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DATED..... *August 11* 1970

RATES OF PAY
IN
INDUSTRIAL AND OTHER ORGANIZATIONS
AND IN
THE PUBLIC SERVICE OF CANADA
OCTOBER 1, 1958 TO 1968

by

J.H. SCARFFE

A thesis submitted to Carleton University in partial
fulfillment of the requirements for the degree of
Master of Arts in Public Administration

School of Public Administration
Carleton University
Ottawa, Canada
August, 1970

The undersigned recommend to the Faculty of
Graduate Studies acceptance of the thesis
"Rates of Pay in Industrial and Other Organizations
and in the Public Service of Canada, October 1,
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ABSTRACT

The main tenet underlying the pay policy for the Canadian Federal Public Service has been for many years and continues to be under a system of collective bargaining, that rates of pay and other conditions of employment within the service should be generally in line with those prevailing for comparable work in outside organizations. The prime objective of this study is to compare rates of pay in the service with those in industrial and other organizations in Canada, and to determine the extent to which the general policy with respect to rates of pay in the service has been met, over the period October 1, 1958 to 1968.

The study is based primarily on an examination of rates of pay for selected classes in industrial and other organizations in Canada and their counterparts in the federal Public Service. The classes selected are representative of professional and scientific, administrative, technical, clerical and operational occupations up to but not including executive levels. Information is presented on annual rates of pay and percentage changes, regional, industrial and occupational differentials for the classes studied in outside organizations over the period October 1, 1958 to 1968. Information is presented on annual rates of pay and percentage changes and occupational differentials for essentially the same classes in the service over the same period of time.

Very briefly, the findings of the study were that rates in the service in 1958 were generally below those prevailing in outside organizations. Over the period under study, the rates in the service increased until in 1968 they were generally competitive with those in outside organizations. However, as of that date the rates for some classes were above what may be considered competitive market rates.

It was concluded that rates of pay in the service had been reasonably well administered over the period under study. Nonetheless, constant vigilance would be required to ensure that rates of pay in the service in the future do not fall too much below or are above those generally prevailing in the economy.

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INTRODUCTION

Rates of pay are of very wide interest. Every person employed has a prime concern with the rates of pay for his or her own job and how they relate to those of colleagues in the organization in which he or she is employed. This interest usually extends, depending upon one's aspirations and the availability of information, to localities and areas beyond one's immediate environment; it even extends to other countries.

Rates of pay in the federal Public Service of Canada also are of interest to many people. They are of vital concern to those who are employed as public servants. They are also of interest to potential employees of the federal Public Service who are now in the labour market and those who will be entering the labour market in the future. They are of interest to members of industrial and other organizations, including provincial and municipal governments and educational institutions. Rates of pay in the Canadian Public Service are of interest to international organizations and foreign governments. They are also, of course, of interest to the tax-paying public, and the appropriate level of public service salaries is a matter of major policy for the Federal Government of Canada. So, directly and indirectly, salaries and wages paid in the Public Service are of interest to the larger community.

At the same time the subject of salaries and wages has been bounded by an aura of secrecy and confidentiality. Individuals are usually reluctant to disclose exactly how much they earn. Organizations, too, are often reluctant, even for survey purposes, to release data on rates of pay, particularly for senior employees. Even in the recruitment of personnel it

may happen that the matter of pay is the last point to be discussed by the employer and the prospective candidate. Organizations pay what they have to pay to attract and maintain the services of employees. Philanthropic attitudes insofar as pay is concerned are usually restricted to one's own job or to the occupation in which one is engaged.

While many studies have shown that pay is not always the most important factor for persons in jobs, it does, however, rank high. If rates of pay in an organization are not considered by the employees to be reasonable in relation to those of other organizations, morale and efficiency may suffer.

The main tenet underlying the pay policy for the Canadian Federal Public Service has been for many years and continues to be under a system of collective bargaining, that rates of pay and other conditions of employment within the service should be generally in line with those prevailing for comparable work in industrial and other organizations in Canada. As in so many other fields of endeavour, the policy is relatively easy to formulate but the actual task of carrying out the policy is more difficult.

As far as rates of pay in the Public Service are concerned, the Federal Government always has had a conflicting role to play. On the one hand, as the country's agent for fiscal policies, it has responsibilities to the tax-paying public. On the other hand, it has a responsibility to its employees to ensure that their remuneration is reasonable in relation to that in outside organizations. The conflict in these two roles, perhaps, has been more acute during the period under study as compared with earlier periods, with the central government being expected to devise policies and give leadership on the matter of inflation.

At the same time, the years between 1958 and 1968 were prosperous years for the Canadian economy. Wages and salaries in the economy, both in real and money terms, increased at a greater rate during that period than in any other period of equal length in Canada's history.

The prime objective of this study is to compare rates of pay in the federal Public Service with those in industrial and other organizations in Canada, and to determine the extent to which the general policies with respect to rates of pay in the service have been met, over the period October 1, 1958 to 1968. It is based primarily on an examination of rates of pay for selected occupations in industrial and other outside organizations and their counterparts in the federal Public Service.

Most of the information for the study was drawn from primary sources including Pay Research Bureau reports, Orders-in-Council and agreements authorizing rates of pay, and unpublished papers and speeches. This information was supplemented by comments and interpretations based on secondary sources, including text books and periodicals.

The findings of the study are presented in the four chapters which follow. Chapter I presents information on rates of pay in industrial and other organizations in Canada, over the period October 1, 1958 to 1968. Chapter II presents similar information for essentially the same kinds of work in the federal Public Service. In Chapter III, the rates in the service are compared with those in outside organizations. The conclusions of the study are set forth in Chapter IV.

Gratefully acknowledged are the assistance and co-operation extended by members of the Pay Research Bureau in the preparation of this paper. Mr. T.J. Wilkins, Director of the Bureau gave encouragement to complete this work and gave permission to use the Bureau facilities. Mr. Kenneth R. Scobie, Mr. Félix Quinet, Mr. Murdoch M. Maclean and Mr. Ian Watson reviewed earlier drafts and made numerous suggestions for improvements in presentation. The tables on which this paper are based as well as those presented in this paper were prepared by Mrs. Joan Jackson and Mrs. Hazel Hopton. The typing was done by Mrs. Marjorie Warren and Miss Bonnie McCredie. Under the tutorship of Dr. R.O. MacFarlane this work was completed.

CHAPTER I
RATES OF PAY IN INDUSTRIAL AND OTHER
ORGANIZATIONS IN CANADA, OCTOBER 1, 1958 TO 1968
SECTION I: BACKGROUND

Introduction

Rates of pay in industrial and other organizations in Canada vary greatly as between industry, region and locality. The economic and institutional factors which influence rates of pay are numerous and complex. By way of introduction, some of these factors which have an effect on rates of pay in the economy should be examined, if only briefly.

Size

In size, Canada is the second largest country in the world, with an area of 3,851,809 square miles; the Union of Soviet Social Republics with 8,649,539 square miles is the largest; and the United States (including Alaska and Hawaii) with 3,615,211 square miles is third; and Brazil with 3,286,488 square miles is fourth.¹ It is more than forty times the size of the United Kingdom and eighteen times that of France.¹ For such a large country, Canada has a relatively small population, 20,772,000,² which is unevenly distributed across the country in accordance with the resources and stage of economic development of the various regions.

¹ Dominion Bureau of Statistics, Canada Year Book, Ottawa, 1969, p. 2.

² Dominion Bureau of Statistics, "Daily Bulletin", Ottawa, 1970.

Regional Differences

In viewing Canada from west to east, British Columbia is Canada's third largest province, with an area of 359,279 square miles.³ However its total population of 2,010,000 as of July 1, 1968⁴ is not as great as either Metropolitan Toronto or Montreal, which in 1968 had populations of 2,280,000⁴ and 2,527,000⁴ respectively. Forestry is one of the more important industries in British Columbia, directly or indirectly generating about one-half of all income earned by persons in the province.⁵ The province ranks first in the value of fish landed, accounting in 1964 for approximately 30% of the national catch.⁶ The mountainous nature of the land abounds in minerals but also limits the development of agriculture. Most secondary manufacturing is concerned with processing raw materials indigenous to the province or imported from overseas.⁷

The Prairie Region has approximately 20%³ of the total area of Canada with approximately 17%⁴ of the total population. Each of the provinces of Manitoba and Saskatchewan has less than half of the populations of either Metropolitan Montreal or Toronto. Alberta as a whole has 61 and 67% respectively of the populations of these two centres.⁴ The most important industry of the Prairies is agriculture. It produces 90% of the wheat grown in the country. However, mining is becoming more important in that region, accounting for 22% of the value of production of the Prairies in

³ Dominion Bureau of Statistics, Canada Year Book, Ottawa, 1969, p. 2.

⁴ Dominion Bureau of Statistics, "Daily Bulletin", Ottawa, 1970.

⁵ Dhalla, N.K., These Canadians, McGraw-Hill of Canada Ltd., Toronto, 1966, p. 618.

⁶ Ibid, p. 619.

⁷ Ibid, p. 620.

1961,⁸ mainly as a result of developments in the oil industry. Forest reserves are quite extensive but not well developed. Manufacturing is concerned primarily with processing raw materials of the area, including food items, petroleum products and local minerals.⁸

In area Ontario ranks second to Quebec, with approximately 412,532 square miles, but ranks first with a population of 7,321,000, which represents approximately 34% of the total population of Canada.⁹ Approximately half of the manufactured foods in Canada are produced in Ontario.¹⁰ It also ranks first in agricultural production in Canada, has great mineral wealth and a good supply of lumber. The largest financial organizations in the economy are concentrated in the southern part of the province.

In area, Quebec is the largest province in Canada, with approximately 523,860 square miles. It ranks second in population, with 5,930,000 people, that is approximately 28.5% of the total population of Canada, as of July 1, 1968.⁹ While somewhat behind Ontario industrially, Quebec has developed rapidly since World War II and the economic gap between the two provinces is closing.¹¹ Quebec has rich agricultural resources, both sea and inland fisheries and good supplies of mineral and forest products.

The Atlantic region, comprised of the four eastern provinces situated on the east coast "lies at the low end of the economic scale".¹¹ The population of the four provinces together, 2,003,000, or 9.6% that of Canada, is less than that of either Metropolitan Montreal or Toronto.⁹

⁸ Dhalla, N.K., These Canadians, McGraw-Hill of Canada Ltd., Toronto, 1966, p. 538.

⁹ Dominion Bureau of Statistics, "Daily Bulletin", Ottawa, 1970.

¹⁰ Dhalla, N.K., op. cit., p. 457.

¹¹ Saunders, G., Wage Determination in Canada, Queen's Printer and Controller of Stationery, 1965, p. e.

Fishing has predominated in the life of the Atlantic provinces. However, in recent years, mining has become more important in the economy, particularly with the development of iron ore deposits in Labrador and important discoveries of metals in New Brunswick. With the exception of Prince Edward Island, all the Atlantic provinces are heavily wooded and "pulp and paper mills are significant props to the economy, especially in Newfoundland and New Brunswick".¹² However, the Atlantic provinces are deficient in secondary manufacturing, being limited to the food processing group, steel making and heavy engineering at Sydney and a miscellaneous group of textiles, clothing, tanning and printing plants, none of them very large.¹²

Size of the Labour Force

Over the ten year period under study, the labour force in Canada increased from 5,125,000 in October, 1958 to 7,130,000 in October, 1968, an increase of approximately 40%. Also, there was a change in the number of employees within major industrial groups. This information is shown in Table 1.

¹² Dhalla, N.K., These Canadians, McGraw-Hill of Canada Ltd., Toronto, 1966, p. 343.

TABLE 1: LABOUR FORCE, CANADA, OCTOBER, 1958 AND 1968

<u>LABOUR FORCE</u>	<u>No. of Persons</u>	
	<u>Oct. 18, 1958</u> 000's	<u>Oct. 19, 1968</u> 000's
Total	6,188	7,995
Unemployed	328	288
Total Employed	5,860	7,707
- Agriculture	735	577
- Non-agriculture	5,125	7,130
 <u>INDUSTRY</u>	 <u>Oct. 18, 1958(a)</u> 000's	 <u>Oct. 19, 1968</u> 000's
Total Employed	5,860	7,707
- Agriculture	731	577
- Forestry	101	-
- Fishing and Trapping	17	-
- Mining	97	-
- Other Primary Industries(b)	-	225
- Manufacturing	1,474	1,769
- Construction	475	520
- Transportation, Storage and Communications	435	-
- Public Utilities	81	-
- Transportation and Other Utilities(b)	-	665
- Trade	915	1,272
- Finance, Insurance, Real Estate	221	327
- Service	1,313	-
- Community, Personal, Other Services(b)	-	1,885
- Public Administration	-	467

Source: Special Surveys Division, Dominion Bureau of Statistics.

(a) Data are estimated based on an earlier Standard Classification system.

(b) The classification now being used by Dominion Bureau of Statistics.

The Composition of the Labour Force

In addition to increases in the total labour force and changes in the proportions of employees in the various industrial groups, there have been changes in its composition. Table 2 shows the percentage of employment in each of 12 occupational groups in 1961 and 1968, together with the percentage change in each of the groups.

TABLE 2: DISTRIBUTION OF LABOUR FORCE BY OCCUPATIONAL GROUP
FOR CANADA, 1961 AND 1968(a)

<u>Occupational Groups</u>	<u>Percent of Total Employed in 1961</u>	<u>Percent of Total Employed in 1968</u>	<u>Percent Change in Employment, 1961 to 1968</u>
Managerial	8.6	9.6	1.0
Professional and Technical	10.0	13.2	3.2
Clerical	13.5	14.3	0.8
Sales	6.6	6.5	- 0.1
Service and Recreation	10.7	11.6	0.9
Transport and Communication	6.5	5.5	- 1.0
Farmers and Farm Workers	11.8	7.8	- 4.0
Loggers and Related Workers	1.0	0.7	- 0.3
Fishermen, Trappers, Hunters	0.3	0.3	0.0
Miners, Quarrymen, Related Workers	1.0	0.7	- 0.3
Craftsmen	24.5	25.8	1.3
Labourers	5.5	4.0	- 1.5
All Occupations	100.0	100.0	

Source: Data referring to 1961 were calculated from information provided by Dominion Bureau of Statistics, 1961 Census of Canada Labour Force, Ottawa, 1963. Data pertaining to 1968 were obtained from Department of Manpower and Immigration, Canada Manpower Bulletin, Ottawa, 1969, p. 19.

Changes in Occupations

Occupations themselves are in a continuous state of flux. Functions and technology are always changing, new jobs emerge and others become obsolete. One example of an occupation which developed as a result of changing functions is that of Economist. In Canada, economists were first employed primarily in universities. In the late 1920's and particularly during and immediately after World War II, the federal Public Service began to employ them. It wasn't until the 1950's however that industrial and other organizations in Canada began to employ them in significant numbers.¹³ Social Worker is another example of an occupation which developed in response to a need for a particular type of work, resulting from the enactment of welfare legislation.

Computer Systems Analyst and Programmer are relatively new occupations. In Canada, there were few persons trained in this occupation before the mid fifties.¹⁴ Since that time, there has been a significant increase in the number of computer installations. Also, a number of organizations increased the size of their installations.¹⁵ The number of persons trained in these occupations now ranges up to as many as 200 or more in some of the larger firms in Canada.

Technician and Technologist offer other examples of a changing occupational structure. For many years in Canada there have been occupations which demanded a level of skill which fell somewhat below that

¹³ Civil Service Commission, Unpublished Data, Ottawa, 1955.

¹⁴ Department of Labour, A Second Survey of Electronic Data Processing in Canada, 1962, Report No. 9C, Ottawa, 1963.

¹⁵ The Computer Society of Canada, Census of Computers in Canada, Ottawa, various years.

of Engineer and above that required by Journeyman Tradesman, such as Electrician. However, there were no formal training courses for these occupations and the number of persons having the requisite qualifications for such work was relatively small. Changes in technology further increased the need for persons with such skills. With new scientific discoveries, new specializations within the scientific and engineering fields have developed which more and more are being performed by Technician and Technologist. These specializations involve tasks which range from relatively simple and routine to those which overlap work performed by Scientist and Engineer. It was only with the introduction of technological institutes in Canada that the number of persons qualified to perform such duties reached a significant proportion of the labour force.

Examples of occupations in which the number of employees has been decreasing over the last ten years are Labourer, Billing Machine Operator, Calculating Equipment Operator and Tabulator Operator, operating unit record equipment. A good deal of the work which was done by Billing Machine Operator, Calculating Equipment Operator and Tabulator Operator is now being done by computers. The introduction of machines such as bulldozers, backhoes and cranes has eliminated the amount of lifting, carrying and shovelling which was formerly done manually by labourers.

As functions change and methods of performing work change, there is a constant regrouping of the composition of various jobs, which is reflected in most large organizations today in their classification plans. The matter of changing job content presents some problems in providing comparable data for various occupations over time, although the

job content of large proportions of jobs remains relatively stable over comparatively long periods.

Labour Organization in Canada

Rates of pay for 33.1% of the non-agricultural paid workers and 26.6% of the labour force are determined by collective bargaining. Statistics on union membership for the period under study are shown in Table 3.

TABLE 3: UNION MEMBERSHIP IN CANADA, 1958 AND 1968

<u>Year</u>	<u>Union Membership (Thousands)</u>	<u>Union Membership as a Percentage of the Labour Force(a) %</u>	<u>Union Membership as a Percentage of Non-agricultural Paid Workers(a) %</u>
1958	1,454	24.7	34.2
1968	2,010	26.6	33.1

Source: Department of Labour, Labour Organizations in Canada, Queen's Printer and Controller of Stationery, Ottawa, 1969, page XII.

Compensation Policies of Industrial and Other Organizations

Apart from the fact that the rates for approximately one third of the labour force are established through collective bargaining, little

(a) These percentages are given as estimates by the Department of Labour.

is known about the actual compensation policies of individual industrial and other organizations in Canada. It is known, of course, that some organizations pay what is being paid to "the top twenty-five percent" of employees in the country or a particular region or community. Others have a policy of being "competitive". Some firms have "profit sharing". But there is little, if any, information on how rates in individual organizations are set in relation to, for example, capital expansion and cyclical changes in economic activity.

Pay Practices

Most large scale organizations in Canada today use job evaluation plans in setting rates of pay. This was not so ten or fifteen years ago. In 1957, many large companies in Canada, had just completed, were in the process of or were contemplating for the first time, the installation of job evaluation plans. At the same time, of course, other organizations have had job evaluation plans for many years and others have not yet installed them.

To substantiate the point of view expressed above, Otis and Leukart¹⁶ writing in 1954 said:

"a majority of the companies in the United States have no definite program for administering the wages and salaries paid to their workers. It is surprising to find that a nation that has installed production systems, inspection systems, and work simplification procedures, which have enabled it to out-produce almost the entire world has done little to bring the same thorough research to wage and salary administration. In organi-

¹⁶ Otis, Jay L. and Leukart, Richard H., Job Evaluation: a basis for sound wage administration, Prentice-Hall, Englewood Cliffs, N.J., 1954, page 7.

zations that pride themselves on precision workmanship, one often finds that workers performing the same tasks are paid at widely differing wage rates, and there are no logical reasons for the existing relationships among the rates for different occupations. However, increasing numbers of companies are turning to systematic and orderly methods of classifying jobs and determining wage rates."

It is not unrealistic to say that the situation in the United States described to Otis and Leukart in 1954 was just as much in evidence in Canada at that time, if not more so. However, in Canada today most firms¹⁷ with more than one establishment¹⁷ within a province or in different provinces or regions usually have a "one rate structure" for professional, technical and administrative employees. However, the same considerations do not apply usually to rates of pay for other occupations in different establishments at different locations in the same firm.

While the tendency is towards uniform rates within establishments for equivalent duties and responsibilities, there are often differences in rates as between one establishment and another in the same firm,

¹⁷ Throughout this paper the term "firm" and "establishment" are used in accordance with the definitions provided by the Dominion Bureau of Statistics in the Standard Industrial Classification Manual, Ottawa, 1960, in which "An establishment is defined as the smallest unit which is a separate operating entity capable of reporting all elements of basic industrial statistics. This means that for purposes of industrial surveys, data are gathered for the most homogeneous units that maintain accounts which permit them to report on their main elements of input and output. The majority of "establishments" are firms but many firms have more than one establishment".

especially for operational and administrative support classes, including Carpenter, Electrician, Machinist, Clerk, Typist and Stenographer. Some firms have "zone rates" for these classes, and others establish rates on the basis of those prevailing in particular localities.

In considering, then, the geographical size, the regional differences, the increase and change in the composition of the labour force, as well as the change in the occupations themselves, and the variation in policies and practices within individual organizations, it is not difficult to understand why the Canadian wage structure has been referred to as a "tangled web".¹⁸ Nevertheless, through reasonably scientific methods for selection of organizations and careful attention to occupational definitions it is possible to establish reasonably reliable averages for Canada, by industry group, region and locality.

For purposes of this study, information collected by the Pay Research Bureau has been consolidated for 32 classes which are representative of professional, administrative, technical, clerical and operational occupations up to but not including the executive level, for the period October 1, 1958 to 1968. The organizations to which the data pertain include a broad spectrum of industrial firms, a number of crown corporations both in the federal and provincial governments, and some municipalities. These organizations are described in more detail below

¹⁸ Woods, H.D. and Ostry, S., Labour Policy and Labour Economics in Canada, MacMillan of Canada, Toronto, 1962.

and in this study are referred to collectively as industrial and other organizations. The sources and methods used in obtaining data on rates of pay in industrial and other organizations including definitions used in the presentation of data on rates of pay in industrial and other organizations in Canada are the subject of the next section of this chapter.

The Pay Research Bureau was created in September, 1957 for the purpose of conducting surveys in industrial and other organizations in Canada as a basis for establishing rates of pay and other conditions of employment in the federal Public Service of Canada. It also has a responsibility for providing similar information on salaries and wages and conditions of employment within the federal Public Service. The Pay Research Bureau was initially created as a branch of the now Public Service Commission. With the enactment of the Public Service Staff Relations Act of March, 1967, it was brought under the aegis of the Public Service Staff Relations Board.¹⁹

¹⁹For information on the functions, organization and operations of the Pay Research Bureau, see Gauthier, G.E. "The Canadian Pay Research Bureau" Public Personnel Review, October, 1958. Gauthier, G.E. "Here's How the Civil Service Gets Facts About Setting Wage Rates" Canadian Business, June, 1958. Wilkins, T.J. "The Pay Research Bureau" Civil Service Review, September, 1967.

SECTION II: SOURCES AND METHODS RELATING TO THE COLLECTION AND PRESENTATION OF INFORMATION ON RATES OF PAY IN INDUSTRIAL AND OTHER ORGANIZATIONS IN CANADA

Introduction

In 1958 the Pay Research Bureau undertook its first major survey on rates of pay in industry. In that survey, data were obtained for professional, technical, clerical and operational occupations from 109 establishments across the country. Since that time many surveys have been conducted by the Bureau, most of which have been national in scope. Classes²⁰ representative of professional, administrative, technical, administrative support and operational categories in the Federal Public Service have been surveyed in a systematic way, every one or two years. More specialized classes have also been surveyed periodically. Information collected by the Bureau has been consolidated in this study for the purpose of analyzing trends in rates of pay over the ten year period, October 1, 1958 to 1968.

Class Coverage

For this study, thirty-two classes were selected which are representative of professional, administrative, technical, clerical and operational classes up to but not including the executive level. These

²⁰ The term class as used in this study has a specific meaning based on the common usage of the word in public service personnel classification systems. It refers to a grouping of duties and responsibilities within the same field or area of work; hence the class of Engineer, Social Worker, Clerk and others. A class may or may not be synonymous with the term occupation. Classes are divided into grades or levels. A grade or level refers to the complexity of the duties and responsibilities being performed within a class and the qualifications required.

classes are characterized by relative stability of employment and job content, encompass a relatively large number of employees, and are important for rate setting purposes for the total spectrum of occupations in industrial and other organizations in Canada.

In industrial and other organizations in Canada, the titles of classes and grades having essentially the same duties and responsibilities often vary greatly from one organization to another. Also, classification plans vary as between organizations and often the same titles in one organization compared with another involve significantly different duties and responsibilities. For example, the duties and responsibilities of Clerk 1 in one organization may be much greater than those of Clerk 1 in another. In order to have a common basis as well as a common terminology for presenting information, the class titles and levels in the Federal Public Service have been used. This was made possible through the matching process. That is, the duties and responsibilities of each class, and grade or level within a class, for which data were obtained from industrial and other organizations were comparable to those set forth in the field survey specifications used in collecting the pay data. For example, the data obtained pertaining to Economist 1 related to duties and responsibilities comparable to those in the survey specifications for Economist 1. While cognizance was taken of qualifications, the emphasis was on "matching" the duties and responsibilities of the classes in industrial and other organizations with those set out in the specifications.

The classes for which data are presented, then, as they relate to those in five occupational categories and a number of occupational groups in the Federal Public Service, are shown below. It may be noted that for

most classes the titles and grades or levels used in presenting information on rates of pay are the same as those used for classification purposes. However, for some classes descriptive titles have been used. For example, the title of Assistant Professor, Associate Professor and Professor have been used in presenting information in this paper, whereas for classification purposes in the service, the titles used are University Teacher 2, 3 and 4 respectively. The titles and grades used for classification purposes in the service are shown together with the specifications in Appendix A.

PROFESSIONAL AND SCIENTIFIC CATEGORY

Economics, Sociology and Statistics Group

Economist 1-7
Statistician 1-7

Education Group

Elementary School Teacher
Secondary School Teacher

Engineering and Land Survey Group

Engineer 1-7

Nursing Group

Nurse, General Duty

Occupational and Physical Therapy Group

Occupational Therapist
Physical Therapist

Social Workers Group

Social Worker 1-6

University Teaching Group

Assistant Professor
Associate Professor
Professor

ADMINISTRATIVE AND FOREIGN SERVICE CATEGORY

Computer Systems Administration Group

Computer Systems Administration 1-5

ADMINISTRATIVE SUPPORT CATEGORY

Clerical and Regulatory Group

Clerk 1-3

Data Processing Group

Keypunch Operator

Secretarial, Stenographic, Typing Group

Typist and Stenographer 1-4

TECHNICAL CATEGORY

Drafting and Illustration Group

Draftsman, Engineering and Architectural 1-4

Engineering and Scientific Support Group

Technician, Engineering 1-5

Technician, Laboratory 1-5

Electronics Group

Technician, Electronics 1-7

OPERATIONAL CATEGORY

Correctional Group

Police Constable

Firefighter Group

Firefighter

General Labour and Trades Group

Carpenter

Electrician

Delivery Truck Driver

General Services Group

Cleaning Service Man
Storeman 2

Heating, Power and Stationary Plant Operation Group

Stationary Engineer 3

Hospital Services Group

Nursing Auxiliary, Certified
Nursing Orderly, Experienced
Cleaning Service Man
Cook
Hospital Maid

Other

Meter Reader

Selection of Organizations

The number of organizations asked to participate in surveys of the Pay Research Bureau varies depending upon the classes involved. Organizations were selected to produce wage and salary data as representative as possible of Canada as a whole, as well as of industrial groups, regions and metropolitan areas in the Canadian economy. For more populous classes, such as Engineer, Clerk, Typist, Stenographer, Carpenter and Electrician, which are employed by a relatively large number of organizations in Canada, the selection was based on particular criteria. Because of the relatively small number of employees in some other occupations, such as Economist and Statistician, the surveys covered virtually all organizations in Canada employing them in sufficient numbers that would justify inclusion in the surveys.

It should be noted that over the period 1958 to 1968, there were changes from time to time in the number of organizations surveyed for the various groups of classes, to improve the coverage and take into account

organizational and other changes in industrial and other organizations in the economy. However, it is considered that the changes in organizations covered do not significantly affect the comparability of data over the period. The organizations were selected to produce salary and wage data representative of the economy at a point in time.

The number of organizations surveyed by class as of October 1, 1958, or the earliest date for which data are presented in this paper, and the year 1968, are shown in Table 4, together with the size of organizations covered. It should be noted that the organizations covered tend to represent the larger employers in Canada.

Table 5 shows the number of employees to which the data presented in this paper relate, by class for Canada for the year 1959 or the earliest date for which data are presented and the year 1968, together with the percentage coverage by major industry group and region. Data on the number of employees by industry and region are not available prior to the year 1959.

The information given as to the size of organizations and the regional and industrial coverage pertain to the year 1968. However, it can be assumed that both the size of organizations covered and the percentage coverage by major industry group and major region would be approximately the same in earlier years as they were in the year 1968.

TABLE 4: NUMBER AND SIZE OF ORGANIZATIONS SURVEYED, BY CLASS, 1958 AND 1968

<u>Class</u>	<u>1958</u>	<u>1968</u>	<u>Size(a)</u>
Economist and Statistician	45 firms	60 firms	11 with up to 1000 employees 13 with 1001 to 5000 employees 14 with 5001 to 10,000 employees 11 with 10,001 to 20,000 employees 11 with over 20,000 employees
Elementary and Secondary School Teacher	442 school boards(b)	94 school boards(c)	
Engineer	85 firms	140 firms	35 with up to 1000 employees 66 with 1001 to 5000 employees 22 with 5001 to 10,000 employees 9 with 10,001 to 20,000 employees 8 with over 20,000 employees
University Teacher	15 large universities(d)	20 large universities	
Nurse, General Duty	68 hospitals(e)	99 hospitals	Of the 99 hospitals, there were:
Occupational Therapist	68 hospitals(e)	99 hospitals	40 general hospitals with a bed capacity of between 200 and 1759;
Physical Therapist	68 hospitals(e)	99 hospitals	56 provincial and municipal hospitals
Social Worker	6 general hospitals(e) 7 provincial governments 5 major municipalities 12 private agencies	8 provincial governments 5 major municipalities 15 private agencies	3 with 200-3019 beds; and 3 rehabilitation hospitals with 53 to 520 beds.
Computer Systems Administration	32 firms(f)	61 firms	13 with up to 1000 employees 18 with 1001 to 5000 employees 14 with 5001 to 10,000 employees 12 with 10,001 to 20,000 employees 4 with over 20,000 employees
Clerk	109 establishments	127 establishments(g)	13 with up to 500 employees
Typist	109 establishments	127 establishments(g)	17 with 501 to 1000 employees
Stenographer	109 establishments	127 establishments(g)	74 with 1001 to 5000 employees
Keypunch Operator	109 establishments	127 establishments(g)	17 with 5001 to 10,000 employees 6 with 10,000 and over

(a) Size refers to total employment of the firms, establishments or organizations from which data on rates of pay were obtained in 1968.

(b) For the year 1963-64.

(c) For the year 1967-68.

(d) For the year 1959-60.

(e) January 1, 1960.

(f) October 1, 1963.

(g) October 1, 1967.

TABLE 4: NUMBER AND SIZE OF ORGANIZATIONS SURVEYED, BY CLASS, 1958 AND 1968 (CONCL'D.)

Class	1958	1968	Size(a)
Draftsman	109 establishments	145 establishments in 118 firms	13 with up to 1000 employees 48 with 1001 to 5000 employees 38 with 5001 to 10,000 employees 15 with 10,001 to 20,000 employees 4 with over 20,000 employees
Technician, Engineering and Laboratory	136 establishments(h)	145 establishments	
Technician, Electronics	20 firms(h)	48 firms	16 with up to 1000 employees 23 with 1001 to 5000 employees 6 with 5001 to 10,000 employees 1 with 10,001 to 20,000 employees 2 with over 20,000 employees
Police Constable Firefighter	82 municipalities(i) 62 municipalities(i)	186 municipalities 153 municipalities	Municipalities with 20 employees or more
Carpenter, Maintenance Electrician, Maintenance Cleaning Service Man Storeman 2	109 establishments 109 establishments 109 establishments 109 establishments	240 establishments 240 establishments 240 establishments 240 establishments	113 with up to 500 employees 48 with 501 to 1000 employees 53 with 1000 to 5000 employees 18 with 5001 to 10,000 employees 8 with over 10,000 employees
Delivery Truck Driver Meter Reader	123 establishments(i) 40 establishments(i)	1865 establishments 183 establishments	Establishments with 20 employees or more
Hospital Services Classes	68 hospitals(j)	99 hospitals	Of the 99 hospitals, there were: 40 general hospitals with a bed capacity of between 200 and 1759; 56 provincial and municipal hospitals with 200-3019 beds; and 3 rehabilitation hospitals with 53 to 520 beds.

- (a) Size refers to total employment of the firms, establishments or organizations from which data on rates of pay were obtained in 1968.
(h) October 1, 1962.
(i) The coverage of the annual mail survey was significantly increased after the year 1958, which explains the wide variation in the numbers of organizations shown for 1958 as compared with 1968.
(j) January 1, 1960.

