITURE
ON GOODS AND SERVICES, 1961-1991
(In Millions of 1957 Dollars)

Year	High Projection			Low Projection			Per Cent of GNE	
	Con- sumption and Invest- ment	De- fence	Total	Con- sumption and Invest- ment	De- fence	Total	Con- sumption and Invest- ment	De- fence
1961	5,079	1,465	6,544	5,079	1,465	6,544	14.5	4.2
1966	7,231	1,797	9,028	6,984	1,735	8,719	16.1	4.0
1971	9,600	2,246	11,846	9,047	2,116	11,164	17.1	4.0
1976	12,619	2,789	15,408	11,607	2,565	14,172	18.1	4.0
1981	16,435	3,442	19,877	14,753	3,090	17,842	19.1	4.0
1986	21,402	4,259	25,661	18,748	3,731	22,479	20.1	4.0
1991	27,977	5,304	33,281	23,916	4,534	28,450	21.1	4.0

Source: Appendix F, Table F-1.

Under the high projection government expenditure on goods and services would rise from about \$360 per capita in 1961 to \$948 per capita in 1991. At the

same time total GNE would rise from about \$1,920 per capita to nearly \$3,780 per capita. Thus private expenditure would increase from \$1,560 to \$2,830 per capita. In other words, with the expansion of GNE as envisaged in the projections, substantial increases in both private and public spending can take place, and indeed, will be a requisite for balanced economic growth. Under the low projection, government expenditure would rise from \$360 per capita in 1961 to \$810 per capita in 1991, GNE per capita would rise from \$1,920 to \$3,330 per capita, and private expenditure from \$1,530 to \$2,420 per capita. Again, large increases in both private and public spending can be expected.

In addition to expenditure on goods and services, governments make a variety of transfer payments. These are payments which redistribute income and which affect the level of personal expenditure on consumer goods and services directly, and ultimately the level of private capital formation.

We have made estimates of transfer payments for the period 1966–1991 by reference to specific types of payments and to the three levels of government. Similarly we have estimated expenditures on goods and services by levels of government. These estimates are discussed in subsequent sections in this chapter.

Table 28 provides our summary estimates of transfer payments. Under the high projection transfer payments are seen as rising from 12.8 per cent to 16.4 per cent of GNP during the 1961–1991 period. Under the low projection the increase would be somewhat greater, largely because of the higher level of unemployment benefits to be paid, and the lesser growth of GNE.

TABLE 28
PROJECTIONS OF TRANSFER PAYMENTS
BY ALL GOVERNMENTS, 1961–1991

Year	In Millions of 1957 Dollars		Per Cent of GNE	
	High Projec- tion	Low Projec- tion	High Projec- tion	Low Projec- tion
1961	4,519	4,519	12.9	12.9
1966	6,243	6,246	13.9	14.4
1971	8,421	8,201	15.0	15.5
1976	10,946	10,388	15.7	16.2
1981	13,768	12,744	16.0	16.5
1986	17,143	15,484	16.1	16.6
1991	21,745	19,155	16.4	16.9

Source: Appendix F, Tables F-1 and F-2.

There is difficulty in expressing government expenditures appropriately in real terms in the projections. The implicit price index for government goods and services reflects the level of wages and salaries of government employees. Since the middle 1950's such wages and salaries have risen more rapidly than

wages and salaries in the private sector. The implicit price index for current government expenditure on goods and services increased by 20.5 per cent 1957–1962, while the index for GNE at market prices, reflecting all expenditures in the economy, rose by only 8.6 per cent. Thus the relationship of the costs of collective goods and services to the costs of goods in the private sector changed substantially during this period.

The expenditure projections made here are expressed in terms of uniform rates of change in the price indexes for government and other expenditures in the economy. That is, any deflation of government expenditure data in the future implies the use of the price index for the whole GNE. Or one can look at the projections as proportions of the GNE which need to be obtained as government revenue to finance the expenditures.

We shall present estimates here of government expenditure in some detail and by reference to each level of government, beginning with the federal. The estimates are to be regarded as indicative of underlying structural, demographic, and economic factors, as well as of political aspects. Although we have plotted ratios and regressions in a number of instances in arriving at estimates, such mechanical techniques have been tempered by a whole complex of institutional factors. Many of the estimates are suggestive, particularly those on the revenue side discussed in the next chapter. There are more choices to be made on the revenue than on the expenditure side because of the many relentless forces pushing government expenditures upward almost inevitably.

It is assumed that there will be no major reallocations of functions among levels of government; minor shifts are allowed for. Given this it appears that the provincial and municipal sectors will grow more rapidly than the federal; this follows from the nature of the services and functions which these levels of government perform. Such an extension in the sphere of provincial-local governments probably harmonizes more with the basic economic and political philosophies of Canadians than substantial expansion of the federal government. It implies that we believe that many functions can be performed more efficiently and effectively by the provincial and municipal governments than by the federal. It also calls for a thorough-going and variegated system of intergovernmental transfers, with the federal government playing a dynamic and co-ordinating role.

C. Projections of Federal Government Expenditures

1. *Expenditure on Goods and Services* – Federal government expenditure on goods and services declined from a wartime high of nearly 38 per cent of GNE in 1944 to less than 5 per cent in 1948. Defence expenditure fell from 34.7 per cent to 1.6 per cent of GNE during this period. Other expenditure on goods and services consisting mainly of outlays for general government, transport, health services, public works and a variety of miscellaneous activities, approached 3 per cent of GNE during the immediate post-war years. During the Korean War outlays on defence increased sharply to 7.4

per cent of GNE in 1952; defence spending then declined to 6 per cent of GNE in 1956 and to 4.2 per cent in 1961. Other federal expenditure on goods and services rose from 3.0 per cent to 3.7 per cent of GNE 1956-1961, while total federal outlays on goods and services fell from 9.0 per cent to 7.7 per cent.

We take Professor Brown's assumption here that defence expenditures will remain at 4 per cent of GNP during the 1966-1991 period for all three projections, the high and the low. In other words, we are saying that defence spending will be closely related to the potential increase in income and productivity, and that the relative level will be somewhat below that of the 1950's. The assumption made here is that over the long run international relations will not differ materially from those existing at the present time making it unnecessary for Canada to increase materially the proportion of G.N.E. devoted to defence spending. Alternative assumptions could be made.

Other federal expenditure on goods and services can be expected to increase to 3.7 per cent of GNE in 1966, rising by 0.1 percentage point thereafter every five years to 4.2 per cent of GNE in 1991. This allows for normal expansion of federal programmes, increases in wages and salaries in line with those in the private sector in the future, and the introduction of some new programmes. The same percentages are assumed for both the high and low projections of GNE.

Including defence the level of federal expenditure on goods and services is expected to be 7.7 per cent of GNP in 1966, increasing to 8.2 per cent in 1991. If we take a long swing back in time we find that this is considerably above the level of the late 1920's. In 1926 total federal expenditure on goods and services was 2.6 per cent of GNE, including defence, and 2.3 per cent excluding defence. By 1929 the percentage had risen to 2.8 and 2.4 respectively, and in 1933, a depression year, to 3.2 and 2.6 respectively. The proportions were, of course, much higher in the war period but they do not provide useful comparisons with peace time experiences.

2. *Transfer Payments and Subsidies* - During the period 1951-1961 federal transfer payments and subsidies increased from 5.3 per cent to 8.1 per cent of GNE. Most of the increase is accounted for by the introduction of federal old-age pensions and a substantial rise in unemployment insurance payments.

Old age security fund payments accounted for 1.2 per cent of GNE by 1956 and 1.6 per cent in 1961. The number of persons aged 70 years and over was 4.95 per cent of the population of Canada in 1961. This proportion is expected to rise over time. Under Professor Brown's Projection No. 1, utilizing Dr. Stukel's estimate of population, based on a net immigration of 50,000 per year, the proportion is expected to rise to almost 5.9 per cent in 1991. On the same basis the number of persons aged 65 years and over is expected to reach 8.9 per cent in 1991 as against 7.6 per cent in 1961. The amount of pension payments per person can also be expected to rise as

income levels of Canadians increase in the future. There will be both the means and a desire to provide more adequately than in the past for our old people.¹ It is assumed here that federal payments for old-age security will rise to 1.8 per cent of GNE in 1966 and continue to increase progressively, reaching 2.8 per cent of GNE in 1991.

Family allowance payments rose from 1.3 per cent to 1.5 per cent of GNE during the 1950's. The proportion of children qualifying for allowances is expected to fall somewhat in the future on the basis of the estimates of Dr. Stukel. There do not appear to be strong pressures on the government to increase the level of family allowances substantially, although relatively small increases can be expected over time. Here it is assumed that family allowances will equal about 1.3 per cent of GNE throughout the period 1966-1991.

Veterans' pensions and benefits equalled about 0.6 per cent of GNE during 1951-1961, and it is envisaged here that the percentage will fall somewhat, probably to about 0.5 per cent, after 1971. Pensions to government employees rose from about 0.1 per cent to about 0.2 per cent of GNE over the years 1951-1961; a level of 0.2 per cent is foreseen for the period 1966-1991.

Unemployment insurance benefits should fall substantially under the high projection of GNE which assumes an unemployment rate of 4 per cent, considerably below the ratio in recent years. In the period 1958-1961 unemployment insurance benefits varied between 1.3 per cent and 1.5 per cent of GNE while unemployment average between 6 per cent and 7 per cent annually. Within the framework of the high projection of GNE benefits paid will fall, and the amounts involved are estimated at 0.7 per cent of GNE for a 4 per cent rate of unemployment. This percentage should also hold for the period 1966-1991, with aberrations from this level during periods of unemployment over or under the 4 per cent level. Under the low projections of GNE, assuming an unemployment rate of 5 per cent, benefits paid will be higher and they are taken at 1 per cent of GNP for the period 1966-1991.

Interest on the federal debt equalled 3.4 per cent of GNE in 1947, and it fell substantially to 1.7 per cent in 1956 as much debt was redeemed during the immediate post-war decade. Since 1956 interest has increased, and in 1961 it was 2.1 per cent of GNE, still far below the 1947 percentage, but quite comparable with the percentages of the late nineteen twenties. In 1929 interest on the federal debt was 2 per cent of GNE; this was a time of relatively high interest rates. In 1939 interest was 2.4 per cent of GNE. Here it is assumed that the federal debt will continue to be somewhat less than one-half of GNE in the future; this is the current state of affairs and it was also the case in the late nineteen twenties. This implies some increases in the national debt in absolute terms in the years ahead. There will also be changes in interest rates. It appears reasonable to estimate interest on the federal debt at 2 per cent of GNE in 1966, at 1.8 per cent in

¹ Cf. The current proposals regarding pension plans in Canada.

1971, at 1.7 per cent in 1976, and so on to less than 1½ per cent in 1991. These estimates are based on the assumptions of current interest rates and a rate of growth in the debt itself below the rate of increase of GNE.

Miscellaneous federal transfers include payments for prairie farm assistance, payments to western grain producers, grants to universities, assistance to immigrants, and other items. Over time new payments will be made; grants to the universities can be expected to increase markedly in the future. The total miscellaneous category fluctuated between 0.1 per cent and 0.4 per cent of GNE during the decade 1951–1961. Here we see it rising to 0.8 per cent of GNE in 1966–1971, chiefly because of increased grants to the universities, and to over 1 per cent of GNE 1976–1991.

Agricultural and other subsidies varied between 0.4 per cent and 0.6 per cent of GNE 1951–1961. In recent years the trend has been upward, from 0.4 per cent of GNE in 1956 to 0.6 per cent in 1961. We foresee a level of about ½ per cent of GNE for the period 1966–1991.

Altogether federal transfers and subsidies may be expected to rise from about 8 per cent to nearly 8½ per cent of GNE in 1991 under the high projection, and to reach 8.7 per cent under the low projection. Table 29 summarizes both the goods and services and transfer expenditures of the federal government.

TABLE 29
PROJECTIONS OF EXPENDITURE
FEDERAL GOVERNMENT, 1961–1991
Per cent of GNE

Year	High Projection			Low Projection		
	Goods and Services	Transfer Payments and Subsidies	Total	Goods and Services	Transfer Payments and Subsidies	Total
1961	7.7	8.1	15.8	7.7	8.1	15.8
1966	7.7	7.9	15.6	7.7	8.2	15.9
1971	7.8	8.0	15.8	7.8	8.3	16.1
1976	7.9	8.2	16.1	7.9	8.5	16.4
1981	8.0	8.2	16.2	8.0	8.5	16.5
1986	8.1	8.3	16.4	8.1	8.6	16.7
1991	8.2	8.4	16.6	8.2	8.7	16.9

Source: Appendix F, Table F-2.

The above projections presume an expansion of the federal sector at a rate exceeding only slightly the rate of increase of GNE. An obvious major factor which could affect the percentages materially, either upward or downward, would be a relative change in expenditures on defence.

D. Projections of Provincial Government Expenditures

1. *Expenditures on Goods and Services* – The provincial governments have major responsibilities in the fields of education, health, highways, social welfare, and various other public services. These are delegated in part to municipalities, but in varying degree, among the ten provinces. Provincial expenditures on goods and services consist chiefly of the salaries and wages of permanent employees, the construction and maintenance of highways and other public projects, resource and industrial development, and a miscellany of government activities.

Between 1951 and 1961 provincial expenditures on goods and services increased from 2.9 per cent to 3.8 per cent of GNE. Preliminary figures for 1962 and 1963 indicate that the percentage has risen further. With the potential provision of public health extensions, the continuing need for super-highways, intensive resource and industrial development programmes and technical and vocational education, provincial governments can be expected to spend an increasing percentage of GNE in the future. By 1966 this proportion can be expected to reach almost 5 per cent of GNE, by 1976 to attain 6 per cent, and by 1986 to surpass 7 per cent. These percentages are assumed to hold for both the high and low GNE projections.

2. *Transfer Payments and Subsidies* – Between 1951 and 1961 provincial government expenditure on transfer payments and subsidies increased from 2.4 per cent to 3.9 per cent of GNE. This increase occurred despite a fall in payments to old-age pensioners after 1951. The chief factors including the rise have been substantial increases in payments made to hospitals under the national hospital insurance provisions and in payments to universities whose enrolments have burgeoned in recent years. Large increases in provincial government transfer payments are foreseen in the future.

Grants to private non-commercial institutions (chiefly hospitals, universities and colleges) make up the largest type of provincial transfer payment. This is a peculiar category in the national accounts; it consists mainly of payments to institutions rather than persons, but is rather tenuously termed part of personal income. During the period 1951–1961 these payments increased from 0.7 per cent to 2.3 per cent of GNE. With further extensions in hospital services and the upsurge in university and college enrolments, this ratio is likely to expand further. It is expected that the provincial governments may be spending nearly 4 per cent on this category by 1966, over 4½ per cent by 1971, and 5½ per cent by 1991.

A second major group of provincial transfer payments are for welfare purposes (direct relief, old-age pensions for persons aged 65 to 69, allowances of blind and disabled persons and mothers' allowances). This type of payments increased from 0.4 per cent to 0.6 per cent of GNP over the 1956–1961 period. The future outlook is that the fraction will settle at about 0.5 per cent of GNE in the 1970's. Under the low projection of GNE, expenditure on direct relief and other welfare allowances can be expected to be above

that under the high projection. Thus we envisage about 0.6 per cent of GNE as the level of welfare expenditure for years 1966–1991 under the low projection.

Other categories are workmen's compensation, pensions to government employees, interest on the public debt, and miscellaneous payments. Between 1951 and 1961 these payments increased from 0.8 per cent to 1 per cent of GNE. Interest on the public debt fluctuated around 0.4 per cent of GNE during the decade. Altogether the fraction devoted to this group of transfer payments is likely to be from 0.8 per cent to 0.9 per cent of GNE in the future, with interest on the public debt assumed to vary around the 0.4 per cent of GNE level.

It appears that the provincial government sector will expand greatly in the future, chiefly because of large increases in the spending on higher education, technical and vocational training, hospital and personal health care services, highways, and economic development. The estimates do not include grants to schools which are considered in a subsequent chapter under intergovernmental transfers and which make up a large part of municipal expenditure.

Table 30 below summarizes the projections of provincial government expenditures for the period 1961–1991.

TABLE 30
PROJECTIONS OF EXPENDITURES
PROVINCIAL GOVERNMENTS
1961–1991
Per cent of GNE

Year	High Projection			Low Projection		
	Goods and Services	Transfer Payments and Subsidies	Total	Goods and Services	Transfer Payments and Subsidies	Total
1961	3.8	4.0	7.8	3.8	4.0	7.8
1966	4.9	5.1	10.0	4.9	5.2	10.1
1971	5.5	6.0	11.5	5.5	6.1	11.6
1976	6.0	6.4	12.4	6.0	6.5	12.5
1981	6.5	6.6	13.1	6.5	6.7	13.2
1986	7.0	6.7	13.7	7.0	6.6	13.6
1991	7.4	6.8	14.2	7.4	6.9	14.3

Source: Appendix F, Table F–2.

E. Projections of Municipal Government Expenditures

1. *Expenditures on Goods and Services* – Municipal expenditures on goods and services have risen greatly since 1951 when they equalled 4.4 per cent of

GNE. By 1961 they had reached 7.2 per cent, not far below the proportion indicated for Federal Government spending. Most of this increase was attributable to the rapid expansion of educational refinements associated with tremendous rise in school enrolments and to increasing need for public services induced by accelerating urbanization. The upward trend in these two major areas can be expected to continue.

By 1971 municipal governments will likely spend nearly 8 per cent of GNE on goods and services such as elementary and secondary education, protection of persons and property, streets and roads, recreational and cultural services, health services, sanitation and waste removal, water works and other functions. This would make municipal expenditure on goods and services roughly equal to that of the federal government, including defence. Further expansion to 9 per cent of GNE by 1986 and to 9½ per cent in 1991 would make municipal government the largest of the three levels of government in the provision of goods and services. The percentages above are assumed to hold for both the high and low projections of GNE.

2. *Transfer Payments* – The transfer payments of municipal governments are mainly payments for direct relief, grants to private non-commercial institutions (chiefly hospitals), and interest on municipal debt. Together they accounted for 0.4 per cent of GNE in 1951, increasing to 0.8 per cent in 1961. The increase is accounted for mainly by the substantial rise in interest and in direct relief payments arising from the high level of unemployment in recent years. In the future one can expect grants to non-commercial institutions to rise, not so much to assist hospitals, but to support regional and local educational institutions of various kinds. It is also likely that

TABLE 31
PROJECTIONS OF EXPENDITURE
MUNICIPAL GOVERNMENTS
1961–1991
Per cent of GNE

Year	High Projection			Low Projection		
	Goods and Services	Transfer Payments	Total	Goods and Services	Transfer Payments	Total
1961.....	7.2	0.8	8.0	7.2	0.8	8.0
1966.....	7.5	0.9	8.4	7.5	1.0	8.5
1971.....	7.8	1.0	8.8	7.8	1.1	8.9
1976.....	8.2	1.1	9.3	8.2	1.2	9.4
1981.....	8.6	1.2	9.8	8.6	1.3	9.9
1986.....	9.0	1.2	10.2	9.0	1.3	10.3
1991.....	9.5	1.2	10.7	9.5	1.3	10.8

Source: Appendix F, Table F–2.

subsidies for housing may become more important in the future, particularly for low rental and slum clearance. Direct relief payments may also increase if a high level of unemployment persists.

It is envisaged that municipal transfer payments will rise to about 1.2 per cent of GNE by 1981 and then level off under the high projection. The additional direct relief implied under the low projection of GNE will probably add about 0.1 per cent of GNE to the above transfer expenditure estimates. Table 31 sets out the projected total expenditures of municipal expenditures relatively to the high and low projections of GNE. It appears that municipal governments can be expected to become even more important in the future than in the past.

F. Summary

The expenditure requirements of the three levels of government in Canada can be expected to increase relatively in the future. In 1961 the total expenditure equalled 31.6 per cent of GNE of which about 19 per cent consisted of the cost of collective goods and services. By 1971 the total may rise to 36 per cent of GNE of which about 21 per cent would be for goods and services. For the long-term a total expenditure of about two-fifths of GNE is foreseen, of which 25 per cent would be for goods and services. The growth of GNE envisaged in Professor Brown's study would make possible such a relative expansion of the public sector with the private sector continuing to grow at a fairly rapid rate. Such growth would also become desirable in order to secure the appropriate balance between the provision of private and public goods and services. The level of income indicated would induce large increases in the number of automobiles purchased and an accompanying persistent increase in the need for highways and streets; it would lead to large increases in the demand for education, health and recreational services of various kinds. Increasing urbanization will create a continuing need for many public services, especially at the provincial and municipal levels. The expansion of government indicated here is a concomitant of the process of economic development, resources utilization, industrialization, and the attendant urbanization. Government in a predominantly agricultural or extractive type of economy need not be large; it can be simple and small. When people come to live under high-density conditions and in a highly specialized, technologically advanced economy the degree of interdependence becomes quite high and there arises a complementary need for a large and complex requirement for government services, and for many adjustments through transfer payments and the whole range of public policies.¹

¹ The public sector is considerably larger proportionately in developed than in less-developed countries. Hinrichs and Bird point out that "two key determinants seem to stand out" in determining the size of the public sector. The first is "the structural change occurring in an economy during the process of economic development and social mobilization, a change which involves industrialization, urbanization, specialization, democratization, secularization, and productivity and income changes." Further, "this structural change demands and procures a greater government share of the national income regardless of the prevalent political ideology." A second key factor is "the ideological change in the role of the state which has occurred throughout the world during the past hundred years as well as for individual countries during the process of economic development and social mobilization itself." See Harley H. Hinrichs and Richard Bird, "Government Revenue Shares in Developed and Less Developed Countries," *Canadian Tax Journal*, September, October, 1963, p. 433.

Projections of Government Revenues

A. Economic Aspects of Government Revenues and Expenditures

We have peered into the future and found that a substantial expansion of the public sector appears to be complementary with a rise in affluence. By the same token the revenue available should also increase to match and to finance the increasing level of public services. It is not within the scope of this study to examine the economic effects of the different revenue sources in detail. This would call for an extensive inquiry and analysis. Along with this would have to go an examination of the effects of government expenditures; these vary greatly, depending upon the type of expenditure. Nevertheless a few general observations appear to be appropriate in the context of this study.

It is sometimes said that the public sector is a burden upon the whole economy. It is undoubtedly true that given full employment of resources, the provision of public services utilizes factors of production which would otherwise be used to produce private goods or services. If there is unemployment, however, expansion of the public sector does not imply a reduction of output of private goods and services. On the contrary, such expansion contributes to an increase in the total Gross National Product until full employment is reached. The resulting pattern of output then comes to consist of the same level of output of private goods plus a higher level of collective goods and services than before. An increase in the expansion of public goods and services may stimulate expansion of the private sector. Further, there are complications in that the new pattern of resource use induces changes in private consumption and investment, depending on the methods of financing used. But the basic simplicity of the proposition remains that if there are unused resources output will be increased if the government puts them to work, and there is no direct burden on the economy.

If there is full employment and the government increases expenditures there are many varying effects, depending upon how the increased expenditures are financed. In any event there is a reduction in the proportion of private output to total output. If the output is expanding over time, both private and public output can be increased, and this has been a secular trend in the developed countries of the world, with the public sector expanding at a more rapid rate than the private.

Indeed, certain public services are required to permit a high rate of over-all economic growth; an appropriate balance between public and private goods is a prerequisite for economic progress.

The sources of funds used to finance expansion may come from various types of taxes, from accumulated surpluses of previous years (a rare phenomenon), from the sale of debentures to the public, the banks, and the central bank, or from the issue of new money. All of these have effects upon the allocation of resources, the supply of labour and capital, the distribution of income, the stability of income and prices, and the administrative machinery of the economy.

For example, a progressive personal income tax will tend to reduce not only the total output of private goods and services and increase that of collective services as the funds are spent by the government, but will also affect resource allocation within the private sector of the economy. Fewer yachts and elaborate houses will tend to be built, and the output of "luxuries" generally will tend to diminish. Such a tax will tend to reduce the level of private savings and capital-formation. On the other hand, government expenditures may yield a larger output over time than the private savings foregone would have done when utilized in private capital formation. The harmful effects of the tax on the motivations to save and to invest are often exaggerated, and whatever empirical studies exist have proved inconclusive. Much saving is automatic and institutionalized in nature. Depreciation allowances and the retained profits of corporations constitute the major fraction of savings and are affected relatively little by a personal progressive income tax. Much has been made of the potential reduction in the supply of labour. It is argued that the tax reduces the incentive to work and that it tends to induce people to substitute leisure. Both theoretical analyses and empirical investigations have yielded few firm conclusions on this question. It appears that people earning high incomes will continue to work regardless of tax levels because they like their jobs and because they are concerned about maintaining their relative status in society. People earning lower incomes who are affected by higher tax rates may decide to increase their efforts in order to maintain their absolute, as well as relative, level of income. The arguments and analyses cut both ways; the tax will tend to reduce the labour provided by some individuals and to increase that of others. It is a complex question in which varying conditions can be analyzed and different assumptions made.

In addition, the government expenditure financed by the tax (e.g., health services) may increase both the quantity and quality of labour. A lowering of mortality rates and the incidence of illness among the labour force may result, increasing the total number of man-days worked during a given period. A rise in the health of the labour force increases the productivity of workers. The provision of social welfare measures and subsidized housing may induce a feeling of security, stability and well-being among the labour force which will tend to increase the supply of labour both quantitatively and qualitatively. Many other examples could be cited. We cannot state definite conclusions without laying down certain assumptions before analyzing the issues.

A progressive income tax will tend to equalize incomes, which in time will have various allocative effects on which we shall not dwell here. The expenditure of the funds on collective goods and services also tends to be equalizing since these may be enjoyed by everyone in the country. The tax will withdraw funds from the private sector, reducing the pressure upon prices, while the expenditure of the proceeds will have the opposite effect. Thus the potential inflationary effect of the government expenditure tends to be offset by the tax. Finally, the collection of the tax will call for the organization of an administrative agency in the public sector. There will also be changes in the private sector; for example, if the tax is collected periodically at the source, employers of labour will have to make special accounting adjustments. The expenditure of the funds collected will also call for new administrative arrangements in the public sector.

We could work our way through the various kinds of taxes and expenditures in the above manner and in much more detail. This is a major task which we cannot undertake. Enough has been said, however, to make one careful about statements regarding the burden of taxes and benefits of expenditures. What we are saying is that the public sector may be either too small or too large to secure that balance between private and collective goods which promotes optimum resource allocation, the desired rate of economic growth, the desired income distribution, full employment without inflation, and administrative efficiency throughout the whole economy. There is no statistical magic number which measures this state of affairs; conditions change over time. An economy with a low level of production will tend to have a smaller public sector proportionately than a highly developed economy. As the Gross National Product grows, both the public sector and the level of taxation can and will tend to rise.

To finance the expansion of public services, especially at the provincial and municipal levels, existing taxes and other revenue sources utilized by the three levels of government will have to continue to be levied. Improvements in tax regulations and administration will have to be sought. Some new taxes may have to be imposed. If the Gross National Product increases as projected by Professor Brown the Canadian economy should be able to provide more funds for both private and public purposes.

For example, in 1961 the three levels of government in Canada collected revenues totalling \$10.4 billion (1957 dollars), leaving \$24.6 billion in private hands. According to our government expenditure estimates under the high projection of GNE, the public sector will need to collect revenues of about \$20 billion in 1971. Since the Gross National Product is estimated to be \$56.1 billion in that year, a balance of \$36.1 billion would be left in the private sector, almost 50 per cent more than in 1961. We could illustrate similarly by examining the projections for other future years.

B. Projections of Federal Government Revenues

We have indicated the structure of the revenue system of the federal government in Chapter II. It remains to examine future prospective trends in yields.

Direct taxes on persons constitute the largest category of federal revenue, and in 1961 they yielded over \$2.1 billion out of a total federal revenue of nearly \$6.7 billion. The chief element in the category is the individual income tax which makes up about 96 per cent of the total; the balance consists of succession duties and estate taxes. The yield from the individual income tax is elastic relative to the GNE; given the same rate structure and base, a one per cent increase in the GNE will be accompanied by an increase in the yield of the individual income tax of between 1½ to 2 per cent. The rise in GNE increases the number of individuals whose income exceeds the basic exemptions; in short, the number of taxpayers increases. Further, the rise in GNE increases the incomes of many taxpayers who move into a higher rate bracket, the rate structure being progressive.

From time to time the federal government alters the tax base and the rate structure so that precise estimates of the elasticity of the individual income tax are difficult to make. Nevertheless we know that the yield of the tax is rather responsive to changes in GNE. Between 1958 and 1961 the yield of total direct taxes on persons increased from 4.8 per cent to 5.7 per cent of GNE. Between 1952 and 1957 the yield fluctuated between 4.9 per cent and 5.4 per cent of GNE. During the immediate post-war period, when rates were reduced from wartime highs the yield fell from 6.7 per cent in 1944 (the wartime high) to 3.6 per cent in 1950. The Korean War brought upward revisions of rates and changes in the base which increased yields. During recent years the federal rates have been abated somewhat to permit the provinces to collect fractions of the total yield varying from 16 per cent to more than 20 per cent. Allowance is made for this in the estimates set out in Table 32. With the expansion of GNE and with periodic adjustments in the base

TABLE 32
PROJECTIONS OF REVENUE,
FEDERAL GOVERNMENT, 1961-1991
(Per Cent of GNE)

Source of Revenue	1961	1966	1971	1976	1981	1986	1991
1. Direct Taxes on Persons ^(a)	5.7	5.8	6.1	6.3	6.4	6.6	6.8
2. Direct Taxes on Corporations	3.5	3.5	3.6	3.7	3.8	3.9	4.0
3. Withholding Taxes	0.3	0.4	0.4	0.5	0.5	0.5	0.5
4. Customs Import Duties	1.4	1.5	1.5	1.5	1.5	1.5	1.5
5. Excise Duties ^(b)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
6. Excise Taxes ^(c)	3.5	3.8	4.1	4.3	4.4	4.5	4.5
7. Investment Income ^(d)	1.1	1.1	1.2	1.2	1.2	1.3	1.3
8. Other ^(e)	1.4	1.7	1.9	2.1	2.2	2.3	2.3
Total	17.8	18.8	19.8	20.6	21.0	21.6	21.9

(a) Individual income tax; succession duties and estate taxes.

(b) Levied on liquor and tobacco.

(c) Includes the general sales tax and various excise taxes.

(d) Interest on government-held public funds, interest on loans and advances, and profits (net of losses) of government business enterprises.

(e) Miscellaneous taxes and contributions of employees and employers to public service pensions and unemployment insurance.

Source: Appendix F, Table F-5.

of the tax and in the rate structure, the yield will increase relative to GNE over time. It is assumed here that some rise in rates would accompany the extension of health and hospital programmes. These increases would occur mainly during the 1960's and early 1970's. Thus a yield of 5.8 per cent of GNE is foreseen for 1966, and a continuing rise to 6.8 per cent of GNE in 1991. Table 32 sets out the percentages for 1961 to 1991, while Table F-5 in Appendix F provides data for years previous to 1961. The percentages in all categories apply to both the high and the low projections of GNP.

Direct taxes on corporation income reached a peak of 6 per cent of GNE in 1951, even exceeding wartime levels. Since 1951 the proportion has tended to decline and during the five years 1957-1961 it varied between 3.3 per cent and 3.8 per cent of GNE. An increasing amount was collected by Quebec and Ontario during the 1950's, reducing the federal portion. Under the current federal-provincial tax arrangements all the provinces are now, at least nominally, sharing the corporation income tax field with the federal government. Here it is assumed that there will be some adjustments in the federal net rates and structure of the tax to produce a gradually rising yield relatively to GNE. During the 1960's its yield is forecast at 3.5 per cent of GNE. This should rise gradually to about 4 per cent of GNE by 1991. With both federal and provincial governments tapping this source of revenue, and with the yield approaching half of corporate profits, the potential for expansion of this tax is quite limited.

Withholding taxes on investment income payments to non-residents at the rate of 15 per cent yielded about 0.3 per cent of GNP in 1961, and approximately 0.2 per cent throughout the 1950's. Taking into account recent changes, and further potential adjustments, the proportion may rise to 0.4 per cent by 1971 and move up to 0.5 per cent thereafter (see Table 32).

Customs import duties yielded between 1.4 per cent and 1.8 per cent of GNP between 1951 and 1961. No drastic changes in rates are assumed in the long run, and no fundamental changes in tariff policy, though Canada in concept with other nations may continue to move in the direction of a gradual and selective over-all reduction in tariffs. An estimated yield of 1.5 per cent of GNP is thus foreseen for the period 1966-1991. Similarly, excise duties may equal about 1 per cent of GNP during the future period in question. Excise duties are levied on liquor and tobacco; consumer expenditure on these goods may fall somewhat relatively to GNP since there is a slight downward long-run trend in the per capita consumption of liquor, while recent investigations relating to the use of tobacco may have a deterrent effect on its consumption, especially cigarettes. The rates of the duties may have to be increased to maintain yields relatively to GNE.

Excise taxes consist of a general sales tax (with certain exemptions) levied on goods manufactured in Canada or imported into Canada, and of special excise taxes. Currently the general sales tax rate is 11 per cent of the factory price of taxable goods. Exempted from the tax have been most foodstuffs, most building materials,¹ machinery and materials used in production, and electricity and fuels.

¹ Building materials began to be taxed in 1963.

Special excise taxes are levied on such items as jewellery, watches, lighters, matches, phonographs, radios, television sets, toilet articles, cosmetics, and playing cards.

