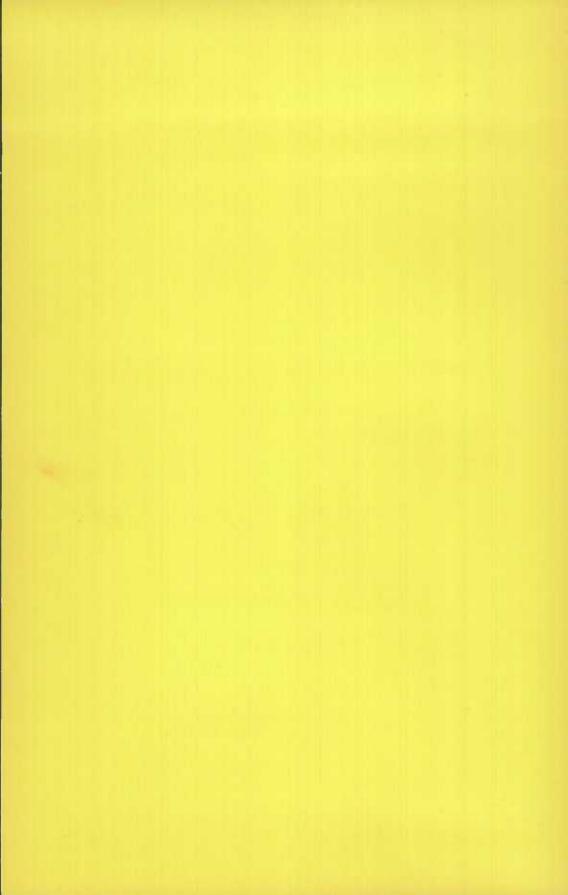


Annual Report

# DOMINION BUREAU OF STATISTICS

For the Fiscal Year ended March 31,1959



# DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS

CATALOGUE No. 11-201

# ANNUAL REPORT

OF THE

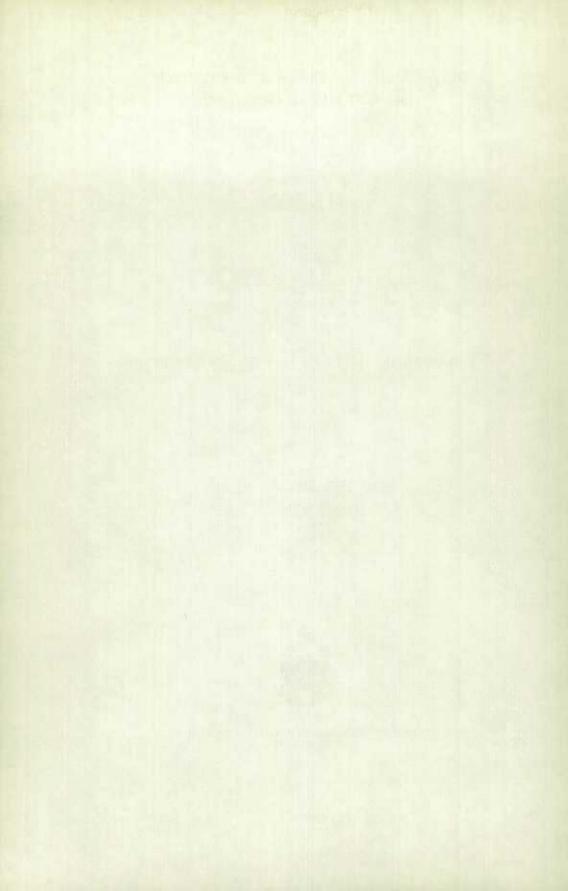
## DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR ENDED MARCH 31, 1959



CANADA

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY OTTAWA, 1960



To His Excellency Major-General Georges P. Vanier, D.S.O., M.C., C.D., Governor General and Commander-in-Chief of Canada.

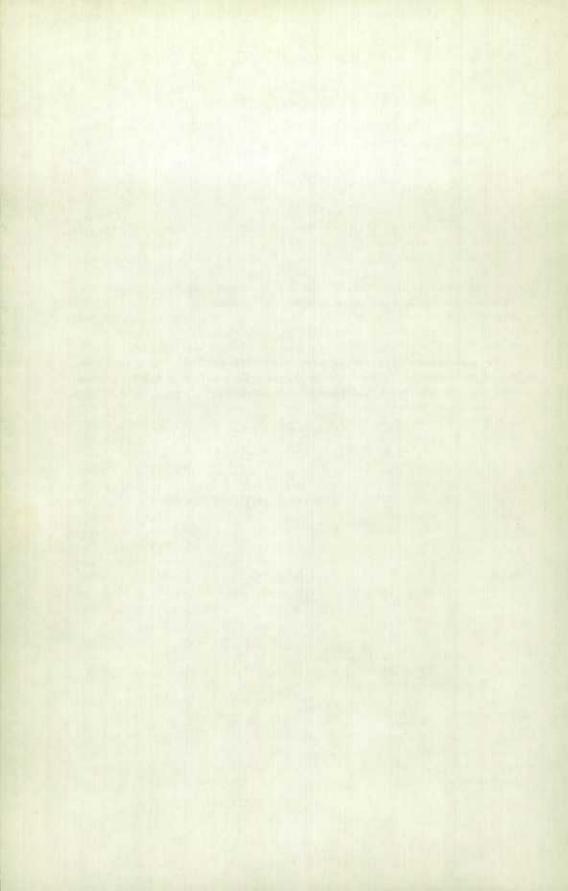
The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1959.

Respectfully submitted,

Gordon Churchill

Minister of Trade and Commerce

Ottawa, Canada January 1960



### REPORT OF THE DOMINION STATISTICIAN

THE HONOURABLE GORDON CHURCHILL, MINISTER OF TRADE AND COMMERCE, OTTAWA.

Sir, - The year 1958-59 marks the fortieth year of the Dominion Bureau of Statistics which assumed its responsibilities as a central statistical agency in 1918. Growth during forty years has been almost continuous and pressure for Dominion Bureau of Statistics services from government business and the public continues. At April 1, 1959 the staff numbered some 1,700. Since that date additional duties have been assumed and some further increase in staff has taken place. Need for additional services led to growth during the year in such fields as judicial statistics, hospital statistics and pension fund statistics. More complete information relating to crime and the administration of justice was required. This was caused by developments in the correctional field, notably the establishment of a National Parole Board, and by growing public concern with the consequences of crime and delinquency. Development of a joint federal-provincial hospital insurance programme has called for more precise information on the operation and utilization of hospital services; the spread of industrial pension schemes has led to public and governmental interest in their social and financial characteristics.

Although less rapid growth took place in the more fully developed fields of the Dominion Bureau of Statistics activities, pressure on resources continued and efforts were made to increase efficiency by improved organization and by better central administration. A major re-organization was initiated in the Industry and Merchandising Division to achieve more effective use of both clerical and professional staff. The results of this re-organization will be studied carefully to determine whether some of the principles involved may have a wider application. A new position of an organization and classification officer in the central administration of the Dominion Bureau of Statistics has been filled, and plans are under way for the addition of a well-qualified staff training officer.

Planning was pushed forward during the year for acquisition of a largesized electronic computer which will constitute the heart of a computer centre to serve both the Dominion Bureau of Statistics and other government departments. The first major task of the computer, expected to be delivered late in 1960, will be the processing of the 1961 Census of Population, Housing and Agriculture.

Like other employers, DBS is confronted with a shortage of qualified professional personnel and attaches importance to the efficient utilization of present staff resources, and to the development of junior staff into positions of greater responsibility. A series of courses, designed to develop a degree

of sampling skills within divisions, has been initiated in the theory and practice of sampling in order to utilize this economical method of collection and to make optimum use of our small group of sampling specialists.

Increasing attention was devoted during the year to preparation for the 1961 Census of Population, Housing and Agriculture. Surveys were made of the needs of users of census material, and detailed planning was commenced on census procedures. New recording and tabulation equipment, including an electronic document reader and the large electronic computer, necessitate the completion of many aspects of the census operation earlier than in the past.

An important survey of farm and farm-family expenditure and income was undertaken during the year to provide an up-to-date basis for statistics on farm finance and production which are of growing importance to governments and farm organizations.

