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*Annual
Report*

For the Fiscal Year ended March 31, 1965

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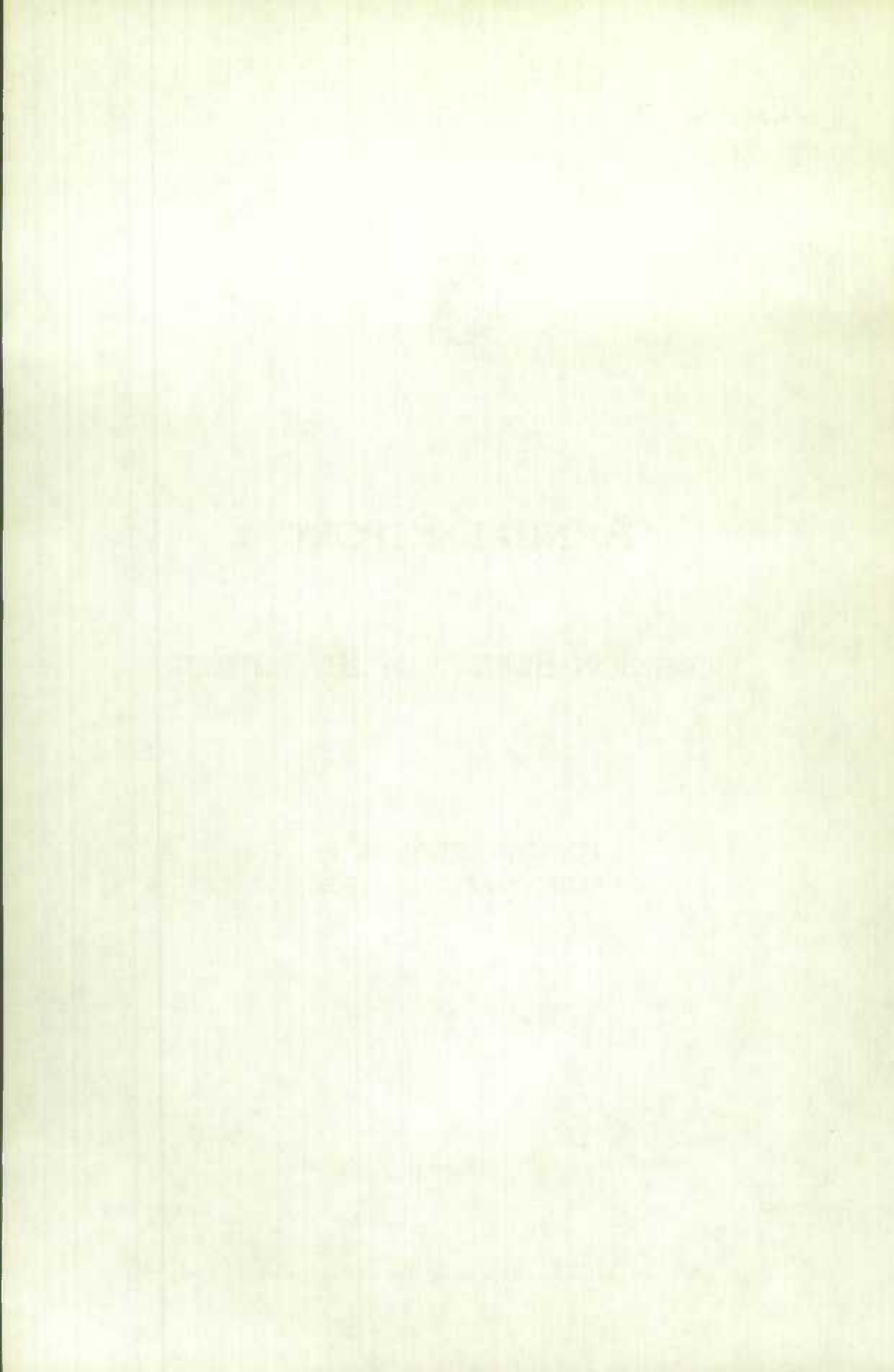


ANNUAL REPORT
OF THE
DOMINION BUREAU OF STATISTICS

FOR THE FISCAL YEAR
ENDED MARCH 31, 1965

June 1965
1101-502

Price: 40 cents



*To His Excellency 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, 1965.