These taxes have yielded a little over $3\frac{1}{2}$ per cent of GNE in recent years. Some excise taxes, notably those on automobiles, have been removed. In the future, as GNE rises, the scope of sales and excise taxes could be broadened and rates increased. Since automobiles create a marked upward pressure upon expenditure on highways, streets, and traffic control, re-imposing excise taxes upon them would have a restraining effect, reducing increases in their number and hence easing the pressure on provincial and municipal budgets. Here it is assumed that the scope of excise taxes will be widened and rates increased. Such adjustments could be associated with the extension of health programmes. It is envisaged that they will yield about 3.8 per cent of GNE by 1966, and up to 4.5 per cent by the 1980's (see Table 32).

Investment income consists of interest on government-held public funds, interest on loans and advances, and profits (net of losses) of government business enterprises. This category averaged a yield of about 1 per cent of GNE during the decade 1951-1961. Railway deficits may be expected to disappear with continuing rationalization of operations of the CNR and even surpluses may emerge. Technological changes will always have an important bearing on the financial aspects of railway, air, and water transportation, and in television and other communications. It is assumed that there will be little increase in the yield relatively to GNE during the 1960's, remaining at about 1.1 per cent, but rising to 1.3 per cent by the 1980's.

Finally, we turn to the balance of federal revenue sources. These consist of employer and employee contributions to federal pension funds and to unemployment insurance, as well as miscellaneous taxes. The amounts collected from these sources rose from 1.1 per cent to 1.4 per cent of GNE in the 1951-1961 decade. The yields can be expected to rise in the future and may reach 2.3 per cent of GNE by 1991.

In total it is expected that federal revenue will increase from 17.8 per cent of GNE in 1961 to 21.9 per cent by 1991. On the basis of Professor Brown's projections this would mean a rise from about \$6.2 billion in 1961 to \$29 billion in 1991, all in 1957 dollars, under the high projection. On the basis of our estimates the federal government will have substantial surpluses available for inter-governmental transfers. This subject is discussed further in Chapter VIII. The total collected in 1991 under the low projection would be nearly \$25 billion (in 1957 dollars).

C. Projections of Provincial Government Revenues

The provincial governments constitute the centre layer of the three levels of government, and in the future they will literally be squeezed in the middle financially. Their expenditures have risen markedly during the post-war period, and if anything, increases will be even more substantial in the future as noted in the previous chapter. Although they can expect to receive considerable financial assistance

from the federal government, the provincial governments will have to increase the scope and rates of their revenue systems.

Table 33 provides a summary of revenue estimates of the provincial governments up to 1991 in terms of percentages of GNE and applying to both the high and low projections of GNE. It is estimated that revenues will have to rise sharply during the 1960's to provide funds for required expenditures. Thus an increase from 7 per cent to 9 per cent of GNE is foreseen from 1961 to 1966. Beyond that year the fraction would rise more slowly, reaching 12 per cent of GNE by 1991. This ratio applies to both the high and low estimates of GNE.

The yield from direct taxes on persons and corporations should increase markedly in the period 1961-1966, under the current federal-provincial tax arrangements (see Table 33). It would be unfortunate if the provinces came to utilize these taxes heavily, since this might lead to great diversities in the tax burdens of individuals and corporations in different provinces. The federal government can levy and collect these taxes more equitably and efficiently than the provincial governments. We assume a tapering off in the yield ratios after 1966 (see Table 33), but allowing for increases in hospital and health care premiums.

The yield from gasoline taxes can be stepped up, serving the double purpose of providing more revenue and of maintaining a balance between resources allocated to the use of automobiles and to highway and street construction and maintenance. The yield was 1.2 per cent of GNE in 1961 and with rate increases it could rise to 1.3 per cent of GNE in 1966, and to 1.5 per cent by 1991. Similarly, revenue from motor vehicle licences could be increased relatively to GNE (see Table 33). Technological changes in the automobile and transportation industries can affect the situation markedly.

TABLE 33
PROJECTIONS OF REVENUE, PROVINCIAL GOVERNMENTS,
1961-1991
(Per Cent of GNE)

Source of Revenue	1961	1966	1971	1976	1981	1986	1991
1. Direct Taxes on Persons	0.9	1.8	1.9	2.0	2.1	2.1	2.2
2. Direct Taxes on Corporations	0.8	1.3	1.4	1.4	1.5	1.5	1.5
3. Gasoline Taxes	1.2	1.3	1.3	1.3	1.4	1.4	1.5
4. Motor Vehicle Licences and Permits	0.3	0.3	0.4	0.4	0.4	0.4	0.4
5. Miscellaneous Natural Resources Revenue	0.4	0.4	0.4	0.4	0.5	0.5	0.6
6. Retail Sales Tax	0.9	1.2	1.4	1.6	1.8	1.9	2.1
7. Miscellaneous Indirect Taxes and Licences ...	0.6	0.7	0.8	0.8	0.9	0.9	1.0
8. Investment Income	1.2	1.2	1.3	1.3	1.4	1.4	1.5
9. Employer and Employee Contributions to Pension Funds and Social Insurance ^(a)	0.7	0.8	0.8	0.9	1.0	1.1	1.2
Total	7.0	9.0	9.7	10.1	11.0	11.2	12.0

(a) Chiefly public service pensions and workmen's compensation.
Source: Appendix F, Table F-6.

It is expected that all the provinces will levy retail sales taxes and increase rates over the near term. Thus the increase in the yield from such taxes may rise from 0.8 per cent of GNE to 1.2 per cent in 1966, and ultimately to 2.2 per cent by 1991.

Miscellaneous revenue from indirect taxes, licences, and natural resources should also rise considerably (see Table 33). Finally, investment income, contributions to civil service pension funds, and to workmen's compensation boards may be expected to increase somewhat relatively to GNE in the future.

D. Projections of Municipal Government Revenues

The municipal governments will also have to increase their own collections of revenue considerably. Table 34 provides a summary of projections. These are applicable to both the high and low projections of GNE. It is expected that the yield will rise from 5.0 per cent to 5.5 per cent of GNE in the years 1961-1966, and eventually to nearly 7½ per cent by 1991.

TABLE 34
PROJECTIONS OF REVENUE,
MUNICIPAL GOVERNMENTS
1961-1991
(Per Cent of GNE)

Source of Revenue	1961	1966	1971	1976	1981	1986	1991
1. Real Property Tax	3.4	3.6	3.8	4.0	4.1	4.2	4.2
2. Retail Sales Tax	0.2	0.3	0.3	0.4	0.4	0.4	0.4
3. Other Taxes and Licences ^(a)	0.6	0.7	0.8	0.9	1.0	1.2	1.4
4. Other ^(b)	0.8	0.9	1.0	1.1	1.2	1.3	1.4
Total	5.0	5.5	5.9	6.4	6.7	7.1	7.4

(a) Includes taxes on amusements, and licences, fees and permits.

(b) Includes investment income (interest and profits, net of losses) of government business enterprises, and contributions to public service pensions.

Source: Appendix F, Table F-7.

The increases projected could be achieved by a continuous overhaul and rationalization of the property tax. It is suggested that its yield could rise from 3.4 per cent to 4.0 per cent of GNE for 1961-1976 period, and up to 4.2 per cent by 1991. Some retail sales taxes, currently utilized in Quebec municipalities, could be levied in other provinces. Various other taxes and licences may also be imposed; for example, there could be a municipal tax on automobiles and other durable goods. The revenue from municipal utilities (investment income) should also rise, and so should contributions to pension funds as municipal expenditures increase in line with projections set out in Chapter VI.

E. Summary

In 1961 the three levels of government in Canada collected revenues equal to about 30 per cent of GNE. Some of these revenues consisted of payments made which would otherwise have been deemed private expenditure, such as contributions to pension funds, hospital insurance and medical care insurance premiums. Taxes, including licences and fees, equalled about 24.7 per cent of GNE. By 1966 it is expected that total revenues will exceed 33 per cent of GNE of which taxes will account for nearly 28 per cent. By 1991 the total revenue may be more than 40 per cent of GNE, and the yield from taxes will be over one-third of GNE, with a continuing rise in the provision of health, education, and other provincial-municipal services. With no reduction in the percentage of GNE devoted to defence expenditure, there appears to be little reason for believing that the suggested taxation levels will be significantly lower than those indicated.

Projections of Intergovernmental Transfer Payments

In the two previous chapters we have set out projections of expenditures and revenues for the three levels of government. The results indicate that before intergovernmental transfers the Federal Government would have substantial surpluses, and the other two levels of government, deficits. These conditions will require a scheme of intergovernmental transfer payments to provide the funds required by provincial and municipal governments to meet their estimated expenditures. Estimates are set out in this chapter in terms of the high projection of GNE.

A. Federal Government Transfer Payments

The Federal Government has had a surplus of revenue over expenditure, exclusive of its payments to the provinces and municipalities¹ in every year except one, during the period 1947–1961. These surpluses exceeded 6 per cent of GNE in the three years of 1947, 1948 and 1951. They exceeded 2 per cent of GNE during 11 years of the period in question. There was a small deficit of –0.3 per cent in 1958. Table F–9 in Appendix F sets out the data.

On the basis of the projections of federal revenue and expenditure set out in the previous two chapters, the following picture emerges for the period 1966–1991 for the Federal Government:

PER CENT OF GNE

Year	Revenue	Expenditure	Surplus
1966.....	18.8	15.6	3.2
1971.....	19.8	15.8	4.0
1976.....	20.6	16.1	4.5
1981.....	21.0	16.2	4.8
1986.....	21.6	16.4	5.2
1991.....	21.9	16.6	5.3

¹ On the basis of National Accounts data.

The estimates suggest that surpluses may grow from 3 per cent to over 5 per cent of GNE for the 1966–1991 period. It is assumed that these surpluses will be used to make appropriate transfer payments to provincial and municipal governments. Thus, over the long run, it is suggested that the Federal Government would balance its budget or have small deficits. There would be surpluses and deficits in the short run and in certain years; if surpluses were to outweigh deficits, the federal debt would fall, and vice versa for the opposite condition. On balance we assume a moderate increase in the federal debt over the longer term, as indicated in Chapter VI.

Federal transfer payments to provincial governments varied from 1 per cent to nearly 3 per cent of GNE during the years 1947–1961. Between 1956 and 1961 they increased rapidly from 1.6 per cent to almost 3 per cent of GNE. Transfer payments to municipal governments began in 1950, and rose from 0.01 per cent in that year to 0.9 per cent of GNE in 1961. Thus, in the latter year, total transfer payments to the two levels of government exceeded 3 per cent of GNE.

Federal transfer payments to the provinces consist of two main categories, which may be termed unconditional and conditional. The former consist of payments under fiscal arrangements as well as subsidies and special grants such as those to the Atlantic Provinces. These unconditional grants reached a peak of \$544 million in the fiscal year 1961–62 (budgetary data), but fell to an estimated \$265 million for the fiscal year 1962–63, as new tax arrangements came into force. Under these arrangements the Federal Government will collect individual and corporate income taxes for the provinces at rates varying among the provinces.

TABLE 35
PROJECTED FEDERAL GOVERNMENT TRANSFER PAYMENTS
TO PROVINCIAL AND LOCAL GOVERNMENTS,
1966–1991
(Per Cent of GNE)

Year	To Provincial Governments		Total	To Municipal Govern- ments	Total
	Unconditional	Conditional			
	(a)	(b)		(c)	
1966.....	0.7	2.7	3.4	0.1	3.5
1971.....	0.9	3.3	4.2	0.2	4.4
1976.....	1.0	3.7	4.7	0.2	4.9
1981.....	1.1	3.8	4.9	0.2	5.1
1986.....	1.2	4.0	5.2	0.2	5.4
1991.....	1.3	3.9	5.2	0.2	5.4

(a) Federal-provincial fiscal arrangements, subsidies, and special unconditional grants.

(b) Grants-in-aid and shared-cost contributions for highways, hospital insurance, other health, welfare, education, natural resource industries, and other.

(c) Grants in lieu of property taxes and special grants-in-aid.

Source: Appendix F, Tables F-9 and F-10.

This has reduced the grants to the provinces which now consist of what are called the equalization and stabilization payments determined by agreed formulas. The statutory subsidies and special grants to the Atlantic Provinces continue to be paid.

The conditional grants have increased rapidly in recent years. They were less than \$100 million annually before the fiscal year 1956-57. After that year they increased to an estimated \$754 million in the fiscal year 1962-63. The conditional grants have thus come to overshadow the unconditional payments. The main category which has contributed to this rise is the grants for health services, but grants for education, chiefly for vocational, technical, and higher education, have also become significantly large. The following tabulation indicates the changes for the years 1956 to 1962:

In Millions of Dollars

Type of Expenditure	Fiscal 1956-57 (Actual)	Fiscal 1962-63 (Estimates)
Hospital Insurance	—	324
Other Health	36	49
Education	5	105
Highways	27	66
Social Welfare	35	151
Other	8	59
TOTAL	111	754

In the future it is assumed that the Federal Government will make inter-governmental transfer payments equal to the projected surpluses of federal revenue over federal expenditure, excluding such payments. Table 35 provides estimates. Unconditional grants to the provinces are likely to increase in relative terms more rapidly in the future, possibly from 0.7 per cent to 1.3 per cent of GNE over the period 1966-1991. Such payments ensure greater independence of the provincial governments than do conditional grants. But it is highly unlikely that a general system of grants which is completely unconditional would be acceptable; there are a number of reasons why Canada may retain a mixed system of conditional and unconditional grants. Hence it is assumed that conditional grants will rise from 2.7 per cent to nearly 4 per cent of GNE during the 1966-1991 period.

Considerable expansion of payments to the municipal governments is also foreseen as urbanization proceeds; federal assistance for urban renewal, housing, and sanitation will also grow. Here it is estimated that the totals will grow from 0.1 per cent to 0.2 per cent of GNE during the period 1966-1991. This is a very modest estimate, and federal transfers may be much more substantial. In this event, transfer payments to provincial governments will tend to rise less than projected above.

B. Provincial Government Transfer Payments

During the period 1947–1961 the provincial governments have had small surpluses or deficits in the aggregate. Before 1959 there were five surpluses during this period, and none exceeded 0.2 per cent of GNE. There were six deficits with none exceeding 0.3 per cent of GNE. After 1958 the provincial governments moved into a continuous deficit position, with deficits of about one per cent of GNE after 1959. Table F–8 in Appendix F provides detailed data.

After including intergovernmental transfer payments the provincial sector showed surpluses in nearly all years before 1960, and small deficits in 1960 and 1961. The following tabulation illustrates the situation in selected years:

PER CENT OF GNE
(In Current Dollars)

	1951	1956	1961
Own revenue.....	5.5	5.2	7.0
Own expenditure	5.4	5.4	7.9
Surplus or deficit (–) before intergovernmental transfers	0.1	–0.2	–0.9
Add transfers from the Federal Government	1.2	1.6	2.9
Add transfers from the municipal governments	0.0	0.0	0.1
Deduct transfers to the municipal governments	–0.9	–1.2	–2.3
Surplus or deficit (–) after intergovernmental transfers	0.4	0.2	–0.2

Source: Appendix F, Tables F–8 and F–9.

We have noted the substantial increase in federal transfer payments to provincial governments. At the same time provincial transfer payments to municipal governments have increased markedly, from less than one per cent of GNE in 1951 to about 2.3 per cent in 1961. These payments consist chiefly of conditional grants to school districts, conditional grants to municipalities for health and welfare, highways, and other purposes, as well as some unconditional grants. Municipal transfer payments have been small, and were less than 0.1 per cent of GNE throughout the period 1947–1961.

In interpreting the surplus or deficit position of the provinces in the aggregate, it should be borne in mind that some provinces had large deficits while others, notably Alberta, had substantial surpluses.

In the future it is envisaged that provincial grants to schools and municipalities will increase greatly, and to a point which bring with it some provincial deficits, implying modest increases in provincial debts in aggregate. This does not necessarily mean that all provinces will operate in such a fashion. The federal grants system may be designed to enable the fiscally weaker provinces to avoid deficits, but this does not preclude surpluses in other provinces.

Table 36 provides a summary view of the projections for the 1966–1991 period. In previous chapters our estimates of provincial government revenue and

TABLE 36
PROJECTED INTERGOVERNMENTAL TRANSFERS OF PROVINCIAL GOVERNMENTS,
1966-1991
(Per Cent of GNE)

Year	Own Revenue	Own Expenditure	Deficit(-)	Transfers from Federal Government	Transfers to Municipal Governments	Net Transfers	Net Surplus or Deficit (-)
1966.....	9.0	10.0	-1.0	3.4	-2.5	0.9	-0.1
1971.....	9.7	11.5	-1.8	4.2	-2.6	1.6	-0.2
1976.....	10.1	12.4	-2.3	4.7	-2.6	2.1	-0.2
1981.....	11.0	13.1	-2.1	4.9	-2.8	2.1	0.0
1986.....	11.2	13.6	-2.4	5.2	-2.8	2.4	0.0
1991.....	12.0	14.2	-2.2	5.2	-3.0	2.2	0.0

Source: Appendix F, Tables F-8 and F-9.

expenditure indicate growing deficits, before including intergovernmental transfer payments. After receipts from the Federal Government and payments to the municipal governments, the net effect would be small deficits. It is assumed that municipal transfer payments to provincial governments will cease in the future or be offset against the provincial transfer payments to municipalities.

C. Municipal Government Transfer Payments

Municipal government transfer payments to other levels of government have been small in the past. They consist chiefly of payments to the provincial governments. Between 1947 and 1961 these amounted to from 0.04 per cent to 0.09 per cent of GNE. The bulk of these are payments relating to health services. For the future it is assumed that these payments from the municipal to provincial governments will be reduced or will be offset against provincial transfers to the local governments.

Transfer payments from the Federal Government to local governments were from 0.01 per cent to 0.09 per cent of GNE over the period 1950–1961. It is expected that these will continue to increase as indicated above.

TABLE 37
PROJECTED INTERGOVERNMENTAL TRANSFER PAYMENTS OF MUNICIPAL
GOVERNMENTS, 1966–1991
(Per Cent of GNE)

Year	Own Revenue	Own Expenditure	Deficit(–)	Transfers from Federal Government	Transfers from Provincial Governments	Net Surplus or Deficit
1966.....	5.5	8.4	–2.9	0.1	2.5	–0.3
1971.....	5.9	8.8	–2.9	0.2	2.6	–0.1
1976.....	6.4	9.3	–2.9	0.2	2.6	–0.1
1981.....	6.7	9.8	–3.1	0.2	2.8	–0.1
1986.....	7.1	10.2	–3.1	0.2	2.8	–0.1
1991.....	7.4	10.7	–3.3	0.2	3.0	–0.1

Source: Appendix F, Tables F–8 and F–9.

Transfer payments received from the provincial governments have risen from about 0.8 per cent of GNE in 1947 to 1.0 per cent in 1954, and to 2.3 per cent in 1961. It is expected that the percentage will continue to rise in the future to 3 per cent as set out in Table 36 dealing with projections of provincial transfer payments.

Between 1947 and 1961 the aggregate expenditure of all municipal governments exceeded the aggregate municipal revenue in all years. The annual deficit

before intergovernmental transfers, increased steadily from 1 per cent of GNE in 1947 to over 3 per cent in 1961. Table F-8 in Appendix F provides the details. After transfer payments received and paid out there were still deficits in all years in the period 1947-1961, ranging from about 0.5 per cent of GNE during the early years to nearly one per cent during the more recent years. The total municipal debt has increased accordingly. The details are found in Table F-9 in Appendix F.

Table 37 provides a summary view of projected future municipal revenue expenditure, transfers, and surplus-deficit position. Before transfer payments the municipal governments would have deficits of about 3 per cent of GNE before 1976, and above 3 per cent after that. Nearly all the gap between own revenue and own expenditure would be filled by transfer payments from the federal and provincial governments. Consequently, there would be, in the aggregate, relatively small deficits, and the rise in municipal debt would be modest. This would not preclude specific municipalities from having larger deficits, or from having surpluses with corresponding increases or decreases in debt. We could also make different assumptions regarding the size of transfers, involving larger or smaller municipal deficits.

D. Summary

The combined projections of total revenue and expenditure for all three levels of government imply that there would be some increases in public debts over the long run. The Federal Government is expected to have surpluses before payments to the other levels of Government but small deficits after such payments. Provinces and municipalities will have substantial deficits before intergovernmental transfers and small deficits after. Federal transfers to the provincial governments would enable the latter to close most of the gap between revenue and expenditure. Federal and provincial transfers to the municipal governments would do the same thing for them. Table F-10 in Appendix F provides estimates in dollar terms.

Many adjustments can, of course, be made in a system of intergovernmental transfers. The one presented here is but one potential scheme and it is based upon assumptions set out in various places of the discussion. A reallocation of functions from provincial and municipal levels would reduce the need for transfer payments, but might reduce efficiency of operations in the whole public sector. Similarly, a substantial transfer of revenue sources, such as income and corporate taxes, from the federal to the other two levels would tend to reduce fiscal equity. Many alternative assumptions could be made with respect to the treatment of public debt.

What is basic in these projections are the estimates of expenditures. These reflect mainly the growth of population, the rapid trend toward urbanization, the expanding demand for more diversified public services and the growth of Gross National Product. Once expenditure estimates are available, one can consider a

number of alternatives in obtaining the funds required on the basis of assuming the performance of given functions among levels of government, and in working out systems of intergovernmental transfers. The attempt set out here is but one of many alternatives; consequently it is largely illustrative. A consideration of various other schemes of allocation of functions and revenue sources, and of transfers, would entail much more discussion than has been presented here. Nevertheless the estimates offered in this report may serve as a framework for public discussion. Decisions as what expenditures should be made and how they should be financed are in the final analysis determined by the political processes of the nation.

Projections of Government Expenditures on Health Services

A. Introduction

Within the framework of general economic growth and the system of public finance discussed in previous Chapters, we can turn to a consideration of prospective government expenditures on health services. To this end we adopt the estimates and projections of total expenditure on health services in Canada made by Professor Madden.¹ He has set out three projections, a low, a high, and a "most likely" one. Here we take the "most likely" projection, and fit it into the framework of the high projection of GNE and accompanying system of public finance. Under the low projection of GNE the level of health expenditure, including both private and public, would be somewhat lower than under the high projection, but the relationships of health expenditure to GNE, government expenditure and revenue, and intergovernmental transfers would be much the same as under the high projection of GNE. There would be some minor differences in ratios and adjustments, the over-all system of analysis remaining the same. To sum up, here we present the "most likely" projection of health expenditure developed by Professor Madden within the public finance system outlined in previous chapters and within the framework of the high projection of GNE made by Professor Brown. Further, we also adopt the division of private and public expenditure on health services made by Professor Madden in his projection.

B. Total Expenditure on Health Services

International comparisons indicate that in developed countries during the 1950's, it was typical for total health expenditure (private and public) to account for three to five per cent of GNP. The United States was at the upper end of the

¹ Madden, J.J., *The Economics of Health*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer.

scale and the United Kingdom at the lower end.¹ At that time, before the national hospital insurance scheme was introduced, Canada spent nearly four per cent of GNE on health. It is rather difficult to make valid comparisons of government expenditure on health services because of the lack of reliable data for local governments in some countries and because of differences of classification of outlays. It does appear, however, that costs of providing health services, for various reasons, are higher in North America where there is a tradition of producing them in the private sector than in a number of European countries where the reverse is the case.

A United Nations report puts the matter as follows:

"The fragmentary health expenditure estimates make generalization difficult... Personal spending on health appears to constitute more than half of what Governments and consumers together spend; this conclusion, however, depends to some extent on the fact that health services and products tend to be higher priced in the private than in the public sector, and the result might in any case be altered if all levels of government could be included in all cases and if all consumer expenditures derived from government transfer payments could be screened out. Of incidental interest is the contrast between countries like Sweden and especially the United Kingdom, where expenditures on health are largely made by the Government, and countries like Canada and especially the United States, where they are largely private."²

One of the main reasons for the difference in costs relative to the fraction of GNE devoted to health expenditures is that the average level of remuneration of physicians and other professional staff in countries like Sweden and the United Kingdom is lower, relative to general income levels than in Canada and the United States. There are also differences in the prices of drugs. Furthermore, it appears that in general, North Americans "buy" a larger quantity of health services than Europeans. Beyond this there is the qualitative question of standards of health services, the argument often being that standards are lower in European countries than in Canada and in the United States. This raises a host of problems, but if we use death rates, infant mortality rates, and the incidence of various kinds of diseases as criteria for comparisons of standards, we have to admit that the differences are minor.

It has been estimated by Professor Madden that the total expenditure on health services in Canada, both private and public, increased from \$81.40 to \$99.40 per capita in terms of constant 1957 dollars between 1957 and 1961.³ This represented a rise from 4.24 to 5.18 per cent of GNE.⁴ The "most likely" projection indicates an expenditure of \$150 per capita by 1971 (in 1957 dollars), of \$202 per capita by 1981, and of \$240 per capita by 1991.⁵ This implies a rise to six per cent of GNE by 1971 and to over 6½ per cent in the 1980's, assuming the high

¹ See Department of Economic and Social Affairs, United Nations, *Report on The World Social Situation*, New York: 1961, p. 67.

² *Ibid.*, pp. 67 and 68.

³ Madden, J.J., *op. cit.*

⁴ *Ibid.*

⁵ *Ibid.*

projection of GNE. Under the low projection of GNE the ratio would be almost 6½ per cent in 1971, and about 7½ per cent during the 1980's. These projections have been made on the basis of assuming extensions of existing government programs, the introduction of a health care system covering the nation, and the pattern and trend of private expenditure on health services. Here we are concerned with the portion which may be financed by governments.

C. Total Government Expenditure on Health Services

Government expenditure on health services in Canada more than tripled between 1947 and 1961 in real terms. The rise was from about \$300 million to over \$1,000 million in terms of constant 1957 dollars.¹ In 1947 it absorbed 6.3 per cent of total government expenditure, while in 1961 it exceeded 9 per cent. By reference to GNE the increase was from 1.5 per cent to nearly 3 per cent.

In 1961 the publicly financed portion of the total spent on health services was about 55 per cent. In the projections of Professor Madden it is assumed that 82 per cent will be government-financed in 1966; by 1971 and after, up to 1991, it is suggested that the ratio will be 85 per cent. The resulting projections for government expenditure on health services are set out in Table 38.

TABLE 38

GOVERNMENT EXPENDITURE ON HEALTH SERVICES 1961 AND PROJECTIONS 1966 TO 1991 BY REFERENCE TO THE HIGH PROJECTION OF GNE

Year	In Millions of Constant 1957 Dollars	Percentage of Total Government Expenditure	Percentage of Gross National Product
1961 (a).....	1,032	9.3	2.95
Projections (b)			
1966.....	2,015	13.2	4.48
1971.....	2,880	14.2	5.13
1976.....	3,835	14.6	5.50
1981.....	4,850	14.4	5.64
1986.....	5,980	14.0	5.62
1991.....	7,165	13.0	5.40

(a) Derived from Appendix B, Table B-1. The estimate differs somewhat from that of Madden, J.J., *The Economics of Health*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer.

(b) Derived from Madden, J.J., *op. cit.*, and termed the "most likely" projection between high and low ones.

¹ Appendix F, Table F-3.

In terms of constant 1957 dollars the total would double from about one billion in 1961 to two billion by 1966, with the extension of various health services, the inception of a national health care plan, and increases in per unit costs of operation. By 1971 the total would approach \$2.9 billion, continuing a rise to over \$7 billion by 1991. Health expenditures would increase from 9.3 per cent of total government expenditures to over 13 per cent in 1966, exceeding 14 per cent by the 1970's, but tapering off to 13 per cent by 1991. By reference to the high projection of GNE, government expenditures on health services are expected to increase from about 3.0 per cent in 1961 to 4.5 per cent in 1966, to 5.1 per cent in 1971, reaching a peak of 5.6 per cent in the 1980's and falling to 5.4 per cent in 1991.

Expenditure on hospital care is expected to continue to be the largest component of the total expenditure projected for health services. During the post-war period this category accounted for three-quarters or more of total government expenditure on health services. By the early 1960's the fraction had risen to six-sevenths. With the introduction of a national health care programme, the relative importance of hospital care expenditure would fall. In real terms, however, the increase will be very marked in any event, as the expenditure per patient-day is expected to rise significantly.¹

In the past government expenditure on medical, dental and allied services has been relatively small. Throughout the post-war years such expenditure approximated 9.2 per cent of GNE; from 1947 to 1961 it fell from 1.0 per cent to 0.6 per cent of all government expenditure, and from 16 per cent to 6 per cent of total government expenditure on health services.

There has been a lag in contrast to what has been done to provide hospital care on a universal basis. The pressures to do something are being felt through Canada. In 1962 Saskatchewan introduced a comprehensive scheme, and since then several provinces have begun serious studies, and even introduced, limited medical or health care schemes. One can expect substantial extensions by the provinces in the near future, and a federal policy to encourage the establishment of a national scheme is quite within the realm of possibility. The projections used here assume nation-wide coverage on a universal basis.

Finally, government expenditure on general and public health was from 12 to 15 per cent of total government expenditure on health in the post-war period, and has approximated one per cent of government spending on all services. In the future this category will become less important relatively to government expenditure on hospital and medical care, falling below 10 per cent of total government spending on health services. In real terms, however, one can expect a considerable rise associated with the over-all upward trend for health services.

D. Expenditure on Sanitation and Waste Removal

Government expenditure on sanitation and waste removal increased from about 9.3 per cent of GNE during the early post-war years to about 0.4 per cent

¹ See Madden, J.J., *op. cit.*, for a discussion of the factors inducing increases.

during most of the 1950's, and approaching 0.45 per cent in the early 1960's. With further urbanization, more pollution problems, and rising costs of finding water supplies the ratio can be expected to increase further, reaching at least 0.5 per cent of GNE by 1991. This may prove to be conservative, and 0.6 per cent might more likely over the long-term be foreseen here. But unlike other health services, the provision of sanitation is fairly capital-intensive and not so labor-intensive. Hence sanitation expenditures per unit of service can be expected to rise less rapidly than in the case of other health services.

TABLE 39

GOVERNMENT EXPENDITURE ON SANITATION AND WASTE REMOVAL 1961 AND PROJECTIONS 1966 TO 1991 BY REFERENCE TO THE HIGH PROJECTION OF GNE

Year	In Millions of Constant 1957 Dollars	Percentage of Total Government Expenditure	Percentage of Gross National Product
1961.....	153	1.4	0.44
Projections			
1966.....	200	1.3	0.45
1971.....	260	1.3	0.46
1976.....	330	1.3	0.47
1981.....	415	1.2	0.48
1986.....	520	1.2	0.49
1991.....	665	1.2	0.50

Source: Appendix F, Table F-3.

The expenditure on sanitation, under the assumptions of the projections, will be about 1¼ per cent of total government expenditure on all services, and somewhat less than 10 per cent of the expenditure on general and public health, hospital care, and personal health care. The municipal governments will be expected to continue to provide for sanitation and waste removal. The federal and provincial governments have made beginnings in providing some grants and loans to assist in financing capital outlays. In some provinces, for example, in Alberta, the process of providing loan funds has been going on for a decade or more. The Municipal Development and Loan Act passed by the Canadian Parliament in June, 1963 has paved the way for increasing federal assistance for municipal sanitation projects. With their relatively inelastic revenue structure, municipal governments will require considerable transfer payments and loans.

E. Intergovernmental Transfer Payments

It is envisaged that the provincial governments will provide the bulk of the health services in the future as in the past. On the other hand, the Federal Government may provide a large part of the funds required. The municipal governments can

be expected to remain of great importance in the spheres of public health and sanitation.

Table 40 provides a summary of projections of expenditure on health services by the Federal Government for 1966–1991. Expenditure on its own functions (see Chapter IV) is projected at 0.3 per cent of GNE. This is above the post-war ratio of 0.2 per cent. It is anticipated that a number of advisory, consultative, research, and other activities will expand in keeping with the projected rise in public expenditure on health services. Grants to the provincial governments will rise greatly under the assumption that the Federal Government will provide half of the funds for health expenditures by governments. Thus grants to the provinces for general and public health, hospital construction, medical and health care, and hospital care are projected at a level which would equal about seven-eighths of total federal spending on health services 1966–1991. Total federal expenditure on health services is expected to rise from nearly \$400 million (in constant 1957 dollars) in 1961 to over \$1,000 million in 1966, and to almost \$3,600 million by 1991. Under the low projection of GNE the amounts spent would be somewhat less, but

TABLE 40
EXPENDITURE ON HEALTH SERVICES FEDERAL GOVERNMENT,
INTERGOVERNMENTAL DATA 1956 AND 1961, AND PROJECTIONS 1966–1991^(a)

Year	Total Own Functions ^(b)	Total Grants to Provinces ^(c)	Total Net General Expenditure ^(d)	
	In Millions of Constant 1957 Dollars	In Millions of Constant 1957 Dollars	In Millions of Constant 1957 Dollars	Per Cent of Total Federal Revenue
1956.....	82	33	115	2.0
1961.....	71	320	391	6.3
Projections				
1966.....	135	872	1,007	12.1
1971.....	165	1,275	1,440	12.1
1976.....	210	1,708	1,918	13.4
1981.....	255	2,170	2,425	13.4
1986.....	314	2,675	2,990	13.0
1991.....	400	3,182	3,582	12.4

(a) By reference to the high projection of GNE.

(b) Expenditure on health services provided and performed directly by the Federal Government, i.e., on its own health functions. This has been projected at 0.3 per cent of GNE 1966–1991.