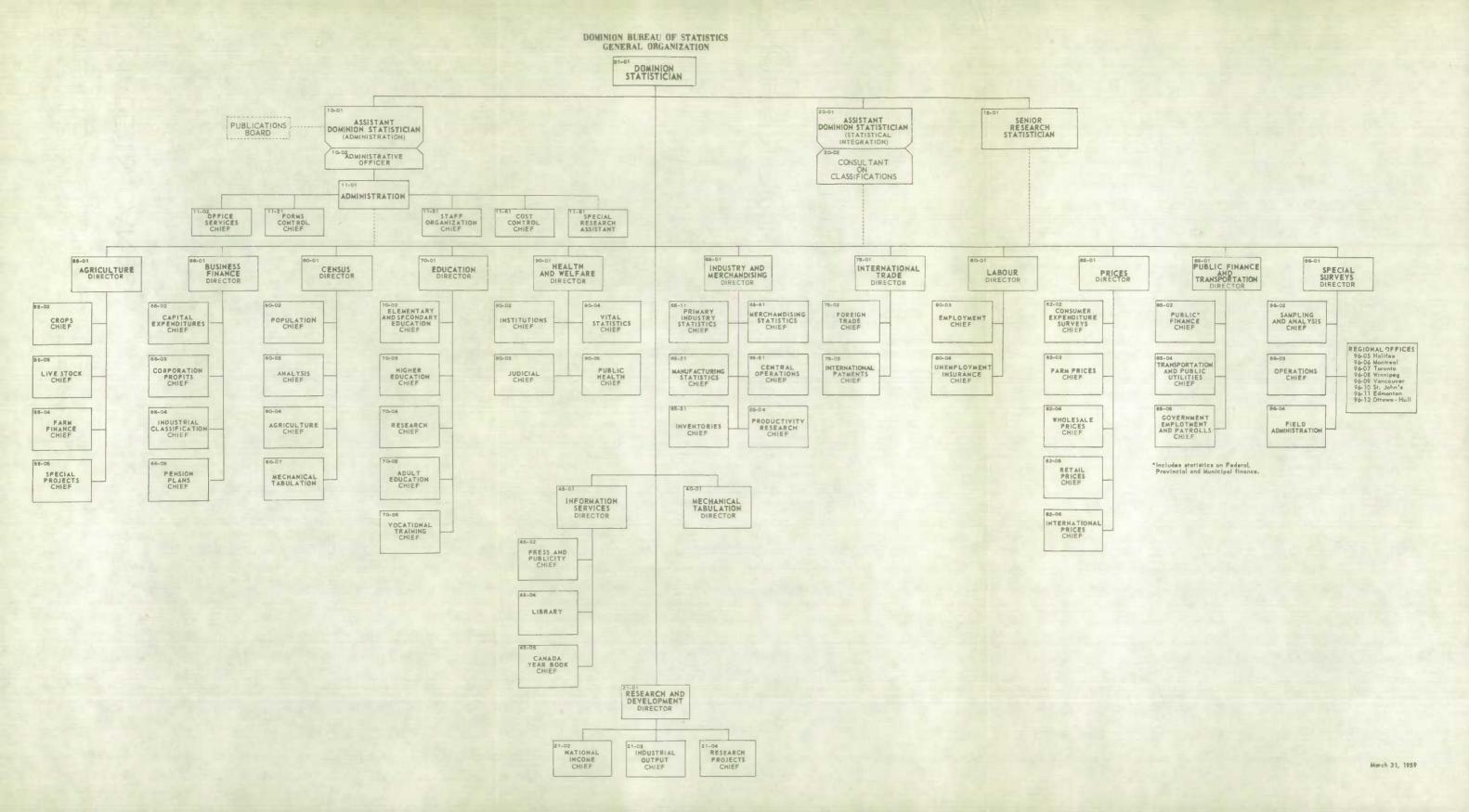
Close contact was maintained with government and other suppliers and users of statistics and with international agencies. A most helpful one-week conference was held at DBS in October 1958 with a group of senior statisticians of the United Kingdom government, led by the Director of the United Kingdom Central Statistical Office. Throughout the year officers studying under the Colombo Plan and United Nations auspices spent extended periods in DBS studying the work of the agency.

A more detailed review of operations of DBS follows, describing briefly the structure of the various divisions and their evolution in meeting the growing needs of the Canadian community for detailed and accurate statistical information on Canadian social and economic life. The accomplishments of the past year reflect the effectiveness with which the individual members of the staff performed their day-to-day duties.

Dominion Statistician

Walter E. Duffett

Ottawa, Canada January 1960 DOMINION BUREAU OF STATISTICS Chart showing organization March 31, 1959



### ADMINISTRATION DIVISION

The division is charged with operating many services necessary for the effective functioning of the organization, including personnel administration, office services, accounts and budgetary control, and forms design. Recently the division assumed responsibility for studies preparatory to the selection and installation of an electronic data processing centre.

A study, commenced in 1958, to assess the feasibility of a proposal for a Data Processing Centre in the Dominion Bureau of Statistics was completed during the year. A report was presented to the Interdepartmental Committee on Electronic Computers and this Committee concurred that such a centre should be established. The recommendation was accepted by Treasury Board and a Treasury Board Minute granted authority to proceed with the plans.

In the course of the feasibility study thirteen suppliers were provided with specifications and requested to submit proposals for a data processing system. Among other considerations suppliers were requested to give particular attention to equipment capable of translating census data collected in the field directly to magnetic tape. While some suppliers failed to respond with proposals, a number of systems were submitted for study. These were examined carefully and the 1BM 705 model III computer, together with a Document-To-Tape Reader, was selected.

Apart from using the installation for processing the 1961 Census of Canada, it is proposed that a considerable number of regular statistical series will be processed on the system. These will probably include employment and payrolls, federal employment, monthly labour force, imports and exports, etc., as well as seasonal adjustment of economic indicators.

The personnel section is concerned with a wide range of services to the staff and co-operates with the Civil Service Commission in the selection and appointment of new employees. The section assists in the preparation of the annual establishment review for presentation to the Minister and Treasury Board at the time of the main estimates.

During this last year provision was made for a continuing position of an Organization and Classification Officer. The size of the Dominion Bureau of Statistics and the technical nature of the work performed warrants employment of an officer at a responsible level to devote his full attention to matters of organization and establishment and to act in a liaison capacity with the Civil Service Commission.

The Office Services Section maintained addressograph, drafting, varityping, mail and messenger, supply and typing services.

The Forms Control Section, established some years ago to assist in the simplification of paper work, contributed during the year to the revision of procedures employed in distributing Dominion Bureau of Statistics publications.

The Accounts Section is responsible for preparing estimates of the funds needed to operate the organization and to maintain proper control over expenditure.

During the fiscal year ninety suggestions were received and evaluated by the Suggestions Award Board. A total of twenty-four awards were granted of which ten were for cash totalling in excess of \$1,000. The fourteen remaining were merchandise of which ten were small, amounting to token awards.

Development of suitable and consistent classifications for statistical material is of great importance to the work of the Dominion Bureau of Statistics. Under the guidance of the Consultant on Classifications work continued on the preparation and implementation of standard, industrial, commodity and occupational classifications. A draft Revised Standard Industrial Classification Manual, was distributed to interested persons and firms requesting comments and suggestions and leading to the completion of a final revised draft of that document. Under the direction of the Consultant on Classifications, work began on a standard list of establishments while the Index to the Standard Commodity Classifications was completed.

The Advisory Board of Publications was established some years ago to assist the Dominion Statistician in ensuring the orderly publication of DBS documents. Throughout the past year, as well as exercising its normal functions, the Board acted with officials of the Information Services Division and the Queen's Printer in revising arrangements for the distribution of Dominion Bureau of Statistics publications. The new publications policy, implemented in January 1959, involved substantial price increases in order to bring prices charged more closely into line with the printing costs.

### AGRICULTURE DIVISION

The functions of the Agriculture Division include the study of statistical material to be collected from agriculture, the collection and compilation of current data, the preparation of reports and the answering of inquiries. These reports and inquiries are concerned with production, distribution and use of agricultural products, quantities and cost of goods and services used by farmers, and the income accruing to farmers.

The Dominion Bureau of Statistics does not collect all the statistics concerning the agriculture industry. The Board of Grain Commissioners and the Canada Department of Agriculture in the course of their regular work provide commercial marketing data for grains, seeds and a number of livestock and livestock products. The Census Division of DBS collects data on the structure of the agriculture industry, and otherf divisions collect data on prices and utilization of farm products. The Agriculture Division is responsible mainly for collection of current data at the farm level. However, in the case of some agricultural manufacturing plants, such as dairy factories and flour mills, surveys are conducted monthly on a full-coverage basis. In other areas of agricultural activity sampling techniques are used. Among the sample surveys are: the June and December crop and livestock surveys from which estimates of crop acreages and numbers of livestock are made; seasonal crop surveys (field crops, oil seeds, fruits and vegetables); monthly

farm prices; and poultry, dairy, fur farm and hog surveys. For the dairy factory surveys and some of the farm surveys, the provinces co-operate with the Dominion Bureau of Statistics in the collection and tabulation of data.