Respectfully submitted,

A handwritten signature in dark ink, reading "Mitchell Sharp". The signature is written in a cursive, flowing style. The first name "Mitchell" is written with a large, prominent 'M' and the last name "Sharp" follows in a similar cursive script.

Minister of Trade and Commerce.

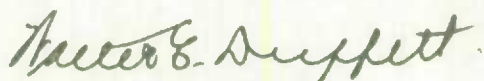
Ottawa, Canada
June 1965.

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, 1965.

Respectfully submitted,

A handwritten signature in dark ink, reading "Maurice E. Duffett". The signature is written in a cursive style with a large initial 'M' and a long, sweeping tail on the 't'.

Dominion Statistician.

Ottawa, Canada
June 1965.

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.

An important development took place in January 1965 when the Dominion Bureau of Statistics was designated as a department of Government. This step had been recommended in the report of the Royal Commission on Government Organization in 1962. In addition, the Commission's other recommendations, which drew attention to the growing importance of statistics in decision-making in government and business, are being studied.

Statistical demands of federal government departments and agencies, as well as provincial governments, accelerated considerably during the year. To a remarkable degree, new agencies at federal and provincial levels have developed in recent years, with urgent needs for statistics, especially statistics relating to regions and local areas. In most cases corresponding statistical facilities were not provided and the Dominion Bureau of Statistics has been under unusually heavy pressure to provide these types of data. The Fifth Federal-Provincial Conference on Economic Statistics was held in November 1964. Efforts are continuing to co-ordinate federal and provincial programs in order to improve the quality and timeliness of the statistics and avoid duplication, thus minimizing respondent burdens. In this connection the creation during the year of a Regional Analysis and Statistics Staff is significant.

A very important development was the introduction of the redesign of the sample of households in the Labour Force Survey. Introduced in Alberta in March 1964, it has now been in use in four other provinces and will be introduced in the remaining five provinces during 1965. Using 1961 Census data for stratification in the new sample, it can be readily modified in localities where significant growth or other changes occur. Evidence thus far indicates that the use of the new sample decreases sampling variability and makes measurement more precise. Some special studies in the area of manpower are planned as soon as staff become available.

The organization and planning for the 1966 Censuses of Population, Agriculture and Merchandising are well advanced. A field test was conducted in a part of the City of Ottawa in November 1964 to test enumeration procedures.

In the field of industry statistics, efforts are being made to regain lost timeliness in the release of data resulting from the changeover to computer processing and the implementation of the Revised Standard Industrial Classification and the new definition of the establishment. Introduction of the new Standard Commodity Classification in industry surveys, which will be completed in the Census of Manufactures by 1966, will greatly facilitate comparison between products shipped, materials consumed, exports and imports, as well as achieve greater consistency of commodity statistics between the numerous industry series.

A reference paper on productivity indexes for commercial non-farm sector of the economy has been completed. It contains annual indexes of output per man-hour and output per employed person for manufacturing and non-manufacturing sectors, as well as for the aggregate, from 1949 to 1962. In the field of

energy statistics, the developmental program initiated in 1960, is close to completion with supply-demand statistics by commodity and by transportation facility, together with financial data relating to these functions.

The administration of the Corporations and Labour Unions Returns Act, which reports to the Dominion Statistician and is located in the DBS building, provided valuable data to DBS during the year. An amendment to this Act, effective March 18, 1965, enables the officers of the Administration to make use of financial statements submitted to the Department of National Revenue for Income Tax purposes, and gives DBS officers access to this data. Plans are under way to assume responsibility for the preparation of that part of "Taxation Statistics", now published by the Department of National Revenue, which covers corporation statistics.

There was an increase in establishment of 142 positions in the last fiscal year but recruitment of experienced staff remains a difficult problem. The Bureau depends heavily for its success in the carrying out of the statistical program described in this report, on the skill and devotion of its staff which has given unstintingly of its support.

