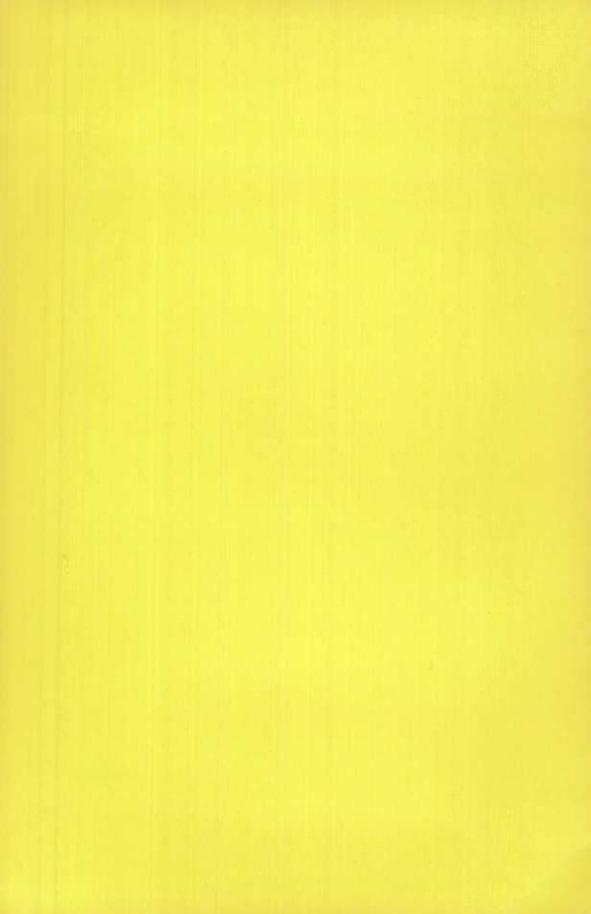
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# DOMINION BUREAU OF STATISTICS

or the Fiscal Year ended March 31,1964

Annual Report



CATALOGUE No.



## ANNUAL REPORT

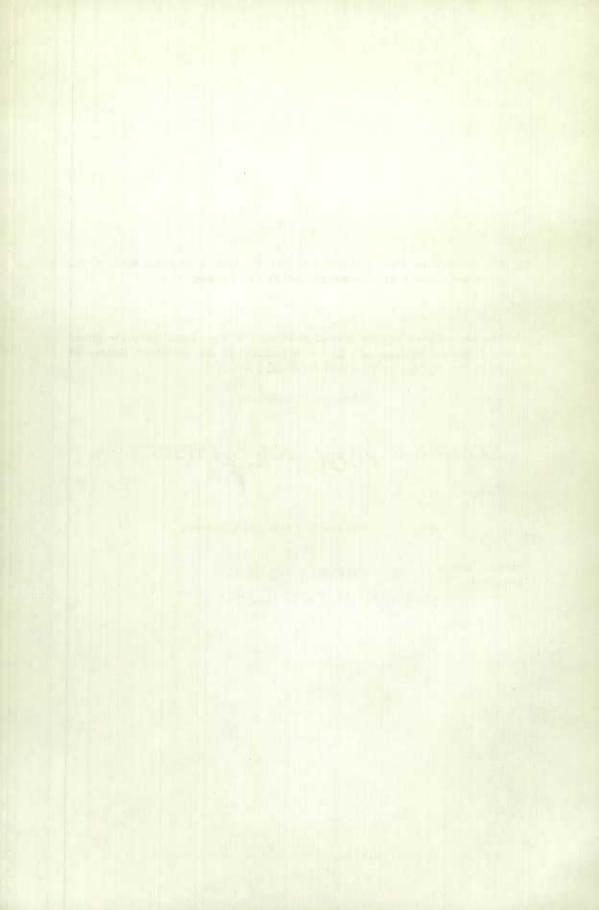
OF THE

### DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR ENDED MARCH 31, 1964

June 1964 1101-502

Price: 40 cents



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

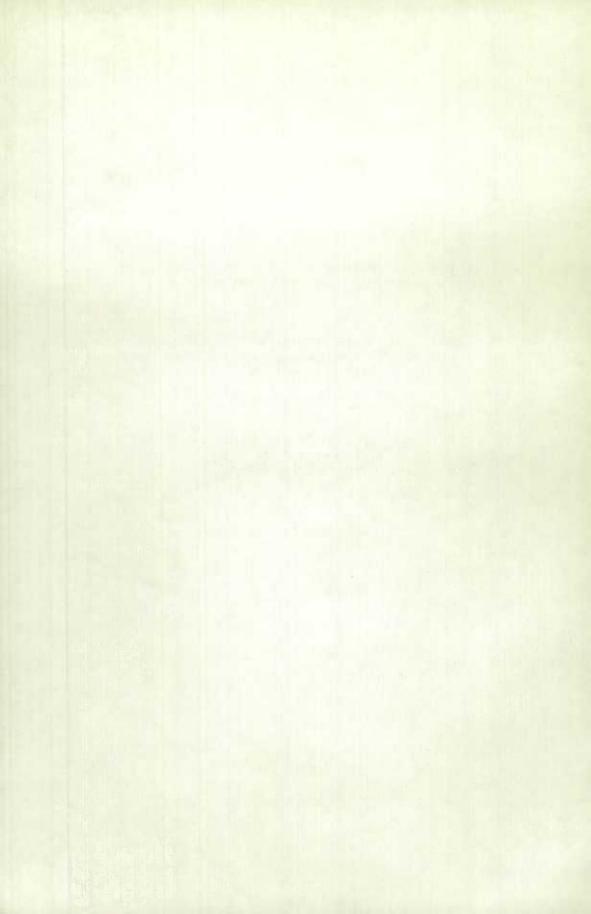
The undersigned has the honour to forward to Your Excellency the report of the Dominion Statistician on the activities of the Dominion Bureau of Statistics for the fiscal year ended March 31, 1964.

Respectfully submitted,

Mitchell Shap

Minister of Trade and Commerce

Ottawa, Canada June 1964.



THE HONOURABLE MITCHELL SHARP, MINISTER OF TRADE AND COMMERCE, OTTAWA. CANADA.

Sir:

I have the honour to submit the Annual Report of the Dominion Bureau of Statistics covering the operations and services rendered during the fiscal year ended March 31, 1964.

Your obedient servant,

Truck & Duffett.

Dominion Statistician

Ottawa, Canada June, 1964. effage with the sample hand with the real control of the same cont

#### GENERAL ACTIVITIES

Under this heading are discussed a number of the highlights of the year's activities in the Dominion Bureau of Statistics as well as certain operations closely associated with the office of the Dominion Statistician. Subsequent sections deal with the work of subject-matter and service divisions.

The Government of Canada was host to the 34th Session of the International Statistical Institute which met in Ottawa from August 21 to 29, 1963. Concurrently meetings were held of the Institute of Mathematical Statistics and the International Union for the Scientific Study of Population. The Canadian Organizing Committee, whose membership comprised leaders of Canadian science, education, labour, commerce and government, under the chairmanship of the Dominion Statistician, was responsible for all arrangements for the Conference. It was gratifying that 780 persons registered, some bringing their families, making a total attendance of 1,024, from 46 countries. The scientific meetings, twenty-four in number, took place at Carleton University, Ottawa. The Proceedings will be published in two volumes.

Mr. J. T. Marshall, Assistant Dominion Statistician, retired in May 1963. Mr. H. L. Allen was appointed in his place as Assistant Dominion Statistician (Administration) and Mr. L. E. Rowebottom became Assistant Dominion Statistician (General Assignments). Dr. S. A. Goldberg is Assistant Dominion Statistician in charge of statistical integration.

In recognition of the two comprehensive and important functions covered, the former Industry and Merchandising Division has been divided into two separate divisions—the Industry Division and the Merchandising and Services Division. In addition to statistics in the fields of manufacturing and primary industries and the development of productivity measures, the Industry Division assumed responsibility for a wider range of the energy field with the transfer of statistics of pipelines and electric and gas utilities from the Public Finance and Transportation Division.

Portions of the report of the Royal Commission on Government Organization that were relevant to the operation of the Bureau were studied by officials and a number of administrative improvements were effected as a result. In line with the Commission's recommendations, which drew attention to the growing importance of statistics in decision-making in government and business, the Bureau hopes to expand and strengthen its contacts and public relations in order to improve the collection of data. The Government has accepted, in principle, a number of recommendations of the Commission relating to statistical matters and others are under study.

The processing of the main body of the results of the 1961 Census of Population, Housing and Agriculture was completed. The use of the computer installation has made it possible to prepare a greater wealth of detail than in any of the previous censuses. Tabulation of the sample survey of migration, fertility and income is proceeding as is the series of analytical monographs on the social and economic life of Canada as indicated in the census information. Plans are underway for a 1966 Census of Population and Agriculture, and preparations are being made for a test of the questionnaire to be carried out in the Fall of 1964.

There was during the year a notable acceleration in statistical needs of federal government departments and agencies and of provincial governments. At the federal level the National Economic Council and the Department of Industry were both engaged in defining their statistical needs, which are proving to be extensive, involving special statistical studies and, in some cases, the loan of DBS staff. Provinces, municipalities and research organizations all have rapidly growing requirements for regional and urban statistics. Careful study is being given to the best means of meeting these requirements for regional and area statistics and co-operative arrangements with a number of provinces have been extended to facilitate joint collection of data and to avoid duplication.

A number of additional positions were authorized in the course of the year. As of April 1, 1964, a further increase in the establishment became effective. The recruitment of experienced staff remains a difficult problem.

The statistical program described above and referred to in some detail in the balance of this report depended heavily for its success on the skill and devotion of the Bureau staff. In a situation where the demand for statistical information has involved great pressure, the DBS staff have been unstinting in their support.

#### CENTRAL STAFFS

During the year much time has been devoted to various interdivisional activities by members of the newly formed Central Classification Staff, the Research and Development Staff and the Sampling and Survey Research Staff. Discussions have been initiated with the aim of strengthening interdivisional communication and obtaining consistent implementation of definitions, methodology, nomenclature and classification. Comprehensive studies have been carried out, in collaboration with officers of the National Accounts and Balance of Payments Division, on the reliability of the annual and quarterly national accounts. Assistance has been given to the Royal Commissions on Taxation, Health Services and Banking and Finance by providing special tabulations and advising on research problems. The census monograph program has been carried forward. One staff member has been on loan part-time to the Economic Council to carry out analyses of manpower and employment, while another was loaned to the Government of Ghana to set up an Institute of Statistics there. The activities of staff members are discussed in greater detail below:

#### Central Classification Staff

A change in organization has taken place whereby the central DBS list of companies and establishments, formerly located in the Business Finance Division, has been transferred to a newly formed Central Classification Staff, which reports to the Consultant on Classification whose designation has been changed to "Director". This change has been made in recognition of the Bureau-wide nature of the services provided, the enlarged scope and complexity of the various classification systems—commodity, geographical, occupational, and industrial (company as well as establishment)—and the growing requirements for comparable or integrated statistical series.

The development of the central DBS list of companies and establishments has continued and notable advances made. The system of identification by numbers by which establishments of multi-establishment firms are linked has been adopted for the list of respondents on the Monthly Employment and Earnings Survey. It is planned that the same numbers will be used for the Census of Manufactures within the next year and eventually they will be applied on all regular surveys obtaining data from establishments and companies.

Implementation of the revised Standard Industrial Classification is continuing. Much work has been done in co-operation with subject-matter divisions to ensure uniform application of the classification. Particular attention is being paid to the provision of data that will permit the maintenance of historical continuity in time series despite changes in classification and concept.

A revised Geographical Classification derived from the 1961 Census and providing code numbers for provinces, counties or census divisions, rural and urban municipalities, greater cities and census metropolitan areas, is ready for distribution. The classification system is designed for statistical purposes and can serve to standardize geographical coding on all surveys.

An up-to-date alphabetical index to the Standard Commodity Classification Manual (i.e. Volume III) was published late in 1963 in preparation for the introduction of the new Import Commodity Classification based upon the SCC. Development of the Standard Commodity Classification and programs for its implementation in additional fields are continuing.

#### Central Research and Development Staff

Two organizational changes included the transfer of the Co-ordinator of Energy Statistics to the Industry Division and the project on national wealth to the Business Finance Division.

Developmental work continued on the overall program of financial statistics. There are many difficult problems of definition, techniques and format, and some of these have received attention. Major progress has been made in the area of corporation financial statistics. With the development of the quarterly survey of corporation balance sheets, and the advent of the Corporation and Labour Unions Returns Act Administration, increased emphasis is being put on company statistics. A number of problems related to the definition and classification of companies were considered and agreement reached. Plans were laid for computer runs which will link together some of the available information on companies and their establishments, and greatly improve the analysis of corporate activity.

This work will culminate eventually in the regular preparation of national money flows tables. Although many gaps still remain, studies have begun on the most suitable conceptual and classification framework for the production of such tables. The approach being followed is to create a decentralized administration whereby parts of the tables are produced in the subject-matter divisions with the Central Research and Development Staff responsible for co-ordinating the work and putting together the parts into a complete table.

Preliminary results of the 1962 Survey of Consumer Finances were released in 1963. The main report will be issued in mid-1964. Tabulation of the 1961 Census statistics on income has begun and three preliminary reports have already been issued. The first two reports of the six to be released in Volume IV have been completed and should be in print by mid-1964. The remaining four reports will be released in the second half of 1964. A number of research projects such as quality checks of the 1961 Census income data were started. It is hoped to complete these projects over the next two years.

Planning of another Survey of Consumer Finances was completed and field operations started in March 1964. This survey, like the 1956 and 1959 surveys, collected data on consumer assets and liabilities as well as on income. A new feature is a special detailed questionnaire on stock ownership. This is the first attempt in Canada to obtain extensive information on the amount and nature of corporate equities held by the household sector. Planning of a report on farm family income, based on the 1958 Farm Income and Expenditure Survey, was started and it is hoped to publish the report in 1964.

Plans for the construction of the 1961 Input-Output Table were completed during the months of April and May 1963 and actual compilation of the Table was started in June. Two special surveys, one on containers used and another on selected operating expenses, were designed and sent out to a sample of business firms. The response to date on both surveys has been satisfactory. A study to obtain a breakdown of corporation profits on an establishment basis using computer techniques was initiated. This study, which is required for the Input-Output Table, will be carried out jointly with several subject-matter divisions.

Various projects designed to measure commodity flows from sources of production to use in production were initiated. In addition to utilizing the information which is available in the Bureau on materials used, produced, imported and exported, the Input-Output Staff is co-operating with the Departments of Defence Production and Industry on studies to ascertain the commodity content of federal government purchases and the materials used by certain industries. This work led to a series of meetings with the Department of Industry which resulted in the establishment of formal liaison channels between the Department of Industry and the Dominion Bureau of Statistics on matters of mutual interest.