TABLE 5: EMPLOYEE COVERAGE FOR CANADA, BY INDUSTRY GROUP AND REGION, 1959 AND 1968

Class	Total Number Employees Covered		Percentage Coverage by Industry Group, 1968							Percentage Coverage by Region, 1968					
	1959	1968	Mining	Mfg.	Trans. & Comm.	Public Utils.	Trade	Fin. & Ins.	Service	Muni- cipal Govts.	Maritimes	Que.	Ont.	Prairies	B.C.
Economist & Statistician Engineer University Teacher Elementary & Secondary School Teacher	250	363	3.0	36.7	36.7(a)	-	5.2(b)	18.4	0	-	0.8	44.6	34.2	11.0	9.4
	6204	12820(c)	5.4	55.7	24.8(a)	-	1.2	-	9.9	-	2.8	34.3	40.7	12.2	10.0
	2233	8371	-	-	-	-	-	-	-	-	6.0	53.6	-	40.4	-
	34158(d)	42754(e)	-	-	-	-	-	-	-	-	4.3	28.8	37.4	20.9	8.6
Nurse, General Duty Occupational Therapist Physical Therapist Social Worker	4522	8445(f)	-	-	-	-	-	-	-	-	4.1	18.3	33.1	26.1	18.4
	80	197(f)	-	-	-	-	-	-	-	-	2.0	22.4	41.6	19.8	14.2
	95	433(f)	-	-	-	-	-	-	-	-	3.5	22.2	30.5	24.2	19.6
	1106(g)	1274	-	-	-	-	-	-	-	-	2.2	10.3	33.8	18.5	35.2
Computer Systems Administration	782(h)	2470	5.7	32.5	12.8	8.8	17.8	20.3	2.1	-	-	32.6	50.1	11.5	5.8
Clerk Typist Stenographer Keypunch Operator	18879	20653(i)	1.6	22.7	24.9	5.6	15.7	20.1	9.4	-	3.3	41.9	38.6	9.2	7.0
	3658	40311(i)	0.8	30.5	17.4	5.6	11.1	15.6	19.0	-	2.6	27.2	43.5	18.9	7.8
	4754	60821(i)	3.9	38.5	16.7	9.4	9.4	12.6	9.5	-	2.4	39.4	39.1	11.2	7.9
	1231	2137(i)	1.9	32.3	21.0	5.2	18.7	15.6	5.3	-	3.1	29.8	49.5	10.6	7.0
Draftsman Technician, Engineering Technician, Laboratory Technician, Electronics	2551	3814(c)	2.8	50.9	21.4(a)	-	0.4	-	13.8	10.0	4.8	33.3	43.6	8.4	9.9
	3928(j)	3826(c)	4.2	62.8	20.7(a)	-	-	-	6.3	4.9	6.0	40.6	35.4	11.7	6.3
	1884(j)	2469	5.9	83.8	3.5(a)	-	1.1	-	3.6	2.1	3.5	26.2	37.4	7.6	5.3
	1344(j)	4088	-	24.4	50.8(a)	-	24.7	-	0.1	-	11.2	34.9	34.8	12.1	7.0

(a) Includes Public Utilities.

(b) Includes Service.

(c) Includes Construction.

(d) For the year 1963-64.

(e) For the year 1967-68.

(f) July 1, 1967.

(g) January 1, 1960.

(h) October 1, 1963.

(i) October 1, 1967.

(j) October 1, 1962.

TABLE 5: EMPLOYEE COVERAGE FOR CANADA, BY INDUSTRY GROUP AND REGION, 1959 AND 1968 (CONCL'D.)

Class	Total Number Employees Covered	1952	1968	Percentage Coverage by Industry Group, 1968							Percentage Coverage by Region, 1968				
				Mining	Mfg.	Trans. & Comm.	Public Utils.	Trade	Fin. & Ins.	Service	Muni- cipal Govts.	Maritimes	Que.	Ont.	Prairies
Police Constable	8083	12419	-	-	-	-	-	-	-	-	4.2	36.9	40.5	13.4	5.0
Firefighter	4682	11006	-	-	-	-	-	-	-	-	4.8	30.5	38.6	16.1	10.0
Carpenter, Maint.	909	916	16.9	44.4	13.5(k)	-	5.1	1.3	3.1	15.7	14.8	27.6	37.7	8.0	11.9
Electrician, Maint.	1278	2257	19.5	60.6	10.9(k)	-	2.7	0.3	0.8	5.2	7.9	18.4	59.6	7.0	7.1
Cleaning															
Service Man	2792	4123	2.1	40.2	16.1(k)	-	7.7	9.2	9.5	15.2	4.6	27.4	52.9	7.8	7.3
Storeman 2	1425	1472	4.4	49.1	22.1(k)	-	17.3	0.3	0.9	5.9	4.7	38.2	49.6	4.6	2.9
Stationary Engineer 3	408	554	10.5	48.7	20.9(k)	-	5.6	3.1	3.6	7.6	15.9	29.1	36.1	12.6	6.3
Delivery															
Truck Driver	4103	12065	-	-	19.4	-	80.6	-	-	-	9.6	26.7	44.3	12.6	6.8
Meter Reader	783	1483	-	-	-	77.2	-	-	-	22.8	14.0	22.5	34.5	18.7	10.3
Hospital Cook	667	561	-	-	-	-	-	-	-	-	4.6	8.6	43.3	30.3	13.2
Hospital Cleaning															
Service Man	1070	2131	-	-	-	-	-	-	-	-	3.1	20.1	41.9	19.8	15.1
Hospital Nursing															
Auxiliary, Certified	1480	4093	-	-	-	-	-	-	-	-	5.0	20.4	29.2	29.6	15.8
Hospital Nursing															
Orderly,															
Experienced	1225	1802	-	-	-	-	-	-	-	-	4.1	19.5	30.9	28.1	17.4
Hospital Maid	3283	3790	-	-	-	-	-	-	-	-	4.8	15.3	35.2	36.9	7.8

(k) Includes Public Utilities.

Collection of Data

For most classes, the data presented were obtained by personal interview surveys conducted by the Pay Research Bureau. However, for some classes the data were obtained by mail by the Pay Research Bureau and the Department of Labour.

The data for the first survey of elementary and secondary school teachers were obtained through a personal interview survey by the Pay Research Bureau. All subsequent surveys have been conducted by mail and telephone. Data for university teachers were obtained in co-operation with the Dominion Bureau of Statistics. Personal visits are made to the universities by Bureau officers every other year in connection with surveys of university teachers. The information presented on rates of pay for Police Constable, Firefighter, Delivery Truck Driver and Meter Reader were obtained through the annual mail survey of the Department of Labour.²¹

Field Survey Specifications

Survey specifications are an important feature of collecting and presenting information on rates of pay. For most classes, the specifications used by the Pay Research Bureau were developed from standards prepared by the Civil Service Commission and latterly, by the Classification Division of the Treasury Board for classifying positions in the federal Public Service. These specifications were revised for survey purposes but their meaning was not altered. For some classes, the specifications as prepared by either the Civil Service Commission or the Treasury Board were used without any alterations. For other classes, the field survey speci-

²¹ Department of Labour, Wage Rates, Salaries and Hours of Labour, Ottawa, various years.

cations were prepared by the Pay Research Bureau.

The field survey specifications used by the Bureau for most of the classes were not changed in any significant way over the period of this study. Some changes were made in 1965 for Economist 2, 4 and 5. In the case of Economist 2, only the qualifications with respect to length of work experience to qualify for the level were changed from four to two years. The duties and responsibilities of Economist 4 and 5 were modified somewhat to reflect a lowering in the level of duties and responsibilities. This, as will be noted later, had implications with respect to pay for these levels from 1965 onward.

The data for Elementary School and Secondary School Teacher were obtained on the basis of titles and qualifications as opposed to "matching" duties and responsibilities. The rates given for Elementary School Teacher pertain to persons having the equivalent of junior matriculation and two years of teacher training and experience. The rates for Secondary School Teacher pertain to teachers with a Bachelors' degree and one year of teacher training.

The titles of Assistant and Associate Professor and Professor are used in all the universities surveyed. Data were collected on the basis of this occupational terminology, rather than by "matching".

Specifications for Computer Systems Administration developed by the Classification Division of the Treasury Board in 1966 were used by the Bureau in the 1967 and 1968 surveys. However, the levels of these specifications could easily be related to those used by the Bureau in the 1963 and 1965 surveys. So, the data collected over the years from 1963 to 1968 have been presented in terms of the later specifications.

The job descriptions used by the Department of Labour in collecting data on Police Constable, Firefighter, Delivery Truck Driver and Meter Reader were not changed significantly over the period of the study.

Summary survey specifications for the classes for which data are presented are contained in Appendix A. It is to be noted, however, that for most classes specifications much more detailed than those given in the appendix were actually used in collecting the data.

Presentation of Data

Information is presented on annual rates of pay and percentage change, and on regional, industrial and occupational differentials for the thirty-two classes in industrial and other organizations in Canada, from October 1, 1958 to 1968. This information is presented in the four sections which follow. Data on annual rates of pay and percentage change are given in Section III, on regional differentials in Section IV, on industrial differentials in Section V, and on occupational differentials in Section VI.

Many of the classes for which data are presented are paid in other than annual rates; that is, hourly, weekly, bi-weekly and monthly rates. These rates have been converted to annual rates for purposes of uniformity in presentation. Hourly rates were converted to annual rates by multiplying the rate per hour times the number of hours worked per week and multiplying the product by 52. Weekly, bi-weekly and monthly rates were converted to annual rates by multiplying by 52, 26 and 12 respectively.

The rates presented include cost-of-living bonuses where applicable. They do not include other types of bonuses, isolation pay, overtime earnings, shift differential, allowances or other fringe benefits.

The measures used in presenting the pay data are the mean rate and the third quartile rate. Mean rates, however, are not shown where there are less than five observations and the third quartile is not shown where there are less than ten. No information is shown where there are less than three organizations represented. The mean of maxima is used for presenting rates for Elementary and Secondary School Teacher.

Percentage change and regional, industrial and occupational differentials have been calculated in terms of mean rates only. The percentage change in rates is shown in two ways: the percentage change between a survey date and the immediately preceding survey date, and the percentage change in rates over the total period for which data are presented.

The regional and industrial differentials have been calculated as the percentage difference between the mean rate for a class or grade within a class in a region or an industry and the mean annual rate for that class or grade in all of Canada. The occupational differentials have been calculated using Engineer 3 as 100%, by taking the percentage between the mean annual rate for a class or grade within a class and the mean rate for Engineer 3 for all of Canada. More specifically, the mean, third quartile and mean of maxima, regional, industrial and occupational differentials are defined as follows:

Mean Rate - Sometimes referred to as the weighted arithmetic mean, it is obtained by multiplying each rate by the number of employees at the rate and dividing the sum of the products by the total number of employees.

Third Quartile Rate (Q3) - In a distribution of observations arranged in descending order of value, the third quartile is the rate above which 25 percent and below which 75 percent of the total observations fall. More precisely, it is the rate opposite the point in the distribution represented by $\frac{n+1}{4}$, where "n" represents the number of observations.

Mean of the Maxima - This measure is calculated by multiplying the number of employees reported in each class or grade by the maximum rate of the formal range and dividing the accumulated products by the overall total number of employees in the class or grade reported from all organizations reporting formal ranges.

Regional Differential is defined as the percentage between the mean annual rates of pay for a class and grade or level within a class in a region and the mean annual rates for that class or grade for all Canada.

Industrial Differential is defined as the percentage between the mean annual rates of pay for a class and grade or level within a class in a major industry and the mean annual rates of pay for that class or grade for all Canada.

Occupational Differential is defined as the percentage between the mean annual rates of pay for a class and grade or level within a class for Canada and the mean annual rate of pay for Engineer 3 for all Canada.

SECTION III: ANNUAL RATES OF PAY AND PERCENTAGE CHANGE,
OCTOBER 1, 1958 TO 1968

Information is presented in Table 6 on mean annual rates of pay and percentage change for thirty-two classes in industrial and other organizations in Canada, for the period October 1, 1958 to 1968 or from the earliest date for which data are available. The percentage changes in rates for the thirty-two classes are presented graphically in Figure 1. It may be noted that the detailed tables on which this information is based were too voluminous to be included in this paper. However, information showing year to year changes is shown in another paper prepared by the author.²²

Rates of pay for a number of classes have been collected by the Bureau since October 1, 1958, including Economist, Engineer, Draftsman, Clerk, Key punch Operator, Stenographer and Typist, Carpenter, Delivery Truck Driver, Electrician, Police Constable, Fireman, Cleaning Service Man, Storeman and Meter Reader. Hospital classes were surveyed by the Pay Research Bureau in 1958. However, the data collected in that survey were not presented in such a way that they could be compared with those collected in later years. The earliest year for which data could be presented for these classes was 1960.

Surveys for other classes were not begun until later. For instance, the earliest date that information on rates of pay is available

²² Pay Research Bureau, J.H. Scarffe, Trends in Rates of Pay in Industrial and Other Organizations in Canada, October 1, 1958 to 1968, Ottawa, 1970.

for Technician is 1962 and for Computer Systems Administration, 1963.

A number of the classes for which data are presented were surveyed every two years. Some, such as Clerk, Key punch Operator, Typist and Stenographer, and a number of operational category classes, were surveyed in most years. However, the class of Engineer is the only one which has been surveyed every year from October 1, 1958. It will of course be realized that the varying time periods for which data were collected present some difficulty in providing information for the whole range of classes.

General Observations on Increases in Rates of Pay

The annual percentage changes in rates have been greater since 1964 than in they were in earlier years. From 1958 to 1964, increases for the classes studied ranged from two to five percent per year. Since that time, the increases have ranged from approximately six to eight percent a year for most of the classes. As will be noted, there have been certain exceptions to this generalization.

Economist and Statistician

Although information was obtained separately for Economist and Statistician, it was combined for purposes of presentation because it was found that in industrial organizations the duties associated with the two classes were frequently performed by the same individuals, and the duties and responsibilities and qualifications of these classes in the Federal Public Service at each level were similar. Furthermore, the number of persons in each of these classes was small. By combining them, it was possible to increase the observations and thereby present meaningful

statistical data. This practice has been continued until the present time.

On October 1, 1958 the mean annual rates of pay for Economist and Statistician 1-5 in industrial and other organizations ranged from \$4,945 to \$9,805 compared with \$7,370 to \$14,471 as of July 1, 1968, an increase of 46.3 to 51.4%. The mean annual rate for Economist and Statistician 6 increased from \$13,633 to \$17,429 between July 1, 1961 and July 1, 1968, an increase of 27.8%. Rates for Economist and Statistician 7 increased by 27.7% over the same period, from \$15,565 to \$19,876 per annum.

Engineer

From October 1, 1958 to July 1, 1968 the mean annual rate of pay in industrial and other organizations for Engineer 1 increased from \$5,158 to \$7,869; for Engineer 2, from \$6,055 to \$9,083; and for Engineer 3, from \$7,086 to \$10,790. From October 1, 1959 to July 1, 1968 the mean annual rate for Engineer 4 increased from \$8,256 to \$12,306; for Engineer 5, from \$9,393 to \$14,048; for Engineer 6, from \$10,591 to \$15,979; and for Engineer 7, from \$12,145 to \$18,491. In other words, the rates of pay for Engineer 1-3 increased from 50.0 to 52.6% from October 1, 1958 to July 1, 1968. Rates for more senior engineers increased from 49.1 to 52.3% from October 1, 1959 to July 1, 1968.

University Teacher

The mean annual rate of pay for Assistant Professor increased from \$6,914 to \$11,126; for Associate Professor, from \$8,683 to \$14,159; and for Professor, from \$11,326 to \$18,647 over the academic years 1959-60

to 1968-69. That is, rates of pay for University Teacher increased from 60.9 to 64.6%, depending upon the level, over the nine academic years. One of the problems, of course, in comparing the basic rates for University Teacher with those for other classes is the lack of and difficulty in obtaining data on other income, such as income derived from additional research and advisory assignments.

Elementary and Secondary School Teacher

The mean of maximum rates for Elementary School Teacher increased by 39.6% from \$4,981 to \$6,951 per annum over the school years from 1963-64 to 1967-68, an average of 9.9% per year. Rates for Secondary School Teacher increased from \$7,781 to \$9,704, an increase of 24.7% over the same period, an annual average increase of 6.2% per annum. Unfortunately, there are no comparable data available at this time for 1968-69 because of delays that year in bargaining between the school boards and the representatives of the teachers in various parts of the country.

Nurse, General Duty, Occupational and Physical Therapist

The mean annual rate for Nurse, General Duty increased from \$3,407 to \$5,110, an increase of 50.0%, between January 1, 1960 and July 1, 1967. Unfortunately, because of delays in bargaining for this class in various parts of the country, comparable data are not available for more recent years.

Mean rates for Occupational Therapist increased from \$3,341 to \$5,573 and for Physical Therapist from \$3,368 to \$5,381 per annum, increases of 66.8 and 59.8% respectively, over the same period of time referred to above for nurses. Also, for these classes, complete information is not

available after July 1, 1967.

It is interesting to note that these classes represent essentially female occupations. However, the demand for persons trained in these occupations has increased with the increase in the provision of welfare services generally throughout the country.²³ Furthermore, it is known from studies conducted by the Pay Research Bureau that employees in these groups are very mobile.

Social Worker

From January 1, 1960 to July 1, 1968, the mean rates for Social Worker 1 and 2 increased from \$4,528 to \$7,508; for Social Worker 3, from \$5,306 to \$9,532; for Social Worker 4, from \$6,084 to \$10,746 per annum; and for Social Worker 5, from \$6,371 to \$11,972. The mean rate for Social Worker 6 increased from \$7,693 to \$11,842 between January 1, 1963 and July 1, 1968. That is, rates for Social Worker 1 and 2 increased by 65.8%, and rates for Social Worker in intermediate and senior level grades increased from 76.6 to almost 80.0% over the period January 1, 1960 to July 1, 1968. Again, with the increase in the provision of welfare services, the demand for persons trained in this occupation has increased.²⁴

Computer Systems Administration

Mean annual rates of pay for Computer Systems Administration as of October 1, 1963 ranged from \$5,944 to \$13,475 per annum, compared with

²³ Department of Manpower and Immigration, University Career Outlook, 1969-70, Ottawa, September, 1969, p. 44-48.

²⁴ Ibid, p. 49.

\$7,325 to \$18,215, October 1, 1968. Increases in rates of pay for Computer Systems Administration, while somewhat erratic as between levels, were not as great as those for professional classes from 1963 onward. The increases for this class ranged from 14.7 to 35.2%, depending upon the level, between October 1, 1963 and 1968. The variations in the increases as between levels may be attributed to significant changes in the number of organizations covered in the surveys for this class between the years 1963 and 1965, and again between 1965 and 1967. (See Appendix A.) However, there was a significant increase in the number of computer installations in Canada over this period. Also, a number of organizations increased the size of their installations.²⁵

Clerk, Keypunch Operator, Typist and Stenographer

Information on rates of pay for these classes was not obtained by the Bureau from industrial and other organizations for the year 1968. However, in a survey conducted by the Bureau in 1970 it was found that the rates for these classes for Canada increased by approximately 7.0% between 1967 and 1968. These approximations have been used in showing rates of pay and percentage changes for these classes for Canada as of October 1, 1968.

Between October 1, 1958 and 1968 the mean rate for Clerk 1 increased from \$2,379 to \$3,513; for Clerk 2, from \$3,000 to \$4,275; and for Clerk 3, from \$3,754 to \$5,451 per annum. That is, rates for this class increased from 42.5 to 47.7% over the period, depending upon the level.

²⁵ The Computer Society of Canada, Census of Computers in Canada, Ottawa, various years.

The mean rate for Typist 1 increased from \$2,353 to \$3,614 between October 1, 1958 and 1968, an increase of 53.6%. The mean rate for Typist 2 was \$2,913 as of October 1, 1959 compared with \$4,490 in 1968, an increase of 54.1%.

The mean annual rate for Stenographer 3 was \$3,010 as of October 1, 1959 and for Stenographer 4, \$3,621 as of October 1, 1960. That is, the rates for Stenographer 3 increased by 40.0% and Stenographer 4 by 37.3% to October 1, 1968.

The mean annual rate for Key punch Operator was \$2,995 as of October 1, 1959 and increased by 43.9% to \$4,310 as of October 1, 1968.

The percentage increases in rates of pay for these classes, with the exception of Typist, have not been as great over the period as those of other classes. While the annual increases for these classes between 1965 and 1968 were generally greater than in previous years, the total percentage changes over the period were significantly lower except for Typist than for the other classes surveyed.

It is difficult to explain why the percentage change in rates for classes in this category have not been as great as those in other categories, including professional, administrative, technical and operational. The situation cannot be explained altogether by the fact that these are essentially female occupations, when the increase in rates of pay are considered for classes such as Nurse, Occupational and Physical Therapist, Social Worker, Elementary School Teacher and some female hospital services classes. However, lower level clerical and related occupations such as those for which data are presented do not require the same level of skill

or as long a period of training as the professional, administrative, technical and many operational classes, particularly skilled trades such as Carpenter and Electrician. A large proportion of the incumbents are single females who do not expect to stay indefinitely in the labour market. Over the ten year period, the participation rate of married women in the labour force has increased, as substantiated from information given in special unpublished tables prepared by the Special Surveys Division of the Dominion Bureau of Statistics.²⁶ Also, many married women are in the labour force for varying periods of time.

It can be judged from the number of applications to competitions for these classes in the Public Service of Canada and from comments made by members of industrial organizations in the course of surveys, that the supply of persons trained for clerical occupations has not been as "tight" as for other classes, such as professional, administrative, technical and some operational category classes. Also, such factors as the introduction of computers may have been a factor in lowering the demand for clerical workers. Furthermore, rates for these classes within individual organizations are for the most part based on local area rates. They tend to be treated as a group apart from professional, administrative, technical and operational classes.

Draftsman

Mean annual rates of pay for Draftsman 1-3 ranged from \$3,479 to \$5,028 on October 1, 1958, compared with \$4,781 to \$7,472 as of July 1,

²⁶ Dominion Bureau of Statistics, Special Surveys Division, Unpublished Tables, Ottawa, 1969.

1968. That is, rates for Draftsman 1 and 2 increased by approximately 37.0% from 1958 to 1968, whereas the rates for Draftsman 3 increased by 48.6%. Over the period the increase in the rates for Draftsman 3 was approximately the same as that for engineers. The increases for the more junior levels were comparatively smaller over the years 1959 to 1965 than were those for professional and other technical classes, particularly in the Maritimes and on the Prairies.

Technician, Engineering and Laboratory

Rates of pay for the technician classes were first collected in 1962 so rates for Technician cannot be related to those for other classes over the whole period under study. The mean rate for Technician, Engineering 1-5 ranged from \$3,594 to \$6,297 per annum on October 1, 1962, compared with \$5,200 to \$8,753 as of July 1, 1968. For Technician, Laboratory 1-5 the rates were somewhat lower, ranging from \$3,300 to \$6,101 on October 1, 1962 to \$4,458 to \$8,219 on July 1, 1968. In terms of percentages, the mean rate for Technician, Engineering ranged from 37.8 to 49.6%, and Technician, Laboratory from 33.9 to 43.3% from October 1, 1962 to July 1, 1968.

Technician, Electronics

The class of Technician, Electronics was first surveyed up to level 5 in 1962 and up to level 7 beginning in 1964. Since that time, increases have been somewhat erratic as between one level and another. The mean annual rates for Technician, Electronics 1-5 ranged from \$4,368 to \$7,189 as of October 1, 1962, compared with \$5,441 to \$9,315 on July 1, 1968, increases of 24.6 to 35.0%, depending on the level.

Operational Category Classes

Over the period October 1, 1958 to 1968 rates of pay for a

number of operational classes have increased by 60.0% or more, including Police Constable, Firefighter, Electrician, Storeman and Meter Reader. From October 1, 1958 to 1968 the mean annual rate for Police Constable increased from \$4,105 to \$6,934; for Firefighter, from \$4,074 to \$6,724; for Electrician, from \$4,665 to \$7,644; for Storeman 2, from \$3,753 to \$6,009; and for Meter Reader, from \$3,543 to \$5,689.

The mean annual rate for Carpenter increased by 54.2%, from \$4,502 to \$6,941, from October 1, 1958 to 1968. The mean annual rate for Cleaning Service Man increased by 54.9%, from \$3,320 to \$5,142; for Stationary Engineer 3 by 49.4%, from \$4,934 to \$7,370; and for Delivery Truck Driver by 40.4% from \$3,546 to \$4,980 over the period October 1, 1958 to 1968.

Increases for hospital services classes were close to those of other operational category classes. The mean rate for Nursing Auxiliary, Certified increased by 60.1%, from \$2,471 to \$4,250; for Nursing Orderly, Experienced by 86.2%, from \$2,998 to \$5,395; for Cleaning Service Man by 53.3%, from \$2,772 to \$4,250; and for Hospital Maid by 56.2%, from \$2,063 to \$3,222, between January 1, 1960 and October 1, 1968. The mean rate for Cook increased by 51.1%, from \$3,271 to \$4,942 between January 1, 1961 and October 1, 1968.

In 1968, there were delays in collective bargaining for hospital services classes in various parts of the country, and it was not possible to obtain mean and third quartile rates comparable to previous years. However, information on means of minima and maxima of salary ranges for October, 1966 and 1968 were available from virtually all the hospitals covered in the Bureau surveys as of those two dates. The percentage differ-

ences between the means of maxima of salary ranges for October 1, 1966 and October 1, 1968 were used in estimating mean rates for 1968. These estimated mean rates would not be significantly different from actual mean rates. It has been found that percentage changes calculated on mean rates for hospital classes from one survey to the next do not differ significantly from those calculated using means of maxima.

TABLE 6: MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE, SELECTED CLASSES,
INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 TO 1968

<u>Class and Grade</u>	<u>Mean Rate</u>		<u>Percentage Change</u> %
	<u>Oct. 1/58</u> \$	<u>July 1/68</u> \$	
Economist & Statistician 1	4945	7370	49.0
Economist & Statistician 2	5818	8505	46.2
Economist & Statistician 3	7062	10689	51.4
Economist & Statistician 4	8437	12343	46.3
Economist & Statistician 5	9805	14471	47.6
Economist & Statistician 6	13633(a)	17429	27.8(a)
Economist & Statistician 7	15565(b)	19876	27.7(b)
Engineer 1	5158	7869	52.6
Engineer 2	6055	9083	50.0
Engineer 3	7086	10790	52.3
Engineer 4	8256(c)	12306	49.1(c)
Engineer 5	9393(c)	14048	49.6(c)
Engineer 6	10591(c)	15979	50.9(c)
Engineer 7	12145(c)	18491	52.3(c)
Assistant Professor	6914(d)	11126(d)	60.9(d)
Associate Professor	8683(d)	14159(d)	63.1(d)
Professor	11326(d)	18647(d)	64.6(d)
	<u>1963-64</u>	<u>1967-68</u>	
Elementary School Teacher	4981(e)	6951(e)	39.6(e)
Secondary School Teacher	7781(e)	9704(e)	24.7(e)
	<u>Jan. 1/60</u>	<u>July 1/67</u>	
General Duty Nurse	3407	5110	50.0
Occupational Therapist 1 & 2	3341	5573	66.8
Physical Therapist 1 & 2	3368	5381	59.8
	<u>Jan. 1/60</u>	<u>July 1/68</u>	
Social Worker 1 & 2	4528	7508	65.8
Social Worker 3	5306	9532	79.6
Social Worker 4	6084	10746	76.6
Social Worker 5	6771	11972	76.8
Social Worker 6	7693(f)	11892	54.6(f)
	<u>Oct. 1/63</u>	<u>Oct. 1/68</u>	
Computer Systems Administration 1	5944	7325	23.2
Computer Systems Administration 2	8129	9327	14.7
Computer Systems Administration 3	9729	11558	18.8
Computer Systems Administration 4	11503	14020	21.9
Computer Systems Administration 5	13475	18215	35.2

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- (a) From July 1, 1961.
(b) From July 1, 1963.
(c) From October 1, 1959.
(d) From the year 1959-60 to the year 1968-69.
(e) Mean of maximum rates.
(f) From January 1, 1963.

TABLE 6: MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE, SELECTED CLASSES,
INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 to 1968 (CONT'D.)

<u>Class and Grade</u>	<u>Mean Rate</u>		<u>Percentage Change</u>
	<u>Oct. 1/58</u>	<u>Oct. 1/68</u>	
	\$	\$	%
Clerk 1	2379	3513	47.7
Clerk 2	3000	4275	42.5
Clerk 3	3754	5451	45.2
Typist 1	2353	3614	53.6
Typist 2	2913(g)	4490	54.1(g)
Stenographer 3	3010(g)	4214	40.0(g)
Stenographer 4	3621(h)	4972	37.3(h)
Keypunch Operator	2995(g)	4310	43.9(g)
	<u>Oct. 1/58</u>	<u>July 1/68</u>	
Draftsman 1	3479	4781	37.4
Draftsman 2	4418(g)	5929	34.2(g)
Draftsman 3	5028	7472	48.6
	<u>Oct. 1/62</u>	<u>July 1/68</u>	
Technician, Engineering 1	3594	5200	44.7
Technician, Engineering 2	4109	6146	49.6
Technician, Engineering 3	4829	6653	37.8
Technician, Engineering 4	5595	7920	41.6
Technician, Engineering 5	6297	8753	39.0
Technician, Laboratory 1	3300	4458	35.1
Technician, Laboratory 2	3824	5481	43.3
Technician, Laboratory 3	4605	6302	36.9
Technician, Laboratory 4	5408	7243	33.9
Technician, Laboratory 5	6101	8219	34.7
	<u>Oct. 1/62</u>	<u>July 1/68</u>	
Technician, Electronics 1	4368	5441	24.6
Technician, Electronics 2	5156	6614	28.3
Technician, Electronics 3	5688	7489	31.7
Technician, Electronics 4	5942	8020	35.0
Technician, Electronics 5	7189	9315	29.6
Technician, Electronics 6	8277(i)	9848	19.0(i)
Technician, Electronics 7	9534(i)	12017	26.0(i)

(g) From October 1, 1959
(h) From October 1, 1960
(i) From October 1, 1964

TABLE 6: MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE, SELECTED CLASSES,
INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 to 1968 (CONCL'D.)

<u>Class and Grade</u>	<u>Mean Rate</u>		<u>Percentage Change</u>
	<u>Oct. 1/58</u>	<u>Oct. 1/68</u>	
	\$	\$	%
Constable	4105	6934	68.9
Firefighter	4074	6726	65.1
Carpenter	4502(j)	6941	54.2(j)
Electrician	4665	7644	63.9
Cleaning Service Man	3320	5142	54.9
Storeman 2	3753	6009	60.1
Stationary Engineer 3	4934	7370	49.4
Delivery Truck Driver	3546	4980	40.4
Meter Reader	3543	5689	60.6
	<u>Jan. 1/60</u>	<u>Oct. 1/68</u>	
Hospital Cook	3271(k)	4942	51.1(k)
Hospital Cleaning Service Man	2772	4250	53.3
Hospital Nursing Auxiliary, Certified	2471	3956	60.1
Hospital Nursing Orderly, Experienced	2898	5395	86.2
Hospital Maid	2063	3222	56.2

(j) From October 1, 1959.

(k) From January 1, 1961.

FIGURE 1: PERCENTAGE CHANGE IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 TO 1968

FIGURE 1: PERCENTAGE CHANGE IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 TO 1968 (CONT'D.)

FIGURE 1: PERCENTAGE CHANGE IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 TO 1968 (CONCL'D)

SECTION IV: REGIONAL DIFFERENTIALS IN RATES OF PAY, OCTOBER 1, 1958 TO 1968

Table 7 presents data on regional differentials in rates of pay for the thirty-two classes in industrial and other organizations as of October 1, 1958 and 1968, or for dates as otherwise specified. Data are presented for five major regions in Canada: the Maritimes, Quebec, Ontario, Prairies and British Columbia. It should be noted that the information for the Maritimes pertains to the provinces of New Brunswick and Nova Scotia only.

As explained earlier, the term, regional differential, refers to the percentage between the mean annual rates for a class and grade or level within a class in a region and the mean annual rate for that class, grade or level for all Canada. Thus, using the Economist 1 as an example, the mean average rate for Economist 1 was calculated for all Canada. Then the mean annual rate for Economist 1 was calculated for a region, for example, Ontario. The mean rate for Economist 1 in Ontario was taken as a percentage of the mean annual rate for Economist 1 for Canada.

As with the information shown in Section III on annual rates of pay and percentage change, data are presented for a number of classes from October 1, 1958. For other classes, data were not collected back that far. For some other classes, changes in the organizations selected or the way in which the data were presented in the earlier years of the Bureau operations negated the possibility of presenting data from 1958.

General Observations on Regional Differentials

Rates of pay for professional, administrative and technical

classes in the various regions tend toward the national average of rates for Canada, that is, the differentials in rates of pay are generally narrow.

There are a number of reasons for this:

- (a) The demand for professional, administrative and technical employees in Canada has been high. Such demand for persons with these skills, in very general terms, can be attributed to the level and distribution of economic activity and the technological and organizational changes which have been taking place in the economy. The number of professional and technical employees increased from 10.0% of the labour force in Canada in 1961 to 13.2% in 1968. This amounts to an average increase of approximately 8.0% in the number of persons in these occupations per year.
- (b) A number of professional associations, such as the Canadian Council of Professional Engineers and the Canadian Association of University Teachers publish data on rates of pay and employment opportunities. It would seem that the publication of such information tends to make persons in these occupations more mobile than they would otherwise be, with implications on rates of pay in various parts of the country, especially under "relatively tight" market conditions.

Largely as a result of the above-mentioned factors, organizations with establishments in more than one province or region usually have a "one rate structure"²⁷ for professional, technical and administrative employees. This serves as an administrative convenience in transferring employees from one location to another as well as meeting the factors of demand and supply.

However, there are a number of cases where the rates for professional classes and technical classes in a region deviate significantly from the national average. These are dealt with in some detail below.

Generally speaking, the rates for clerical and operational classes have been low in the Maritimes and on the Prairies in relation to other parts of the country. In Quebec, the rates for operational category classes have been lower than the national averages, but in British Columbia significantly above the national averages.²⁸

Economist and Statistician

The differentials for this class have vacillated somewhat from year to year within levels due to the relatively small numbers of employees in these occupations. A small rise or fall in the differential cannot be regarded as being as significant for this class as for more populous classes

²⁷ This statement can be substantiated from information obtained from the Pay Research Bureau surveys.