CENTRAL STAFFS

This group of functions comprises the Central Classification Staff, the Central Research and Development Staff, the Sampling and Survey Research Staff, and the Regional Statistics and Analysis Staff, the last having been established during the current year in response to widespread demand by federal and provincial departments and agencies for more statistics and analysis on a provincial and smaller geographical basis. A description of the activities of the various staffs follows:

Central Classification Staff

The development of the Central DBS List of Companies and Establishments has continued. The Central List numbering system, which had been adopted for the list of respondents in the Monthly Employment and Earnings Survey at the close of the 1964 fiscal year, has been extended during the current year to the Census of Manufactures, Energy Statistics, Rail, Air and Water Transportation, Wholesale Trade and the Corporations and Labour Unions Returns Act Administration. At the close of the year its adoption by the corporation financial statistics surveys of the Business Finance Division was being initiated.

The co-operative arrangement continued with the Unemployment Insurance Commission whereby their local offices collect a Nature of Business report from all new registrants. This has become the major source of information for keeping DBS survey lists up-to-date and is the basis of the semi-annual publication, *New Manufacturing Establishments in Canada*.

Work has continued, in co-operation with subject-matter divisions, to ensure uniform application of the Standard Industrial Classification. Notable in this connection was the review of government establishments and of certain complex companies. An interim edition of a Standard 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, has been distributed. Two supplements, one providing maps and the other code numbers for countries outside Canada, will be

published shortly. An agreement has been completed with the province of Quebec whereby statistical data for that province will be tabulated and published according to the areal system comprising the Standard Geographical Classification. A version of the Standard Commodity Classification for use in coding materials and supplies used and shipments or sales of industrial establishments is being developed. Implementation of this classification is proceeding in other fields, notably freight transportation statistics. A convertibility list between the American Standard Transportation Commodity Code and the Canadian Standard Commodity Classification is being prepared to facilitate reporting of international shipments.

Work has commenced also on the development of a Standard Classification of Services. This classification will supplement the Standard Commodity Classification in providing a vehicle for collecting and assembling data on total expenditure for goods and services, including service inputs and outputs of the different industries.

Central Research and Development Staff

A major research study of alternative methods of adjusting economic time series for seasonal variation, carried out in collaboration with the National Accounts and Balance of Payments Division, was completed. One of the most important results of this study was the decision to change the method of seasonally adjusting unemployment and other series from the Labour Force Survey. A committee was established to deal with problems of discontinuities in economic time series arising from changes in definitions, concepts or method of measurement. This committee advises on methods of reconstructing time series to eliminate such discontinuities. It also advises on the application of econometric methods to problems of estimation and analysis throughout the Bureau.

The input-output staff carried out extensive revision and refinement of its plans in the light of recent developments in the field of input-output compilation and analysis. At the same time, work proceeded on the main commodity flow studies, on estimates of business services (a survey of which was completed) and investment income, and on federal government purchase of goods and services. On this last item, a co-operative project was completed in the summer of 1964 involving the Dominion Bureau of Statistics and the Department of Defence Production, the purpose of which was to code a majority of federal purchase documents for a one-year period, in order to provide commodity data required for the input-output table. A number of other studies connected with the input-output project were carried forward.

The program of financial statistics which is centred around the ultimate publication of an appropriate version of quarterly financial flows accounts has been carried forward. Much work has been done on problems of design, classification and concept. Background studies have been completed regarding procedures to be employed for carrying out quarterly surveys of life insurance companies and co-operatives, and questionnaires have been drafted in close collaboration with the Business Finance Division. Arrangements have been made whereby the Quebec Bureau of Statistics would supply to DBS current statistics covering the *caisses populaires*. An interdivisional committee was formed to study the meaning of "company profits" in relation to company accounting practices and income tax requirements. One important result of this work was that the questionnaires used in the quarterly surveys of corporation profits were revised.

The results of the 1962 Survey of Consumer Finances were released. Field work and processing was completed on the 1964 Survey of Consumer Finances which was expanded to collect data on consumer assets and liabilities as well as income, and which contained a special detailed questionnaire on stock ownership. Statistics were collected from a sample of 6,400 family units and the resulting data should become available in the spring of 1965. A report may be released during the following fiscal year.

A special paper was prepared and presented to the Senate Committee on Aging on the income position of the older population. The paper was published in the proceedings of the Committee. The writing of the income monograph was started and a number of chapters have been completed. It is hoped to complete the monograph in the coming year.