Meetings and exchanges of reports on area statistics have taken place with provincial authorities and other interested agencies. A meeting of the Subcommittee of the Dominion Provincial Conference on Economic Statistics took place in January 1964. A pilot study was carried out involving the application of computer techniques to deriving homogeneous regions for statistical purposes.

An experimental study has been undertaken aiming to explore the possibility of making quarterly estimates of unemployment, by province, on the basis of unemployment insurance and related data. Studies have been undertaken, designed to improve the methods of seasonal adjustment and to produce a computer program, which would be sufficiently flexible to yield not only population projections but also life tables and graduated single years of age

distributions, as by-products. Consultation was provided on demographic research and numerous problems including collection, processing and tabulation of population, vital and accident statistics.

#### Sampling and Survey Research Staff

Besides sampling and assistance on mathematical aspects of various projects the functions of this Staff have expanded to include quality control, response research, the design of experiments and research into survey methodology. Accordingly the designation of the Staff has been changed to the above title. The designation "mathematical adviser" has been substituted by "director".

During the past year the Staff was engaged in designing or redesigning an increasing number of surveys. In each case the primary objective was to improve the reliability of the statistics produced by the survey and/or to reduce the cost of the operations.

The redesign of the Labour Force Survey, an operation carried out jointly with the Special Surveys Division, has progressed according to schedule. A complex mathematical model of the survey was used to good effect to assist in the determination of the optimum sampling ratios for Alberta, Quebec and the Maritimes. The new sample design was successfully tested in Alberta confirming the expectation that substantial gains in the reliability of the statistics may be made using the new design. In co-operation with the Special Surveys Division, a senior member of the Staff and some supporting personnel was working full-time on the preparation of the new sample (stratification, maps, calculation of sampling ratios, instructions, etc.). Specifications were prepared for a computer program to produce the monthly estimates under the new design. Specifications were also prepared for another computer program to calculate the sampling variability of the monthly estimates as well as those of the estimated month-to-month changes.

Work was begun on the development of a new sample design for the monthly Retail Sales Survey, based on 1961 Census data. The new sample is due to be introduced during the first half of the next fiscal year. The main objective of the new design is to provide statistically valid monthly estimates for approximately 30 trade groups by province. Specifications were prepared for a computer program to select the new sample and for another program to prepare monthly estimates based on the new sample.

Final reports have been prepared on the Quality Analysis Projects associated with the 1961 Census of Population. One of these studies provides estimates of the completeness of the population counts, the other analyses the effect of errors in response on the final census estimates. These studies may have important implications for the 1971 Census of Population. Further studies in this direction have been planned in conjunction with the 1966 Census. A paper on this topic was read at the 34th Session of the International Statistical Institute and another paper was submitted for publication in the Journal of the American Statistical Association.

A detailed review of the Motor Transport Traffic Survey, which is conducted by the Public Finance and Transportation Division, has been completed. Recommendations were made for extensive revisions in sample design, data

processing and estimation procedures. These recommendations have been implemented and will result in substantial gains both with respect to the reliability of the statistics and the efficiency of the survey operation. Work was begun on a similar review of the monthly sample survey of employment in small firms, conducted by the Labour Division.

A study was undertaken concerning the feasibility of replacing hundred per cent verification (checking) of punch cards by sample verification. The present practice of the Tabulating Services Division is to verify every punched card. The study indicates that the standard techniques of industrial quality control can profitably be applied to the punching operation, effecting a considerable reduction of the amount of time spent in verifying. The best plan for sample verification has been outlined and a recommendation was made concerning its adoption.

During the last year the Director of the Staff has spent considerable time assisting in the establishment of the Scientific Programming Unit. The work of the Staff has become increasingly dependent on the use of the computer and hence on the work of mathematically oriented programmers. The co-ordination of the work of the Sampling and Survey Research Staff and the Scientific Programming Unit of the Central Programming Division will be of continuing concern to the respective Directors.

Consulting services were extended to a majority of the divisions of the Bureau as well as to several other departments and agencies, such as the Departments of Agriculture; Finance; Fisheries; Forestry; Labour; Mines and Technical Surveys; National Health and Welfare; Post Office; Public Works and Transport; the Air Transport Board; the Bank of Canada; the Central Mortgage and Housing Corporation; the Civil Service Commission.

#### AGRICULTURE DIVISION

The Agriculture Division is responsible for the development and co-ordination of an integrated program of agricultural statistics, including the collection, compilation and publication of current statistical data relating to all phases of the agricultural industry. Although much of the data related to the program is collected by a number of other divisions of the Dominion Bureau of Statistics, by provincial governments and the Canada Department of Agriculture, the Agriculture Division assembles such data for statistical analyses and publication.

The specific role of the Division in the collection of statistics is to conduct numerous farm sample surveys (annual, monthly or seasonal) from which are derived estimates of the acreage and production of crops, number and production of the various kinds of livestock and poultry, as well as farm prices and wage rates. It also conducts full-coverage surveys at the manufacturing or wholesale level for production and stocks of a number of agricultural products and co-operates directly with the provinces and other agencies in the conduct of certain farm and industry surveys.

A federal Interdepartmental Committee, with commodity subcommittees, and an annual Dominion-Provincial Conference on Agricultural Statistics, facilitate the co-ordination of the statistical program. The Dominion-Provincial Conference held in February 1964 was devoted primarily to a discussion of the proposed questionnaire for the 1966 Census of Agriculture. In addition, a number of specific problems in the current statistical program were raised by provincial representatives and the Economics Division of the Canada Department of Agriculture.

Field crop production in Canada in 1963 reached an all-time record index of 176.3 (1949 = 100), exceeding the previous high in 1952 when the index was 172.0. The regular reporting and analysis program of the Crops Section was undertaken during the year and in addition much progress was made in the preparation of a re-issue of the Handbook of Field Crops. Basic source material, derived from the results of mail questionnaire surveys of farm respondents and supplemented by material supplied by the Board of Grain Commissioners, the Canadian Wheat Board, Marketing Boards, private industry and other government departments, was integrated to provide a wide range of weekly, monthly, seasonal and annual statistics relative to production, marketing, processing and consumption of field and special crops. Analyses of the wheat and coarse grains situations were carried in the monthly Wheat Review and the Coarse Grains Quarterly. Extensive files of data pertaining to the production and disposition of cereal and oilseed crops are maintained and hence information and special tabulations were provided in addition to the data contained in the regularly scheduled releases.

Because of staff shortages during the year under review, the research aspects of the program were curtailed. A survey of seed corn dealers in Ontario was undertaken in an attempt to derive new and useful information pertaining to this crop which is growing in importance. A project was started, in conjunction with the regular program of obtaining new crop correspondents, to study response patterns by geographic area and by size of farm in Ontario and Quebec. Stocks of grain on farms has been a sensitive estimate in the Prairie Provinces for nearly a decade. Due to reduced crops, especially in 1961, and to improved sales, stocks shrank to more normal levels at the end of the 1961 and 1962 crop years; this provided an opportunity to check on the nature of the returns of a panel of crop correspondents.

The Division continued to co-operate with grower and processor associations and provincial authorities in studies of the application of objective estimating procedures for tender tree fruits. Continued co-operation was extended to the Province of Quebec in the development of this program of objective estimates of the apple crop.

More resources were channeled into the statistical field of Canadian food consumption with the aim of clarifying past trends and providing a broad framework from which projections of future requirements can be made. A comprehensive feed-concentrate balance pertaining to the Canadian feed-livestock economy was developed. Foreign reporting in the Wheat Review and Coarse Grains Quarterly was extended during the year.

The Livestock and Animal Products Section issued monthly reports on the output of dairy factory products, fluid milk sales, estimates of production and farm value of milk and eggs, and on stocks of the principal food commodities held in storage; quarterly reports on the number of pigs on farms and forecasts of sows to farrow; semi-annual estimates of other livestock and poultry on farms, annual estimates of meat and wood production and domestic disappearance. Annual reports on dairy, livestock, poultry and eggs and also on fur farm statistics cover production, trade and other related data for those products or segments of the agricultural industry. In these annual reports data compiled within the Bureau are supplemented by data from other sources. Considerable progress was made during the year in compiling historical series for a Handbook on Livestock Statistics.

Research pursued included correlation analyses on farrowing and hog marketing forecasts and detailed tabulation of population for selected areas under Milk Board control to establish a basis for revising estimates of fluid sales and per capita consumption of milk and cream. Dairy Commissioners and Milk Control Board officials in the various provinces were consulted in connection with this latter study. Estimates of poultry meat production for 1963 were prepared in greater detail than for previous years in order to separate fowl production from that of other chicken meat.

Revised mailing lists, based on the 1961 Census of Agriculture, were completed for all provinces in time for use in the 1963 June Survey of Crops and Livestock. The introduction of this new list has had a beneficial effect upon farmers' response in most provinces, particularly Ontario.

Revisions of farm income and expenditure estimates, based on the 1961 Census of Agriculture and the 1958 Farm Expenditures and Income Survey, progressed favourably despite some problems arising out of the change in the definition of a farm for the 1961 Census of Agriculture. The results from the 1958 survey have been used extensively in revising and making more complete the content of the expenditure items presently included in the Bureau estimates.

Arrangements were made with the two large vegetable marketing agencies in British Columbia to receive, on a regular basis, information regarding quantities and farm values of potatoes handled. Some information was collected in Saskatchewan and Alberta concerning marketing charges levied for livestock marketed through public stockyards.

A study was initiated to determine the possibility of making more direct use of municipal taxation data collected by provincial Departments of Municipal Affairs for the purpose of estimating farmers' expenses for property taxes. So far, investigations in Saskatchewan and Alberta look promising. The situations in the remaining provinces are somewhat more complex and will require further study.

Arrangements have been made to obtain regular information concerning farmers' premiums and indemnities received under the provisions of the Federal Crop Insurance Act. Up to the present, only Prince Edward Island, Manitoba and Saskatchewan have launched crop insurance schemes under the provisions

of this Act. During the year, discussions were held with a representative of the Canada Department of Insurance to consider the possibility of obtaining information concerning premiums paid and indemnities received by farmers in connection with insurance for the protection of the farm business against fire, hail, wind and other risks.

The Agriculture Division has been made solely responsible for the Bureau's collection and tabulation of information concerning farm debt. As a result, a thorough study of sources of credit available to farmers has been initiated. Already arrangements have been made through the Bureau's Public Finance Section to collect data concerning farm credit extended by rural municipalities.

Most of the work in the Interview Survey Section during the past year consisted of preparing drafts of reports from the 1958 Farm Expenditures and Income Survey and checking computer tabulations of data. Five series of analytical tabulations from Schedule A (Farm Business Expenditure and Income) were specified to meet the requirements of the Agriculture, Prices, and Research and Development Divisions within the Dominion Bureau of Statistics and the Economics Division of the Canada Department of Agriculture. These tabulations contain selected groups of summary items pertaining to farm operations and family income from all sources, classified for each province by type, size and other characteristics of the farm holdings and families.

Drafts for three reports were completed during the past year in the Interview Survey Section. In general, these reports contain more detailed classifications of data for selected items in 1958 Farm Survey Report No. 1: Expenditures, Receipts and Farm Capital, released during November 1962. The contents of these three reports consist of: (1) farm family income from sources other than the operation of farms: (2) motor vehicles and machinery on farms; numbers, values, and operating expenses; and (3) farm family assets and liabilities. Before publication of these reports, it has been considered essential to provide users of the data with an appraisal of the number of farms which supply the major part of the income received by the farm operator and his family. Data collected during the survey pertain to farms as defined in the 1956 Census of Agriculture, Many of these land holdings can be designated as farms only on the basis of the use of land area. However, it is well known that the income originating from these holdings constitutes a relatively small part of the total income received by the owner (or operator) and his family. In order to specify more precisely the number of farm operators and farm families actually dependent on agricultural operations for the major part of their income, some additional analysis of the survey data will be necessary.

Special tabulations and tables were constructed for research projects being conducted for the Royal Commission on Taxation, the Royal Commission on Health Services, the Organization for Economic Co-operation and Development and other agencies and organizations.

A formal project proposal outlining the details of a systematic investigation of the various mail questionnaire surveys carried out by the Agriculture Division was given approval by the Dominion Statistician in the Fall of 1963. It is planned to evaluate the efficiency of present methods of estimation, to study alternative sampling techniques, and to recommend changes where there is an apparent need. It is also planned to study the feasibility of establishing probability sampling procedures from the point of view of: (a) a complete changeover to probability methods; (b) the subsampling of non-respondents using a field follow-up; (c) a combination of mail questionnaire and probability sampling methods. This will involve an assessment of the relative costs of the various procedures keeping in mind the timeliness with which the data must be collected, edited and tabulated. The initial investigation has centred upon the monthly poultry survey.

Other projects carried out during the year include: - conferring on the statistical aspects of objective yield measurement studies on tree fruits which are being conducted by the Province of Quebec and by outside agencies in Ontario; working closely with the Sampling Research and Consultation Staff both on problems associated with the analysis of the 1961 Quality Check of the Census of Agriculture and on plans for the 1966 Quality Check; a study of the variability of wheat yields in the three Prairie Provinces; and assistance to the Economics Branch and the Farm Credit Corporation of the Canada Department of Agriculture in the development of the Sample design of a survey of farm credit characteristics.

#### BUSINESS FINANCE DIVISION

A large part of the work of the Division is centred around the collection and analysis of the financial statistics of business firms. Surveys of corporation profits and related data are conducted quarterly and the results are published in a report entitled *Corporation Profits*. Profits data are presently provided for twenty-five broad industrial groups, an increase of five groups over the number published during the previous year.

Estimates of capital and repair expenditures on construction, machinery and equipment are obtained three times each year from business, institutions and governments. Estimates of the expenditures of individuals for housing are also included in these surveys. One survey of capital and repair expenditures is conducted in the Fall of the year and obtains estimates for the current year and intentions for the year ahead. Each Spring estimates of actual expenditures for the previous year are collected and at mid-year, a sample survey is undertaken to review the stated intentions of the previous Fall. Two reports are issued each year on the results of these surveys: Private and Public Investment Outlook is released in mid-March and gives the outlook for that year, preliminary estimates for the previous year and final estimates for the year prior to that; Private and Public Investment Mid-Year Review is released in July and gives a re-assessment of the intentions stated the previous Fall for the current year. Capital and repair expenditures for the years 1955 to 1959 are being assembled in conformity with the revised Standard Industrial Classification and should be completed by mid-1965. Data from 1960 on is already on the new industrial classification.