(c) Includes grants for hospital insurance and diagnostic services, medical and health care schemes, and other health services. The projections are made on a basis by which the Federal Government pays 50 per cent of the cost of all government outlays on health services from 1966–1991.

(d) The net general expenditure is the total contribution of the Federal Government, amounting to 50 per cent of all government spending on health, 1966–1991.

Source: Appendix F, Tables F-3, F-4, and F-10.

it is still assumed that the Federal Government would meet half of the total public expenditures on health services, and that about seven-eighths of its health outlays would consist of grants to the provincial governments. Under the high projection of GNE and accompanying government expenditures (see Chapter VI), health outlays can be expected to rise from a little over 6 per cent to 12 per cent of the projected total federal revenue from 1961 to 1966. Beyond that date there would be a further rise to almost 13½ per cent in the 1980's, followed by a decline to about 12½ per cent in 1991.

The projections for the provincial governments are set out in Table 41, assuming the high projection of GNE. It is anticipated that the total expenditure on health services performed by the provincial governments will rise from about \$900 million (in constant 1957 dollars) to nearly \$1,800 million in 1966, to over

TABLE 41
EXPENDITURE ON HEALTH SERVICES PROVINCIAL GOVERNMENTS,
INTERGOVERNMENTAL DATA 1956 AND 1961, AND PROJECTIONS 1966-1991^(a)

Year	Total Own Functions	Add Grants to Municipalities	Deduct Grants from Federal Government	Deduct Grants from Municipalities	Total Net General Expenditure ^(f)	
	In Millions of Constant 1957 Dollars				In Millions of Constant 1957 Dollars	Per Cent of Own Revenue
	(b)	(c)	(d)	(e)		
1956.....	348	6	- 33	-15	306	18.7
1961.....	891	11	- 320	-13	570	23.3
Projections						
1966.....	1,790	14	- 872	0	932	23.1
1971.....	2,605	16	-1,275	0	1,346	24.7
1976.....	3,485	21	-1,708	0	1,798	25.6
1981.....	4,425	25	-2,170	0	2,280	24.1
1986.....	5,450	32	-2,675	0	2,807	23.5
1991.....	6,500	40	-3,182	0	3,358	21.1

(a) By reference to the high projection of GNE.

(b) Expenditure on health services performed directly by the provincial governments, i.e., in their own health functions. Projected for 1966-1991 as residual of total government expenditure on health after deducting the "own" expenditures of the federal and municipal governments.

(c) Net grants, projected at 15 per cent of total municipal government expenditure on health 1966-1991.

(d) From data in Table 40.

(e) Eliminated in the projections and assumed to be offset against grants from provinces to municipalities.

(f) Total contribution of the provincial governments toward the cost of health services.

Source: Appendix F, Table F-3, F-4, and F-10.

\$2,600 million in 1971, and to \$6½ billion in 1991. In addition, there will be relatively small grants made to the municipalities; these have been projected at 15 per cent of projected municipal expenditure on health services. Grants from the Federal Government are expected to finance a large part of the provincial expenditure. The net general expenditure of the provincial governments, i.e., their total contribution to financing health services, is considerably smaller than the total expenditure on provincial health services. It is expected to rise from about \$570 million (constant 1957 dollars) to over \$930 million 1961–1966, to almost \$1,350 million in 1971, and to about \$3½ billion by 1991. In 1961 the net general expenditure on health services was a little more than 23 per cent of the total revenue collected from own sources by the provinces. This ratio may be expected to rise to over 25 per cent by 1976, and then to fall to 21 per cent in 1991 (see Table 41).

The projected municipal expenditures on health services (excluding sanitation and waste removal) are set out in Table 42, assuming the high projection of GNE. The totals are small relatively to the other two levels of government. It is expected that health expenditure will absorb a decreasing proportion of municipal revenue, from about 4 per cent of "own revenue" in 1961 to 2.3 per cent in 1991.

In terms of the quantity of health services to be provided, the provincial governments are expected to continue to account for seven-eighths or more of the

TABLE 42
EXPENDITURE ON HEALTH SERVICES MUNICIPAL GOVERNMENTS
INTERGOVERNMENTAL DATA 1956 AND 1961, AND PROJECTIONS 1966–1991^(a)

Year	Total Own Functions ^(b)	Add Grants to Provincial Governments ^(c)	Deduct Grants from Provincial Governments ^(d)	Total Net General Expenditure ^(e)	
	In Millions of Constant 1957 Dollars			In Millions of Constant 1957 Dollars	Per Cent of Own Revenue
1956.....	70	15	– 6	79	6.6
1961.....	70	13	–11	72	4.1
1966.....	90	0	–14	76	3.1
1971.....	110	0	–16	94	2.8
1976.....	140	0	–21	119	2.7
1981.....	170	0	–25	145	2.5
1986.....	215	0	–32	183	2.4
1991.....	265	0	–40	225	2.3

(a) By reference to the high projection of GNE.

(b) Expenditure on health services performed directly by the municipal governments, i.e., on their own health functions. Projected at 0.2 per cent of GNE for 1966–1991.

(c) Eliminated in the projections. See Table 41, footnote (e).

(d) See Table 41.

(e) Total contribution of the municipal governments to health expenditure.

Source: Appendix F, Tables F-3, F-4 and F-11.

total. The financing is assumed to be 50 per cent federal by 1966 and thereafter, and the provincial-municipal the other half, with the municipal providing less than 5 per cent of the total funds required for health services. These divisions among the three levels of government, of course, will be subject to a great deal of political debate and discussion.

Financing Health Services in The Future

In Chapter VII we set out a suggested pattern of government revenue for the period 1961–1991. We indicated that if the gross national product rises, as projected by Professor Brown, yields from existing revenue sources will rise at least at a rate equal to the rate of growth of GNE and even more, given present rates and exemptions. Some increases in the rates, as well as reductions in exemptions of specific taxes will be necessary within the scope of the projections made. All this implies the adjustment of rates and exemptions of the various sources of revenue, along the whole revenue-collecting front, rather than a concentration in one or two places with any particular kind of tax. We shall illustrate by reference to the five-year period 1961–1966, to all three levels of government, and to the total financial requirements for the performance of all their functions.

A. Sources of Revenue of all Governments, 1961–1966

We have estimated that between 1961 and 1966 total government expenditures will rise from \$11.1 billion to \$15.3 billion in constant 1957 dollars under the high projection of GNE.¹ This is an addition of \$4.2 billion by 1966. The revenue is expected to increase from \$10.4 billion to about \$15 billion in 1957 dollars, a rise of \$4.6 billion. The over-all deficit, which was \$0.7 billion (1957 dollars) in 1961, is expected to be reduced to \$0.3 billion in 1966 because of increased revenue collections. GNE, of course, is expected to rise by nearly \$10 billion during the period 1961 to 1966 under the high projection.

In percentage terms the revenue collected in 1961 was 29.8 per cent of GNE. By 1966 it is projected to be 33.3 per cent of GNE, or about 3.5 percentage points more than in 1961. The increases in revenue sources to provide this are as follows below.

It is seen that increases in a variety of taxes and other revenue sources are expected to provide the necessary funds for the anticipated increases in expenditures. There would still be an over-all deficit of 0.7 per cent of GNE in 1966.² Direct taxes

¹ Appendix F, Table F–1.

² Appendix F, Table F–9.

	Per Cent of GNE
Direct taxes on persons, federal	0.1
Withholding taxes, federal	0.1
Customs import duties, federal	0.1
Excise taxes, federal	0.3
Miscellaneous, federal	0.4
Direct taxes on persons, provincial	0.9
Direct taxes on corporations, provincial	0.5
Gasoline taxes, provincial	0.1
Retail sales tax, provincial	0.3
Miscellaneous, provincial	0.2
Property taxes, municipal	0.2
Miscellaneous, municipal	0.3
Total	3.5

Source: Appendix F, Tables F-5, F-6 and F-7.

on persons and corporations are expected to increase substantially as the provinces raise the rates and the federal government recovers the lost ground of 1962 and 1963. Altogether these taxes, including succession duties and estate taxes, as well as hospital insurance premiums,¹ are expected to account for almost one-half of the additional tax burden. Provincial sales taxes are expected to rise considerably, while increases for other sources are expected to be more moderate relatively to GNP.

We could go through the same exercise for the low projection of GNP; the results would be comparable to those in the above example. For the period 1966-1971 the increases in revenue relatively to GNP are smaller than for the 1961-1966 period. Taking the high projection the following changes relative to GNE emerge:

	Increase as Per Cent of GNP 1966-1971
Direct taxes on persons, federal	0.3
Direct taxes on corporations, federal	0.1
Excise taxes, federal	0.3
Miscellaneous, federal	0.3
Direct taxes on persons, provincial	0.1
Direct taxes on corporations, provincial	0.1
Motor vehicle licences, provincial	0.1
Retail sales tax, provincial	0.2
Miscellaneous, provincial	0.2
Property taxes, municipal	0.2
Miscellaneous, municipal	0.2
Total	2.1

Source: Appendix F, Tables F-5, F-6 and F-7.

¹ In 1961 personal income taxes yielded \$2,131 million, corporate income taxes \$1,612 million, succession duties and estate taxes \$144 million, hospital insurance premiums \$120 million, and other direct taxes \$116 million. (DBS, *National Accounts, Income and Expenditure, 1962*, Ottawa, 1963).

For the 1966–1971 period, then, increases in direct taxes would be of less importance than in the previous period. Generally, no one revenue source would be stressed greatly.

From 1971–1976 total revenue would rise from 34.5 per cent to 37.1 per cent of GNE. The net rise of 1.7 per cent of GNE is considerably less than the 2.1 per cent for the 1966–1971 period, and the 3.5 per cent for the 1961–1966 period. For 1976–1981 our data suggest a rise in revenue equivalent to 1.6 per cent of GNE, with a tapering off to 1.2 per cent for 1981–1986, and to 1.4 per cent for 1986–1991. A variety of revenue sources would provide the required increases.¹

B. Financing Health Services

Projected expenditure on health services has been included in the total expenditure estimates. This also means that we have accounted implicitly for their financing. However, it is helpful to consider what specific levies might be made to help the financing of additional health services, particularly since they account for much of the rise in government expenditure and required revenue for the years 1961–1971.

The following tabulation sets out the actual net general expenditure on health services in 1961 and those projected for 1966 under the high projection of GNE:

(In Millions of 1957 Dollars)

	1961	1966	Increase
Federal	391	1,007	616
Provincial	570	932	362
Municipal	71	76	5
Total	1,032	2,015	983

Source: Appendix F, Table F-4.

Expressed in terms of percentages of GNE the expenditures are as follows:

(Per Cent of GNE)

	1961	1966	Change
Federal	1.12	2.24	1.12
Provincial	1.63	2.07	0.44
Municipal	0.20	0.17	-0.03
Total	2.95	4.48	1.53

¹ See Appendix F, Tables F-5, F-6, F-7, and F-8.

We note that additional revenue of 1.53 per cent of GNE is required to finance the additional health services in 1966. This amounts to \$687 million of the projected 1966 GNE of \$44,916 million (in constant 1957 dollars).

The remaining \$296 million of the total additional \$983 million required would be forthcoming from the present revenue structure. In other words, nearly \$300 million additional revenue will be available for health services in 1966, given the high projection of GNE and the present tax rates and exemptions. Nearly \$700 million of additional revenue will have to be obtained under our assumptions by raising tax rates, lowering or eliminating exemptions, or introducing new taxes, or a combination of all these alternatives.

We have assumed that additional revenue will rise by 3.5 per cent of GNE 1961–1966 as various taxes and other revenue sources yield more revenue with the projected rise in GNE, as tax rates are increased, as exemptions are reduced or removed, and as new revenue sources are utilized. As this is done we could look at the problem of providing additional funds for health services as part of the whole picture of raising revenues. If revenues are increased by 3.5 per cent of GNE 1961–1966 (from 29.8 per cent to 33.3 per cent), then the ratio attributable to additional financing of health services is 1.53/3.50, or a little more than two-fifths. The additional \$700 million would come from a variety of revenue sources as indicated above. This would be a general and over-all method of raising the required additional revenue, and it would mean reliance upon the yearly budgetary processes of the governments concerned.

1. *Federal Government* – It is useful, however, to set out some alternative specific measures, especially since there are important psychological and political factors involved in initiating new services and their financing. We shall consider the federal government first. On the basis of our estimates it will need to raise additional revenues for health services equivalent to 1.12 per cent of GNE in 1966 (that is, an increase from 1.12 per cent to 2.24 per cent of GNE). There are many ways of obtaining this revenue, and we can only illustrate the possibilities that might be considered.

Federal direct taxes on persons yielded 5.8 per cent of GNE in 1961 of which the income tax accounted for 5.6 per cent and succession duties and estate taxes a little over 0.2 per cent. Altogether the personal income tax provided \$2,050 million of revenue¹ and succession duties and estate taxes \$80 million. The latter would have to be made exceedingly stiff levies to provide the additional funds required for health services, and they cannot in any way be considered as a major source of additional revenue. The aggregate taxable value of estates in the fiscal year 1960–61 was \$382 million.² This was a little more than one per cent of GNE, a very small tax base. The base could be enlarged considerably by reducing the basic exemption from the present \$40,000 to \$20,000 or less. This would meet with wide-spread resistance, and there would be high costs to both tax-collectors and tax-payers if such modest estates were made taxable.

¹ Data from Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1962*, Ottawa, 1963.

² Department of National Revenue, *1962 Taxation Statistics*, Ottawa, 1962, p. 167.

The personal income tax, on the other hand, has a very broad base. In 1960 total personal income in Canada exceeded \$27 billion, or more than three-quarters of GNP. Almost 4.4 million persons filed returns in the fiscal year 1960-61 for a total income of \$18.6 billion; after exemptions and deductions the taxable income was \$9.7 billion.¹ The tax paid amounted to nearly \$1.8 billion, including Old Age Security Fund payments. Since 1962, under the federal-provincial fiscal arrangements for 1962-1967, all the provinces have shared the revenue collected from the tax, except the province of Quebec which collects its own personal income tax. Under these circumstances, the federal rates would have to be raised substantially. The increases required to meet all of the additional potential expenditure on health services would meet with much resistance. In our projections we have allowed for some increases and adjustments, sufficient to yield a revenue equivalent to 5.8 per cent of GNE in 1966.

Federal corporation income tax rates, together with provincial, are currently at a level which it is not desirable to increase. In the future, however, we have projected rising yields relatively to GNE on the assumption of a rapid rate of economic growth and a high rate of utilization of resources bringing with it significant increases in corporate profits.

Withholding taxes are collected from a small base, interest and dividends paid to foreigners, and they would not yield substantial amounts of revenue, even at high rates. The projection points to an increase in yield from 0.3 to 0.4 per cent of GNE over the period 1961-1966.

Customs import duties would have to be increased by about three-quarters to provide the additional revenue required for health services. This would be a drastic measure and not practical in the light of Canada's international trading commitments. Non-revenue objectives are important in this case and it would be desirable not to tamper at all with customs duties for the purpose of financing health services.

Excise duties would have to be more than doubled to provide the required revenue. This would make the prices of liquor and tobacco much higher than at present. There are various reasons which militate against such a step. There is leeway for some further increases in this area. While taxes on liquor and tobacco can be used to finance a part of the expanding health services, the fact that they are already high indicates the limitations inherent in any attempt to use this revenue source extensively.

The manufacturers' sales tax and other excise taxes offer considerable scope for revenue purposes. In 1961 they produced \$1,302 million of revenue, about 3.5 per cent of GNE. There are many exemptions and the rates are not unduly high. To provide the required additional revenue for health services, the rates would have to be raised by at least one-third. As in the case of the personal income tax this is within the realm of possibility if one were to use one

¹ *Ibid.*, p. 31.

source of revenue for raising the additional funds required. But it would be best to increase rates and to remove exemptions gradually. Again we come back to the proposition of proceeding along most of the revenue front in raising additional funds required.

Miscellaneous taxes, investment income, and other revenue sources offer some scope for action, but except for miscellaneous taxes, they are not suitable for providing additional revenue for health services.

The conclusion appears to be that the federal government can adopt a general approach as a first step in financing health services. In this case it would be a matter of budgetary policy, with attention given to all competing claims for funds. It is suggested here that there is scope for gradual increases in personal income tax rates, excise taxes, and possibly corporation income taxes. Adjustments in other sources are also possible. These are all matters for the federal government to decide.

In this process some new revenue sources might be explored. For example, levies on passenger transportation, long-distance telephone calls, and telegrams might be considered.

The passenger revenue of the two major railways systems has been declining in recent years, from \$85 million in 1957 to \$61 million in 1961. A tax or 10 per cent on passenger tickets would thus have yielded about \$6 million if there were no exemptions, and the trend is seemingly downward. Gross revenue from bus traffic was about \$48 million in 1961; a 10 per cent levy on this would have yielded less than \$5 million; the trend of bus revenue tends to be slightly upward. The passenger revenue of Canadian air lines has increased rapidly in the post-war period; in 1961 it amounted to \$187 million. A tax of 10 per cent would have yielded nearly \$19 million. The passenger revenue of water vessels operating under Canadian registry amounted to \$16 million in 1961, and there is little trend upward. A 10 per cent tax would have yielded less than \$2 million.

It appears, then, that in 1961 a 10 per cent tax on passenger transport would have yielded about \$30 million, about 0.08 per cent of GNE. Presumably the yield in 1966 would be a little less than \$40 million on the basis of the GNE projection.

Revenue from long-distance telephone calls increased from \$81 million to \$217 million in the years 1951-1961. A tax equivalent to 10 per cent of the revenue would have amounted to nearly \$22 million in 1961. Any levy would have to be specific rather than *ad valorem* in nature because of the need for rounding off to the nearest five cents (cf., coin telephones). There would be a very considerable nuisance element and inconvenience attached to this kind of tax. Telegraph revenues equalled nearly \$60 million in 1961. After allowing for exemptions of various kinds, one could hardly look for more than \$4 million to \$5 million of revenue on the basis of a 10 per cent tax.

In general, taxes on passenger transportation and on communications such as telephones and telegraphs would not provide significantly large revenues.

There are many inconveniences to both the companies concerned and to the public in collecting such revenue. Certain social policies, such as keeping the cost of northern transportation and communications as low as possible, would dictate exemptions. Indeed, a number of exemptions would reduce the tax base considerably. Altogether it is doubtful that much more than 0.1 per cent of GNE could be collected from taxes on transportation and communications. This is far short of the total required for financing additional health services, though such taxes, if administrative costs can be kept within bounds, would make a useful contribution to the total additional revenue required.

A variety of services present themselves as potential sources of revenue. These include laundry and dry-cleaning services, barbering and hairdressing, garage and repair services, and others. There are serious administrative difficulties in levying taxes on services; the nuisance element is strong, and enforcement costly. Most services also are peculiarly local in character, and if they are to be taxed, the provincial and municipal governments are the logical taxing bodies. Even then one would hesitate to recommend such taxes before other possibilities are exhausted. The totals collected would be minor compared to what could be done by adjusting, for example, income taxes upward by one or two percentage points. When all is said and done, the income tax provides the best available instrument for raising revenue in an equitable way. A good substitute for it would be an expenditure tax; this has more administrative drawbacks than the income tax; it is not a practical proposal, even though it has many merits from the points of view of efficient resource allocation, economic growth, and equity.

The federal government might institute lotteries along the lines of the football pools and lottery bonds in Western European countries. There are many ethical and economic arguments on this matter, most of them ancient and time-worn. Be that as it may, state lotteries provide considerable revenue in Western European countries and in countries of British Commonwealth, and they appear to provide considerable consumer satisfaction. They are a substitute for our penny stocks; it takes a substantial amount of money, not available to the average citizens, to play the stock market at all in Western Europe. One possible fiscal drawback is the high cost of administration and collection. A recent estimate of maximum amounts of government revenue which could be derived from lotteries in the United States puts the net in 1963 at one billion dollars.¹ Taking this figure at face value it appears that Canada could expect to net at least \$100 million or about 0.25 per cent of GNE. As an alternative, if the Federal Government did not wish to enter the field of operating lotteries the proceeds of which would be earmarked for health services, it could submit to Parliament proposals for amending the Criminal Code, which, if approved, would make it possible for provincial governments desiring to do so to operate lotteries for the same purpose.

¹ See Kinsey, Robert K., "The Role of Lotteries in Public Finance", *National Tax Journal*, March 1963, pp. 11-19. This article sets out the pros and cons of the whole question.

One simple scheme may be suggested here which would provide adequate revenue and which could be administered readily. The Old Age Security Fund provides revenue earmarked for old age pensions. Currently there are three types of taxes: first, a 3 per cent sales tax; second, a 3 per cent corporation income tax; and third, a 3 per cent personal income tax with a limit of \$90 for any one individual.¹ The estimated yields were as follows in the fiscal year 1961-62:

(In Millions of Current Dollars)

Sales tax.....	284.9
Individual income tax	259.0
Corporation income tax	100.1
Total	644.0

The total yield of \$644 million was 1.72 per cent of GNE for 1961. To finance the additional health services assumed for 1966, the Federal Government would need to collect 1.12 per cent more of the GNE than in 1961. If 2 per cent were added to each of the three taxes, their total yield would be 2.87 per cent of GNE, assuming to yield - GNE relationship of 1961. This is 1.15 per cent more of GNE than in 1961, and is just a little more than the additional 1.12 per cent required to finance the federal health expenditures projected for 1966.

2. *Provincial Governments* - On the basis of our estimates the provincial governments will need to raise additional revenues for health services equivalent to 0.44 per cent of GNE in 1966, an increase from 1.63 per cent to 2.07 per cent of GNE. This would amount to about \$200 million of additional funds to be raised by 1966 by adjusting the present revenue structure.

In general, the provincial governments could raise the required funds by increasing the rates for various sources of revenue. This has been discussed in Chapter VII where it has been suggested that the provinces will need to raise rates for existing revenue sources and to explore new ones to bring total revenue from 7 per cent of GNE to 9 per cent in 1966.

With respect to the financing of additional health services some provinces currently levy hospital insurance premiums. These could be introduced universally, and so could levies for other personal health care. A tax of \$10 per capita would provide more than the additional \$200 million required for additional health services, over and above the funds provided at present. The amount is purely suggestive here; the tax might be more than \$10 per capita, with exemptions for family circumstances.

Other alternatives for the provinces would be to utilize the method of financing the Old Age Security Fund. Under the present fiscal arrangements the provinces could levy additional amounts of personal and corporation income

¹ This was the situation in fall 1963 when this report was prepared. Subsequently, commencing January 1, 1964, an additional one-half per cent of personal income tax was imposed to cover increased old-age security payments, amending the formula to 3:3:3½.

taxes to meet additional expenditures on health services. To this end, an additional percentage point for each of these two taxes, plus an additional percentage point in retail sales tax, would furnish enough revenue to meet the needs for health expenditure. Other possibilities would include a payroll deduction plan by using and extending existing arrangements of financing medical care through employer-employee contributions. Or provinces could operate lotteries designed to assist in the financing of health care programmes provided appropriate legislative arrangements are worked with the Federal Government (see section on Federal Government financing in this chapter).

3. *Municipal Governments* – Under our projections the municipal governments would have no additional burdens relatively as far as health services are concerned in the future. However, they will have nearly all of the responsibility for sanitation and waste removal. Currently the provinces and the federal government are developing schemes of financial assistance which can be expected to proceed further in the future (see Chapters III and V).

C. Projections for 1971 to 1991

The funds required to finance additional health services beyond 1966 are of lesser relative magnitude than for 1961–1966. For 1961–1966 we have projected an increase amounting to 1.53 per cent of GNE, i.e., from 2.95 to 4.48 per cent of GNE. For the 1966–1971 period the projected rise is from 4.48 per cent to 5.13 per cent of GNE, or an addition of 0.65 per cent (see Appendix Table F–3). This implies some further upward adjustments in revenues, but on a smaller scale than during 1961–1966 because of the suggested establishment of major programmes up to 1966.¹ For 1971–1976 the projected increase is 0.37 per cent of GNE, for 1976–1981 it is 0.14 per cent, for 1981–1986 there is a decline of 0.02 per cent, and for 1986–1991 a further decline of 0.22 per cent of GNE. These additions to health expenditures can be financed readily by general or specific revenue adjustments, assuming the projected rise in GNE.

Finally, under the low projection of GNE we can say much the same things about methods of raising revenues as in the case of the high projection. The number of dollars involved is somewhat smaller under the low than under the high projection, but the relative magnitudes or percentages of GNE are quite comparable under both projections.

¹ If some of the major programmes are not implemented until the 1966–1971 period, then the timing pattern of the upward shift in revenue requirements would have to be adjusted accordingly, with the more rapid relative increase coming in the 1966–1971 period rather than in the 1961–1966 period assumed in this report.

Conclusions

A variety of problems present themselves in dealing with public financing of health services. First, there is the matter of determining the over-all level of health expenditure and the related questions of what health programmes to support. Second, there are decisions to be made with respect to the general level of government revenue and choices of the specific revenue sources to be used. Third, there are the problems of sharing actual health programmes among the several levels of government.

A. The Optimum Level of Health Services

It is becoming apparent that the process of allocating economic resources to the production of health services has both consumption and investment effects. Economists are addressing themselves increasingly to a long-neglected question, how investment in people affects the rate of economic growth.¹ Education and health services are both effective means whereby human resources are increased in quantity and improved in quality. Expenditure on health and education can yield benefits in terms of increasing national and international output which may exceed potential benefits from alternative uses of resources utilized. They may also yield benefits which fall below the rates of return on alternative investments. Much depends upon the length of the time period analyzed; many health and education programmes have long gestation periods. The point is that much expenditure on education and health is in the nature of capital investment, leading to increases in the national product over time.

It is customary, however, in the case of health services, to regard them as consumption. Yet there are many instances where expenditures on health programmes yield substantial returns even in the short run. For example, communicable disease control programmes obviously increase man-power available.

¹ For a comprehensive survey in compact form of the current discussion, see *The Journal of Political Economy*, The University of Chicago Press, Supplement: October, 1962 (Chicago, 1962). This issue contains eight papers presented before the Exploratory Conference on Capital Investment in Human Beings, held in New York City, December 1 and 2, 1961, and sponsored by the Carnegie Corporation of New York.

Similarly, other preventive services such as the provision of a safe water supply, various sanitary measures, and maternal and child health services, improve the quality and increase the quantity of man-hours available within a relatively short span of time. All of the preventive services mentioned, as well as others, have a lasting effect upon the labour force and its output, even in the long run. The provision of curative services, such as hospital and medical care of individuals, also increases output in both the short and long term. It matters little if the financing is private or public. When an individual purchases health services he improves his own health; if it is a case of a communicable disease other individuals also benefit; in this, and in the general case, there are significant consumption and investment effects. When the government finances the service both specific individuals and society at large benefit.

Attempts to measure the investment or capital component of health care are under way in some countries. Mushkin points out that in the United States, on the average, more than \$1,000 is spent per child up to the age of eighteen on health and medical services. She says that "to produce a labor force member aged eighteen at today's quantities and quality of health care and at today's prices, accordingly, upward of \$1,000 is spent on health resources alone".¹ Offsetting the cost there is a capitalized value of additional product arising from longer life spans and quality improvements of the labour force. Inevitably, then, if decisions are to be made about the appropriate level of national expenditure on health services, some estimates of benefits and costs are necessary. In the past these have been extremely rough in nature; in addition, in the early stages of building up a national structure of health services the gains are usually substantial and obvious. As the level of services increases, the benefits of alternative uses of scarce means make themselves felt, and this increases the desirability of appraising carefully new programmes and extensions of established ones.

There are various ways of assessing the economic results of health care. Some involve estimates of additional labour output gained through reductions in death, disability, and debility. The problems of measurement, however, are legion.² One estimate made in terms of labour force added by improved life expectancy indicates, for example, that the employed population in 1960 in the United States would have been about 13 million less than it was if death rates had not declined after 1900; the labour product added by the 13 million survivors was estimated at about \$60 billion, or more than one-eighth of GNP of the United States.³ Mushkin cites a variety of studies in her article, including the developmental-cost approach, the capitalized earnings approach, and cost-benefit analysis.⁴

¹ Mushkin, Selma J., "Health as an Investment", *op. cit.*, p. 136.

² *Ibid.*, pp. 138-143.

³ *Ibid.*, p. 145.

⁴ *Ibid.*, pp. 149-157.

Given fairly reliable estimates of the social benefits of a given health programme (or extension of one) we are not, however, out of the woods. It may be, at any given time, that the net benefits of a new health programme or extension of an established one are less than those which could be derived from alternative health programmes or from other projects and programmes in the whole economy. Considering the public sector, this implies analysis of the various competing expenditure proposals confronting governments. It also assumes analysis of the costs of raising the additional funds required; these will vary depending upon the methods used to obtain funds. The task, then, of deciding what programmes to embark upon at any given time is not an easy one, and it is not one that depends entirely upon economic analysis. Social and political considerations inevitably play a large role, and in the end it becomes the function of the politician to weigh all the relevant factors and make a decision.

In Canada, as elsewhere, health services are competing with other government functions for funds and resources available. We have assumed that health services will expand significantly in the future, as will expenditures on education. We have allowed for somewhat lower rates of increase for most other government services. This we have done within the scope of Professor Brown's projections of GNP.

B. Sources of Revenue

In this study it has been assumed that the trend toward an increasing proportion of public financing will continue. Financing from public funds enables the nation to provide minimum standards of service and to share the burden equitably. Our projections in Chapter IX presume that within a decade nine-tenths or more of all health services will be financed by governments.

We have suggested some special levies as such for the financing of health services. For the federal government there is a clear-cut proposal to finance along the lines of the Old Age Security Fund. There is a case for contributing subscriptions from potential beneficiaries and their employers, with the public treasury providing the residual amounts required for a given programme. Thus, hospital insurance premiums, such as those levied by Prince Edward Island, Ontario, Manitoba, and Saskatchewan are workable devices for the partial financing of hospital expenditures. Some other provinces might consider to make such levies. In large part these provincial levies are substituted for contributions to voluntary hospital insurance schemes in force before provincial government systems were introduced. They also have the virtue of being drawn from current consumption funds rather than from investment funds.¹ If we concede that expenditure on health is an investment, and the funds come largely from consumption, there is a positive net effect upon economic growth. In any event we

¹ This distinction should not be drawn too sharply since there will be some effects upon savings, and hence upon investment. But it seems appropriate to say that hospital insurance premiums are drawn from consumption funds to a larger extent than, for example, a corporation income tax.

have allowed for additional hospital insurance premiums to be levied in the various provinces, if they are deemed appropriate by the provincial governments concerned.

Otherwise we have suggested that if Gross National Product rises as projected by Professor Brown, yields from existing revenue sources will rise substantially. Some increases in the rates, and reductions in exemptions of specific taxes will be necessary in the short run, and also over the long term within the scope of the projections made. Specifically we think in terms of increasing the rates of the federal income and sales and excise taxes, and the provincial sales taxes. Adjustments of the revenue structure must be made in the light of changing conditions, and they constitute an exercise to be performed by the budgetary authorities continually and regularly. It is also highly desirable that all revenues and expenditures be dealt with in an integrated way.

C. The Allocation of Health Services among the Three Levels of Government

Given proposed or estimated expenditure on any function, and that such expenditure is deemed to be in the national interest, there remain the questions of the division of functions to be performed by the three levels of government and the division of expenditure and revenue. We shall deal with the first of these problems in this section.

From the point of view of what is usually called efficiency it appears that fairly large governmental units are necessary to obtain economies of scale for some government services. Defence is a case in point. In the sphere of health services, however, it seems that provinces and large municipalities can provide the required facilities at as low a cost as the federal government. For example, provincial governments and cities can operate hospitals which secure the utmost in economies of scale. On the other hand, small municipalities are not able to do so if a wide range of hospital services, embracing the latest technological and medical advances, is sought. But the fact of the matter is that many public health activities can be handled efficiently by provincial authorities, and by large municipalities.

Disadvantages of large-scale bureaucratic organization can offset economies of scale. If we wish to have an initial rule for the allocation of governmental functions it would be that one should have a given function performed at the lowest level of government consistent with economies of scale. This principle, of course, needs modification in the light of further principles discussed below. On the score of efficiency there are, by and large, a few health services which could be performed more efficiently by the federal than by the smaller units of government. Our projections of revenues, expenditures, and intergovernmental transfers rest upon the assumption that provincial and municipal functions, including health services, will expand more rapidly than federal ones.

If uniformity of standards and policies are sought, there is a strong case for central government jurisdiction. Certain functions, for example, defence,

monetary control, and international trade policies, must necessarily be national in scope and jurisdiction. There are also some health services which should be performed by the federal government in the national interest; these include the after-care of veterans, health examinations of immigrants, food and drug regulation, various consulting and advisory services, and a good deal of research. With respect to therapeutic services such as hospital and medical care there is a national interest in the provision of a minimum standard of service everywhere in the country. In this case it is not necessary for the federal government to administer the services; its function should be to investigate and define standards and to devise appropriate financial measures to ensure the ability of all parts of the country to provide an adequate level of services. Whether the measures are conditional or unconditional in nature will depend upon reigning political and social philosophies, upon regional attitudes, and upon the procedure of negotiating fiscal arrangements.

There is, in Canada, a tradition of maintaining considerable freedom of consumer choice. If this is accepted it follows that it is desirable that the local governments (including provincial) provide as many services of government as is feasible administratively and compatible with economies of scale. Again we have been influenced by this consideration in making our projections of the allocation of health services to be performed by the three levels of government.