Regional Statistics and Analysis Staff

This staff has been created in response to persistent provincial demands for more statistics at the provincial and sub-provincial level; the requirements of various federal government departments and agencies such as the Area Development Administration of the Department of Industry and the Agricultural Rehabilitation and Development Act; and the general interest in small area statistics and research. The functions of the staff are: to keep provincial statistical officers informed of DBS developments and to inform DBS officers of statistical activities of the provinces; to assist subject-matter divisions of DBS in working out co-operative arrangements with provincial statistical agencies for collection and exchange of statistics; to initiate and co-ordinate the tabulations and analysis of statistics for special regional studies; to undertake studies designed to test the feasibility and determine the cost of new or improved information on a regional basis; to provide consulting services and on-the-spot assistance to the provinces and others when required.

During the current fiscal year much of the time of the staff was taken up with the preparation for the Fifth Federal-Provincial Conference on Economic Statistics which was held in November 1964; work arising out of the conference; and recruitment and related administrative problems.

Sampling and Survey Research Staff

The functions of the Sampling and Survey Research Staff include: to design sample surveys, analyse their reliability and establish efficient designs to maximize the reliability of data collected at a given cost; to establish quality control plans for large-scale operations, such as coding and key punching; to conduct response research and analyse the reliability of surveys and censuses in the context of response errors; to design experiments and conduct research into survey methodology and alternative methods of data collection; and to provide assistance on the mathematical aspects of various projects carried out by the Dominion Bureau of Statistics.

Work on the Labour Force Survey has continued to absorb a considerable part of the work of the staff. The redesign of the Labour Force Survey, an operation carried out jointly with the Special Surveys Division, has continued to progress according to schedule. The new sample design was successfully introduced in Alberta, Prince Edward Island, Nova Scotia, New Brunswick and Quebec during the fiscal year. A senior member of the staff and some supporting

personnel were engaged full-time on the stratification, preparation of maps and calculation of sampling ratios for the new sample design. Estimates of sampling variability for major Labour Force characteristics are produced monthly for all the provinces which have been introduced under the new design. Specifications were prepared for a computer program to produce, in addition to the estimates of total sampling variability, a breakdown of this sampling variability into components (one component corresponding to each stage of sampling), which will facilitate the analysis of the survey results and thus be instrumental in pointing to those areas of weakness in the sample which might gradually develop. This analysis will be part of a comprehensive system of controls designed to signal the deterioration of the sample if and where it occurs. Preliminary discussions are under way concerning a quality control plan which may be applied to the work of clerks coding industry and occupation. A research project has begun and specifications for a corresponding computer program has been prepared to study the effect of an alternative method of estimation which would utilize previous months' information in addition to the current information, in order to reduce the sampling variability of the estimates without increasing the sample size. A study was initiated to analyse the results of the re-enumeration survey conducted by supervisors and covering a subsample of the regularly enumerated households. A comparison of the interviews obtained by regular enumerators and supervisors will provide important materials for a study of response errors.

Work is under way on a program to analyse the quality of the 1966 Census of Population and Agriculture. The sample design has been established for a survey to re-enumerate a sample of farms after the 1966 Census of Agriculture. The re-enumeration will be conducted by specially trained enumerators using a more probing questionnaire. The comparison of the re-enumeration results with the census results for identical farms will indicate the errors in the Census of Agriculture. The sample for this survey has been selected and maps are now prepared for the selected areas.

Two projects have been designed to analyse the quality of the 1966 Population Census. In one of these, a sample of persons will be selected from various records including the 1961 Census, the vital statistics records for children born between 1961 and 1966, the immigration records for immigrants who entered Canada between 1961 and 1966, and other sources. The project will consist of locating the addresses of the selected persons at the time of the 1966 Census and then checking the Census records to determine whether they have been included in the 1966 Census or not. From this project an estimate of the proportion of persons missed in the 1966 Census of Population by province and by age groups will be prepared. The selection of the sample for this project has begun. In another project, which is now in the planning stages, persons and households enumerated in the Labour Force Survey and/or the Census will be matched. This project will provide information of analytical value concerning persons missed by the Census, persons missed by the Labour Force Survey who should have been enumerated, persons missed within enumerated households, persons missed within completely missed households and the labour force status of persons missed.

The sample design for the monthly Retail Sales Survey has been completed and the new sample is now being introduced.