The results of the profits and investment surveys provide the basic data for these items in the National Accounts and are widely used by business and government as key indicators of current and future developments in the econ-

omy. Investment in plant, equipment, housing, institutions and other facilities is of particular significance in Canada since over a fifth of the nation's expenditures are usually made for these purposes. The size and content of the intended investment program and its regional distribution provide considerable information on the support that may be given to general economic activity as a result of the direct demand generated for labour, materials and equipment during the period of construction of these facilities and later when the newly created plants or other facilities go into production or service.

In addition to the construction data provided in the investment reports which show expenditures on construction by industries, agencies, or organizations paying for the work done, another report is prepared entitled Construction in Canada which provides information on value of work put in place by type of structure along with overall estimates of the labour and material content of this work. The value of construction by type of structure is reported in the capital expenditure or investment surveys. The labour and material content of these expenditures is estimated by applying ratios derived mainly from surveys of construction contractors to the total cost estimates taken from the investment surveys. Separate estimates are also shown for the total value of work performed by construction contractors and that performed by others engaged in construction work on their own account. The report containing this information is usually released in May of each year.

Monthly statistics on construction activity, as reflected by building permits data collected from approximately 1,400 municipalities in Canada, are published about six weeks after the close of each month in a report entitled Building Permits. This report contains information by provinces and economic regions on the number and value of housing units by type, for which permits have been issued. Value data is also provided as given on the permits for industrial, commercial, institutional and government building construction. Since building permits data are used extensively in estimating the number of housing starts, coverage of the survey has been extended to all municipalities in Canada issuing building permits.

As of January 1, 1963, the responsibility for the monthly publication New Residential Construction was transferred from the Special Surveys Division to the Business Finance Division. This report is based on nation-wide surveys by the Central Mortgage and Housing Corporation which collects the number of dwelling units started and completed each month and the number under construction at the end of the month. Volume estimates of the number of units put in place which are prepared quarterly and annually are derived from the starts and completions data and then cost and price factors are applied to produce value series in terms of current and constant dollars.

The total number of dwelling units constructed between 1951 and 1961, as estimated from the starts and completions surveys, is being compared with the net change in stocks between these dates as reflected in decennial census data. This reconciliation will result in adjustments to some of the annual and quarterly estimates published for the years 1951 to 1961.

Development work continued on the quarterly survey of corporation balance sheets which was initiated in 1961. This survey was undertaken to meet the need for information on how corporation activity is being financed, the liquidity position of this sector and the probable demand for funds. A report released in May 1963 covering trust companies, mortgage loan companies, sales finance companies and consumer loan companies provided quarterly data from 1960 or 1961 to the first quarter of 1963. Quarterly data for the non-financial major industrial groups will be included in this publication as the information being collected is edited, improved and analysed. Reports will normally be released within three months following the close of a quarter.

An annual survey of the financial aspects of trusteed pension plans is conducted in July each year and the results of the survey are usually published about December of the same year in a report entitled Trusteed Pension Plans, Financial Statistics. These surveys collect income, expenditure and assets data for plans with fiscal years ending between July 1 of one year and June 30 of the following year. These data are collected from employers having a trusteed pension plan and from trust companies with respect to the investment of pooled and mutual funds. There are a variety of uses for the data collected: pension payments of individuals form a part of contractual savings as recorded in National Accounts; trust and investment companies are able to follow developments in pooled and mutual funds; and government bodies use the data as background material in social security studies.

Two biennial reports on Canadian scientific research, Industrial Research and Development Expenditures in Canada and Federal Government Expenditures on Scientific Activities, are published by the Division. Both reports show expenditures by source of funds, by performer of research, and by scientific field. They also provide information about classes of personnel engaged in research and development. During the year, the report Industrial Research and Development Expenditures in Canada, 1961 was released, and new surveys of industrial and government research were started. Questionnaires for these new surveys were expanded in order to ask for additional information on the recommendation of users. It is expected that both of these reports will be published in 1964. The publication on industrial research will contain actual expenditures for 1963 and estimates for 1964. The report Federal Government Expenditures on Scientific Activities will present actual figures for the fiscal year 1962-63 and estimates for the years 1963-64 and 1964-65.

Monthly reports are issued on the total value of cheques cashed in fifty-one clearing centres in Canada which account for more than 80 per cent of all cheques cashed, Quarterly reports are issued on commercial failures in Canada on the basis of information supplied to the Bureau under the provisions of the Bankruptcy and Winding-Up Acts. The number of failures and the liabilities incurred are published by region and by industry.

A continuous survey of new firms is conducted to assist divisions of the Bureau in maintaining up-to-date coverage in various Bureau surveys. Efforts are made to cover all establishments in manufacturing and wholesale trade and, for other businesses, those with 15 or more employees. Co-operative arrangements exist with provincial governments whereby the results of these surveys are made available to them. A co-operative arrangement has been established with the Unemployment Insurance Commission as well, whereby their local offices collect a Nature of Business Report from all new registrants in conjunction with the completion of the Unemployment Insurance Commission

application for registration to purchase unemployment insurance stamps. In return for this collection service, the Bureau assigns industrial codes for all Unemployment Insurance Commission registrations. The publication New Manufacturing Establishments in Canada issued semi-annually, is based on results of this work.

The Division is also responsible for constructing a standard list of establishments according to definitions set out in the most recent issue of the Standard Industrial Classification Manual. As the title implies, the intention is to standardize coverage by industry groups so that the same establishments are included in each group in the various Bureau surveys collecting different types of subject matter, thus permitting the use of one statistical series with another, with the minimum adjustments for coverage, This standard list or index has been completed for all industries except some segments of trade and services and for Education and Health and Welfare surveys. During the year multi-unit firms were also assigned industrial codes at the company level and each of the over 100,000 entries in the standard lists was assigned an identification number. At year-end, preliminary work was underway leading to the application of the standard list numbering system to the monthly employment, payrolls and manhours survey and to the energy statistics survey. This classification and numbering system is also being adopted by the Corporations and Labour Unions Returns Act Administration. It is planned that other survey areas throughout the Bureau, in particular the annual Census of Manufactures. will adopt the standard list numbering system during the coming year.

#### CANADA YEAR BOOK, HANDBOOK AND LIBRARY DIVISION

The program of the Division includes the planning, compiling, editing and publication of both English and French language editions of two official compendia of information on the Canadian economy, the large 1,250-page reference volume, Canada Year Book, and the 320-page illustrated handbook, Canada, as well as the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library for statistical research and study.

The compiling, editing and printing of the Canada Year Book 1963-64 extended throughout the first ten months of the fiscal year under review and the English language edition was released for distribution on March 6, 1964. At the close of the fiscal year production of its French language counterpart, Annuaire du Canada 1963-64, had reached only mid-point, owing to existing pressures on the translation services of the Government, and publication was forecast for August.

The official handbook Canada 1963 was published in English and French editions by photo-offset process and released simultaneously in May 1963. The planning, preparation and editing of Canada 1964 were carried on during the period September 1963 to March 1964 and final stages of production were sufficiently advanced to anticipate possible publication in both official languages by July 1964.

Throughout the spring and summer of 1963, translation of specially prepared English text, based upon the standard 1962 and 1963 editions of the official handbook, was completed in Spanish with the co-operation of the Translation Bureau and initial copies of a 256-page Canada were received from the printers as the fiscal year closed. This Spanish language edition of the Canada Handbook was produced by the Division largely for distribution by the Departments of External Affairs, Trade and Commerce, and Citizenship and Immigration through their offices in Latin America, Spain and the Philippines.

In its capacity as a focal centre for Canadian statistical material closely related to the Canada Year Book's overall coverage of the Canadian economy and its administration, the Division supplied regular series of Canadian statistics for the United Nations Statistical Monthly Bulletin, the United Nations Statistical Yearbook and for the International Labour Office. In addition, the long-established practice of providing up-to-date annual revisions of Canadian material was continued for a great variety of standard national and international reference works.

The Library at the Dominion Bureau of Statistics maintains a large stock of books, periodicals, documents and reports for the use of the DBS staff and research workers. It also has an extensive collection of statistical publications received on an exchange basis from nearly all countries of the world. The Library's resources are used not only by Bureau staff but by other government departments, business firms and academic staff throughout Canada as well as the United States through inter-library loan facilities.

Continued progress was made during the fiscal year in reorganizing the varied library collection and in the task of rearranging it most efficiently in the limited space available. The general periodical collection was completely centralized in one area under an alphabetical title arrangement, thus terminating a project which has been underway for some time. Also completed was the physical rearrangement of the collection of DBS publications which have now been filed in an expanded classification as used in the DBS Catalogue of Current Publications.

Demands on the services of the Library have continued to be heavy; and it was not found possible to complete the manuscript of the Historical Catalogue for publication.

#### CENSUS DIVISION

The processing of the results of Canada's Tenth Decennial Census of 1961 continued, and during the 1963-64 fiscal year 102 reports, comprising some 6,000 pages of statistical information, were published.

During the year, the staff of the Division was employed primarily in examining tabulations of the Population, Housing, and Agriculture data, analysing and evaluating the results, and arranging the statistics in tabular form for publication. Cross-classification tabulations of the information were compared for consistency with the basic tabulations made earlier and then

prepared in a series of tables for publication. For the different series of reports, changes in concepts and definitions from previous censuses had to be reconciled, convertibility indices prepared, and the necessary adjustments made in the statistics for previous censuses in order that the trend data would be comparable. These adjustments were necessary to conform with the standard and international classifications requested for the various statistical series.

The first tabulations derived from information relating to income, fertility, and migration collected in the 1961 Census from a 20 per cent sample of private non-farm households. The results were examined, adjusted to meet the sample design, and the data prepared for publication. Three reports presenting family and individual income information were published during the year.

Included among the reports published was a series which presented for the census tracts in twenty-one of Canada's largest cities and census metropolitan areas, considerable basic information on the various characteristics of the population, including their economic status and occupations, and the homes in which the population resided.

The third and final brochure listing reports planned for publishing the 1961 Census information was prepared and printed during the year.

Following the release of the various bulletins, the staff commenced work on a number of detailed analyses of the statistical information collected in the Census. The significant results of these analyses and detailed statements covering the administrative procedures followed in the Census will be presented in a series of reports comprising the General Review Volume of the Census. Individual reports of these analyses will be published during the next year or two. Arrangements were completed with a number of university professors to write a series of analytical monographs on the social and economic life of Canada as indicated by the information obtained in the Census. Details of the tabulation requirements were submitted by the authors for review by the subject statisticians, the programming and the tabulation staffs. Assistance in assembling historical data for these studies was also given by members of the census staff.

The microfilming of the 1961 Census documents was completed and the films transferred to storage. A number of studies relating to times and costs of the various field and processing operations of the 1961 Census were undertaken with a view to establishing more economical and improved methods for the next Census.

In the Census Analysis Section, the regular series of reports dealing with estimates of total population and of population characteristics was prepared and published. These include estimates for June 1, 1963, as follows: (a) Population of Canada and the Provinces by Sex and Age Groups; (c) Quarterly Estimates of the Population for Canada; (d) Population of Eleven Census Metropolitan Areas. The 1962 Annual Estimates of Families in Canada, and the 1962 Annual Report on Canadian Citizenship Statistics were also published. Estimates of Population as of June 1, 1963, by Single Years of Age and Sex, for Canada and the Provinces,

were calculated and made available upon request. A special report was prepared and published in collaboration with other divisions of DBS in which Selected Statistics on the Older Population of Canada was presented. A paper showing the demographic trends as affecting the older population was also prepared. Considerable technical assistance was rendered to authors of the various monographs and considerable statistical data were compiled for other departments and commissions. One analytical bulletin describing the rural and urban population of the 1961 Census was prepared and published. Progress was made in preparing five other analytical reports on census information.

In the Administration Section, some 46,000 requests for verification of age, using early census and national registration records, were received and processed during the year. The Proofreading Unit, in addition to reading all manuscript before publication, reviewed all manuscript for consistency of the English and French text prior to printing.

Representatives of the Division served on various committees and provided consultation services to other government departments and agencies, including that of the Representation Commissioner. Members of the staff participated in the International Statistical Institute meetings and served on the secretarial staff. Officers of the Division also planned and participated in the program for training a number of international students and observers sponsored by United Nations and the Agency for International Development.

The review of the Division's functions and staff requirements, commenced in the previous year, was continued and discussions held with senior officials of the Bureau and the Civil Service Commission. While some progress has been made in this regard, the discussions were continuing at the year's end.

Toward the close of the fiscal year, a number of meetings were held to consider the need for a 1966 Census and to contemplate the inquiries that should be included in the censuses of population and agriculture. Draft questionnaires on these two subjects were prepared.

#### **EDUCATION DIVISION**

The Education Division functions as an agency for the collection and dissemination of information describing the state of Canadian education. Since the directive force for the conduct of formal education within such provincial boundary rests with the provincial government, it is inevitable that the pattern of the Division's activities has reflected the demands and needs of those who are actually responsible for the conduct of the schools, while at the same time considering the needs of the federal departments of government and international bodies. Since the position of education is dynamic, not only the series collected but the work of the Division is changing somewhat and expanding to meet an increasing number of requests for further analysis and greater interpretation of available information. Since education is being considered more and more as a basic factor in economic development and a contributor of production, an ever-increasing number of departments of government as well as a wide variety of other organizations are requesting information concerning manpower and are showing an interest in some phases of education planning.

As Canada has no education documentation centre, the Education Division, together with the Canadian Education Association, Canadian Teachers' Federation, Canadian Universities Foundation and some departments of government share this responsibility. Because the Division is the only unit of the federal government which compiles data on education for Canada as a whole, it provides considerable statistical data and information for international bodies, national organizations, departments of government, associations and individuals. In addition, it issues regular surveys of education throughout Canada at all levels and occasional publications as time permits.

Data for Division reports are compiled in many ways, sometimes using forms designed co-operatively with and distributed by provincial departments of education. Other forms are designed with approval of the universities, planned co-operatively with the Federal Department of Labour, or are forms originating from DBS. Data compiled from these forms, together with some provincial compilations, are brought together to present a composite picture of education in Canada. The principal data collected cover number and type of establishments; number, salaries and qualifications of staff members; number, levels and activities of those enrolled; and revenues and expenditures.

A primary function of the Division is that of co-ordinating provincial data to provide totals for Canada. Through limited analysis and significant comparisons of related data, trends are traced and estimates are produced. During the year, efforts were continued to bring the regular publications more up-to-date, to revise forms, to ensure the best coverage, to review the contents to ensure that they meet current needs, and to consider the adequacy of coverage for those interested in education planning. During the year, more reports were issued than during any year previously and the lag between time of reporting and publication was reduced in many cases. Where expedient, current data are made available through the Daily Bulletin and in preliminary releases.