The first and third principles outlined above tend to bring about a high level of participation by provincial and municipal governments. This implies that the desired level of expenditure cannot be attained in the financially less well endowed provinces without federal assistance. On the other hand, the second principle, the desirability of having uniform or minimum standards, also means heavy federal government participation financially and, to some extent, administratively. In our projections we have assumed that health service functions will continue to be performed by governments on the basis of the currently evolved system of functions allocated. This implies large federal government transfer payments to the provinces, a question to which we now turn.

D. Intergovernmental Relations and Transfers

The matter of the allocation of functions is part of the whole problem of intergovernmental relations, but it is desirable to discuss it separately. There is also the question of the allocation of revenue sources, and allied considerations involving fiscal transfers.

At present there are certain constitutional provisions regarding the division of revenue sources between the federal and provincial governments, as well as federal-provincial taxation arrangements arrived at by negotiation. The details need not detain us here.

There are certain general considerations to be kept in mind in deciding upon the division of revenue sources among the three levels of government. One is efficiency in the administration and collection of taxes. For example, local

governments find it difficult to obtain all the information required to ascertain taxable income in the administration of an income tax; they also lack jurisdiction in various cases. On the other hand, the property tax, which has a localized and readily ascertained and immobile base, can be administered equitably and efficiently by local governments. Indeed, they can administer and collect property taxes with less difficulty than the provincial and federal governments.

In the interest of economic and social progress, of efficiency in administrations, of regional and individual equity and freedom throughout the whole country, the federal government should administer income taxes, succession duties, customs import duties, and even a substantial modicum of excise taxes. This implies a federal government which is strong fiscally. In addition, it must have control monetary and banking matters. However, if we leave the provincial and local governments to perform the bulk of the services, there results an imbalance between revenues and expenditures, and the federal government must make large fiscal transfers to the regional governments. There is, then, an intergovernmental problem arising out of the differences in the fiscal capacities of different levels of government. That is, the allocation of functions and of revenue sources is such that one level of government (e.g., the federal) may have the capacity to collect revenues in excess of expenditures required for the performance of its own functions, while another level (e.g., the municipal) may have expenditure requirements in excess of its own revenues collecting capabilities.

There is a further problem related to the general one of the necessity for transfers. This arises because economic conditions and resources are not uniform throughout a federation or even within a unitary state. In fact it is the very nature of a federation that regions are dissimilar. Thus there arise differences in the fiscal capacities of governments at the same level. For example, there are some provinces in Canada whose ability to finance a defined level of services is much less than that of the others. Similarly, there are "wealthy" and "poor" municipalities within the provinces. This creates a need for equalization measures.

The differences in the fiscal capacities of the provinces is a matter of much concern in the provision of health services. Some provinces find it difficult to maintain adequate standards; to achieve the national average standards for health and other services they need to impose a tax burden above the national average. Differences in the fiscal capacities of municipalities within provinces is of less concern, since municipalities have relatively small net expenditures on health services. Nevertheless, the provinces need to be in a financial condition which enables them to provide adequately for the municipalities.

There are some other general aspects which deserve comment. One is federal action in the national interest, to induce provinces to undertake new health programmes or to extend existing ones. This problem arises when the jurisdiction left to the provinces is wide in scope and when there is rapid technological and medical progress. In Canada the federal government has set up a number of health grants which may be termed "stimulation" grants. These were discussed in Chapter IV.

E. Transfer Techniques

Currently the Canadian federation employs several transfer techniques. First, there is a constitutional separation of revenue sources. Thus only the federal government may levy customs duties and excise duties. But when we turn to other sources of revenue, the lines become less distinct. Constitutionally the provincial governments may levy only "direct" taxes. But the distinction between direct and indirect taxes is a tenuous one, both in legal and economic terms. The provinces, for example, now levy a number of taxes on sales which have traditionally been considered to be indirect. But legal expedients have been devised to make retail sales taxes and gasoline taxes "direct". During the last quarter century the federal government has attempted to induce the provinces to pre-empt certain direct tax fields, notably the personal income tax, the corporation income tax, and succession duties and estate taxes. This has been done by a series of taxation agreements and arrangements through a process of negotiation. It would be an understatement to say that the federal government has been less than successful in its efforts to "rent" these fields.

Because of the expansion of the provinces into most tax fields and because of the failure to secure complete agreement in tax rentals, the federal and provincial governments really employ a second device, namely, the sharing of revenues. This is coupled with taxation arrangements negotiated every five years. Currently, too, the provinces are imposing supplementary rates in the fields of personal and corporation income taxation.

We turn next to grants-in-aid. These appear to solve the problems of inter-governmental finance more neatly and adequately than any kind of division of revenue sources. They enable us to take account of standards of service, stimulation, and equalization. The federal government has a complex set of grants to the provinces and municipalities and the provinces similarly have grants systems geared to provincial-municipal needs.

Professor Donald Smiley has recently published an appraisal of federal conditional grants in Canada.¹ It is a helpful and timely document and provides specific analyses of the various grants, including those for health services. Here we shall indicate briefly some points he makes in connection with health and hospital grants. The federal government made many federal-provincial financial proposals at the 1945-46 Reconstruction Conference with a comprehensive set of conditional grants for health services as part of the whole scheme of things. The Conference broke down in May 1946 and the federal government proceeded to negotiate with the provinces on separate issues and in piecemeal fashion. In the sphere of health the federal government established shared-cost programmes beginning in 1948. We traced the development of these in Chapter IV.

Smiley has provided a useful survey of all conditional grants, including those for health, and his analysis covers the bases of federal sharing, financial administration, corporation and conflict, and the impact on provincial finance.²

¹ Smiley, Donald V., *Conditional Grants and Canadian Federalism*, A Study in Constitutional Adaptation, Canadian Tax Foundation, Toronto, February 1963.

² *Ibid.*, Chapter III.

He makes certain suggestions which deserve attention. There is a need for more progress "in rationalizing the auditing and reimbursement procedures and in eliminating some of the more anomalous definitions of shareable costs where the amounts involved are small".¹ He also recommends that all the present health grants, excluding those for hospital construction, be amalgamated into one public health grant.² More could also be done by the federal government to inform provincial governments well ahead of time of intentions of changes in grants; conditional grants create uncertainties in provincial budgeting and planning since a matching of funds is involved. In general, he concludes: "with all their defects, conditional grants have brought an invaluable element of adaptability to a federal structure which has proved remarkably resistant to change through constitutional amendment or evolving patterns of judicial review".³

Unconditional grants might also be considered. In part the federal-provincial taxation arrangements provide for unconditional payments; in part there is a sharing of revenues and the collection of supplementary provincial levies by the federal government. In a full-blown unconditional scheme, however, the federal government would determine the total need for provincial-municipal services and then make an unconditional grant to each province, varying according to fiscal need. A practical method is to underwrite minimum standards for all services and to provide grants to meet the provincial-municipal deficiency in each province; some provinces might not get any grants under this system, a feature which makes the proposal politically unacceptable.

If grants were made unconditionally the provinces would not necessarily spend their revenues on the different functions in such a way that equivalent services are produced in each province. As soon as the federal government wishes this to happen the grants have to be conditional. Thus if specific health service standards are desired in every province, conditional grants are called for. This involves an effort to persuade provincial governments to adhere to certain common objectives agreed upon.

Within the terms of reference of this study prepared for the Royal Commission on Health Services it appears desirable to concentrate on the present health and hospital grants structure which is conditional in nature. If they were not conditional these payments would not be health grants. We shall examine each in turn and suggest any changes that seem workable and desirable.

F. Proposed Changes in the Federal Health Grants Structure

The federal health and hospital grants may be considered under three categories:

- (1) The health grants for cancer control, medical rehabilitation, general public health, professional training, mental health, tuberculosis control, public

¹ *Ibid.*, p. 70.

² *Ibid.*

³ *Ibid.*, p. 72.

health research, and child and maternal health could be merged into a lump-sum grant. This would make it partly unconditional, that is, to the extent that the funds could be used for any type of health programme. It would be conditional in the sense that the funds must be spent on health services and not, for example, on education or highways.

Some special equalization features could be introduced in order to increase the grants payable to the provinces with fiscal capacities below the Canadian average. The total amount paid in recent years has been somewhat above \$30 million annually, or considerably less than \$2 per capita. Formula modifications would be required to secure a greater degree of equalization than now exist. In any event, in the future, larger grants are likely to be provided, though they will represent a smaller proportion of GNE.

It also seems desirable to retain the completely conditional structure to serve the national interest in specific health programmes. Offsetting this is the administrative complexity of the present grants system. No hard and fast conclusion appears possible in this matter at the present time. It is largely a question of negotiations and discussion among federal and provincial governments. There has also developed a system of liaison among federal and provincial officials in the health and welfare departments which has been found useful by most concerned and which might be considered as worth preserving and developing further.

- (2) The hospital construction grants constitute a separate category, but again it is not significantly large. In recent years the totals paid by the federal government have been less than \$20 million annually, or about \$1 per capita. It does not appear worthwhile to introduce major innovations in the formula.
- (3) The major category consists of grants for hospital insurance and diagnostic services. The amount budgeted for in the fiscal year 1963-64 was \$3.5 million. The formula has been set out in Chapter IV. It is an open-end formula since the federal contribution is determined by what the provinces spend, and not by the federal government. The lower a province keeps its costs, the larger the fraction of the total cost will be that is receivable from the federal government. We shall discuss the operation of the formula in detail. Table 43 indicates the per capita cost of in-patient services in Canada by provinces, ranked according to such cost in 1962.

The per capita payments from the federal government to the provinces and the per cent of the cost of the plan in each province in the same years are set out in Table 44.

Personal income per capita is a measure of taxable capacity, and Table 45 sets out such data for the provinces.

We note that provinces with low hospital costs per capita also tend to be the low-income provinces. They receive proportionately higher grants than the others. Except for Newfoundland, however, the range in the percentage contributed by the federal government is relatively small, varying from 45 per cent in

TABLE 43
PER CAPITA COST OF IN-PATIENT
SERVICES, CANADA AND THE PROVINCES
1960, 1961 AND 1962^(a)
(In dollars)

	1960	1961	1962 ^(b)
Canada ^(c)	28.31	31.98	35.55
Newfoundland	18.42	19.53	21.93
Prince Edward Island	19.23	23.00	25.15
Nova Scotia	25.17	28.32	29.18
Quebec	21.36	26.99	31.66
British Columbia	31.74	34.27	36.05
New Brunswick	27.44	32.72	36.07
Manitoba	31.14	33.49	36.55
Alberta	32.91	35.00	37.85
Ontario	31.83	35.03	39.07
Saskatchewan	37.38	38.81	40.89

(a) Calculated from net population figures, non insured persons are included in the per capita cost for provinces of P.E.I., Ontario, Manitoba and Saskatchewan.

(b) Department of National Health and Welfare preliminary final figures.

(c) Includes Yukon and Northwest Territories.

Source: Department of National Health and Welfare.

TABLE 44
PER CAPITA PAYMENTS TO THE PROVINCES
AND PERCENTAGE OF THE COST OF THE PLAN
PAID BY THE FEDERAL GOVERNMENT^(a), 1960-1962^(b)

Province	1960 ^(c)		1961 ^(c)		1962 ^(c)	
	Per Capita Payment	Per Cent	Per Capita Payment	Per Cent	Per Capita Payment	Per Cent
	\$		\$		\$	
Newfoundland.....	11.68	63.4	12.88	65.9	14.37	65.5
Prince Edward Island	11.89	52.6	13.74	50.2	15.18	53.7
Nova Scotia	13.37	53.1	15.07	53.2	16.18	55.5
Quebec	—	—	14.74	54.6	16.80	53.1
British Columbia	14.62	46.1	16.14	47.1	17.49	48.5
New Brunswick	13.94	44.7	16.17	49.4	17.91	49.6
Manitoba	14.86	47.4	16.36	48.7	18.03	48.9
Alberta	14.31	43.5	15.72	44.9	17.31	45.7
Ontario	15.04	44.5	16.75	45.5	18.66	46.2
Saskatchewan.....	16.42	43.0	17.69	44.1	19.11	45.0

(a) Calculated from the number of insured persons, by province.

(b) For in-patient services only.

(c) 1960 and 1961 figures are final, 1962 figures are estimates.

Source: Department of National Health and Welfare.

TABLE 45
PROVINCIAL PER CAPITA INCOME
 1959-1962
 (In dollars)

Province	1959	1960	1961	1962	Average 1959-62	Index of Average
CANADA	1,489	1,534	1,563	1,658	1,561	100
Newfoundland	823	879	921	972	899	57
Prince Edward Island ...	921	990	971	1,009	973	62
Quebec	1,265	1,308	1,361	1,417	1,338	85
Nova Scotia	1,118	1,166	1,205	1,245	1,184	76
New Brunswick	985	1,046	1,062	1,107	1,050	67
British Columbia	1,758	1,783	1,817	1,896	1,814	116
Alberta	1,548	1,555	1,608	1,687	1,600	102
Manitoba	1,490	1,549	1,522	1,696	1,564	100
Ontario	1,770	1,800	1,851	1,938	1,840	118
Saskatchewan	1,298	1,475	1,241	1,690	1,426	91

Source: *National Accounts, Income and Expenditure*, 1962 (Ottawa, 1963).

high-cost, medium-income Saskatchewan to 54 per cent in low-cost, low-income Prince Edward Island. The formula largely does what it is intended to do; it provides a larger percentage of the cost in the low-cost provinces than in the high-cost provinces. However, on a dollar per capita basis the high-cost and high-income provinces receive more than the low-cost and low-income provinces.

If we are concerned solely with applying the principle of equalization of service standards, there should be a defined minimum level of expenditure termed the "national standard". The federal grant should then equal a residual calculated by reference to the fiscal capacity of each province. Such calculations are set out in Appendix G. The national average provincial-municipal expenditure is used as a national standard for all services. Adjustments are made by reference to personal income per capita, to federal and natural resources receipts, and a standard deficit. On this basis the five eastern provinces had large deficits in 1960, and would have been entitled to substantial special grants from the federal government if a high degree of equalization were denied. In Appendix H the varying levels of health expenditures per capita among the provinces are examined.

The calculations in Appendix G and Appendix H take into account a variety of factors involving much detail. They cannot be made on a current basis except as approximations. For achieving a high degree of equity, however, consideration should be given to several factors that had to be taken into account in making the calculations. Here our concern is with determining what grants would be required for the different provinces to inject a large measure of equalization in the federal distribution of hospital insurance grants.

There are various ways of dealing with the problem, and it is helpful to examine alternatives. A major factor which requires application in equalization formulae is taxable capacity. In providing equalization grants to the municipalities the provinces have recourse to the level of property assessments. In the federal-provincial field a similar measure is needed, and the most satisfactory one available is personal income per capita. This criterion has not yet been recognized in federal-provincial fiscal transfers, but there is always a first time. Let us examine an example.

A simple and direct method would be to express a national standard of hospital services in terms of dollars per capita and to express tax effort in terms of a percentage of personal income. For the calendar year 1962 the estimated expenditure on hospital insurance is \$35.55 per capita for the ten provinces. This is equal to 2.274 per cent of the personal income per capita for Canada in 1961.

Assuming equal sharing of costs by the federal and provincial governments, the provinces would pay, on the average, \$17.78 per capita or 1.137 per cent of personal income. This may be called the standard provincial tax effort applied to each province. Low-income provinces would contribute fewer dollars per capita on this basis than high-income provinces. The federal government would also contribute \$17.78 per capita, on the average, but the grants to low-income provinces would be higher than those to high-income provinces in order to provide an equal

TABLE 46
HYPOTHETICAL DISTRIBUTION OF COSTS OF HOSPITAL INSURANCE BASED
ON ADJUSTMENTS FOR PERSONAL INCOME PER CAPITA,
PROVINCES OF CANADA, 1962
(Dollars per Capita)

Province	Standard Tax Effort of 1.137 Per Cent of Personal Income per Capita (a)	Federal Grant Required	Total Standard Expendi- ture	Actual Estimated Expendi- ture	Actual Estimated Federal Grant
Newfoundland	10.47	25.08	35.55	21.93	14.37
Prince Edward Island ..	11.04	24.51	35.55	25.15	15.18
Nova Scotia	13.70	21.85	35.55	29.18	16.18
New Brunswick	12.07	23.48	35.55	36.07	17.91
Quebec	15.47	20.08	35.55	31.66	16.80
Ontario	21.05	14.50	35.55	39.07	18.66
Manitoba	17.31	18.24	35.55	36.55	18.03
Saskatchewan	14.11	21.44	35.55	40.89	19.11
Alberta	18.28	17.27	35.55	37.85	17.31
British Columbia	20.66	14.89	35.55	36.05	17.49
Canada	17.78	17.78	35.55	35.55	17.65

(a) By reference to the income per capita in 1961.

Source: Tables 43, 44 and 45, and Department of National Health and Welfare.

standard expenditure in each province. Table 46 sets out the results. Under this scheme any province would be free to spend an amount above the national average, raising the revenue needed locally. The personal income data for 1961, the year preceding the fiscal year 1962-63, are used in calculating the "standard" provincial tax per capita.

It would be difficult to reduce the grant of any given province as under the present formula. Consequently we should make a proviso that a given province would receive a grant determined as under the present formula plus an equalization payment. In no case would any province receive less than it would get under the present formula. Furthermore, under the scheme set out in Table 46 some provinces, notably Newfoundland and Prince Edward Island, would receive grants in excess of their actual expenditure. To deal with this situation we can modify the scheme by specifying that in no case shall a province receive more than say 80 per cent of its actual estimated expenditure.

The scheme then takes this form:

1. The present formula is retained and it produces a result which shall be considered the minimum grant payable to any province.
2. An equalization payment is then made equal to the Canadian standard expenditure less an assumed provincial tax equivalent to 1.137 per cent of personal income (in 1961) and less the payment under the present formula.
3. The total grant is not to exceed 80 per cent of the estimated actual expenditure.

Table 47 illustrates the scheme if we take the Canadian average estimated actual expenditure per capita of \$35.55 as the standard expenditure. Under this Ontario, British Columbia, and Alberta would receive the amounts under the present formula. The other seven provinces would receive some equalization grants. Newfoundland and Prince Edward Island would be subject to the limitation that they cannot receive more than 80 per cent of estimated actual expenditure. In the future they would tend to work up to a higher level of expenditure than at present. The total cost of the scheme would have been \$349.9 million in 1962 as against \$320.7 million under the existing formula. That is, an additional \$29.2 million would have been required for equalization purposes. Equalization grants have been allowed for in the projections of federal-provincial expenditures in Chapter IX.

The national standard expenditure could be set somewhat below the Canadian average of \$35.55 per capita. For example, it could be 5 per cent, 10 per cent, or some other percentage below the national average. This would reduce the equalization payments, and some provinces might not qualify for them at all.

Other alternatives present themselves. For example, we might use provincial revenue per capita as a measure of taxable capacity, or some modification of it. Instead of single-year data for personal income, or other factors, moving averages could be used (see Table 45). The ratio of division of costs between the federal and provincial governments might be altered from year to year, or less frequently. The use of personal income data would relate the standard national expenditure to

TABLE 47

SUGGESTED FEDERAL GRANTS FOR HOSPITAL INSURANCE TO THE PROVINCES OF CANADA, CALENDAR YEAR 1962^(a)

(Standard Expenditure Equal to Canadian Average)

Province	Actual Estimated Expenditure Per Capita	Actual Estimated Grant Under Present Formula Per Capita	Add Equali- zation Portion Per Capita	Total Grant Per Capita	Total Grant in Millions of Dollars
Newfoundland	\$21.93	\$14.37	\$3.17	\$17.54 ^(b)	8.2
Prince Edward Island ...	25.15	15.18	4.94	20.12 ^(b)	1.9
Nova Scotia	29.18	16.18	5.67	21.85	15.08
New Brunswick	36.07	17.91	5.57	23.48	14.1
Quebec	31.66	16.80	3.28	20.08	107.3
Ontario	39.07	18.66	—	18.66 ^(c)	113.7
Manitoba	36.55	18.03	.21	18.24	16.7
Saskatchewan	40.80	19.11	2.33	21.44	19.2
Alberta	37.85	17.31	—	17.31 ^(c)	23.5
British Columbia	36.05	17.49	—	17.49 ^(c)	28.8
Canada ^(d)	\$35.55	\$17.65	\$1.61	\$19.26	349.9

(a) Calculated on the basis of number of insured persons, by province.

(b) Limited to 80 per cent of actual estimated expenditure per capita.

(c) Equal to actual estimated grant per capita under present formula.

(d) Includes Yukon and Northwest Territories.

Source: Tables 43, 44, 45 and Department of National Health and Welfare.

the growth of GNE. In the end the economic and political objectives sought, the availability of reliable data, and great workability of a formula would be major determinants of any scheme adopted.

In allocating grants for additional health services, or for the whole gamut of such services, the basic formula might follow the present one for hospital insurance. It might be modified by making it a straight 50:50 conditional grant and this has been the primary assumption in the projections made in Chapter IX. In addition, equalization provisions related to personal income can be attached, modified by a limitation on total grants related to the actual expenditure of each province.

G. Summary

Government expenditures tend to be developed fundamentally by demographic, structural, technological, and social factors in the widest sense.

In a developing economy, changes in these forces exert a relentless upward pressure on government expenditures. The ideological debate among the influential groups in the society comes to focus ultimately on the question of how much more should be spent on a given proposal, rather than centering around the question of whether or not there should be an extension at all, once the fundamental factors have made their impact felt. Through the political process, government is the final arbiter.

Expenditures on health services constitute in part an investment in human resources which can be justified in terms of the desirability of economic growth and development. Such outlays also have consumption aspects which promote the welfare of the individual. Social considerations, usually expressed by reference to equity rather than economic efficiency, generally point to the provision of services to all citizens and regions in the nation. A laissez-faire policy or limited action on the part of governments means that many individuals are excluded from obtaining a reasonable level of benefits, and that there may not be enough investment in human resources to create a balanced and acceptable rate of growth of the economy.

Before World War II, a large part of the population of Canada received little hospital and health care, and government expenditure on health was minimal. After the War, there began a rapid process of expansion of hospital services through insurance schemes and government action. The Federal Government introduced a programme of public health grants. Throughout the first post-war decade, however, there continued to be wide differences in the level of hospital and health services provided among the provinces and individuals across the nation. The Canadian Parliament passed the Hospital Insurance and Diagnostic Services Act in 1957, and the Federal Government began to make substantial grants to participating provinces to meet the costs of certain hospital services. By 1961 all the provinces were covered under the Act. The total government expenditure on health services increased from less than 1½ per cent to over 3 per cent of GNE from 1947 to 1962. The portion of total expenditure on health services which is publicly financed is currently approaching three-fifths.

With the extension of present health and hospital programmes, and the introduction of a national health care scheme in the near future, the portion financed by governments would soon exceed four-fifths. In our long-term projections we have assumed that governments will provide 85 per cent of the funds required for all expenditures on health services. Of this the Federal Government would provide close to one-half, and the provincial-municipal governments a little over one-half. The latter would administer over nine-tenths of the health services, while the Federal Government would provide a large part of the required funds through a system of grants-in-aid.

It is anticipated, given early action on a national health care scheme, that total government spending on health services could rise to 4½ per cent of the GNE by 1966, to more than 5 per cent in 1971, and to about 5½ per cent in the long run. Other public services, particularly education, can be expected to expand relatively to the GNE. In our projections we foresee an increase in the government

expenditure on goods and services from one-fifth to one-quarter of the GNE in the long-run, and a rise in transfer payments from one-eighth to nearly one-sixth. This implies that all levels of government will need to cultivate every revenue field that shows promise of providing an adequate yield. With the growth of the economy indicated by the projections made of the GNE by professor Brown, there will be an increasing flow of funds available to finance Government expenditures. In fact, the expansion of the public sector is an integral part of the model used for projection; it is a function of the growth of the whole economy, and also one of the factors contributing to that growth.

It has been suggested in this study that to finance additional public expenditure on health services, the whole revenue structure of the three levels of government could be adjusted in piecemeal fashion to yield the required funds. The potential of some new revenue sources have also been discussed. There are, however, some specific sources of additional revenue which can be associated with expenditure requirements from health services. First, many people now pay premiums under insurance schemes; for term payments to a government fund make little difference unless the amounts involved are increased. Second, all the provinces could impose hospital and health care premiums on a modified per capita or family basis. Third, the Federal Government could adopt the revenue structure of the Old Age Security Fund. Under the projected requirements for 1966, additional levies of 2 per cent on personal income, 2 per cent on corporate income, and 2 per cent on sales would provide the funds required by the Federal Government. Smaller increases in these taxes would be required by 1971 and in the long-run; alternatively other revenue sources could be used to yield the future amounts needed. Finally, taxes on services and transportation could be considered, but they present many administrative problems. A system of lotteries is another alternative, but it would have to be fairly comprehensive to produce adequate revenues.

A broad and general system of intergovernmental transfers covering all government functions has been projected in this study. Under it the Federal Government would play a major role in collecting revenues; it is envisaged that the Federal Government will have substantial surpluses before making payments to the provinces and municipalities, but possibly small deficits after doing so. It would be a dynamic agent in the sense of working out national policies with respect to the various functions, and devising appropriate grants and payments to other governments. The provincial governments would administer the bulk of public services serving regional purposes directly.

In the field of health services our projections for 1966-1991 are based on a roughly fifty-fifty sharing of costs between the federal and provincial (including the municipal) governments. This implies a substantial increase in the federal portion which currently is somewhat less than two-fifths. The municipal contribution would shrink further from the current six per cent of the total public expenditure on health services, leaving the provinces to provide about 45 per cent of the total. The provinces (together with the municipalities) would administer and spend more than nine-tenths of the funds required. Further, the municipalities

will continue to provide sanitation and waste disposal services in addition to general and public health services.

There are disparities in the ability of the ten provinces to finance public services. The projections made allow for the injection of federal equalization grants to the provinces for all services. Specifically, it is suggested that an equalization feature be included in the hospital insurance grant, and in a potential personal health care programme developed on a Canadian-wide basis. This could be done for example, by reference to the levels of personal income and health expenditure per capita in the various provinces.

In general, the potential extension of health services by governments has been presented here within the framework of a developing, increasingly affluent, society. The Canadian economy has experienced much change and growth since Confederation; with the critical appraisals of its performance and potential which are emerging to provide guidance for the future, and on the basis of the long-term trends, one cannot help but have a predilection for believing that substantial growth will take place in the future. Much of it is a matter of taking thought. Canadians can afford a high standard of health services, available to all, and the funds required can be made available largely from additional economic growth. The challenge facing the Canadian people is to devise the appropriate policies and measures needed to translate the objective of comprehensive health services for all into reality.

APPENDIX A

National Income Data

Relating to Public Finance,

Canada, 1946-1962

TABLE A-1
GROSS NATIONAL EXPENDITURE AND GOVERNMENT EXPENDITURE ON GOODS AND SERVICES, CANADA, 1946-1962

Year	Government Expenditure on Goods and Services			Government as Per Cent of G.N.E.	Gross National Expenditure of Constant 1949 Dollars	Government Expenditure on Goods and Services			Implicit Price Index, Gross National Expenditure	Implicit Indexes, Government Expenditure on Goods and Services		
	Gross National Expenditure of Current Dollars	Current Expenditure	Gross Fixed Capital Formation			Total	Current Expenditure	Gross Fixed Capital Formation		Total		
Billions of Current Dollars			(a)	(b)	(c)	Billions of Constant 1949 Dollars			77.7	100.0	100.0	
1946	11.8		1.8	15.2	15.3			2.3				78.3
1947	13.2		1.5	11.7	15.4			1.8				83.3
1948	15.1		1.8	11.9	15.7			1.9				94.5
1949	16.3		2.1	13.0	16.3			2.1				100.0
1950	18.0	0.5	2.3	13.0	17.5	1.6	0.5	2.2	103.1	104.5	104.6	104.5
1951	21.2	0.6	3.3	15.5	18.5	1.7	0.6	2.1	114.1	116.4	117.1	116.6
1952	24.0	0.8	4.3	17.8	20.0	2.7	0.8	2.8	119.8	121.3	122.9	121.7
1953	25.0	1.0	4.4	17.7	20.8	2.7	0.8	3.5	120.3	125.7	127.2	126.0
1954	24.9	0.9	4.5	17.9	20.2	2.7	0.7	3.4	123.2	131.5	127.5	130.6
1955	27.1	1.0	4.8	17.7	21.9	2.8	0.8	3.6	123.8	135.8	129.9	134.5
1956	30.6	1.3	5.4	17.6	23.8	2.9	0.9	3.8	128.5	143.8	136.2	142.0
1957	31.9	1.4	5.7	18.0	24.1	2.9	1.0	3.8	132.3	151.4	142.8	149.3
1958	32.9	1.4	6.2	18.8	24.4	3.0	1.1	4.1	134.8	157.4	131.5	151.0
1959	34.9	1.5	6.5	18.6	25.2	3.1	1.1	4.2	138.3	162.6	137.3	156.2
1960	36.3	1.6	6.8	18.6	25.8	3.1	1.1	4.2	140.5	169.5	137.6	161.3
1961	37.4	1.5	7.2	19.3	26.5	3.2	1.2	4.4	141.4	175.9	131.5	164.4
1962	40.4	1.8	7.7	19.1	28.1	3.3	1.3	4.5	143.7	182.4	138.8	170.5

(a) Includes net purchases of government commodity agencies. Data are not available before 1949.

(b) Includes outlay on new durable assets such as building and highway construction by governments, other than government business enterprises. Data not available before 1949.

(c) Includes defence expenditures.

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*.

TABLE A-2
TOTAL EXPENDITURE, ALL GOVERNMENTS, CANADA, 1946-1962

Year	Purchases of Goods and Services			Transfer Payments and Subsidies				Total Expenditure, all Governments	Goods and Services		Transfer Payments and Subsidies		Per Cent of GNE		
	De-fence	Other	Total	Interest on Public Debt	Other Transfer Payments	Subsidies	Total		Millions of Constant 1949 Dollars	Per Capita Constant 1949 Dollars	Millions of Constant 1949 Dollars	Per Capita Constant 1949 Dollars (a)	Goods and Services	Transfers and Subsidies	Total
1946	847	849	1,796	554	1,106	236	1,896	3,692	2,294	187	2,437	198	15.0	15.9	30.9
1947	227	1,314	1,541	559	839	177	1,575	3,116	1,850	147	1,846	147	12.0	12.0	24.0
1948	236	1,561	1,797	558	862	75	1,495	3,292	1,902	148	1,549	121	12.1	9.9	22.0
1949	361	1,766	2,127	572	948	77	1,597	3,724	2,127	158	1,597	119	13.0	9.7	22.7
1950	493	1,851	2,344	545	1,030	63	1,638	3,982	2,242	164	1,586	116	12.8	9.1	21.9
1951	1,157	2,114	3,271	553	1,032	128	1,713	4,984	2,806	200	1,504	107	15.2	8.1	23.3
1952	1,800	2,479	4,279	580	1,359	100	2,039	6,318	3,516	243	1,743	121	17.5	8.7	26.2
1953	1,907	2,525	4,432	610	1,461	110	2,181	6,613	3,517	237	1,866	126	16.9	9.0	25.9
1954	1,727	2,734	4,461	669	1,634	86	2,389	6,850	3,415	223	2,016	132	17.0	10.0	27.0
1955	1,760	3,032	4,792	669	1,737	82	2,488	7,280	3,563	227	2,098	134	16.3	9.6	25.9
1956	1,802	3,584	5,386	714	1,766	123	2,603	7,989	3,794	236	2,157	134	15.9	9.1	25.0
1957	1,765	3,957	5,722	739	2,076	116	2,931	8,653	3,833	231	2,357	142	15.9	9.8	25.7
1958	1,661	4,519	6,180	782	2,637	146	3,565	9,745	4,093	240	2,783	163	16.8	11.4	28.2
1959	1,559	4,931	6,490	963	2,755	205	3,923	10,413	4,155	238	3,020	173	16.5	12.0	28.5
1960	1,546	5,209	6,755	1,096	3,129	236	4,461	11,216	4,188	234	3,398	190	16.2	13.2	29.4
1961	1,613	5,592	7,205	1,164	3,408	254	4,826	12,031	4,383	240	3,642	200	16.6	13.8	30.4
1962	1,680	6,041	7,721	1,274	3,652	291	5,217	12,938	4,528	244	3,882	209	16.1	13.8	29.9

(a) Deflated by the implicit index for personal expenditure on goods and services.

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*.

TABLE A-3
TOTAL REVENUE,^(a) ALL GOVERNMENTS, CANADA, 1946-1962
(In Millions of Current Dollars)

Year	Direct Taxes			With- holding Taxes	Indirect Taxes	Invest- ment Income	Employer and Employee Contributions to Social Insurance Funds	Total Revenue
	Persons	Corpo- rations	Total					
	(b)	(c)			(d)	(e)	(f)	
1946	796	654	1,450	29	1,506	404	149	3,538
1947	791	702	1,493	35	1,785	375	181	3,869
1948	822	687	1,509	41	1,840	386	224	4,000
1949	789	718	1,507	47	1,885	419	239	4,097
1950	740	983	1,723	54	2,063	471	256	4,567
1951	1,030	1,416	2,446	56	2,597	534	336	5,969
1952	1,323	1,384	2,707	55	2,817	617	375	6,571
1953	1,432	1,220	2,652	54	3,021	651	410	6,788
1954	1,437	1,082	2,519	58	3,033	687	422	6,719
1955	1,499	1,272	2,771	67	3,319	753	476	7,386
1956	1,732	1,413	3,145	69	3,759	834	532	8,339
1957	1,917	1,337	3,254	83	3,977	849	590	8,753
1958	1,795	1,315	3,110	48	4,028	937	615	8,738
1959	2,088	1,581	3,669	74	4,464	998	652	9,857
1960	2,360	1,562	3,922	79	4,706	1,053	745	10,505
1961	2,511	1,612	4,123	116	4,970	1,130	787	11,126
1962	2,714	1,750	4,464	125	5,552	1,211	816	12,168

(a) Excludes intergovernmental transfer payments.