²⁸ A number of writers have sought to explain the social, economic and institutional factors that influence regional differences in rates of pay. Many studies relate to the differentials between the South and the remainder of the United States. For example, see H.M. Douty "Wage Differentials: Forces and Counterforces" Monthly Labour Review. March, 1968, p. 74-81. For a recent analysis of the Canadian scene, see S.G. Peitchinis, The Economics of Labour: Employment and Wages in Canada. McGraw-Hill, Toronto, 1965, p. 316-322.

as, for example, operational category classes. However, generally speaking, the rates in the regions have tended to fall close to the national average over the period of the study.

Engineer

There was a general upward trend in rates of pay for Engineer in the Maritimes in relation to the national averages over the period under study. From October 1, 1958 to July 1, 1968 the differentials for Engineer 1-3 increased from 7.5 to 13.4% below the national average, to the equivalent of the national averages, except for Engineer 3 which in 1968 was 2.0% below the average for Canada. As of October 1, 1959 the rates for intermediate and senior level Engineer were 7.7 to 19.1% below the national average, depending upon the level. The rates for these levels increased over the years until in 1968 they were 2.9 to 3.8% below the national averages. That is, the rates for the more junior employees have increased to meet the competitive market, whereas the rates for intermediate and senior level employees continue to be somewhat below the mean rates for Canada. Rates for all levels of Engineer in Quebec, Ontario and British Columbia were very close to the national average over the ten years. Rates of pay for Engineer on the Prairies have been somewhat below the mean rate for Canada. In 1968, the difference was up to 4.1%, depending on the level.

University Teacher

For purposes of presenting information on regional rates of pay for University Teacher, Canada was divided into three regions: Eastern, Central and Western. The Eastern region pertains to the Maritimes, the Central region includes Quebec and Ontario, and the Western region includes

the four western provinces.

While the rates for university teachers in the Eastern region increased over the years relative to other regions, they continue to be low in comparison with the national average. Again as with Engineer, the rates for the more junior employees have risen closer to the Canada average than have the rates for more senior employees. In 1968 the rates for Assistant Professor were 6.8% below, Associate Professor 9.9% below and Professor 12.3% below the average for Canada. These differences can perhaps be attributed to the demand and supply of employees at the junior levels, coupled with the fact that junior employees are much more mobile than more senior employees with greater family and other commitments. Rates in other regions have been and continue to be close to the national averages for the three levels of University Teacher.

Elementary and Secondary School Teacher

It should be noted that the regional differential for Elementary School Teacher is heavily influenced by Quebec, where the rates have been significantly above those in most other provinces. The annual mean of maxima for Elementary School Teacher in Quebec for the year 1967-68 was \$7505 as compared with \$4654 in Nova Scotia, \$6428 in Ontario, \$5148 in Manitoba, \$5347 in Saskatchewan, \$6230 in Alberta, and \$6849 in British Columbia. The differentials, therefore, for all other provinces except Quebec in 1967-68 were below the Canada average. Rates in Quebec in that year were 8.0% above the Canada average. It may be noted that while the rates in both Ontario and British Columbia were above the Canada average in earlier years, rates in both provinces in 1967-68 showed a drop in

relation to rates for the country as a whole. Unfortunately, because of lack of information on the male-female ratio for Elementary School Teachers in Quebec it was not possible to give meaningful differentials for that province for other than the year 1967-68.

Rates for Secondary School Teacher in the various provinces have tended toward the national average. While the rates in the Maritimes were 24.8 to 28.1% below the national averages in 1963-64, the rates in Nova Scotia in 1967-68 were 7.0% below the Canada average. In 1967-68, the rates in Ontario and Manitoba were close to the national average; the rates in Saskatchewan and British Columbia were approximately 3.0% above and the rates in Alberta 8.6% above the average for Canada. The rates for Secondary School Teacher in Quebec were 5.8% below the average for Canada in 1967-68.

Nurse, General Duty

Since 1960, rates of pay for Nurse, General Duty have tended to be somewhat below the national averages in the Maritimes and on the Prairies and somewhat above the national averages in Ontario and British Columbia, with rates in Quebec in the years since 1964 being close to the average for Canada. In 1967, the rates for Nurse, General Duty in the Maritimes were 8.5% below and on the Prairies 5.6% below the national average. In that year, in both Ontario and Quebec, the rates were 3.6% above the national average, with the rates in British Columbia being almost equivalent to the average for Canada.

Occupational and Physical Therapist

Rates of pay for Occupational and Physical Therapist were much the same throughout the five regions over the period. However,

in 1967, the rates for occupational therapists in Quebec and British Columbia were 4.4 to 5.0% below, and the rates in Ontario 5.3% above the national average.

Social Worker

Rates for Social Worker in the Maritimes have been and continue to be well below the national average. In 1968, rates for Social Worker 1-3 were from 9.7 to 17.3% below the average for Canada, depending on the level. It is interesting to note that rates for Social Worker in British Columbia have been falling, and in 1968 were from 4.6 to 9.9% below the national averages, depending on the level. However, rates in the other regions have been slightly above or near the average rates for all Canada.

Computer Systems Administration

Rates for this class are very uniform across the country from Quebec westward. Until recently there was not a sufficient number of computer installations in the Maritimes from which to obtain rates for this class.

Clerk, Key punch Operator, Typist and Stenographer

Rates for these classes in the Maritimes have been and continue to be below those in other parts of the country. In 1967, rates for these classes were 13.1 to 29.8% below the Canadian averages, depending on the classes involved. In Quebec, the rates have tended toward the Canada average, whereas rates in Ontario have been approximately from 2.0 to 4.0% above. Rates for Clerk in British Columbia have been significantly higher than in other parts of Canada over the period. In the years

1964 to 1967, rates for this class were approximately 6.0 to 7.0% above the national average for Canada.

Draftsman

Rates of pay for Draftsman in the Maritimes have been lower than the national average by approximately 10.0% in 1968. Otherwise, the rates have been pretty much the same across the country, except that those for junior levels in British Columbia have been somewhat higher than in other regions.

Technician, Engineering and Laboratory

Generally speaking, the rates for these classes have tended toward the Canadian average. However, the rates for Technician, Laboratory in Quebec have been somewhat lower than in other regions, and on the Prairies and in British Columbia somewhat higher. Although the numbers are comparatively small, the rates for the more junior levels of Technician, Engineering have been somewhat lower on the Prairies than in other parts of Canada.

Technician, Electronics

The rates for this class also tended toward the Canada average. However, the rates have been a little lower in the Prairies and a little higher in British Columbia than in other regions.

Operational Category Classes

Over the ten year period, the rates for operational category classes have been lower in the Maritimes, in Quebec and on the Prairies than in other parts of Canada. In the Maritimes, while there has been

vacillation in the rates from year to year, there has been no significant change in the rates for most operational category classes as compared with national averages over the years 1958 to 1968. The rates for these classes in 1968 in the Maritimes ranged from 9.0 to as much as 30.1% below the national average rates.

In Quebec, rates for operational classes were relatively low over the period, except for Delivery Truck Driver and Meter Reader, whose rates have been close to the national averages. In 1968 rates for Delivery Truck Drivers were 1.9% below and Meter Reader 0.9% above the averages for Canada. Rates for Police Constable and Firefighter increased to the point where in 1968 they were close to the national averages. And while rates for some of the other classes also increased, they have remained below the average for Canada. In 1968 rates for Carpenter, Electrician, Cleaning Service Man, Storeman and Stationary Engineer were from 5.6 to 7.4% below the averages for Canada.

In Ontario, the rates for these classes have been above the national average. Again in 1968 rates for these classes ranged from 2.7 to 8.3% above the Canada average.

In 1968 on the Prairies, the rates for all classes except Stationary Engineer were somewhat below the national averages. Rates for Stationary Engineer were 2.2% above, and the remainder were from 0.3 to 8.6% below the Canada averages.

In British Columbia, rates for these classes have been higher than in any other region. In 1968 the rates ranged from 2.4 to 17.6% above the mean average for Canada, except for Cleaning Service Man where the rates were close to the national average.

Unfortunately as has been explained, regional differentials

cannot be shown for hospital classes after 1966 because of lack of data. However, in 1966 in the Maritimes, the rates for these classes were from 17.1 to 28.0% below the national average, depending upon the classes involved. In Quebec on the other hand, rates for these classes rose significantly over the years to the point where in 1966 they ranged from 5.9 to 14.7% above the average rates for Canada, again depending on the classes involved.

In Ontario in 1966, rates for Nursing Auxiliary, Certified, Cook and Hospital Maid were from 2.0 to 5.0% above the national average, whereas the rates for Nursing Orderly, Experienced were 6.2% and Cleaning Service Man 3.2% below the national averages. On the Prairies in 1966, rates for these classes were from 1.7 to 6.5% below the Canada average, except for nursing orderlies whose rates were close to the Canada rate. In British Columbia during the years from 1961 to 1966, all the hospital services classes studies lost their relative position. Rates for Nursing Auxiliary, Certified, Nursing Orderly, Experienced, Cleaning Service Man and Hospital Maid dropped approximately 12.0% relative to the national averages for Canada. Rates for the class of Cook dropped by 6.2%. In 1966, rates for Orderly and Cleaning Service Man were 8.3 and 12.7% respectively above the average for Canada. Rates for Nursing Auxiliary were 8.7% and for Hospital Maid 2.1% below the average for Canada. Rates for Cook, Certified were equivalent to the average rate for that class for Canada.

TABLE 7: REGIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES, INDUSTRIAL
AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 AND 1968

Class and Grade	Maritimes		Quebec		Ontario		Prairies		British Columbia	
	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68
	%	%	%	%	%	%	%	%	%	%
Economist & Statistician										
1	-	-	102.8(a)	96.4	98.3(a)	101.9	107.8(b)	-	102.3(b)	-
2	-	-	90.6(a)	101.0	104.3(a)	104.3	99.5(c)	-	94.4(c)	-
3	-	-	95.0(a)	97.9	105.9(a)	99.6	98.9(c)	105.3	96.2(c)	105.8
4	-	-	99.3(a)	96.8	100.7(a)	104.8	-	98.7	-	95.6
5	-	-	101.0(a)	100.9	97.5(a)	95.5	-	111.5	-	-
6	-	-	102.3(d)	103.2	97.7(a)	98.1	-	-	-	-
7	-	-	98.2(c)	109.2	99.5(a)	90.8	-	-	-	-
Engineer										
1	92.5	100.4	98.9	99.4	101.3	100.4	102.3	99.7	99.7	100.3
2	93.6	99.2	99.0	100.4	101.8	100.5	97.2	97.5	97.8	100.1
3	86.6	98.0	100.7	102.5	99.7	99.5	100.4	98.3	101.5	96.7
4	92.3(a)	97.1	97.5(a)	100.5	102.6(a)	100.3	101.1(a)	98.7	96.6(a)	99.3
5	86.1(a)	97.5	98.2(a)	98.6	103.9(a)	101.3	96.2(a)	98.4	95.7(a)	101.4
6	85.6(a)	97.6	100.3(a)	100.1	102.1(a)	101.7	102.4(a)	96.6	97.0(a)	98.8
7	80.9(a)	96.2	103.9(a)	103.3	96.9(a)	95.5	104.3(a)	95.9	94.2(a)	108.8
	Eastern		Central		Western					
	1959-60	1968-69	1959-60	1968-69	1959-60	1968-69	1959-60	1968-69	1959-60	1968-69
Assistant Professor	88.5	93.2	99.4	100.8					102.9	100.3
Associate Professor	87.4	90.1	98.6	99.9					103.3	101.4
Professor	86.2	87.7	102.3	101.3					98.0	98.9
Elementary School Teacher	Nova Scotia		Quebec		Ontario		Saskatchewan		British Columbia	
	1963-64	1967-68	1963-64	1967-68	1963-64	1967-68	1963-64	1967-68	1963-64	1967-68
	70.3	67.0	-	108.0	105.2	92.5	81.5	76.9	113.4	98.5
Secondary School Teacher	75.2	93.0	-	94.2	106.5	101.2	95.9	103.0	102.9	103.4

(a) October 1, 1959.
(b) July 1, 1966.
(c) July 1, 1963.
(d) July 1, 1961.
(e) July 1, 1965.

Based on mean of maximum salaries of elementary and secondary school teachers.

TABLE 7: REGIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES, INDUSTRIAL
AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 AND 1968 (CONT'D.)

Class and Grade	Maritimes		Quebec		Ontario		Prairies		British Columbia	
	Jan. 1/60	July 1/68	Jan. 1/60	July 1/68	Jan. 1/60	July 1/68	Jan. 1/60	July 1/68	Jan. 1/60	July 1/68
	%	%	%	%	%	%	%	%	%	%
General										
Duty Nurse	87.4(f)	91.5(g)	94.1(f)	103.6(g)	99.7(f)	103.6(g)	100.4(f)	95.4(g)	107.8(f)	99.4(g)
Occupational										
Therapist 1&2	-	-	90.2(f)	95.6(g)	100.8(f)	105.3(g)	104.6(f)	98.4(g)	100.2(f)	95.0(g)
Physical										
Therapist 1&2	99.1(f)	100.7(g)	92.7(f)	102.5(g)	99.1(f)	99.8(g)	102.0(f)	98.1(g)	107.2(f)	99.9(g)
Social Worker 1 & 2	87.6(h)	90.3	96.7(h)	105.8	102.8(h)	106.7	101.3(h)	103.7	99.6(h)	93.0
3	91.7(h)	82.7	95.7(h)	101.0	105.6(h)	102.9	96.1(h)	103.2	99.5(h)	91.1
4	95.2(e)	-	101.4(h)	99.9	105.4(h)	105.5	95.4(h)	100.6	97.7(h)	93.2
5	-	-	-	-	99.7(i)	105.4	99.8(h)	97.4	92.0(g)	95.4
6	-	-	-	-	99.8(i)	98.3	-	-	-	-
Computer Systems										
Administration 1	-	-	98.2(j)	94.6	100.5(j)	102.7	101.0(j)	97.8	107.0(j)	106.9
2	-	-	100.8(j)	97.0	99.9(j)	101.8	97.4(j)	101.3	99.5(j)	99.6
3	-	-	100.8(j)	99.7	98.9(j)	101.4	99.7(j)	95.6	104.2(j)	100.1
4	-	-	103.1(j)	103.6	97.9(j)	97.3	103.3(j)	102.6	-	-
5	-	-	96.9(j)	96.0	103.6(j)	98.6	-	-	-	-
Clerk 1	77.5	83.9	95.1	99.0	104.5	103.0	90.6	91.8	111.9	110.1
2	68.9	73.6	99.8	98.2	104.9	104.5	94.0	91.3	105.0	107.5
3	68.5	80.0	96.4	101.8	108.4	101.6	100.1	89.1	103.7	106.8
Typist 1	80.2	86.9	93.6	98.3	106.5	104.7	92.5	95.6	99.2	100.7
2	81.3(a)	70.2	92.0(a)	95.4	106.1(a)	108.1	94.3(a)	91.1	97.3(a)	94.9
Stenographer 3	69.8(a)	78.9	99.0(a)	101.2	104.4(a)	103.5	98.2(a)	92.4	97.4(a)	98.9
4	85.2	-	99.3	99.9	101.2	103.7	100.0	93.4	99.2	95.6
Keypunch Operator	80.6(a)	77.4	100.3(a)	103.9	101.2(a)	101.6	92.4(a)	88.2	103.0(a)	99.8

(a) October 1, 1959.
(e) July 1, 1965.
(f) January 1, 1961.
(g) July 1, 1967.
(h) January 1, 1962.
(i) January 1, 1963.
(j) October 1, 1965.

TABLE 7: REGIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES, INDUSTRIAL
AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 AND 1968 (CONT'D.)

Class and Grade	Maritimes		Quebec		Ontario		Prairies		British Columbia	
	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68
Draftsman	89.3	88.9	97.0	98.6	102.4	100.8	99.5	97.9	108.0	116.0
	98.0(a)	91.3	100.4(a)	99.7	100.4(a)	99.6	94.4(a)	99.9	103.2(a)	106.5
	97.0	90.9	101.3	100.4	100.0	101.7	91.9	95.6	94.9	98.1
Technician Engineering	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68
	-	-	99.9(k)	97.7	109.9	111.6	88.4	80.1	-	84.3
	-	97.4	92.8	97.9	113.4	104.3	107.3	88.8	-	-
	90.4	95.2	100.9	101.9	99.1	100.3	99.7	95.2	109.2	99.2
	96.4	86.2	97.8	100.5	101.5	99.5	102.5	101.8	104.3	98.0
	83.4	91.0	100.5	102.3	100.0	101.1	102.7	100.5	102.0	97.7
Technician Laboratory	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68
	-	-	102.7	91.0	96.7	105.1	91.3(k)	123.1	-	-
	127.3	99.1	90.2	93.3	97.5	102.6	108.1(k)	116.1	121.7	115.9
	113.1	97.2	93.0	93.4	101.5	100.3	97.6	108.3	108.8	112.9
	-	-	93.9	90.6	101.5	100.7	99.8	103.2	99.4	114.0
	-	-	96.1	96.7	101.4	100.0	102.6(k)	102.2	99.9	-
Technician Electronics	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68	Oct. 1/62	July 1/68
	91.9(1)	83.8	101.7	103.0	99.0	95.1	81.3(k)	96.3	-	119.2
	91.2	94.2	102.1	101.0	97.7	98.0	91.0(k)	103.0	105.8(1)	108.5
	87.2(1)	92.1	99.3	102.9	102.8	99.3	94.6(k)	99.9	104.5(1)	108.4
	96.9(1)	95.7	99.9	106.1	98.3(k)	98.1	93.4(1)	91.0	-	105.8
	95.8(1)	99.7	102.1(k)	102.7	100.2	98.8	98.9(e)	97.2	-	99.3
	-	-	100.8(k)	102.1	99.9(k)	101.6	-	97.0	-	96.2
	-	-	97.8(k)	99.8	-	102.1	96.0(1)	95.7	-	103.8

(a) October 1, 1959.
(e) July 1, 1965.
(k) October 1, 1964.
(1) July 1, 1967.

TABLE 7: REGIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES, INDUSTRIAL
AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 AND 1968 (CONCL'D)

Class and Grade	Maritimes		Quebec		Ontario		Prairies		British Columbia	
	Oct. 1/58	Oct. 1/68	Oct. 1/58	Oct. 1/68	Oct. 1/58	Oct. 1/68	Oct. 1/58	Oct. 1/68	Oct. 1/58	Oct. 1/68
	%	%	%	%	%	%	%	%	%	%
Constable	82.4(a)	77.4	93.4(a)	99.0	103.9(a)	102.7	107.0(a)	99.7	122.1(a)	105.8
Firefighter	85.9(a)	81.5	94.8(a)	98.2	101.8(a)	103.6	98.4(a)	96.3	123.4(a)	106.3
Carpenter	105.8(a)	83.5	91.3(a)	94.4	106.0(a)	104.8	102.7(a)	97.6	109.4(a)	117.6
Electrician	93.6	86.9	92.9	94.4	102.9	104.6	100.4	98.9	107.7	109.5
Cleaning Service Man	83.8	69.9	89.9	92.6	106.0	107.8	89.3	91.4	107.2	99.0
Storeman 2	81.0	81.0	98.9	94.3	102.5	105.6	94.3	95.6	104.4	116.1
Stationary Engineer 3	110.0(m)	91.0	92.2(a)	93.7	102.7(a)	105.8	100.2(a)	102.2	113.1(a)	114.4
Delivery Truck Driver	95.4(a)	84.6	98.6(a)	98.1	96.7(a)	102.9	102.6(a)	94.9	117.2(a)	119.7
Meter Reader	88.1(a)	79.8	92.7(a)	100.9	108.5(a)	108.3	97.0(a)	97.2	109.6(a)	102.4
	Jan. 1/60	Oct. 1/66	Jan. 1/60	Oct. 1/66	Jan. 1/60	Oct. 1/66	Jan. 1/60	Oct. 1/66	Jan. 1/60	Oct. 1/66
Hospital Cook	88.6(n)	79.2	92.8(n)	110.0	99.5(n)	102.1	100.9(n)	97.3	106.3(n)	100.1
Hospital Cleaning Service Man	78.4(n)	73.4	83.1(n)	105.9	96.9(n)	96.8	111.6(n)	95.4	124.1(n)	112.7
Hospital Nursing Aux. Certified	87.2(n)	82.9	93.3(n)	114.7	103.1(n)	103.9	103.9(n)	93.5	105.1(n)	91.3
Hospital Nursing Ord., Experienced	84.3(n)	72.0	85.9(n)	109.3	92.2(n)	93.8	103.8(n)	99.3	120.8(n)	108.3
Hospital Maid	70.0(n)	75.5	87.8(n)	113.2	106.4(n)	105.1	99.5(n)	98.3	108.5(n)	97.9

(a) October 1, 1959
(m) October 1, 1960
(n) January 1, 1961.

SECTION V: INDUSTRIAL DIFFERENTIALS IN RATES OF PAY,
OCTOBER 1, 1958 TO 1968

Table 8 presents information on industrial differentials in rates of pay for eighteen classes as of October 1, 1958 to 1968, or for the dates as otherwise specified.

As explained above, the term, industrial differential, refers to the percentage between the mean annual rate of pay for a class and grade or level within a class in an industry and the mean annual rate of pay for that class and grade or level for all Canada. Again, as with regional differentials, to use as an example Economist 1, the mean annual rate was calculated for the mining industry. This mean rate was then taken as a percentage of the mean rate for Economist 1 for all Canada.

Some classes such as Elementary and Secondary School Teacher, University Teacher and hospital services classes are found only in one industrial group. For other classes such as Police Constable and Firefighter, the data collected pertain to municipal governments. This explains why the number of classes for which industrial differentials are shown is less than the number for which information is presented in Section III, IV and VI.

Information is presented for six industrial groups: mining; manufacturing; transportation and communication; utilities; trade, and finance and insurance. For the class of Engineer, information is presented for the construction industry; it is the only class included in this paper for which data are presented for that industry.

For professional and technical classes and computer systems administration, data are presented for transportation, communication and utilities combined. For administrative support and operational classes, data are presented for transportation and communication; and utilities separately. This is the way the data were combined in the Pay Research Bureau surveys for the various classes.

No information is presented on industrial differentials for the service industry group or municipal governments. However, a number of the organizations asked to participate in Bureau surveys on rates of pay fall within the service industry group. Included as well are some municipal governments. There was some variation in the presentation of this information over the years. For some surveys, information obtained with respect to service industries was combined with that for municipal governments. In others, the information on these two groups was presented separately. Also, there was a variation for some classes between the number of municipalities covered in the beginning of the period as compared with subsequent years. Therefore, the data were not always comparable over time. However, and this point is reasonably important, the data on these two groups are included in the Canada averages on which the industrial differentials have been calculated.

General Observations on Industrial Differentials

Rates of pay for professional, administrative and technical classes in most industrial groups tend to be close to the national averages, that is, the rate differentials are narrow. Rates of pay for administrative support and operational categories, however, tend to be somewhat above the national averages for Canada in mining, manufacturing and the utilities, and somewhat below in the transportation and communication, trade, finance and insurance. However, there are

exceptions to these generalizations, as will be explained in more detail below.²⁹

Economist and Statistician

In manufacturing and transportation, communication and the utilities, the rates for the class of Economist and Statistician have been close to the national averages over the period. In finance and insurance, the rates have been below the Canada averages, except for the more senior levels. In 1968, rates for levels 1-4 were 2.6 to 5.1% below the national averages.

Engineer

Rates for Engineer in mining, manufacturing, construction and transportation, communication and utilities have been close to the national averages, particularly for levels 1-6. While the differential for level 7 has vacillated somewhat, particularly in mining and construction, this may be due to the relatively small number of observations.

Computer Systems Administration

In mining, rates for these classes from 1965 to 1968 were approximately 12.0% above the national average. In manufacturing, they have been slightly above, and in transportation, communication and the utilities, and trade, close to the averages for Canada. In finance and insurance, the rates as of October 1, 1968 were from 3.6 to 7.1%

²⁹ A number of authors have reported on studies that attempt to explain the underlying factors that cause inter-industry differentials in rates of pay. Some of these factors revolve around the operation of labour market and other factors are related to labour productivity, unionization, skill mix and the economies of the firm. For example, see Stuart O. Schweitzer, "Factors Determining the Inter-industry Structure of Wages", Industrial and Labour Relations Review, January, 1969, pp. 217-225, and H.D. Woods and Sylvia Ostry, Labour Policy and Labour Economics in Canada, Toronto, MacMillan of Canada, 1962, pp. 448-467.

below the national averages, depending upon the level in the class of Computer Systems Administration.

Clerk, Keypunch Operator, Typist and Stenographer

Rates of pay for Clerk have been above the national average in the mining, manufacturing and the utilities industry groups. In 1967, in mining, rates for this class were from 6.6 to 14.9% above; in manufacturing, 3.9 to 16.9% above; and in the utilities, 1.6 to 8.4% above the average for Canada, depending on the level. Rates for Clerk in transportation and communication were from 4.0 to 5.4% below; in trade, 3.3 to 16.0% below. In finance and insurance in 1967, rates for Clerk were 6.6 to 12.1% below the national average rates for Canada.

Rates for Keypunch Operator, Typist and Stenographer in manufacturing have been above the national averages. In 1967, the rates ranged from 3.3 to 10.6% above. The differentials for these classes in mining, transportation and communication, utilities and trade have varied from class to class and year to year over the period. In 1967 in mining, rates for these classes were from approximately 0.1 to 5.0% below the national average; in transportation and communication, with the exception of typists, from 3.2% below to 1.3% above; in the utilities, from 5.2% below to 4.5% above; and in trade, from 8.6% below to 2.8% above the average for Canada. In the same year, in finance and insurance, the rates for these classes were from 9.8 to 13.2% below the average for Canada.

Draftsman

Rates for this class were close to the national average in three of the industrial groups which employ them in significant numbers;

that is, mining, manufacturing and transportation and communication. The other industrial groups which employ draftsmen in significant numbers are the construction industry and the service industry. As explained, information is not available for these two industrial groups.

Technician, Engineering and Laboratory

In mining, rates for these classes have tended to be above the national averages for the lower levels. Rates in manufacturing, except for the first level of Technician, Engineering, have followed the national average very closely. In transportation, communication and the utilities, the rates for engineering technicians have been somewhat below and rates for laboratory technicians above the national average, particularly for the more junior levels.

Technician, Electronics

Manufacturing and transportation, communication and utilities are the industries which employ technicians, electronics in significant numbers. As will be observed from Table 5, rates for this class in manufacturing have tended to be somewhat lower as compared with those in transportation, communication and utilities.

Operational Category

Rates of pay for operational category classes have tended to be above the national averages in mining, manufacturing and the utilities, and generally somewhat below in transportation and communication, trade and finance and insurance. However, in 1968, in mining, the rates for Carpenter were found to be 1.5% below and Electrician 6.6% below, and rates for Cleaning Service Man were 1.0%, Storeman 8.2% and Stationary Engineer 6.1% above the national averages. In manufacturing, in 1968,

rates for these classes were from 1.4 to 10.7% above the averages for Canada, depending on the class involved.

In 1968, the data for these classes in the utilities, except for Meter Reader, were combined with those for transportation and communication. In 1967 in the utilities, the rates for these classes ranged from 4.6 to 22.1% above the averages for Canada.

Meter readers are employed in the utilities and in municipal governments. In 1968, the rates for the class in the utilities were 1.0% above the Canada average.

Until 1967, the rates for operational classes in transportation and communication were generally below the national average. As mentioned, in 1968 the data for operational classes in the utilities were combined with those for transportation and communication. This makes the data for 1968 not strictly comparable with that of previous years. However in 1968, the rates in transportation, communication and utilities for Carpenter were 2.2% below, Electrician 8.7% below and Stationary Engineer 6.3% below the national averages, whereas the rates for Cleaning Service Man and Storeman were 2.7 and 2.4% respectively above the national averages for Canada.

As has been noted the data presented for Delivery Truck Driver relate to transportation and communication, and trade. In 1968, the rates for this class in transportation and communication were 11.3% above the national average. However, it may be noted that between the years 1959 and 1966 the rates for this class in that industry were close to or below the national average.

During the years 1959 to 1967, the rates for Carpenter and Electrician in trade were above the national averages. However in 1968,

there was a significant drop in relative position in rates of pay for these classes in that industry. In that year, rates for carpenters were 3.6% below and electricians 13.5% below the national averages. Also in 1968, rates for Delivery Truck Driver were 2.7% below, Cleaning Service Man 9.9% below and Storeman 21.4% below, and Stationary Engineer 2.4% above the Canada averages. The differentials for these latter four classes in 1968 were close to what they had been over the years 1959 to 1967.

In finance and insurance, the rates for these classes from 1959 to 1967 were generally 10.0 to 15.0% below the Canada averages. In 1968, rates for Carpenter were 15.6% below, Cleaning Service Man 15.5% below, and Stationary Engineer 17.7% below the Canada averages.

TABLE 8: INDUSTRIAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 TO 1968

CANADA - 100%

Class and Grade	Mining		Manufacturing		Construction		Transportation, Communication, and Utilities		Trade		Finance and Insurance	
	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68
Economist & Statistician 1	-	-	111.6(a)	103.6(b)	-	-	94.9(a)	101.1	-	-	81.3(a)	96.9
2	-	-	103.8(a)	102.4	-	-	97.7(a)	99.3	-	-	85.6(a)	95.1
3	-	-	105.3(a)	101.4	-	-	99.8(a)	98.9	-	-	89.0(a)	94.9
4	-	-	101.6(a)	102.9	-	-	108.3(a)	97.0	-	-	91.7(a)	97.4
5	-	-	104.3(c)	101.3	-	-	97.1(a)	100.3	-	-	99.8(a)	101.6
6	-	-	95.8(d)	99.1	-	-	105.1(a)	108.1(b)	-	-	-	-
7	-	-	96.3(d)	-	-	-	-	-	-	-	101.0(e)	104.9
Engineer 1	102.1	102.3	100.0	99.9	102.6	99.3	98.6	99.4	-	-	-	-
2	97.6	99.7	100.4	98.0	96.6	94.5	99.1	104.1	-	-	-	-
3	98.8	97.4	100.5	98.3	98.5	96.4	98.8	100.4	-	-	-	-
4	102.3(a)	101.1	99.0(a)	99.2	95.8(a)	98.9	103.8(a)	101.6	-	-	-	-
5	101.8(a)	97.0	98.9(a)	99.8	102.0(a)	97.4	101.8(a)	101.5	-	-	-	-
6	105.9(a)	99.5	101.1(a)	99.1	92.1(a)	109.6	90.9(a)	103.5	-	-	-	-
7	104.8(a)	93.1	102.8(a)	98.6	110.7(a)	92.8	95.2(a)	107.3	-	-	-	-
Computer Systems Administration 1	121.0(f)	103.5	104.6	101.2	-	-	99.6	97.6	101.2(f)	100.0	87.5(f)	93.6
2	116.2(f)	108.7	103.1	102.6	-	-	98.4	96.9	100.4(f)	95.5	89.0(f)	96.2
3	114.3(f)	113.9	102.3	102.5	-	-	95.7	99.7	103.2(f)	96.5	90.4(f)	94.2
4	-	129.1	106.5	103.7	-	-	101.5(f)	100.8	99.8(f)	98.7	100.8(f)	92.9
5	-	-	99.7(f)	101.3	-	-	83.9(f)	-	-	-	111.3(f)	96.4
Clerk 1	128.7	111.8	120.8	103.9	92.0	103.8(*)	98.3	101.6	91.4	96.7	87.7	93.4
2	117.9	114.9	117.2	116.9	95.0	95.4(*)	102.8	105.2	82.8	91.3	87.4	94.1
3	110.7	106.6	108.6	108.1	89.5	94.0(*)	99.8	108.4	87.9	84.0	84.0	87.9

(a) October 1, 1959.
 (b) July 1, 1966.
 (c) July 1, 1961.
 (d) July 1, 1965.
 (e) July 1, 1963.
 (f) October 1, 1965.

(*) The data shown include rates drawn from establishments involved in storage activities, as well as transportation and communication.

TABLE 8: INDUSTRIAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 TO 1968 (CONT'D.)

CANADA - 100%

Class and Grade	Mining		Manufacturing		Transportation & Communication		Utilities		Trade		Finance and Insurance	
	Oct. 1/59	Oct. 1/67	Oct. 1/59	Oct. 1/67	Oct. 1/59	Oct. 1/67	Oct. 1/59	Oct. 1/67	Oct. 1/59	Oct. 1/67	Oct. 1/59	Oct. 1/67
Typist 1	93.4(f)	-	106.7	110.6	97.3	97.3(*)	100.8	94.8	93.3	102.8	92.9	92.2
2	103.2	95.0	104.2	106.3	91.5	87.5(*)	103.0	97.5	85.5	91.4	84.9	88.0
Stenographer 3	101.9	95.3	103.6	103.3	96.0	98.5(*)	98.1	103.9	94.3	99.6	90.3	91.0
4	96.8(h)	99.9	101.7(i)	103.9	94.9(i)	96.8(*)	105.5(h)	98.6	90.7(i)	96.8	93.5(h)	91.5
Key punch Operator	-	97.9	105.8	108.5	104.4	101.3(*)	95.0	104.5	89.4	92.8	85.5	86.8

Class and Grade	Mining		Manufacturing		Transportation, Communication, and Utilities		Trade		Finance and Insurance	
	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68	Oct. 1/58	July 1/68
Draftsman 1	100.0(a)	110.6	100.2(a)	97.7	99.2(a)	100.3	95.9(k)	-	-	-
2	103.8(a)	102.3	103.3(a)	101.2	99.3(a)	97.5	107.4(a)	-	-	-
3	95.5(a)	99.5	102.1(a)	101.3	98.1(a)	98.6	107.5(a)	97.0(k)	-	-
Technician Engineering 1	-	-	114.2	116.9	78.7(b)	87.9	-	-	-	-
2	115.6	105.7	105.1	100.0	104.4(k)	94.3	-	-	-	-
3	103.5	103.8	98.3	100.7	100.0	97.6	110.8(k)	-	-	-
4	104.1	100.1	98.7	100.7	102.7	99.3	-	-	-	-
5	92.3	100.4	98.7	100.7	103.0	95.5	-	-	-	-
Technician Laboratory 1	92.7(k)	123.1	100.1	97.8	105.7(b)	116.9	-	-	-	-
2	94.7	118.0	99.7	97.9	109.2	111.6	-	-	-	-
3	101.3	106.9	99.5	98.0	108.4(d)	105.7	-	-	-	-
4	99.2	104.7	100.1	99.5	101.2(b)	104.4	-	-	-	-
5	101.2(k)	101.9	99.5	99.5	99.2(b)	100.7	-	-	-	-

- (a) October 1, 1959.
 (b) July 1, 1966.
 (c) July 1, 1965.
 (d) October 1, 1967.
 (e) October 1, 1963.
 (f) October 1, 1960.
 (g) October 1, 1962.
 (h) October 1, 1964.