Because the Division operates in a field where the provincial departments exercise jurisdiction and collect data on education for administrative purposes, the Division maintains informal though close liaison with the Departments of Education. By using the same forms, duplication of effort is avoided. Somewhat similar relationships have been established with the universities, business colleges and most other types of education institutions and with education associations in order to ensure the adequacy of data collected and series established.

The Chief of the Elementary-Secondary Section, who spent four months last year as statistical adviser for UNESCO to the Ministry of Education of Libya, spent from mid-October to mid-December on a follow-up mission to Libya this year. While there, he prepared a survey of education, related statistics and enrolment forecasts based on five different assumptions for the use of a team of experts in education planning.

Beginning in February, the Chief of the Elementary-Secondary Section became a part-time member of the secretariat of the Conference Arrangements Committee for the Third Commonwealth Education Conference to be held in Ottawa from August 21 to September 4, 1964.

The seventh Federal-Provincial Conference on Education Statistics was convened March 18-20, 1964, to review the forms used at present in compiling data and to consider implications of the introduction of tabulating units in some provinces. More delegates and observers attended this conference than any previous meeting of this kind, with representatives from the ten Departments of Education, four national education associations, four provincial trustees' associations and six provincial teachers' federations.

After consultations with university registrars and the Canadian Universities Foundation, two forms for the collection of higher education enrolment data received extensive revision. The revised forms make a more accurate count possible for determining eligible enrolment for Federal University Grants administered by the Canadian Universities Foundation and provides greater detail on part-time student enrolment.

Preliminary discussions are under way in an attempt to design current DBS forms to meet the needs of the Ontario and British Columbia governments for higher education data and to combine certain independent university salary surveys with those conducted by the Bureau. The DBS salary survey is used by the Pay Research Bureau of the Civil Service Commission and provides information requested by the Canadian Association of University Teachers.

In the Vocational Education Section, the Survey of Vocational Education and Training was published and, in addition, three reports were prepared for the Technical and Vocational Training Branch of the Department of Labour. During the year a special survey was designed co-operatively with the Department of Labour to determine the extent of organized in-service training in industry at the technician, supervisor level. In this respect, some preliminary data have been issued to date.

In addition to the regular publications the Adult Education Section issued an article Special Library Statistics for Canadian Library describing the use of the Gale Research Directory as a source of statistics in this field. The Chief of the Section attended meetings of the Statistics Co-ordinating Project of the American Library Association, New York, to review definitions and text for a handbook on library statistics.

The Finance Section issued the Survey of Education Finance, 1959-60 and is preparing a new publication Canadian Universities, Income and Expenditures which should be available this summer. Work continues on the manual for secretary-treasurers of school boards which is now in draft form. A form for collecting expenditures on education by federal departments of government will be introduced for the year 1964.

The number of special requests increased during the year in both number and variety. Attendance at conferences and meetings also increased as new demands were made on education. Among these were meetings of the Learned Societies, conferences on education research, guidance, manpower and education planning by the Organization for Economic Co-operation and Development. In addition, many articles and reports were prepared for professional educational publications and for UNESCO.

#### EXTERNAL TRADE DIVISION

During 1963, the External Trade Division was reorganized into two sections and a central staff. The Operations Section was assigned responsibility for the compilation of commodity trade statistics and the preparation of export and import reports. The Classification and Surveys Section was assigned responsibility for the development and control of the classification systems within which these statistics are compiled, and the central staff was assigned responsibility for overall planning, for general research and analysis, and for information services.

The prompt publication of detailed statistics by commodity and country is the primary objective of the Division's work. Considerable progress was made during 1963-64 in reducing the delays affecting monthly import reports, and release dates for 1963 reports averaged more than a month earlier than those achieved for the 1962 series. The sustained rapid growth of export trade caused some delays in the production of export statistics in the latter part of 1963, but it remained possible to release detailed reports within six to seven weeks of the close of the reporting period.

In April 1963, the Division began to compile information on the means of transport used to carry exported goods from Canada. A plan for the annual tabulation of this information has been developed, and work is proceeding on the design of an experimental publication which will make these statistics available and also provide the sort of information formerly published in the series entitled Exports of Canadian Produce to Overseas Countries via the United States and via Canadian Ports. The new operation provides more information and appears to be less expensive and cumbersome than its predecessor.

The new Import Commodity Classification and its related references were completed in 1963, and put into effect with statistics for January 1964. Import and export statistics will now both be compiled within the framework of the Standard Commodity Classification, and will be readily comparable not only with each other but also with other commodity series which have been compiled on the basis of the Standard Commodity Classification. The new import classification is expected to yield the same benefits in flexibility, accuracy, and improved detail as were achieved when the companion export classification was introduced in 1961.

In order to minimize delays in compiling monthly import statistics during the period that the operating staffs were being retrained in the use of the new classification, it was necessary to recruit and train almost fifty additional clerks. The recruitment of suitable staff for this work has always been handicapped by the lack of adequate selection tests, and this build-up therefore created serious difficulties for the Operations Section. Even with these extra resources, the delays in monthly import reports for 1964 are expected to be of the same order as were encountered for exports in 1961, and normal release dates are unlikely to be restored before mid-1965.

The introduction of the new import classification required a thorough review and revision of the operating instructions governing the compilation of import statistics. This permitted two significant changes in import statistics which would otherwise have been difficult to control. The first was to substitute "general trade" concepts for the "special trade" concepts previously in use, and from January 1964, imports will be recorded on a "landed" basis rather than on a "cleared for consumption" basis. This change was prompted by a rapid growth in the use of customs warehouses, which was stimulated by the special duty surcharges imposed in 1962, but which continued even after the surcharges were eliminated. The increased use of warehousing created, for some commodities, an undesirable lag between the time goods arrived in Canada and the time that they entered import statistics. A parallel change was made in export statistics; from January 1964, statistics of re-exports include exports from customs warehouses.

The second change was to institute a closer scrutiny of the values entered in import statistics, in an effort to make these statistics reflect more accurately the actual amounts paid to foreign exporters for their goods. Earlier steps in this direction had been limited to cases involving specific commodities or special customs procedures, but in 1964 the values shown on all very large import entries (which account for some 20 per cent of the total value of imports) will receive special attention. This step is expected to reduce (but not eliminate) a tendency towards overvaluation in import statistics.

The heavy demands on scarce professional and managerial time made by the Import Commodity Classification program and the related procedures review, combined with the vacancy of key professional positions, effectively blocked any real work on another important problem. It has been obvious for some time that a significant proportion of the values used in export statistics are defective, and that existing administrative arrangements are not adequate to produce and maintain a reliable system of export valuation. Visits to a number of exporters, late in the fiscal year, confirmed that the problem is still widespread, but the number of interviews was not sufficient to provide a basis for a reliable estimate of the magnitude of these valuation errors. The solution of this problem will have to be the primary objective of research in the Division once the analytical difficulties associated with the introduction of new commodity classifications have been overcome.

#### HEALTH AND WELFARE DIVISION

This Division is responsible for the production of statistics on the state of the health of the Canadian people, on the enforcement of law and on the administration of justice in Canada. Three sections share the responsibility for producing health statistics. The Vital Statistics Section is concerned with recording and classifying births and deaths as well as with conducting statistical studies on mortality, fertility and life expectancy. This Section is also the recipient of records of marriages and dissolutions of marriages. The Institutions Section is concerned with collecting detailed information on the services, facilities, staffing and finances of general and special hospitals and of mental and tuberculosis institutions. The Public Health Section is con-

cerned with acquiring data on the condition and characteristics of patients in hospitals of every treatment type and also with obtaining figures on the incidence of a number of communicable diseases. The fourth Section, the Judicial, is responsible for the production of criminal and judicial statistics based on information supplied to it by police departments, courts, correctional institutions and the National Parole Board.

The Division carried out its statutory obligations in the field of Vital Statistics by preparing and publishing the regular series of reports as well as by investigating special features of mortality. In accordance with the usual practice, new Life Tables were produced utilizing the 1961 Census population figures. The provinces were supplied with basic vital statistics tabulations as provided for under Dominion-Provincial agreements.

Throughout the year, the demands from public health authorities, from persons engaged in medical research, from producing and distributing firms, from market research agencies and from other user areas continued to be high, and carried with them requests for detailed analyses of current and historical vital records. Questions have been asked about particular diseases, about demographic changes, about the trend of fertility, and about groups of related diagnostic conditions. Each such request usually requires a particular investigation and some special calculation, since nearly all such requests arise after an examination has exhausted the published material in the field.

The Division has been preparing alphabetic registers of births, marriages and deaths on behalf of the provinces, and of the Family Allowances Administration since 1945. For some years negotiations have been under way with the agencies concerned in an attempt to cut down on some of these operations which are not directly statistical in nature. Some of these negotiations have been successful.

The Division each year provides the Vital Statistics Council for Canada with its secretariat service. Besides the work immediately associated with the meeting of the Council, the secretariat service usually involves the examination of a number of problem areas designated by the Council. Some of the problems relate to legal and administrative features of the vital statistics system. Others extend beyond the immediate operations of the system into the general sphere of social statistics. Redesigning the registration forms used by the provinces and reconsidering statistical headings to be placed on these forms are matters which have been under investigation for some time and which illustrate the particular and general nature of these problems. This investigation has the goal of forms standardized in terms of content, size and order of headings. The immediate benefits anticipated are those of economy, convenience of processing and ease of record exchange. Any economy in having the forms printed would be of direct benefit, since, under the terms of the Dominion-Provincial agreement, these forms are supplied free to the provinces. The ultimate benefits anticipated are those of improved and integrated vital statistics. Other benefits are anticipated through changes in conventional processing methods, through the adoption of new processing techniques and also through co-ordinating, wherever possible, the operations of the Division and those of provincial registration and vital statistics offices.

A complete changeover to computer processing from the previously used peg-bar and comptometer methods has made possible the production by the Division of a wider range of statistics regarding the operation and financing of general and special hospitals than could be made available in the past. The new processing procedure also made it feasible to calculate a series of hospital indicators - rates or ratios that measure workload, utilization, staffing, quality of care, costs and other related matters. Despite these advances, certain resource and communication difficulties still persist which lower the quality and delay the arrival of the incoming data. As a result, the rate of statistical output suffers. All eight volumes, for example, of the 1961 statistics on the institutional and financial features of general and special hospitals, have not yet been published, although the 1962 preliminary volume has already been released. Every effort is being made to find solutions to these problems. One delaying feature was the duplicate editing program carried on by the Division and by the Department of National Health and Welfare. This was eliminated during the year.

Several developments of note, besides the processing change, took place in connection with the institutional hospital statistics program. Revisions in the returns submitted annually by the general and special hospitals were incorporated into the 1963 and 1964 forms and major revisions for 1965 were tentatively mapped out. Steps are being taken to have the 1965 revisions satisfy the data requirements of other divisions of the Bureau. Besides immediate revisions to the forms, experimental work is being carried on with a view to revising the present schedule of unit values for clinical laboratory procedures.

In the mental and tuberculosis hospital fields the 1961 volumes on services, facilities and finances were released and the 1962 volumes are almost ready for publication. The material in these volumes is being rearranged in order to accelerate the release of reports somewhat more comprehensive than those that have appeared before.

A general and special hospital morbidity publication for the year 1960 based on tabulations of data from eight provinces was prepared. This project was originally undertaken on behalf of the Royal Commission on Health Services.

The 1961 report on cases admitted to or separated from mental institutions as well as the report on the conditions of patients in these institutions at the end of the year have been published. Efforts are under way to improve the quality of reporting of in-patients statistics for mental cases. Provincial adoptions of standard DBS reporting cards are important steps in this direction.

The regular reports on the cases treated in tuberculosis institutions in 1961 were published during the year, together with the monthly reports on the incidence of tuberculosis. The current incidence reports are derived from provincial registers of active, inactive and re-activated cases of tuberculosis. During the past year, British Columbia adopted the individual case reporting system in place of its previous practice of summarizing tuberculosis notification. Officers of the Division and officials of the Department of National

Health and Welfare discussed various methods of establishing a tuberculosis case register with health authorities in Quebec City. As a result, the Quebec case register began operations on January 1, 1964.

The 1962 annual report Notisiable Diseases was published during the year as well as the weekly reports on the current situation which were released regularly during 1963. Again, as in the previous year, special weekly and four weekly tabulations, subdivided by age, sex, city and health unit, were prepared and sent to the province of Alberta, which supplies the Bureau with individual reports on each case of a notifiable disease.

The 1962 report *Illness in the Civil Service* is about to be published. The series which classified the medically certified illnesses of federal civil servants by diagnostic type, by length and by the demographic characteristics of the affected persons will be the last report in this series.

During the year, the Division published information on police administration, on crime and traffic enforcement, on criminal and other offences, on correctional institutions and on juvenile delinquency. The Division also prepared statistical material for publication by the Commissioner of Penitentiaries and by the National Parole Board. A special motor vehicle thefts survey was also carried out. At the request of the Canadian Association of Chiefs of Police, work is proceeding on the production of two manuals: one on police records, and one on the classification of motor vehicle traffic accidents which will be a Canadian edition of the National Safety Council Manual, the rights to which have been released to DBS for this purpose.

With the introduction of electronic computer programming into the processing of police administration, crime and traffic enforcement and indictable offence statistics, several changes have taken place. To accommodate the acceleration in output due to the speed of electronic computer processing, internal procedures have been revised. It is still necessary, however, to refer preliminary figures back to police respondents for final verification but this can now be done much earlier than was possible before. In the verification and in the original editing of police statistical reports, over two thousand letters and queries were sent out.

A number of liaison activities in the police area, directed toward the improvement of incoming statistical forms, were carried out during the year. Eight seminars on the reporting of crimes under the uniform system were conducted by divisional officers. These seminars took place in various parts of Canada, with the local police acting as conveners. Training courses in the system were also held in the Division itself and were attended by members of Canadian police forces and police officials from other countries. The Canadian Army Provost Corps has introduced a modified form of the Uniform Crime Reporting system into its record-keeping procedures. Among the visitors from other countries that were introduced to this system, those from the Philippines and from Australia have indicated that they are interested in setting up similar programs in their countries. Papers on the present state of the Uniform Crime Reporting system were delivered at the annual meeting of the Canadian Association of Chiefs of Police and at provincial and regional meetings of the several police chiefs associations. Police forces in Ontario report monthly to

the Ontario Police Commission, at the same time as they report to the Bureau. At the request of the Commission, the Division developed procedures to make this duplication feasible.

Besides these direct liaison and training activities in the police field, the Division made changes in the requirements for traffic enforcements statistics in order to establish indexes based on offences charged and on accident statistics at the request of the Committee on Uniform Crime Reporting of the Canadian Association of Chiefs of Police. A special motor vehicle thefts survey, was carried out in May 1963 and the published results were discussed both at the annual conference of the Canadian Association of Chiefs of Police and of the International Association of Chiefs of Police.