The Agriculture Division is comprised of four sections: Crops, Livestock, Special Projects and Farm Finance. There is one field office situated at Truro, Nova Scotia, established to aid in developing agricultural statistical work in the Atlantic Provinces.

Work in the Crops Section during the year involved the extension of the new survey of yields on summerfallow and stubble to all three of the Prairie Provinces. Data were also obtained from this survey on the proportions of the more important crops sown on summerfallow. This was undertaken at the request of several agencies including the Provincial Department of Agriculture. The data so obtained have been useful, not only to agencies outside the Dominion Bureau of Statistics, but to the Crops Section in appraising the accuracy of its own crop estimates.

In a continuing search to find methods to improve its own techniques of crop forecasting the section maintained liaison with the United States Department of Agriculture where field work in Kansas was observed. Records of the weights of samples of crops growing under different conditions of light, moisture, heat, etc., are kept at various stages of the crop season. These are related to the final yield obtained from the crops when they are harvested. Experiments indicate the possibility of forecasting final yields from this background information by comparing weights of samples taken at selected times with the yields of crops supplying similar weight samples at comparable points of time in the growing season.

Further studies were made during 1958-59 on methods of estimating stocks of grain on farms. Survey questionnaires were reviewed and changes made where warranted. The small fruits surveys were strengthened while the estimating program for vegetable crops was extended, making data available for some crops not covered previously.

A re-organization of the clerical operations within the Livestock Section was undertaken. Many of the clerical staffs of the Dairy, Poultry and Livestock Estimates Units were amalgamated into a single clerical pool. This was undertaken to improve over-all efficiency and broaden the knowledge and usefulness of the individual clerks.

Because of changing production and marketing conditions for poultry along with rapidly increasing specialization among producers, changes were necessary in schedules used in surveying this industry. Work was carried out by the Interdepartmental Statistics Committee on the Department of Agriculture schedules used in obtaining additional breakdowns of data on chick hatches, output for broiler production and turkey poult hatch. Dominion Bureau of Statistics schedules for the special turkey survey were redesigned and, in co-operation with the Farm Economics and Statistics Division of the Ontario Department of Agriculture, a special survey was conducted of commercial duck and goose farms.

The Special Projects Section was fully engaged during the year, in cooperation with other divisions of the Dominion Bureau of Statistics and with
the Department of Agriculture, in making a sample survey of farm-family
expenditure and income during 1958, designed to yield information on a provincial basis of the principal items of income and expenditure. A sample of
9,700 farms was used for the farm business expenditure and income survey
and a sample of 4,000 farms for the survey of family living expenditure. The
considerable array of material on expenditure and income will provide a background of data in areas where statistics have not existed to date. For instance, knowledge will be gained of the distribution of income among farm
families by size and source of income, together with estimates of income
received by farm families from sources other than the farm. The statistics
will be used for establishing benchmarks for farm finance data and weights
in indexes of prices paid by farmers.

During the year the Farm Finance Section completed revisions of farm income estimates based on data made available from the 1951 and 1956 censuses of agriculture. In the process of revision an attempt was made to include some of the expense items which up to this time had been omitted because of lack of information; this included such items as electricity, feeder cattle purchases and certain livestock services. Revisions were also completed for the estimated values of farm capital, which includes farm land and buildings, machinery and livestock.

### BUSINESS FINANCE DIVISION

During the year the title of the division was changed from General Assignments to Business Finance to better describe its functions. It consists of four sections—Capital Expenditures, Industrial Classification (formerly Forecast Surveys, and Organization and Planning respectively), Corporation Profits and Pension Plans.

Work of the Capital Expenditures Section consists of gathering and publishing information concerning investment intentions of both private and public sectors in the fields of construction, including housing, and machinery and equipment. It is important that business and government have prior knowledge of such intentions because expenditures of this kind exercise considerable impact on the general level of economic activity, while the size and content of the program is a valuable indicator of the demands likely to be placed on various segments of Canadian business and manpower in carrying out the program.

The report, Private and Public Investment in Canada, Outlook 1959, issued during the last quarter of the fiscal year, covered capital spending intentions for 1959 as reflected at the end of 1958, together with comparative figures for 1957 and 1958.

Building Permits, released monthly, provides data for one thousand municipalities which are used to determine trends in construction activity at the local level. A publication Construction in Canada 1956-1958, was released during the year. The increased number of requests for information on the construction industry led to an investigation to determine the areas of construction statistics requiring development.

In the Corporation Profits Section estimates of profits and related data of incorporated Canadian companies were released for the fourth quarter of 1957 and the first three quarters of 1958. Arrangements were made for this section to assume responsibility for certain work on corporate taxation previously done in the Research and Development Division and required for the National Accounts and Corporation Profits figures.

In the Industrial Classification Section a report, Industrial Research—Development Expenditures in Canada, 1957, was released showing the magnitude and direction of research activities conducted by Canadian industry. Preparatory work was carried out for a corresponding survey of research-development activity conducted by federal government departments and agencies. This is the first step in expanding the research survey into the non-industrial field, in an attempt to secure knowledge of all research activity in Canada.

The survey of new establishments continued throughout the year, with the information so gathered published in June and December 1958, and providing the names, addresses and principal products of over 4,000 new firms. Although centred on manufacturing, the survey was expanded during the last quarter to include wholesale trade.

To assist the Central Mortgage and Housing Corporation the section completed a survey of mortgage and agreements of sale held in estates, trusts and agencies. The section assumed responsibility for the monthly series, Cheques Cashed in Clearing Centres, and the quarterly series, Commercial Failures Under Provisions of the Bankruptcy and Winding-Up Acts, formerly the responsibility of the Research and Development Division. Preliminary work started on a standard list of establishments as used by the various divisions of the Dominion Bureau of Statistics in collecting data. When completed the basis will be laid for direct comparability of data throughout the organization.

The Pension Plans Section was set up during the year to assume and enlarge work on pension statistics formerly compiled in the Industrial Classification Section. The growth of such plans makes them an important medium for personal savings, and the large sum of money involved has far reaching implications in the fields of labour, welfare and finance.

### CENSUS DIVISION

The Census Division is responsible for the Censuses of Population, Housing and Agriculture.

During the fiscal year, planning for the 1961 Decennial Census constituted the main activity of the division. Planning was initiated under the

direction of the Census Executive Committee, a policy-making group, of which the Dominion Statistician is Chairman and which includes directors and statisticians of a number of divisions as well as personnel from the Census Division itself. The Census Executive Committee held twenty-seven meetings during the year and, in addition, numerous meetings were held by the various working committees existing to arrange details of organization, planning and subject matter. Two new working committees were formed to deal with training and publicity.

Arrangements for the census were affected by the decision to purchase electronic data processing equipment for use in the Dominion Bureau of Statistics. This decision made it possible to proceed with the planning of a comprehensive Census Test as early as June 1959. This test, a full-scale enumeration of two towns in Ontario and Quebec, served as a 'dry-run' for checking the efficiency of training, field operations and processing procedures.

Activities of the Population and Agriculture Sections were largely centred in preparation for the 1961 Census and the Census Test. Innovations under consideration for use in the 1961 Census and coming under test in June 1959 are: a new form of document for use with electronic data processing equipment, use of sample methods to obtain certain population data and utilization of the services of postal carriers for the purpose of insuring more complete coverage. Tentative plans for a tabulation program have been outlined and preliminary investigations started towards defining Census Tracts in major cities. Preliminary discussions were held concerning procedures for enumeration in northern areas of the country and the decision not to conduct a Census of Fisheries in 1961 was made.

In the Analysis Section, the regular series of estimates of population (quarterly, semi-annual and annual) were prepared and published as were the annual reports on citizenship statistics and estimates of numbers of families in Canada in 1957. In addition, a study of labour force characteristics of post-war immigration was made, as well as the preparation and publication of several analytical reports on the 1956 Census.

In the Administration Section some 55,000 requests were received for assistance in establishing age from early census records and for information from National Registration records. Approximately 2,000 letters were received asking for information concerning the census. The 1921 Census Index was completed in November 1958 and a complete set of microfile cards was sent to the Regional Director of Old Age Security in each province.