(b) Includes income taxes, succession duties and estate taxes, hospital insurance premiums, personal share of motor vehicle licences, and miscellaneous.

(c) Includes income taxes and taxes on mining and logging profits.

(d) Includes customs import duties, excise duties, excise taxes, amusement taxes, corporation taxes (not on profits), gasoline taxes, licences, fees, permits, business share of motor vehicle licences, various taxes on natural resources, real property, retail sales tax and miscellaneous.

(e) Includes interest on government held public funds, interest on loans, advances and investments, and profits (net of losses) of government business enterprises.

(f) Includes contributions to public service pensions, unemployment insurance, workmen's compensation and vacations.

Source : Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*.

TABLE A-4
EXPENDITURE, REVENUE AND INTERGOVERNMENTAL TRANSFERS
BY LEVELS OF GOVERNMENT, CANADA, 1946-1962
(In Millions of Current Dollars)

Year	Expenditure (a)			Revenue (a)			Intergovernmental Transfer Payments							
	Federal	Provincial	Municipal	Total	Federal	Provincial	Municipal	Federal Government			Municipal to Provincial Governments	Total Transfer Payments		
								To Provincial Govern'ts	To Municipal Govern'ts	Total				
1946	2,676	524	492	3,692	2,602	519	417	3,538	174	—	174	79	7	260
1947	1,864	665	587	3,116	2,740	674	455	3,869	192	—	192	101	7	300
1948	1,767	810	715	3,292	2,677	812	511	4,000	150	—	150	129	9	288
1949	1,987	928	808	3,724	2,654	887	556	4,097	187	—	187	157	10	354
1950	2,079	1,005	898	3,982	2,965	978	624	4,567	250	1	251	171	11	433
1951	2,830	1,139	1,015	4,984	4,110	1,144	715	5,969	257	2	259	197	13	469
1952	4,005	1,156	1,157	6,318	4,626	1,136	809	6,571	365	3	368	215	13	596
1953	4,172	1,167	1,274	6,613	4,726	1,188	874	6,788	409	3	412	242	15	669
1954	4,198	1,275	1,377	6,850	4,528	1,246	945	6,719	428	2	430	259	15	704
1955	4,311	1,413	1,556	7,280	4,937	1,409	1,040	7,386	443	7	450	327	22	799
1956	4,549	1,651	1,789	7,989	5,578	1,598	1,163	8,339	476	9	485	362	18	865
1957	4,818	1,814	2,021	8,653	5,588	1,877	1,288	8,753	505	16	521	452	28	1,001
1958	5,428	2,033	2,284	9,745	5,334	1,987	1,417	8,738	640	23	663	545	17	1,225
1959	5,490	2,386	2,537	10,413	6,043	2,240	1,574	9,857	856	24	880	622	24	1,526
1960	5,670	2,708	2,838	11,216	6,426	2,353	1,726	10,505	962	32	994	715	16	1,725
1961	5,993	2,950	3,088	12,031	6,668	2,605	1,853	11,126	1,095	33	1,128	855	14	1,997
1962	6,245	3,235	3,458	12,938	6,907	3,285	1,976	12,168	1,094	42	1,136	1,050	17	2,203

(a) Excludes intergovernmental transfers.

Source: Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*.

APPENDIX B

Government Expenditures
on Health Services, Canada,
1947-1962

TABLE B-1
NET GENERAL EXPENDITURE ON HEALTH SERVICES, BY FUNCTION,
ALL GOVERNMENTS IN CANADA, 1947-1962
(In Millions of Current Dollars)

Year	Federal Government				Provincial Governments				Municipal Governments					
	General and Public Health	Medical, Dental and Allied Services	Hospital Care	Total	General and Public Health	Medical, Dental and Allied Services	Hospital Care	Total	General and Public Health	Medical, Dental and Allied Services	Hospital Care	Sanitation and Waste Removal	Total, Incl. Sanitation	Total, Excl. Sanitation
1947	3	18	36	57	11	5	71	87	7	5	15	29	56	27
1948	10	16	34	60	12	8	94	114	8	6	17	35	66	31
1949	13	16	40	69	12	9	135	156	9	7	22	37	75	38
1950	16	16	40	72	13	11	148	172	9	7	27	41	84	43
1951	21	17	44	82	15	12	163	190	10	8	33	50	101	51
1952	23	18	47	88	17	15	178	210	11	8	34	53	106	53
1953	27	19	48	94	19	15	195	229	12	8	34	71	125	54
1954	30	20	50	100	20	16	221	257	12	11	44	140	207	67
1955	32	20	51	103	24	17	230	271	13	11	45	107	176	69
1956	34	23	55	112	24	18	246	288	15	12	47	130	204	74
1957	37	24	57	118	27	20	285	332	15	15	55	130	215	85
1958	40	24	122	186	31	23	309	363	16	14	50	130	210	80
1959	43	23	214	280	32	25	413	470	18	11	43	147	219	72
1960	44	29	257	330	37	28	489	554	20	9	40	153	222	69
1961	44	30	355	429	40	32	549	621	21	10	41	166	238	72
1962	50	32	402	484	46	46	627	719	23	12	42	177	254	77

TABLE B-1 (Concl.)

Year	Totals by Function					Totals by Level of Government						
	General and Public Health	Medical, Dental and Allied Services	Hospital Care	Sanitation and Waste Removal	Total, Incl. Sanitation	Total, Excl. Sanitation	Federal	Provincial	Municipal, Incl. Sanitation	Total, Incl. Sanitation	Municipal, Excl. Sanitation	Total, Excl. Sanitation
1947	21	28	122	29	200	171	57	87	56	200	27	171
1948	30	30	145	35	240	205	60	114	66	240	31	205
1949	34	32	197	37	300	263	69	156	75	300	38	263
1950	38	34	215	41	328	287	72	172	84	328	43	287
1951	46	37	240	50	373	323	82	190	101	373	51	323
1952	51	41	259	53	404	351	88	210	106	404	53	351
1953	58	42	277	71	448	377	94	229	125	448	54	377
1954	62	47	315	140	564	424	100	257	207	564	67	424
1955	69	48	326	107	550	443	103	271	176	550	69	443
1956	73	53	348	130	604	474	112	288	204	604	74	474
1957	79	59	397	130	665	535	118	332	215	665	85	535
1958	87	61	481	130	759	629	186	363	210	759	80	629
1959	93	59	670	147	969	822	280	470	219	969	72	822
1960	101	66	786	153	1,106	953	330	554	222	1,106	69	953
1961	105	72	945	166	1,288	1,122	429	621	238	1,288	72	1,122
1962	119	90	1,071	177	1,457	1,280	484	719	254	1,457	77	1,280

Source: See Tables C-1, C-2, C-3, C-4, D-1, D-2, D-3, E-1, E-2 and E-3.

All data have been aggregated on the basis of calendar years.

TABLE B-2
NET GENERAL EXPENDITURE ON HEALTH AND SANITATION, ALL GOVERNMENTS
IN CANADA, PERCENTAGE RELATIONSHIPS, 1947-1962

Year	Per Cent of Total Expenditure on Health, by Category				Per Cent of Total Expenditure on Health by Level of Government				Per Cent of GNE by Category					
	General and Public Health	Medical, Dental and Allied Services	Hospital Care	Sanitation	Total	Municipal	Provincial	Federal	Total	General and Public Health	Medical, Dental and Allied Services	Hospital Care	Sanitation	Total
1947	10	14	61	15	100	28	44	28	100	0.16	0.21	0.93	0.23	1.53
1948	12	12	61	15	100	25	47	28	100	0.20	0.20	0.95	0.23	1.58
1949	11	11	66	12	100	23	52	25	100	0.21	0.20	1.20	0.23	1.84
1950	12	10	65	13	100	22	52	26	100	0.21	0.19	0.19	0.23	1.82
1951	12	10	64	13	100	22	51	27	100	0.22	0.16	1.13	0.24	1.76
1952	13	10	64	13	100	22	52	26	100	0.21	0.17	1.08	0.22	1.68
1953	13	9	62	16	100	21	51	28	100	0.23	0.17	1.10	0.28	1.79
1954	11	8	56	25	100	18	45	37	100	0.25	0.19	1.27	0.56	2.27
1955	13	9	59	19	100	19	49	32	100	0.24	0.17	1.16	0.38	1.95
1956	12	9	58	21	100	18	48	34	100	0.24	0.17	1.14	0.42	1.97
1957	12	9	60	19	100	18	50	32	100	0.25	0.19	1.24	0.41	2.09
1958	11	8	64	17	100	24	48	28	100	0.26	0.18	1.46	0.40	2.30
1959	10	6	69	15	100	29	49	23	100	0.27	0.17	1.92	0.42	2.78
1960	9	6	71	14	100	30	50	20	100	0.28	0.18	2.17	0.42	3.05
1961	8	6	73	13	100	33	48	19	100	0.28	0.19	2.53	0.44	3.44
1962	8	6	73	12	100	33	50	17	100	0.30	0.22	2.65	0.44	3.61

TABLE B-2 (Concl.)

Year	Per Cent of GNE by Level of Government				Per Cent of GNE Excluding Sanitation by Level of Government			
	Federal	Provincial	Municipal	Total	Federal	Provincial	Municipal	Total
1947	0.43	0.66	0.43	1.53	0.43	0.66	0.20	1.33
1948	0.40	0.75	0.43	1.58	0.40	0.75	0.20	1.38
1949	0.42	0.95	0.46	1.84	0.42	0.95	0.23	1.61
1950	0.40	0.95	0.47	1.82	0.40	0.95	0.24	1.59
1951	0.39	0.90	0.47	1.76	0.39	0.90	0.23	1.52
1952	0.37	0.88	0.44	1.68	0.37	0.88	0.22	1.46
1953	0.38	0.91	0.50	1.79	0.38	0.91	0.22	1.51
1954	0.40	1.03	0.84	2.27	0.40	1.03	0.28	1.71
1955	0.37	0.96	0.62	1.95	0.37	0.96	0.24	1.57
1956	0.37	0.94	0.66	1.97	0.37	0.94	0.24	1.75
1957	0.37	1.04	0.68	2.09	0.37	1.04	0.27	1.68
1958	0.56	1.10	0.64	2.30	0.56	1.10	0.24	1.90
1959	0.80	1.35	0.63	2.78	0.80	1.35	0.21	2.36
1960	0.91	1.53	0.61	3.05	0.91	1.53	0.19	2.63
1961	1.15	1.66	0.64	3.44	1.15	1.66	0.19	3.00
1962	1.20	1.78	0.63	3.61	1.20	1.78	0.19	3.17

Source: See Tables C-1, C-2, C-3, C-4, D-1, D-2, D-3, E-1, E-2 and E-3.
 All data have been aggregated on the basis of calendar years.

APPENDIX C

Expenditures on Health Services
and Other Public Finance Data,
Government of Canada,
Fiscal Years, 1947-1963

TABLE C-1
NET ORDINARY AND CAPITAL EXPENDITURE ON HEALTH SERVICES,
GOVERNMENT OF CANADA, FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	Hospital and Medical Services	Consulting and Advisory Services	Examination Services	Inspection and Enforcement Services	Health Grants to Provinces	Grants to Voluntary Organ- izations	General Admin- istration	Miscel- laneous Health Services	Total Federal Government
	(a)	(b)	(c)	(d)	(e)		(f)	(g)	
1947-48	53.8	0.5	0.8	0.9	0.2	0.1	0.3	0.1	56.8
1948-49	48.4	0.5	1.2	1.1	7.8	0.1	0.4	0.4	59.9
1949-50	49.2	0.6	1.3	1.3	15.8	0.1	0.5	0.5	69.3
1950-51	48.7	0.6	1.2	1.4	18.9	0.2	0.5	0.7	72.2
1951-52	51.7	0.7	1.8	1.5	24.4	0.2	0.5	1.0	81.7
1952-53	54.7	0.7	1.5	1.7	27.5	0.2	0.6	0.9	87.6
1953-54	58.0	0.8	1.6	2.6	29.2	0.2	0.6	1.0	94.0
1954-55	60.6	0.9	1.7	2.3	31.6	0.2	0.7	2.6	100.5
1955-56	61.1	1.0	1.7	2.2	33.7	0.2	0.7	2.7	103.3
1956-57	67.3	1.0	2.2	2.5	36.4	0.2	0.8	1.8	112.0
1957-58	73.2	1.2	4.0	2.8	34.6	0.2	0.8	1.3	118.3
1958-59	129.1	1.5	3.4	3.0	45.9	0.2	0.9	1.9	185.8
1959-60	222.1	1.8	2.9	3.3	46.0	0.3	1.0	2.4	279.8
1960-61	269.3	2.0	3.0	3.7	48.0	0.2	1.2	2.8	330.2
1961-62	366.1	2.3	3.0	4.0	49.0	0.2	1.4	3.0	429.0
1962-63	417.2	2.5	3.0	4.4	50.3	0.2	1.5	5.3	484.4

(a) See Table C-2 for detail.

(b) Includes epidemiology, special technical services, occupational health, health insurance studies and health grants administration, and investigation of air pollution in Windsor.

(c) Includes immigration medical services, Civil Service Health, and Quarantine and Leprosy Services.

(d) Includes laboratory of hygiene, opium and narcotic drugs, food and drugs, proprietary and patent medicines, and public health engineering.

(e) Grants to encourage the extension of Provincial Health Services.

(f) Administration of the Department of National Health and Welfare.

(g) Includes medical research and education (Department of Veterans Affairs), grants-in-aid for medical research (National Research Council), miscellaneous expenditure of Department of Public Works, Royal Commission on Health Services (1962-63), and miscellaneous.

Source: Government of Canada, Department of National Health and Welfare, *Government Expenditures and Related Data on Health and Social Welfare, 1947-1953* (Ottawa: Queen's Printer, June 1955), and *Government Expenditures on Health and Social Welfare, Canada, 1927 to 1959* (Ottawa: Queen's Printer, December, 1961). The data for 1959-1963 were obtained from the Department of National Health and Welfare as well as from Government of Canada, *Public Accounts, 1959-1962, Estimates and Revised Estimates, 1962-63*.

TABLE C-2
NET ORDINARY AND CAPITAL EXPENDITURE ON HOSPITAL AND MEDICAL SERVICES,
GOVERNMENT OF CANADA, FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	Dept. of National Health and Welfare				Department of Veterans' Affairs				Contributory Med. Insurance for Government Employees	Miscel- laneous	Total Hospital and Medical Services
	Medical and Hospital Services, Esquimos and Indians	Sick Mariners', Medical Services	Hosp. Ins. and Diag- nostic Services	Total	Treatment Services	Prosthetic Services	Hospital Construction Improvements etc.	Total			
1947-48	(a) 5.5	0.2	-	5.7	(b) 40.5	0.6	7.0	48.1	(c) -	(d) 0.1	(e) 53.8
1948-49	8.0	0.2	-	8.2	34.0	0.9	5.1	40.0	-	0.2	48.4
1949-50	9.9	0.3	-	10.2	33.9	1.0	3.8	38.7	-	0.2	49.2
1950-51	10.3	0.3	-	10.6	34.0	0.9	3.0	37.9	-	0.2	48.7
1951-52	11.8	0.3	-	12.1	34.7	1.0	3.8	39.5	-	0.1	51.7
1952-53	12.9	0.2	-	13.1	36.4	0.9	4.0	41.3	-	0.2	54.7
1953-54	14.3	0.7	-	15.0	37.7	1.0	4.2	42.9	-	0.2	58.0
1954-55	15.5	0.9	-	16.4	39.0	1.0	3.9	43.9	-	0.3	60.6
1955-56	16.8	1.0	-	17.8	38.9	1.0	3.5	43.4	-	0.2	61.1
1956-57	18.8	0.9	-	19.7	41.7	1.0	4.6	47.3	-	0.2	67.3
1957-58	20.7	1.0	-	21.7	46.8	1.1	3.3	51.2	-	0.3	73.2
1958-59	22.3	1.0	54.7	78.0	46.4	1.2	3.3	50.9	-	0.3	129.1
1959-60	21.5	1.1	150.6	173.2	42.8	1.3	4.5	48.6	-	0.3	222.1
1960-61	23.0	0.9	189.4	213.3	42.3	1.4	6.1	49.8	6.0	0.3	269.3
1961-62	24.0	1.0	283.9	308.9	42.5	1.5	5.5	49.5	7.6	0.3	366.1
1962-63	24.3	1.0	336.7	362.0	42.9	1.5	2.5	46.9	8.0	0.3	417.2

(a) Includes Northern Health Service.

(b) Excludes amounts paid for funerals before the fiscal year 1952-53.

(c) Contributory medical insurance scheme for members of the Civil Service, the Armed Forces, the R.C.M.P. and employees of certain Crown Corporations introduced July 1, 1960, and extended to retired personnel February 1962.

(d) Includes hospitalization and medical aid for indigent immigrants and hospitalization and medical services of prisoners.

(e) Excludes grants for hospital construction to the provinces.

Source: 1947-53 (Ottawa: Queen's Printer, June 1955), and *Government Expenditures and Related Data on Health and Social Welfare, 1927 to 1959* (Ottawa: Queen's Printer, December 1961). The data for 1959-63 were obtained from the Department of National Health and Welfare as well as from Government of Canada, *Public Accounts, 1959-62, Estimates and Revised Estimates, 1962-63*.

TABLE C-3 (Concl.)

Fiscal Years April 1 to March 31	General Health Grants (b)					Other Grants (c)	Total Grants to Provinces	Grants to Yukon and Northwest Territories
	Public Health Research	Labo- ratory and Radio- logical Services	Medical Reha- bili- tation	Child and Maternal Health	Total General Health Grants			
1947-48.....	—	—	—	—	—	0.2	0.2	—
1948-49.....	0.0	—	—	—	7.4	0.4	7.8	—
1949-50.....	0.1	—	—	—	15.6	0.2	15.8	—
1950-51.....	0.2	—	—	—	18.7	0.2	18.9	—
1951-52.....	0.3	—	—	—	24.2	0.2	24.4	—
1952-53.....	0.4	—	—	—	27.3	0.2	27.5	—
1953-54.....	0.4	0.8	0.1	0.1	29.1	0.1	29.2	—
1954-55.....	0.4	1.2	0.2	0.6	31.5	0.1	31.6	—
1955-56.....	0.4	1.6	0.3	1.0	33.5	0.2	33.7	0.1
1956-57.....	0.4	1.6	0.5	1.0	36.2	0.2	36.4	0.7
1957-58.....	0.5	2.7	0.6	1.2	34.5	0.1	34.6	0.1
1958-59.....	0.5	3.5	0.7	1.7	45.8	0.1	100.6	0.1
1959-60.....	0.4	3.0	0.7	1.8	45.8	0.2	196.7	0.1
1960-61.....	1.5	(f)	1.2	1.4	48.0	0.2	237.6	0.2
1961-62.....					49.0(g)	0.2	333.1	0.4
1962-63.....					50.3(g)	0.2	387.0	0.9

(a) Programme began in 1958. See *Canada Year Book*, 1962. (Queen's Printer, Ottawa), pp. 224-229.(b) Programmes began in 1948. See *Ibid.*, pp. 223 and 224.

(c) Includes assistance to health services, vital statistics fees, combatting of venereal diseases (before 1948), and health survey grants (1948-1953).

(d) Absorbed into General Public Health Grant, April 1, 1960.

(e) Merged with Medical Rehabilitation Grant, April 1, 1960.

(f) Introduced in 1953 and absorbed into General Health Grant, April 1, 1960.

(g) Detailed breakdown not available.

Source: Government of Canada, Department of National Health and Welfare, *Government Expenditures and Related Data on Health and Social Welfare, 1947 to 1953* (Ottawa: Queen's Printer, June 1955), and Government Expenditures on Health and Social Welfare, Canada, 1927 to 1959, (Ottawa: Queen's Printer, December, 1961). The data for 1959-63 were obtained from the Department of National Health and Welfare as well as from Government of Canada, *Public Accounts, 1959-62, Estimates and Revised Estimates, 1962-63*.

TABLE C-4

ESTIMATED NET GENERAL EXPENDITURE ON HEALTH SERVICES,
BY FUNCTIONS, GOVERNMENT OF CANADA, FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	General and Public Health (a)	Medical, Dental and Allied Services (b)	Hospital Care (c)	Total Federal Government
1947-48	3	18	36	57
1948-49	10	16	34	60
1949-50	13	16	40	69
1950-51	16	16	40	72
1951-52	21	17	44	82
1952-53	23	18	47	88
1953-54	27	19	48	94
1954-55	30	20	50	100
1955-56	32	20	51	103
1956-57	34	23	55	112
1957-58	37	24	57	118
1958-59	40	24	122	186
1959-60	43	23	214	280
1960-61	44	29	257	330
1961-62	44	30	355	429
1962-63	50	32	402	484

- (a) Estimated from data in Table C-1. Includes consulting and advisory services, examination services, inspection and enforcement services, health grants to the provinces (except those for hospital construction), grants to voluntary organizations, general administration, and miscellaneous health services.
- (b) Estimated from data in Table C-2. One-third of the expenditure on hospital and medical services for veterans, Indians, Eskimos, and sick mariners has been allocated under the category of "medical, dental and allied services". Includes contributory medical insurance for government employees.
- (c) Estimated from data in Tables C-2 and C-3. Two-thirds of the expenditures on hospital and medical services for veterans, Indians, Eskimos, and sick mariners has been allocated to the category of "hospital care". Includes grants to the provinces for hospital insurance and diagnostic services (see Tables C-2 and C-3) and for hospital construction (see Table C-3).

TABLE C-5
BUDGETARY REVENUE, GOVERNMENT OF CANADA, FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	Taxes										Post Office Depart- ment	Return on Invest- ments	Other Revenue	Total Budg- etary Revenue
	Indi- vidual Income Tax	Corpo- rate Income Tax	Non- Re- sident Income Tax	Success- ion Duties	Gen- eral Sales Tax	Excise Duties	Other Excise Taxes	Customs Import Duties	Other Taxes	Total Taxes				
1947-48	660	591	36	31	372	274	191	293	4	2,452	78	76	266	2,872
1948-49	763	537	43	26	377	292	172	223	4	2,436	81	108	147	2,771
1949-50	622	605	48	30	403	313	75	226	4	2,327	84	92	81	2,580
1950-51	652	809	62	34	460	241	227	296	5	2,785	90	90	147	3,112
1951-52	976	1,133	55	38	574	218	312	346	6	3,658	105	118	101	3,981
1952-53	1,180	1,240	54	38	563	241	278	389	13	3,998	112	117	134	4,361
1953-54	1,188	1,191	54	39	587	227	296	407	14	4,004	111	152	130	4,396
1954-55	1,183	1,021	61	45	572	226	252	397	16	3,774	131	134	85	4,124
1955-56	1,186	1,028	66	67	642	249	261	481	17	3,996	137	149	118	4,400
1956-57	1,400	1,268	76	80	717	271	267	549	18	4,648	146	207	106	5,106
1957-58	1,500	1,235	64	72	703	300	249	498	2	4,623	153	169	104	5,049
1958-59	1,354	1,021	61	73	694	317	241	486	1	4,247	158	221	129	4,755
1959-60	1,567	1,143	73	88	733	335	288	526	1	4,752	168	240	130	5,290
1960-61	1,711	1,277	88	85	721	345	291	499	-	5,016	174	284	144	5,618
1961-62	1,793	1,202	112	85	760	363	262	534	0	5,111	184	308	127	5,730
1962-63	1,745	1,183	130	87	806	382	260	645	-	5,237	193	312	137	5,879

Source: Government of Canada, *Public Accounts, 1947-62*, and *Budget Papers, 1963*.

TABLE C-6
REVENUE FROM INCOME AND SALES TAXES, GOVERNMENT OF CANADA,
FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	Individual Income Tax			Corporate Income Tax			General Sales Tax		
	Budgetary	Old Age Security Fund	Total	Budgetary	Old Age Security Fund	Total	Budgetary	Old Age Security Fund	Total
1947-48	660	-	660	591	-	591	372	-	372
1948-49	763	-	763	537	-	537	377	-	377
1949-50	622	-	622	605	-	605	403	-	403
1950-51	652	-	652	809	-	809	460	-	460
1951-52	976	0	976	1,133	2	1,135	574	24	598
1952-53	1,180	45	1,225	1,240	37	1,277	563	142	705
1953-54	1,188	91	1,278	1,191	56	1,247	587	147	734
1954-55	1,183	101	1,284	1,021	46	1,067	572	143	715
1955-56	1,186	102	1,288	1,028	53	1,081	642	160	802
1956-57	1,400	125	1,526	1,268	67	1,336	717	179	896
1957-58	1,500	135	1,635	1,235	61	1,296	703	176	879
1958-59	1,354	146	1,500	1,021	55	1,076	694	174	868
1959-60	1,567	186	1,752	1,143	91	1,234	733	270	1,003
1960-61	1,711	229	1,941	1,277	104	1,380	721	270	991
1961-62	1,793	259	2,052	1,202	100	1,302	760	285	1,045
1962-63	1,745	274	2,019	1,183	115	1,298	806	302	1,108

Source: Government of Canada, *Public Accounts, 1947-62*, and *Budget Papers, 1963*.

TABLE C-7
BUDGETARY EXPENDITURE, GOVERNMENT OF CANADA,
FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	National Defence	Health and Welfare	Public Debt Charges	Selected Payments to the Provinces	Veterans Affairs	Transport	Labour	Agri- culture	Post Office	Public Works	Other	Total Expend- iture
	(a)			(b)							(c)	
1947-48	196	333	466	156	341	66	38	46	68	36	449	2,196
1948-49	269	360	475	102	277	100	55	39	78	51	372	2,176
1949-50	385	423	470	104	246	126	52	53	83	67	439	2,449
1950-51	782	449	439	124	217	85	63	143	92	82	427	2,901
1951-52	1,447	498	531	127	216	100	64	67	98	92	493	3,733
1952-53	1,973	405	465	339	241	104	67	107	106	98	434	4,337
1953-54	1,858	426	496	341	239	118	68	108	114	115	468	4,351
1954-55	1,688	494	502	359	240	159	70	82	124	131	424	4,275
1955-56	1,769	536	514	351	248	132	70	88	127	142	457	4,433
1956-57	1,784	558	534	395	252	158	76	85	140	169	701	4,849
1957-58	1,688	659	567	383	277	207	82	95	153	209	771	5,087
1958-59	1,442	869	648	467	289	289	87	209	158	226	680	5,364
1959-60	1,537	814	784	519	288	296	103	227	166	218	751	5,703
1960-61	1,542	884	798	538	292	336	121	265	178	201	803	5,958
1961-62	1,655	1,030	839	541	333	410	169	287	185	189	876	6,521
1962-63	1,610	1,118	918	275	336	416	348	235	189	171	953	6,570

(a) Includes civil defence and defence production.

(b) Includes federal-provincial fiscal arrangements, share of income tax on power utilities, subsidies, and transitional grants to Newfoundland.

(c) Includes government contribution to superannuation account, mutual aid, Colombo Plan, grants to universities, and other.

Source: Government of Canada, *Public Accounts, 1947-1962, Revised Estimates, 1962-63, and Budget Papers, 1963.*

TABLE C-8
REVENUE AND EXPENDITURE,
GOVERNMENT OF CANADA, FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	Budgetary Revenue and Expenditure			Old Age Security Fund			Old Age Security Fund Deficit Absorbed in Budgetary Expenditure	Adjusted Over-all Surplus or Deficit	Direct Funded Debt Outstanding at End of Year	Net Debt Outstanding at End of Fiscal Year
	Revenue	Expenditure	Budgetary Surplus or Deficit	Revenue	Pension Payments	Surplus or Deficit				
1947-48	2,872	2,196	676	-	-	-	-	676	16,142	12,372
1948-49	2,771	2,176	595	-	-	-	-	595	15,960	11,776
1949-50	2,580	2,449	131	-	-	-	-	131	15,246	11,645
1950-51	3,112	2,901	211	-	-	-	-	211	15,321	11,433
1951-52	3,981	3,733	248	26	76	- 50	50	248	14,811	11,185
1952-53	4,361	4,337	24	224	323	-100	-	- 76	14,664	11,162
1953-54	4,396	4,351	46	293	339	- 46	-	0	15,117	11,116
1954-55	4,123	4,275	-152	290	353	- 63	46	-169	14,548	11,263
1955-56	4,400	4,433	- 33	316	366	- 50	63	- 20	15,140	11,280
1956-57	5,106	4,849	-257	372	379	- 8	56	306	14,442	11,008
1957-58	5,049	5,087	- 39	372	474	-102	104	- 37	14,436	11,046
1958-59	4,755	5,364	- 609	375	559	-184	184	-609	15,393	11,678
1959-60	5,290	5,703	- 413	547	575	- 28	-	-441	15,801	12,089
1960-61	5,618	5,958	- 340	603	592	11	-	-329	16,071	12,437
1961-62	5,730	6,521	- 791	644	625	19	-	-772	16,965	13,228
1962-63	5,879	6,570	- 691	691	734	- 43	-	-734	17,962	13,920

Source: Government of Canada, *Public Accounts*; Bank of Canada, *Statistical Summary*, for direct funded debt; Canadian Tax Foundation, *The National Finances*, for net debt outstanding.

APPENDIX D

Expenditure on Health Services
and Other Public Finance Data,
Provincial Governments,
Canada,
Fiscal Years. 1947-1963

TABLE D-1
NET GENERAL EXPENDITURE ON HEALTH SERVICES, PROVINCIAL GOVERNMENTS IN CANADA,
BY FUNCTION, FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	General Health	Public Health	Net General Expenditure			Total	Intergovernmental Transfer Payments	
			Medical, Dental and Allied Services	Hospital Care	Medical Aid and Hospitalization, Workmen's Compensation (b)		Total, Excluding Workmen's Compensation	To Municipalities and Other Local Governments (c)
1947-48(a)	2.2	8.9	2.6	64.5	9.2	87.4	78.2	1.4
1948-49(a)	2.7	9.4	4.3	85.9	11.9	114.2	102.4	2.0
1949-50	2.8	9.5	5.0	125.8	13.0	156.0	143.1	6.7
1950-51	3.0	10.3	6.3	138.4	13.7	171.8	158.0	5.5
1951-52	3.7	11.3	7.0	151.8	15.6	189.5	173.8	1.6
1952-53	3.8	13.0	8.7	166.8	18.1	210.4	192.3	2.4
1953-54	4.3	14.2	8.3	182.7	19.3	228.7	209.5	3.1
1954-55	4.9	15.4	8.3	206.4	21.8	256.7	234.9	3.6
1955-56	5.2	18.4	9.0	214.3	23.7	270.6	246.9	4.2
1956-57	5.7	17.8	9.8	228.3	26.2	287.7	261.5	6.3
1957-58	6.2	20.8	10.4	264.6	29.6	331.6	302.0	7.8
1958-59	6.7	24.2	11.8	287.5	32.4	362.7	330.3	7.1
1959-60	7.8	23.9	13.5	391.1	34.0	470.3	436.3	4.7
1960-61	9.0	27.5	16.0	465.4	35.9	553.8	517.8	7.9
1961-62	10.0	30.0	20.0	524.5	36.5	621.0	584.5	11.7
1962-63	12.0	34.0	33.0	602.0	38.0	719.0	681.0	11.8

(a) Excludes Newfoundland.

(b) For calendar years.

(c) From Dominion Bureau of Statistics, *Financial Statistics of Provincial Governments*.

(c) For 1947-1959 from Department of National Health and Welfare, Government of Canada, *Government Expenditures on Health and Social Welfare, Canada, 1947 to 1953*, Table 9 (Ottawa), June 1955, and 1927 to 1959, Appendix 10 (Ottawa), December 1961. For 1960-1963 the data are based on preliminary estimates of the Dominion Bureau of Statistics.