In the field of Training School Statistics, a second meeting took place in June 1963 at the Bureau with provincial authorities in attendance. As a result, a simplified method of reporting on children admitted to training schools was developed.

An improved Penitentiary Statistics program is to begin on April 1, 1964. The setting-up of this program was preceded by a number of discussions with officials of the Canadian Penitentiary Service, by visits to the Bureau of Corrections in Pennsylvania and to the United States Bureau of Prisons in Washington. This program is intended to satisfy the needs of the Canadian Penitentiary Service for basic statistics and for information required in connection with special investigations. The first phase of this new program has been the development of a perpetual inventory of penitentiary inmates, the inventory being prepared by collating admissions and releases each day. Monthly listings will be sent to the federal institutions to verify the accuracy of the inventory.

Discussions during the year in the Adult Court Statistics area have been catried out with a view to simplifying the collection and improving the quality of reported information by changing from quarterly to monthly reporting. The new forms which are an improvement in content and design will soon be ready for presentation to the provinces for their consideration. At the same time, consideration has been given to the advisability of collecting details of the social characteristics of persons appearing in court; practices of a number of other countries have also been examined in this connection. The departments of the Attorneys-General of the provinces have been kept informed of all these activities. The desire of the departments for a simplification of the final reporting program has been kept firmly in mind.

The Division supplied considerable statistical information to the Committee on Juvenile Delinquency of the Minister of Justice. No changes of importance in the Juvenile Delinquency Statistical program will be proposed until the Committee's recommendations have been made public. However, one minor change was introduced, viz., a separate form to be filled out for informal cases in juvenile hearings.

#### INDUSTRY DIVISION

The Industry Division was established on June 1, 1963, when the former Industry and Merchandising Division was reorganized into two separate divisions; the Industry Division and the Merchandising and Services Division. The Industry Division was assigned responsibility for statistics in the fields of manufacturing and primary industries and for the development of productivity measures. Also, in order to achieve statistical and administrative co-ordination in the field of energy statistics, the new Division's responsibility was broadened in this area to cover statistics on all forms of energy. This involved the transfer from the Public Finance and Transportation Division, of that part of the Public Utilities Section responsible for statistics on oil and gas pipelines, generation and distribution of electricity and distribution of natural gas. The position of Co-ordinator of Energy Statistics was also transferred from the the Central Research and Development Staff.

The Division now consists of four main sections: Industry Statistics, Productivity Research and Analysis, Energy Statistics and Inventories, Shipments and Orders. A separate unit is responsible for the collection and summarizing data on stocks of critical survival materials for use of the Emergency Supply Planning Branch of the Department of Defence Production. The Industry Statistics Section consists of the former Census of Manufactures, Primary Industries and Operations Sections, the latter continuing in its principal function of collecting and processing the annual, quarterly and monthly data originating in the censuses of industry and in the current commodity surveys of the Division. The Energy Statistics Section was assigned, in addition to the statistical fields mentioned previously, responsibility for the monthly statistics on refined petroleum products and for the monthly and annual statistics on coal, crude petroleum and natural gas. The Inventories, Shipments and Orders Section was formerly attached to the old Census of Manufactures Section and now constitutes a separate section.

The Industry Statistics Section is responsible for industry and commodity statistics on an annual and current basis in the fields of manufacturing, mining, forestry and fisheries. Comprehensive industrial censuses are carried out each year, providing data on value of shipments, employment, payrolls, inventories, cost of fuel and electricity and cost of materials and supplies. Most of these "principal" statistics, along with computed "value added", are published by industry, province, small geographic area and by size of establishment and type of ownership. Annual data on thousands of individual material and product items are also collected and published as part of the annual census operations. While the annual censuses provide a wealth of integrated statistics, current information on the production of important commodities and materials is of primary importance and a considerable number of commodity surveys on a monthly, quarterly or seasonal basis are carried out. Results of all these census and commodity surveys are published in a regular series of nearly 300 reports and special statements.

During the past year, the change to the new establishment definition in the Census of Manufactures was virtually completed. While the statistics published in the 1961 census reports were compiled according to the Standard Industrial Classification and the new "accounting entity" concept for the

period 1957-1961, they were confined, as in the past, to "manufacturing activity". The data which will be published during the coming year in the 1962 reports will be on the basis of "total activity" of manufacturing establishments although data on "manufacturing activity" will still continue to be shown separately. In order to provide a one-year overlap, the 1961 statistics were recompiled on the new basis and will be published with the 1962 data. It is only at the "total activity" level that complete consistency between items of "principal" statistics can be obtained and the new compilations will provide improved accuracy and co-ordination of industry statistics. It has been recognized for some time that the operational data collected and compiled as "manufacturing activity" could not be entirely realistic and accurately defined; manufacturing establishments engaged in other activities, such as wholesale trade or construction, which are not treated as separate units in their accounting records cannot properly allocate certain items of statistical data entirely to a single activity.

The extensive changes in classification, concept and compilation procedures, which were implemented in the 1960, 1961 and 1962 censuses of manufactures, have strained the resources of the Section with a consequent loss in timeliness of the annual census statistics. A number of general industry reports had to be suspended for 1961 and 1962 to help regain some of the lost time, but where this would have meant withholding important statistical series, these were included in other regular publications. Improvement in timeliness, however, is expected for the 1963 Census of Manufactures.

During the past year, considerable progress was made in applying computer processing to the tabulation and editing of Census of Manufactures 'principal' statistics and will be further extended during the coming year. Full use of electronic computer processing for the annual censuses of industry is an important factor in the Division's longer range plans for the improvement of timeliness and will permit a significant expansion in the number and detail of analytical series.

As a result of divisional reorganization, responsibility for subject matter is now divided into five units. These are the Minerals, Metals and Chemicals Unit, the Forestry Statistics Unit, the Foods and Beverages Unit, the Textiles and Miscellaneous Industries Unit, and the Fisheries Statistics Unit. In addition, to cope with the increasing number of complex reporting problems brought about by the recent changes in classification and concept, the Company Edit Unit was formed. This Unit is staffed with senior editing personnel who analyse the reports of all multi-unit firms to ensure accuracy and consistency.

In the Minerals, Metals and Chemicals Unit some progress was made during the period in implementing the new establishment concept in the mining industries. New questionnaires were developed for use in the 1963 Census of Metal Mines and new companion forms were also designed for integrated mining concerns which are also engaged in smelting and/or refining activities. It is expected that estimation procedures will be required to work back the data on the new basis to 1962 and 1961. The change to the new reporting basis for the other mineral industries will be carried out in the 1964 Census. Officers of the Unit organized a number of meetings with industry and government officials to

review existing statistics and discuss desirable changes. The more important of these were a Dominion-Provincial Conference on Mineral Statistics and meetings with representatives of the iron and steel, plumbing and heating, and chemicals industries. In addition, initial arrangements were made with the Department of Mines and Technical Surveys to form an interdepartmental committee on mineral statistics. At the request of the Central Research and Development Staff, for purposes of the Input-Output project, the Unit also co-operated in carrying out special surveys for 1962 of operating and maintenance supplies in the mineral industries and of containers and packaging materials mostly in manufacturing industries. It is planned to publish results of the latter during the coming year.

In the Textiles and Miscellaneous Industries Unit, the quarterly statistics on clothing were reviewed in co-operation with the appropriate trade associations and as a result the questionnaire was amended and the associations undertook to assist the Section in obtaining a higher rate of survey response. At the request of the Statistics Committee of the Society of the Plastics Industry, a special survey was undertaken to obtain 1962 production and shipments of certain types of plastic film. It is also planned to undertake an additional quarterly survey on hand luggage in 1964.

In the Foods and Beverages Unit, major changes in the method of Publication of a number of current reports were implemented. The report on Quarterly Processed Foods was discontinued and replaced by three separate quarterly reports, viz., Pruit and Vegetable Preparations, Biscuits and Confectionery, and Miscellaneous Foods. Following requests from the Department of Agriculture and from the industry, a monthly cumulative release was instituted covering the pack of canned and frozen fruits and vegetables. This report supplements the seasonal releases for individual packs, During the period, the Unit also prepared directories of bakery products manufactures and dairy products manufactures showing lists of establishments and the type of products they manufacture.

Developments in the Fisheries Statistics Unit centred about the proposed Survey of the Primary Fishing Industry and in this connection draft question-naires and an enumerators' instruction manual were prepared and tested. The survey, to be carried out in co-operation with the Department of Fisheries, is to be periodic rather than annual and will be complete for large firms and on a sample basis for small operators. Many suggestions and recommendations for changes resulted from the tests and these will be taken into account in the final version of the questionnaire. A number of meetings of the Interdepartmental Committee on Fisheries Statistics was held during the year with resulting changes in the tabulations required for the International Commission on North Atlantic Fisheries. In addition, decisions were made which will affect the fisheries tabulating units in Halifax and Vancouver. In brief, it was agreed that DBS will assume full responsibility for operating these units. This will probably result in a number of staff transfers from the Fisheries Department,

In the Forestry Statistics Unit, the first Dominion-Provincial Conference on Forest Product Statistics held at the end of the previous fiscal year, resulted in increased co-operation with the provinces and in further elimination of DBS-provincial duplication of surveys in this field. In particular, cooperative arrangements were made with the provinces of Newfoundland, Nova Scotia, Ontario, Saskatchewan and Alberta with respect to surveys of several forest products.

Developmental work is now being done on an annual survey of production on farm woodlands to be carried out in conjunction with the Agriculture Division's June crop survey. Heretofore, there was only a decennial census of farm woodlands and estimates were made for intercensal years. Close liaison was maintained with the various forest industry associations and as a result of these contacts, changes were made in certain annual reports. In particular, the report on Paper Box Manufacturers was discontinued and replaced by two separate reports, viz., Manufacturers of Folding Cartons and Set-up Boxes, and Manufacturers of Corrugated Boxes.

Officers of the Section, in line with an intensive program of improved public relations, made numerous personal visits to firms and associations during the year and attended several industry conventions and exhibitions. Individual meetings were also held with senior officers of the new Industry Department to initiate discussion of the Statistical requirements of the Department. It is expected that the Industry Department will generate considerable demands on the services of the Division in the future.

In the Productivity Research and Analysis Section, work was concentrated during the period on the development of the global productivity series and at the end of the year, a completed draft report showing the results of the project and describing concepts and methods was ready for circulation to interested government agencies for study and comments prior to publication. The major part of the work consisted in developing appropriate employment and man-hour series to match, in coverage and concept, the volume of output series produced by the National Accounts and Balance of Payments Division. The indexes of output per person employed and per man-hour worked relate to the commercial non-farm sector of the economy and cover the period 1949-1962. Indexes are shown for both the total manufacturing and non-manufacturing universes. The Section also made progress in its productivity measurement for individual industries. This work is at present concentrated in the manufacturing area and at year-end, studies of four manufacturing industries were nearing completion and work had started on two others.

During the period, the Section co-operated with other government departments in the preparation of reports to international organizations and provided technical advice, textual material and statistical tables to other government departments and agencies, industrial firms and universities. A first meeting was held with the Productivity Committee of the Economic Council of Canada to describe the work of the Section and discuss the Committee's statistical requirements. Several members of the Section's staff have prepared or are preparing technical papers for presentation at meetings of economic and statistical associations. The chief of the Section visited several European countries to discuss their experience in productivity measurement and the uses made of productivity measures.

In the Energy Statistics Section considerable emphasis has been placed on electric power and petroleum statistics. Two major meetings, one with the electric power industry and the other with petroleum refiners, were held in September. The petroleum refiners agreed to several modifications in reporting which will create significant improvements in the statistics and a new survey of liquefied petroleum gas distributors will fill a large gap in supply-demand of petroleum products. In addition, a monthly series on supply-demand of crude oil was initiated and plans are also being made to develop statistics on gasoline sales by grade and metropolitan area, on typical natural gas bills for representative cities and on supply-demand of natural gas and liquefied petroleum gases. In electric power, a major reshaping of the statistical collection program was approved by the industry, consolidating the requests of several government departments and the Bureau, and including a new monthly series on electric power sales.

In November, an overall review of the statistics on petroleum and natural gas exploration and production was initiated. Meetings were held with the Canadian Petroleum Association in Calgary to discuss the complex aspects of financial accounting in this industry and its relationship to the Division's statistical program. It is planned to effect revisions of collection procedures for this industry in the 1964 Census.

In the Inventories, Shipments and Orders Section, emphasis is being placed on revising the monthly series on the basis of the new establishment concept. During the period the revision of the monthly inventories, shipments and orders series to the revised Standard Industrial Classification was completed. This revision was based on Census of Manufactures results for the years 1958, 1959 and 1960 on the new SIC and the revised series were extended back to January 1958. The compilation of the economic use of groupings of industries was suspended when the old classification was discontinued, but it is planned to resume publication this year after the groupings on the revised S.I.C. have been reviewed. At the same time, the question of extending the seasonally adjusted series will be considered.

The annual revision of the monthly series, based on the 1961 Census of Manufactures, was underway at year-end. Since the 1961 base is on the new establishment concept, changes resulting from this have to be worked backward to January 1958 as well as from 1961 onward. The monthly series is to be confined for the present to manufacturing activity; the feasibility of extending the compilation to total activity will be considered during the coming year.

Considerable work was involved in changing the reporting basis of individual firms to the new establishment concept and it was necessary to deal with numerous cases of discontinuity and delays in the monthly data. In addition, the adjustments to new industry groupings have shown up gaps in coverage which will have to be filled to sustain adequate coverage in the monthly series.

During the year, the question of extending coverage of the monthly survey to industries which have to be estimated on the basis of related data was reviewed. New schedules for the bakeries and distilleries industries were set

up and mailed early in 1964 and the results will be incorporated in the regular series. A similar approach is being considered in the case of the printing and publishing, and the sawmills industries.

In the Emergency Supply Planning Unit, new surveys were undertaken during the year. Data are compiled and coded by location and every effort is made to make as much use as possible of established DBS surveys. In addition, to the regular surveys on foods and clothing, special series were developed on stocks of coal, coke and sawn lumber as well as on manufacturers' production and stocks of drugs and pharmaceuticals and of surgical dressings. Directories of food and clothing firms were also developed. At year-end, work was proceeding on special surveys of certain medical supplies and on the preparation of directories of producers and handlers of coal and coke, and of manufacturers of lumber, drugs, pharmaceuticals and surgical dressings.