(*) The data shown include rates drawn from establishments involved in storage activities, as well as transportation and communication.

TABLE 8: INDUSTRIAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 TO 1968 (CONCL'D.)

CANADA - 100%

Class and Grade	Mining		Manufacturing		Transportation, Communication, and Utilities		Trade		Finance and Insurance			
	Oct. 1/52	July 1/68	Oct. 1/52	July 1/68	Oct. 1/52	July 1/68	Oct. 1/52	July 1/68	Oct. 1/52	July 1/68		
Technician Electronics	1	-	99.4(k)	106.6	97.7(k)	100.1	-	-	-	-		
	2	-	99.1(k)	91.6	100.4(k)	103.8	-	96.0	-	-		
	3	-	94.4(k)	92.9	96.2(k)	107.0	-	100.7	-	-		
	4	-	100.6(k)	94.0	98.7(k)	109.8	-	-	-	-		
	5	-	96.6(k)	91.5	104.1(k)	103.9	-	97.5	-	-		
	6	-	-	95.7	103.1(l)	110.2	-	-	-	-		
	7	-	-	-	-	96.7(l)	95.7	-	-	-		
Class and Grade	Oct. 1/52	Oct. 1/68	Oct. 1/52	Oct. 1/68	Transportation & Communication							
	Oct. 1/52	Oct. 1/68	Oct. 1/52	Oct. 1/68	Oct. 1/52	Oct. 1/68	Oct. 1/52	Oct. 1/68	Oct. 1/52	Oct. 1/68		
Carpenter	98.6(a)	98.5	102.8	104.0	93.9	97.8	100.8	105.4(g)	100.3	96.4	90.3	84.4
Electrician	102.1	93.4	99.9	101.4	94.8	91.3	104.6	111.7(g)	100.9	86.5	92.1	90.9(g)
Cleaning Service Man	114.0(h)	101.0	106.6	110.7	98.1	102.7	103.8	104.6(g)	89.2	90.1	81.7	84.5
Storeman 2	110.9(j)	108.2	101.6	105.5	100.0	102.4	109.7	106.0(g)	81.2	78.6	91.2	76.6(g)
Stationary Engineer 3	109.2(m)	106.1	99.5	102.8	100.8	93.7	114.6	122.1(g)	101.8	102.4	97.6	82.3
Delivery Truck Driver	-	-	-	-	97.3	111.3	-	-	100.6	97.3	-	-
Meter Reader	-	-	-	-	-	-	99.8	101.0	-	-	-	-

(a) October 1, 1959.
 (g) October 1, 1967.
 (h) October 1, 1963.
 (j) October 1, 1962.
 (k) October 1, 1964.
 (l) July 1, 1967.
 (m) October 1, 1966.

SECTION VI: OCCUPATIONAL DIFFERENTIALS IN RATES OF PAY
OCTOBER 1, 1958 TO 1968

Table 10 presents information on occupational differentials in rates of pay between Engineer 3 and other classes for October 1, 1958 and 1968 or for dates as otherwise specified. Occupational differentials for 1968 based on Engineer 3 are presented graphically in Figure 2.

Occupational differential is defined as the percentage between the mean annual rate of pay for a class and grade or level within a class for Canada and the mean annual rate of pay for Engineer 3 for Canada.

The class of Engineer is relatively well-defined. It is a populous class, with engineers being employed in every region and in most industrial groups in Canada. Rates of pay for the class of Engineer, often referred to as a "key class" for purposes of wage and salary administration, are important in establishing rates of pay for other classes, both in the private and public sectors. The class of Engineer is one which has been surveyed every year since 1958 by the Pay Research Bureau.

Accordingly, Engineer 3 was selected as a basis for calculating occupational differentials because it is a level encompassing a larger number of employees than any of the other levels in the class of Engineer in the organizations surveyed over the period under study. It is a level which is relatively easy to define, whose job content has not changed significantly over the last ten years, and which is fairly uniformly interpreted in organizations employing engineers in Canada. Most classification plans for engineers provide for a description of duties and responsibilities for a level which is similar to that described for Engineer 3 in the specifications presented in Appendix B. However,

Engineer 3 used in calculating the differentials and some of the other classes does not affect the validity of the data for trend purposes. Again, for reasons explained above, it is not possible to present differentials back to October 1, 1958 for all classes.

General Observations on Occupational Differentials

Occupational differentials have tended to be relatively constant for a number of classes over the period, even though the percentage increases in rates were greater for the years from 1965 onward than they were before that time, as explained in Section III. A number of classes exhibited very little change in the differentials including Economist and Statistician, Typist, working level Draftsman, Technician and Stationary Engineer.

Rates for other classes have increased relative to those for engineers, including Nurse General Duty, Occupational and Physical Therapist, Social Worker, University Teacher, Elementary and Secondary School Teacher, Police Constable, Firefighter, Carpenter, Electrician and Nursing Orderly. The rates for Computer Systems Administration, Clerk and Technician, Electronic have fallen somewhat in relation to others.³⁰

Economist and Statistician

In the case of Economist and Statistician, the decrease in the occupational differential shown in Table 10 for levels 2, 4 and 5 can be

³⁰ Some of the factors bearing on occupational differentials have been the operation of the labour market, education levels, union organization and labour mobility. For a detailed discussion of these factors, see Peitchinis, op. cit., pp. 324-337.

there are some plans which combine lower and higher level duties and responsibilities than those associated with this level in most organizations employing engineers in Canada.

The duties and responsibilities of Engineer 3 can be compared generally with those of other professional, administrative and technical classes and can be related, at least in a general way, to clerical and operational classes, particularly those such as Carpenter and Electrician. It may be noted that some industrial organizations in Canada with a wide range of classes have one classification plan covering all salaried positions in their respective organizations. Others, of course, have a plan covering supervisory, specialist and professional classes and one or more for lower level classes. Operational category employees are usually classified under separate plans. For these reasons, rates of pay for Engineer 3 are considered to be a reasonably good basis on which to calculate occupational differentials.

It is to be noted, with respect to the information presented on occupational differentials, that since 1961 engineers have been surveyed by the Pay Research Bureau each year as of July 1. Since 1961, the data obtained in Bureau surveys for most other professional and technical classes also pertain to July 1. On the other hand, the survey date for operational, administrative and foreign service, and administrative support categories was October 1 throughout the period. The survey date for Nurse, General Duty and Occupational and Physical Therapist were January 1 and July 1. The survey dates for the Hospital Services Classes were January 1 until 1965 and October 1 thereafter. The occupational differentials for all classes are shown as of the dates they were surveyed. It is considered that the slight difference in dates of the rates for

explained at least in part by the fact that the specifications for these levels were changed in 1965, as explained above. The years of experience were reduced for Economist 2 and the duties and responsibilities for Economist 4 and 5 were decreased from what they were prior to that time. The number of observations for Economist 6 and 7 have been comparatively few over the years, which, it is thought, explains to a large extent the vacillation in the occupational differentials for these levels.

Engineer

It will be noted that the relationship between the grades of engineers have been very stable. However, rates for the more senior levels increased by more than did the rates for the junior and intermediate levels over the period.

University Teacher

The differentials for all levels of University Teacher have increased relative to Engineer 3. The differentials for Assistant Professor increased by an average of 8.1%, for Associate Professor by 11.9% and for Professor by 17.2%, between the years 1959-60 and 1968-69.

Elementary and Secondary School Teacher

Rates for Elementary School Teacher increased by 6.7% in relation to Engineer 3 over the years 1963-64 to 1967-68. Over the same period, the differentials for Secondary School Teachers decreased by 1.1%.

Nurse, General Duty

The relative position of nurses in terms of rates of pay was improved in relation to other classes over the period. The differentials for Nurse, General Duty, increased from 45.3% as of January 1, 1960 to 50.5% as of July 1, 1967.

Occupational and Physical Therapist

Rates for Occupational and Physical Therapist increased by 10.6% and 8.3% respectively in relation to Engineer 3 over the same period January 1, 1960 to July 1, 1967. As has been explained, complete data are not available for these classes after July 1, 1967.

Social Worker

The relative position in rates of pay for Social Worker vis a vis Engineer also improved. The differentials for Social Worker increased by approximately 20.0% between the period October 1, 1960 to July 1, 1968. Some reasons were advanced in Section III, why the rates for these classes have increased as they have in relation to other classes.

Computer Systems Administration

This is a relatively new occupation. In Canada, there were few persons trained for this occupation before the mid-nineteen fifties, as was explained in Section of this Chapter. When computers were being installed in earlier years, the rates for the class tended to be high in relation to other occupations, taking into consideration the duties and responsibilities and the training required. In the years between 1963 and 1967, the relative position in rates of pay for the working and intermediate levels dropped by approximately 15.0% in relation to

those for Engineer 3. However, the relationships since that time have remained virtually unchanged. It is thought that the differentials shown for the class in 1968 tend to reflect the policies with respect to relativity of rates within most organizations covered in the Bureau surveys, that is, to pay similar rates for similar levels of duties and responsibilities in one class as compared with another, particularly for professional and administrative classes.³¹

Clerk, Keypunch Operator, Typist and Stenographer

The differentials for Clerk, Keypunch Operator and Stenographer fall between 1.2 and 2.8% from October 1, 1958 to 1967. Some reasons were advanced in Section III with respect to changes in rates for these classes. Only rates for Typist in this group have maintained their relative position.

Draftsman

Rates of pay for the more junior draftsmen have not increased at the same rate as most other classes. The differential for working level draftsmen, that is Draftsman 3, in 1968 was 1.8% less than it was in 1958.

Technician, Engineering and Laboratory

Differentials for Technician, Engineering vacillated somewhat between October 1, 1962 to July 1, 1968. However in 1968 the differentials were slightly higher, except for level 3, than they were in 1962. The differentials for Technician, Laboratory were virtually unchanged over the period in 1968 compared with 1962.

³¹ As has been mentioned, the statement that organizations tend to maintain a "one rate" structure for professional and administrative classes can be supported from information obtained in Pay Research Bureau surveys.

Technician, Electronics

Rates for Technicians, Electronics have fallen in relation to Engineer 3. For levels 1-5, this decrease was between 0.9 and 4.9% for the years October 1, 1962 to July 1, 1968. The differentials for Technician, Electronics 6 dropped by 8.3% and for Technician, Electronics 7 by 3.3% between 1964 and 1968.

Operational Category Classes

Except for Stationary Engineer and Delivery Truck Driver, the rates for all operational category classes increased in relation to Engineer 3, from 1958 to 1968. Over that period, the differentials for Police Constables increased by 6.4%, for Firefighter by 4.8%, for Carpenter by 2.4% since 1959, for Electrician by 5.0%, for Cleaning Service Man by approximately 1.0%, for Storeman by 2.7% and for Meter Reader by 2.7%.

The differentials for Stationary Engineer were higher over most of the period than they were in 1958, but in 1968 showed a slight drop. Similarly with the differentials for Delivery Truck Driver, they were higher over most of the period than they were in 1958 but also showed a drop in 1968.

The relative position of rates for hospital services classes have also increased in relation to Engineer 3. From 1960 to 1968 the differentials for Nursing Auxiliary Certified increased by 3.8%, for Nursing Orderly Experienced by 11.5%, for Cleaning Service Man by 2.5%, for Cook by 3.2% since 1961, and for Hospital Maids by 2.5%.

Factors such as increased unionization and increased qualifications resulting from technological and other developments

certainly merit study as possible major causes for the increase in rates for police constables and firefighters in comparison with those for engineers. The same observations concerning the movement of rates for carpenters and electricians might also be made.

The increase in rates for the hospital services classes relative to Engineer 3 can perhaps be attributed to the expansion in hospital facilities leading to an increasing demand for workers in these occupations.

In Canada since 1945, the percentage increase in hospital employment has been significantly greater than that for total employment. As shown in detail below, total employment between 1945 and 1967 increased by 66.0%, whereas employment in hospitals increased by 356.0% over the same period.

TABLE 9: EMPLOYMENT IN HOSPITALS COMPARED WITH
TOTAL EMPLOYMENT IN CANADA,
1945, 1954, 1961, 1967

<u>Year</u>	<u>Total Employment</u>	<u>Hospital Employment</u>
1945	4,447,000	64,046
1954	5,243,000	121,056
1961	6,049,000	208,866
1967	7,385,000	291,817

	<u>% Increase in Total Employment</u>	<u>% Increase in Hospital Employment</u>
1945-1954	18%	89%
1954-1961	15%	73%
1961-1967	22%	40%
1954-1967	41%	142%
1945-1967	66%	356%

Sources: D.B.S. Annual Supplement to the Canadian Statistical Review, Ottawa, 1967.
D.B.S. Canada Year Book, Ottawa, 1967.
D.B.S. Hospital Statistics, Vol. III, Ottawa, 1967.
D.B.S. Mental Health Statistics, Vol. III, Ottawa, 1967.

TABLE 10: OCCUPATIONAL DIFFERENTIALS, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 AND 1968

Engineer 3 = 100%

<u>Class and Grade</u>	<u>Differential</u>	
	<u>Oct. 1/58</u> %	<u>July 1/68</u> %
Economist & Statistician 1	69.8	68.3
Economist & Statistician 2	82.1	78.8
Economist & Statistician 3	99.7	99.1
Economist & Statistician 4	119.1	114.4
Economist & Statistician 5	138.4	134.1
Economist & Statistician 6	168.4(a)	161.5
Economist & Statistician 7	193.9(b)	184.2
Engineer 1	72.8	72.9
Engineer 2	85.5	84.2
Engineer 4	113.4(c)	114.1
Engineer 5	129.1(c)	130.2
Engineer 6	145.5(c)	148.1
Engineer 7	166.9(c)	171.4
Assistant Professor	95.0(d)	103.1(e)
Associate Professor	119.3(d)	131.2(e)
Professor	155.6(d)	172.8(e)
	<u>1963-64</u>	<u>1967-68</u>
Elementary School Teacher	62.0(f)	68.7(f)
Secondary School Teacher	96.9(f)	95.8(f)
	<u>Jan. 1/60</u>	<u>July 1/67</u>
General Duty Nurse	45.3	50.5
Occupational Therapist 1 & 2	44.4	55.0
Physical Therapist 1 & 2	44.8	53.1
	<u>Jan. 1/60</u>	<u>July 1/68</u>
Social Worker 1 & 2	60.2	69.6
Social Worker 3	70.6	88.3
Social Worker 4	80.9	99.6
Social Worker 5	90.0	111.0
Social Worker 6	95.8(g)	110.2
	<u>Oct. 1/63</u>	<u>Oct. 1/68</u>
Computer Systems Administration 1	74.0	67.9
Computer Systems Administration 2	101.2	86.4
Computer Systems Administration 3	121.2	107.1
Computer Systems Administration 4	143.3	130.0
Computer Systems Administration 5	167.8	168.8

(a) July 1, 1961.

(b) July 1, 1963.

(c) October 1, 1959.

(d) Year 1959-60.

(e) Year 1968-69.

(f) Calculated on mean of maximum rates for teachers and mean rates for Engineer 3.

(g) January 1, 1963.

TABLE 10: OCCUPATIONAL DIFFERENTIALS, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 AND 1968 (CONT'D).

Engineer 3 = 100%

<u>Class and Grade</u>	<u>Differential</u>	
	<u>Oct. 1/58</u> %	<u>Oct. 1/67</u> %
Clerk 1	33.6	32.4
Clerk 2	42.3	39.5
Clerk 3	53.0	50.3
Typist 1	33.2	33.4
Typist 2	40.0(h)	41.4
Stenographer 3	41.4(h)	38.9
Stenographer 4	48.2(i)	45.9
Keypunch Operator	41.2(h)	39.8
	<u>Oct. 1/58</u>	<u>July 1/68</u>
Draftsman 1	49.1	44.3
Draftsman 2	60.7(h)	54.9
Draftsman 3	71.0	69.2
	<u>Oct. 1/62</u>	<u>July 1/68</u>
Technician, Engineering 1	45.5	48.2
Technician, Engineering 2	52.0	57.0
Technician, Engineering 3	61.1	61.7
Technician, Engineering 4	70.8	73.4
Technician, Engineering 5	79.7	81.1
Technician, Laboratory 1	41.8	41.3
Technician, Laboratory 2	48.4	50.8
Technician, Laboratory 3	58.3	58.4
Technician, Laboratory 4	68.5	67.1
Technician, Laboratory 5	77.2	76.2
Technician, Electronics 1	55.3	50.4
Technician, Electronics 2	65.3	61.3
Technician, Electronics 3	72.0	69.4
Technician, Electronics 4	75.2	74.3
Technician, Electronics 5	91.0	86.3
Technician, Electronics 6	99.6(j)	91.3
Technician, Electronics 7	114.7(j)	111.4

(h) October 1, 1959

(i) October 1, 1960

(j) October 1, 1964

TABLE 10: OCCUPATIONAL DIFFERENTIALS, SELECTED CLASSES, INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, OCTOBER 1, 1958 AND 1968 (CONT'D.)

Engineer 3 = 100%

<u>Class and Grade</u>	<u>Differential</u>	
	<u>Oct. 1/58</u>	<u>Oct. 1/68</u>
Constable	57.9	64.3
Firefighter	57.5	62.3
Carpenter	61.9(k)	64.3
Electrician	65.8	70.8
Cleaning Service Man	46.9	47.7
Storeman 2	53.0	55.7
Stationary Engineer 3	69.6	68.3
Delivery Truck Driver	50.0	46.2
Meter Reader	50.0	52.7
	<u>Jan. 1/60</u>	<u>Oct. 1/68</u>
Hospital Cook	42.6(l)	45.8
Hospital Cleaning Service Man	36.9	39.4
Hospital Nursing Auxiliary, Certified	32.9	36.7
Hospital Nursing Orderly, Experienced	38.5	50.0
Hospital Maid	27.4	29.9

(k) October 1, 1959
(l) January 1, 1961.

FIGURE 2: OCCUPATIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES,
INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, 1968

- (a) Pertains to year 1968-69.
 (b) Pertains to year 1967-68.
 (c) July 1, 1967.

FIGURE 2: OCCUPATIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES,
INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, 1968 (CONT'D)

(d) October 1, 1967.

FIGURE 2: OCCUPATIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES,
INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, 1968 (CONT'D)

(d) October 1, 1967.

FIGURE 2: OCCUPATIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES,
INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, 1968 (CONCL'D)

FIGURE 2: OCCUPATIONAL DIFFERENTIALS IN RATES OF PAY, SELECTED CLASSES,
INDUSTRIAL AND OTHER ORGANIZATIONS, CANADA, 1968 (CONCL'D)

Engineer 3 = 100%

CHAPTER II

RATES OF PAY IN THE FEDERAL PUBLIC SERVICE, OCTOBER 1, 1958 TO 1968

SECTION I: BACKGROUND

Composition of the Federal Public Service

The federal government is the largest employer in Canada. In September, 1958 it had a total of 196,736 employees, including 153,859 salaried, 25,295 prevailing rate, 2,733 ships officers and crews, and 14,849 casuals and others.¹ As of September, 1968 the number had increased to 234,394, of which 191,972 were salaried, 18,290 now paid zone rates, which are discussed in some detail below, 4,015 ships officers and crews, and 20,117 casuals and others.¹

The number and distribution of full time public servants by province, employed under the Public Service Employment Act, as of July 1, 1968 is given in Table 11. Approximately half of the federal public servants work in Ontario. The proportion of public servants in Ontario is high compared with other provinces because of the large numbers working in

¹ Dominion Bureau of Statistics, Government Division, Federal Government Employment, September, 1959 and 1968. The Queen's Printer, Ottawa, 1960 and 1969.

The figures apply to departments, boards, commissions and councils, such as the Atomic Energy Control Board, the Unemployment Insurance Commission and the National Research Council as listed under Schedules A and B of the Financial Administration Act. The figures, however, do not include agency and proprietary corporations shown in Schedules C and D of the Financial Administration Act, such as the National Capital Commission and the Canadian National Railways and other quasi-independent government bodies such as the Bank of Canada. Also excluded are military personnel and members of the Royal Canadian Mounted Police.

TABLE 11: NUMBER AND DISTRIBUTION OF EMPLOYEES UNDER THE
PUBLIC SERVICE EMPLOYMENT ACT, JULY 31, 1968

<u>Province</u>	<u>Number</u>	<u>Percent of Total</u> %
Newfoundland	2,674	1.7
Prince Edward Island	729	0.5
Nova Scotia	7,318	4.7
New Brunswick	4,891	3.2
Quebec	26,111	16.9
Ontario	76,285	49.3
Manitoba	7,578	4.9
Saskatchewan	4,437	2.8
Alberta	9,122	5.9
British Columbia	14,355	9.3
Yukon and Northwest Territories	1,295	0.8
Total, All Provinces	154,795(a)	100.0

Source: Pay Research Bureau, G. Thivierge, Composition of the
Public Service of Canada, July, 1968

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- (a) The difference between the total number of employees shown here and that reported on the previous page is that the figures given in Table 1 exclude persons not under the Public Service Employment Act, such as those employed by separate employers and on ministers' staffs. Also excluded from the figures given in Table 1 are 1,793 salaried employees under the Act, as well as locally-engaged employees, located outside of Ottawa. Also, ships officers and crews and personnel previously designated as prevailing rate employees now paid zone rates, are not included in Table 1.

headquarters offices at Ottawa.

The same qualification regarding headquarters staff applies, of course, to the distribution by metropolitan areas, shown in Table 12, in which the Ottawa-Hull area accounts for more than a quarter of federal public servants. This table shows federal public servants to be highly concentrated in urban areas. Less than twenty percent work outside the twenty-three urban areas listed.

TABLE 12: NUMBER AND DISTRIBUTION OF EMPLOYEES UNDER THE PUBLIC
SERVICE EMPLOYMENT ACT BY METROPOLITAN AREA, JULY 1, 1968

<u>Location</u>	<u>Number</u>	<u>Percent of Total</u> %
Metropolitan Areas:		
Ottawa-Hull	43,552	28.1
Montreal	16,480	10.6
Toronto	14,440	9.3
Vancouver	8,479	5.5
Winnipeg	5,881	3.8
Halifax	5,239	3.4
Edmonton	4,258	2.8
London	3,431	2.2
Quebec	3,328	2.2
Victoria	2,929	1.9
Calgary	2,836	1.8
Hamilton	1,760	1.1
Regina	1,647	1.1
St. Johns, Nfld.	1,447	0.9
St. John, N.B.	1,409	0.9
Windsor	1,256	0.8
Saskatoon	1,181	0.8
Kitchener-Waterloo	771	0.5
Sudbury	455	0.3
Total, Metropolitan Areas	120,779	
Selected Major Urban Areas:		
Moncton	1,559	1.0
Kingston	1,014	0.7
Fort William - Port Arthur (now Thunder Bay)	825	0.5
Sydney - Glace Bay	544	0.4
Other Locations:	30,074	19.4
Total, Canada	154,795(a)	100.0

Source: Pay Research Bureau, G. Thivierge, Composition of the
Public Service of Canada, July, 1968.

(a) See footnote - Table 1.

Compensation Policy

Compensation policy in the federal Public Service had its origins in the Civil Service Act of 1918. With the coming into force of that Act, the Civil Service Commission of the day was made responsible for the classification of positions and reviewing and recommending salaries for the various departments in the service.² Under the Act, the salaries recommended by the Commission were subject to the approval of the Governor-in-Council.

The 1918 Act greatly extended the jurisdiction of the Commission. The need to develop a classification system quickly was too large a task for the Commission's own staff and it was decided to engage a firm of consultants, Arthur Young and Company, "to make investigations and to formulate recommendations on which a classification system might be based".³ The consultants reviewed the work of the various departments of the Government and developed a complete plan which included descriptions of the duties and qualifications required for each type of position, and recommended compensation.

When this plan was presented by the company, it was accompanied by a "Report of Transmission" which suggested certain general principles of compensation. As these principles have served as a foundation on which subsequent statements of policy have been based, they are cited in full:

- I. Rates of compensation should be uniform for the same work.

² Canada, Civil Service Act, Part IV, Sections 42-52, Ottawa, 1918.

³ Arthur Young & Company, Report of Transmission, Ottawa, Printer to the King's Most Excellent Majesty, 1919, Page v.

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II. Rates of compensation should be relatively right for different classes.

(a) For the same vocation, trade or profession, this should be measured by differences in duties, responsibilities, experience, knowledge and skill.

(b) In different fields, rates of compensation should bear the same relation to other fields that has been established in the business world as between different vocations, trades, professions and kinds of work.

III. The pay for each class should be equitable, that is, fair to the employee and fair to the taxpaying public.

(a) Fairness to the employee requires that the compensation should permit him to maintain a standard of living that will make for the good of society and posterity. In the case of the lowest ranks, the compensation should be adequate to attract into the service young men and women without family responsibilities, but of a training and capacity that will enable them to become of future value to the service and themselves.

(b) Fairness to the taxpaying public requires:

(i) Compensation should not materially exceed that paid for similar services by enlightened employers in the general industrial and commercial world. Any excess over such a prevailing average is in the nature of a special subsidy with which no group should be favoured.

(ii) Furthermore, in comparing the compensation between public and business for similar services, the relative advantages and disadvantages of public and private employment should be taken into account:

(a) permanence and continuity of tenure,

(b) hours of work,

(c) holiday and sick leave.

IV. The schedules should provide an absolute minimum, absolute maximum and intermediate rates within the

range.⁴

These principles were endorsed by the Civil Service Commission and the government of the day. From 1919 to 1948 there is no evidence of any significant further statement of policy, although there were a number of salary revisions including a salary decrease in the depression days of the 1930's.

In 1948, Prime Minister St. Laurent, in introducing certain salary revisions, restated the principles upon which the compensation policy of the government was based in terms that did not differ greatly from those of 1919. In summary, the three most important were:

equal pay for equal work;

fair relationship between classes; and

fair relationship with private employment, defined to require consideration of the average paid by enlightened employers or the so-called good employers.⁵

The influence of the 1919 principles was still apparent in 1958 when Prime Minister Diefenbaker told a convention of the Civil Service Association of Canada:

"For many years it has been generally accepted that two main principles should guide the determination of salaries in the service. First, the salaries must be enough to do the job, that is, to attract enough of the right kind of men and women into the service and keep them in it; second, they must be fair as between civil servants and people outside the service, the taxpayer if you will, which means that the salaries we pay for any class of work should be comparable with those paid by private employers for

⁴ Arthur Young & Company, Report of Transmission, Ottawa, Printer to the King's Most Excellent Majesty, 1919, Page 25.

⁵ Canada, The Royal Commission of Government Organization, Ottawa, the Queen's Printer, 1962, Page 409.

similar classes of work, taking into account the other terms of employment that are necessary to make a fair comparison. I think these principles should continue to guide us."⁶

A few years later these same principles were given legislative sanction in Section 10 of the Civil Service Act of 1961, which stated:

"The Commission in making recommendations on remuneration shall consider the requirements of the civil service, and shall take into account the rates of pay and other terms and conditions of employment prevailing in Canada for similar work outside the service, the relationship of the duties of the various classes within the civil service and any other considerations that the Commission considers to be in the public interest."

With the advent of collective bargaining in the Public Service in 1967, Section 68 of the Public Service Staff Relations Act prescribes that:

"In the conduct of proceedings before it and in rendering an arbitral award in respect of a matter in dispute, the Arbitration Tribunal shall consider

- (a) the needs of the Public Service for qualified employees;
- (b) the conditions of employment in similar occupations outside the Public Service, including such geographic, industrial or other variations as the Arbitration Tribunal may consider relevant;
- (c) the need to maintain appropriate relationships in the conditions of employment as between different grade levels within an occupation and as between occupations in the Public Service;
- (d) the need to establish terms and conditions of employment that are fair and reasonable in relation to the qualifications required, the work performed, the responsibility assumed and the nature of the services rendered; and
- (e) any other factor that to it appears to be relevant to the matter in dispute."

⁶ Canada, The Royal Commission of Government Organization, Ottawa, the Queen's Printer, 1962, Page 409.

Under the Public Service Staff Relations Act, employees in the Federal Public Service are divided into five main categories: Professional and Scientific, Technical, Administrative and Foreign Service, Administrative Support and Operational. These categories are further divided into occupational groups. For example, falling under the Operational Category are the Firefighters Group, General Labour and Trades, General Services, and Hospital Services, as well as others. These occupational groups are further divided into sub-groups. There are some 73 occupational groups, plus a number of sub-groups which constitute separate bargaining units. The Act provides for managerial exclusions but does not specifically mention the sixth category, the executive category, which exists in the classification structure.

Pay Practices

As mentioned above, the plan of position classification developed by Arthur Young and Company in 1919 was accompanied by compensation schedules for the various classes. For most classes a range of annual salary rates was provided. Each salary range had a minimum, which was generally the rate paid a new employee, and a maximum, which was the rate that could be attained after a number of years of satisfactory performance. Through the years the number of intermediate steps has varied, but not greatly. Most commonly now there are two or three intermediate steps and successive steps are generally reached in successive years of satisfactory performance. Entrance levels, for example those used for new recruits just out of high school, technological institute, or university, carry longer salary ranges and provision for more frequent than annual steps in the first few years after initial appointment. Also, in recent years longer salary ranges have been established for

a number of administrative and professional classes to provide for what is called "merit pay".

The compensation schedules developed by Arthur Young and Company provided for national scales of rates for most classes. However, the company established "prevailing rates" as the compensation applicable to a small number of classes, mainly in the "General Artisan and Skilled Labour Service".⁷ Later, in 1922, the Civil Service Commission, having found it impractical at that time to set up and administer examinations or tests for large numbers of positions at low skill levels in the "outside service", that is, outside of Ottawa, recommended their exclusion from the Civil Service Act. This was authorized by Order-in-Council PC 1053 of that year which stipulated that the rates were not to exceed those established for similar classes on the recommendation of the Commission. Beyond this the determination of prevailing rates was left entirely to the employing departments.⁸

Gradually, the federal Department of Labour became involved as a fact finding and recommending agent.⁹ Ultimately, it was provided in the Prevailing Rate Employees' General Regulations, 1960, that:

"The rate and conditions of pay, not including additional remuneration by way of supervisory differential, for (prevailing rate) employees of each unit of the Public Service shall be fixed by the Treasury Board

⁷ The Classification of the Civil Service of Canada, (Prepared by Authority of the Parliament of Canada under Direction of the Civil Service Commission), Ottawa, Printer to the King's Most Excellent Majesty, 1919, Page 817.

⁸ Department of Labour, Johnstone, H.S. "Fair Wages Policy and Prevailing Rates" Labour Gazette, September, 1950.

⁹ Pay Research Bureau, Morritt, H.H. An unpublished paper "Prevailing Rate Policy and Determination of Prevailing Rates", May 7, 1962.

after receipt by the Board of a submission from a department that is based on a recommendation of the Department of Labour."

With collective bargaining this was changed. New systems of zone pay were introduced for General Labour and Trades and the General Services Group in the Operational Category, involving approximately 35,000 employees. For this purpose Canada is divided into 36 pay zones ranging from the Northwest Territories to Labrador and Newfoundland. Rates of pay are established for each class in each of these zones. Incidentally, zone rates are single hourly rates, but not necessarily different for each zone. In other words, a number of zones could and do have the same hourly rate for a given job.

A form of zone pay was introduced for Ships Crews, encompassing about 3,000 employees, and identifying two pay regions: Eastern Waters and the MacKenzie River and Western Waters. Similarly for the Ship Repair Group, encompassing 2,500 employees, differences were recognized in the pay plan between the two major federal dockyards at Esquimalt, British Columbia and Halifax, Nova Scotia.

In the operational category there is also one other group for which zone pay was introduced, namely the hospital services group. These employees are now paid according to a plan of compensation based on six zones, corresponding to provinces or groups of provinces.

Employees in the professional and scientific, administrative and foreign service, administrative support and technical categories continue to be paid according to scales of rates which are Canada-wide. There are also some groups in the operational category to which national scales apply, for example, the firefighter group. However, a modified scheme of zone pay

was negotiated for elementary school teachers in the Education Group, about 1,500 in all, which varies according to the province or territory of employment. The Nurses Group covering approximately 2,000 employees is another group where, at the first level, a plan of compensation is based on the same six zones as those for hospital services classes.

Except for employees excluded by law from the collective bargaining process (mainly managerial and confidential) all present rates are bargained rates. In the first round of bargaining, the rates negotiated were retroactive to October 1, 1966 for the Operational Category, to July 1, 1967 for the Scientific and Professional and Technical Categories, and to October 1, 1967 for the Administrative and Foreign Service and Administrative Support Categories.

SECTION II: SOURCES AND METHODS RELATING TO THE COLLECTION AND PRESENTATION OF DATA ON RATES OF PAY IN THE FEDERAL PUBLIC SERVICE

Class Coverage

For this study, information on rates of pay for twenty-eight classes in the federal Public Service has been consolidated for the purpose of analyzing trends in rates of pay over the period October 1, 1958 to 1968. The classes selected are representative of professional, administrative, technical, administrative support and operational categories in the Public Service. They are essentially the same classes as those for which data are presented pertaining to industrial and other organizations in Canada in Chapter I.