In co-operation with the Labour Division, work has begun on the redesign of the monthly Employment Survey. The possibility of utilizing the computer to select the sample, handle the mailing and check in the completed questionnaires

are being explored. Specifications for a computer program to select the sample and prepare estimates from the sample using new methods of estimation have been prepared. This project could have wide implications since it involves an almost full automation of the handling of a survey, from updating the sample frame through the mailing and checking of questionnaires to preparing and printing the estimates in final form.

Specifications are now being written for a computer program to prepare estimates for the Motor Transport Traffic Survey. The opportunity is being taken at the same time to include a number of revisions in the survey procedures which should improve the resulting estimates considerably.

A quality control plan has been developed to be applied to the work of key punch operators working on external trade statistics. Under this plan ten per cent verification of punch cards will be replaced by sample verification. This plan has now been accepted by the Tabulating Services Division as well as by the External Trade Division for whom the punch cards are being prepared. The plan is due to be introduced shortly and a considerable reduction of the amount of time spent in verifying the punch cards will be effected.

Consulting services were extended to various government departments and agencies such as the Departments of Agriculture; External Affairs; Finance; Defence; Industry; National Health and Welfare; Mines and Technical Surveys; the Air Transport Board; the Canadian Union of University Students; the Central Mortgage and Housing Corporation; the Unemployment Insurance Commission; and the Canadian Association for Health, Physical Education and Recreation.

A paper on the new design of the Canadian Labour Force Survey was delivered at the annual meeting of the American Statistical Association in Chicago. A second paper on the 1961 Census of Agriculture Quality Analysis was presented at the annual meeting of the Canadian Agricultural Economics Society. In addition, an article on response errors in the 1961 Census of Population was published in the Journal of the American Statistical Association.

AGRICULTURE DIVISION

The Agriculture Division is responsible for the development and co-ordination of a comprehensive and integrated program of agricultural statistics. By conducting numerous farm sample surveys it collects current data from which to derive estimates of acreage and production of crops, number and production of the various kinds of livestock and poultry, farm income and expenses. 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 provincial departments and other agencies in the conduct of certain farm and industry surveys. In addition, it assembles data collected by other divisions of the Dominion Bureau of Statistics, the Canada Department of Agriculture and other agencies for statistical analysis and publication.

A federal Interdepartmental Committee, with various commodity subcommittees, and an annual Federal-Provincial Conference on Agricultural Statistics facilitate the co-ordination of the statistical program.

The Crops Section publishes a continuous and comprehensive flow of timely data and market information on field and horticultural crops in Canada. At the farm level much data is collected by means of mailed questionnaire inquiries of a sample of volunteer crop correspondents, seeking information on such topics as growing conditions, forecasts of acreage to be planted and what was actually planted, probable yields and actual yields, and farm stocks and quantities of grain fed on farms. Although published reports usually refer to provincial totals only, the data for many items are tabulated by smaller geographical areas and made available to provincial authorities.

In order to integrate material from farm surveys with other available detail on grains and oilseeds, two comprehensive reports, the *Wheat Review* and the *Coarse Grains Quarterly* are published. These publications collate and analyse national and international data and policy changes of importance to the production and marketing of the major commercial grain and oilseed crops. Detailed data on the movement of Canadian commercial grains and oilseeds are published in the *Grain Statistics Weekly*. Historical data are made available for reference purposes in a series of handbooks and in the annual *Grain Trade of Canada*.

During the year, a new survey was undertaken to determine the present structure of apple tree plantings in Nova Scotia and provide information on the direction in which this industry may be headed. This was a combination mail survey with a personal follow-up of a probability sample of non-respondents.

Due to the changing nature of marketing, especially for those commodities where producer and processor groups negotiate prices in advance of the harvest, there has been a growing demand for more precise early-season estimates of probable production. Such data would help alleviate one of the variables in the negotiation process. As a start in meeting these rather difficult and precise requirements, the Crops Section has been developing a system of objective counts and measurements. Apple counts have been underway in the Province of Quebec for a number of years and the program was extended to sour cherries and peaches in the Niagara District of Ontario this past season with encouraging results.

Work on questionnaire design and coverage for a proposed mushroom growers' survey was undertaken as well as development work on a proposed early-season survey to obtain a forecast of probable honey production. A survey to obtain data on the regional use of fertilizers in the Prairie Provinces was established. Preliminary discussions took place on the possibility of introducing objective measurements to obtain more reliable early-season production estimates of the Ontario winter wheat crop.