TABLE D-2
NET GENERAL EXPENDITURE ON HEALTH SERVICES, INCLUDING WORKMEN'S COMPENSATION,
PROVINCIAL GOVERNMENTS IN CANADA BY PROVINCES, FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total Provincial Governments	Yukon and North-West Territories
1947-48	-	0.67	3.44	2.43	22.00	23.38	3.39	14.19	5.90	11.98	87.4	-
1948-49	-	0.75	3.95	3.11	30.08	32.83	4.49	13.49	8.37	17.16	114.2	-
1949-50	6.53	0.90	4.53	3.34	33.29	39.20	5.26	17.73	10.96	34.26	156.0	-
1950-51	5.61	1.02	5.35	3.63	40.71	42.74	5.40	21.23	13.43	32.65	171.8	-
1951-52	6.58	0.99	6.31	4.66	33.91	53.33	5.61	26.25	14.30	37.51	189.5	-
1952-53	6.32	0.95	5.22	5.73	35.94	63.12	6.42	27.21	15.71	43.78	210.4	-
1953-54	6.61	1.08	5.78	6.29	40.83	66.30	7.19	28.59	19.25	46.60	228.7	0.21
1954-55	7.22	1.38	6.15	5.70	48.61	73.13	7.94	33.71	21.69	50.75	256.7	0.40
1955-56	7.77	1.42	6.29	5.99	48.36	79.14	8.30	34.47	26.92	51.54	270.6	0.42
1956-57	8.90	1.34	7.51	6.81	49.19	85.05	9.55	35.12	28.93	54.48	287.7	0.84
1957-58	10.18	1.25	8.65	7.98	66.57	91.30	11.11	39.73	32.09	61.79	331.6	0.97
1958-59	11.13	1.49	11.27	7.92	73.22	107.82	17.33	40.58	36.00	55.38	362.7	0.54
1959-60	10.83	2.68	15.28	11.23	84.58	189.17	26.03	36.71	38.85	54.98	470.3	0.58
1960-61	10.83	2.68	20.02	20.71	115.37	213.39	27.54	38.24	42.85	62.14	553.8	
1961-62	10.61	2.77	21.42	19.29	149.80	234.45	30.42	42.53	48.78	60.94	621.0	
1962-63	11.61	3.43	25.83	20.50	184.56	255.60	34.80	61.15	54.04	67.62	719.1	

Source: For 1947-1959 from Department of National Health and Welfare, Government of Canada, *Government Expenditures on Health and Social Welfare, Canada, 1947 to 1953*, Table 9 (Ottawa), June 1955, and 1927 to 1959, Appendix 10 (Ottawa), December 1961. For 1960-1963 the data are based on preliminary estimates of the Dominion Bureau of Statistics.

TABLE D-3

ESTIMATED NET GENERAL EXPENDITURE ON HEALTH SERVICES, BY FUNCTIONS,
PROVINCIAL GOVERNMENTS OF CANADA. FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	General and Public Health	Medical, Dental and Allied Services	Hospital Care	Total Provincial Governments
	(a)	(b)	(c)	(d)
1947-48	11	5	71	87
1948-49	12	8	94	114
1949-50	12	9	135	156
1950-51	13	11	148	172
1951-52	15	12	163	190
1952-53	17	15	178	210
1953-54	19	15	195	229
1954-55	20	16	221	257
1955-56	24	17	230	271
1956-57	24	18	246	288
1957-58	27	20	285	332
1958-59	31	23	309	363
1959-60	32	25	413	470
1960-61	37	28	489	554
1961-62	40	32	549	621
1962-63	46	46	627	719

(a) From data in Table D-1.

(b) As per data in Table D-1 plus one-third of expenditure by workmen's compensation boards on hospital and medical care (see Table D-1).

(c) As per data in Table D-1 plus two-thirds of expenditure by workmen's compensation boards on hospital and medical care (see Table D-1). Includes mental hospitals, tuberculosis hospitals, hospital insurance schemes, grants and miscellaneous net of grants from the federal government. Probably some medical services are included under mental and tuberculosis hospitals.

(d) Total expenditure, net of grants from the Federal Government and transfer payments from municipal governments.

Source: For 1947-1959 from Department of National Health and Welfare, Government of Canada, *Government Expenditures on Health and Social Welfare, Canada, 1947 to 1953*, Table 9 (Ottawa), June 1955, and 1927 to 1959, Appendix 10 (Ottawa), December 1961. For 1960-1963 the data are based on preliminary estimates of the Dominion Bureau of Statistics.

TABLE D-4
NET GENERAL EXPENDITURE, PROVINCIAL GOVERNMENTS,
CANADA, BY PROVINCES, FISCAL YEARS, 1947-1963
(In Millions of Dollars)

Fiscal Years April 1 to March 31	Newfound- land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Total	Yukon and North- West Terri- tories
1947-48	-	5.97	34.32	33.04	186.00	198.04	24.90	52.07	42.30	79.38	656.0	
1948-49	-	5.53	43.06	40.24	229.82	235.18	32.60	54.62	55.30	101.49	797.8	
1949-50	26.06	6.31	50.80	37.54	192.92	261.10	34.94	57.67	58.08	150.94	876.4	
1950-51	27.42	7.05	51.75	40.69	224.42	278.93	35.89	61.95	73.05	140.66	941.3	
1951-52	29.90	7.86	49.13	40.04	261.72	335.82	42.13	71.78	81.96	152.12	1,072.5	
1952-53	28.88	7.06	46.46	44.93	313.64	372.02	41.21	80.19	103.58	168.88	1,206.9	
1953-54	32.80	7.17	51.25	47.81	311.00	384.22	46.70	85.78	118.15	171.78	1,256.7	1.15
1954-55	39.09	8.82	52.64	50.99	349.98	421.00	48.55	96.14	138.30	178.58	1,384.1	
1955-56	42.42	10.34	57.69	54.45	399.71	488.93	51.94	100.78	159.38	207.49	1,573.1	2.13
1956-57	44.35	10.09	70.76	59.34	433.46	552.16	62.87	110.73	170.00	257.64	1,770.8	3.03
1957-58	47.88	10.77	74.47	63.49	493.37	656.48	75.62	124.35	199.42	287.46	2,033.3	3.68
1958-59	61.53	14.39	86.31	70.93	533.03	741.94	97.82	137.51	215.03	266.58	2,225.1	4.08
1959-60	64.86	20.05	91.80	79.63	600.94	898.23	127.70	142.25	234.66	283.16	2,543.3	3.65
1960-61	73.95	15.38	108.60	95.08	748.80	954.00	127.75	150.27	265.81	328.12	2,867.8	
1961-62	78.02	18.69	108.55	93.89	845.00	1,037.00	138.20	158.74	272.05	338.00	3,088.1	
1962-63	83.81	21.15	122.21	95.62	998.10	1,174.50	155.24	183.60	281.26	364.87	3,480.4	

Source: For 1947-1959 from Department of National Health and Welfare, Government of Canada, *Government Expenditures on Health and Social Welfare, Canada, 1947 to 1953*, Table 9 (Ottawa), June 1955, and 1927 to 1959, Appendix 10 (Ottawa), December 1961. For 1960-1963 the data are based on preliminary estimates of the Dominion Bureau of Statistics.

APPENDIX E

Expenditures on Health Services
and Other Public Finance Data,
Municipal Governments,
Canada,
1947-1962

TABLE E-1
ESTIMATED NET GENERAL EXPENDITURE ON HEALTH SERVICES AND SANITATION,
MUNICIPAL GOVERNMENTS IN CANADA, BY FUNCTIONS, 1947-1962
(In Millions of Dollars)

Calendar Year	General and Public Health (a)	Medical, Dental and Allied Services (b)	Hospital Care (c)	Total, Excluding Sanitation	Sanitation and Waste Removal	Total, Including Sanitation	Transfer Payments to Provincial Governments
1947	7	5	15	27	29	56	3
1948	8	6	17	31	35	66	1
1949	9	7	22	38	37	75	6
1950	9	7	27	43	41	84	6
1951	10	8	33	51	50	101	7
1952	11	8	34	53	53	106	7
1953	12	8	34	54	71	125	10
1954	12	11	44	67	140	207	12
1955	13	11	45	69	107	176	14
1956	15	12	47	74	130	204	15
1957	15	15	55	85	130	215	11
1958	16	14	50	80	130	210	10
1959	18	11	43	72	147	219	12
1960	20	9	40	69	153	222	13
1961	21	10	41	72	166	238	14
1962	23	12	42	77	167	244	15

(a) Estimated from breakdowns of health expenditures on current account in DBS publications. Allowances have been made for capital expenditures. Estimates for Quebec are very rough, and this affects the totals accordingly. Accurate data for all ten provinces are not available.

(b) Includes capital expenditure estimates, including very rough ones for Quebec.

(c) Chiefly the provinces of Quebec and Alberta re hospital care.

Source: Dominion Bureau of Statistics, *Financial Statistics of Municipal Governments, 1947-1962*. The data for 1960 and 1961 are preliminary, and those for 1962 are forecast estimates.

TABLE E-2
ESTIMATED NET GENERAL EXPENDITURE ON HEALTH SERVICES,
MUNICIPAL GOVERNMENTS IN CANADA, BY PROVINCES, 1947-1962
(In Millions of Dollars)

Calendar Year	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec (a)	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
1947 (b)	—	0.006	1.20	0.70	7.00	10.00	1.40	2.00	3.00	2.00	27.3
1948 (b)	—	0.007	1.40	0.80	7.50	12.00	1.60	2.50	3.50	2.20	31.5
1949 (b)	0.002	0.004	1.60	0.90	8.50	16.00	1.80	3.00	4.00	2.50	38.3
1950 (b)	0.002	0.010	1.80	1.00	9.50	18.00	2.00	3.50	4.50	2.80	43.1
1951	0.003	0.007	2.16	1.14	11.50	20.04	2.41	4.58	5.73	3.40	51.0
1952	0.003	0.009	2.35	1.52	11.57	18.12	2.99	4.50	9.08	2.98	53.1
1953	0.003	0.009	2.88	1.51	11.54	20.23	2.81	5.01	7.52	2.91	54.4
1954	0.003	0.008	4.11	1.72	14.50	26.95	3.05	5.88	9.35	2.78	67.3
1955	0.004	0.009	2.55	2.72	14.00	24.06	3.90	6.38	12.30	3.12	69.0
1956	0.007	0.011	2.87	2.36	15.97	27.40	3.09	5.58	13.46	3.78	74.5
1957	0.011	0.010	2.97	3.04	15.58	30.33	4.19	5.84	18.11	5.48	85.5
1958	0.009	0.013	3.52	3.47	18.70	28.02	3.09	7.21	11.48	4.35	79.9
1959	0.011	0.011	2.45	2.31	17.40	25.38	2.05	6.10	12.91	3.18	71.8
1960 (c)	0.015	0.003	2.73	1.78	18.60	22.68	2.18	6.66	11.47	3.32	69.4
1961 (c)	0.017	0.004	2.97	2.11	18.00	23.60	2.36	6.46	13.04	3.37	71.9
1962 (d)	0.014	0.005	3.35	2.20	19.20	25.98	2.43	6.28	14.18	3.47	77.1

(a) Capital portion estimated for all years; the whole series is largely estimated.

(b) Estimated for all provinces since data comparable with 1951-1962 not available.

(c) Preliminary data of the DBS.

(d) Estimates of the DBS.

Source: Dominion Bureau of Statistics, *Financial Statistics of Municipal Governments, 1947-1962*. The data for 1960 and 1961 are preliminary, and those for 1962 are forecast estimates.

TABLE E-3
ESTIMATED NET GENERAL EXPENDITURE ON SANITATION AND WASTE REMOVAL,
MUNICIPAL GOVERNMENTS, BY PROVINCES, 1947-1962
(In Millions of Dollars)

Calendar Year	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec (a)	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
1947	—	0.012	0.78	0.06	5.70	16.82	1.04	0.95	1.05	2.99	29.4
1948	—	—	1.19	0.07	7.20	18.20	1.33	1.91	1.22	4.17	35.3
1949	0.26	0.003	1.25	0.61	8.70	16.12	1.70	1.91	2.19	4.01	36.8
1950	0.25	0.003	1.00	0.65	8.50	17.43	1.59	1.91	5.10	4.16	40.6
1951	0.29	0.003	1.39	0.53	10.70	23.05	1.88	1.96	5.70	4.35	49.9
1952	0.38	0.004	1.22	0.59	12.75	20.88	1.92	2.27	7.68	5.21	52.9
1953	0.40	0.011	1.13	0.65	15.85	32.11	2.67	3.17	10.63	4.78	71.4
1954	0.43	0.006	1.37	0.67	18.49	92.05	2.88	3.49	14.54	6.20	140.1
1955	0.42	0.011	1.05	0.51	18.82	57.32	2.78	4.13	14.87	7.18	107.1
1956	0.78	0.020	1.66	1.03	20.86	73.36	3.16	6.39	15.85	7.39	130.5
1957	0.91	0.028	1.66	0.79	21.65	64.04	4.38	6.24	18.90	11.72	130.3
1958	0.56	0.115	1.78	1.39	22.49	68.85	3.43	6.74	14.57	10.26	130.2
1959	0.65	0.411	3.41	1.08	23.24	77.24	5.30	6.84	15.23	13.87	147.3
1960 (b)	0.68	0.225	3.14	1.16	24.90	81.49	5.38	7.30	15.81	12.89	153.0
1961 (c)	0.73	0.275	3.31	1.43	28.15	86.99	5.99	7.65	16.80	14.21	165.5
1962 (c)	0.82	0.325	3.47	1.58	30.94	91.77	6.57	7.93	18.36	15.70	177.5

(a) Estimated for capital expenditure, by the author.

(b) Preliminary.

(c) Estimated.

Source: Dominion Bureau of Statistics, *Financial Statistics of Municipal Governments, 1947-1962*. The data for 1960 and 1961 are preliminary, and those for 1962 are forecast estimates.

TABLE E-4
NET GENERAL EXPENDITURE, MUNICIPAL GOVERNMENTS,
BY PROVINCES, 1947-1962
(In Millions of Dollars)

Year	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total	Yukon and Northwest Territories
1947	—	1.12	17.92	13.81	150.00	224.66	30.55	36.72	39.39	50.47	564.6	
1948	—	1.48	21.17	16.66	170.00	284.89	38.97	43.12	46.95	62.86	686.1	
1949	2.09	1.14	22.87	21.30	190.00	298.94	46.58	46.97	65.30	73.32	768.5	
1950	1.87	1.54	27.04	23.13	215.00	353.91	52.58	50.82	78.98	75.93	880.8	
1951	2.22	1.79	27.67	22.21	210.00	406.84	56.55	51.54	93.34	86.60	958.8	
1952	2.96	2.12	31.25	26.91	227.00	440.59	58.28	60.00	108.76	100.66	1,058.5	
1953	3.39	2.05	31.12	29.46	258.80	507.89	65.38	68.20	137.43	124.94	1,228.6	
1954	4.52	2.94	33.07	30.50	285.00	670.98	68.85	80.52	147.35	147.06	1,470.8	
1955	4.18	2.74	32.14	32.10	310.00	691.46	83.53	81.99	153.61	133.80	1,525.6	
1956	6.67	3.04	37.98	36.44	335.43	773.74	80.91	93.82	176.80	147.36	1,692.2	1.757
1957	7.97	3.47	43.65	39.12	371.55	864.30	90.46	105.05	191.98	177.25	1,894.8	0.878
1958	7.00	4.20	50.18	44.36	397.62	918.72	96.12	115.37	201.90	190.52	2,026.0	1.016
1959	7.26	4.00	55.72	47.20	471.31	1,043.58	107.82	129.54	229.15	227.41	2,323.0	
1960	7.55	4.30	60.00	50.00	500.00	1,100.00	115.00	140.00	240.00	240.00	2,456.8	
1961	7.98	5.00	64.00	54.00	530.00	1,170.00	122.00	142.00	250.00	250.00	2,595.0	
1962	8.50	6.00	67.00	57.00	550.00	1,230.00	130.00	145.00	265.00	265.00	2,723.5	

Source: Dominion Bureau of Statistics, *Financial Statistics of Municipal Governments, 1947-1962*. The data for 1960 and 1961 are preliminary, and those for 1962 are forecast estimates.

APPENDIX F

Projections of Population,
Gross National Product, Government
Expenditures, Government Revenues,
and Intergovernmental Transfer Payments,
Canada, 1966-1991

TABLE F-1
POPULATION, GROSS NATIONAL PRODUCT AND GOVERNMENT EXPENDITURES, CANADA, SELECTED YEARS,
1926-1961, AND PROJECTIONS, 1966-1991

Year	Total Population June 1 (a)	GNE 1957 Dollars (b)	Government Consumption and Investment (c)	Government Expenditure			Total Govern- ment Expen- diture	Consump- tion and Invest- ment	Government Expenditure Ratios		Total	
				Defence (c)	Total on Goods and Services (c)	Transfer Payments (d)			De- fence and Services	Transfer Payments		
In Millions of 1957 Dollars												
1926	Thousands 9,451	Millions 10,043	1,000	34	1,034	603	1,637	10.0	0.3	10.3	6.0	16.3
1929	10,029	12,009	1,293	47	1,340	617	1,957	10.7	0.4	11.1	5.2	16.3
1933	10,633	8,430	1,052	47	1,099	1,152	2,251	12.5	0.6	13.0	13.7	26.7
1938	11,152	11,759	1,387	81	1,468	1,248	2,716	11.8	0.7	12.5	10.6	23.1
1947	12,551	20,439	2,092	356	2,448	2,452	4,900	10.2	1.8	12.0	12.0	24.0
1951	14,009	24,542	2,410	1,303	3,713	1,981	5,694	9.8	5.3	15.1	8.1	23.2
1956	16,081	31,508	3,774	1,890	5,664	2,686	8,350	12.0	6.0	18.0	8.5	26.5
1961	18,238	35,023	5,079	1,465	6,544	4,519	11,063	14.5	4.2	18.7	12.9	31.6
High Projection												
1966	20,296	44,916	7,231	1,797	9,028	6,243	15,271	16.1	4.0	20.1	13.9	34.0
1971	22,590	56,142	9,600	2,246	11,846	8,421	20,267	17.1	4.0	21.1	15.0	36.1
1976	25,234	69,719	12,619	2,789	15,408	10,946	26,354	18.1	4.0	22.1	15.7	37.8
1981	28,247	86,049	16,435	3,442	19,877	13,768	33,645	19.1	4.0	23.1	16.0	39.1
1986	31,546	106,479	21,402	4,259	25,661	17,143	42,804	20.1	4.0	24.1	16.1	40.2
1991	35,107	132,592	27,977	5,304	33,281	21,745	55,026	21.1	4.0	25.1	16.4	41.5
Low Projection												
1966	20,296	43,377	6,984	1,735	8,719	6,246	14,965	16.1	4.0	20.1	14.4	34.5
1971	22,590	52,909	9,047	2,116	11,164	8,201	19,363	17.1	4.0	21.1	15.5	36.6
1976	25,234	64,126	11,607	2,565	14,172	10,388	24,560	18.1	4.0	22.1	16.2	38.3
1981	28,247	77,239	14,753	3,090	17,843	12,744	30,587	19.1	4.0	23.1	16.5	39.6
1986	31,546	93,275	18,748	3,731	22,479	15,484	37,963	20.1	4.0	24.1	16.6	40.7
1991	35,107	113,348	23,916	4,534	28,450	19,155	47,605	21.1	4.0	25.1	16.9	42.0

(a) From Brown, T.M., *Canadian Economic Growth*, Study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer (in press).

(b) *Ibid.* The 1961 GNP is the revised figure in D.B.S., *National Accounts, Income and Expenditure*, 1962. (Ottawa, August, 1963).

(c) Deflated by the DBS implicit index for government goods and services.

(d) Deflated by the DBS general implicit price index for Gross National Expenditure at market prices.

TABLE F-2
PROJECTIONS OF GOVERNMENT EXPENDITURE BY LEVEL OF GOVERNMENT,
PERCENTAGES OF GROSS NATIONAL EXPENDITURE BY REFERENCE TO 1957 CONSTANT DOLLARS, SELECTED YEARS,
1926-1961, AND PROJECTIONS, 1966-1991

Year	Expenditure on Goods and Services				Transfer Payments and Subsidies				Total Government Expenditure			
	Federal	Provincial	Municipal	Total	Federal	Provincial	Municipal	Total	Federal	Provincial	Municipal	Total
1926	2.6	1.9	5.8	10.3	3.3	1.3	1.3	6.0	5.9	3.2	7.1	16.3
1929	2.8	2.3	6.0	11.1	2.6	1.4	1.2	5.2	5.4	3.7	7.2	16.3
1933	3.2	2.7	7.1	13.0	5.6	5.2	2.9	13.7	8.8	7.9	10.0	26.7
1938	3.3	4.1	5.1	12.5	4.7	4.2	1.7	10.6	8.0	8.3	6.8	23.1
1947	4.9	3.0	4.1	12.0	9.4	2.2	0.4	12.0	14.3	5.2	4.5	24.0
1951	7.9	2.9	4.3	15.1	5.3	2.4	0.4	8.1	13.2	5.3	4.7	23.2
1956	9.0	3.5	5.6	18.0	6.1	2.0	0.4	8.5	15.1	5.5	6.0	26.5
1961	7.7	3.8	7.2	18.7	8.1	4.0	0.8	12.9	15.8	7.8	8.0	31.6
High Projection												
1966	7.7	4.9	7.5	20.1	7.9	5.1	0.9	13.9	15.6	10.0	8.4	34.0
1971	7.8	5.5	7.8	21.1	8.0	6.0	1.0	15.0	15.8	11.5	8.8	36.1
1976	7.9	6.0	8.2	22.1	8.2	6.4	1.1	15.7	16.1	12.4	9.3	37.8
1981	8.0	6.5	8.6	23.1	8.2	6.6	1.2	16.0	16.2	13.1	9.8	39.1
1986	8.1	7.0	9.0	24.1	8.3	6.6	1.2	16.1	16.4	13.6	10.2	40.2
1991	8.2	7.4	9.5	25.1	8.4	6.8	1.2	16.4	16.6	14.2	10.7	41.5
Low Projection												
1966	7.7	4.9	7.5	20.1	8.2	5.2	1.0	14.4	15.9	10.1	8.5	34.5
1971	7.8	5.5	7.8	21.1	8.3	6.1	1.1	15.5	16.1	11.6	8.9	36.6
1976	7.9	6.0	8.2	22.1	8.5	6.5	1.2	16.2	16.4	12.5	9.4	38.3
1981	8.0	6.5	8.6	23.1	8.5	6.7	1.3	16.5	16.5	13.2	9.9	39.6
1986	8.1	7.1	9.0	24.1	8.6	6.7	1.3	16.6	16.7	13.7	10.3	40.7
1991	8.2	7.4	9.5	25.1	8.7	6.9	1.3	16.9	16.9	14.3	10.8	42.0

Source: Based on data from Table F-1 and projections by author for 1966-1991.

TABLE F-3
GOVERNMENT EXPENDITURE ON HEALTH SERVICES AND SANITATION,
SELECTED YEARS 1947-1961, AND PROJECTIONS, 1966-1991

Year	In Millions of Constant 1957 Dollars			Percentage of Gross National Product (c)			Percentage of Total Government Expenditure (d)		
	Health Services (a)	Sanitation and Waste Removal (b)	Total	Health Services	Sanitation and Waste Removal	Total	Health Services	Sanitation and Waste Removal	Total
1947	306	52	358	1.50	0.26	1.76	6.3	1.1	7.3
1951	419	65	484	1.70	0.26	1.96	7.4	1.1	8.5
1956	500	137	637	1.58	0.43	2.01	6.0	1.6	7.6
1961	1,032	153	1,185	2.95	0.44	3.39	9.3	1.4	10.7
Projections									
1966	2,015	200	2,215	4.48	0.45	4.93	13.2	1.3	14.5
1971	2,880	260	3,140	5.13	0.46	5.59	14.2	1.3	16.5
1976	3,835	330	4,165	5.50	0.47	5.97	14.6	1.3	15.9
1981	4,850	415	5,265	5.64	0.48	6.12	14.4	1.2	15.6
1986	5,980	520	6,500	5.62	0.49	6.11	14.0	1.2	15.2
1991	7,165	665	7,830	5.40	0.50	5.90	13.0	1.2	14.2

(a) Derived from Appendix Table B-1 for the selected postwar years. The projections for 1966-1991 are from Table 21-3 and other tables and from Madden, J.J., *The Economics of Health*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer.

(b) Derived from Appendix Table B-1 for the selected postwar years. The projections have been made by the writer.

(c) The projected expenditure ratios for 1966-1991 refer to the high projection of the GNP.

(d) The projected expenditure ratios for 1966-1991 refer to the high projection of total government expenditure.

TABLE F-4
EXPENDITURE ON HEALTH SERVICES^(a) BY LEVEL OF GOVERNMENT 1956 AND 1961, AND PROJECTIONS, 1966-1991
(In Millions of Constant 1957 Dollars)

Year	Total General Expenditure ^(b)				Intergovernmental Transfer Payments				Net General Expenditure ^(c)			
	Federal ^(d)	Provincial ^(e)	Municipal ^(f)	Total ^(g)	Federal to Provincial ^(h)	Provincial to Municipal ⁽ⁱ⁾	Municipal to Provincial	Total	Federal ^(j)	Provincial ^(k)	Municipal ^(l)	Total
1956	82	348	70	500	33	6	15	54	115	306	79	500
1961	71	891	70	1,032	320	11	13	344	391	570	72	1,032
Projections												
1966	135	1,790	90	2,015	872	14	—	886	1,007	932	76	2,015
1971	165	2,605	110	2,880	1,275	16	—	1,291	1,440	1,346	94	2,880
1976	210	3,485	140	3,835	1,708	21	—	1,729	1,918	1,798	119	3,835
1981	255	4,425	170	4,850	2,170	25	—	2,195	2,425	2,280	145	4,850
1986	315	5,450	215	5,980	2,675	32	—	2,707	2,990	2,807	183	5,980
1991	400	6,500	265	7,165	3,182	40	—	3,222	3,582	3,358	225	7,165

(a) Includes current and capital expenditure. Expenditure on sanitation and waste removal is excluded.

(b) Includes the current and capital expenditure of each level of government providing services directly, and thus excludes intergovernmental transfers.

(c) Net cost to the level of government, and thus includes transfers made to other levels of government.

(d) Derived from Appendix Table B-1 for 1956 and 1961. The projected data are 0.3 per cent of the high GNP projection for 1966-1991.

(e) Derived from Appendix Table B-1 for 1956 and 1961. The projections are residuals after estimating federal, municipal and total expenditure.

(f) Derived from Appendix Table B-1 for 1956 and 1961. The projections are 0.2 per cent of the high projection of GNP for 1966-1991.

(g) From Table F-3.

(h) Net general expenditure of the federal government less general expenditure on its own functions.

(i) For 1966-1991 this is taken as 15 per cent of the general expenditure of the municipal governments on health.

(j) For 1966-1991 the federal share is assumed to be 50 per cent of all government expenditure on health services.

(k) For 1966-1991 the provincial share is 50 per cent of all government expenditure on health services less the net expenditure of the municipal governments.

(l) General expenditure less grants-in-aid from provincial governments.

TABLE F-5
REVENUES, GOVERNMENT OF CANADA, SELECTED YEARS, 1926-1961, AND PROJECTIONS, 1966-1991
 (Per Cent of Gross National Expenditure)

Year	Direct Taxes, Persons	Direct Taxes, Corpora- tions	With- holding Taxes	Customs Import Duties	Excise Duties	Excise Taxes	Miscel- laneous Taxes	Invest- ment Income	Employer and Employee Contri- butions to Pension Funds and Social Insurance	Total
1926	0.4	0.6	—	2.8	1.0	2.1	0.1	0.3	0.1	7.2
1933	0.9	0.9	0.1	1.9	1.0	3.0	0.1	-1.0	0.1	7.1
1938	0.9	1.5	0.2	1.5	1.0	3.1	0.1	-0.5	0.1	7.9
1944	6.7	5.0	0.2	1.2	1.3	5.2	0.1	1.4	0.6	21.8
1946	6.2	5.5	0.2	1.8	1.7	4.5	0.1	1.3	0.7	22.0
1951	4.4	6.0	0.3	1.7	1.1	4.2	0.1	0.8	1.0	19.4
1956	5.0	4.4	0.2	1.8	0.9	3.7	0.1	1.0	1.2	18.2
1961	5.7	3.5	0.3	1.4	1.0	3.5	0.0	1.1	1.3	17.8
1966	5.8	3.5	0.4	1.5	1.0	3.8	0.2	1.1	1.5	18.8
1971	6.1	3.6	0.4	1.5	1.0	4.1	0.3	1.2	1.6	19.8
1976	6.3	3.7	0.5	1.5	1.0	4.3	0.3	1.2	1.8	20.6
1981	6.4	3.8	0.5	1.5	1.0	4.4	0.3	1.2	1.9	21.0
1986	6.6	3.9	0.5	1.5	1.0	4.5	0.3	1.3	2.0	21.6
1991	6.8	4.0	0.5	1.5	1.0	4.5	0.3	1.3	2.0	21.9

Source: Actual data for 1926-1961 are from D.B.S., *National Accounts, Income and Expenditure, 1926-1956 and 1962*. The projections refer to both the high and low projections of the GNP.

TABLE F-6
REVENUES, PROVINCIAL GOVERNMENTS, CANADA, SELECTED YEARS, 1926-1961,
AND PROJECTIONS, 1966-1991
 (Per Cent of Gross National Expenditure)

Year	Direct Taxes, Persons	Direct Taxes, Corpora- tions	Gas- oline Taxes	Motor Vehicle Licences and Permits	Miscella- neous Natural Resource Taxes	Retail Sales Tax	Miscella- neous Indirect Taxes and Licences	Invest- ment Income	Employer and Employee Contri- butions to Pension Funds and Social Insurance	Total
1926.....	0.6	0.0	0.1	0.1	0.3	-	0.7	0.8	0.2	2.9
1933.....	0.9	0.1	0.7	0.3	0.2	-	1.0	1.0	0.4	4.7
1938.....	1.1	0.3	0.8	0.2	0.4	0.0	0.9	1.1	0.5	5.5
1944.....	0.4	0.0	0.4	0.2	0.2	0.2	0.3	1.0	0.4	3.1
1946.....	0.5	0.0	0.6	0.2	0.3	0.3	0.5	1.5	0.6	4.4
1951.....	0.4	0.9	0.9	0.2	0.3	0.5	0.6	1.1	0.5	5.4
1956.....	0.5	0.3	0.9	0.3	0.4	0.6	0.5	1.1	0.5	5.2
1961.....	0.9	0.8	1.2	0.3	0.4	0.9	0.6	1.2	0.7	7.0
1966.....	1.8	1.3	1.3	0.3	0.4	1.2	0.7	1.2	0.8	9.0
1971.....	1.9	1.4	1.3	0.4	0.4	1.4	0.8	1.3	0.8	9.7
1976.....	2.0	1.4	1.3	0.4	0.4	1.6	0.8	1.3	0.9	10.1
1981.....	2.1	1.5	1.4	0.4	0.5	1.8	0.9	1.4	1.0	11.0
1986.....	2.1	1.5	1.4	0.4	0.5	1.9	0.9	1.4	1.1	11.2
1991.....	2.2	1.5	1.5	0.4	0.6	2.1	1.0	1.5	1.2	12.0

Source: Actual data for 1926-1961 are from Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*. The projections refer to both the high and low projections of GNP.

TABLE F-7

REVENUES, MUNICIPAL GOVERNMENTS, CANADA, SELECTED YEARS, 1926-1961,
AND PROJECTIONS, 1966-1991

(Per Cent of Gross National Expenditure)

Year	Real Property Tax	Retail Sales Tax	Other Taxes and Licences	Investment Income and Contri- butions to Social Insurance	Total
1926.....	4.3	—	0.6	1.2	6.1
1933.....	6.5	—	0.9	1.9	9.3
1938.....	4.6	0.1	0.7	1.4	6.7
1944.....	2.2	0.1	0.3	0.7	3.3
1946.....	2.3	0.1	0.4	0.7	3.5
1951.....	2.2	0.1	0.4	0.6	3.4
1956.....	2.5	0.2	0.5	0.7	3.8
1961.....	3.4	0.2	0.6	0.8	5.0
1966.....	3.6	0.3	0.7	0.9	5.5
1971.....	3.8	0.3	0.8	1.0	5.9
1976.....	4.0	0.4	0.9	1.1	6.4
1981.....	4.1	0.4	1.0	1.2	6.7
1986.....	4.2	0.4	1.2	1.3	7.1
1991.....	4.2	0.4	1.4	1.4	7.4

Source: Actual data for 1926-1961 are from Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1926-1956 and 1962*. The projections refer to both the high and low projections of GNP.

TABLE F-8
GOVERNMENT EXPENDITURES AND REVENUES BY LEVEL OF GOVERNMENT, CANADA, SELECTED YEARS, 1947-1961,
AND PROJECTIONS, 1966-1991
(Per Cent of GNE)^(a)

Year	Federal Government			Provincial Governments			Municipal Governments			Totals, All Governments		
	Expend- iture	Revenue	Surplus or Deficit (-)	Expend- iture	Revenue	Surplus or Deficit (-)	Expend- iture	Revenue	Surplus or Deficit (-)	Expend- iture	Revenue	Surplus or Deficit (-)
1947	14.2	20.7	6.5	5.1	5.1	0.1	4.4	3.4	-1.0	23.7	29.3	5.6
1948	11.6	17.7	6.1	5.4	5.4	0.0	4.7	3.4	-1.3	21.7	26.5	4.8
1949	12.2	16.2	4.1	5.7	5.4	-0.3	4.9	3.4	-1.5	22.8	25.0	2.2
1950	11.5	16.4	4.9	5.6	5.4	-0.2	5.0	3.5	-1.5	22.1	25.3	3.2
1951	13.4	19.4	6.0	5.4	5.5	0.1	4.8	3.4	-1.4	23.5	28.2	4.7
1952	16.7	19.3	2.6	4.8	4.8	-0.1	4.8	3.4	-1.4	26.3	27.4	1.1
1953	16.7	18.8	2.2	4.7	4.7	0.1	5.1	3.5	-1.6	26.4	27.1	0.7
1954	16.8	18.2	1.4	5.1	5.0	-0.1	5.5	3.8	-1.7	27.4	27.0	-0.4
1955	16.0	18.2	2.2	5.2	5.2	0.0	5.7	3.8	-1.9	26.9	27.2	0.3
1956	14.8	18.2	3.4	5.4	5.2	-0.2	5.8	3.8	-2.0	26.0	27.2	1.2
1957	15.1	17.5	2.4	5.7	5.9	0.2	6.3	4.1	-2.3	27.1	27.4	0.3
1958	16.5	16.2	-0.3	6.2	6.0	-0.2	7.0	4.3	-2.7	29.7	26.6	-3.1
1959	15.7	17.3	1.6	6.8	6.4	-0.4	7.3	4.5	-2.6	29.8	28.2	-1.6
1960	15.6	17.7	2.1	7.5	6.5	-1.0	7.9	4.8	-2.9	31.0	29.0	-2.0
1961	16.0	17.8	1.8	7.9	7.0	-0.9	8.3	5.0	-3.1	32.2	29.8	-2.4
1966	15.6	18.8	3.2	10.0	9.0	-1.0	8.4	5.5	-2.9	34.0	33.3	-0.7
1971	15.8	19.8	4.0	11.5	9.7	-1.8	8.8	5.9	-2.9	36.1	35.4	-0.7
1976	16.1	20.6	4.5	12.4	10.1	-2.3	9.3	6.4	-2.9	37.8	37.1	-0.7
1981	16.2	21.0	4.8	13.1	11.0	-2.1	9.8	6.7	-3.1	39.1	38.7	-0.4
1986	16.4	21.6	5.2	13.6	11.2	-2.4	10.2	7.1	-3.1	40.2	39.9	-0.3
1991	16.6	21.9	5.3	14.2	12.0	-2.2	10.7	7.4	-3.3	41.5	41.3	-0.2

(a) By reference to current dollars, 1947-61 and to constant dollars 1966-1991.