These classes, as with their counterparts in industrial and other organizations, are characterized by relative stability of employment and job content, encompass a relatively large number of employees and are important for rate setting purposes in the federal Public Service. The classes for which data are presented as they relate to five occupational categories and a number of occupational groups in the federal Public Service are given below. The titles and grades shown for most classes are the same as those used for classification purposes in the federal Public Service, and are the same as those used in presenting information on rates of pay in industrial and other organizations. However, over the period under study, the titles and grades of some classes in the service have changed in the course of revising classification plans. The titles and grades now being used for classification purposes as they relate to former class titles and grades are shown in Appendix A.

PROFESSIONAL AND SCIENTIFIC CATEGORY

Economics, Sociology and Statistics Group

Economist 1-7
Statistician 1-7

Education Group

Elementary School Teacher

Engineering and Land Survey Group

Engineer 1-7

Nursing Group

Nurse, General Duty

Occupational and Physical Therapy Group

Occupational Therapist 1-2
Physical Therapist 1-2

Social Workers Group

Social Worker 1-6

University Teaching Group

Assistant Professor
Associate Professor
Professor

ADMINISTRATIVE AND FOREIGN SERVICE CATEGORY

Computer Systems Administration Group

Computer Systems Administration 1-5

ADMINISTRATIVE SUPPORT CATEGORY

Clerical and Regulatory Group

Clerk 1-3

Data Processing Group

Keypunch Operator

Secretarial, Stenographic, Typing Group

Typist and Stenographer 1-4

TECHNICAL CATEGORY

Drafting and Illustration Group

Draftsman, Engineering and Architectural 1-3

Engineering and Scientific Support Group

Technician, Engineering 1-5

Technician, Laboratory 1-5

Electronics Group

Technician, Electronics 1-7

OPERATIONAL CATEGORY

Firefighter Group

Firefighter

General Labour and Trades Group

Carpenter, Maintenance

Electrician, Maintenance

General Services Group

Cleaning Service Man

Storeman

Heating, Power and Stationary Plant Operation Group

Stationary Engineer 3

Hospital Services Group

Hospital Nursing Auxiliary, Certified

Hospital Nursing Orderly, Experienced

Hospital Cleaning Service Man

Hospital Cook

Hospital Maid

Collection of Data

The data presented were obtained from Minutes and Orders-in-Council authorizing rates of pay in the service up to the advent of collective bargaining. For years subsequent to collective bargaining, the data were obtained from collective agreements.

Class Standards

The information presented on rates of pay for classes in the service is based on the same standards or specifications as those used in presenting information on rates of pay for classes in industrial and other organizations, as shown in Appendix A. As mentioned in Chapter I, the standards shown in Appendix A are summaries of more detailed specifications used for classification purposes in the service and for collecting information from outside organizations.

While there were few changes in the standards used by the Pay Research Bureau in collecting information from outside organizations, there were changes in the standards for a number of classes in the service over the period under study. These changes emanated from the review of the classification system begun in 1964 by the now Classification Division of the Treasury Board.

However for a number of classes in the service for which data are presented, the standards remained unchanged over the period, October 1, 1958 to 1968, including Elementary School Teacher, Engineer, Nurse, General Duty, Occupational and Physical Therapist, Social Worker, University Teacher, and Technician, Electronics.

However, for other classes in the service covered in this paper, the standards were revised in recent years, including Economist and Statis-

tician, Draftsman, Technician and many operational category classes. In the course of these revisions, the number of levels for some of these latter classes were reduced and/or the descriptions of the levels were changed in some way. For most of the classes for which the standards were revised the information has been presented in terms of the former specifications, by relating the levels of the earlier specifications with those which now exist. For other classes for which the standards were revised, data are presented in accordance with the revised classification plans. For example, the number of levels for Computer Systems Administration was reduced from seven levels to five. For this class the data are presented according to the five levels which now exist. This, too, was done by relating the levels as defined by the older specifications with those as presently defined for the class. As explained above, the class titles and grades or levels which now apply in the service for classification purposes are shown together with the former titles in Appendix A.

Presentation of Data

Information is presented on annual rates of pay and percentage changes and occupational differentials for twenty-eight classes, from October 1, 1958 to 1968. Data on annual rates and percentage change are given in Section III and on occupational differentials in Section IV.

All classes in the service now except general labour and trades, general services and hospital services classes, are paid annual rates. For purposes of uniformity of presentation, the rates for these classes have been converted to annual rates by multiplying the rate per hour times the normally scheduled number of hours per week and then multiplying the product by 52. The rates presented do not include such items as isolation

pay, overtime earnings, or compensation received in the form of shift differentials.

While mean and third quartiles are available for the Public Service up to the first round of bargaining, they are not available for all classes for subsequent years. There is a lag between the times rates are established in bargaining and when they are reflected in rates of pay for individual employees, which are necessary in calculating mean and third quartile rates of pay. It will be some time before mean and third quartile rates are available for all the classes covered in this study for the years up to 1968. However, in order to present comparable information with that which has been presented for outside organizations, mean rates in the service have been estimated for the years after the first round of bargaining. This has been done by taking the mean rates for the various classes and levels in the service at a date before bargaining and applying the percentage changes made in these rates thereafter, in accordance with the distribution of employees at various steps in the ranges as of the date mean rates are available. These estimated mean rates for the service should be reasonably reliable. There is not likely to be any significant differences between these estimated mean rates and those which will be produced unless there is a significant change in the number of employees at particular steps in the ranges of any one class. At the same time, however, it may be noted that in Chapter III in making comparisons between rates of pay in the Public Service with those in outside organizations the maximum rates are shown for the classes in the service covered in this study.

Information is presented on mean annual rates of pay and percentage change for the twenty-eight classes in the service covered in the study over

the period October 1, 1958 to 1968, or from the earliest date for which data are available. Information is also presented on occupational differentials using Engineer 3 = 100%, as was done in presenting information on occupational differentials in industrial and other organizations.

For the years following collective bargaining in the service, data were not available at the time this paper was prepared for those classes for which zone pay plans were introduced. It must therefore be specifically emphasized that the rates shown for Elementary School Teacher since 1967 pertain to employees working in the province of Ontario. The rates shown for Nurse, General Duty also since 1967 pertain to the provinces of Ontario, Quebec, the Yukon and the Northwest Territories. Those shown for the hospital services group since 1966 pertain to employees located in the province of Ontario. The rates shown since 1966 for Carpenter, Electrician, Storeman 2 and Cleaning Service Man pertain to the Ottawa zone. The information presented on occupational differentials for these years also relates to zones, as applicable.

This presentation is not entirely satisfactory. At the same time, of course, other zones could have been selected or unweighted averages for Canada could have been calculated. However, the zones selected were considered to have rates generally representative of rates for these classes in Canada. Unweighted averages of zone rates would not be comparable to the data presented for earlier years.

SECTION III: ANNUAL RATES OF PAY AND PERCENTAGE CHANGE, OCTOBER 1, 1958 TO 1968

Information is presented in Table 13 on estimated mean rates of pay and percentage changes for twenty-eight classes in the federal Public Service from October 1, 1958 to 1968, or for dates as otherwise specified. The percentage changes in rates of pay for the twenty-eight classes over the period are presented graphically in Figure 3. It may be noted that the detailed tables on which the information presented on rates of pay in the federal Public Service is based were too voluminous to be included in this paper. However, information showing year to year changes is shown in another report prepared by the author.¹⁰

General Observations on Rates of Pay

After World War II, with the phasing out of wage and price controls, wages and salaries in the economy began to rise. Accordingly, it was necessary to adjust rates of pay in the federal Public Service. Over the years from 1947 to 1957 there were seven general increases in rates of pay in the service. Although attempts were made to ascertain rates and trends in rates for a number of occupations in the private sector, these increases for the most part were in the form of "flat amounts" which were much the same for virtually all classes and levels in the service. In some cases the amounts were greater for more senior levels; furthermore, not all classes necessarily received increases each time the

¹⁰ Pay Research Bureau, J.H. Scarffe, Trends in Rates of Pay in the Public Service of Canada, October 1, 1958 to 1968, Ottawa, 1970.

rates were adjusted. In addition, there were a number of adjustments in rates of pay for particular classes made necessary as a result of changes in classification standards, but these were comparatively minor from the standpoint of the pay structure for the service as a whole.

There were also adjustments in recruiting rates, particularly as they applied to new graduates in administrative and professional classes. If starting rates for these classes fell below those in outside organizations, recruiting suffered.

In retrospect, it was found after information became available from Pay Research Bureau surveys, that these general revisions were having the effect of keeping rates for lower level employees in the service in line with those generally prevailing in the economy, but the rates for intermediate and senior levels were falling behind those in outside organizations.

In 1960, rates of pay for various classes in the service were adjusted, based largely on information obtained by the Pay Research Bureau from industrial and other organizations in Canada. However, the effective dates of these revisions were spread over a period of six months from April 1, 1960 to October 1, 1960 and intermediate and senior levels generally received larger increases than employees at lower levels of pay. These revisions, which provided different amounts of increases for the various classes and levels and spread as they were over a six-month period, set the pattern for an examination of different groups in the service at separate times.

In 1961, the cyclical salary review procedure was introduced in the Public Service, which provided that rates of pay for all classes

be reviewed at least once every two years. For this purpose the classes in the service were divided into four major groups: Group A included classes for which university graduation or its equivalent was a requirement as well as senior management levels; Group B included administrative and clerical classes; Group C included hospital and related classes; and Group D included postal, customs and immigration, technicians, trades and manual work classes.

Group A and B were reviewed as of July 1 and October 1 respectively of one year; Group C and D were reviewed as of January 1 and October 1 respectively of the following year. Subsequently, some of the Group C classes were reviewed annually. However, the rates for the various classes in these major groups were determined after the review dates but made retroactive to them. These reviews for the most part were based on data obtained from outside organizations by the Pay Research Bureau after the review date. Some time was required to collect and tabulate the data and determine what adjustments should be made. Any adjustments in rates were made retroactive to the review dates. For example, Group D classes were reviewed every other year as of October 1. However, the collection of data from industrial and other organizations did not begin until after October 1. Then, some time was required to tabulate the data and formulate recommendations with respect to rates of pay. Often it was May or June of the following year before this work was completed. However, any adjustments authorized by the Governor-in-Council were retroactive to October 1. This explains to a large extent why the percentage increases in rates for a number of classes were approximately double those in outside organizations for the first year for which rates were bargained. The rates that were bargained for the first year of the

agreements in fact related to a two year period.

The period used for presenting information on rates of pay in this paper is October 1, 1958 to 1968. However, the rates for the classes covered in the study, except Computer Systems Administration and Technician, Electronics, were established sometime before October 1, 1958,¹¹ but, it must be emphasized, were in effect as of October 1, 1958. Therefore, the same percentage changes as shown for the period October 1, 1958 to 1968 would also apply to longer periods of time for those classes whose rates were established before October 1, 1958.

Economist and Statistician

The classes of Economist and Statistician are distinct classes in the federal Public Service. However, they are combined in this report because this was the way the information for these classes was presented in Chapter I for industrial and other organizations. There is close correspondence in responsibilities and qualifications required, level for level, between these two classes in the federal Public Service, which make it possible to show combined information for them.

The plan of classification for Economist and Statistician was changed effective October 1, 1967. Under the revised plan, seven levels for both the class of Economist and Statistician were reduced to four. In the consequent re-evaluation of positions, generally speaking, Economist and Statistician 1-3 became Economist and Statistician 1;

¹¹ The rates for Economist and Statistician were established April 1, 1958; the rates for Engineer were established May 1, 1957; the rates for Clerk, Typist and Stenographer, and Key punch Operator were also established May 1, 1957; the rates for operational classes were established April 1, 1958; and hospital services classes, May 1, 1957.

levels 4 and 5 became level 2; level 6 became level 3; and level 7 became level 4.

The mean annual rate for Economist 3 (now part of level 1) was \$6,710 as of October 1, 1958 and \$11,171 as of July 1, 1968. The mean annual rate for Economist 5 (now part of level 2) was \$8,520 as of October 1, 1958 and \$16,099 as of July 1, 1968. That is, the rates for these levels increased by 66.5 and 90.0% respectively over the period. Economist 6 (now level 3) had a mean rate of \$18,042 and Economist 7 (now level 4) had a mean rate of \$20,962 as of July 1, 1968. Rates for these levels increased by 54.0 and 52.4% respectively from July 1, 1961 to July 1, 1968.

Engineer

It should be noted particularly that the salary ranges for Engineer in the federal Public Service were not adjusted during the first round of bargaining. Instead, employees in the class were granted a settlement bonus of 7.0% of their rate of pay during the period July 1, 1967 to June 30, 1968 and 14.49% of their rate of pay during the period July 1, 1968 to June 30, 1969. The same salary ranges were in effect from July 1, 1967 to June 30, 1969. Superannuation contributions were calculated on the rates within the salary ranges, that is, not including the settlement bonuses.

In this paper, the settlement bonuses for this class have been included as part of pay for the year 1967 and 1968. To have excluded them would be to show information not truly indicative of the remuneration for this class during those years. New salary ranges were bargained effective July 1, 1969.

It should be noted, however, that in 1967 and 1968 the number of employees at the higher rates in the range for Engineer 1 was minimal. As a matter of fact, as of July 1, 1968 there were no employees at the maximum rate in the range. To show rates for this level for these years by applying bonuses would not necessarily be representative of the rates paid at that level. Therefore, no information on rates of pay is shown for Engineer 1 for July 1, 1968.

As of October 1, 1958 the mean annual rate of pay for Engineer in the service ranged from \$5,024 for Engineer 1 to \$9,655 for Engineer 7. From October 1, 1958 to July 1, 1968, the mean annual rate for Engineer 2 increased 48.7%, for Engineer 3, 63.4%, for Engineer 4, 74.5%, for Engineer 5, 77.2%, for Engineer 6, 89.2% and for Engineer 7, 95.8%.

University Teacher

The mean annual salary for Assistant Professor in the service was \$6,662 as of October 1, 1958 compared with \$11,078 as of July 1, 1968, an increase of 66.3%. The mean rate for Associate Professor increased from \$7,645 to \$12,995 between October 1, 1958 and July 1, 1968, an increase of 70.0%. The mean rate for Professor increased from \$10,087 to \$17,160 per annum, an increase of 70.1% over the same period of time.

Elementary School Teacher

Elementary school teachers were paid in accordance with national salary scales until 1967, when a plan of zone pay was introduced. Under this plan, elementary school teachers are paid in accordance with rates prevailing within the province or territory of employment. Because of lack of information, mean rates cannot be estimated with any degree of

reliability, and maximum rates are presented for Elementary School Teacher. For Elementary School Teacher, the maximum annual rates of pay increased from \$4,800 in the year 1958-59 to \$6,914 in Ontario in 1968-69, an increase of 44.0%.

Nurse, General Duty

Prior to January 1, 1966 the maximum rate for Nurse, General Duty was the same for all locations; however, the starting rate varied according to that prevailing in various localities throughout Canada. After 1966, a plan was introduced which provided for variations both in the minimum and the maximum of the salary range, again according to rates prevailing in different localities. As of July 1, 1967, a plan of compensation based on six zones, corresponding to provinces or provincial groupings, was brought into effect. As with Elementary School Teacher, because of lack of information mean rates cannot be estimated for 1968 with any degree or reliability for particular provinces, and information on rates of pay for Nurse, General Duty is presented in terms of maximum rates. The maximum rate shown for January 1, 1968 relates to the provinces of Ontario, Quebec, Yukon and Northwest Territories. The rates for Nurse, General Duty increased from \$3,900 as of January 1, 1961 to \$6,592 as of July 1, 1968 in the above-mentioned provinces and regions, that is, an increase of 69.0%.

Occupational and Physical Therapist

The mean annual rate of pay for Occupational and Physical Therapist 1 and 2 increased by 89.1 and 87.1% respectively between October 1, 1958 and January 1, 1968, from \$3,169 and \$3,138 to \$5,994

and \$5,871 respectively per annum. Throughout that period, national scales of rates applied to these classes.

Social Worker

Mean annual rates of pay for Social Worker 1 and 2, 3, and 4 increased by 103.7, 85.3 and 95.5% respectively from October 1, 1958 to July 1, 1968. As of October 1, 1958 the mean annual rate for Social Worker 1 and 2 was \$4,470 compared with \$9,106 as of July 1, 1968, for Social Worker 3, \$5,667 compared with \$10,518, for Social Worker 4, \$6,017 compared with \$11,766 as of the same dates. The mean annual rates for Social Worker 5 increased by 75.5% from January 1, 1961 to July 1, 1968. The final adjustment in rates of pay for Social Worker 6 for the year 1968 was not available when this paper was being prepared.

Computer Systems Administration

Because of lack of information, reliable estimates of mean rates for this class could not be made. However, maximum rates of pay for the class of Computer Systems Administration increased by 33.0 to 33.5% depending upon the level, between October 1, 1963 and October 1, 1968. The maximum annual salaries as of October 1, 1963 ranged from \$7,170 for level 1 to \$15,100 for level 5, compared with \$9,627 for level 1 and \$20,440 for level 5 as of October 1, 1968.

Clerk 1-3, Keypunch Operator, Typist and Stenographer 1-4

As of October 1, 1958 the mean annual rate of pay for Clerk 1 was \$2,313, for Clerk 2, \$2,966 and for Clerk 3, \$3,430. As of October 1, 1968 they had increased to \$3,491, \$4,480 and \$5,600 respectively. That

is, over this period the mean rates for Clerk 1 increased 51.0%, for Clerk 2, 51.0% and for Clerk 3, 62.9%.

The rates for Keypunch Operator, Typist and Stenographer corresponded very closely with those for Clerk. Over the same period, the mean annual rates of pay for Keypunch Operator increased 60.5%, for Typist and Stenographer from 45.7 to 56.5%, depending upon the level.

Draftsman

There were changes in the specifications for this class over the period under study. However, the duties and responsibilities for Draftsman 3 remained virtually unchanged. From October 1, 1958 to July 1, 1968 the mean annual rate for this level increased from \$4,867 to \$7,929, that is, by 54.7%.

Technician

The specifications for this class were completely revised in 1967. However, there is a consensus among practitioners in classification in the service as to the relationships between the levels of earlier specifications and those which now exist under a later plan, up to level 5. The rates for Technician 1-5, increased by 74.4, 69.7, 63.7, 59.6 and 57.9% respectively from October 1, 1958 to July 1, 1968. As of October 1, 1958 the mean annual rates for Technician ranged from \$2,933 to \$5,023 per annum, as compared with \$5,114 to \$7,930 as of July 1, 1968.

Technician, Electronics

As with Engineer in the service, the ranges as such for Technician, Electronics were not adjusted during the first round of bargaining. Technician, Electronics were granted a settlement bonus equal to 7.0% of

their rates of pay during the period July 1, 1967 to June 30, 1968 and 14.49% of their rates of pay during the period July 1, 1968 to June 30, 1969. The same range was in effect from July 1, 1967 to June 30, 1969. For the same reasons as were given with respect to Engineer, the bonuses have been included in the rates shown for Technician, Electronics for the years 1967 and 1968. As with Engineer, the settlement bonuses were not included in calculating superannuation contributions.

The mean annual rates for this class ranged from \$3,986 for Technician, Electronics 1 to \$7,825 for Technician, Electronics 7 per annum as of October 1, 1962. The mean rates for level 1 and 7 were \$6,135 and \$12,354 respectively as of July 1, 1968. The rates for this class increased by 54.0% for level 1 to 57.9% for level 7 from October 1, 1962 to July 1, 1968.

Operational Category Classes

Firefighter and Stationary Engineer continue to be paid under collective bargaining according to a national scale of rates. The mean annual rate for Firefighter increased from \$3,420 on October 1, 1958 to \$5,938, October 1, 1967, an increase of 73.6%. The mean annual rate for Stationary Engineer 3 increased from \$4,542 on October 1, 1958 to \$7,283 on October 1, 1967, an increase of 60.3%.

As explained in Section I, there were two sets of rates for Carpenter, Electrician and Cleaning Service Man in the service until 1966; some employees were paid according to a national scale of rates and others were paid prevailing rates. Beginning in 1966, zone rates were established for these classes. The rates shown for 1958 are national rates,

but those shown for 1967 and 1968 pertain to the Ottawa zone. The changes, therefore, for the three classes apply to the Ottawa zone.

The mean annual rate for Carpenter increased from \$3,730 in 1958 to \$6,947 as of October 1, 1967, and the rate for Electrician increased from \$4,007 to \$8,154 in the Ottawa zone over the same period, increases of 86.2 and 103.5% respectively. The mean annual rate for Cleaning Service Man increased by 72.3% in the Ottawa zone, from \$2,813 to \$4,846, from October 1, 1958 to October 1, 1968.

Storeman 2 had national rates until 1966, after which date the employees in the class were paid according to zone rates. The rates for this class from 1958 are national and those for 1968 pertain to the Ottawa zone. The mean annual rate for this class between October 1, 1958 and October 1, 1968 increased from \$3,255 to \$6,219 in the Ottawa zone, an increase of 91.1%.

Until 1966, hospital services classes covered in this study were paid according to national scales of rates, except for hospital maids who were paid prevailing rates. Since then, this group has been paid according to six zones, corresponding to provinces or groups of provinces. The rates shown for 1958 are national, and those for 1968 pertain to employees located in the province of Ontario.

As of October 1, 1958, Nursing Auxiliary, Certified had a mean annual salary of \$2,218. By January 1, 1968 this rate had increased to \$4,826, an increase of 117.6%. Nursing Orderly, Experienced had a mean annual salary of \$3,049 as of October 1, 1958. The mean rate for this class was \$5,096 for employees located in the province of Ontario as of October 1, 1968. That is, the rates for this class employed in

the province of Ontario increased by 67.1% over the period.

Until October 1, 1966, Cleaning Service Man in federal government hospitals was paid within the same range as other employees in the class performing similar work in other than hospitals. However, with collective bargaining, Cleaning Service Man in hospitals was paid in accordance with the zone plan for hospital services classes. The rate shown for 1958 is national and that for 1968 pertains to employees located in the province of Ontario. For employees in that province, the rates increased from \$3,049 as of October 1, 1958 to \$5,096 as of January 1, 1968, an increase of 67.1%.

Hospital maids were paid prevailing rates until October 1, 1966, and zone rates thereafter. Information on prevailing rates is not available for this class for earlier years. As of January 1, 1968 the mean rate for Hospital Maid in the province of Ontario was \$3,349 per annum.

TABLE 13: MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, OCTOBER 1, 1958 TO 1968

<u>Class and Grade</u>	<u>Mean Rate</u>		<u>Percentage Change</u> %
	<u>Oct. 1/58</u> \$	<u>July 1/68</u> \$	
Economist & Statistician 1	4844	-	-
2	5803	-	-
3	6710	11171	66.5
4	7983	-	-
5	8520	16099	90.0
6	11946(a)	18042	54.0
7	13755(a)	20962	52.4
Engineer 1	5024	-	-
2	6270	9323(b)	48.7
3	6886	11255(b)	63.4
4	7348	12820(b)	74.5
5	8107	14369(b)	77.2
6	8848	16736(b)	89.2
7	9655	18907(b)	95.8
Assistant Professor	6662	11078	66.3
Associate Professor	7645	12995	70.0
Professor	10087	17160	70.1
	<u>1958-59</u>	<u>1968-69</u>	
Elementary School Teacher	4800(c)	6914(d)	44.0
	<u>Oct. 1/58</u>	<u>July 1/68</u>	
Nurse, General Duty	3667(e)	6592(f)	79.8(f)
Occupational Therapist 1 & 2	3169	<u>Jan. 1/68</u> 5994	89.1
Physical Therapist 1 & 2	3138	5871	87.1
	<u>Jan. 1/58</u>	<u>July 1/68</u>	
Social Worker 1 & 2	4470	9106	103.7
3	5677	10518	85.3
4	6017	11766	95.5
5	6840(g)	12017	75.7
6	7800(g)	-	-

(a) July 1, 1961.

(b) Includes a "settlement bonus" for the years July 1, 1967 to June 30, 1968 and July 1, 1968 to June 30, 1969. No information is given for Engineer 1 for the reasons explained on page

(c) Maximum rate.

(d) Maximum rate for the Province of Ontario.

(e) January 1, 1961.

(f) Maximum rate which pertains to employees working in the Provinces of Ontario, Quebec, Yukon and Northwest Territories. Therefore, the percentage change represents the increase in rates for employees working in these provinces and territories.

(g) January 1, 1961.

TABLE 13: MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, OCTOBER 1, 1958 TO 1968 (CONT'D.).

<u>Class and Grade</u>	<u>Mean Rate</u>		<u>Percentage Change</u> %
	<u>Oct. 1/63</u> \$	<u>Oct. 1/68</u> \$	
Computer Systems			
Administration 1	7170(h)	9627(h)	34.3
2	8460(h)	11256(h)	33.0
3	10700(h)	14368(h)	34.3
4	12300(h)	16516(h)	34.3
5	15100(h)	20460(h)	35.5
	<u>Oct. 1/58</u>	<u>Oct. 1/68</u>	
Clerk 1	2313	3491	51.0
2	2966	4480	51.0
3	3438	5600	62.9
Typist 1	2228	3486	56.5
2	2594	4018	54.9
Stenographer 3	2986	4473	49.8
4	3440	5011	45.7
Key punch Operator	2698	4331	60.5
	<u>Oct. 1/58</u>	<u>July 1/68</u>	
Draftsman 1	-	4491	-
2	4237	6155	45.3
3	4867	7929	54.7
Technician 1	2933	5114	74.4
2	3477	5902	69.7
3	4025	6587	63.7
4	4575	7302	59.6
5	5023	7930	57.9
	<u>Oct. 1/62</u>	<u>July 1/68</u>	
Technician			
Electronics 1	3986	6135(i)	54.0
2	5112	7162(i)	40.1
3	5837	8366(i)	43.3
4	6210	8993(i)	44.8
5	6685	9896(i)	48.0
6	7157	10768(i)	50.5
7	7825	12354(i)	57.9
	<u>Oct. 1/58</u>	<u>Oct. 1/67</u>	
Carpenter, Maintenance	3730	6947(j)	86.2
Electrician, Maintenance	4007	8154(j)	103.5

(h) Maximum rate.

(i) Includes a "settlement bonus" for the years July 1, 1967 to June 30, 1968 and July 1, 1968 to June 30, 1969.

(j) The rate shown pertains to the Ottawa zone.

TABLE 13: MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, OCTOBER 1, 1958 TO 1968 (CONCL'D.)

<u>Class and Grade</u>	<u>Mean Rate</u>		<u>Percentage Change</u>
	<u>Oct. 1/58</u>	<u>Oct. 1/68</u>	
	\$	\$	%
Cleaning Service Man	2813	4846(k)	72.3
Storeman 2	3255	6219(k)	91.1
	<u>Oct. 1/58</u>	<u>Oct. 1/67</u>	
Firefighter	3420	5938	73.6
Stationary Engineer 3	4542	7283	60.3
	<u>Oct. 1/58</u>	<u>Jan. 1/68</u>	
Hospital Cook 2	2985(1)	4826(m)	61.7
Hospital Cleaning Service Man	2813	4472(m)	59.0
Hospital Nursing Auxiliary, Certified	2218	4826(m)	117.6
Hospital Nursing Orderly, Experienced	3049	5096(m)	67.1
Hospital Maid	-	3349(m)	-

(k) The rate shown pertains to the Ottawa zone.

(1) January 1, 1961.

(m) The rate shown pertains to the Province of Ontario.

FIGURE 3: PERCENTAGE CHANGE IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, OCTOBER 1, 1958 TO 1968

(a) Percentage change includes settlement bonuses for the years 1967-68 and 1968-69.

(b) Pertains to employees in the Province of Ontario.

(c) Pertains to employees in the Province of Ontario, Quebec, Yukon and Northwest Territories.

FIGURE 3: PERCENTAGE CHANGE IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, OCTOBER 1, 1958 TO 1968 (CONT'D.)

(d) Percentage change includes settlement bonuses for the years 1967-68 and 1968-69.

(e) Pertains to employees in the Ottawa zone.

FIGURE 3: PERCENTAGE CHANGE IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, OCTOBER 1, 1958 TO 1968 (CONT'D.)

(d) Percentage change includes settlement bonuses for the years 1967-68 and 1968-69.

(e) Pertains to employees in the Ottawa zone.

FIGURE 3: PERCENTAGE CHANGE IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, OCTOBER 1, 1958 TO 1968 (CONCL'D.)

(f) Pertains to employees in the Ottawa zone.

(g) Pertains to employees in the Province of Ontario.

FIGURE 3: PERCENTAGE CHANGE IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, OCTOBER 1, 1958 TO 1968 (CONCL'D.)

(f) Pertains to employees in the Ottawa zone.

(g) Pertains to employees in the Province of Ontario.

SECTION IV: OCCUPATIONAL DIFFERENTIALS IN RATES OF PAY, OCTOBER 1, 1958 TO 1968

Table 14 presents information on occupational differentials for October 1, 1958 and 1968. Occupational differentials for 1968 are presented graphically in Figure 4.

Occupational differentials have been calculated using the mean rates for Engineer 3 = 100%, by taking the percentage between the mean annual rate for a class and grade or level within a class and the mean annual rate for Engineer 3, as was its counterpart in presenting occupational differentials for outside organizations. Most rates for which data are presented are national in character. Therefore, the differentials shown apply uniformly across Canada unless otherwise specified.

In the service as in outside organizations, Engineer 3 is relatively well-defined, and its job content has not changed significantly over the past ten years. It is a level which encompasses a larger number of employees than any other level of Engineer in the service. It must be emphasized again that the rates for Engineer 3 used in calculating the occupational differentials for 1968 include the settlement bonuses paid in 1967-68 and 1968-69.

It is to be noted with respect to the information presented on occupational differentials that since 1961 the rates for Engineer have been adjusted as of July 1. Since 1961 the rates for most other professional and technical classes also were adjusted as of July 1. However, rates for Social Worker were adjusted as of January 1 until 1965 and rates

for Draftsman and Technician and Technician, Electronics were adjusted as of October 1, from 1961 until 1966. The rates for operational category classes were generally adjusted as of October 1, beginning in 1962, as were administrative and administrative support classes, beginning in 1963. The occupational differentials for the various classes are shown as of the date their rates were adjusted. It is considered that the slight differences in dates of the rates for Engineer 3 used in calculating the differentials and other classes does not affect the validity of the data.

General Observations on Occupational Differentials

From October 1, 1958 to 1968 the rates of pay for a large proportion of the classes in the federal Public Service increased by more than those for Engineer 3. There were increases in the differentials for most of the professional classes covered in this study, including Economist and Statistician, University Teacher, Nurse, General Duty, Occupational and Physical Therapist and Social Worker. The senior levels of Engineer also increased in relation to Engineer 3. In the case of Elementary School Teacher, there was a decrease in the differential.

From October 1, 1963 to 1968 there were slight decreases in the differentials for the various levels of Computer Systems Administration. The differentials for most levels of Clerk, Typist and Stenographer, and Key punch Operator were also lower as of October 1, 1968 than they were October 1, 1958, by 0.7 to 5.5%, depending upon the level. However, the differential for Clerk 3 remained virtually unchanged.

For the most part there was little change in the differentials for the classes in the Technical category over the period October 1, 1958

to 1968. While there were relatively small decreases for some levels, there were also small increases for other levels in the classes covered in the study. However, the differentials for Technician, Electronics 6 and 7 increased by 5.0 and 10.0% respectively.

The rates for all of the operational category classes, including hospital services, with the exception of Hospital Maid for which there is little information, increased relative to Engineer 3 over the period October 1, 1958 to 1968. The increases in the differentials for some of the operational classes were not large. However, the differentials for Carpenter and Electrician in the Ottawa zone increased by 11.7 and 19.2% respectively. Also, the differential for Nursing Auxiliary, Certified in the province of Ontario increased by 13.6%.

Economist and Statistician

The mean annual rates of pay for Economist 3 (now part of level 1) were almost the same as those for Engineer 3 from 1958 to 1968. While the differentials for Economist 5 (now part of level 2) increased from 123.7% as of October 1, 1958 to 143.0% as of July 1, 1968, this increase occurred in the years up to July 1, 1965. Similarly, the differentials for Economist and Statistician 6 (now level 3) increased from 151.7 to 160.3%, and for Economist and Statistician 7 (now level 4) increased from 174.6 to 186.2% from July 1, 1961 to July 1, 1968. These changes also were effected in the years from July 1, 1961 to 1965, from which time there was little change in the differentials.

Engineer

There was a decrease in the differential for Engineer 2 between October 1, 1958 and July 1, 1968, from 91.1 to 82.8%. The differentials

for more senior levels, however, increased by 7.2% for level 4, 10.0% for level 5, 20.2% for level 6, and 27.8% for level 7 from October 1, 1958 to July 1, 1968. These increases for the most part occurred in the years up to July 1, 1965. Since that time the differentials have remained virtually unchanged.

University Teacher

The differentials increased by 1.7% for Assistant Professor, 5.5% for Associate Professor and 6.0% for Professor from October 1, 1958 to July 1, 1968.

Elementary School Teacher

The rates for Elementary School Teacher in the Province of Ontario fell by 7.3% in relation to those for Engineer 3, from the year 1958-59 to 1968-69.

Nurse, General Duty

The relative position of Nurse, General Duty in terms of rates of pay was improved in relation to Engineer 3. The differential for Nurse, General Duty increased from 49.6% as of January 1, 1961 to 55.6% as of January 1, 1968.

Occupational and Physical Therapist

The rates of pay for Occupational and Physical Therapist also increased relative to Engineer 3. The differentials for Occupational Therapist 1 and 2, and Physical Therapist 1 and 2, increased by 7.3% and 6.6% respectively from October 1, 1958 to January 1, 1968.