# INFORMATION AND PUBLIC RELATIONS DIVISION

The role of the Information and Public Relations is to stimulate the development and improvement of all activities which affect the public presentation aspects of the Bureau's work. This involves the extensive DBS publications program as far as overall effectiveness is concerned; the development and promotion of greater use of the Bureau's economic and statistical information with the Canadian community; the improvement of relations with suppliers of information so as to affect the quality and rate of response to DBS surveys; co-ordination and encouragement of the efforts of headquarters and regional officers which relate to these activities; the initiation of contracts with the press and other information media and the employment of other promotion and publicity methods as required to attain these objectives.

During the year under review, the Division proceeded to make arrangements with the objective of performing these duties more adequately. It was engaged in reviewing the nature and extent of information activities in Canada and other countries which have a bearing on DBS problems in this field. This review was nearing completion at the end of the year, and the employment of some additions to the staff was in process. It is expected that these efforts will result in a considerably improved publicity and information operation during the new fiscal year.

Telephone and written inquiries continued at a high level during 1963-64. Written inquiries were handled by the Division at a rate of between 20 and 30 per working day. In many instances material for replies had to be assembled from a number of sources and in some cases special tabulations were necessary.

Portable displays were provided by the Division during the year for use at conferences, seminars, and meetings. Considerable assistance was provided to other Government Departments and Agencies in the development of displays and exhibits of various types. Pamphlets and other promotional material were produced and special articles for selected news media were prepared with accompanying photographs. Co-operation with the press and other information media was undertaken resulting in the publication of news features, TV programs and photo stories.

prepared with accompanying photographs. Co-operation with the press and other information media was undertaken resulting in the publication of news features, TV programs and photo stories.

During the year, 250 is sues of the Daily Bulletin were published with an average circulation of 1,600 English and 250 French copies per issue. The Weekly Bulletin was published each week with an average circulation of 1,500 copies per week.

The Division continued on a limited scale the promotion of the sale and distribution of DBS publications and, generally speaking, good results were obtained.

By the end of the year, the manuscript for the new Catalogue of Current Publications was ready for printing. It will contain up-to-date information on DBS publications as of April 30, 1964, and will take account of all changes resulting from the adoption of the revised Standard Industrial Classification. The catalogue lists 126 new titles and shows 59 old titles as being discontinued for a net addition of 67 titles. The new catalogue also incorporates all publications issued up to the end of April 1964 as a result of the 1961 Census of Canada. The total number of titles in the catalogue is 1,041 comprising 536 periodicals, 213 reference papers, 261 publications of the 1961 Census of Canada, and 31 working manuals.

Approximately 25,000 of the existing catalogue of DBS publications have been distributed since it was printed in 1960.

During the 10-day conference of the International Statistical Institute at Carleton University in August 1963, the Division produced a special bilingual Daily Bulletin, arranged display materials, photographic and newspaper coverage and supplied other publicity and information services for the conference.

## LABOUR DIVISION

The Labour Division consists of three sections: the Employment Section, the Labour Income and Research Section and the Unemployment Insurance and Pensions Section. This last Section was formed by combining the Unemployment Insurance Section with the Pension Plans Section which was transferred from the Business Finance Division early in 1964. 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 employment index numbers are widely used for industry and area analysis of employment changes; per capita data on earnings and hours of work have several uses, the most important of which is perhaps in collective bargaining between labour and management. The Labour Income and Research Section issues labour income estimates giving industry and area totals and undertakes research and analysis pertaining to the general field of labour statistics. The Unemployment Insurance and Pensions Section provides the Unemployment Insurance Commission with operational statistics and publishes statistics of public interest conceming persons covered by unemployment insurance and persons claiming benefit. The Section also publishes statistics of private pension plans from an annual survey of trusteed plans.

In addition to continuing the regular program of unemployment insurance and pensions statistics, a number of special projects were undertaken. These included planning arrangements for the collection of statistics for persons covered by unemployment insurance and others in connection with the registration for social security numbers in April 1964. This involved a series of meetings with the Unemployment Insurance Commission and other departments concerned with the registration. Final arrangements for integration of collection and sampling procedures for statistical purposes with the Unemployment Insurance Commission's operational procedures was facilitated by attendance of senior personnel at the Unemployment Insurance Commission School of Instruction for Head Office, Regional and Local Office officials, held in Ottawa in November 1963.

Senior staff members served on interdepartmental committees organized to study various aspects of the proposed Canada Pension Plan. These committees included the Subcommittee on Statistics and the Subcommittee on the Implications of the Canada Pension Plan for Private Pension Plans. In connection with the activities of these Committees, a number of working documents and background papers were prepared within the Division.

As part of a continuing program to take advantage of computer applications, the Semi-Annual Survey of Hirings and Separations of 60,000 firms was programmed for the computer in the summer of 1963. This is expected to produce some clerical savings and improve timeliness in publication.

The Employment Section continued the regular program of preparing statistics of employment, hours and earnings. The Annual Survey of Earnings and Hours of Work in Manufacturing was re-instituted in the Fall of 1963. This survey, which produces separate data on the earnings and hours worked of salaried, clerical, and production workers, had not been taken since 1960. Re-introduction of the survey was made possible by simplification of internal processing procedures and substitution of tabulation by computer for conventional mechanical tabulation. Considerable progress was made with the revision project involving transfer of the Monthly Employment and Payrolls to the new Standard Industrial Classification code, implementation of the standard establishment concept, adoption of a new geographical code and conversion from a 1949 to a 1961 base. It is anticipated that this long-run project will be completed by early 1966.

Considerable work was done on a proposed monthly publication containing estimates of numbers of employees by industry and province. This publication will combine results of large and small firm monthly employment surveys and will include historical data back to May 1961. In addition, a technical note describing the methods used in compiling these estimates and some of the problems encountered was prepared. Preparation of revised estimates of labour income from 1951 to date was commenced. This decennial project involves adjustment of data to take account of the new Standard Industrial Classification and the new standard establishment concept.

Comparison of the new series of employment aggregates with decennial census data and labour force survey estimates was made. Some of the results of this investigation were incorporated in the technical note referred to above. Discussions were held with the Economics Research Branch of the Department of Labour regarding the adoption of the new Standard Industrial Classification code and standard establishment definition in connection with the Annual Wage Survey and a comment was prepared concerning the Labour Income Section of a report on Unit Labour Cost by the Organization for Economic Co-operation and Development.

## MERCHANDISING AND SERVICES DIVISION

This Division was established on June 1, 1963, when the former Industry and Merchandising Division was reorganized into two separate divisions: the Industry Division and the Merchandising and Services Division. Through the Decennial Census of Merchandising, the latter provides a wide range of statistics on the distributive trades—retailing, wholesaling and the service trades. In the intercensal years, sample-type surveys are conducted in important trades and the resulting estimates published in monthly, quarterly or annual reports. In order to carry out these functions, the Division is organized into four sections: Census Surveys, Sampling, Current Surveys and Current Statistics.

During the year, collection of delinquent questionnaires for the 1961 Decennial Census of Merchandising and Service Trades was finalized with the exception of a limited number in wholesale trade. Editing and preparing material for machine processing was advanced and the publication of reports was under way. Special tabulations for the census monograph Trends in Canadian Merchandising were completed and the intercensal program was prepared.

Data from the 1961 Decennial Census was released in three advance reports giving statistics on retail locations using the individual store or place of business as the statistical unit and showing retail trade by selected trades with 1951-1961 comparisons. In addition, the first of four standard Census Bulletins on location statistics was released. Special runs and tables were also prepared for various market research firms. Material for reports on retail establishments is being prepared and when published will contain comprehensive statistics using the accounting entity as the statistical unit. These will include data on part-time and full-time employment as at four selected weeks in the year, gross trading margin, commodity and other detail of sales.

In the Census year the annual surveys for service trades are merged with the Census to avoid duplication. Statistics on individual service locations have been published for 1961 for advertising agencies, motion picture producers, motion picture theatres and film distributors; the report on hotels will be released shortly and will be followed by one on launderers, dry cleaners and dyers. Provincial data for all service trades, by location, were also released. The more comprehensive data on service establishments, using the accounting entity as the unit, is presently being processed.

Before release of the 1961 Census publications in the statistical area of wholesale trade, both for location statistics and establishment statistics, much work has still to be done because of the many parts of great complexity, particularly in connection with co-operatives, petroleum bulk tank stations and grain elevators.

In addition to the above mentioned data from the 1961 Census, a tabulation of the Channels of Distribution of Manufacturers was recently completed. Efforts were made to contact all considerable sellers of merchandise through supplementary 1961 Census surveys, designed to measure important elements of direct selling to households which by-pass retail outlets. A survey of sales of newspapers, magazines and other publications through subscription, housedelivery of papers, and book clubs was also completed. In order to provide comparable area data the 1951 Census material for locations was re-run to take account of changes in geographical boundaries and shifts of trades under the new Standard Industrial Classification. A more ambitious program has been undertaken for the Census monograph to achieve reasonable comparability between 1961 and all previous Census years for the main types of business. These efforts will provide links between the two Censuses of 1961 and 1951 as required for the impending historical revision of the National Accounts.

In the intercensal program, the design and introduction of a new monthly sample of retail sales, inventories and credit receivables on books, by location, based on the 1961 Census, is approaching completion and the actual "responding units" will be selected by means of the computer.

An annual survey of wholesale trade, by establishment, has been initiated, largely because of the difficulties encountered in dealing with this subject as an occasional Census effort. This survey is designed with limited data-seeking questions but capable of being expanded on demand to produce any part, or all, of the detail previously sought in a Census year. The first such annual survey will cover 12,000 respondents for the year 1963.

A second annual survey initiated in 1963 is that for voluntary chains, by location, covering 5,000 respondents. The biennial sample survey of operating expenses of selected retail trades has been converted to an annual sample survey of approximately one-third of the trades, with all trades to be covered in a three-year cycle. The food trades, covering 15,000 respondents are being surveyed for 1963 data using the establishment as the statistical unit,

Investigations have been carried out of possible sources of lists or data in other departments, both federal and provincial. An agreement was reached with the Alberta Provincial Bureau of Statistics to reorganize both the survey carried on by them monthly for wholesale trade and also their annual surveys for retail, wholesale and service trades; with this co-operation, total coverage annually for that province will be greatly improved. Discussions have commenced with Ontario concerning the use of the complete data available on retail sales monthly through sales tax records. There is still the problem of rounding out lists for a comprehensive annual program for the service trades, an area in which the predominance of some 30,000 small businesses with a high birth-death rate, makes ordinary survey approaches impossible.

During the fiscal year under review, the regular monthly, quarterly and annual series were continued and reports published regularly. Discount department store sales were published for the first time in the March 1963 report of Department Store Sales and Stocks. A special bulletin on Shopping Centres, giving 1961 and 1962 annual data, will be released shortly.

# NATIONAL ACCOUNTS AND BALANCE OF PAYMENTS DIVISION

This Division, in its general responsibilities, is concerned with a wide range of economic statistics which includes the principal comprehensive statements and indicators relating to the Canadian economy. The preparation of these statistics for the publications which are described below involved the co-ordinating, processing and analysing of information from a variety of sources as well as some direct collection. The scope of information covered in these publications extends over the whole ambit of the organized output of the Bureau and beyond, providing a set of machroeconomic data relating to the Canadian economy. The data are used by economists and others concerned with observing the course and performance of the Canadian economy and advising on policy.

The principal products of the Division are indicated by the following publications. In addition, an important aspect of the Division's work is the provision of day-to-day assistance to many users. Regular publications include quarterly and annual reports on National Accounts and Balance of Payments, annual reports covering a survey of production, foreign capital invested in Canada and Canadian capital invested abroad, as well as travel between Canada and other countries, Monthly publications include The Canadian Statistical Review, Index of Industrial Production, Sales and Purchases of Securities Between Canada and Other Countries, Travel Between Canada and Other Countries and Travel Between Canada and the United States. The Canadian Statistical Review with its Supplements is the most comprehensive of the monthly publications, being the medium for presenting a selection of Canadian statistics from the whole range of information encompassed in the various fields covered in the Bureau's activities and from other sources. This publication also contains an article each month reviewing developments in special fields of Canadian statistics and, as well, it is a leading channel for the public presentation of monthly seasonally adjusted series produced in the Current Business Indicators Section. A supplement to the Review published in 1963 is the edition for that year of the Historical Summary which contains available annual data for many series for the period 1926-1962.

Work on the Balance of Payments has been augmented by the growing public attention being given to this subject with the emergence of several critical periods in a little more than a year. The effects of these events, the exchange crisis of June 1962, and the announcement in July 1963 of a proposal to introduce an interest equalization tax in the United States, have been to greatly increase the demand from both within the government and without for more statistics on the Balance of Payments, along with assistance in their interpretation.

In addition, there has been the need to extend the analysis in quarterly reports on the Balance of Payments. Growing relations with users of these statistics have included divisional participation in Washington on the Technical Working Group on Canadian-United States Balance of Payments Statistics, and in meetings of balance of payments experts in Paris jointly with the International Monetary Fund and the Organisation for Economic Co-operation and Development, and the Development Assistance Committee relating to statistical reports on the Flow of Financial Resources to Less Developed Countries.

Among developments during the year was the publication of the reference paper Indexes of Real Domestic Product by Industry of Origin, 1935-1961, by the Industrial Output Section and the issuing of the new publication Historical Monthly Statistics by the Current Business Indicators Section. The first of these documents complements the constant dollar expenditures in the National Accounts by showing in the form of a constant dollar index detailed developments by industries for the whole spectrum of Canadian industries which produce goods and services. The second document gives a complete historical record of selected monthly series together with technical notes on their historical continuity. Material for these series was drawn together with the help of originating divisions and most of the series have been adjusted for seasonality.

Experts in National Accounts statistics participated in the preparation of a paper The Canadian Quarterly National Accounts, a Critical Appraisal prepared for presentation at the Conference of the International Association for Research in Income and Wealth, Corfu, Greece, in June 1963.

## PRICES DIVISION

The function of the Division is to collect, compile and publish data on prices and on consumer expenditure. The Division consists of five sections: Retail Prices, Consumer Expenditures, Wholesale Prices, Farm and Special Purpose Prices, and International Prices. The principal emphasis in the prices program is on the construction and publication of price indexes but data on average prices are published for selected commodities. Surveys of urban consumer expenditure are conducted biennially to provide a basis for revising the item content and item weights in the Consumer Price Index. The resultant body of information on expenditures of Canadian families is published and is widely used by business organizations and welfare agencies.

Price statistics of urban rents for April 1962 were released in the September 1963 issue of Prices and Price Indexes. These average rents for 16 major Canadian cities were based on data obtained from rented households in the labour force survey and provide a supplement to the occasional paper, Residential Rents in Major Canadian Cities, released in April 1962 which contained the same type of data for September 1959.