Close collaboration with the U.S. Bureau of the Census in Washington continued. Committee personnel have been present at various U.S. Technical Advisory Committee meetings and there has been an exchange of observers for both U.S.A. and Canadian test and pre-test operations. An exchange of committee reports, technical papers and other census material has been maintained between the two countries.

### EDUCATION DIVISION

The Education Division collects and publishes statistics of public and private elementary and secondary schools, vocational institutes and trade schools, colleges and universities, libraries, museums and adult educational activities. By analysis and interpretation the division makes significant comparisons of related data. One of its primary functions is the co-ordination of provincial educational statistics on a comparable basis for the entire nation.

In order to collect and co-ordinate such information the division co-operates closely with many organizations. Among the organizations with which close relations are maintained are federal government departments, provincial departments of education and private or professional groups and associations. Typical of the latter are the Canadian Teachers Federation, the Canadian Education Association, the Association Canadienne des Éducateurs de Langue Française and the Canadian Library Association. Liaison is maintained with the provincial departments through staff visits and through conferences and meetings. The Higher Education Section issued on a trial basis, a Christmas news letter, which was well received.

During the past year considerable emphasis was placed on the problem of speeding up the release of statistics. A start was made towards revising the regular publication, not only to include the latest information available, but also to improve the arrangement of the publication and to eliminate material no longer of interest. The coverage of the parts of the education field to be included in each publication was scrutinized and altered to meet current needs. Instances of this are the teachers' salary bulletins which have been made more comprehensive, yet easier to follow, and the survey of elementary and secondary education which has been remodelled prior to becoming an annual survey. An agenda was drawn up for the Fifth Dominion-Provincial Conference, planned for May 1959, and called to ensure greater comparability and wider coverage in statistics. It is expected that by 1960 the regular publications will all have been reviewed, the data better organized and the formats revised.

By processing current data while the previous material is being published, the timeliness of the statistics is being improved. For instance the Survey of Elementary and Secondary Education, 1950-54 was published, while that for 1954-56 was prepared; University Entrance Awards, 1958 and Salaries and Qualifications of Teachers in Universities and Colleges, 1957-58 were released while others were prepared for press.

The Vocational Section co-operated with Canadian Vocational Training officials in conducting a survey and reporting on vocational education in Canada. A publication No. 5. Vocational Training in Canada, A - Technical and Trade Training, Publicly-Operated was produced. A second publication covering publicly-operated training facilities is being prepared. It is expected that regular publications on vocational education will be issued by DBS beginning 1959-60.

In addition to the preparation of regular publications, members of the division prepared special releases on such items as the financing of education, library statistics and scholarships. A chapter was prepared for UNESCO'S World Survey of Education III, Secondary Education.

### HEALTH AND WELFARE DIVISION

Statistics published by the Health and Welfare Division are comprised of data on births, mortality, illness, health care, hospitalization, law enforcement and the administration of justice. Used by many organizations and individuals, the statistics are produced by four sections—Public Health, Vital Statistics, Institutional Statistics and Judicial Statistics.

During the year re-organization and staff development occurred in the division to keep pace with changes in the programs of the Department of Justice and the introduction of hospital insurance.

In the Public Health Section, while a number of improvements were made in existing statistics, particularly in series of notifiable diseases and home nursing activity, work was largely confined to preparing the traditional material and a comprehensive report on the Canadian Sickness Survey 1950-51.

A prime objective of the Vital Statistics Section was to speed up the release of routine annual tables of births, stillbirths, deaths and marriages. Improvement in release times was attained through efforts to secure returns more quickly from the provinces and by improving internal procedures for handling and processing the forms.

As a result of continuing demands for special compilations of vital statistics, an extension to include greater detail in annual tabulations occurred while a series of special reports was issued supplementing the regular annual issues. These special reports contained historical and brief analytical treatments of several types of fatal accidents, suicides, and leading and detailed causes of death.

During the year the seventh revision of the International Statistical Classification of Diseases, Injuries, and Causes of Death was put into effect necessitating some changes in the operating practices of the section. In addition, the Section conducted a training course for other personnel in the health field required to use the classification in the course of their work.

The Institutions Section was affected by the introduction of national hospital insurance. With eight provinces signing agreements with the Federal Government, a considerable revision of the reporting system was introduced. The schedules were completely reviewed to take account of the needs of the Federal Department of Health and Welfare and the various provincial administrations. The increasing involvement of government in hospital financing also increased the need for more rapid release of hospital statistics; work methods were adjusted to accomplish faster handling with only a small increase in staff.

The section co-operated with Newfoundland in attempting to help that province with its program of hospital morbidity statistics.

In the Judicial Section major emphasis was placed on the development of police statistics. In September 1958, the Canadian Association of Chiefs of Police appointed a Committee on the Uniform Recording of Police Activities. A work group has been established within this committee. Dominion Bureau of Statistics officers are members of the Committee and of the work group. The Committee's objectives are to determine what kinds of information are required, to define concepts underlining the required information, and to specify the requirements for standard records and procedures for recording the information. In October a Committee on Statistics, including a Dominion Bureau of Statistics representative, was appointed at the Canadian Conference of Training Schools. A special tabulation of court data was prepared at the request of the Correctional Planning Committee of the Department of Justice.

### INDUSTRY AND MERCHANDISING DIVISION

The division provides a wide range of statistics on selected Canadian industries. It conducts an annual Census of Industry covering manufacturing, mining, logging and fishing, as well as taking a decennial census of distribution including retailing, wholesaling and the service trades. Current data are provided monthly or quarterly on such aspects as the output of important commodities produced by many industries, and on manufacturers' shipments, inventories, new and unfilled orders. Material is also available on sales and inventories in wholesale and retail trade together with quarterly estimates of consumer credit. Special studies are conducted on industry, merchandising and related activities.

In early December 1958, a major change was made in the organization of the division. Under the previous system the division consisted of ten sections, each responsible for all aspects of the work relating to a particular area of industrial or trade activity, such as food and beverages, manufacturing, or mining. Statisticians under these circumstances were heavily involved in operational problems. In order to free their time for planning and development work, new arrangements were made whereby editing, compiling, and similar functions throughout the division were centralized, permitting more flexibility in staff arrangements, standardization of routine operations, and more opportunity for mechanical processing.

During the year, compilation of the 1957 Census of Manufacturing was completed about two months earlier than in the previous year and plans were made for taking a complete census of manufacturing in 1958. This would be the first complete census carried out since 1948. For the years 1949 to 1957 inclusive, coverage in the annual Census of Manufacturing was incomplete to the extent that small establishments in most industries were asked to report only the total value of their shipments. The other data (such as sales and consumption of materials) for these firms have been estimated from the

trend of shipments. In using such a system for estimating data it is necessary to assure that allowance is made, from time to time, for changing patterns of sales and consumption, etc. Further, allowance must be made for changes occurring in the types of statistical data required, which necessitates a more extensive survey from which to develop statistics for the future.

In planning for this complete Census, consideration was given to easing the reporting burden on the smaller firms. A relatively short form of question-naire is being used for establishments which produce less than \$100,000 worth of goods a year. This form, though collecting all basic industrial information, does not require certain detailed breakdowns asked of large companies.

Planning provides for the use of three classes of questionnaires for use in subsequent annual censuses. With the objectives in mind of maintaining quality in the statistics produced, yet easing the burden of reporting, provision is being made to send "one-question" short forms to the smaller firms, while the large firms answer the detailed long form. Intermediate-sized estabments will receive a less detailed version of the longer form.

Statistical coverage in certain areas was improved and expanded with estimates of manufacturers' shipments being prepared for publication on a provincial basis. A survey of shipments, bookings and backlogs of steel fabricators was started.

The usual annual census of mines was carried out. It was decided to make more use of provincial records in the case of the crude petroleum and natural gas industry in Saskatchewan and Alberta. The division's questionnaires were modified accordingly.

In the case of statistics on fish landings, the division participates only in the compilation made for the Maritime Provinces. For other areas, the division assembles and publishes data supplied by federal and provincial departments. At Halifax, steps were taken, during the year under review, to change from a manual tabulating procedure to a combined manual and mechanical operation. This arrangement will permit supplying much additional data for use by the Fisheries Research Board and other agencies. A change was also made in the design of the questionnaire and in the method of collecting the annual data for the Maritime Provinces on men, boats and gear. The fisheries officers, who do the collecting, are now required to take a census of all fishermen in their respective areas, obtaining information on equipment owned, value of equipment, type of ownership, etc.