Social Worker

The relative position of the rates of pay for Social Worker vis à vis Engineer 3 also improved. The differentials for Social Worker 1 and 2, 3, and 4 increased by 15.6, 11.4 and 16.6% respectively from January 1, 1958 to July 1, 1968. Over the period from January 1, 1961 to July 1, 1968, the differential for Social Worker 5 increased by 14.2%.

Computer Systems Administration

The differentials for Computer Systems Administration were from 1.8 to 3.2% lower, depending on the level, as of October 1, 1968 than they were October 1, 1963.

Clerk 1-3, Keypunch Operator, Typist and Stenographer

The differentials for Clerk 1 and 2, Typist 1 and 2, and Stenographer 3 and 4 fell from between 1.4 to 5.5% between October 1, 1958 and October 1, 1968. The differentials for Clerk 3 and Keypunch Operator in 1968 were virtually unchanged from what they were as of October 1, 1958.

Draftsman

There were changes in the specifications for Draftsman 1 and 2. However, the duties and responsibilities of Draftsman 3 remained virtually unchanged over the period. For this level the differential was 0.3% lower in 1968 than it was October 1, 1958.

Technician

The differentials for Technician 1 and 2 as of July 1, 1968

were 2.8 and 1.9% higher than they were October 1, 1958. The differential for Technician 3 remained virtually unchanged. The differentials for levels 4 and 5 dropped by 1.3 and 2.4% respectively.

Technician, Electronics

During the period October 1, 1962 to July 1, 1968 there was little change in the relative position of rates for the first four levels of Technician, Electronics and those for Engineer 3. The differentials for levels 5 and 6 increased by approximately 4.0%. The differential for Technician, Electronics 7 was 10.4% higher as of July 1, 1968 than it was October 1, 1962.

Operational Category Classes

The differentials for Firefighter and Stationary Engineer increased by 6.7 and 3.1% respectively between October 1, 1958 and 1967. The differentials for Carpenter increased by 11.7%, and for Electrician by 19.2% in the Ottawa zone over the same period. As of October 1, 1958 the differential for Cleaning Service Man was 2.2% higher, and for Storeman 2, 8.0% higher, also in the Ottawa zone, than on October 1, 1958.

Differentials for Hospital Cook and Hospital Cleaning Service Man in the province of Ontario increased by 2.5 and 1.3% respectively. The differentials for Nursing Orderly, Experienced increased by 4.1%, and for Nursing Auxiliary, Certified by 13.6%, again located in Ontario, from October 1, 1958 to January 1, 1968.

TABLE 14: OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY,
SELECTED CLASSES, FEDERAL PUBLIC SERVICE,
OCTOBER 1, 1958 AND 1968

Engineer 3 = 100%

<u>Class and Grade</u>	<u>Differential</u>	
	<u>Oct. 1/58</u> %	<u>Oct. 1/68</u> %
Economist & Statistician 1	70.3	-
2	84.3	-
3	97.4	99.3
4	115.9	-
5	123.7	143.0
6	151.7(a)	160.3
7	174.6(a)	186.2
Engineer 1	73.0	-
2	91.1	83.8
3	-	-
4	106.7	113.9
5	117.7	127.7
6	128.5	148.7
7	140.2	168.0
Assistant Professor	96.7	98.4
Associate Professor	111.0	115.5
Professor	146.5	152.5
	<u>1958-59</u>	<u>1968-69</u>
Elementary School Teacher	65.6(b)	58.3(c)
	<u>Oct. 1/58</u>	<u>July 1/68</u>
Nurse, General Duty	49.7(d)	58.6(e)
Occupational Therapist 1 & 2	46.0	53.3
Physical Therapist 1 & 2	45.6	52.2
	<u>Jan. 1/58</u>	<u>July 1/68</u>
Social Worker 1 & 2	65.3	80.9
3	82.9	93.5
4	87.9	104.5
5	92.6(f)	106.8
6	105.6(f)	-
	<u>Oct. 1/63</u>	<u>Oct. 1/68</u>
Computer Systems Administration 1	83.0(g)	81.2(g)
2	97.9(g)	94.9(g)
3	123.8(g)	121.1(g)
4	142.4(g)	139.2(g)
5	174.8(g)	172.5(g)

(a) July 1, 1961.

(b) Based on maximum rates.

(c) Based on maximum rates for the employees in the Province of Ontario.

(d) January 1, 1961

(e) Pertains to employees in the Provinces of Ontario, Quebec, Yukon and Northwest Territories.

(f) January 1, 1961

(g) Based on maximum rates

TABLE 14: OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY,
SELECTED CLASSES, FEDERAL PUBLIC SERVICE,
OCTOBER 1, 1958 AND 1968 (CONT'D.)

Engineer 3 = 100%

<u>Class and Grade</u>	<u>Differential</u>	
	<u>Oct. 1/58</u> %	<u>Oct. 1/68</u> %
Clerk 1	33.6	31.0
2	43.1	39.8
3	49.9	49.8
Typist 1	32.4	31.0
2	37.7	35.7
Stenographer 3	43.4	39.7
4	50.0	44.5
Key punch Operator	39.2	38.5
	<u>Oct. 1/58</u>	<u>July 1/68</u>
Draftsman 1	45.6	39.9
2	61.5	54.7
3	70.7	70.4
Technician 1	42.6	45.4
2	50.5	52.4
3	58.5	58.5
4	66.4	64.9
5	72.9	70.5
	<u>Oct. 1/62</u>	<u>July 1/68</u>
Technician, Electronics 1	50.6	54.5(h)
2	64.9	63.6(h)
3	74.1	74.3(h)
4	78.9	80.0(h)
5	84.9	88.0(h)
6	90.9	95.7(h)
7	99.4	109.8(h)
	<u>Oct. 1/58</u>	<u>Oct. 1/67</u>
Carpenter, Maintenance	54.2	64.9(i)
Electrician, Maintenance	58.2	77.4(i)
	<u>Oct. 1/58</u>	<u>Oct. 1/68</u>
Cleaning Service Man	40.9	43.1(i)
Storeman 2	47.3	55.3(i)
	<u>Oct. 1/58</u>	<u>Oct. 1/67</u>
Firefighter	49.7	56.4
Stationary Engineer 3	66.0	69.1

(h) Based on rates which include a "settlement bonus" for the years July 1, 1967 to June 30, 1968 and July 1, 1968 to June 30, 1969

(i) Pertains to Ottawa zone.

TABLE 14: OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY,
SELECTED CLASSES, FEDERAL PUBLIC SERVICE,
OCTOBER 1, 1958 AND 1968 (CONCL'D)

Engineer 3 = 100%

<u>Class and Grade</u>	<u>Differential</u>	
	<u>Oct. 1/58</u>	<u>Jan. 1/68</u>
	<u>%</u>	<u>%</u>
Hospital Cook 2	43.3(j)	45.8(1)
Hospital Cleaning Service Man	40.9	42.4(1)
Nursing Auxiliary, Certified	32.3	45.8(1)
Nursing Orderly, Experienced	44.3	48.4(1)
Hospital Maid	-	31.8(1)

(j) January 1, 1961.

(1) Pertains to employees in the Province of Ontario.

FIGURE 4: OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, 1964

Engineer 3 = 100%

(a) Differential pertains to employees located in the Province of Ontario.

(b) Differential pertains to employees located in the Provinces of Ontario, Quebec, Yukon and Northwest Territories.

FIGURE 4: OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, 1968 (CONT'D.)

Engineer 3 = 100%

(c) Differential based on maximum rates.

(d) Differential shown is based on rates which include settlement bonuses for the year 1967-68 and 1968-69.

FIGURE 4: OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, 1968 (CONT'D.)

Engineer 3 = 100%

(c) Differential based on maximum rates.

(d) Differential shown is based on rates which include settlement bonuses for the year 1967-68 and 1968-69.

FIGURE 4: OCCUPATIONAL DIFFERENTIALS IN MEAN ANNUAL RATES OF PAY, SELECTED CLASSES,
FEDERAL PUBLIC SERVICE, CANADA, 1968 (CONCL'D.)

Engineer 3 = 100%

(e) Differential pertains to rates of pay for employees located in the Ottawa zone.

(f) Differential applies to rates of pay for employees located in the Province of Ontario.

CHAPTER III

A COMPARISON OF RATES OF PAY IN INDUSTRIAL AND OTHER ORGANIZATIONS AND IN THE PUBLIC SERVICE OF CANADA, 1958 TO 1968

SECTION I: COMPARISONS OF RATES OF PAY

Method of Comparison

The purpose of this chapter is to compare rates in the Public Service with those in industrial and other organizations over the period October 1, 1958 to 1968. However, the points in time for which data are available for industrial and other organizations often do not coincide with the adjustment dates for rates of pay in the Public Service. For that reason, the comparisons for some classes are not always made at the earliest dates for which data are available as presented in previous chapters, but at dates when comparable data are available both for the service and for outside organizations.

Also, as has been explained in Chapter II, data are not available for the service for all Canada for those classes for which zone pay plans have been introduced. Nor are data comparable to those presented in other parts of this paper available for outside organizations by zone. For some classes, therefore, comparisons can only be made between zone rates in the service and rates pertaining to all Canada in the case of outside organizations. While these comparisons do give some indication of relationships between rates in the Public Service and those in outside organizations, they are not entirely satisfactory. However, this seemed to be the only reasonable approach in view of the data available.

Comparisons between jurisdictions made on mean rates are the most reliable because mean rates tend to be fairly stable, in that they are not unduly influenced by rates which are not representative for one reason or another. Quartiles and deciles are also very useful in comparing rates.

These measures show the relationships between lower and higher rates between one jurisdiction and another. For this reason, it would be useful to be able to make comparisons between rates in the service and those in outside organizations based on these measures. Again, as explained above, quartile and decile rates are not available for the service for more recent years, and cannot be estimated with the same degree of reliability as can mean rates. Therefore, in this paper the maximum rates in the service are compared with third quartile rates in outside organizations. These comparisons show how the rates in the federal Public Service relate to higher rates prevailing in the economy. Such comparisons are considered reasonable because maximum rates in the federal Public Service are attainable rates for virtually all employees, with the exception of some at senior levels including senior executive officers, whose rates are based on performance. Therefore, for most classes in the service maximum rates tend to be close to third quartile rates. In industrial and other organizations, the third quartile rate represents the rate above which twenty-five percent of the employees in a class or grade are paid.

Also important in comparing rates over the period is information on percentage changes in rates both in industrial and other organizations and in the service. Such information shows when and in what amounts rates of pay were adjusted, both in the service and in outside organizations.

For purposes of this study, therefore, comparisons have been made between:

- (1) Mean rates in industrial and other organizations and estimated mean rates in the Public Service for the years 1958 and 1968. This information is presented in Table 15.
- (2) Third quartile rates in industrial and other organizations and maximum rates in the Public Service for the same two years, 1958 and 1968. This information is shown in Table 16.
- (3) Percentage changes in rates over the period in industrial and other organizations and in the Public Service are presented in Table 17.

Before going on to compare the rates of pay for the twenty-eight classes in the service with those in outside organizations, it should be mentioned that rate setting, whether in industrial and other organizations or in the federal Public Service, is not an exact science. There are many factors to be taken into account. In a jurisdiction as large as the federal Public Service it is necessary to consider: rates between one region and another; percentage changes in rates between one period and another; turnover; demand and supply of persons in particular occupations; concentrations of occupations in relatively high paying areas in outside organizations; and the relationships in rates between one class and another, often referred to as internal relativity. However, there are many other factors to be considered such as the kind of work to be performed, promotional opportunities and, of course, cost.

A full discussion of the wage and salary determination process in the service does not fall within the ambit of this paper. However, mention should be made of some of the problems to assist in explaining the relationships between rates for classes in the service and those in outside organizations

There are particular problems in setting rates of pay for those occupations for which personnel are in short supply. These problems are further complicated if the total number of persons trained in these occupations in the economy is comparatively small and if, in outside organizations they are generally concentrated in relatively high paying areas. These problems have persisted over the period under study for the class of Economist and Statistician, Social Worker, Nurse, General Duty and Computer Systems Administration. In outside organizations, these occupations have tended to be concentrated in Ontario and Quebec. Therefore, rates in these regions have tended to govern those paid for these classes in the service.

It is also necessary in the service to have a fair relationship

in rates of pay as between one class and another, based on duties and responsibilities and qualifications. Outside organizations which usually have similar policies within their organizations often do not have the same number of occupations or the same occupational mix as does the Public Service. Maintaining a fair relationship between classes in the service, therefore, has a bearing on how rates for particular classes are set in relation to those in outside organizations. Also, rates in the service have to be set in relation to averages of rates in outside organizations which are in a sense fictional, to the extent that there are wide variations in the component rates which are included in the averages. While the rates in the service for particular classes or levels within classes over the period under study have been both below and above the averages in outside organizations, these differences have generally been less than those for any one class or level within a class as between organizations.

General Observations

In 1958 rates of pay for most classes studied in the Public Service were below those for comparable work in industrial and other organizations in Canada. Largely as a result of the practice of general revisions in the years following World War II, these differences tended to be larger at the higher levels. Very generally, the differences ranged up to 20.0%, based on mean to mean comparisons, as well as between third quartile rates in outside organizations and maximum rates in the federal Public Service. In 1958 the rates for only a few classes were above those in outside organizations, including Elementary School Teacher, Nurse, General Duty and Occupational and Physical Therapist. It should be noted that the rates for the classes in the service for which comparable data are not available back to 1958 were increased by significant amounts during the earlier years of the period under study.

In 1968, the mean rates for twenty of the twenty-eight classes studied in the Public Service were in line with or above those in industrial and other organizations. The amounts by which the rates in the service for the twenty classes were above those in outside organizations varied as between classes and grades or levels within classes. For some classes the differences tended to be smaller at higher levels as compared with lower levels of pay. Also for some of the twenty classes the differences between maximum rates in the service and third quartile rates in outside organizations were less than those based on mean to mean comparisons. The relationships between rates of pay in the federal Public Service and industrial and other organizations as of October 1, 1958 and 1968 are considered class by class in some detail below.

Economist and Statistician

As of October 1, 1958 the mean annual rates of pay for Economist and Statistician 1-5 (now levels 1 & 2) in the Public Service were from \$15 to \$1,285, or 0.3 to 13.1% below those for comparable levels of work in industrial and other organizations in Canada. There were similar differences between maximum rates in the service and third quartile rates in outside organizations for these levels at that time. As of July 1, 1961 the mean rate for Economist and Statistician 6 (now level 3) was \$1,687 or 12.4% below that for their industrial counterparts. As of July 1, 1963 the mean rate for Economist and Statistician 7 (now level 4) was also below that of industrial and other organizations by \$1,048 or 6.7%.

While the increases in the service for employees at lower levels of pay were approximately the same as those in outside organizations from 1958 to 1966, the increases in rates for more senior levels in the service were much greater than those in outside organizations during that time. Between the years 1966 and 1967 the percentage increases in rates for this class in the

service were approximately double those in industrial and other organizations. Between 1967 and 1968 the increases in rates in the service were approximately the same as those in outside organizations, amounting to 7.0%.

As of July 1, 1968 the mean rates for these classes in the service were \$486 to \$1,086 or 3.5 to 11.3% above those in outside organizations in Canada, depending upon the level. The differences between maximum rates in the service and third quartile rates in outside organizations were somewhat smaller than those reflected in mean to mean comparisons as of that date. The maximum rate for Economist and Statistician 7 (now level 4) in the service was \$482 per annum or 2.2% below the third quartile in outside organizations.

Engineer

As of October 1, 1958 the mean annual rates of pay for Engineer 1 and 3 were \$137 and \$200, or 2.6 and 2.8% respectively below the mean rates for equivalent levels of work in industrial and other organizations. As of October 1, 1959 the mean rates of pay for Engineer 4-7 in the service were from \$900 to \$2,490, or 11.0 to 20.5% below their industrial counterparts, with the differences being larger at the higher levels. At that time, except for Engineer 1 and 2, maximum rates of pay in the service were from \$230 to \$3,270 or 3.0 to 24.4% below third quartile rates in industrial organizations.

From 1958 to 1966 however, the increases in rates of pay for more senior engineers in the service were larger than those in industrial organizations. During this period, increases in rates for Engineer 4-7 in the service ranged from 42.3 to 59.7% with the larger amounts being accorded to the higher levels, compared with 32.1 to 32.9% in industrial and other organizations from 1959 to 1966. Between the years 1966 and 1967, increases in rates for Engineer in the service, part of which were in the form of settlement bonuses, were approximately double those for Engineer in outside

organizations. The increases granted between 1967 and 1968 were approximately the same in the service as compared with outside, amounting to approximately 7.0%.

As of July 1, 1968, the mean annual rates for the seven levels of Engineer in the service were from \$240 to \$757 or 2.2 to 4.7%, depending upon the level, above those in outside organizations in Canada. While the maximum annual rates as of that date for Engineer 2-4 in the service were somewhat above the third quartile rates, the maximum rates for Engineer 5-7 were from 0.7 to 1.3% below the third quartile rates of their counterparts in industrial and other organizations.

University Teacher

For the academic year 1959-60, the mean annual rate of pay for Assistant Professor in the service was \$252, 3.6% lower, for Associate Professor \$938, 12.0% lower, and for Professor \$1,239, 11.9% lower than that for equivalent levels in the outside organizations. The rates for University Teacher in the service during the years 1958 to 1966 were increased by larger amounts than were those in outside universities, ranging from 45.0 to 52.4% depending upon the level, as compared with 29.9 to 34.5% in outside universities. Between 1966 and 1968 the percentage increases in rates in the service were approximately the same as those in outside universities.

As of July 1, 1968 the mean annual rate for Assistant Professor in the Public Service was 1.0% above, but the mean rate for Associate Professor and Professor was 2.4 and 4.0% below mean annual rates for outside organizations in Canada. In 1968 the maximum rates in the service were from 9.0 to 12.4% higher than the third quartile rates in outside universities. Maximum rates for university teachers in the service over the period under study are not reliable for showing the movement of rates or as a basis for making comparisons with outside jurisdictions. This is because rates of pay for individual

university teachers are based on their performance, with recognition also being given to the number of years of teaching experience since graduation. Furthermore, with salary adjustments university teachers in the service did not necessarily move from a particular step in an old range to a corresponding step in a revised range, as did other classes in the service covered in this study.

Elementary School Teacher

In the school year 1962-63 the maximum rate for Elementary School Teacher in the service was \$5,100, compared with the mean of maximum of \$4,981 for Elementary School Teacher in outside organizations for the year 1963-64. In other words, the rate for Elementary School Teacher in the service in 1962-63 was 6.7% higher than for Elementary School Teacher in outside organizations in 1963-64. However, in 1967-68 this position was reversed. The maximum rate for Elementary School Teacher in the service located in Ontario was \$6,524 compared with a mean of maximum of \$6,951 in outside organizations in Canada.

Nurse, General Duty

As of January 1, 1961 the mean annual rate for Nurse, General Duty in the service was \$3,667 compared with \$3,515 in outside hospitals a difference of \$152 or 4.3%. As of July 1, 1967 the mean rate for the class in the service for employees located in the Province of Ontario was \$5,267, \$157 or 3.1% above the mean annual rate for Canada. As of that date the maximum rate in the service for Nurse, General Duty in Ontario was \$5,10 or 9.4% above the third quartile rate for Canada. Unfortunately, because of lack of comparable data for outside organizations after 1967, comparisons for later years cannot be made.

Occupational and Physical Therapist 1 and 2

In 1960 the mean annual rate for Occupational Therapist 1 and 2

and Physical Therapist 1 and 2 in the service was \$494 and \$408, or 14.8 and 12.1% respectively above those for comparable levels of work in outside organizations. The increases in rates for Occupational and Physical Therapist in the service, however, were not as great as those in outside organizations over the period from 1960 to 1965, 26.9 and 30.2% as compared with 42.5 and 37.9% respectively. From July 1, 1965 to 1967 the increases in rates were approximately the same as between the service and outside jurisdictions.

As of July 1, 1967, the mean rate in the service for Occupational Therapist was \$342 and for Physical Therapist \$594 per annum, or 6.1 and 11.0% respectively above those in outside organizations. Again, because of lack of comparable data for outside organizations after July 1, 1967, comparisons for later years cannot be made.

Social Worker

As of January 1, 1960 the mean annual rate of pay in the service for Social Worker 1 and 2 was \$900, 19.9% higher, for Social Worker 3, \$957, 18.0% higher, and for Social Worker 4, \$610, 10.0% higher than that for corresponding levels in outside organizations in Canada. As of January 1, 1962 the mean annual rate for Social Worker 5 was \$385 or 5.1% below, and as of July 1, 1963 the mean rate for Social Worker 6 in the service was \$707, or 9.2% above that for an equivalent level of work in outside organizations.

The percentage increases in rates of pay for this class in the service were somewhat less than those in outside organizations over the period from 1960 to 1968. However, as of July 1, 1968 the mean rates for level 1 and 2 were 21.3% higher, for level 3, 10.3% higher and for level 4, 9.5% higher and for level 5, 0.4% higher than those of their counterparts in outside jurisdictions. However, the maximum rates in the

service for levels 3-5 were from 3.3 to 4.2% higher than third quartile rates in outside organizations as of July 1, 1968. The differences in these comparisons can be attributed primarily to the fact that rates for this class in the service have been set in relation to those prevailing in Ontario, in order to attract and maintain qualified personnel.

Computer Systems Administration

Reliable data on mean rates of pay in the service for this class are not available. As of October 1, 1963 the maximum rate in the service for level 2 was \$540 or 6.0% below but for level 3, \$200 or 1.9% and for level 4, \$240 or 2.0% above those in industrial and other organizations in Canada. Third quartile rates for levels 1 and 5 are not available as of October 1, 1963 for outside organizations.

As of October 1, 1968 the maximum annual rate for Computer Systems Administration 1 in the service was \$1,504 or 18.5% above, for level 2, \$1,046 or 10.2% above, for level 3, \$1,984 or 16.0% above, and for level 4, \$1,576 or 10.5% above, and for level 5, \$898 or 4.6% above third quartile rates for comparable levels of work in industrial and other organizations.

Clerk, Keypunch Operator, Typist and Stenographer

As of October 1, 1958 the mean annual rate for Clerk 1 was \$66 or 2.8%, for Clerk 2, \$34 or 1.1%, and for Clerk 3, \$316 or 8.4% below those for similar levels of work in outside organizations. The maximum rates for Clerk 2 and 3 in the service were 8.6 and 14.3% respectively below third quartile rates in industrial and other organizations on October 1, 1958.

From October 1, 1958 to 1965 the mean rate for Clerk 1 and 2 in the service increased by approximately 23.0%, but for Clerk 3 by 32.8% compared with 21.3 to 24.2% for the three levels in

industrial and other organizations. From October 1, 1965 to 1967 the increase in rates for Clerk 1-3 in the service was 14.6% compared with 9.2 to 13.8% in outside organizations, depending upon the level. Between October 1, 1967 and 1968 the increases in the service were about the same as in outside organizations, approximately 7.0%.

As of October 1, 1968 the mean annual rate for Clerk 1 in the service was 0.6% below, but for Clerk 2, 4.7% above and for Clerk 3, 2.7% above those for comparable levels in outside organizations.

As of October 1, 1959, the mean annual rate for Typist 1 in the service was \$92 or 3.6% above, but for Typist 2, \$344 or 10.8% below that for comparable work in outside organizations. As of October 1, 1968 the mean rate for Typist 1 in the service was in line with that for comparable work outside, but the mean rate for Typist 2 was \$454 or 9.4% below that in outside organizations.

As of October 1, 1960, the mean annual rates for Stenographer 3 and 4 were 7.1 and 1.3% respectively above those in outside organizations but the mean rate for Key punch Operator was 13.2% below. As of October 1, 1968 the mean rate for Stenographer 3 was 6.1% above the mean rate in industrial organizations but the rates for Stenographer 4 and Key punch Operator were in line with those in outside organizations.

Information on third quartile rates in industrial and other organizations for these Administrative Support Category classes is not available for 1968. Therefore, comparisons between maximum and third quartile rates cannot be made as of that date.

Draftsman

There were changes in the specifications for the class of Draftsman used in obtaining information from outside organizations as well as for internal purposes within the federal Public Service, over the period under study. However, the specifications for Draftsman 3 remained virtually unchanged.

As of October 1, 1958 the mean annual rate for Draftsman 3 in the service was \$3,479 as compared with \$3,614 in industrial and other organizations in Canada, a difference of \$135 or 3.2%. Since that time the percentage increases in rates of pay for this level in the service have been somewhat greater than those in outside organizations. As of July 1, 1968 the mean rate for Draftsman 3 in the service was \$457 or 6.1% above that for comparable work in outside organizations. However, the maximum rate in the service was 2.6% above the third quartile rate in industrial and other organizations as of that date.

Technician

In the federal Public Service, there is one plan of classification for Technician, which includes both Engineering and Laboratory Technicians. However, the Pay Research Bureau in obtaining information from industrial and other organizations has collected data separately for Technician, Engineering and Technician, Laboratory. In Tables 15 and 16 rates for the two above-mentioned specializations in outside organizations are compared with the class of Technician in the service. As has been explained above, the Bureau has found that the rates for Technician, Engineering have been somewhat higher than those for Technician, Laboratory in outside organizations.

As of October 1, 1962 the mean annual rates for Technician 1-5 in the service were from \$68 to \$611 or 1.4 to 9.7% below those of Technician, Engineering in outside organizations, depending upon the level. At the same time, the mean rates for Technician 1-3 in the service were 2.8 to 10.7% above those for Technician, Laboratory 1-3 in industrial and other organizations. However, the mean rates for Technician 4 and 5 in the service were 3.6 and 6.8% respectively, below that for Technician, Laboratory 4 and 5 in outside organizations as of that date. From 1962 to 1968 the percentage changes in rates for Technician 1-5 in the service were generally speaking about the same as those for Technician, Engineering but greater than those for Technician, Laboratory in outside organizations.

As of July 1, 1968 the mean annual rates for Technician 1-5 in the service were from \$86 to \$823 or 1.7 to 9.4% below those of Technician, Engineering, but from \$59 to \$656 or 0.8 to 14.7% above those for Technician, Laboratory in outside organizations. However, maximum rates in the service were below the third quartile rates both for Technician, Engineering and Laboratory, in industrial and other organizations in amounts ranging up to 13.1%, depending upon the level, except for Technician, Laboratory 1 and 2, as of July 1, 1968.

Technician, Electronics

As of October 1, 1962 the mean annual rates for Technician, Electronics 1, 2 and 5 were \$44 to \$382 or 0.9 to

8.7% below, and for levels 3 and 4, \$149 and \$268 or 2.6 and 4.5% above those of their industrial counterparts. As of October 1, 1964 the mean rates for levels 6 and 7 were 0.9 and 1.3% respectively below those in outside organizations.

While there were variations as between levels both in the service and in outside organizations, the increases in rates in the Public Service were larger, particularly at the higher levels, than those in outside organizations, from October 1, 1962 to July 1, 1966. The increases in rates were also somewhat greater in the service as compared with outside organizations from July 1, 1966 to July 1, 1968. However, it must be borne in mind that the rates shown for Technician, Electronics in the service include settlement bonuses for the years 1967 and 1968.

As of July 1, 1968 the mean annual rates for various levels in the service were from \$337 to \$920 or 2.8 to 12.8% above those in outside organizations. However, the maximum rates in the service, apart from level 1, were from 0.7 to 6.9% above the third quartile rates in industrial and other organizations in Canada.

Operational Category Classes

With the introduction of zone rates in the Public Service, there is a particular problem in comparing rates of a number of operational category classes in the service covered in this study with those in industrial and other organizations,

because of lack of comparable data. The only operational category classes covered in the study for which comparable data are available for the whole of Canada, both for the service and outside organizations over the period October 1, 1958 to 1968 are Firefighter and Stationary Engineer.

As of October 1, 1958 the mean annual rates for Carpenter and Electrician in the service were \$772 and \$658 or 17.1 and 14.1% respectively below the mean annual rates for Canada for comparable work in industrial and other organizations. The last adjustment in rates for these classes in the service following the first round of bargaining was October 1, 1967. As of October 1, 1967 the mean annual rates of pay in the service in the Ottawa zone for Carpenter and Electrician were \$591 and \$1,478 or 9.3 and 22.1% respectively above those in industrial and other organizations in Canada. The differences between maximum rates of pay in the service and third quartile rates in outside organizations were much less than those calculated as mean rates. However, the maximum rates for these classes in the service are now the same as mean rates because employees in these classes are now paid single rates as opposed to being paid within ranges. As of October 1, 1967 the maximum rate for Carpenter was 1.2% above and the maximum rate for Electrician in the service was 13.0% above the third quartile rate in outside organizations in Canada.

As of October 1, 1958 the mean annual rate for Cleaning Service Man was \$507 or 15.3% and for Storeman 2 was \$498 or 13.3% below that for outside organizations in Canada. As of October 1, 1968 the mean annual rate for Cleaning Service Man in the service in the Ottawa zone was \$296 or 5.8% below, but the mean rate for Storeman 2 in the service, again in the Ottawa zone, was \$210 or 3.5% above that for industrial and other organizations in Canada.

The mean annual rate for Firefighter and Stationary Engineer 3 were \$654 and \$392 or 16.1 and 7.9% respectively below those in outside organizations in Canada. On October 1, 1967 the mean annual rate for Firefighter in the service was \$788 or 11.7% below and mean annual rate for Stationary Engineer 3 was \$87 or 1.2% below that for comparable work in outside organizations. The maximum rate for Firefighter was 15.1% below and for Stationary Engineer 3, 6.9% below the third quartile rate as of October 1, 1967.

In 1960 the mean annual rate for Hospital Cleaning Service Man and Hospital Nursing Orderly, Experienced in the service was \$415 and \$424 or 15.0 and 14.6% respectively above those for comparable work in outside hospitals. The mean annual rate for Nursing Auxiliary, Certified in the service was 1.7% below that in outside hospitals in 1960. The mean annual rate for Cook in the service in 1961 was 3.0% above that of the mean annual rate for Canada in outside organizations.

As of January 1, 1968 the mean annual rate for Hospital Cleaning Service Man and Nursing Auxiliary, Certified and Hospital

Maid in the service for employees located in Ontario were 5.2, 22.0 and 3.9% respectively above the mean annual rates for all Canada. The mean annual rates for Cook and Nursing Orderly, Experienced in the service also located in the Province of Ontario were 2.3 and 5.5% below those for Canada.

TABLE 15: A COMPARISON OF MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE
IN INDUSTRIAL AND OTHER ORGANIZATIONS AND IN THE
FEDERAL PUBLIC SERVICE, 1958 AND 1968

Class	1958			1968		
	Industrial and Other Organizations	Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations	Industrial and Other Organizations	Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations
	Oct. 1/58 \$	Oct. 1/58 \$	%	July 1/68 \$	July 1/68 \$	%
Economist & Statistician 1	4945	4844	- 2.0	7370	-	-
2	5818	5803	- 0.3	8505	-	-
3	7062	6710	- 5.0	10689	11171	+ 4.5
4	8437	7983	- 5.4	12343	-	-
5	9805	8520	-13.1	14471	16099	+11.3
6	13633(a)	11946(a)	-12.4	17429	18042	+ 3.5
7	15565(b)	14517(b)	- 6.7	19876	20962	+ 5.5
Engineer 1	5158	5024	- 2.6	7869	-	-
2	6055	6270	+ 3.6	9083	9323(*)	+ 2.6
3	7086	6886	- 2.8	10790	11255(*)	+ 4.3
4	8256(c)	7348	-11.0	12306	12820(*)	+ 4.2
5	9393(c)	8107	-13.7	14048	14369(*)	+ 2.3
6	10591(c)	8848	-16.5	15979	16736(*)	+ 4.7
7	12145(c)	9655	-20.5	18491	18907(*)	+ 2.2
Assistant Professor	6914(d)	6662	- 3.6	11126	11078	- 0.4
Associate Professor	8683(d)	7645	-12.0	14159	12995	- 8.2
Professor	11326(d)	10087	-10.9	18647	17160	-1487
Elementary School Teacher	1963-64	1962-63		1967-68	1967-68	
	4981(e)	5100(f)	+ 6.2	6961(e)	6524(f)(g)	- 6.1
Nurse, General Duty	3515(h)	3657(h)	+ 4.3	5110	5267(g)	+ 3.1
Occupational Therapist 1 & 2	3341	3835	+14.8	5573	5915	+ 6.1
Physical Therapist 1 & 2	3368	3776	+12.1	5381	5975	+11.0

(a) July 1, 1961.

(b) July 1, 1963.

(c) October 1, 1959.

(d) For the year 1959-60.

(e) Mean of maximum rate.

(f) Maximum rate.

(g) Pertains to the Province of Ontario.

(h) January 1, 1961.

(*) Includes a "settlement bonus" for the years July 1, 1967 to June 30, 1968 and July 1, 1968 to June 30, 1969. No information is given for Engineer 1

TABLE 15: A COMPARISON OF MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE
IN INDUSTRIAL AND OTHER ORGANIZATIONS AND IN THE
FEDERAL PUBLIC SERVICE, 1958 AND 1968 (CONT'D.)