Source: Tables F-2, F-5, F-6 and F-7.

TABLE F-9
INTERGOVERNMENTAL TRANSFER PAYMENTS, BY LEVEL OF GOVERNMENT, CANADA, SELECTED YEARS, 1947-1961,
AND PROJECTIONS, 1966-1991
(Per Cent of GNE)

Year	Federal Transfers Payments			Provincial to Municipal Governments	Municipal to Provincial Governments	Total Transfer Payments	Federal Effect		Provincial Effect		Municipal Effect		Net Surplus or Deficit(-)
	To Provinces	To Municipalities	Total				Net Transfer Payments	Net Surplus or Deficit(-)	Net Transfer Payments	Net Surplus or Deficit(-)	Net Transfer Payments	Net Surplus or Deficit(-)	
1947	1.46	-	1.46	0.77	0.05	2.28	-1.46	5.1	0.74	0.8	0.72	-0.3	5.6
1948	0.99	-	0.99	0.85	0.06	1.90	-0.99	5.1	0.20	0.2	0.79	-0.5	4.8
1949	1.15	-	1.15	0.96	0.06	2.17	-1.15	2.9	0.25	-0.1	0.90	-0.6	2.2
1950	1.39	0.01	1.40	0.95	0.06	2.41	-1.40	3.5	0.50	0.4	0.90	-0.6	3.2
1951	1.21	0.01	1.22	0.93	0.06	2.21	-1.22	4.8	0.34	0.4	0.88	-0.5	4.7
1952	1.52	0.01	1.53	0.90	0.05	2.48	-1.53	1.1	0.67	0.6	0.86	-0.6	1.1
1953	1.63	0.01	1.64	0.96	0.06	2.66	-1.64	0.5	0.73	0.8	0.91	-0.7	0.7
1954	1.72	0.01	1.73	1.04	0.06	2.83	-1.73	-0.3	0.74	0.6	0.99	-0.7	-0.4
1955	1.63	0.03	1.66	1.20	0.08	2.94	-1.66	0.6	0.51	0.5	1.15	-0.7	0.3
1956	1.55	0.03	1.58	1.18	0.06	2.82	-1.58	1.8	0.43	0.2	1.15	-0.9	1.2
1957	1.58	0.05	1.63	1.42	0.09	3.14	-1.63	0.8	0.25	0.4	1.38	-0.9	0.3
1958	1.95	0.07	2.02	1.66	0.05	3.73	-2.02	-2.3	0.34	0.1	1.68	-1.0	-3.1
1959	2.45	0.07	2.52	1.78	0.07	4.37	-2.52	-0.9	0.74	0.3	1.78	-0.8	-1.4
1960	2.66	0.09	2.75	1.98	0.04	4.77	-2.75	-0.6	0.72	-0.3	2.03	-0.9	-1.8
1961	2.93	0.09	3.02	2.29	0.04	5.35	-3.02	-1.2	0.68	-0.2	2.34	-0.8	-2.2
1966	3.4	0.1	3.5	2.5	-	6.0	-3.5	-0.3	0.9	-0.1	2.6	-0.3	-0.7
1971	4.2	0.2	4.4	2.6	-	7.0	-4.4	-0.4	1.6	-0.2	2.8	-0.1	-0.7
1976	4.7	0.2	4.9	2.6	-	7.5	-4.9	-0.4	2.1	-0.2	2.8	-0.1	-0.7
1981	4.9	0.2	5.1	2.8	-	7.9	-5.1	-0.3	2.1	0.0	3.0	-0.1	-0.4
1986	5.2	0.2	5.4	2.8	-	8.2	-5.4	-0.2	2.4	0.0	3.0	-0.1	-0.3
1991	5.2	0.2	5.4	3.0	-	8.4	-5.4	-0.1	2.2	0.0	3.2	-0.1	-0.2

Source: Tables F-2, F-5, F-6 and F-7.

TABLE F-10
PROJECTIONS OF INTERGOVERNMENTAL TRANSFER PAYMENTS, CANADA, 1966-1991
(In Millions of 1957 Dollars)

Year	Federal Government					Provincial To Municipal Govern- ments(e)	Total Transfer Payments ^(f)	Health Transfer Payments Only	
	To Provincial Governments		To Municipal Govern- ments (d)	Total Federal Transfer Payments(c)	Federal To Provincial Govern- ments(g)			Provincial To Municipal Govern- ments(h)	
	Uncondi- tional(a)	Condi- tional(b)							
									Total(c)
High Projection									
1966	314	1,213	45	1,527	1,123	2,695	872	14	886
1971	505	1,853	112	2,470	1,460	3,930	1,275	16	1,291
1976	697	2,580	140	3,417	1,813	5,230	1,708	21	1,729
1981	947	3,270	172	4,389	2,409	6,798	2,170	25	2,195
1986	1,278	4,260	213	5,751	2,981	8,732	2,675	32	2,707
1991	1,724	5,171	265	7,160	3,978	11,138	3,182	40	3,222

High Projection

(a) Includes federal-provincial fiscal arrangements, share of income tax on power utilities, subsidies, and transitional grants to Newfoundland. Estimated at 0.7 per cent of GNP in 1966, 0.9 per cent in 1971, 1.0 per cent in 1976, 1.1 per cent in 1981, 1.2 per cent in 1986, and 1.3 per cent in 1991.

(b) Includes grants-in-aid and shared-cost contributions for highways, hospital insurance, personal health care, other health, welfare, education, natural resource industries, and other.

(c) From ratios in Tables F-8 and F-9.

(d) Chiefly grants in lieu of property taxes, and special grants.

(e) Includes grants for schools and for highways, health, welfare and other. From ratios in Table F-9.

(f) Estimated from Tables F-8 and F-9. Provincial transfers to the Federal Government for RC.M.P. have been excluded.

(g) See Table F-4.

(h) See Table F-4.

APPENDIX G

Fiscal Capacities of

Provincial Governments

A. Introduction

Since the provincial and municipal governments are expected to expand their activities in the future it is important to examine the fiscal condition of the provinces. There are marked differences in the fiscal capacities of the ten provinces. These are of concern here because some provinces will have difficulty in financing an adequate level of health services. While they may be able to raise the required revenue, some provinces may require a tax burden above the national average.

The latest year for which complete and actual data on provincial-municipal revenues and expenditures were available at the time of writing this Report relate to 1960. Both provincial and municipal revenues and expenditures have moved upward substantially since 1960, and there have been changes in the structure of federal transfer payments to the provinces. However, the data for the year 1960 indicate basic differences among provinces and furnish information about relative differentials.

In this analysis the provincial data cover the fiscal year of April 1, 1960 to March 31, 1961, and the municipal data cover the calendar year 1960. No adjustment has been made to make figures conform exactly to the same period of time. Significant differences would not arise were such adjustments to be made. Much of the presentation is along the lines of a previous study made by the writer,¹ and to a large extent it is an up-dating of material in that study which, published in 1961, includes data up to and including 1956. The chief reason for combining provincial and municipal revenues and expenditures is that the municipalities are the creatures of the provinces and perform functions delegated to them. Various divisions of labour between the two levels of government have been worked out in the Canadian provinces.

In Ontario and Alberta the municipalities accounted for 44 per cent and 42 per cent respectively of total combined provincial-municipal expenditure in 1960.² In Saskatchewan and Manitoba they spent 38 per cent, in British Columbia 35 per cent, and in Quebec 34 per cent. Nova Scotia followed with 28 per cent and New Brunswick with 26 per cent. Municipal governments are not highly developed in the other two provinces; in Prince Edward Island they spent only 19 per cent of the combined provincial-municipal total, while in Newfoundland they accounted for a mere 6 per cent. There are, then, great differences among the provinces in the relative importance of municipal governments.

B. Revenues of Provincial-Municipal Governments

The concept of combined provincial-municipal revenue excludes transfers between these two levels of government but includes transfers from the federal

¹ Hanson, E.J., *Fiscal Needs of the Canadian Provinces*, Canadian Tax Foundation, (Toronto, 1961).

² From data in Appendix G, Tables G-11, G-12, G-14, and G-16.

government. Revenue from interest on loans, advances and investments, is not included; it has been deducted from debt charges on the expenditure side. Revenue from government enterprises, negative for some provinces in 1960, is included on a net basis. The resulting total, derived from DBS data, may be termed "adjusted provincial-municipal revenue".

1. Total Revenues

Combined provincial-municipal revenue per capita increased by 83 per cent 1952-1960. Table G-5 sets out the data. Increases were greatest in the Atlantic provinces and Ontario. Substantial increases in federal grants under the new federal-provincial taxation arrangements have reduced disparities among the provinces during the 1950's.

This can be observed from the data in Table G-5 which sets out the relative level of per capita revenue in each province by reference to the Canadian averages in 1952 and 1960. In 1952 the per capita indexes ranged from 69 for Newfoundland to 154 for Alberta a spread of 85 points. In 1960 the range was much narrower, from 76 for Newfoundland to 128 for British Columbia or 52 points.

There has been a further shrinkage of the range in per capita revenue since 1960, but precise data cannot be provided. Increased federal equalization payments to the Atlantic provinces and a tapering off in the rate of revenue increases in Alberta and British Columbia, the provinces with the highest revenues, account for the reduction in disparities.

2. Provincial-Municipal Taxation

Revenue from taxes made up 55 per cent of total provincial-municipal revenue of the Canadian provinces in 1952, and the fraction rose somewhat to 57 per cent in 1960. Quebec, which has remained largely outside the federal-provincial tax agreements, has relied mainly upon levying its own taxes; in 1952 this province derived 70 per cent of total provincial-municipal revenue from this source and in 1960 taxation accounted for 69 per cent. Ontario, which levied provincial corporation income taxes, also has depended greatly upon its own taxation for revenue. Table G-6, provides a summary of the situation in the various provinces for 1960.

Among the other provinces, Saskatchewan, British Columbia, and Manitoba have obtained about one-half of their revenues from taxation during the last decade. Alberta and Newfoundland have utilized taxation as a source of revenue to a considerably lesser degree than any of the other provinces. In Alberta, from 1952 to 1960 tax revenue was about one-third of total provincial-municipal revenue while natural resource revenues, receipts from the federal government, and other revenues made up the bulk. In Newfoundland, which has little local government and which receives much federal revenue, taxes furnished only 23 per cent of total revenue in 1952 and 25 per cent in 1960.

Table G-7 provides data on provincial-municipal taxation in 1960. Both Ontario and Quebec levied corporation income taxes and succession duties; Quebec also imposed a provincial income tax. All the provinces levied taxes on motor fuel

and fuel oil. Most of the provinces imposed taxes on retail sales; in early 1964 Manitoba and Alberta are the only provinces which do not levy a general sales tax. In recent years several provinces have begun to levy hospital insurance premiums.

The municipalities in nearly all the provinces (the exceptions are Newfoundland and Prince Edward Island) have highly-developed property taxes. More than nine-tenths of municipal taxes come from levies on property.

3. Receipts from the Federal Government

Receipts from the Federal Government accounted for 20 per cent of combined provincial-municipal revenue in 1952, and increased to 22 per cent by 1960. There were large variations among the provinces. In 1960 Newfoundland obtained 64 per cent of total revenue from the Federal Government, the highest proportion among the provinces, followed by 54 per cent for Prince Edward Island, and 43 per cent for both Nova Scotia and New Brunswick. Special federal grants (adjustment grants) to the Atlantic provinces, as well as the equalization features in federal-provincial tax arrangements have led to substantial increases in federal payments to these provinces.

Table G-6 sets out the data on the degree of dependence upon federal receipts for all the provinces. Quebec is notably the province which has received the least from the Federal Government, largely a matter of choice on the part of the Quebec government. The other five provinces obtained from one-fifth to one-third of their total revenues from the Federal Government.

Table G-8 provides a classification of types of federal payments to the provinces. Conditional grants-in-aid for a variety of purposes have become substantial during recent years. In our projections it has been assumed that a large increase in federal conditional grants can be expected. After 1961 payments under tax rental agreements have been largely eliminated in form; in substance the Federal Government continues to collect income taxes for the province.

4. Revenue from Other Sources

Other sources of revenue beside tax and federal receipts accounted for 25 per cent of total provincial-municipal revenue in 1952, declining to 21 per cent by 1960. These sources include fees, licences, natural resource royalties and rentals, net profits of government enterprises, liquor profits, and miscellaneous.

Table G-9 summarizes the amounts collected in 1960.

There were marked variations among the provinces in the importance of "other source". In Alberta the yield from these has been from 45 to 50 per cent in most years since the early 1950's. In British Columbia the ratio has been approaching one-quarter. The percentages were much lower in all the other provinces (see Table G-6). The chief factor responsible for the high percentage in Alberta was the great increase in receipts in the form of fees, rentals, sales of leases, and royalties from petroleum resources after 1947. Such receipts have also become important in British Columbia and Saskatchewan in more recent years.

5. Revenue Contributions by Level of Government

All three levels of government provide funds for expenditures by provincial-municipal governments. In 1960 the provincial governments collected over \$2.0 billion, the municipal close to \$1.5 billion, and the Federal Government over \$1.0 billion, making a total combined provincial-municipal revenue of over \$4.5 billion.

The data for the ten provinces are set out in Table G-3.

In 1960 the provincial contribution exceeded 50 per cent in Quebec because of a high level of provincial taxation, and was close to one-half in Alberta and British Columbia because of large "other sources" of revenue. It raised between 30 and 40 per cent in most provinces. Table G-6 provides a summary of the relative contributions of the three levels of government.

The municipal contribution ranged from 5 per cent (Newfoundland) to 38 per cent (Ontario). The national average was about 33 per cent. The range in the federal contribution was from 14 per cent (Quebec) to 64 per cent (Newfoundland), and the national average 22 per cent.

6. Comparisons of Taxable Capacities

There are various ways of measuring the taxable capacity of governments. One of the oldest methods is by reference to per capita expenditures and revenues. Such measurements do not take account directly of levels of income of the regions, which is essential to measuring taxable capacity.¹ Here the relative levels of the severity of taxation in the ten provinces for 1960 are indicated by reference to estimates of their personal income.

Table G-10 provides a summary of this attempt. The first line shows the total revenue from provincial-municipal sources; federal receipts are excluded since these are provided from federal revenue collections throughout the nation. Not all the "own" revenue receipts, however, are necessarily collected from residents of a given province. Natural resource revenue constitutes a major exception. The incidence is mainly on non-residents, although a portion is paid by residents.² There is also the general principle that revenue from natural resources is, in effect, a gift of nature accruing to the residents of a region, and that "revenue from the bounty of nature should not be confused with tax burden."³ For example, the Royal Commission on Newfoundland Finances removed natural resource revenues in estimating tax burdens of the Atlantic provinces. This procedure is followed here.

Accordingly natural resource revenues are shown as deductions in the second line in Table G-10. The most striking effect of this is the rather substantial sums subtracted for Alberta; the amounts for British Columbia, and even Saskatchewan, are relatively large.

¹ See Hanson, E.J., *op. cit.*, Chapter 10, for a discussion of the concept of taxable capacity.

² For an exposition of this principle, see *ibid.*, p. 88.

³ See Government of Canada, Royal Commission on Newfoundland Finances, *Report*, (Ottawa, 1958), p. 30.

The third line of Table 64 shows the "tax revenue" or the amounts collected from provincial residents not only in taxes of every kind, but also from fees, licences, liquor sales, and miscellaneous sources. This provides our measurement of the severity of taxation.

The resulting "net own revenue" or "tax revenue" per capita for each province is shown in the fourth line. In 1960 Ontario had the highest provincial-municipal taxation in Canada at \$211 per capita, about 16 per cent above the national average of \$182 per capita. British Columbia followed with \$209 per capita, or 15 per cent above the national average. Saskatchewan was third with \$195 per capita, 7 per cent above the average. All the other provinces fell below the national average, to a low of \$67 per capita for Newfoundland. Per capita measures, however, do not demonstrate the tax burden fully; both Ontario and British Columbia, with the highest per capita taxes, also have the highest per capita incomes.

Consequently it is desirable to measure taxes as a fraction of income. In the last line of Table G-10 tax revenue as a percentage of personal income is set out for each province.¹ The average provincial-municipal tax burden was 11.9 per cent of personal income in 1960. On this basis Quebec had the highest tax burden of 13.3 per cent, followed by Saskatchewan with 13.2 per cent, New Brunswick with 12.6 per cent, and British Columbia and Ontario with 11.7 per cent. Alberta, Manitoba and Newfoundland had the lowest rates, all falling below 10 per cent. The Newfoundland figure would be somewhat higher if cash contributions to schools by religious denominations were included.

The relatively low percentages of the Atlantic Provinces would seem to indicate that their tax burdens are lower than in the rest of Canada, with the exception of Manitoba and Alberta. Such is not the case. The personal income per capita is considerably lower in the Atlantic Provinces than in the other provinces. New Brunswick, with a rate of 12.6 per cent of personal income, roughly equal to the national average, has an exceptionally high tax burden. The higher the income, the higher the ratio of taxes that can be readily collected.

An illustration should bring home the point. In 1960, Newfoundland had a personal income per capita of \$879, the lowest in Canada. A tax levy of 10 per cent of this would yield \$88 per capita and leave \$791 per capita for other spending and for saving. Ontario had a personal income of \$1,800 per capita; a tax of 10 per cent would yield \$180 per capita and still leave residents of the province with \$1,620 per capita for other purposes, a residual which is more than twice as much as would be left the Newfoundlander. The Ontario resident could take the levy in his stride, whereas for the Newfoundlander it would be a very considerable sacrifice.

C. Expenditures of Provincial-Municipal Governments

The concept of combined provincial-municipal expenditure excludes transfer payments between these two levels of government, but includes transfer payments

¹ For a discussion of this and related measures, see Hanson, E.J., *op. cit.*, p. 89.

from the federal government. Table G-14 summarizes such expenditure on a per capita basis for 1960.

From 1952 to 1960 per capita combined provincial-municipal expenditure almost doubled for the ten provinces as a whole (see Table G-15). The range of increases was from a low of 72 per cent in the case of Quebec to a high of 148 per cent in both Prince Edward Island and Newfoundland.

In 1952, the national per capita average was \$150. British Columbia, at \$206 per capita, had the highest level, 37 per cent above the national average. Newfoundland, with \$89 per capita, and 41 per cent below the national average, was lowest.

By 1960, the range of per capita expenditure had narrowed. The province with the highest average, Alberta, was 30 per cent above the national average, and Newfoundland, still the lowest, had managed to reach a level of only 75 per cent of the national level (see Table G-15). However, even in 1960, the five eastern provinces, including Quebec, had per capita levels substantially below the national average. Large increases in federal payments have narrowed the gaps, but there was still a long way to go in 1960.

In relation to personal income, provincial-municipal expenditure increased from 12.5 per cent to 19.3 per cent from 1952 to 1960. Table G-15 provides data for the ten provinces. Measured as a fraction of personal income the level of expenditure in 1960 was about one-quarter in Newfoundland, Prince Edward Island, and Alberta, and it was above 20 per cent in Saskatchewan and British Columbia.

Table G-16 furnishes data on the allocation of expenditures among functions. We need not discuss the breakdowns in detail. It is to be noted that health expenditures accounted for almost 16 per cent of total provincial-municipal expenditure for the ten provinces as a group. Saskatchewan led with nearly 22 per cent, followed by New Brunswick with 20 per cent. However, the data cannot be relied upon fully because provinces like Quebec have a large "Miscellaneous" category. Since 1960 Quebec has entered the national hospital insurance scheme, and this will have altered the picture.

D. Appraisal of Fiscal Capacities

To obtain a comparison of the fiscal condition of the ten provinces for 1960 we shall assume that each one spent an equal amount per capita on all services. The average for the year was \$295 per capita. Table G-17, Line B sets out the "equalized" provincial-municipal expenditure for each province. Thus the equalized expenditure is greater than the actual (see Line A, Table G-17) for the provinces of Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick, Quebec and Manitoba, which has per capita levels below the national average of \$295 in 1960 (see Table G-15).

The equalized expenditure is lower than the actual for the other four provinces, which has actual per capita expenditure levels exceeding the national average. In

short, the data in Line B of Table G-17 indicate the amounts that would have been spent in each province if they all had had the same expenditure per capita. No adjustments have been made for differences in geographic, economic and other conditions among the provinces; a flat equality is assumed.¹ This has unrealistic features, but it is useful to go through this kind of exercise.

To provide the funds required to meet the equalized expenditure per capita in each province, several sources present themselves. First, revenue from natural resources provides funds which can be deemed to ease the tax burden of the residents of provinces. Second, federal transfer payments to the province constitute another "external" source of funds. Third, deficit-financing furnishes funds without immediate recourse to taxation. In Table G-17 these three items are deducted on a national basis to arrive at a uniform rate of provincial-municipal taxation (own revenue required). For 1960 this works out to 11.9 per cent of personal income.

Table G-17 shows the computations, explains the methods used, and summarizes the results. In essence, the whole exercise is based upon the assumptions of equal per capita expenditure among the ten provinces, and an equal rate of taxation by reference to the personal income of each province. Federal grants are taken as given, with the exception of an adjustment for Quebec which is shown in Table G-17. Natural resource revenues are taken as given. Finally, it is assumed that each province will have a "standard deficit" equivalent to the national average, defined by reference to personal income. The five eastern provinces would have required additional funds in 1960 to achieve the national average expenditure per capita, under the above assumptions. The five western provinces, from Ontario to British Columbia would not.

In summary, we find that in 1960, as in previous years, the Atlantic Provinces and Quebec were fiscally the weakest provinces in Canada, followed by Saskatchewan and Manitoba which were close to the Canadian average. The strongest provinces are the two most westerly ones — Alberta and British Columbia. These statements would be modified by making adjustments in the data along lines done by the writer elsewhere.² Even such adjustments would not disturb the rankings of the provinces; the changes would be a matter of degree. The fact remains that the five eastern provinces are the weakest fiscally in Canada, and if equality of standards is sought for any given service, such as health, fairly large grants to these five provinces, and possibly considerably smaller ones to Saskatchewan and Manitoba, are required. There is little presumption that the situation has changed materially since 1960.

¹ But see *ibid.*, Chapters 2 to 8, in which a variety of adjustments are discussed and made for the year 1956.

² *Ibid.*

TABLE G-1
GENERAL REVENUE, PROVINCIAL GOVERNMENTS, CANADA, FISCAL YEAR, 1960-61
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and N.W.T.	Total
Taxes.....	17.50	5.30	28.27	31.68	420.19	494.93	31.93	54.96	30.02	131.67	0.80	1,247.26
Privileges, Licences, Etc.....	6.07	0.96	8.13	9.01	98.90	150.42	15.81	29.47	127.62	77.20	0.46	524.05
Sales and Services.....	2.14	0.83	2.53	2.33	8.97	18.08	2.82	4.85	7.23	8.83	0.35	58.95
Fines and Penalties	0.32	0.06	0.34	0.23	1.13	2.37	0.40	0.72	1.54	0.69	0.03	7.82
Liquor Profits.....	2.38	1.31	11.71	8.22	32.58	55.26	11.66	13.67	19.94	27.90	1.53	186.16
Government Enterprises (Net).....	-1.13	—	-0.34	-0.03	2.18	-0.51	-0.28	3.47	0.18	-2.56	—	0.98
Other Own Revenue	0.16	0.14	0.02	0.11	2.89	1.10	0.40	0.49	0.48	1.62	0.04	7.44
Total Own Revenue	27.44	8.60	50.66	51.55	566.84	721.65	62.74	107.63	187.01	245.35	3.21	2,032.66
Government of Canada:												
Tax-Sharing.....	20.46	4.80	32.24	26.75	70.37	113.79	40.08	40.58	57.15	73.69	0.98	480.88
Other	36.08	8.38	34.04	32.51	75.49	161.88	28.32	28.99	35.87	67.08	0.98	509.60
Total	56.54	13.18	66.28	59.26	145.86	275.67	68.40	69.57	93.02	140.77	1.96	990.48
Total General Revenue ..	83.98	21.78	116.94	110.81	712.70	997.32	131.14	177.20	280.03	386.12	5.17	3,023.14

Source: Dominion Bureau of Statistics, *Financial Statistics of Provincial Governments, Revenue and Expenditure, Actual, 1960*.

TABLE G-2
GENERAL REVENUE, MUNICIPAL GOVERNMENTS, CANADA, 1960
(In Millions of Dollars)

Item	New-found land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Man- itoba	Saskat- chewan	Alberta	British Columbia	Yukon and N.W.T.	Total
Taxation	4.05	2.44	35.69	28.58	329.01	571.85	62.24	78.24	102.46	121.41	0.41	1,336.38
Licences and Permits	0.15	0.06	0.42	0.25	5.29	6.91	1.50	1.97	2.37	6.20	0.03	25.15
Government Enterprises (Net) .	-0.32	0.07	0.72	0.28	10.69	-4.17	1.37	3.77	6.72	1.55	0.05	20.73
Other Own Revenue	0.42	0.07	2.38	1.05	19.76	40.11	3.91	6.79	12.19	15.21	0.02	101.91
Total Own Revenue	4.30	2.64	39.21	30.16	364.75	614.70	69.02	90.77	123.74	144.37	0.51	1,484.17
Government of Canada	0.21	0.09	2.29	2.79	4.14	12.54	1.16	0.99	1.94	2.28	0.09	28.51
Provincial Government	1.35	0.35	4.20	7.74	13.13	119.43	7.97	11.95	26.92	27.63	0.27	220.94
TOTAL	1.56	0.44	6.49	10.53	17.27	131.97	9.13	12.94	28.86	29.91	0.36	249.45
Total General Revenue ..	5.86	3.08	45.70	40.69	382.02	746.67	78.15	103.71	152.60	174.28	0.87	1,733.62

Source: Dominion Bureau of Statistics, *Financial Statistics of Municipal Governments, 1960*.

TABLE G-3
COMBINED GENERAL REVENUE AND TAXATION, PROVINCIAL AND MUNICIPAL GOVERNMENTS, CANADA,
1960-61
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and N.W.T.	Total
Total Revenue												
Provincial	27.44	8.60	50.66	51.55	566.84	721.65	62.74	107.63	187.01	245.35	3.21	2,032.66
Municipal	4.30	2.64	39.21	30.16	364.75	614.70	69.02	90.77	123.74	144.37	0.51	1,484.17
Total Own Sources	31.74	11.24	89.87	81.71	931.59	1,336.35	131.76	198.40	310.75	389.72	3.72	3,516.83
Federal	56.75	13.27	68.57	62.05	150.00	288.21	69.56	70.56	94.96	143.05	2.05	1,018.99
Total Revenue	88.49	24.51	158.44	143.76	1,081.59	1,624.56	201.32	268.96	405.71	532.77	5.77	4,535.82
Total Taxation												
Tax Rental Fields	-	-	-	-	159.17	170.58	-	-	-	-	-	329.75
Succession Duties	-	-	0.00	-	22.85	37.60	-	0.00	0.00	-	-	60.47
Other Provincial	17.50	5.30	28.27	31.68	238.17	286.75	31.93	54.96	30.02	131.67	0.80	857.05
Total Provincial	17.50	5.30	28.27	31.68	420.19	494.93	31.93	54.96	30.02	131.67	0.80	1,247.26
Municipal Taxes	4.05	2.44	35.69	28.58	329.01	571.85	62.24	78.24	102.46	121.41	0.41	1,336.38
Total Taxation	21.55	7.74	63.96	60.26	749.20	1,066.78	94.17	133.20	132.48	253.08	1.21	2,583.64
Total Other Revenue												
Federal	56.75	13.27	68.57	62.05	150.00	288.21	69.56	70.56	94.96	143.05	2.05	1,018.99
Other	10.19	3.50	25.91	21.45	182.39	269.57	37.59	65.20	178.27	136.64	2.51	933.20
Total Other Revenue	66.94	16.77	94.48	83.50	332.39	557.78	107.15	135.76	273.23	279.69	4.56	1,952.19
Net Own Revenue												
Total Own Revenue	31.74	11.24	89.87	81.71	931.59	1,336.35	131.76	198.40	310.75	389.72	3.72	3,516.83
Less Nat. Res. Rev.	-1.59	-0.02	-1.41	-3.76	-35.46	-44.00	-4.15	-20.23	-111.82	-54.34	-0.10	-276.87
Balance	30.15	11.22	88.46	77.95	896.13	1,292.35	127.61	178.17	198.93	335.38	3.62	3,239.96

Source: Tables G-1 and G-2.

TABLE G-4
REVENUE FROM THE GOVERNMENT OF CANADA AND LOCAL GOVERNMENTS,
PROVINCIAL GOVERNMENTS, CANADA, 1960
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and N.W.T.	Total
Tax-Sharing Arrangements:												
Rental Agreements	5.07	1.14	11.22	9.33	—	113.79	25.97	16.86	39.64	65.64	...	288.66
Tax Equalization	15.39	3.45	21.02	17.42	70.37	—	14.10	23.72	17.51	5.93	...	188.91
Revenue Stabilization	—	0.21	—	—	—	—	—	—	—	2.12	...	2.33
Total	20.46	4.80	32.24	26.75	70.37	113.79	40.08	40.58	57.15	73.69	0.98^(a)	480.88
Share of Income Tax on												
Power Utilities:	0.13	0.04	0.35	0.12	1.22	0.58	0.03	0.06	1.45	0.26	—	4.23
Subsidies:	17.07	3.16	9.56	9.18	3.24	3.64	2.05	2.09	2.36	1.28	0.01	53.71
Total General:	37.66	8.00	42.15	36.05	74.83	118.01	42.16	42.73	60.96	75.23	0.99	538.82
Grants-in-Aid and Shared-Cost												
Contributions:												
Highways, Roads, Bridges	6.34	2.68	5.00	5.49	1.28	21.42	2.44	2.27	1.80	18.81	—	67.53
Health and Social Welfare	11.93	2.06	18.03	15.94	65.83	127.09	21.94	21.89	25.18	41.70	0.84	352.42
Rec. and Cult. Services	0.07	0.01	0.05	0.07	—	1.07	0.21	0.25	0.26	0.44	0.02	2.45
Education	0.27	0.30	0.69	1.08	0.37	3.84	0.58	0.98	0.90	1.20	0.02	10.21
National Resources, etc.	0.18	0.11	0.23	0.56	1.87	0.97	0.67	0.58	2.13	1.19	—	8.49
Other	0.09	0.02	0.15	0.07	1.69	3.27	0.40	0.87	1.80	2.21	—	10.56
Total	18.88	5.18	24.14	23.22	71.03	157.66	26.24	26.84	32.07	65.54	.88	451.66
Total from Government of Canada	56.54	13.18	66.28	59.26	145.86	275.67	68.40	69.56	93.02	140.77	1.87	990.47
From Local Governments	0.10	0.00	0.53	0.03	5.35	0.00	0.59	0.65	6.32	0.80	14.37	14.37
Total From All Governments	56.64	13.18	66.81	59.29	151.21	275.67	68.98	70.21	99.34	141.57	16.24	1,004.84

(a) Federal Tax Abatement Grant.

Source: Dominion Bureau of Statistics, *Financial Statistics of Provincial Governments, Revenue and Expenditure, Actual, 1960*.

TABLE G-5
COMBINED PROVINCIAL-MUNICIPAL REVENUES, PER CAPITA, CANADA,
1952 AND 1960

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
A. Dollars Per Capita											
1952(a)	98	100	109	130	118	139	128	174	218	210	142
1960(b)	197	238	218	244	210	266	222	294	314	333	254
Per Cent Increase, 1952-1960	101	138	100	88	78	92	73	68	44	59	79
B. Index of Dollars Per Capita (Canada = 100)											
1952	69	70	77	92	83	98	90	123	154	148	100
1960	78	94	86	96	83	105	87	116	124	131	100
Index Change, 1952-1960	9	24	9	4	0	7	-3	-7	-30	-17	0

(a) From Hanson, E.J., *Fiscal Needs of the Canadian Provinces*, Canadian Tax Foundation, (Toronto, 1961), p. 75.