Efforts were made to improve the statistics on primary forestry operations. The division acted in an advisory capacity to the Province of New Brunswick in its sample survey designed to estimate timber cut on private woodlots in one forest district. Because the results were not entirely satisfactory plans are being prepared to repeat the survey in 1959-60, taking account of weaknesses in the sample design and supervision of enumerators. The Interdepartmental Advisory Committee on Forestry Statistics, of which the Director of Industry and Merchandising is Chairman, was active in assisting in the planning of the sample survey in New Brunswick, initiating a study

of statistical and administrative data available to the provincial forestry departments, preparing a questionnaire covering the output of farm woodlots for use in the 1961 Census and carrying out special studies of exports of forest products by province of origin rather than by province of exit.

In the area of merchandising statistics, estimates on sales by 20 retail and 18 wholesale trades were prepared as usual. In the former case efforts were made to provide separate totals for each of the Maritime Provinces and, in the latter, plans were laid for a complete survey dealing with the year 1958. Attention was given to 1961 Census of Wholesale Trade with questionnaires being prepared for the Census Test of 1959. Timeliness problems were under continuous review, with savings as high as two to three months achieved over release dates of regular publications by the use of the Daily Bulletin.

In an attempt to provide a breakdown, the first since 1951, of retail trade totals for each of the Maritime Provinces, an additional 3,000 independent stores were added to the sample for 1957. Unsatisfactory response prevented publishing the data on a provincial basis.

Other improvements and innovations were introduced. A shuttle-type form was introduced for the monthly retail sales survey during the early months of 1959. Coverage for the monthly survey of chain stores was improved for both sales and inventories. Surveys of vending machine operators and shopping centres were tried but first results of both proved unsatisfactory; the surveys are being repeated in 1959. Consumer credit statistics were extended to cover amounts outstanding on the books of certain utilities and transportation companies.

In wholesaling, preparations went forward for a survey of the year 1958 which would provide complete coverage of wholesalers proper and a sampling of agents and brokers. The complete survey of agents and brokers for the year 1957 was brought close to publication. Data for the years 1955 - 58, inclusive, covering sales and inventories of manufacturers' trading outlets was released in December 1958.

A survey was made of a number of wholesale firms to determine whether statistics on voluntary chain retail stores could be supplied. Some wholesalers have data on the chains they supply; others do not. Investigations are continuing.

A survey was made of respondents and subscribers to the series of studies on operating costs. It appears that, with some improvements, the studies are of sufficient interest to justify their continuation.

The annual survey of motion picture theatres was simplified by dropping establishments operated by community hall enterprises and services by itinerant operators of motion picture equipment.

### INFORMATION SERVICES DIVISION

The division provides the focal point for the release of the Dominion Bureau of Statistics published information. In the course of this work it compiles and publishes the Canada Year Book, the handbook Canada and the DBS Daily and Weekly Bulletins. Its work includes the operation of the distribution services for publications, the library and a centre for answering general inquiries.

The section concerned with the production of the Canada Year Book and the handbook Canada divided its energies between two succeeding editions of each publication. In the case of the Year Book plans for the 1959 edition were well advanced before the 1957-58 edition was released in November, 1958. The Handbook was released in June 1958 and, throughout the period October 1958 to March 1959, Canada 1959 was in process.

Continued efforts were made to expedite the publication of the French edition of both the Year Book and Handbook through the provision of a photocopy of the edited English copy, chapter by chapter as available, to the Translation Section.

The Press and Publicity Section works towards supplying DBS documents and information to the public and to government officials.

During the year the catalogue Current Publications - Dominion Bureau of Statistics - 1959 was completely revised. The revision included a new subject grouping of all publications and the adoption of a permanent code number for each publication which could be used by subscribers in placing orders and filing, thus saving time in the maintenance of mailing lists.

The division, in close co-operation with other officers of the Dominion Burcau of Statistics and with the Queen's Printer, discontinued the long-standing practice of permitting a very substantial reduction in price when a subscriber took all DBS publications and introduced a revised system of prices and subscription rates. These steps were taken in an effort to bring DBS distribution into line with approved government policy wherein publications are priced to recover costs of printing.

The volume of correspondence requiring collection of material from various divisions, or needing special investigation before reply, remained heavy. Several displays publicizing DBS services were prepared for showing at conferences.

The Daily and Weekly Bulletins continued to act as a means of summarizing each day's and week's issues of reports as well as statistical releases not otherwise published.

One function of the library is to make available materials for use in research work, and its stock includes an increasing supply of books, periodicals, government documents and historical reports covering a wide variety of subjects. Strenuous efforts were made during the year to acquire new material of value, while many items, no longer of frequent use, were sent to the National Library or to a large number of universities and research libraries.

The library acquired 33,405 items, some 3,200 more than during the previous year and representing increases in all categories of documents. In a research library where normal development leads to doubling in size every 17 years, efforts to control material must be constant. Evaluation of material was done by a number of the regular staff familiar with resources and material and, because of the press of other work, was confined to areas where the need of shelf space required immediate action.

In 1950, a new catalogue was started with entries made to standard library practice. Intentions are to re-catalogue all material retained according to this system. During the year the cataloguing staff kept abreast of current material but has not been able to proceed with re-cataloguing except in urgent cases.

### INTERNATIONAL TRADE DIVISION

The division provides statistical information covering a wide range of economic and financial transactions between Canada and other countries. It is composed of two main sections, one dealing with external commodity trade and the other with balance of payments, investment position and international travel.

During 1958, an analysis was completed of Canada's short-term external assets and liabilities. The new material makes possible the production of a more comprehensive statement of Canada's international investment position than has heretofore been available, and provides bench-mark data and additional light on short-term movements of capital. It is expected that this material can be made generally available in the near future.

Publication of statistics of Canada's international investment position has also been continued, although the time lag involved in their production has unfortunately increased with the sharp growth in the number of companies which have to be surveyed. A re-examination of various aspects of international investment which have not been examined for some years past had to be postponed. In order to cope with the growth in the number of companies in which there is foreign investment, a growth which in recent years has averaged about ten per cent per annum, arrangements are now being completed to introduce experimentally a triennial survey for the less active or less important companies currently covered by annual questionnaires.

Improvements were made in the format of the monthly report Sales and Purchases of Securities Between Canada and Other Countries to simplify presentation and to provide for inclusion of more comprehensive data.

The use to which external trade statistics are put demands that they be published promptly and in considerable detail by commodity and country. A regular publication schedule for export statistics was restored. The main monthly export report will now be published and distributed about five weeks after the close of the month to which it relates, as compared with about eight

weeks timing in recent years. The range of detail now shown in export statistics is, within the limits set by the secrecy provisions of the Statistics Act, apparently adequate to answer most questions raised by the public.

On the import side release dates were still slow and efforts to speed them up were under way. The main monthly import reports were published about sixteen weeks after the close of the month to which they related, rather than with the approximately nine weeks' lag which is economically feasible. The range of detail shown in import statistics has been somewhat curtailed in recent years, and the increasingly important special analyses of "basket" import classifications have been virtually eliminated.

During the year, certain statements which duplicated, or partially duplicated regular monthly reports were discontinued, an economy which permitted the increasing load of regular operations to continue without enlarging the establishment. The study of the significance of small value shipments in import statistics was largely completed, but further change in existing coding practices was avoided for the present.

Changes were made in the area of travel statistics. New tabulations were made on the length of visits of Canadian travellers in the U.S.A. using non-automobile type of transportation.

Towards the end of the year studies were made, in conjuction with the Department of National Revenue, on the effects of simplifying present administrative procedures in admitting foreign vehicles into Canada. Administrative changes which have been proposed by that Department will have major effects in the coming year on some of the statistical sources now used in estimating expenditures of United States visitors to Canada by automobile. As a result, it is likely that there will be a reduction in the available information on which these estimated expenditures are based and it is anticipated that a greater volume of documents covering automobile visits to Canada will have to be tabulated in order to analyse this heavy traffic.

The redesigning of the schedule used for Canadians reporting on visits to the United States made it possible to gather additional information on overseas travel via the United States, by giving respondents the opportunity to report the overseas and United States portions of the trip separately.

### LABOUR DIVISION

A separate division for labour statistics was established in the summer of 1958. It consists of three units: the Employment Section, the Unemployment Insurance Section, and a small unit concerned with research and the estimation of labour income. The Employment Section collects industrial establishment records of employment, hours of work, and wages and salaries. It publishes index numbers of employment and payrolls, and per capita figures of hours and earnings. The Unemployment Insurance Section provides the Unemployment Insurance Commission with operational statistics. It publishes statistics concerned with unemployment, unemployment insurance claims and the amounts of benefits received by beneficiaries. The Labour Income and

Research Unit issues labour income estimates and undertakes research and analysis pertaining to the general field of labour statistics.