Class	1958			1968		
	Industrial and Other Organizations	Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations	Industrial and Other Organizations	Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations
	Jan. 1/60 \$	Jan. 1/60 \$	\$ %	July 1/68 \$	July 1/68 \$	\$ %
Social Worker 1 & 2	4528	5427	+89.9	7508	9106	+1598
3	5306	6263	+18.0	9532	10518	+986
4	6084	6694	+10.0	10746	11766	+1020
5	7605(1)	7220(1)	- 5.1	11972	12017	+ 45
6	7693(1)	8400(1)	+ 9.2	11892	-	-
	Oct. 1/63	Oct. 1/63		Oct. 1/68	Oct. 1/68	
Computer Systems						
Administration 1	5944	(k)	-	7325	(k)	-
2	8129	(k)	-	9327	(k)	-
3	9729	(k)	-	11558	(k)	-
4	11503	(k)	-	14020	(k)	-
5	13475	(k)	-	18215	(k)	-
	Oct. 1/58	Oct. 1/58		Oct. 1/68	Oct. 1/68	
Clerk 1	2379	2313	- 2.8	3513	3491	- 22
2	3000	2966	- 1.1	4275	4480	+ 205
3	3754	3438	- 8.4	5451	5600	+ 149
Typist 1	2383(1)	2252(1)	- 5.5	3614	3486	- 128
2	2913(1)	2647(1)	- 9.1	4496	5018	- 472
Stenographer 3	3104(m)	3324(m)	+ 7.1	4214	4473	+ 257
4	3621(m)	3667(m)	+ 1.3	4972	5011	+ 39
Keypunch Operator	2995(1)	2599(1)	-13.2	4310	4331	+ 21
	Oct. 1/58	Oct. 1/58		July 1/68	July 1/68	
Draftsman 1	3479	-	-	4781	4491	- 290
2	4418(1)	4237	- 4.1	5929	6155	+ 226
3	5028	4867	- 3.2	7472	7929	+ 457

(1) January 1, 1962.
(j) January 1, 1963.
(k) Reliable information not available.
(l) October 1, 1959.
(m) October 1, 1960.

TABLE 15: A COMPARISON OF MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE
IN INDUSTRIAL AND OTHER ORGANIZATIONS AND IN THE
FEDERAL PUBLIC SERVICE, 1958 AND 1968 (CONT'D.)

Class	1958			1968		
	Industrial and Other Organizations	Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations	Industrial and Other Organizations	Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations
	Oct. 1/62 \$	Oct. 1/62 \$	\$ %	July 1/68 \$	July 1/68 \$	\$ %
Technician, Engineering	1 3594	3393	- 201 - 5.6	5200	5114	- 86 - 1.7
	2 4109	4234	+ 125 + 3.0	6146	5902	- 244 - 4.0
	3 4829	4761	- 68 - 1.4	6653	6587	- 66 - 1.0
	4 5595	5213	- 382 - 6.8	7920	7302	- 618 - 7.8
	5 6297	5686	- 611 - 9.7	8753	7930	- 823 - 9.4
Technician, Laboratory	1 3300	3393	+ 93 + 2.8	4458	5114	+ 656 +14.7
	2 3824	4234	+ 410 +10.7	5481	5902	+ 421 + 7.7
	3 4605	4761	+ 156 + 3.4	6302	6587	+ 285 + 4.5
	4 5408	5213	- 195 - 3.6	7243	7302	+ 59 + 0.8
	5 6101	5686	- 415 - 6.8	8219	7930	- 289 - 3.5
Technician, Electronics	1 4368	3986	- 382 - 8.7	5441	6135(*)	+ 694 +12.8
	2 5156	5112	- 44 - 0.9	6614	7162(*)	+ 548 + 8.3
	3 5688	5837	+ 149 + 2.6	7489	8366(*)	+ 877 +11.7
	4 5942	6210	+ 268 + 4.5	8020	8993(*)	+ 973 +12.1
	5 7189	6685	- 504 - 7.0	9315	9896(*)	+ 581 + 6.2
	6 8277(n)	8236(n)	- 41 - 0.5	9848	10768(*)	+ 920 + 9.3
	7 9534(n)	9414(n)	- 120 - 1.3	12017	12354(*)	+ 337 + 2.8
Carpenter, Maintenance	Oct. 1/58 4502(o)	Oct. 1/58 3730	- 772 -17.1	Oct. 1/67 6356	Oct. 1/67 6947(p)	+ 591 + 9.3
Electrician, Maintenance	4665	4007	- 658 -14.1	6676	8154(p)	+1478 +22.1
Cleaning Service Man	3320	2813	- 507 -15.3	5142	Oct. 1/68 4846(p)	- 296 - 5.8
Storeman 2	3753	3255	- 498 -13.3	6009	6219(p)	+ 210 + 3.5

(n) October 1, 1964.

(o) October 1, 1959.

(p) The rate shown pertains to the Ottawa zone.

(*) The rate shown includes a "settlement bonus" for the years July 1, 1967 to June 30, 1968 and July 1, 1968 to June 30, 1969.

TABLE 15: A COMPARISON OF MEAN ANNUAL RATES OF PAY AND PERCENTAGE CHANGE
IN INDUSTRIAL AND OTHER ORGANIZATIONS AND IN THE
FEDERAL PUBLIC SERVICE, 1958 AND 1968 (CONCL'D.)

Class	1958			1968		
	Industrial and Other Organizations	Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations	Industrial and Other Organizations	Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations
	Oct. 1/58 \$	Oct. 1/58 \$	\$ %	Oct. 1/68 \$	Oct. 1/67 \$	\$ %
Firefighter	4074	3420	- 654 -16.1	6726	5938	- 788 -11.7
Stationary Engineer 3	4934	4542	- 392 - 7.9	7370	7283	- 87 - 1.2
Hospital Cook 2	3271(q)	3364(q)	+ 93 + 3.0	4942(r)	4826(s)	- 116 - 2.3
Hospital Cleaning Service Man	2772	3187	+ 415 +15.0	4250(r)	4472(s)	+ 222 + 5.2
Hospital Nursing Auxiliary, Cert.	2471	2430	- 41 - 1.7	3956(r)	4826(s)	+ 870 +22.0
Hospital Nursing Orderly, Exp.	2898	3322	+ 424 +14.6	5395(r)	5096(s)	- 299 - 5.5
Hospital Maid	2063	-	- -	3222(r)	3349(s)	+ 127 + 3.9

(q) January 1, 1961.

(r) This rate has been estimated by applying the percentage change in means of maxima between October 1, 1966 and 1968 to the mean rate for October 1, 1966.

(s) This rate pertains to the province of Ontario.

TABLE 16: A COMPARISON OF ANNUAL THIRD QUARTILE RATES OF PAY IN INDUSTRIAL AND OTHER ORGANIZATIONS AND ANNUAL MAXIMUM RATES OF PAY IN THE FEDERAL PUBLIC SERVICE, 1958 AND 1968

Class	1958			1968		
	Third Quartile Rate in Industrial and Other Organizations	Maximum Rate in Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations	Third Quartile Rate in Industrial and Other Organizations	Maximum Rate in Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations
	Oct. 1/58 \$	Oct. 1/58 \$	\$ %	July 1/68 \$	July 1/68 \$	\$ %
Economist & Statistician 1	5520	5640	+ 2.2	7915	-	-
2	6300	6480	+ 2.9	9077	-	-
3	7680	7320	- 4.7	11492	11861	+ 3.2
4	8940	8580	- 4.0	13242	-	-
5	10700	9420	-12.0	15924	17179	+ 7.9
6	15000(a)	13100(a)	-13.2	18776	19453	+ 3.6
7	-	15100(b)	-	21830	21348	- 2.2
Engineer 1	5400	5640	+ 4.4	8160	-	-
2	6400	6780	+ 5.9	9568	10106(*)	+ 5.6
3	7550	7320	- 3.0	11640	11861(*)	+ 1.9
4	8871(c)	7860	-11.4	13200	13264(*)	+ 0.5
5	10000(c)	8580	-14.2	15104	14905(*)	- 1.3
6	11664(c)	9420	-19.2	17292	17179(*)	- 0.7
7	13410(c)	10140	-24.4	19800	19453(*)	- 1.8
Assistant Professor	7450(d)	7320	- 1.7	11800	12750	+ 8.1
Associate Professor	9235(d)	8580	- 7.3	15000	16350	+ 9.0
Professor	12000(d)	11000	- 8.3	19800	22250	+12.4
Elementary School Teacher	4981(e)	5100	+ 2.4	6951(e)	6524(f)	- 6.1
Nurse, General Duty	3840(g)	3900(g)	+ 1.6	5400	5910	+ 9.4
Occupational Therapist 1 & 2	3540	4020(h)	+13.6	5870	6256	+ 6.6
Physical Therapist 1 & 2	3600	4020(h)	+11.7	5675	6256	+10.2

(a) July 1, 1961.

(b) July 1, 1963.

(c) October 1, 1959.

(d) For the year 1959-60.

(e) Mean of maximum rate.

(f) Pertains to employees located in the province of Ontario.

(g) January 1, 1961.

(h) Rate for level 2.

(*) Includes a "settlement bonus" for the years July 1, 1967 to June 30, 1968 and July 1, 1968 to June 30, 1969. No information is given for Engineer 1 for the reasons mentioned on page 110.

TABLE 16: A COMPARISON OF ANNUAL THIRD QUARTILE RATES OF PAY IN INDUSTRIAL AND OTHER ORGANIZATIONS AND ANNUAL MAXIMUM RATES OF PAY IN THE FEDERAL PUBLIC SERVICE, 1958 AND 1968 (CONT'D.)

Class	1958			1968		
	Third Quartile Rate in Industrial and Other Organizations	Maximum Rate in Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations	Third Quartile Rate in Industrial and Other Organizations	Maximum Rate in Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations
	Jan. 1/60 \$	Jan. 1/60 \$	\$ %	July 1/68 \$	July 1/68 \$	\$ %
Social Worker 1 & 2	-	5880(1)	-	8068	9400(1)	+1332
3	5640	6420	+13.8	10320	10661	+ 341
4	6300	6900	+ 9.5	11632	12037	+ 405
5	8088(1)	8040(1)	- 0.6	12650	13183	+ 533
6	8000(k)	9060(k)	+10.6	11929	-	-
	Oct. 1/63	Oct. 1/63		Oct. 1/68	Oct. 1/68	
Computer Systems Administration 1	-	7170	-	8123	9627	+1504
2	9000	8460	- 6.0	10210	11256	+1046
3	10500	10700	+ 1.9	12384	14368	+1984
4	12060	12300	+ 2.0	14940	16516	+1576
5	-	15100	-	19562	20460	+ 898
	Oct. 1/58	Oct. 1/58		Oct. 1/68	Oct. 1/68	
Clerk 1	2640	2640	0.0	-	3855	-
2	3446	3150	- 8.6	-	4732	-
3	4200	3600	-14.3	-	5868	-
Typist 1	2548(1)	2640(1)	3.6	-	3855	-
2	3194(1)	2850(1)	-10.8	-	4401	-
Stenographer 3	-	3540(m)	-	-	5008	-
4	3900(m)	3780(m)	- 3.1	-	5451	-
Keypunch Operator	-	3150	-	-	5015	-
	Oct. 1/58	Oct. 1/58		July 1/68	July 1/68	
Draftsman 1	3669	-	-	5268	5337	+ 69
2	4800(1)	4500	- 6.2	6552	6907	+ 355
3	5340	5220	- 2.2	8100	8311	+ 211

(1) Rate for Social Worker 2.
(j) January 1, 1962.
(k) January 1, 1963.
(l) October 1, 1959.
(m) October 1, 1960.

TABLE 16: A COMPARISON OF ANNUAL THIRD QUARTILE RATES OF PAY IN INDUSTRIAL AND OTHER ORGANIZATIONS AND ANNUAL MAXIMUM RATES OF PAY IN THE FEDERAL PUBLIC SERVICE, 1958 AND 1968 (CONT'D.)

Class	1958				1968			
	Third Quartile Rate in Industrial and Other Organizations		Maximum Rate in Federal Public Service		Public Service Rates in Relation to Rates in Industrial and Other Organizations		Maximum Rate in Federal Public Service	
	Oct. 1/62 \$	Oct. 1/62 %	Oct. 1/62 \$	Oct. 1/62 %	July 1/68 \$	July 1/68 %	July 1/68 \$	July 1/68 %
Technician, Engineering								
1	4441		3620	-18.5	6420		5423	-15.5
2	4495		4440	-1.2	6636		6196	-6.6
3	5205		5040	-3.2	7166		6972	-2.7
4	5980		5400	-9.7	8403		7454	-11.3
5	6759		5880	-13.0	9300		8078	-13.1
Technician, Laboratory								
1	4181		3620	-13.4	5040		5423	+7.6
2	4555		4440	-2.5	6040		6196	+2.6
3	5117		5040	-1.5	7020		6972	-0.7
4	5845		5400	-7.6	7862		7454	-5.2
5	6720		5900	-13.7	8880		8078	-9.0
Technician, Electronics								
1	4607		4980	+8.1	6018		6972(*)	+15.9
2	5426		5460	+0.6	7388		7642(*)	+3.4
3	6060		6000	-1.0	8100		8653(*)	+6.8
4	6344		6300	-0.7	8963		9211(*)	+2.8
5	7500		6960	-7.2	9840		10144(*)	+3.1
6	8460(n)		8400(n)	-0.7	10265		10977(*)	+6.9
7	10200(n)		9780(n)	-4.1	12700		12784(*)	+0.7
Carpenter, Maintenance	Oct. 1/58		Oct. 1/58		Oct. 1/67		Oct. 1/67	
	4898(o)		3900	-20.4	6864		6947(p)	+1.2
Electrician, Maintenance	4971		4230	-14.9	7217		8154(p)	+13.0
Cleaning Service Man	3682		2910	-21.0	5720		4846(p)	-15.3
Storeman 2	4025		3720	-7.6	6677		6219(p)	-6.9

(n) October 1, 1964.

(o) October 1, 1959.

(p) Rates apply to Ottawa zone.

(*) Includes a "settlement bonus" for the years July 1, 1967 to June 30, 1968 and July 1, 1968 to June 30, 1969.

TABLE 16: A COMPARISON OF ANNUAL THIRD QUARTILE RATES OF PAY IN INDUSTRIAL AND OTHER ORGANIZATIONS AND ANNUAL MAXIMUM RATES OF PAY IN THE FEDERAL PUBLIC SERVICE, 1958 AND 1968 (CONCL'D.)

Class	1958		1968		Public Service Rates in Relation to Rates in Industrial and Other Organizations	Third Quartile Rate in Industrial and Other Organizations	Maximum Rate in Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations	Third Quartile Rate in Industrial and Other Organizations	Maximum Rate in Federal Public Service	Public Service Rates in Relation to Rates in Industrial and Other Organizations
	Oct. 1/58	Oct. 1/58	Oct. 1/58	Oct. 1/58							
	\$	\$	\$	\$	%						%
Firefighter	4332	3720	- 613	-14.1		7106	6031	-1075	-15.1		
Stationary Engineer 3	5242	4680	- 562	-10.7		8049	7409	- 640	- 8.0		
Hospital Cook 2	3600(q)	3540(q)	- 60	- 1.7		- (z)	4826(s)	-	-		
Hospital Cleaning Service Man	3060	3300	+ 240	+ 7.8		- (z)	4472(s)	-	-		
Hospital Nursing Auxiliary, Cert.	2520	2640	+ 120	+ 4.8		- (z)	4826(s)	-	-		
Hospital Nursing Orderly, Exp.	3300	3420	+ 120	+ 3.6		- (z)	5096(s)	-	-		
Hospital Maid	2280	-	-	-		- (z)	3349(s)	-	-		

(q) January 1, 1961.

(r) No information.

(s) The rate shown pertains to employees located in Ontario.

TABLE 17 A COMPARISON OF RATES OF PAY AND PERCENTAGE CHANGE, INDUSTRIAL AND OTHER ORGANIZATIONS
AND THE FEDERAL PUBLIC SERVICE, OCTOBER 1, 1958 TO 1968

CLASS AND GRADE	INDUSTRIAL AND OTHER ORGANIZATIONS					FEDERAL PUBLIC SERVICE				
	Mean Rate		Percentage Change			Mean Rate		Percentage Change		
	Oct. 1/58 \$	July 1/66 \$	Oct. 1/58 to July 1/66 %	July 1/66 to July 1/67 %	July 1/67 to July 1/68 %	Oct. 1/58 \$	July 1/66 \$	Oct. 1/58 to July 1/66 %	July 1/66 to July 1/67 %	July 1/67 to July 1/68 %
Economist & Statistician 1	4945	6138	24.1	19.2	0.8	4844	6111	26.2	-	-
2	5818	7549	29.8	5.2	7.1	5803	7574	30.5	-	-
3	7062	9541	35.1	4.7	7.0	6710	8994	34.0	15.7	7.0
4	8437	10605	25.7	7.7	8.1	7983	11089	38.9	-	-
5	9805	12733	29.9	6.0	7.2	8520	13129	54.1	14.6	7.0
6	13633(a)	15483	13.6(a)	2.6	9.7	11946(a)	14714	23.2(a)	14.6	7.0
7	15565(b)	17837	14.6(b)	9.9	1.4	14517(b)	17095	17.8(b)	14.6	7.0
Engineer 1	5158	6784	31.5	9.5	5.9	5024	6467	28.7	-	-
2	6055	7880	30.1	7.7	7.0	6270	7603	21.3	14.6(d)	7.0(e)
3	7086	9473	33.7	6.9	6.6	6886	9092	32.0	15.7(d)	7.0(e)
4	8256(c)	10903	32.1(c)	7.0	5.5	7348	10455	42.3	14.6(d)	7.0(e)
5	9393(c)	12365	31.6(c)	6.4	6.7	8107	11718	44.5	14.6(d)	7.0(e)
6	10591(c)	14070	32.8(c)	5.1	8.1	8848	13648	54.2	14.6(d)	7.0(e)
7	12145(c)	16136	32.9(c)	7.1	7.0	9555	15419	59.7	14.6(d)	7.0(e)
Assistant Professor	6914(f)	9006	30.3(f)	7.6	8.6	6662	9638	45.0	8.2	7.7
Associate Professor	8683(f)	11416	31.5(f)	7.9	8.4	7645	11650	52.4	8.7	9.0
Professor	11326(f)	14712	29.9(f)	7.5	10.1	10087	14904	47.8	9.5	9.9
Elementary School Teacher	1963-64	1965-66	1963-64 to 1965-66	1965-66 to 1967-68		1963-64	1965-66	1963-64 to 1965-66	1965-66 to 1967-68	1967-68 to 1968-69
	4981(g)	5254(g)	5.5	32.3		5100(h)	5700(h)	11.8(h)	14.5(h)	6.0(h)

- (a) From July 1, 1961.
(b) From July 1, 1963.
(c) From October 1, 1959.
(d) This percentage includes a "settlement bonus" for the year July 1, 1967 to June 30, 1968.
(e) This percentage represents a "settlement bonus" for the year July 1, 1968 to June 30, 1969.
(f) From the year 1959-60.
(g) Mean of maximum rates.
(h) Maximum rate for Canada up to the year 1966-67. For 1967-68 and 1968-69, rates pertain to the Province of Ontario; therefore, the percentage change represents the change in maximum rates for employees in Ontario.

TABLE 17: A COMPARISON OF RATES OF PAY AND PERCENTAGE CHANGE, INDUSTRIAL AND OTHER ORGANIZATIONS
AND THE FEDERAL PUBLIC SERVICE, OCTOBER 1, 1958 TO 1968 (CONT'D.)

CLASS AND GRADE	INDUSTRIAL AND OTHER ORGANIZATIONS										FEDERAL PUBLIC SERVICE									
	Mean Rate					Percentage Change					Mean Rate					Percentage Change				
	Jan. 1/60 \$	Jan. 1/65 \$	Jan. 1/67 \$	Jan. 1/68 \$	Jan. 1/69 \$	Jan. 1/60 %	Jan. 1/65 %	Jan. 1/67 %	Jan. 1/68 %	Jan. 1/69 %	Aug. 1/60 \$	July 1/65 \$	July 1/67 \$	July 1/68 \$	July 1/69 \$	Aug. 1/60 %	July 1/65 %	July 1/67 %	July 1/68 %	July 1/69 %
Nurse, General Duty	3515(1)	4391	24.9	16.4	-	24.9	16.4	-	-	-	3667(1)	4279	16.7(1)	23.1	11.5					
Occupational Therapist 2	3341	4762	42.5	17.0	-	42.5	17.0	-	-	-	3835	4867	26.9	18.0	3.0(j)					
Physical Therapist 2	3368	4643	37.9	15.9	-	37.9	15.9	-	-	-	3776	4916	30.2	18.0	3.0(j)					
Social Worker 1 & 2	4528	5721	26.3	25.2	4.8	26.3	25.2	4.8	4.8		5427	6588	21.4	30.4	6.0					
3	5306	6829	28.7	24.6	12.0	28.7	24.6	12.0	12.0		6263	7400	18.2	34.1	6.0					
4	6084	7576	24.5	31.1	8.2	24.5	31.1	8.2	8.2		6694	7917	18.3	40.2	6.0					
5	7605(k)	8311	9.3(k)	31.7	9.4	9.3(k)	31.7	9.4	9.4		7220(k)	8203	13.6(k)	38.2	6.0					
6	7693(1)	8956	16.4(1)	21.0	9.8	16.4(1)	21.0	9.8	9.8		8400(1)	-	-	28.8	-					
Computer Systems Administration 1	5944	6344	6.7	8.1	6.8	6.7	8.1	6.8	6.8		5369	5777	7.6	14.6	6.5					
2	8129	8484	4.4	3.0	6.7	4.4	3.0	6.7	6.7		7328	7945	8.4	14.6	6.5					
3	9729	10187	4.7	5.0	8.1	4.7	5.0	8.1	8.1		9159	10245	11.9	14.6	6.5					
4	11503	12407	7.9	6.6	6.0	7.9	6.6	6.0	6.0		10533	12060	14.5	14.6	6.5					
5	13475	15732	16.7	11.1	4.3	16.7	11.1	4.3	4.3		-	16252	-	14.6	6.5					
Clerk 1	2379	2886	21.3	13.8	7.0	21.3	13.8	7.0	7.0		2313	2847	23.1	14.6	7.0					
2	3000	3658	21.9	9.2	7.0	21.9	9.2	7.0	7.0		2966	3654	23.2	14.6	7.0					
3	3754	4664	24.2	9.2	7.0	24.2	9.2	7.0	7.0		3438	4567	32.8	14.6	7.0					
Typist 1	2353	2947	25.2	14.6	7.0	25.2	14.6	7.0	7.0		2228	2843	27.6	14.6	7.0					
2	2913(m)	3578(m)	22.8(m)	17.3	7.0	22.8(m)	17.3	7.0	7.0		2594	3285	26.6	-	7.0					
Stenographer 3	3010(m)	3619	20.2(m)	8.8	7.0	20.2(m)	8.8	7.0	7.0		2986	3654	22.4	14.4	7.0					
4	3621(n)	4315	19.2(n)	7.7	7.0	19.2(n)	7.7	7.0	7.0		3440	4097	19.1	14.3	7.0					
Keypunch Operator	2995(m)	3497(m)	16.8(m)	15.2	7.0	16.8(m)	15.2	7.0	7.0		2698	3529	30.8	14.7	7.0					

(i) From January 1, 1961.
(j) To January 1, 1968.
(k) From January 1, 1962.
(l) From January 1, 1963.
(m) From October 1, 1959.

TABLE 17: A COMPARISON OF RATES OF PAY AND PERCENTAGE CHANGE, INDUSTRIAL AND OTHER ORGANIZATIONS
AND THE FEDERAL PUBLIC SERVICE, OCTOBER 1, 1958 TO 1968 (CONT'D.)

CLASS AND GRADE	INDUSTRIAL AND OTHER ORGANIZATIONS						FEDERAL PUBLIC SERVICE					
	Mean Rate		Percentage Change				Mean Rate		Percentage Change			
	Oct. 1/58 \$	Oct. 1/65 \$	Oct. 1/58 to Oct. 1/65 %	Oct. 1/65 to July 1/67 %			Oct. 1/58 \$	July 1/66 \$	Oct. 1/58 to July 1/66 %	July 1/66 to July 1/67 %		
Draftsman	3479	-	-	-	9.9		-	3662	-	14.6	7.0	
	4418(n)	-	-	-	9.0		4237	5068	19.6	13.5	7.0	
	5028	6078	20.9	15.3	6.6		4867	6352	30.5	8.5	7.0	
Technician, Engineering	3594	4282	19.1	18.9	2.1		3393	3940	16.1	21.3	7.0	
	4109	4837	17.7	11.3	14.2		4234	4813	13.7	14.6	7.0	
	4829	5623	16.4	7.8	9.8		4761	5372	12.8	14.6	7.0	
Technician, Laboratory	5595	6295	12.5	10.7	13.6		5213	5955	14.2	14.6	7.0	
	6297	7379	17.2	11.4	6.5		5686	6467	13.7	14.6	7.0	
	3300	3960	20.0	2.3	10.1		3393	3940	16.1	21.3	7.0	
Technician, Electronics	3824	4746	24.1	6.1	8.9		4234	4813	13.7	14.6	7.0	
	4605	5490	19.2	6.7	7.6		4761	5372	12.8	14.6	7.0	
	5408	6228	15.2	6.7	9.0		5213	5955	14.2	14.6	7.0	
Technician, Electronics	6101	7041	15.4	9.1	7.0		5686	6467	13.7	14.6	7.0	
	4368	4853	11.1	1.6	10.3		3986	5012	25.7	14.4(p)	7.0(q)	
	5156	5622	9.0	13.4	3.7		5112	5840	14.2	14.6(p)	7.0(q)	
	5688	6474	13.8	9.8	5.4		5837	6823	16.9	14.6(p)	7.0(q)	
	5942	7022	18.2	6.1	7.6		6210	7334	18.1	14.6(p)	7.0(q)	
	7189	7736	7.6	10.5	8.9		6685	8071	20.7	14.6(p)	7.0(q)	
	8277(r)	8989	3.8(z)	10.1	4.1		7336	8782	19.7	14.6(p)	7.0(q)	
	9334(z)	9708	1.8(z)	19.4	3.7		7854	10075	28.3	14.6(p)	7.0(q)	

(o) From October 1, 1959.

(p) This percentage includes a "settlement bonus" for the year July 1, 1967 to June 30, 1968.

(q) This percentage represents a "settlement bonus" for the year July 1, 1968 to June 30, 1969.

(r) From October 1, 1964.

TABLE 17: A COMPARISON OF RATES OF PAY AND PERCENTAGE CHANGE, INDUSTRIAL AND OTHER ORGANIZATIONS
AND THE FEDERAL PUBLIC SERVICE, OCTOBER 1, 1958 TO 1968 (CONCL'D.)

CLASS AND GRADE	INDUSTRIAL AND OTHER ORGANIZATIONS										FEDERAL PUBLIC SERVICE									
	Mean Rate		Percentage Change				Mean Rate		Percentage Change				Mean Rate		Percentage Change				Mean Rate	
	Oct. 1/58	Oct. 1/65	Oct. 1/66	Oct. 1/67	Oct. 1/68	Oct. 1/69	Oct. 1/65	Oct. 1/66	Oct. 1/67	Oct. 1/68	Oct. 1/69	Oct. 1/70	Oct. 1/65	Oct. 1/66	Oct. 1/67	Oct. 1/68	Oct. 1/69	Oct. 1/70	Oct. 1/71	Oct. 1/72
	\$	\$	%	%	%	%	\$	\$	%	%	%	%	\$	\$	%	%	%	%	\$	\$
Carpenter, Maintenance	4502(s)	5537	23.0(s)	6.7	7.5	9.2	3730	5121	37.3	24.9(t)	6.0(t)	-	37.3	5121	37.3	24.9(t)	6.0(t)	-	37.3	5121
Electrician, Maintenance	4665	5943	27.4	5.0	6.9	14.5	4007	5450	36.0	37.1(t)	6.0(t)	-	36.0	5450	36.0	37.1(t)	6.0(t)	-	36.0	5450
Cleaning Service Man	3320	4308	29.8	7.4	8.7	2.3	2813	3772	34.0	11.0(t)	5.8(t)	6.4	34.0	3772	34.0	11.0(t)	5.8(t)	6.4	34.0	3772
Storeman 2	3753	4907	30.7	7.7	8.0	5.3	3235	4839	48.7	11.9(t)	6.1(t)	6.8	48.7	4839	48.7	11.9(t)	6.1(t)	6.8	48.7	4839
Firefighter	4074	5398	32.5	6.3	-	17.2(u)	3420	4961	45.1	12.4	6.5	-	45.1	4961	45.1	12.4	6.5	-	45.1	4961
Stationary Engineer 3	4934	6272	27.1	5.0	6.3	5.3	4342	6229	37.1	10.3	6.0	-	37.1	6229	37.1	10.3	6.0	-	37.1	6229
	Jan. 1/60	Jan. 1/65	Jan. 1/66	Jan. 1/67	Jan. 1/68	Jan. 1/69	Jan. 1/60	Jan. 1/65	Jan. 1/66	Jan. 1/67	Jan. 1/68	Jan. 1/69	Jan. 1/60	Jan. 1/65	Jan. 1/66	Jan. 1/67	Jan. 1/68	Jan. 1/69	Jan. 1/70	Jan. 1/71
Hospital Cook 2	3271(v)	3746	14.5(v)	13.2	16.5(w)	16.5(w)	3364(v)	3965	22.6(v)	10.6(x)	5.9(x)	-	3364(v)	3965	22.6(v)	10.6(x)	5.9(x)	-	3364(v)	3965
Hospital Cleaning Service Man	2772	3346	20.7	9.0	16.5(w)	16.5(w)	3187	3772	18.4	8.8(x)	5.9(x)	-	3187	3772	18.4	8.8(x)	5.9(x)	-	3187	3772
Hospital Nursing Auxiliary, Cert.	2471	3011	21.9	12.2	17.1(w)	17.1(w)	2430	3170	30.5	35.2(x)	5.9(x)	-	2430	3170	30.5	35.2(x)	5.9(x)	-	2430	3170
Hospital Nursing Orderly, Exp.	2898	3650	25.9	10.6	33.6(w)	33.6(w)	3322	4013	20.8	19.1(x)	6.1(x)	-	3322	4013	20.8	19.1(x)	6.1(x)	-	3322	4013
Hospital Maid	2063	2485	20.5	11.7	16.1(w)	16.1(w)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- (s) From October 1, 1959.
(t) Percentage change calculated on the basis of rates prevailing in the Ottawa zone, after October 1, 1965.
(u) From October 1, 1966 to 1968.
(v) From January 1, 1961.
(w) This represents the percentage difference between the mean of maxima for October 1, 1966 and October 1, 1968.
(x) This percentage change pertains to employees in the Province of Ontario.

SECTION II: OTHER CONDITIONS OF EMPLOYMENT

While rates in the Public Service are now a matter for the parties to collective bargaining to decide, there is no magic formula for establishing rates of pay in the service in relation to those in outside organizations. As has been explained above, there are a number of factors to be considered. However, one of the more important considerations is the "total compensation package", the cost of wages and salaries and other conditions of employment in the federal Public Service as compared with outside organizations. With the advent of collective bargaining in the service other conditions of employment, often referred to as fringe benefits, are now subject to negotiation, except for superannuation, which is governed by the Public Service Superannuation Act.

It is not within the scope of this study to undertake a detailed analysis of other conditions of employment. This would represent a major project in itself. However, some information is presented on other conditions of employment because they form a substantial portion of total compensation for employees, both in the federal Public Service and in industrial and other organizations in the economy. From this point of view, the comparisons which have been made between rates of pay in the service and in outside organizations would not be complete if some mention was not made of them.

Until surveys were conducted by the Pay Research Bureau, other conditions of employment could only be considered in a general way in establishing rates of pay in the Public Service. The first survey undertaken

by the Bureau on other conditions of employment pertained to 1961. Since that time surveys on other conditions of employment have been conducted every other year in industrial and other organizations. Also, surveys have been conducted on the cost of other conditions of employment in the federal Public Service.

Since 1961, the same approach has been used in these surveys. Information has been obtained on the incidence and characteristics as well as the cost to the employer of individual conditions of employment. The costs have been measured in terms of dollars per employee per year as well as in terms of percentage of payroll costs. However, it is necessary to be cautious in discussing costs of other conditions of employment because there are many items which fall under this heading and their characteristics vary a good deal from one organization to another. One of the surveys of the Bureau covered 51 conditions of employment and this is not to suggest that it included all which might have been covered. Table 18 shows the cost for sixteen conditions of employment as a percentage of straight-time payroll as obtained by a personal interview survey from 178 industrial establishments pertaining to the year 1967. This information is shown for office, non-office and office and non-office combined. Table 19 shows the cost to the federal government for essentially the same conditions of employment by category for the final year 1966-67.

The information presented in these tables is not entirely comparable because the information for industrial organizations relates to the office and non-office employees, whereas that for the Public Service is presented by category. Then, not all of the industrial organizations would

necessarily have all the benefits listed. For example, not all organizations contributed toward the cost of provincial hospital universe, but for those which did provide data the cost to them was as shown. Then of course, apart from the conditions of employment shown in the tables, there are many others both in the service and in outside organizations, such as clothing and uniform allowances, parking privileges and in industrial organizations production bonuses, non-production bonuses and many others. However, the total costs of the fifteen conditions of employment in the service are not significantly different for the same benefits in outside organizations, as shown in Tables 18 and 19. In 1967, the cost of other conditions of employment as a percentage of straight-time payroll in the service ranged from 27.05% in the case of operational category classes (1965) to 30.32% for employees in administrative and foreign service category. For essentially the same benefits in outside organizations the cost also as a percentage of straight-time payroll was 26.0% for office, 28.5% for non-office and 27.56% for office and non-office combined.

It should also be recognized that there are other conditions of employment, which may be identified as non-compensation areas and which at little or no cost to the employer assist in promoting the morale and welfare of employees and efficiency in the service. These include educational leave for the upgrading of skills, sick leave provisions which exceed actual earned entitlements, and rating of employee performance.¹

¹ For a more detailed discussion on this subject, refer to Wilkins, T.J. "Some Comments on the Collective Bargaining Scene in the Public Service of Canada", Unpublished Speech, Ottawa, 1969.