Spatial price indexes pertaining to food have been published for some time and experimental work is in progress to construct comparable indexes for the remainder of the consumer's budget for 12 cities. Conceptual problems still lie in the way of finalizing this study.

In an endeavour to improve our price data, a special study of retail outlets was undertaken in Toronto and in Ottawa. Prices were collected from a large sample of outlets, and in some cases the universe, for a number of items. The resulting price data were then compared with their consumer price index counterparts. In this same connection, some of the data from the 1961 Census of Distribution were examined with a view to revising city and outlet samples.

In the Consumer Expenditure Surveys Section, no expenditure surveys were undertaken in the year under review, following the intensive survey program in 1962-63. The interest evinced in the 1959 survey from business, welfare and academic quarters, indicated that the next survey of the complete budget should be similarly expanded and unrestricted, and for this reason, survey operations in 1964 will be concentrated on a year-end survey of the complete budget which will be broader in scope than the 1962 survey.

A new development in the Consumer Expenditure Surveys Section was the acceptance of responsibility for publication and other release of farm family expenditure data from the 1958 Farm Expenditures and Income Survey. Although the survey was carried out under the direction of the Agriculture Division, information on farm family living expenditures was obtained primarily for use in the Farm Prices Section. The task of publication, therefore, was assigned to the Consumer Expenditure Surveys Section which is responsible for surveys of urban family expenditure. Considerable progress was made in assembling a first publication which will present detailed average expenditure by province and region for the families of farm operators.

The year's work in the section was, to a considerable extent, an investment in timeliness and efficiency in processing future surveys. In addition to the transfer of editing and tabulation routines to the electronic computer for the 1962 survey of the complete budget, the 1962 food expenditure survey also was programmed for computer when it reached the final stages involving weighting of monthly city data. Thus 1963-64 marked a considerable change in work patterns, as the testing of tabulation and editing programs replaced clerical processing of expenditure schedules and the calculation of averages and percentages.

Requests for special tabulations from the 1959 survey continued to take considerable time, particularly in cases where liaison between users and programmers or tabulation services was required. Although the 1959 survey was processed by peg-bar and, for selected items, by unit-record equipment, in some instances data have been subsequently transferred to tape in fulfilling requests for additional tabulations. It is expected that with all survey data from current and future surveys committed to tape, the number and complexity of requests for analytical tabulations will increase and a greater amount of time be devoted to formulating requests to programmers and checking new programs.

In the fiscal year 1963-64, developmental work in the Wholesale Prices Section was almost entirely devoted to revising the Industry Selling Price Indexes to a 1961 base, although some further progress was made in constructing input indexes of manufacturing industries.

During the period, indexes for a number of commodities, compiled under the General Wholesale Price Index system and for which indexes were also available within the Industry Selling Price Index framework, were withdrawn from the publication Prices and Price Indexes and replaced by their Industry Selling Price Index counterparts. This course of action is in keeping with the Section's policy of de-emphasing the General Wholesale Price Index as a current indicator of price movement for manufactured products.

In addition to indexes of prices of farm products and prices paid by farmers, the Farm and Special Purpose Prices Section prepares and publishes indexes of prices of industrial materials, highway construction, building materials and of common and preferred stocks. Revision and developmental work was pursued in connection with most of the indexes. The section continued its analysis of the data from the Farm Expenditures and Income Survey preparatory to the revision of the Prices Paid by Farmers Indexes and steps have been taken to expand and update the price series to be used in the indexes.

The coverage of the Price Indexes of Highway Construction in Canada 1956 = 100 was expanded during the year with the acquisition of additional cost data. This expansion will be reflected in the 1965 indexes. Continued progress was made in the collection and analysis of construction cost data from public and private utilities and it is expected that preliminary price indexes will be calculated for the transmission, distribution and substations components of the Electrical Utility Construction Index by the end of 1964.

During the year under review, the International Prices Section carried out full studies of comparative living cost conditions at about fifty foreign cities to determine appropriate allowance levels for civil servants stationed abroad. Officers of the Section visited various defence establishments in Western Europe to initiate accommodation and living cost surveys of Canadian military personnel serving there. These surveys were subsequently carried through to completion. In addition, detailed reports of the relative retail food cost situation, and of the domestic fuel and utility cost conditions, of federal civil servants stationed at over two hundred isolated locations within Canada were analysed.

# PUBLIC FINANCE AND TRANSPORTATION DIVISION

This Division consists of five sections: Government Employment and Payrolls, Government Finance, Public Utilities, Research Projects and Transportation. Its function is to collect and publish data on the financial structure of the three levels of government in Canada with details on numbers employed and payrolls, the performance and financial condition of rail, road, water and air transport and the financial and operational information concerning the various communications media.

During the year the Government and Payroll Section undertook, in addition to its regular publications program, the survey on Civil Service sick leave which was carried out previously by the Health and Welfare Division. Beginning with a revised pilot survey of sick leave for the 1962-63 fiscal year and later, a full-scale survey for 1963-64, the results will be forwarded to the Treasury Board for its exclusive use.

Federal Government employment and payrolls data of urban municipalities in Canada were issued in the form of a Daily Bulletin release. A very limited application of computer data processing was introduced although delays in the development of a full computer program to the Federal Government employment forced some improvisation in allocation of staff resources. A special wage rate survey was conducted for the use of the Department of Labour and similar special surveys for other departments are expected in the next few months.

In compliance with a recommendation of the Royal Commission on Government Organization, a Federal Government Committee on Personnel Statistics was established in December 1963 and held a number of meetings during the remainder of the fiscal year. It is expected to compile within a year an inventory of all personnel or manpower statistics now being collected or planned by all departments or agencies of the federal government including crown corporations; to made recommendations concerning feasibility of these statistical systems; and to recommend what statistics should be centrally tabulated by DBS for the use of Treasury Board, the Civil Service Commission and departments.

In the Government Finance Section, the first issue of Financial Statistics of Provincial Government Enterprises covering the years 1958 to 1961 was released. Also for the first time, a functional-economic cross-classification of federal gross general expenditures was prepared and published in Financial Statistics of the Government of Canada, 1961.

Fruitful discussions were held with officials from the Quebec Bureau of Statistics concerning the annual survey of provincial government capital expenditure intentions. In addition, preliminary revenue and expenditure data for municipalities in that Province having a population of 10,000 and over is being obtained from a joint reporting form.

The staff of the Government Finance Section also took part in important discussions with the members of the Department of Finance concerning the Royal Commission recommendations on the form and content of the Estimates and Public Accounts of Canada. Statistical assistance and material was supplied to the Royal Commission on Taxation, the Atlantic Provinces Economic Council, the Canadian Tax Foundation, the Ontario Commission on Taxation, the Quebec Royal Commission on Taxation and others.

In the field of road transportation, a thorough review of the motor transport traffic survey was instituted resulting in economies in operation. Considerable thought was also given to the introduction of a survey of the travel behaviour

of Canadians. Representations supporting this survey were received from federal and provincial government departments as well as the transportation industries. In this respect, a sample survey was carried out during the summer and fall months of 1963. After a number of discussions with officials of the Canadian Good Roads Association, it was decided to discontinue the use of their Uniform Classification of Roads and Streets. A revised classification will be introduced next year.

An important step towards a system of Standard Commodity Classification for the national economy was accomplished with the completion and publication of the Conversion of Railway Freight Traffic 1961 to Standard Commodity Classification. The 1956 edition of Uniform Classification of Rail Employees was revised and a preliminary issue distributed to the reporting carriers and the regulatory agency. This was adopted by the railways, effective January 1, 1964. Discussions were held with officials of the Canadian National and Canadian Pacific Railways concerning adoption of the DBS Standard Commodity Classification and the establishment of a DBS Committee on Rail Transport Statistics.

In the field of air transport, the Canadian Travel Research Association made strong recommendations concerning the reintroduction of a trans-Atlantic air passenger survey. Because of shortage of staff and a lack of adequate guarantee on the part of the airlines, it was decided to defer consideration of this proposal for the present. Arrangements were concluded with the Air Transport Board to compile and publish more detailed statistics on helicopter operations, and bulk (charter and contract) passenger miles and ton miles, segregating foreign from domestic.

In the Water Transport Unit, the shipping series was reviewed and reorganized with improvements being introduced in the compilation process. After consultation with the Canadian Shipowners Association, the Water Transportation report was revised with particular emphasis on terminology. A special study was completed for the Royal Commission on Pilotage including a detailed examination of the volume of traffic at Canadian ports according to pilotage districts for a period of years. The results of this study played an important part in the findings of the Commission.

During the year, responsibility for oil and gas pipelines and electric power statistics was transferred from the Public Utilities Section to the Industry Division. The former, however, will continue to be responsible for the production of other statistics in the public utilities field.

Plans were completed for the introduction of the Standard Industrial Classification into the statistical program of the Division. Conceptual difficulties and problems of procedure connected with its introduction into the government finance program were discussed. The classification will be first introduced into the government employment and payrolls series.

A central divisional reference source was created in the form of a complete listing of technical papers, text books, classifications and manuals located within the Division. Listings will be kept up-to-date and made available to the professional and technical staff of the Division.

A National Advisory Committee on Broadcasting Statistics was established during the year with the Director of the Division as Chairman and representatives of the Canadian Association of Broadcasters, the Canadian Broadcasting Corporation, the Board of Broadcast Governors and the Department of Transport. The purpose of the Committee was to establish a uniform classification of financial accounts for the industry; to assist in co-ordination of collection procedures between various federal government agencies and to advise DBS on collection, compilation and publication of statistics.

Similarly, a National Advisory Committee on Telephone Statistics was formed to advise DBS on problems in connection with collection and production of statistics in the telephone, telegraph and cable fields. Already a number of improvements in the collection and publication process have resulted.

## SPECIAL SURVEYS DIVISION

Through its eight Regional Offices, the Special Surveys Division is responsible for all field activities of the Dominion Bureau of Statistics. Current information on many topics is obtained by part-time interviewers working under the supervision of the different Regional Offices, who interview each month a scientifically selected sample of approximately 32,000 households across the country.

Each month questions on labour force activity are asked and the resulting monthly bulletin *The Labour Force* presents details of employment and unemployment for Canada and the five main regions of the country. At the same time, enumerators inquire about rents paid and the information elicited is used to compile the rent components of the Consumer Price Index.

In addition, a variety of other information is obtained from time to time using special questionnaires. An annual bulletin entitled Household Facilities and Equipment results from special questions asked in May of each year and provides information on the facilities and equipment present in Canadian homes. A Consumer Finance Survey was carried out during March 1964 in order to gather information by personal interview from approximately 7,000 Canadian families concerning details of income, assets, investments and debts.

As part of their continuing duties, the Regional Offices collect data on retail prices of commodities for use in compiling the Consumer Price Index. They also maintain, for the convenience of local business firms and others, a file of all current DBS publications. The collection of business reports, which other divisions of the Bureau have not been able to obtain by mail, is also carried out through these offices.

Early in 1963, a major project was launched involving the complete redesign of the sample used in the monthly Labour Force Survey. The new sample design was introduced in the Province of Alberta in March 1964 and will be introduced progressively in the remaining provinces during 1964 and 1965. Detailed data from the 1961 Census have been used for stratification and other sample design purposes. Many new technical features have been introduced to improve efficiency and accuracy.

One important feature of the new design is that it will lend itself to redesign within relatively small areas of the country where significant changes have occurred, without disruption of the design in other areas where stability or normal growth has occurred. For instance, restratification and redesign can be carried out within a selected Economic Region of a province when there is evidence that the system of stratification in that Economic Region is deteriorating. Within any city, redesign can be carried out in any part of the city where significant growth has occurred without affecting the sample in those parts of the city where stability or normal growth has occurred.

## DATA PROCESSING SERVICES

The large-scale processing of statistical data at the Dominion Bureau of Statistics is undertaken by the Tabulating Services Division in conjunction with the Central Programming Division. The two Divisions work together to improve the processing services of the Bureau using the equipment most suitable for the purpose. A senior committee, under the chairmanship of the Dominion Statistician, meets monthly and guides the allocation of computer and programming time. Long run schedules for computer utilization are being developed in order to ensure orderly utilization of these facilities and to ensure proper priorities.

# Tabulating Services Division

The subject-matter divisions of the Bureau gather data which form the basis for statistical tables. The Tabulating Services Division provides a service, using a variety of tabulating methods, to process the data, reducing it to more manageable form for further analysis. Broadly speaking, there are three methods of processing data in use in the Division.

When aggregates only are required involving a minimum of cross-classification, they are produced directly as a clerical operation by means of peg-bar methods of compilation using comptometers and desk calculators. This group, comprising 25 operators, handles a considerable volume of data, particularly where monthly, quarterly and annual tabulations of a repetitive nature constitute a large part of the work. This group also undertakes special projects involving more complicated calculations.

Next in order of complexity from a tabulation point of view are the many Bureau projects involving more difficult manipulation of the data and a number of more complex cross-classification. For these, the Division uses a wide variety of unit record (punched card) equipment. More than 100 operators record

the data from the source documents onto punch cards, about one half of them punching the cards and the other half verifying them independently for accuracy. Another group of some 60 operators use other punch card equipment, such as sorters, tabulators, reproducers and collators, to group the punch cards by the various characteristics of the data and to produce the totals required.

One important feature of unit record tabulation which has been developed to a high degree of efficiency in the Division has been the editing of the data by mechanical means, seeking out inconsistencies which may arise through misinterpretation of instructions and definitions governing the collection of data and through errors in recording answers.

To handle the larger and most complex applications, an electronic computing facility was established in 1961 in the Dominion Bureau of Statistics. Although the greater part of the time of the computer is allocated to the work of the Bureau, some requirements of other government departments and agencies have been accommodated on instructions from the Interdepartmental Committee on Electronic Computers. The installation consists of an IBM 705 System and an IBM 1401 System. The latter is used for about half the time as an input and output device for the former and for the remainder of the time is used as a separate computer. Throughout the year, the operations were on a three-shift, seven-day week basis.

The processing of the 1961 Census continued to absorb most of the computer time during the year under review. Most of the tabulations of the data collected on a 100% basis were completed during the year and a start was made on processing the data collected on a sample basis.

In 1963, in excess of 32,000 hours were used on various types of tabulating equipment (exclusive of auxiliary equipment such as sorters, reproducers and collators), using a total of approximately 25,000,000 punch cards.

Throughout the year the regular re-examination of existing projects was continued from the point of view of making the most effective use of all the resources available, including the computer installation. A significant advance was made in processing techniques by the development, in co-operation with the Central Programming Division, of a specialized program to simulate, on the 1401 Computer System, the operation of an IBM 101 Electronic Statistical Machine. Work was proceeding at the end of the year to produce these programs to tabulate statistical material more efficiently and economically.