In the Employment Section, methods of compiling monthly statistics on industrial employment and payrolls by further mechanical means were introduced. The procedure simplifies the processing operation as well as representing a preparatory step in the transition to electronic computers.

Certain historical tables, valuable to users, do not need to be reproduced in their entirety each month. By alternating a number of these, economies were made in printing the monthly Employment and Payrolls publication.

In order to make employment and payroll statistics more readily comparable with other series, the data in monthly reports were identified with the last pay period of the month where formerly they had been identified with the first day of the following month.

In an attempt to learn how the statistics are used and to obtain suggestions on how they might be made more useful, two questionnaires were sent to subscribers. Replies indicated that per capita earnings figures are used widely by industrial relations and labour union groups in wage and salary negotiations. Detailed data showing the finest possible industry-area breakdowns are sought for this purpose. Market and economic analysts wish to have information regarding levels and trends in employment and earnings, and here again industry-area detail was reported to be valuable.

In the Unemployment Insurance Section a consolidation of staff contributed to better co-ordination of work and some reduction in the handling of documents. Studies were made of the implications of recently introduced punch card equipment to the production of statistics on benefits and claimants in the Regional Offices of the Unemployment Insurance Commission.

A number of special projects, such as those to assist the Unemployment Insurance Commission and the Actuary, were undertaken. From data available on the individual characteristics of claimants it is possible to make studies of particular groups, such as those on seasonal benefit and those failing to qualify for benefits of any kind. Studies of contribution records of different groups throw light on the actuarial aspects of the insurance scheme.

The Labour Income and Research Unit completed a historical revision of labour income estimates. Labour income estimates include all wages and salaries and provide a useful indication of regional differences in the size and movement of this large component of personal income. The monthly reports now show data for five regions along with national totals and some industry sub-totals. During the year, time was devoted to the study of relationships between different measures of employment and unemployment.

### MECHANICAL TABULATION DIVISION

The subject matter divisions gather quantities of data which form the basis for statistical tables. A large part of this material is processed by the Mechanical Tabulation Division, a service division, using a variety of mechanical equipment.

The greatest part of the work is done on punch card equipment. About 40 p.c. of the staff record the data from the source documents onto punch cards in the form of positioned holes. One group of operators punches the cards and a second group verifies independently the accuracy of the data recorded. A further 40 p.c. of the staff operate a variety of other punch card equipment, such as sorters and tabulators, to group the punch cards by characteristics of the data and to produce in printed form the totals required.

The remainder of the staff operate comptometers and desk calculators to produce aggregates directly from data recorded on source documents. Most of these are in the form of "peg-bar" schedules which are particularly adaptable to speedy adding operations.

Most of the work of the division during the year involved monthly, quarterly and annual tabulation programs which are largely repetitive. However, a large number of requests for special tabulations were handled during the course of the year. As in past years, quite a number of projects were undertaken for other government departments and agencies who did not have the facilities required. These were handled on a cost reimbursement basis under individual agreements. Tabulation services for the Immigration Branch were continued and considerable work was carried out for the Department of Labour, particularly in connection with surveys of wage rates and of members of scientific and technical professions. The extensive program of tabulations undertaken for the Department of Insurance in connection with its periodic evaluation of the Public Service Superannuation Account was all but brought to conclusion by the end of the year.

For some time, fish landings on the east coast have been tabulated in Halifax using proof machines, a form of adding machine. The Department of Fisheries requested additional cross-classifications of the data which could not be obtained in this manner. Following a review of the requirements and techniques, a punch card system was introduced. A key-punch unit was installed in our office in Halifax and arrangements were made for the Maritime Life Assurance Company to undertake monthly tabulations in Halifax.

Punching of cards was undertaken for the Department of Public Works in connection with the calculation of the "cut and fill" required on highway contracts. These were prepared as input for a computer. Atomic Energy of Canada Limited and the Dominion Bureau of Statistics co-operated in studies of family linkage of vital and health records; the division prepared the punch cards and tabulations required.

New and established procedures were under a continuing review. Vital Statistics punch cards have been produced from microfilm records received from the provinces. On a pilot basis, the punch cards for part of the project have been produced directly from the microfilm records. Some additional information is required on the original record prior to microfilming and some coding is done by the puncher as the cards are produced, but a fairly lengthy clerical operation is being substantially reduced.

### PRICES DIVISION

The division was created in September 1958 by a separation of the former Labour and Prices Division into two divisions. It was felt that the separation would permit more effective co-ordination within the fields of both labour and prices, consequently providing more satisfactory services to users.

The division whose purpose is to collect and publish prices and urban consumer expenditure data is composed of five operating sections: Consumer Expenditure Surveys, Farm Prices, Wholesale Prices, Retail Prices and International Prices.

During the first months of its operation the resources of the division have been devoted to three main projects: the continuing production of weekly and monthly price statistics, the development of new price series to meet current needs and assisting with the farm survey of income and expenditure.

In the Consumer Expenditure Surveys Section, efforts were directed to the processing and analysis of expenditure data collected in urban family expenditure surveys taken during the calendar year 1957 and the early months of 1958. The 1957 program was the third in a series of small-sample biennial surveys designed to obtain expenditure information for a cross-section of urban families. The prime purpose of the surveys is to permit adjustment to the revision of the weights of the Consumer Price Index. However, aside from their use in the determination of price statistics, the resultant body of expenditure statistics is a primary source of information to manufacturers, distributors, market research organizations and welfare agencies concerning expenditures by Canadian families.

In 1953, 1955 and 1957, the survey programs consisted of a series of monthly food surveys throughout the year, followed by a retrospective survey covering the complete family budget for the same year. In 1957, a larger body of data was collected, the use of a panel of families was introduced, and the design of the food schedule was changed.

The processing of 1957 food expenditure records extended into 1958-59 owing to more complex tabulations involving data for matched-sample families from month to month, as well as all-family totals. This information was used by the Retail Prices Section for a study of expenditure change in seasonal food items, preparatory to a revision of the Consumer Price Index. Information collected in January 1958, covering total family expenditures and income for almost one hundred families in nine cities, was edited and tabulated in 1959.

The Farm Prices Section published, on a weekly, monthly or thriceannual basis, price indexes at wholesale and retail levels covering farm and industrial commodities, building materials, and prices paid by farmers, as well as common and preferred stocks. In addition, the staff was engaged in a number of developmental projects.

In co-operation with the Agriculture Division, this section continued to work towards successful completion of the Survey of Farm Income and Expenditure. During the latter half of the year the statistician in charge of the index of prices paid by farmers devoted almost all of his time to the training

and supervising of field staff required for the farm survey, and to preparing the ground-work for processing of the data by electronic computer. The interest of the Farm Prices Section in this survey arises from the fact that a major revision of the index of Commodities and Services Used by Farmers is dependent upon results of the survey.

Price collection of industrial machinery and equipment was further expanded.

Brief preliminary studies were made in connection with the calculation of new price indexes of highway construction and electric generating installations. These indexes are being calculated at the request of road and electrical associations who will use them in planning and evaluating construction progress and in connection with cost estimates and rate and depreciation studies. They will be used by provincial and federal authorities for similar purposes, and for the expression of value figures in quantity terms.

In the Wholesale Prices Section, next-to-final steps were taken towards the publication of new wholesale price indexes. These new indexes have been calculated to remedy a number of inadequacies of the present wholesale indexes and are in response to criticisms of users in both government and industry. In the course of commenting on currently available series, users indicated requirements for price indexes based on an industry classification to supplement existing commodity classified series, and for a wide variety of price indexes of manufactured commodities. This is the broad background to the output price indexes for manufacturing industries which have been in the course of preparation for some years. A large number of industry indexes have now been calculated, and a reference paper explaining them is being prepared.

This project, begun in 1956, caused a substantial increase in the activities of the section. The number of price series involved was four to five times greater than that being collected for existing indexes. This, combined with a program to improve substantially the quality of price information, entailed considerations of staff enlargement and economies in the use of available resources. In this connection, a re-organization of duties on a functional basis coupled with more efficient techniques and forms produced a more integrated and productive work flow.

Manufacturers have been most co-operative in this project and those with whom we have worked most closely believe that the resultant price indexes will repay their efforts. It is, of course, the concern of the section to see that they do.