TABLE 18: MEAN ANNUAL EMPLOYER EXPENDITURES AS A PERCENTAGE OF STRAIGHT-TIME PAYROLL,
INDUSTRIAL ORGANIZATIONS, JANUARY 1, 1968

	<u>Office</u> %	<u>Non-Office</u> %	<u>Total</u> %
<u>INSURED BENEFIT PLANS</u>			
Group Life Insurance	.58	.52	.55
Provincial Hospital Insurance	.58	.85	.75
Supplementary Hospital Insurance	.19	.19	.19
Surgical-Medical Insurance	.68	.91	.80
Long-Term Disability Insurance	.62	.39	.55
<u>SICK BENEFIT PLANS</u>			
Paid Sick Leave	1.58	1.66	1.61
Sickness Indemnity Insurance	.44	1.06	.83
<u>PAY FOR TIME NOT WORKED</u>			
Paid Vacations	5.12	5.55	5.35
Paid Holidays	3.48	3.64	3.56
Paid Leave for Personal Reasons	.39	.28	.32
Paid Rest Periods	4.00	3.80	3.90
<u>SUPERANNUATION</u>	5.37	5.66	5.42
<u>FINANCIAL BENEFITS</u>			
Severance Pay and Retirement Allowances	2.11	2.14	2.13
<u>PAYMENTS REQUIRED BY LAW</u>			
Workmen's Compensation	.62	1.09	.88
Unemployment Insurance	.46	.76	.62
TOTAL	26.22	28.50	27.56

Source: Pay Research Bureau, Selected Benefits and Working Conditions in Industry, January 1, 1968, Ottawa, 1970.

TABLE 19: MEAN ANNUAL EMPLOYER EXPENDITURES AS A PERCENTAGE OF STRAIGHT-TIME PAYROLL,
SELECTED CONDITIONS OF EMPLOYMENT, BY CATEGORY, FEDERAL PUBLIC SERVICE,
APRIL 1, 1966 TO MARCH 31, 1967

<u>Employer Expenditure as Percent of Straight-Time Payroll</u>					
	<u>Operational (a)</u> %	<u>Admin. & Foreign Service</u> %	<u>Admin. Support</u> %	<u>Scientific & Professional</u> %	<u>Technical</u> %
<u>INSURED BENEFIT PLANS</u>					
Group Life Insurance	-	-	-	-	-
Provincial Hospital Insurance	-	-	-	-	-
Supplementary Hospital Insurance	-	-	-	-	-
Surgical-Medical Insurance	0.64	0.65	0.66	0.51	0.77
Long-Term Disability Insurance	-	-	-	-	-
<u>SICK BENEFIT PLANS</u>					
Paid Sick Leave	2.95	2.11	3.43	1.82	2.13
Sickness Indemnity Insurance	-	-	-	-	-
<u>PAY FOR TIME NOT WORKED</u>					
Paid Vacations	5.32	6.09	5.82	5.68	5.72
Paid Holidays	3.88	3.77	3.77	3.74	3.76
Paid Leave for Personal Reasons	0.17	0.18	0.24	0.16	0.19
Paid Rest Periods	3.99	4.20	4.21	4.30	4.11
<u>SUPERANNUATION</u>					
	10.14	12.75	11.27	12.86	12.74
<u>FINANCIAL BENEFITS</u>					
Severance Pay and Retirement Allowances	0.54	0.42	0.55	0.56	0.41
<u>PAYMENTS REQUIRED BY LAW</u>					
Workmen's Compensation	0.63	0.18	0.36	0.19	0.29
TOTAL	28.39	30.41	30.39	29.89	30.20

(a) For the year April 1, 1964 to March 31, 1965.

Source: Pay Research Bureau, Benefit Usage in the Public Service of Canada, Ottawa, 1969.

CHAPTER IV

CONCLUSION

In this paper, factual information has been presented on rates of pay and changes in rates of pay for classes which are important for rate setting purposes in industrial and other organizations and in the federal Public Service, over the period October 1, 1958 to 1968. Comparisons have also been made between rates of pay in outside organizations and those in the service, with some information being provided on other conditions of employment. In line with the prime objective of this study, to determine the extent to which the general policy with respect to rates of pay in the service has been met over the period under study, it is the purpose of this final chapter to make some evaluation of the data which has been presented.

It is quite clear from information presented in the previous chapters that rates of pay in the service in 1958 were generally below those prevailing in the economy. There is also substantial evidence on file in the Public Service Commission, to show that turnover, particularly for administrative, professional and technical classes, was high during the late fifties and early sixties and that public servants do respond to labour market forces. Incidentally, the data obtained on file, although admittedly limited, are sufficient to show that the old image of the public servant as a feeder in the "public trough" is hardly realistic. Had there not been substantial increases in rates in those years, it is likely that the drain of personnel in these classes would have significantly affected the efficiency of the service.

Over the years from 1958 to 1968 the situation in the federal Public Service has changed from one where rates of pay were generally below those prevailing in the economy to one where rates of pay in the service are generally competitive with those in outside organizations. In fact, it could be argued that for some classes the rates in the service in 1968 were substantially above competitive rates in the economy. However, these discrepancies can be attributed to practical problems involved in wage and salary determination and the need for arriving at reasonable settlements within a reasonable time period during the first round of bargaining. It is likely that any discrepancies which exist will be rectified during negotiations in the future.

It is too early to speculate how collective bargaining in the service will ultimately affect rates of pay in the service as compared with those in outside organizations. It would seem that the rates established during the first round of collective bargaining were not significantly different from what they would have been, had the rates not been bargained. At the same time, collective bargaining theoretically at least, does give employees a voice, through their associations, in determining what their rates and other conditions of employment should be.

One can only conclude that rates of pay in the service have been reasonably well administered over the period under study and in accordance with the policy of the Government. However, it seems that it is not at all desirable that rates of pay in the Public Service be higher than those generally prevailing in the economy. At the same time for those occupations for which personnel are in short supply in

the economy it may be that the Public Service should lead by setting rates somewhat above those for outside counterparts, for short periods of time, to stimulate entrance into them. Also for those occupations for which the federal Public Service is the main employer it may be necessary to follow a similar course of action to ensure sufficient numbers of personnel for such occupations. Usually a good deal of time is required to stimulate interest in and ultimately provide for adequate numbers of personnel in an occupation which are in short supply, both from the point of view of the federal Public Service and the economy generally.

However, there is a delicate balance to be maintained between rates of pay in the federal Public Service with those in outside organizations. If the rates in the service fall too much below average rates in outside organizations, there are implications for morale and efficiency. If on the other hand, the rates in the service are too high generally in relation to those in outside organizations, the result, in a Canadian setting, will be a hardening of bureaucratic tendencies.

Public servants in the federal Public Service should consider themselves fortunate for the high degree of co-operation with respect to the provision and exchange of information on rates of pay which exists between the federal Public Service and industrial and other organizations, as well as between provincial and municipal governments. The degree of co-operation in this regard between these jurisdictions is undoubtedly as high as any other country in the world. If these relationships can be continued and the Public Service of

Canada can maintain rates reasonably well in line with these other jurisdictions this could contribute to a greater interchange and more mobility of personnel to the mutual benefit of all concerned.

BIBLIOGRAPHY

BIBLIOGRAPHY

Arthur Young & Company, Report of Transmission, Printer to the King's Most Excellent Majesty, Ottawa, 1919.

Canada, Civil Service Act, Part IV, Sections 42-52, Ottawa, 1918.

Canada, The Royal Commission of Government Organization, The Queen's Printer, Ottawa, 1962.

Civil Service Commission, Unpublished Data, Ottawa, 1955.

Department of Labour, A Second Survey of Electronic Data Processing in Canada, 1962, Report No. 9C, Ottawa, 1963.

_____, Johnstone, H.S., "Fair Wages Policy and Prevailing Rates", Labour Gazette, September, 1950.

_____, Wage Rates, Salaries and Hours of Labour, Ottawa, various years.

_____, Labour Organizations in Canada, Queen's Printer and Controller of Stationery, Ottawa, 1969.

Department of Manpower and Immigration, Canada Manpower Bulletin, Ottawa, 1969.

_____, University Career Outlook, 1969-70, Ottawa, September, 1969.

Dhalla, N.K., These Canadians, McGraw-Hill of Canada Ltd., Toronto, 1966.

Dominion Bureau of Statistics, Annual Supplement to the Canadian Statistical Review, Ottawa, 1967.

_____, Canada Year Book, Ottawa, 1967 and 1969.

_____, "Daily Bulletin", Ottawa, 1970.

_____, Hospital Statistics, Vol. III, Ottawa, 1967.

_____, Mental Health Statistics, Vol. III, Ottawa, 1967.

_____, 1961 Census of Canada Labour Force, Ottawa, 1963.

_____, Government Division, Federal Government Employment, September, 1959 and 1968, The Queen's Printer, Ottawa, 1960 and 1969.

_____, Special Surveys Division, Unpublished Tables, Ottawa, 1969.

_____, Standard Industrial Classification Manual, Ottawa, 1960.

Douty, H.M., "Wage Differentials: Forces and Counterforces", Monthly Labour Review, March, 1968.

Gauthier, G.E., "Here's How the Civil Service Gets Facts About Setting Wage Rates", Canadian Business, June, 1958.

_____, "The Canadian Pay Research Bureau", Public Personnel Review, October, 1958.

Otis, Jay L. and Leukart, Richard H., Job Evaluation: a basis for sound wage administration, Prentice-Hall, Englewood Cliffs, N.J., 1954.

Pay Research Bureau, Morritt, H.H., "Prevailing Rate Policy and Determination of Prevailing Rates", An Unpublished Paper, Ottawa, 1962.

_____, Scarffe, J.H., Trends in Rates of Pay in Industrial and Other Organizations in Canada, October 1, 1958 to 1968, Ottawa, 1970.

_____, Scarffe, J.H., Trends in Rates of Pay in the Public Service of Canada, October 1, 1958 to 1968, Ottawa, 1970.

_____, Thivierge, G., The Composition of the Public Service of Canada, July, 1968.

_____, Various Reports, various years.

Peitchinis, S.G., The Economics of Labour: Employment and Wages in Canada, McGraw-Hill, Toronto, 1965.

Saunders, G., Wage Determination in Canada, Queen's Printer and Controller of Stationery, 1965.

Schweitzer, Stuart O., "Factors Determining the Inter-industry Structure of Wages", Industrial and Labour Relations Review, January, 1969.

The Classification of the Civil Service of Canada, (Prepared by Authority of the Parliament of Canada under Direction of the Civil Service Commission), Ottawa, Printer to the King's Most Excellent Majesty, 1919.

The Computer Society of Canada, Census of Computers in Canada, Ottawa, various years.

Wilkins, T.J., "Some Comments on the Collective Bargaining Scene in the Public Service of Canada", Unpublished Speech, Ottawa, 1969.

_____, "The Pay Research Bureau", Civil Service Review, September, 1967.

Woods, H.D. and Ostry, S., Labour Policy and Labour Economics in Canada, MacMillan of Canada, Toronto, 1962.

APPENDIX A

CLASS SPECIFICATIONS

Leaf A2 omitted in page numbering.

ECONOMICS, SOCIOLOGY AND STATISTICS GROUP

Economist 1 - Economist 1 *

An entrance grade. Under supervision undertakes assignments within a field of economics for training and development.

Economist 2 - Economist 1 *

A working level grade; may be the entrance grade for highly qualified economists. Under supervision, is responsible for carrying out complete projects in a field of economics.

Economist 3 - Economist 1 *

A full working level grade. Under general supervision, is responsible for projects, some of which are complex, in a field of economics.

Economist 4 - Economist 2 *

A specialist grade and/or a grade which usually involves first level supervision. Under direction, is responsible for projects which are inter-related and concerned with more than one major objective.

Economist 5 - Economist 2 *

A senior specialist grade and/or a grade which usually involves supervision of professional staff. Under general direction, is responsible for a field of economics involving co-ordination and integration of projects with other related fields.

Economist 6 - Economist 3 *

A grade involving responsibilities as economic adviser and division head. Under broad general direction, is responsible for the work of a division involving several fields of economics and the co-ordination and integration of the work with other related fields.

Economist 7 - Economist 4 *

A grade involving responsibilities as senior economic adviser, head of a major division and second in charge of a branch, where economics is a substantive part of the work of the department, OR as the senior economist in a department where economics is not a substantive function. Under very broad direction, is responsible for the work of a division involving several fields of economics and the co-ordination and integration of the work with other fields and departments.

* Present classification title.

ECONOMICS, SOCIOLOGY AND STATISTICS GROUP

Statistician 1 - Statistician 1 *

An entrance grade. Under supervision undertakes assignments within a field of statistics.

Statistician 2 - Statistician 1 *

A working level grade and may be an entrance grade for highly qualified statisticians. Under supervision, is responsible for complete projects in a field of statistics.

Statistician 3 - Statistician 1 *

A full working level grade. Under general supervision is responsible for projects within a field of statistics, some of which are complex.

Statistician 4 - Statistician 2 *

A specialist grade and/or grade which usually involves first level supervision. Under direction is responsible for projects which are inter-related and concerned with more than one major objective.

Statistician 5 - Statistician 2 *

A senior specialist grade and/or grade which usually involves supervision of professional staff. Under general direction is responsible for a field of statistics involving co-ordination and integration of the projects with other related fields.

Chief Statistician 1 - Statistician 3 *

A grade involving responsibilities as a statistical adviser and division head. Under broad general direction of the Dominion Statistician is responsible for the work of a division involving several fields of statistics and the co-ordination and integration of the work with other related fields and departments.

Chief Statistician 2 - Statistician 4 *

A grade involving responsibilities as senior statistical adviser and the work of a major division in the Dominion Bureau of Statistics. Under very broad general direction of the Dominion Statistician is responsible for a major division involving several fields of statistics and the co-ordination and integration of the work with other fields and other departments.

* Present classification title.

ENGINEERING AND LAND SURVEY GROUP

Engineer 1

An entrance grade. Receives on-the-job training in various phases of a field of engineering. Under supervision, performs routine engineering assignments.

Engineer 2

A junior working level. Under general supervision, is responsible for projects or operations of limited scope and complexity, or acts as assistant to a more senior engineer.

Engineer 3

The fully qualified level. Under direction, is responsible for projects or operations requiring familiarity with a broad field of engineering.

Engineer 4

The first level of engineering supervision or specialization. Under direction, is responsible for a number of major projects or operations requiring familiarity with a broad field of engineering; OR, acts as a specialist in a particular phase of a field of engineering.

Engineer 5

Under general direction as a project engineer, is responsible for a number of major projects or operations requiring familiarity with a broad field of engineering; OR, acts as a senior specialist in a particular field of engineering.

Engineer 6

First level involving responsibility for programme planning; makes responsible decisions concerning policy, finance and work programmes. Is expected to tender advice as an authority in an engineering field of major importance to the organization.

Engineer 7

Acts as senior adviser to Chief Engineer or Director. Is responsible for long-range planning and the coordination of programmes in more than one field of engineering.

UNIVERSITY TEACHING GROUP

Assistant Professor - University Teacher 2 *

As defined by the university.

Associate Professor - University Teacher 3 *

As defined by the university.

Professor - University Teacher 4 *

As defined by the university.

* Present classification title.

EDUCATION GROUP

Elementary School Teacher

Junior Matriculation plus two years of training and experience.

NURSING GROUP

Nurse, General Duty - Nurse 1 *

Under supervision performs, in a hospital, ward or unit, various nursing duties requiring graduation from a hospital or university school of nursing.

* Present classification title.

OCCUPATIONAL AND PHYSICAL THERAPY GROUP

Occupational Therapist 1 and 2

Under medical direction and subject to technical advice and control, develops and carries out treatment programmes for assigned patients; maintains records as required; controls use and care of equipment and issue of materials to patients. As experience increases, may allocate and supervise work of less experienced therapists, students and assistants; may provide a limited programme of physiotherapy; may act as Charge Therapist of a one-therapist unit. This grade is the working level for graduates of a recognized school of Occupational Therapy.

Physical Therapist 1 and 2

Under medical direction and subject to technical advice and control, develops and carries out treatment programmes for assigned patients; attends ward rounds for medical briefing; conducts group work exercises and therapy; maintains records as required; cares for and maintains equipment. As experience increases, may allocate and supervise work of less experienced therapists, students and assistants; may provide a limited programme of occupational therapy; may act as Charge Therapist of a one-therapist unit. This grade is the working level for graduates of a recognized school of Physiotherapy.

SOCIAL WORKERS GROUP

Social Worker 1

An entrance grade. Under supervision carries out assignments in family welfare, child welfare, geriatrics, rehabilitation or community development.

Social Worker 2

A working level grade. Under general direction is responsible for a programme of work in family welfare, child welfare, geriatrics, rehabilitation or community development.

Social Worker 3

Under direction is responsible for the administration of a social work programme in a hospital, district or an isolated undeveloped community.

Social Worker 4

Under general direction is responsible for the social work programme of a large hospital (over 20 units involving over 750 beds) or a large geographical area, i.e. a city such as Toronto in the Department of Veterans Affairs, a province in the Indian Affairs Branch or an equivalent area in the Northern Development Branch of the Department of Indian Affairs and Northern Development.

Social Worker 5

Under general direction is responsible for the administration of a social work programme in a large geographical area, i.e. the MacKenzie and the Arctic Districts and the province of British Columbia in the Indian Affairs Branch of the Department of Indian Affairs and Northern Development.

Social Worker 6

Under administrative direction, as a chief social worker in a department is responsible for a broadly based family and community programme,

OR

Acts as consultant and adviser in a broad segment or area of social work.

COMPUTER SYSTEMS ADMINISTRATION GROUP

Level 1

Under the general supervision of a programming team leader, develops and writes programmes and machine operating instructions for a computer installation including peripheral equipment; collect and documents information required for future reference to completed computer systems programmes; modifies continuing computer systems programmes; and performs other related duties.

Level 2

Under the supervision of 1st level supervisor, prepares electronic computer programmes and machine operating instructions for problem-solving and mass data applications for processing in house or on outside contractors' computers; adapts or revises computer programmes written for various computer installations; and performs other related duties.

OR

Under the general supervision of a project leader participates in studies to establish the technical and economic feasibility of proposed computer applications; plans and develops automated data processing systems for mass data applications relating to the development, maintenance and analysis of automated master files.

Level 3

Under the direction of 2nd level supervisor, plans and directs the work of staff providing a computer systems analysis and programming service for mass data applications. Prepares preliminary systems proposals and cost estimates; advises on the installation and maintenance of automated data processing systems.

Level 4

Under the direction of 3rd level supervisor, directs the activities of a Computer Systems Analysis and Programming Section, in which from 20 to 40 computer systems analysts, programmers and clerks are employed in the development and maintenance of applications for processing data, using IBM Model 7074 and Model 1401 support computers; provides information and advice to senior officials and user departments; and performs other related duties.

Level 5

Under the general direction of a director, plans and directs the activities of the Data Processing Service which include the planning development and processing of mass data and problem-solving applications using departmental and outside contract facilities; advises users and management officials on the use and development of data processing services.

CLERICAL AND REGULATORY GROUP

Clerk 1

Under close supervision, performs one or several routine or repetitive clerical duties not requiring judgement in the selection or interpretation of office procedures or directives.

Clerk 2

Under supervision, performs clerical work requiring experience in office routine and judgement in following directives. The work requires a good knowledge of standardized clerical methods and procedures and may consist of several standardized operations; OR, acts as group leader to a very small staff engaged in simple, routine or repetitive work (e.g. mailing room).

Clerk 3

Under general supervision, performs relatively difficult or complex clerical work where procedures are not entirely standardized. Selects methods and procedures when unusual problems arise. Work requires a good knowledge of clerical methods and procedures related to the work being performed and may consist of several varied operations.

DATA PROCESSING GROUP

Key Punch Operator - Numeric Machine

Under the supervision of a key punch supervisor, operates a numeric key punch machine to record one type or closely related types of data on tabulating cards, verifies punch cards, and performs related clerical duties. Work is of a repetitive nature and is performed under close and constant checking.

Key Punch Operator - Alpha-numeric Machine

Under the supervision of a key punch supervisor, operates on alpha-numeric key punch machine to record a variety of accounting and statistical data on tabulating cards, verifies punched cards, and performs related clerical duties. Work is governed by well-defined methods and procedures and there is little scope for initiative or judgement.

SECRETARIAL, STENOGRAPHIC, TYPING GROUP

Level 1

Under close supervision, carries out a variety of typing assignments the subject matter of which normally contains common terminology of business and repetitive terms relative to a specialized function.

Level 2

Under general supervision, carries out a variety of typing assignments the subject matter of which is characterized by difficult, specialized terminology, as in legal, medical, scientific or technical reports and correspondence.

Level 3

Under close supervision, takes dictation and transcribes correspondence, reports and other matter from notes and transcribing machines. Subject matter of work normally contains common terminology of government business and repetitive terms relative to a specialized function.

Level 4

Under general supervision, takes dictation and transcribes notes containing difficult, specialized terminology as in legal, medical, scientific or technical reports and correspondence.

DRAFTING AND ILLUSTRATION GROUP

Draftsman, Engineering and Architectural 1 - Drafting and Illustration Level 1 *

This is a training level for employees with demonstrated aptitude for drawing. They follow established drafting methods and procedures and acquire a knowledge of drafting techniques, including a knowledge of the use of materials, symbols, tolerances, finishes and production or construction methods.

Draftsman, Engineering and Architectural 2 - Drafting and Illustration Level 2 *

This is a working level. Under supervision is responsible for preparing maps, charts, diagrams and drawings from sketches and general assemblies and layouts. Responsible for planning the presentation of the work but receives advice and assistance as to methods of approach, precedents, and source material. Responsible for accurate dimensioning and detail of work performed.

Draftsman, Engineering and Architectural 3 - Drafting and Illustration Level 4 *

This is an experienced working level, capable of a high standard of production. Under general supervision prepares freehand sketches, maps, charts, layouts, drawings, and diagrams, and specifies materials, finishes and production or construction methods. May suggest improvements in design detail, layouts and construction.

* Present classification title.

ENGINEERING AND SCIENTIFIC SUPPORT GROUP

Technician 1, Engineering - Technician 1 *

A training level. Under close supervision performs simple operations, following prescribed procedures and not requiring previous experience.

Technician 2, Engineering - Technician 2 *

The work at this level follows detailed procedures which are either established and repetitive or which are specified by the supervisor at the time of performance. The duties require some readily acquired skill or knowledge.

Technician 3, Engineering - Technician 3 *

Positions at this level are involved in the carrying out of standardized or prescribed operations in Testing, Data Analysis and Presentation, and Hydraulic Field Measurements requiring a limited background of knowledge of engineering methods and practices in the specialization.

Technician 4, Engineering - Technician 4 *

Positions at this level are involved in the carrying out of a variable sequence of operations in Testing, Data Analysis and Presentation, Hydraulic Field Measurements or Design that are not completely standardized or prescribed and that require a knowledge of engineering principles and practices, based on training and experience, in the specialization. A variety of standard references, guides, and precedents are used to obtain the needed information and to select and adapt methods and procedures.

Technician 5, Engineering - Technician 5 *

Positions at this level are involved in the planning and carrying out of non-routine assignments of substantial variety and complexity based on specified operational plans. A background of understanding of related engineering principles and practices plus intensive training and diversified experience in the field of activity is required for positions at this level. Assignments are performed in Testing, Data Analysis and Presentation, Hydraulic Field Measurements, Design and Specification and Research and Development.

* Present classification title.

ENGINEERING AND SCIENTIFIC SUPPORT GROUP

Technician 1, Laboratory - Technician 1 *

An entrance level, the duties performed involve routine or repetitive work for the purpose of acquiring familiarity with laboratory or field methods and techniques.

Technician 2, Laboratory - Technician 2 *

A working level, independently performs routine or repetitive work consisting of a variety of simple techniques and of a few standard techniques.

Technician 3, Laboratory - Technician 3 *

The work at this level is largely routine or repetitive and consists of the independent performance of a variety of standard techniques requiring some skill and judgement in their application.

Technician 4, Laboratory - Technician 4 *

The work at this level is generally non-repetitive and consists of the independent performance of complex techniques requiring substantial skill and judgement in their application.

Technician 5, Laboratory - Technician 5 *

The work at this level is characterized by the independent performance of difficult techniques which require a high degree of skill and judgement in their application.

* Present classification title.

ENGINEERING AND SCIENTIFIC SUPPORT GROUP

Technician 1, Electronics

This is a training level, under close supervision performs assigned tasks on non-critical components in many types of electronic equipment in order to acquire a knowledge of the specific equipment in service and the detail of its operation, OR after one year of experience works independently in a maintenance complex with low equipment variety and intricacy.

Technician 2, Electronics, Maintenance

This is the working level in a maintenance complex having an intermediate level of equipment variety and intricacy. Under general supervision, independently performs maintenance tasks involving the checking, repairing, installing and adjusting of all units of the equipment and systems to achieve functional performance.

Technician 2, Electronics, Regional Aircraft Shop

In a Regional Aircraft Workshop, checks, repairs, installs, adjusts to achieve functional performance on all units of electronic equipment in the aircraft assigned to a Region.

Technician 3, Electronics, Maintenance

This is the working level in a maintenance complex having a high level of equipment variety and intricacy; checks, repairs, installs and adjusts all units of equipment and systems in order to achieve functional performance.

Technician 3, Electronics, Ottawa Aircraft Shop

In the Ottawa Aircraft Workshop, checks, repairs, installs, adjusts to achieve functional performance, all units of electronic equipment found in the aircraft fleet including executive transport aircraft. This fleet of 62 aircraft is composed of Viscounts, DC 3s, Jet Star, Beechcrafts and Helicopters.

Technician 3, Electronics, Maintenance, Supervisory

In a maintenance complex, having an intermediate level of equipment variety and intricacy, acts as the senior technical authority, checking, repairing, installing and adjusting all units of the electronic equipment and systems to assure specification performance; and assumes the responsibility for the maintenance and operation of the complex, supervising 1-4 Technicians, Electronics, and a similar number of Radio Operators.

Technician 4, Electronics, Aircraft Workshop, Supervisory

In a Regional Aircraft Shop, is responsible for the operation of the shops; supervises and checks, repairs, installs and adjusts to achieve

Technician 4, Electronics, Aircraft Workshop, Supervisory (Cont'd.)

specification performance on all units of electronic equipment in the aircraft assigned to the Region OR in the Ottawa Aircraft Workshop acts as shift supervisor; supervises and checks, repairs, installs and adjusts to achieve functional performance, all units of electronic equipment found in the aircraft fleet including executive transport aircraft.

Technician 4, Electronics, Construction

In the field independently installs, interconnects, tests, adjusts and modifies equipments and materials in accordance with design to achieve functional performance. Tasks assigned are a segment of a project or a minor project in the construction of stations.

Note: This is the fully qualified or working level in installation of electronic equipments and systems of any type in service. The greater versatility required and poor working conditions associated with construction are significant in raising the highest construction working level above the highest maintenance working level.

Technician 5, Electronics, Maintenance, Supervisory

As senior technical authority in a maintenance complex having a high level of equipment variety and intricacy, co-ordinates and participates in preventive and emergency maintenance to assure specification performance on the electronic equipment and systems. Supervises from 3 to 10 Technicians 3, Electronics depending on the size of the complex.

Technician 5, Electronics, Construction

As a senior project Technician, Electronics, in the field supervises and works with subordinate Technicians, Electronics engaged in the construction of stations of all types of electronic equipment and systems. Details and organizes the personnel tools, materials and test equipment necessary for the project.

Technician 6, Electronics

In a regional office co-ordinates, supervises and works on a programme of construction in a specialty area to achieve specification performance OR co-ordinates and participates as a specialist in calibration, recalibration and inspection of technical plant on all types of equipment and systems to assure specification performance.

Technician 7, Electronics

In Construction, from a regional office co-ordinates, supervises and works on the programme of construction for the region to assure specification performance of all equipment and systems OR, from headquarters continually revises concepts, methods, procedures and specifications for the construction of all equipment and systems of the specialty to assure universal application of preferred construction practices.

OR

Technician 7. Electronics (Cont'd.)

In Maintenance, from a regional office acts as the senior technical authority co-ordinating, supervising and working on the maintenance programme of the region to assure specification performance of all types of equipment and systems OR, from headquarters in a specialty group prepares and continually revises concepts, methods, procedures and specifications for the maintenance of all equipment and systems of the specialty, to assure universal implementation of preferred maintenance practices.

FIREFIGHTER GROUP

Firefighter - Firefighter 1 *

Qualified firemen excluding cadets.

CORRECTIONAL GROUP

Police Constable

Under general supervision, patrols an assigned area, directs and controls traffic, investigates accidents and complaints and performs clerical work and other duties related to the preservation of peace and good order.

* Present classification title.

GENERAL LABOUR AND TRADES GROUP

Carpenter, Maintenance - Woodworking Sub-Group Level 9 *

A journeyman class involving the skilled erection, installation, alteration and repair of wooden structures using wood or similar material. Working from blueprints, sketches, specifications or personal diagnosis, makes all necessary preparations for his own work, such as planning and layout. Excluded are similar occupations exclusively employed in the processing of a product or in one specialized field of the trade such as cabinet maker.

Electrician, Maintenance - Electrical Installing and Maintaining Sub-Group Level 10 *

A journeyman class involving skilled installation, modification, repair and testing of electrical fixtures, motors, apparatus, control equipment and wiring as used in the light and power systems of buildings. Working from blueprints, sketches, specifications or personal diagnosis, makes all necessary preparations for his own work, such as planning and layout. Excluded are similar occupations involving exclusive employment in one specialized field of the trade, such as line work, motor rewinding automotive electrical systems and production-line occupations.

* Present classification title.

GENERAL SERVICES GROUP

Cleaning Service Man - Building Services Level 2 *

Performs specified heavy cleaning duties in office buildings and plant service areas, such as stores, lounges, halls, ramps, washrooms, shipping and receiving areas, etc. ... May maintain grounds by cutting grass, picking up litter, shovelling snow. Excluded are: occupations involving cleaning of buses, trams and coaches; part-time cleaners; and occupations involving continuous employment on light cleaning duties (normally performed by female employees).

Storeman 2 - Stores Services Level 4 *

Under supervision is responsible for the operation of a stores section (e.g. automotive spares, clothing, etc. ...) of a supply unit providing a direct support service to a line operation.

OR

Under supervision is responsible for a small section (i.e. a small range of commodities, e.g. electrical and carburetor spares and running spares, electro-mechanical parts and assemblies, protective clothing and footwear, etc.) in a supply depot or warehouse.

Delivery Truck Driver

Places items in truck in order of delivery; drives a truck to deliver items to numerous addresses on a specified route; loads and unloads items; may collect payment for C.O.D. orders and turn in cash collected. Excluded are long-distance inter-city drivers, those delivering truckload lots of merchandise, and route salesmen.

Meter Reader

Reads residential and commercial meters to note consumption of electricity, gas, steam or water during a prescribed period of time; records meter readings, reports changes in customer's location or rate classification, leaks, meter tampering, power diversion and other irregularities. May present and collect customers' accounts.

* Present classification title.

HEATING, POWER AND STATIONARY PLANT OPERATION GROUP

Stationary Engineer 3 - Heating, Power and Stationary Plant Operation
Level 4 *

Operates and maintains, under provincial certificate, a stationary steam, refrigeration or compressor plant (or a combination of such plants) and auxiliary equipment as:

Chief in a

*Low pressure plant of over 600 registered H.P.

**High pressure plant of 201 to less than 600 registered H.P.

Refrigeration or compressor plant of over 400 registered H.P.

OR

Shift engineer in a high pressure plant exceeding 600 registered H.P.

* Low pressure plant: A steam plant which has safety valves set to relieve the pressure at 15 PSI or less or a hot water plant operating at 30 PSI or less.

** High pressure plant: A steam plant which has safety valves set to relieve the pressure at over 15 PSI or a hot water plant operating at over 30 PSI.

* Present classification title.

HOSPITAL SERVICES GROUP

Hospital Nursing Auxiliary, Certified - Hospital Services Level 4*

Under immediate supervision of a graduate nurse, assists the professional nursing staff in a hospital by performing routine or less skilled tasks in the care of patients. Only included are those certified or licensed by a Nursing Association, Province or other recognized agency as having completed at least 10 months of accredited formal course work and qualifying examinations.

Hospital Nursing Orderly, Experienced - Hospital Services Level 5*

Performs for male patients a wide variety of nursing care and treatment procedures requiring training on aseptic technique; sets up and assists with anaesthetic and orthopaedic equipment, suction equipment, material for plastic casts, sterile solutions; performs regularly assigned duties in a specialty unit (e.g. gives morning and evening care, catheterization and genitourinary treatments). (This grade is the working level for experienced nursing orderlies who have successfully completed a course of instruction and who have had at least twenty-four months of combined training and experience.)

Hospital Cleaning Service Man - Hospital Services Level 2*

Sweeps, washes and polishes floors, walls and windows, and services washrooms; collects and disposes of refuse. May keep grounds tidy. May remove snow from sidewalks, driveways and platforms. (Charwoman not included.)

Hospital Cook - Hospital Services Level 4*

Under general supervision is responsible for cooking full meals in kitchens serving limited numbers of patients and/or employees, or in kitchens serving larger numbers, specializes in preparing cooking meats, fish and similar foods, or in preparing and mixing ingredients for desserts, pastries, fillings and other baked goods. Employees of this grade must be generally skilled in the preparation, cooking and serving of food, or especially skilled in one or more recognized culinary specialties. May be required to instruct and supervise junior staff.

Hospital Maid - Hospital Services Level 1*

Under direction, assists in maintaining the general cleanliness of the wards and residences of a hospital or institution. May assist in duties such as taking meals to patients, distributing nourishment and ice water, and in collecting empty trays, dishes, and wash basins. Seldom performs any personal service for patients.