(b) From Table G-3 and population data in Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1962*, (Ottawa, 1963).

TABLE G-6
SOURCES OF PROVINCIAL-MUNICIPAL REVENUES, 1960
 Percentages of Total

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
A. By Source of Revenue											
1. Taxation	24	32	40	42	69	66	47	50	33	48	57
2. Natural Resources	2	0	1	3	3	3	2	8	28	10	6
3. Other Own Revenue	10	14	16	12	14	13	16	16	16	15	15
4. Total Own Revenue	36	46	57	57	86	82	65	74	77	73	78
5. From Federal Government	64	54	43	43	14	18	35	26	23	27	22
6. Total	100	100	100	100	100	100	100	100	100	100	100
B. By Level of Government											
1. Federal	64	54	43	43	14	18	35	26	23	27	22
2. Provincial	31	35	32	36	52	44	31	40	46	46	45
3. Municipal	5	11	25	21	34	38	34	34	31	27	33
4. Total	100	100	100	100	100	100	100	100	100	100	100

Source: Tables G-1, G-2, G-3, and G-4.

TABLE G-7
COMBINED PROVINCIAL-MUNICIPAL TAXATION BY SOURCES AND LEVEL OF GOVERNMENT, 1960
(In Millions of Dollars)

Province	Provincial Governments				Municipal Taxes (d)	Total Provincial-Municipal Taxes
	Tax Rental Fields (a)	Succession Duties (b)	Other Provincial (c)	Total Provincial		
Newfoundland	-	-	17.5	17.5	4.1	21.6
Prince Edward Island	-	-	5.3	5.3	2.4	7.7
Nova Scotia	-	0.0	28.3	28.3	35.7	64.0
New Brunswick	-	-	31.7	31.7	28.6	60.3
Quebec	159.2	22.8	238.2	420.2	329.0	749.2
Ontario	170.6	37.6	286.8	494.9	571.8	1,066.8
Manitoba	-	-	31.9	31.9	62.2	94.2
Saskatchewan	-	0.0	55.0	55.0	78.2	133.2
Alberta	-	0.0	30.0	30.0	102.5	132.5
British Columbia	-	-	131.7	131.7	121.4	253.1
Total	329.8	60.5	856.3	1,246.5	1,336.0	2,582.5

(a) Corporation taxes and income taxes on corporations and individuals. Only Quebec and Ontario levied such taxes in 1960.

(b) Levied only by Quebec and Ontario.

(c) Chiefly sales taxes on alcoholic beverages, amusements, motor fuel and fuel oil, tobacco, as well as general sales taxes. Includes hospital insurance premiums.

(d) Chiefly property taxes.

Source: Appendix G, Table G-3.

TABLE G-8
COMBINED PROVINCIAL-MUNICIPAL REVENUE RECEIVED FROM THE FEDERAL GOVERNMENT, BY TYPE OF RECEIPT, 1960
(In Millions of Dollars)

Province	Unconditional and General Grants to Provincial Governments					Conditional Grants to Provincial Governments ^(d)	Transfer Payments to Municipal Government	Grand Total	
	Tax-Sharing Arrangements		Income Tax Power Util-ities ^(b)	Sub-sidies ^(c)	Total				
	Rental Agree-ment	Tax Equaliza-tion							
									Total ^(a)
Newfoundland	5.1	15.4	20.5	0.1	17.1	37.7	18.9	0.2	56.8
Prince Edward Island .	1.1	3.7	4.8	0.0	3.2	8.0	5.2	0.1	13.3
Nova Scotia	11.2	21.0	32.2	0.4	9.6	42.2	24.1	2.3	68.6
New Brunswick	9.3	17.4	26.8	0.1	9.2	36.0	23.2	2.8	62.0
Quebec	—	70.4	70.4	1.2	3.2	74.8	71.0	4.1	150.0
Ontario	113.8	—	113.8	0.6	3.6	118.0	157.7	12.5	288.2
Manitoba	26.0	14.1	40.1	0.0	2.1	42.2	26.2	1.2	69.6
Saskatchewan	16.9	23.7	40.6	0.1	2.1	42.7	26.8	1.0	70.6
Alberta	39.6	17.5	57.2	1.4	2.4	61.0	32.1	1.9	95.0
British Columbia	65.6	8.0	73.7	0.3	1.3	75.2	65.5	2.3	143.0
Total	288.7	191.2	479.9	4.2	53.7	537.8	450.8	28.4	1,017.0

(a) Includes revenue stabilization payments. These are relatively small.

(b) Share of income taxes on power utilities.

(c) Includes special grants to Atlantic provinces.

(d) Grants-in-aid for highways, health, social welfare, recreation, education, resource development and other.

Source: Tables G-3 and G-4.

TABLE G-9
COMBINED PROVINCIAL-MUNICIPAL REVENUE FROM OTHER SOURCES, 1960
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New-Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Natural Resources	1.6	0.0	1.4	3.8	35.5	44.0	4.2	20.2	111.8	54.3	276.8
Liquor Profits	2.4	1.3	11.7	8.2	32.6	55.3	11.7	13.7	19.9	27.9	184.6
Other Provincial Revenue ^(a)	6.0	2.0	9.3	7.9	78.6	127.5	15.0	18.8	25.2	31.4	321.6
Other Municipal Revenue ^(b)	0.2	0.2	3.5	1.6	35.7	42.8	6.8	12.5	21.3	23.0	147.6
Total	10.2	3.5	25.9	21.4	182.4	269.6	37.6	65.2	178.3	136.6	930.7

(a) Privileges and licences (excluding natural resources), sales and services (net), fines and penalties, government enterprises (net), and other own revenue.

(b) Licences and permits, government enterprises (net), and other own revenue.

Source: Tables G-1, G-2, and G-3.

TABLE G-10
COMBINED PROVINCIAL-MUNICIPAL REVENUES, CLASSIFIED AS TAX REVENUE, 1960
(In Millions of Dollars)

Item	New- found- land	Prince Edward Island	Nova Scotia	New Brun- swick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Total
Total Own Revenue ^(a)	31.8	11.2	89.9	81.7	931.6	1,336.4	131.8	198.4	310.7	389.7	3,513.2
Less Natural Resources Revenue	-1.6	-0.0	-1.4	-3.8	-35.5	-44.0	-4.2	-20.2	-111.8	-54.3	-276.8
Net Own Revenue ^(b) ...	30.2	11.2	88.5	77.9	896.1	1,292.4	127.6	178.2	198.9	335.4	3,236.4
Per Capita Net Own Revenue	67	109	122	132	174	211	141	195	154	209	182
Net Own Revenue as Per Cent of Personal Income	7.7	11.0	10.4	12.6	13.3	11.7	9.1	13.2	9.9	11.7	11.9

(a) Excludes revenue from the federal government.

(b) Includes all collections from the residents of each province.

Source: Table G-3 for revenue, and Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1962*, (Ottawa, 1963), for population and income data.

TABLE G-11
GENERAL EXPENDITURES,
PROVINCIAL GOVERNMENTS, CANADA,
1960-61

(In Millions of Dollars)

Item	New- found- land	Prince Edward Island	Nova Scotia	New Brun- swick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon and Northwest Territory	Total
Highways and Streets	21.97	7.11	36.10	37.44	177.95	262.16	39.15	33.73	70.82	93.03	0.64	780.10
Health and Hospital .	18.60	4.09	33.25	32.14	125.83	301.85	44.38	54.95	62.36	84.27	1.78	763.50
Public Welfare	15.81	1.77	10.51	9.02	147.94	75.74	15.63	18.06	25.20	46.25	0.42	366.25
Education	18.78	3.47	26.44	14.71	184.27	237.99	31.74	39.44	81.03	75.36	2.02	715.25
Other Expenditure												
General Gov't.....	5.73	0.78	4.75	3.77	36.43	32.05	7.00	7.18	10.22	16.87	0.39	125.17
Protection.....	3.55	0.41	3.13	2.30	35.12	50.65	5.87	7.95	16.16	15.49	0.02	140.65
Rec. and Com. Ser.	0.42	0.11	0.75	0.43	3.26	10.93	1.08	1.35	3.31	3.20	0.08	24.92
Debt Charges	3.41	1.32	9.78	6.82	14.42	45.99	1.22	-1.32	-16.83	2.03	0.03	66.87
Miscellaneous	4.77	1.61	10.20	6.68	91.89	48.25	15.19	16.54	33.08	48.93	0.16	277.29
Total Other.....	17.88	4.23	28.61	20.00	181.12	187.87	30.36	31.70	45.94	86.52	0.68	634.90
Total General Expenditure	93.04	20.67	134.91	113.31	817.11	1,065.61	161.26	177.88	285.35	385.43	5.54	3,260.00

Source: Dominion Bureau of Statistics, *Financial Statistics of Provincial Governments, Revenue and Expenditure, Actual, 1960.*

TABLE G-12
GENERAL EXPENDITURE MUNICIPAL GOVERNMENTS, CANADA, 1960-61
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New-Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and Northwest Territory	Total
Highways and Streets	2.52	0.76	3.85	4.67	42.85	180.08	20.89	25.58	37.46	29.30	0.19	348.15
Health and Hospitals	-0.01	0.00	2.11	0.33	5.17	28.89	2.53	7.46	8.25	2.77	0.01	57.41
Public Welfare	-	0.05	1.33	0.42	6.87	19.46	2.28	0.50	1.74	3.07	0.05	35.77
Education	0.21	2.65	29.24	22.15	233.21	362.57	46.46	48.99	84.39	73.26	0.15	903.28
Other Expenditure												
General Government	0.86	0.24	3.31	3.08	40.41	60.20	5.71	7.25	9.13	11.14	0.11	141.45
Protection	0.42	0.39	6.26	4.74	50.81	101.62	11.33	8.00	19.52	28.34	0.09	231.52
Recreation and Com. Ser.	0.30	0.10	1.51	1.11	11.26	35.21	3.28	3.75	5.88	11.62	0.05	74.07
Sanitation	0.82	0.44	2.79	1.01	9.45	84.99	4.93	6.41	9.35	21.52	0.06	141.77
Debt Charges	0.88	0.28	0.61	1.02	-43.61	-35.92	-0.19	1.07	8.04	24.11	0.03	-43.68
Miscellaneous	0.22	0.07	2.50	1.76	61.07	15.16	1.93	1.08	22.76	1.58	0.04	108.17
Total Other	3.50	1.52	16.98	12.72	129.39	261.26	26.99	27.56	74.68	98.31	0.38	653.30
Total General Expenditure ..	6.22	4.98	53.51	40.29	417.49	852.26	99.15	110.09	206.52	206.71	0.78	1,997.91

Source: Dominion Bureau of Statistics, *Financial Statistics of Municipal Governments, 1959*.

TABLE G-13
AMOUNTS PAID TO OTHER GOVERNMENTS — PROVINCIAL GOVERNMENTS, CANADA, 1960-61
(In Thousands of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and N.W.T.	Total
<i>To Local Governments:</i>												
Unconditional Grants	1,190	355	1,084	5,528	250	32,488	2,722	16	15,182	11,137	204	70,156
<i>Grants-in-Aid and Shared-Cost Contributions:</i>												
Protection of Persons and Property	—	2	10	25	1,924	670	—	—	—	—	—	2,631
Highways, Roads and Bridges	194	21	187	189	15,113	70,299	4,609	6,614	7,288	642	59	105,215
Health and Hospital	29	—	661	650	3,677	2,713	157	250	1,245	323	—	9,705
Social Welfare	—	—	1,222	1,564	—	30,307	1,424	5,099	2,478	15,734	58	57,886
Rec. and Cultural Services ..	—	—	—	—	—	860	—	4	1,020	—	—	1,884
Education (To School Boards)	—	2,346	16,425	9,360	98,355	161,773	24,049	28,793	56,322	56,491	195	454,109
Nat. Res. and Prim. Industries	—	—	—	—	393	818	477	453	315	2	—	2,458
Local Gov't Planning	—	—	—	95	—	—	—	393	—	—	—	488
Civil Defence	—	—	78	65	—	729	—	—	134	425	—	1,431
Housing	—	—	—	—	200	776	—	—	—	—	—	976
Winter Works Projects	39	—	51	—	6,686	3,220	—	1,184	2,150	2,415	—	15,745
Other	—	—	—	—	68	59	315	—	—	—	—	442
Total	262	2,369	18,634	11,948	126,416	272,224	31,031	42,790	70,952	76,032	312	652,970
<i>Total to Local Governments:...</i>	1,452	2,724	19,718	17,476	126,666	304,712	33,753	42,806	86,134	87,169	516	723,126
<i>To Gov't of Canada:</i>												
Grants-in-Aid	—	—	800	—	—	—	—	—	—	—	—	800
R.C.M.P.	683	124	668	541	—	—	872	1,101	1,560	1,927	—	7,476
Total	683	124	1,468	541	—	—	872	1,101	1,560	1,927	—	8,276

Source: Dominion Bureau of Statistics, *Financial Statistics of Provincial Governments, Revenue and Expenditure, Actual, 1960.*

TABLE G-14
COMBINED GENERAL PROVINCIAL-MUNICIPAL EXPENDITURE,
BY FUNCTIONS AND PROVINCES, CANADA, 1960-61
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and N.W.T.	Total
Highways and Streets.....	24.49	7.87	39.95	42.11	220.80	442.24	60.04	59.31	108.28	122.33	0.83	1,128.25
Health and Hospital.....	18.58	4.09	35.36	32.47	131.00	330.74	46.91	62.41	70.61	87.03	1.79	820.99
Public Welfare.....	15.81	1.82	11.84	9.44	154.81	95.20	17.91	18.56	26.94	49.32	0.47	402.12
Education.....	18.99	6.12	55.68	36.86	417.48	600.56	78.20	88.43	165.42	148.62	2.17	1,618.53
Other Expenditure												
General Government.....	6.59	1.01	8.06	6.85	76.84	92.25	12.71	14.44	19.35	28.01	0.50	266.62
Protection.....	3.97	0.81	9.39	7.04	85.93	152.27	17.21	15.95	35.68	43.82	0.11	372.17
Rec. and Com. Services	0.71	0.22	2.26	1.54	14.52	46.14	4.36	5.10	9.19	14.82	0.13	98.99
Sanitation.....	0.82	0.44	2.79	1.01	9.45	84.99	4.93	6.41	9.35	21.52	0.06	141.77
Debt Charges.....	4.29	1.60	10.39	7.85	-29.20	10.07	1.03	-0.25	-8.79	26.14	0.06	23.19
Miscellaneous.....	4.99	1.67	12.70	8.44	152.95	63.41	17.12	17.62	55.84	50.51	0.20	385.46
Total Other	21.37	5.75	45.59	32.73	310.49	449.13	57.36	59.27	120.62	184.82	1.06	1,288.20
Total General Expenditure.	99.24	25.65	188.41	153.61	1,234.58	1,917.86	260.42	287.98	491.87	592.12	6.32	5,258.09

Source: Tables G-11 and G-12.

TABLE G-15
COMBINED PROVINCIAL-MUNICIPAL EXPENDITURE ON ALL FUNCTIONS PER CAPITA
AND AS PERCENTAGE OF PERSONAL INCOME, CANADA, 1952 AND 1960

Item	New- found- land	Prince Edward Island	Nova Scotia	New Brun- swick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Total
A. Dollars Per Capita											
1952 ^(a)	89	101	116	134	140	152	115	163	195	206	150
1960 ^(b)	222	249	259	261	240	314	287	315	381	370	295
Per Cent Increase, 1952-1960	148	147	123	94	72	107	150	94	95	80	97
B. Indexes of Dollars Per Capita (Canada = 100)											
1952 ^(a)	59	67	77	89	93	101	77	109	130	137	100
1960	75	84	88	88	82	106	97	107	130	126	100
Index Change, 1952-1960	16	17	11	-1	-11	5	20	-2	0	-11	0
C. Per Cent of Personal Income											
1952 ^(c)	15.1	14.2	13.7	17.3	14.0	10.8	9.7	11.3	14.3	14.3	12.5
1960 ^(d)	25.2	25.3	22.2	24.9	18.4	17.6	18.6	21.3	24.5	20.7	19.2
Change, 1952-1960..	10.1	11.1	8.5	7.6	4.4	6.8	8.9	10.0	10.5	6.4	6.7

(a) From Hanson, E.J., *Fiscal Needs of the Canadian Provinces*, Canadian Tax Foundation, (Toronto, 1961), p. 65.

(b) From Table G-14 and population data in Dominion Bureau of Statistics, *op. cit.*

(c) From Hanson, E.J., *op. cit.*, pp. 138-149.

(d) From Table G-14 and income data in Dominion Bureau of Statistics, *op. cit.*

TABLE G-16
COMBINED GENERAL PROVINCIAL-MUNICIPAL EXPENDITURES,
BY FUNCTIONS AND PROVINCES, CANADA, 1960-61
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
<i>Provincial-Municipal Total</i>											
Per Cent Provincial.....	94	81	72	74	66	56	62	62	58	65	62
Per Cent Municipal.....	6	19	28	26	34	44	38	38	42	35	38
<i>Functions (Percentage of Total)</i>											
Highways & Streets.....	24.7	30.7	21.2	27.4	17.9	23.1	23.1	20.6	22.0	20.7	21.5
Health & Hospital.....	18.7	15.9	18.8	21.1	10.8	17.2	18.0	21.7	14.4	14.7	15.6
Public Welfare.....	15.9	7.1	6.3	6.1	12.5	5.0	6.9	6.4	5.5	8.3	7.6
Education.....	19.1	23.9	29.6	24.0	33.8	31.3	30.0	30.7	33.6	25.1	30.8
General Government.....	6.6	3.9	4.3	4.5	6.2	4.8	4.9	5.0	3.9	4.7	5.1
Protection of Persons and Property.....	4.0	3.2	5.0	4.6	7.0	8.0	6.6	5.5	7.3	7.4	7.1
Rec. & Com. Services....	0.7	0.9	1.2	1.0	1.2	2.4	1.7	1.8	1.9	2.5	1.0
Sanitation.....	0.8	1.7	1.5	0.7	0.8	4.4	1.9	2.2	1.9	3.6	2.7
Debt Charges.....	4.3	6.2	5.5	5.1	-2.4	0.5	0.4	-0.1	-1.8	4.4	0.4
Miscellaneous.....	5.0	6.5	6.7	5.5	12.4	3.3	6.6	6.1	11.4	8.5	7.3
TOTAL.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Table G-14.

TABLE G-17
REQUIREMENTS OF PROVINCIAL-MUNICIPAL GOVERNMENTS
TO FINANCE EQUALIZED EXPENDITURE, PER CAPITA, CANADA, 1960
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Actual Provincial-Municipal Expenditure(a)	99.2	25.6	188.4	153.6	1,234.6	1,917.9	260.5	288.0	491.9	592.3	5,251.8
Equalized Prov-Mun. Expenditure Required(b)	132.0	30.3	214.2	173.3	1,514.2	1,799.6	266.7	269.6	380.1	471.8	5,251.8
Sources of Funds											
Natural Resource Rev.(c)	1.6	0.0	1.4	3.8	35.5	44.0	4.2	20.2	111.8	54.3	276.8
Federal Government(d) ..	56.8	13.3	68.6	62.0	351.3 ^d	288.2	69.6	70.6	95.0	143.0	1,218.4
Standard Deficit(e)	7.5	1.9	16.2	11.8	128.2	209.8	26.7	25.7	38.2	54.5	520.5
Uniform Tax Yield(f) ...	46.6	12.1	100.5	72.7	796.7	1,304.4	166.2	160.1	238.0	338.8	3,236.1
Additional Requirement	19.5	3.0	27.5	23.0	202.5	-46.8	0.0	-7.0	-102.9	-118.8	0.0
Total	132.0	30.3	214.2	173.3	1,514.2	1,799.6	266.7	269.6	380.1	471.8	5,251.8

(a) From Table G-14 after omitting the Yukon and Northwest Territories.

(b) A uniform expenditure of \$295 per capita (see Table G-15) is assumed.

(c) From Table G-3, except for Quebec (see below).

(d) The average per capita revenue received from the federal government by the nine provinces, excluding Quebec was \$68.32. It is assumed that Quebec were to receive this per capita figure.

(e) The difference between combined provincial-municipal revenue (as per Table G-3) and expenditure (as per Table G-14) was a deficit of 721.8 million. After allowing for additional federal funds to Quebec of \$201.3 million, the deficit becomes \$520.5 million or about 1.91 per cent of the personal income of the provinces. It is assumed that all provinces have uniform deficits equal to 1.91 per cent of their personal income.

(f) It is assumed that each province would collect taxes and other own revenue equal to 11.85% of its personal income. The total for the ten provinces of \$3,236.1 million is 11.85 per cent of their combined personal income.

APPENDIX H

Fiscal Capacities and Health Expenditures of Provincial Governments

There are marked variations in the level of health expenditures among the provinces. There is no strong correlation with fiscal capacities for some provinces with low fiscal capacity make a relatively great effort in the field of health services. Table H-1 provides a summary of the distribution of gross and not general health expenditures among the ten provinces for the fiscal year 1960-61. Similarly, Table H-2 provides estimates of municipal expenditures on health and sanitation in the ten provinces. Table H-3 sets out data on intergovernmental transfer payments involving health services. The combined provincial-municipal expenditures on health services in the provinces are shown in Table H-4.

Finally, Table H-5 summarizes the combined provincial-municipal per capita expenditure on health services, such expenditures as a per cent of personal income of each province, and as a per cent of total combined provincial-municipal expenditures on all services. In 1960 the estimated per capita expenditure on health by all provincial-municipal governments was \$46. Newfoundland, Prince Edward Island, and Quebec fell below the average. The latter province had the lowest per capita expenditure with \$25.90, not much more than half the national figure. Quebec, however, had not yet joined the national hospital insurance plan. Since 1960 the expenditure per capita in that province has increased substantially with the exception of hospital care insurance. Saskatchewan, the first province to introduce a hospital insurance plan, had the highest per capita level of expenditure on health services.

Expenditure on health services as a percentage of personal income varied from 2 per cent in Quebec to 5.3 per cent in New Brunswick. The national average was 3 per cent. All the Atlantic provinces and Saskatchewan made high contributions to health services relatively to income.

There were also marked differences in the amounts allocated to health services out of the total budgets. Saskatchewan ranked first, with 21.7 per cent of total combined provincial-municipal expenditure going to health services. New Brunswick was next with 21.1 per cent. The other Atlantic provinces, Ontario, and Manitoba varied between 16 per cent and 19 per cent. Alberta and British Columbia were somewhat below the national average of 15.6 per cent, and Quebec was lowest with 10.8 per cent.

The municipal contribution to health expenditure was relatively low, averaging 7.2 per cent of all provincial-municipal expenditure for the ten provinces. Only in Alberta and Saskatchewan was the municipal portion above 10 per cent; in the Atlantic provinces it was negligible, except in Nova Scotia.

Table H-5 also provides similar data for expenditure on sanitation and waste removal. This is almost entirely a municipal function, and the amounts spent per capita depend largely upon the degree of urbanization in any given province.

The per capita average for Canada was an estimated \$8.80 in 1960. Ontario and British Columbia, with rapidly growing urban centres had the highest expenditures with \$13.90 and \$13.40 per capita respectively. The Atlantic provinces, less urban in character, spent per capita amounts far below the national average. Even Quebec, with its high urban population, had a relatively low expenditure.

In relation to personal income the expenditure on sanitation varied between 0.2 per cent in Newfoundland and New Brunswick and 0.8 per cent in Ontario and British Columbia. The national average was 0.6 per cent of personal income. This expenditure was largest (4.3 per cent) in the Ontario provincial-municipal total budget and smallest (0.7 per cent) in Newfoundland. The national average was 3.1 per cent.

There were considerable disparities among the provinces in 1960 in the expenditure on sanitation. A case can be made for special grants which, indeed, are being made at present by both federal and provincial governments. Since the level of expenditure required is closely related to the degree of urbanization, complete equalization of expenditure per capita among the provinces would not meet the needs of those provinces having a large proportion of urban dwellers. At the same time the latter provinces are also high-income provinces and therefore have high fiscal capacities. The Atlantic provinces will require some assistance in the future to develop water and sewage facilities in their cities and towns.

In general, considerable differentials exist in the levels of health and sanitation expenditures per capita. If a minimum national programme is to be established, special equalization grants will be needed for the provinces with fiscal capacities below the national average. The amounts required will depend upon the degree of equalization sought.

TABLE H-1
EXPENDITURES ON HEALTH SERVICES, PROVINCIAL GOVERNMENTS, CANADA, 1960-61
(In Thousands of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and NWT.	Total
<i>Gross General Expenditure</i>												
General Health	306	72	249	404	3,326	4,016	696	604	631	1,242	49	11,595
Public Health	1,416	465	3,199	2,263	18,207	13,515	3,351	5,787	4,238	6,811	363	59,615
Medical, Dental and Allied Services	1,585	146	257	152	1,489	2,801	269	2,135	2,078	4,540	10	15,462
Hospital Care	15,291	3,409	29,549	29,325	106,802	281,522	40,366	46,735	61,710	72,061	1,357	688,127
Total	18,598	4,092	33,254	32,144	129,824	301,854	44,682	55,261	68,657	84,654	1,779	774,799
<i>Deduct</i>												
General Health	45	2	121	75	911	1,105	124	118	336	135	7	2,979
Public Health	715	269	1,355	1,075	8,490	7,461	1,775	2,183	1,881	2,816	75	28,095
Medical, etc. Services	12	9	47	78	360	226	-	82	5	109	-	928
Hospital Care	7,282	1,460	12,661	11,363	24,185	93,779	15,014	15,905	25,870	26,075	591	234,185
Total Deductions	8,054	1,740	14,184	12,591	33,946	102,571	19,330	18,288	28,092	29,135	673	266,187
<i>Sources of Deductions</i>												
Government of Canada	6,359	1,463	13,506	11,686	29,929	101,582	16,686	17,239	19,957	26,760	673	245,240
Local Governments	-	2	-	-	3,993	4	305	310	6,301	388	-	11,303
Institutional Revenue	1,695	275	678	905	24	985	2,339	739	1,834	1,987	-	9,644
Total	8,054	1,740	14,184	12,591	33,946	102,571	19,330	18,288	28,092	29,135	673	266,187
<i>Net General Expenditure</i>												
General Health	261	70	128	329	2,415	2,911	572	486	295	1,107	42	8,616
Public Health	701	196	1,844	1,188	9,717	6,054	1,576	3,604	2,357	3,995	288	31,520
Medical, etc. Services	1,573	137	210	74	1,129	2,575	269	2,053	2,073	4,431	10	14,534
Hospital Care	8,009	1,949	16,888	17,962	82,617	187,743	25,352	30,830	35,840	45,986	766	453,942
Total	10,544	2,352	19,070	19,553	95,878	199,283	27,769	36,973	40,565	55,519	1,106	508,612

Source: Dominion Bureau of Statistics, *Financial Statistics of Provincial Governments, 1960*.

TABLE H-2
EXPENDITURES ON HEALTH AND SANITATION, MUNICIPAL GOVERNMENTS, CANADA,
1960-61
(In Thousands of Dollars)

Item	New- found- land	Prince Edward Island	Nova Scotia	New Brun- swick	Quebec	Ontario	Man- itoba	Saskat- chewan	Alberta	British Colum- bia	Yukon and North- west Terri- tories	Total
<i>Health Expenditure</i>												
Current	15	1	2,676	975	8,848	14,583	1,670	6,145	7,474	2,294	12	44,693
Capital	-	-	90	2	2,000(a)	17,023	1,017	1,561	2,020	795	-	24,508
Total	15	1	2,766	977	10,848	31,606	2,687	7,706	9,494	3,089	12	69,201
<i>Sanitation</i>												
Current	582	20	1,084	635	9,445	34,492	3,309	2,597	5,408	6,286	63	63,921
Capital	239	424	1,703	372	15,000(a)	50,501	1,618	3,817	3,943	15,231	-	92,848
Total	821	444	2,787	1,007	24,445	84,993	4,927	6,414	9,351	21,517	63	156,769

(a) Estimated.

Source: Dominion Bureau of Statistics, *Financial Statistics of Municipal Governments, 1960*.

TABLE H-3

GRANTS-IN-AID AND SHARED-COST CONTRIBUTIONS RECEIVED FROM THE GOVERNMENT OF CANADA AND LOCAL GOVERNMENTS RE HEALTH AND HOSPITAL SERVICES, CANADA, 1960-61
(In Thousands of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Yukon and North-west Territories	Total
From Government of Canada:												
Hospital Insurance and Diagnostic Services	5,518	1,011	10,608	9,953	15,864	86,509	13,204	14,470	17,448	22,591	590	197,766
General Health Grants:												
Hospital Construction	71	170	1,363	508	5,005	6,311	1,029	954	293	1,357	1	17,062
General Public Health	325	123	767	501	2,619	2,623	717	762	735	1,206	25	10,403
Tuberculosis Control	126	29	124	157	1,274	785	177	151	249	290	28	3,390
Mental Health	209	99	372	313	2,424	2,622	406	396	657	657	20	8,175
Professional Training	43	2	71	72	288	501	77	66	97	65	2	1,284
Cancer Control	23	12	36	62	917	1,039	781	186	253	305	2	3,016
Public Health Research ...	-	-	48	-	599	578	44	49	81	63	5	1,467
Crippled Children and Mental Rehabilitation ...	24	13	61	78	370	226	177	111	64	113	-	1,237
Child and Maternal Health .	20	4	56	42	569	388	74	94	80	113	-	1,440
Total	841	452	2,898	1,733	14,065	15,073	3,482	2,769	2,509	4,169	83	47,474
Total, Gov't of Canada	6,359	1,463	13,506	11,686	29,929	101,582	16,686	17,239	19,957	26,760	673	245,240
From Local Governments:												
Hospital Care	-	-	-	-	3,316	-	85	-	6,301	144	-	9,846
Other Health	-	2	-	-	677	4	220	310	-	244	-	1,457
Total	-	2	-	-	3,993	4	305	310	6,301	388	-	11,303

Source: Dominion Bureau of Statistics, *Financial Statistics of Provincial Governments, 1960*.

TABLE H-4
COMBINED PROVINCIAL-MUNICIPAL EXPENDITURE ON HEALTH SERVICES, (a) CANADA, 1960
(In Millions of Dollars)

Item	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
A. PROVINCIAL											
1. Gross Expenditure(b)	18.60	4.09	33.25	32.14	129.82	301.85	44.68	55.26	68.66	84.65	773.02
2. Less Transfer Payments from Municipal(c)	-	-0.00	-	-	-3.99	-0.00	-0.31	-0.31	-6.30	-0.39	-11.30
3. Net Total	18.60	4.09	33.25	32.14	125.83	301.85	44.37	54.95	62.36	84.26	761.72
B. MUNICIPAL											
1. Gross Expenditure(d)	0.02	0.00	2.77	0.98	10.85	31.61	2.69	7.71	9.49	3.09	69.20
2. Less Transfer Payments from Provincial(e)	-0.03	-	-0.66	-0.65	-3.68	-2.71	-0.16	-0.25	-1.25	-0.32	-9.71
3. Net Total	-0.01	0.00	2.11	0.33	7.17	28.90	2.53	7.46	8.24	2.77	59.49
C. COMBINED TOTAL, Excluding intertransfers	18.59	4.09	35.36	32.47	133.00	330.75	46.90	62.41	70.60	87.03	821.21

(a) Excludes sanitation and waste removal which is wholly municipal (see Table H-2).

(b) From Table H-1.

(c) From Table H-3.

(d) From Table H-2.

(e) From Table G-13.

TABLE H-5
COMBINED PROVINCIAL-MUNICIPAL EXPENDITURE ON HEALTH SERVICES AND SANITATION,
PER CAPITA AND PERCENTAGE COMPARISONS, CANADA, 1960

Item	New- found- land	Prince Edward Island	Nova Scotia	New Brun- swick	Quebec	Ontario	Man- itoba	Saskat- chewan	Alberta	British Colum- bia	Total
A. Health Services											
1. Dollars Per Capita(a)	41.50	39.70	48.60	55.10	25.90	54.10	51.80	68.20	54.70	54.30	46.00
2. Index of Dollars Per Capita ..	90	86	106	120	56	118	113	148	119	118	100
3. Percentage of Personal Income(b)	4.7	4.0	4.2	5.3	2.0	3.0	3.3	4.6	3.5	3.1	3.0
4. Percentage of Combined Provincial-Municipal Expenditure(c)	18.7	15.9	18.8	21.1	10.8	17.2	18.0	21.7	14.4	14.7	15.6
5. Per Cent Municipal(d)	0.0	—	6.0	1.0	5.4	8.7	5.4	12.0	11.7	3.2	7.2
B. Sanitation											
1. Dollars Per Capita(e)	1.80	4.30	3.80	1.7	4.80	13.90	5.40	7.00	7.20	13.40	8.80
2. Index of Dollars Per Capita ..	20	49	43	19	55	158	61	80	82	152	100
3. Percentage of Personal Income	0.2	0.4	0.3	0.2	0.4	0.8	0.3	0.5	0.5	0.8	0.6
4. Percentage of Combined Provincial-Municipal Expenditure	0.8	1.7	1.5	0.7	2.0	4.4	1.9	2.2	1.9	3.6	3.0

(a) From data in Table H-4 and population data from Dominion Bureau of Statistics, *National Accounts, Income and Expenditure, 1962* (Ottawa, 1963).

(b) Expenditure and Income data from *Ibid.* Canada = 100.

(c) By reference to data in Table G-14 and Table G-16.

(d) From data in Table H-4.

(e) From data in Table H-2.