Liaison with users has also been given special emphasis. Part of the duties of two new commodity officers is to visit manufacturers for discussion of reporting problems. At the same time, they assist manufacturers in their price statistics requirements.

The Retail Prices Section's main activity during 1958-59 was the production, on a regular monthly basis, of the Consumer Price Index. In addition to the regular program of price collection, processing and index calculation required to produce this index, a wide variety of related operations were carried out involving the maintenance and revision of commodity

specifications, schedule design and revision, selection of pricing outlets and constant review of pricing techniques and procedures in the light of changing merchandising practices.

The program of continually reviewing the budget content of the Consumer Price Index was accelerated during the current year as tabulations from the 1957 expenditure surveys became available. A number of aspects of index number calculation were reviewed preparatory to a revision of the Consumer Price Index.

Among the more significant projects completed during the past year was the changeover to an expanded rent schedule and absorption by the section of the responsibility for rent calculations. This survey is now yielding significant data on rent attributes as well as rent indexes for the Consumer Price Index.

In the International Prices Section, measurement of comparative living costs at cities outside Canada, for the purpose of adjusting allowances of Canadian Government foreign service personnel, has been facilitated by the recent development of a continuous review system aimed at maintaining a constant check on the validity of our international indexes in the face of rapidly changing price and exchange rate situations abroad. It is based on a monthly assessment of conditions at each foreign post in the light of all relevant information regularly obtained from governmental and business sources overseas. It has thus been possible to reduce the frequency of price surveys at many locations, at a time when the number of foreign posts has continued to increase.

Continuing the program of gaining first-hand knowledge of living conditions being encountered by foreign service personnel, the Section Chief visited all Canadian posts in Latin America and the Caribbean. The year was also characterized by intensified studies, in co-operation with other government departments, preliminary to the revision of the structure of the Canadian foreign allowance system.

With the coming into effect of new regulations for the payment of allowances to government employees stationed in northern and isolated areas of Canada, the section became responsible for the measurement of relative food costs between such locations, and population centres in southern Canada. During the course of the year, indexes based on food price surveys at over one hundred locations were recommended.

### PUBLIC FINANCE AND TRANSPORTATION DIVISION

The division, consisting of three operating sections, is charged with the preparation of a wide range of statistics on the financial structure of the three levels of government in Canada, employment and payrolls of government bodies, and the operations of the transportation and public utilities industries.

The Public Finance Section having recently established a series on "actual" finance statistics of the Government of Canada, published a report

on federal "estimates", "preliminary" revenue and expenditure, and "interim" debt. In the field of provincial finance statistics the first "interim" report of debt was released. Because of the great interest in inter-government contributions and transfers, a table was introduced into the provincial revenue and expenditure estimates report to show payments to local governments.

The report Consolidated Public Finance Statistics, which brings together the revenues, expenditures and debt of all governments in Canada, federal, provincial and municipal, on an 'actual' basis, was improved during 1957-58 by the addition of a table showing net general revenue of all governments adjusted to show the net percentage of total revenue accruing to each level of government after transfers between governments.

Following the Seventh Dominion-Provincial Conference on Municipal Statistics, work was commenced on preparing the revised Municipal Finance Reporting Manual, incorporating the numerous changes recommended by the Conference concerning the items that municipalities should report and the style that the reports should take. As was the case with previous editions, it was recommended that the revised Manual be made available to all municipal treasurers and auditors. The volume is also widely used as a text and reference document.

The regular reports on municipal statistics "actual", "preliminary" and "estimates", were published, and to the latter was added the "interim" report on debt. There seems to be reluctance on the part of some municipalities in the group being sampled to complete the questionnaire forms on preliminary and estimated figures, but most are co-operative. Education of officials over a period of years as to the need for the statistics and for early response may progressively improve the currency of this report.

In the Government Employment and Payrolls Section, improvements in the timeliness, accuracy and completeness of the monthly Federal Government Employment and quarterly Provincial Government Employment reports were achieved. Progress was made towards adoption of uniform location codes between the Civil Service Commission and the Dominion Bureau of Statistics.

The Federal Government Employment report for April 1958 contained an extended and improved description of the methods of collection and processing as well as a more complete and improved glossary of terms. It is intended that the April report of each year will contain similar data. At the end of the fiscal year the regular monthly publication had to be delayed in order that special tabulations might be prepared for the Pay Research Bureau. In addition special data were prepared for the Health and Welfare Division and the Unemployment Insurance Section.

Improvements were made in the completeness and accuracy of federal and provincial employment statistics. Changes in processing techniques involved additional mechanization and alterations in the coding system. Date of birth information was added in the case of federal civil servants, while the records were expanded to cover the teaching staffs of the Departments of Citizenship and Immigration and Northern Affairs and National Resources.

Plans were made to release data each quarter on total provincial government employment in the *Daily Bulletin*, while coverage was increased to include a number of agencies not previously included.

The operations of the Transportation and Public Utilities Section were arranged into three units during the year. These specialized in Road Transport, Rail, Water and Air Transport and in Pipelines, Communications and Utilities.

The first national estimates of motor transport traffic were made possible by the high degree of co-operation received from the truckers and the provincial governments. Because of the growing interest in statistics of ton-miles and weight of goods carried, the survey is being adjusted to improve the data concerning the extent to which the industry competes with other forms of transportation. The adjustments will permit the Dominion Bureau of Statistics to meet specific demands for increased detail such as more commodity statistics, more reliable interprovincial traffic data, and truck traffic classified by length of haul.

Efforts were made to assure that these additional demands for statistics were met in an economical way. To facilitate the compilation of these additional statistics without increasing staff resources, plans were made to introduce a punch card system of tabulation. Work methods and procedures were under continuous review with the object of economizing operations as much as possible. To this end plans were made to test the adequacy of a short form, the utilization of which would considerably reduce handling costs and improve response among certain classes of trucks.

In order to show the growth of the relatively new type of transport service, ''piggyback'' traffic, arrangements were completed to collect and publish information on ''Trailer-on-Flat-Car'' operations by class I and II railways.

The annual Shipping Report 1957, introduced data for non-customs ports. Shipping schedules are now received from vessels calling at non-customs ports as well as at customs ports and the large discrepancy which existed in previous annual publications between totals for cargo loaded and unloaded in coastwise trade has been largely eliminated. For Canadian National Steamships operating in Newfoundland waters, a new schedule has been devised which allows each vessel to make one report for all the calls of one trip, instead of submitting one report for every port of call. Prior to the opening of the St. Lawrence Seaway, a joint schedule was designed, with the St. Lawrence Seaway Authority, to be used by vessels which pass through the canal system under the jurisdiction of the Seaway Authority.

At the request of the Air Transport Board an air passenger survey of transatlantic and polar flights was begun on January 1, 1959. Preliminary results have already been tabulated for the information of some airlines and it is intended that some data will be published. Discussions were held with the Department of Transport to develop Airport Statistics to provide air traffic movements similar to the port activities reported in Shipping Statistics. The Department of Transport plans initially to collect statistics for the larger airports under its jurisdiction, and the Dominion Bureau of Statistics will collect data for those airports over which the Department of Transport has

no control. The material will be combined to form the basis for a report on airport statistics.

Progress was made in developing gas pipeline statistics while, in January, the division assumed responsibility for the monthly report Sales of Manufactured and Natural Gas previously produced by the Industry and Merchandising Division. This will form part of the statistical series on gas distribution and transmission which is being developed in the division.

### RESEARCH AND DEVELOPMENT DIVISION

This division is responsible for several important statistical publications such as the *National Accounts* and *Canadian Statistical Review*. In addition, new or continuing research projects are undertaken resulting in occasional publications of a research nature.

During the year the National Income Section published the regular quarterly National Accounts while completing the basic Canadian reference document National Accounts, Income and Expenditure, 1926-1956. This document contains a description of concepts, sources and methods, as well as charts and an analysis of the Canadian economy as illustrated by the national accounts material over the thirty year period. The data were brought up to date in the regular annual report National Accounts, Income and Expenditure, 1955-1957.

Efforts were made to shorten operational procedures while at the same time to improve the quality and usefulness of the statistics. Arrangements were made to transfer much of the work on the seasonal adjustment of the national accounts series to electronic computers. This permits not only faster processing but also allows more thorough analysis of the data. Research was pressed to find a way by which quarter to quarter comparisons of movements in volume of output and in prices could be made.