As in the past, a number of projects were undertaken during the year for other government departments and agencies on a cost-reimbursement basis under individual agreements.

# Central Programming Division

The principal functions of the Central Programming Division are systems analysis in collaboration with subject-matter divisions, and programming for projects approved as computer applications by the DBS Electronic Computer

Committee. In some cases investigation indicates that punch card or other methods of processing can produce the desired product just as timely and more economically than could be done by computer processing. An attempt is also made to eliminate routine types of manual editing, coding and other clerical operations by computer processing, thus releasing clerical staff for other aspects of statistical data collection, processing, analysis and publication.

Programming resources have been a limiting factor in the changeover of non-census DBS work to the computer. To help overcome this deficiency, DBS has been developing generalized or multi-purpose programs over the past year. The use of control or parameter cards with these general programs will eliminate, in many instances, the need for specialized programs for each tabulation. Improved card-to-tape, merging, sorting and information retrieval programs are included in this series.

One of the more significant developments within the Central Programming Division during the past fiscal year was the creation of a Scientific Section headed by one of the Senior Programmers. The purpose of this section is to work closely with the Sampling and Survey Research Staff, the Research and Development Staff and economists and statisticians in subject-matter divisions, to produce and modify programs for analysis of tabulated data, seasonal adjustment of time series, perfecting sampling techniques and design of sampling areas. This section originally consisted of the section head and one programmer but has been increased to a total of four as the work advanced.

In order to examine the Industry Division's activities and report on the feasibility of extending computer processing, revision of coding techniques and improved collection methods, one programmer was seconded to that Division. It is expected that this study will require from one to two years to complete. One senior programmer-analyst was also loaned to the Pay Research Bureau of the Civil Service Commission for a two-month period to assist in a survey of programmers' and systems analysts' salaries.

A new systems and methods position was established in an effort to standardize procedures within the Central Programming Division and carry out liaison with subject-matter and operating staffs. In addition, a DBS stafftraining program, initiated during the previous fiscal year, was continued with officers of this Division taking an active part.

The DBS Central Programming Division actively participated in a programmer-training course conducted by the Civil Service Commission. It also provided an instructor for an IBM 650 course and field training for three "trainees" for the first two-month period and one person for the second two-month period. Assistance was given to personnel from other government departments when requested as well as to visitors from other countries, notably Australia, New Zealand and India.

As in the previous year, the Census Division was the greatest individual user of programming resources requiring the writing of 238 programs of a total of 478 written for the 1963-64 fiscal year. Emphasis shifted from the volume runs of population, housing and agriculture data to processing requirements for the 20 per cent sample of income, fertility and migration as well as monograph and special request tabulations.

Programming requirements for continuing activities increased during the year. Production of annual import statistics by computer was added to the previous monthly and quarterly tabulations. The introduction of a new sample design for the monthly Labour Force Survey required new programming, especially for variance and covariance. Additional tabulations were requested such as a survey of Post-War Immigrants. A start was made on the redesign of the complete labour force system to improve the initial system, to permanently incorporate changes requested over the past two years and to decrease the running time of the computer.

In addition to writing computer programs for DBS projects, the Division prepared annual tabulations for the Pay Research Bureau of the Civil Service Commission and wrote programs or prepared material for the Department of Veterans Affairs; Royal Commission on Taxation; Department of Northern Affairs and National Resources; the Province of Quebec and the Government of Ghana.

In order to maintain personal contact and discussion with personnel from other computer installations, visits were made to Washington and to Harvard University which proved worth while. It is hoped to continue and expand this type of education in the future.

## ADMINISTATIVE SERVICES

Under this general heading are found a series of functions serving the Dominion Bureau of Statistics as a whole, including general administration, staff organization, financial control and publications distribution, forms control and office services such as the addressograph unit, drafting unit, stenographic pool, supplies, mail and messenger services.

## Staff Organization

Arrangements for the maintenance of an effective work force is the function of the Personnel and Organization and Establishment Sections. In carrying out these functions it is necessary to maintain close liaison with the Civil Service Commission on recruitment, pay, promotions, transfer and related matters.

The staff employed on continuing operations at March 31, 1964, numbered 1,970, an increase of 173 from the number employed on March 31, 1963. During the year under review, 32 statisticians and economists were recruited and 21 separated. There were 25 research assistants engaged on summer projects. Throughout the year, 204 promotional competitions were conducted. The 1961 Census temporary staff at Head Office, which numbered 279 on March 31, 1963, was reduced to 218 by March 31, 1964. The establishment authorized for the fiscal year under review was 2,025 positions and 367.5 man-years of casual clerical assistance including 259 man-years for the 1961 Census processing.

Staff training and development functions were further clarified in the past year. The DBS Training Officer acts mainly as an adviser to line management on employee development and related activities, and on technical training at the divisional level. He is also responsible for directing supervisory and management development programs and participates in management consultation activities, as well as employee relations, counselling and guidance activities.

The Health Unit, a branch of the Civil Service Health Division of the Department of National Health and Welfare, continued to provide an industrial nursing service for employees.

# Suggestion Awards

During the fiscal year, 45 suggestions from DBS employees were considered by the Suggestion Award Committee, nine of which received awards totalling \$130 for suggestions estimated to save the Bureau \$1,608.

#### Financial Control

This section is responsible for the distribution of DBS publications and the financial operations of the Dominion Bureau of Statistics. The latter include the preparation of estimates, examining and controlling expenditures, interpretation of financial regulations, preparation of financial reports and submissions to Treasury Board.

During the past year, the Publications Distribution Unit serviced 12,000 subscription orders to DBS publications in addition to casual sales – a total distribution of 1,745,000 individual reports.

#### Forms Control

Work continued on the simplification, standardization and revision of forms, methods and publications, which resulted in savings of both time and material.

During the year under review, the Forms Control Section processed 2,980 forms consisting of 8,105 pages, of which 1,025 were reprints, 5,960 were revisions and 1,120 were new or redesigned. Specialty forms, numbering 194, were also prepared, revised or redesigned and 210 envelopes were printed.

In addition, a comprehensive work study was made of processing corporation financial statements; revised procedures were developed to take advantage of mechanical processing methods. A start was also made on a work study of the processing of the monthly employment survey. The processing procedures of the annual electric meter survey were also studied and revised procedures developed to permit tabulation by punch card.

In addition, various layout studies of the DBS building were prepared in order to accommodate staff increases.

#### Office Services

In the Addressograph Unit of the Office Services Section, 11,714,732 forms were addressed for the various divisions of the Bureau. In addition, 314,406 plates were embossed, 132,585 corrected and 312,476 deleted.

DOMINION BUREAU OF STATISTICS

CHART SHOWING ORGANIZATION

March 31, 1964

#### DOMINION BUREAU OF STATISTICS GENERAL ORGANIZATION DOMINION STATISTICIAN ASSISTANT DOMINION STATISTICIAN (STATISTICAL INTEGRATION) ASSISTANT OOMINION STATISTICIAN (GENERAL ASSIGNMENTS) ASSISTANT DOMINION STATISTICIAN (ADMINISTRATION) PUBLICATIONS CENTRAL RESEARCH RESEARCH CONSULTANT CENTRAL SAMPLING AND SURVEY RESEARCH ORGANIZATION AND PERSONNEL SERVICES FINANCIAL CONTROL FORMS OFFICE CANADA YEAR BOOK, HANDBOOK AND LIBRARY DIVISION INFORMATION AND PUBLIC RELATIONS DIVISION TABULATING SERVICES DIVISION PROGRAMMING DIVISION ORGANIZATION PERSONNEL TRAINING ESTABLISHMENT NATIONAL ACCOUNTS AND BALANCE OF PAYMENTS DIVISION PUBLIC FINANCE MERCHANDISING AND SERVICES DIVISION TRADE DIVISION HEALTH AND WELFARE DIVISION PRICES SPECIAL SURVEYS BUSINESS FINANCE EDUCATION DIVISION INDUSTRY DIVISION TRANSPORTATION DIVISION AGRICULTURE DIVISION CENSUS PROFITS, ASSETS ELEMENTARY AND SECONDARY EDUCATION CONSUMER EXPENDITURES GOVERNMENT FINANCE CENSUS SURVEYS NATIONAL PRODUCT ADMINISTRATION EMPLOYMENT ADMINIST RATION DPERATIONS INSTITUTIONS CROPS CONSTRUCTION UNEMPLOYMENT INSURANCE AND PENSION PLANS FARM AND SPECIAL PUR-POSE PRICES NATIONAL EXPENDITURE TRANS. PROCESSING LIVESTOCK AND ANIMAL PRODUCTS CLASSIFICATION AND SURVEY ENERGY STATISTICS CENTRAL HIGHER STATISTICS POPULATION REGIONAL OFFICES INVENTORIES, SHIPMENTS AND ORDERS STATISTICS LABOUR INCOME AND RESEARCH CURRENT BUSINESS INDICATORS GDVERNMENT EMPLOYMENT AND PAYROLLS St. John's Molifax Montreal Ottawa-Hull Toranto Winnipeg Edmonton Vancouver SAMPLING FARM FINANCE PUBLIC RESEARCH AGRICULTURE INDUSTRIAL OUTPUT PRODUCTIVITY RESEARCH AND ANALYSIS CURRENT RETAIL PUBLIC INTERVIEW SURVEY ADULT ANALYSIS JUDICIAL BALANCE OF PAYMENTS INTERNATIONAL PRICES RESEARCH PROJECTS VOCATIONAL EDUCATION RESEARCH

EDUCATION FINANCE Effective November 1, 1963, the Vari-Type Unit was taken over by the Department of Public Printing and Stationery. During the period April 1 to October 31, 1963, the Unit planned, vari-typed and prepared for printing 8,944 pages of tabular and textual material. In addition, 3,930 hours were devoted to miscellaneous vari-typing of forms. Based on the current general average of 1.5 hours per page, this represents a theoretical production of 2,620 pages of publications, bringing the Unit's total production to 11,564 pages for the first seven months of the fiscal year.

The Drafting Unit completed 2,003 economic charts, maps, diagrams and various illustrations. The Unit also completed layout in colour of armorial bearings and floral emblems of the Provinces and Territories for the Canada Year Book.

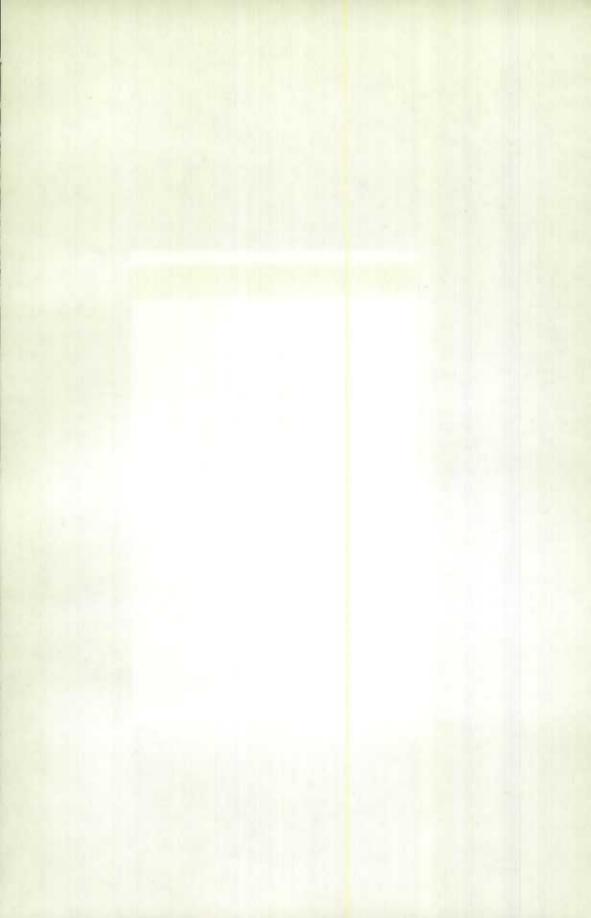
The outgoing mail numbered 21,712 bags containing approximately 4,392,217 pieces of mail.

In addition to supplying stenographic and typing services to the various Divisions of the Bureau, the Stenographic Pool provided members of the staff on a loan basis to Divisions for 71 days. A total of 21,636 pages were typed of which 11,997 were photocopy and paper master, and 9,639 were drafts, statements and lists. Letters transcribed from dictation numbered 2,563. As well as the foregoing, 34,700 forms, envelopes and form letters were completed and prepared for mailing.

During the period under review, 7,497 requisitions for contact and Xerox duplicating were received and completed involving a total of 384,614 prints.

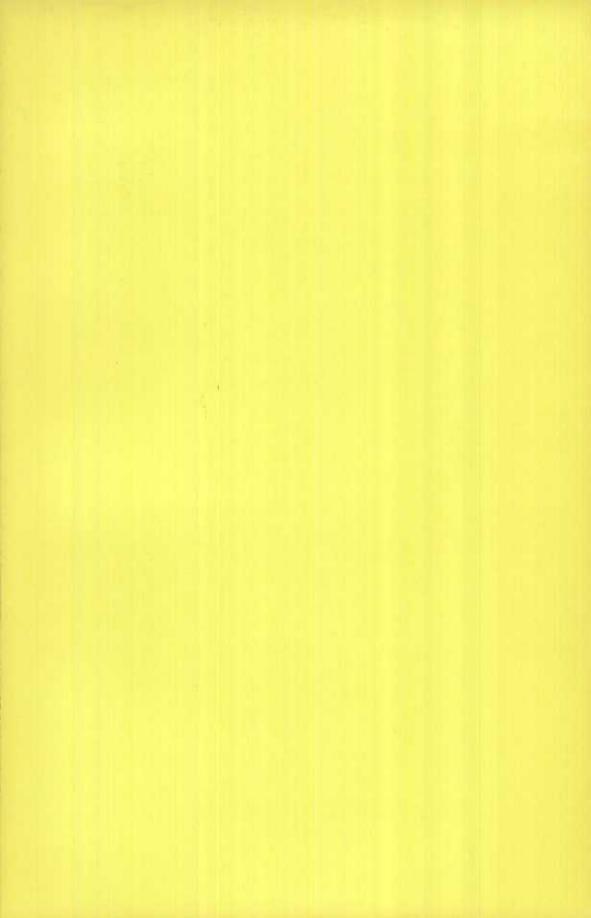
The Supplies Unit received from the Department of Public Printing and Stationery materials valued at \$375,801. The supplies inventory, as at March 31, 1964, was \$32,130; the turnover rate, therefore, was 11.3. Replacement value of DBS office machine and equipment inventory, as at the same date, was \$625,783 at original cost. Requisitions numbering 398 were completed for goods and services for which the Department of Public Works is responsible.





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ANNUAL REPORT