At the end of the year, the Business Statistics Section was renamed the Industrial Output Unit. The work was re-organized as a consequence of the transfer of the chief of the section to the Industry and Merchandising Division. The work on cheques cashed and commercial failures was transferred to the Business Finance Division, while the Canadian Statistical Review and its supplement were placed in charge of the assistant to the director. The remainder of the original Section was then changed to Industrial Output Unit, reporting to the Chief of the National Income Section. The National Income Section in turn is giving a very high priority to the development of the new measure of Real Gross Domestic Product by industry.

During the year work was completed on the Revised Index of Industrial Production 1935-1957 (1949=100) and a basic reference document dealing with concepts, methods and analysis was released. In February the new series replaced the old index in the Canadian Statistical Review. At the same time the number of seasonally adjusted industry indexes in the publication were increased greatly.

Estimates of total Canadian production by industry were prepared quarterly for use in conjunction with the National Accounts and other releases. Extensively used in the analysis of economic trends, the real output project is still on an experimental basis, though it is hoped eventually to publish this new type of production statistics.

A major historical revision of the Survey of Production was completed, covering the period 1926 to 1956. The Survey of Production combines in one publication the net values of production for all commodity-producing industry groups for Canada and for each of the ten provinces.

In the Research Projects Section, the data on family and individual incomes obtained from the survey of 7,750 non-farm families in March and April, 1958, has been tabulated and analysed and is being published in Distribution of Non-Farm Incomes in Canada, by Size, 1957. During the past year plans were made for another sample survey to be undertaken in May 1959, to collect information on the liquid assets, indebtedness, and incomes of non-farm families. The 1959 survey is the second survey of this type; the first one was taken in 1956.

Consideration is being given to developing ways and means of providing estimates of personal and corporate saving derived from an analysis of financial transactions. When satisfactory estimates can be developed, the estimates of saving and capital formation published in the National Income and Expenditure Accounts will be supplemented by information on the way in which funds are transferred from one sector of the economy to another through the capital market. To facilitate this work an Interdepartmental Committee on Financial Statistics was formed.

A new project was begun during the year aimed at developing estimates of the stock of fixed capital (machinery and equipment, residential and non-residential structures) in Canada. Estimates are available from the National Income Accounts of the quarterly gross additions to the capital stock, but there have been no official estimates of the total stock to which these additions are being made.

Exploratory work continued on the possibility of integrating the various industry and commodity statistics into a consistent framework such as that provided by the table of the inter-industry flow of goods and services which was constructed for 1949. A member of the section sat on the General Committee on Industrial Classification which has been engaged in revising the DBS Standard Industrial Classification; another member worked closely with the Consultant on Classifications in preparing the DBS Standard Commodity Classification for use throughout the Dominion Bureau of Statistics.

### SPECIAL SURVEYS DIVISION

This division is made up of three principal sections—an Operation Section, a Sampling and Analysis Section and a Field Administration Section. It co-operates with the other divisions of the Dominion Bureau of Statistics, and with federal departments, to secure, by sampling methods, specialized information about Canadian businesses and population. The gathering of information by sampling methods is comparatively inexpensive and provides a great deal of material quickly. The division, through its eight Regional Offices, carries out the field work of the Dominion Bureau of Statistics. Through these offices, and using the services of a large number of temporary enumerators across the country, the division executes personal interview surveys in the course of which information on a variety of subjects is obtained from a cross-section of Canadian households.

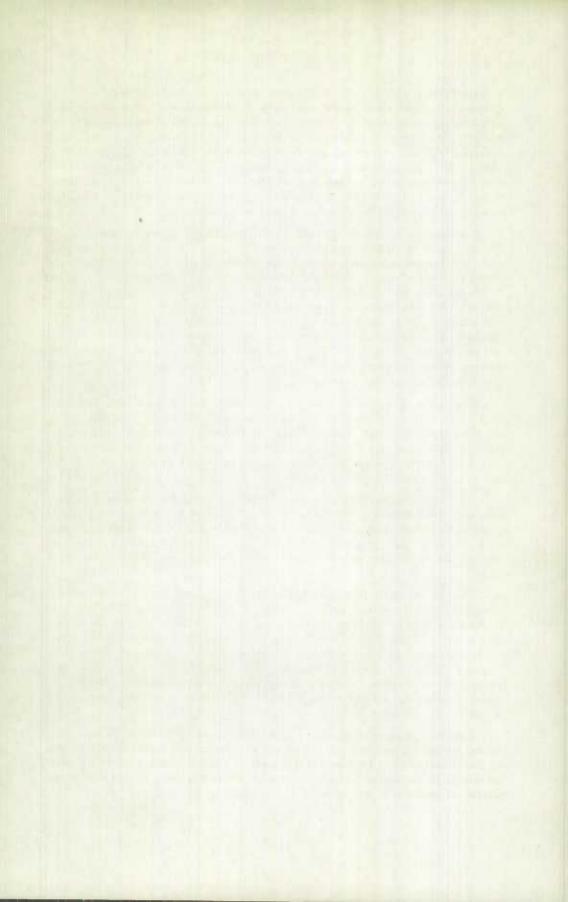
Because the division specializes in sampling work it constantly cooperates with the other divisions of the Dominion Bureau of Statistics and other government departments to provide them with advice and assistance in obtaining data by these techniques. Over the period from November 1958 to February 1959 the Regional Offices carried out a survey designed to obtain statistics on farm business income and expenses, and also farm family living expenditures. Such material is of great use to marketing groups, farm associations, government administrators and others dealing with rural problems and conditions. To carry out the work a number of Department of Agriculture officers worked closely with DBS officials during the periods of training of enumerators, and actual enumeration.

The questionnaires themselves were necessarily quite detailed and interviews with farmers usually required some hours to complete the questionnaire properly. The response from the farmers interviewed was highly gratifying and this can probably be attributed to the fact that the field supervisors and enumerators selected were largely farmers or farm housewives who had first-hand knowledge of farm matters.

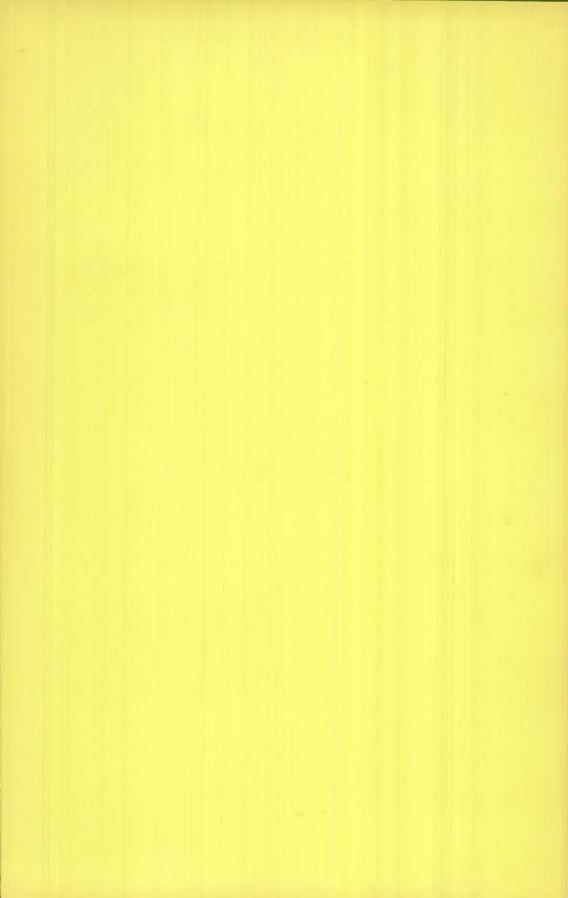
In close collaboration with the Central Mortgage and Housing Corporation, an improved sample was designed to reflect more accurately construction of new dwellings in areas outside of urban centres of 5,000 population and over. For this survey, reports on housing starts and completions are obtained through the field organization of the Central Mortgage and Housing Corporation.

To gain the maximum benefits from sampling techniques, continuous work is needed to improve the quality of samples and to keep abreast of changes in the field. Improvements in the design of the labour force sample illustrates this activity. Here changes were made by introducing a new rotation method in the larger urban centres and by establishing cities with populations exceeding 15,000 as self-representing areas. Considerable effort went into estimation of sampling variance. Special samples were selected for a Consumer Finance Survey and for an enlarged rent survey in certain metropolitan areas.

Research covered studies of under-enumeration in the 1956 Census and, in the Labour Force Surveys, the effect of repetitive interviews and the use of city directories to improve the accuracy of field listings. Studies of gross movement in the labour force, inaugurated during the year, appear to provide useful information in this area.







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