The Livestock and Animal Products Section commenced a survey of cattle on feed in Ontario and the Prairie Provinces. Initially, this survey is a part of the regular June and December farm surveys and is kept to the minimum of detail. With repetition of the survey with similar questionnaires in 1965 it should be possible to publish reasonably accurate data on magnitude of change between the two years. Benchmark data on number of cattle on feed is to be obtained in the 1966 Census of Agriculture which will also provide a mailing list for the eventual development of a more detailed, separate survey for which considerable demand has been evident.

A further subdivision of age groups in pigs, namely under 3 months old and 3 to 6 months old, was introduced into the 1964 surveys to facilitate market forecasting. The Section also co-operated with the Farm Economics and Statistics Branch of the Ontario Department of Agriculture in questionnaire development and planning for a survey designed to secure data on the current structures of pig production with special emphasis on the channels of weanling and feeder pig sales.

In its regular program, this Section issued monthly reports on the output of dairy factory products, fluid milk sales, milk production and its farm value, egg production, and on stocks of principal food commodities held in storage; quarterly reports on numbers of pigs on farms and forecasts of farrowing intentions; semi-annual estimates of other livestock and poultry on farms; and annual reports of meat and wool output and domestic disappearance. The Section also issued comprehensive annual reports on livestock statistics, poultry and egg statistics and on fur production. The annual report *Dairy Statistics* included historical revisions for the last intercensal period and corresponding preliminary revisions for 1962 and 1963.

During the year, the regular work of the Farm Finance Section included the initial processing of the semi-annual surveys of crop acreages, livestock numbers and disposition, farm woodlot production and farm wages; this involved the preparation and mailing of more than 800,000 schedules and the editing and tabulation of returns. Monthly surveys of farm prices of agricultural products and seasonal surveys of farm wage rates were also undertaken. Estimates were prepared and published for the indexes of farm prices and production, farm cash receipts and net income from farming operations, farm wage rates, farm capital and the value of total agricultural production.

The large-scale revision of farm income and expenditure estimates, based on the 1961 Census of Agriculture and the 1958 Farm Expenditure and Income Survey, was continued. In the process of making these revisions, efforts have been made to make these estimates more complete, particularly farm operating expenses. Items for which specific estimates have not been made in the past, include veterinary services, custom charges and insurance. While token allowances have been made to cover these items, no precise measures have been attempted until now. In connection with insurance, arrangements have been made whereby the Department of Insurance supplies provincial estimates of farm fire insurance premiums and indemnities paid to farmers.

Continuing efforts were made to develop new and more reliable sources of information for estimating the components of farm income and expenditure. During the past year, arrangements were made to obtain marketing data from the recently established Manitoba potato and hog marketing boards.

Work in the Interview Survey Section during the past year has centred almost entirely on the Farm Expenditure Income Survey. Computer processing has been completed for most of the data tabulations initially specified for this project.

The preparation of data required for proposed publications originating from the Farm Expenditure and Income Survey was given priority. Considerable progress was made in editing and revising the tabular material in the first draft of a statistical handbook entitled *Motor Vehicles and Machinery on Farms: Numbers, Values and Operating Expenses*. Summary data on values and operating expenses are provided for farms classified by acres of improved land,

product type of farm, and cash income from sales of farm products. Work was started on another statistical handbook based on the economic classification of farms used in the 1961 Census of Agriculture. Within this classification framework, the handbook will contain data pertaining to the physical organization of farms, such as acres of crops and numbers of livestock. The financial position of farms in the various economic classes is described in terms of the value of capital assets, operating expenses, cash income from sales of farm products, and income of the farm family from off-farm sources.

A major research report, tentatively titled *The Agricultural Sector: Its Structure and Composition*, has been planned with direct assistance from the Economics Branch, Department of Agriculture. The proposed project outline and analytical procedures have received approval in principle from an advisory committee composed of senior officers from the Dominion Bureau of Statistics, the Department of Agriculture, the Agricultural Rehabilitation and Development Administration, the Canadian Federation of Agriculture, and the Agricultural Economics Research Council of Canada.

Data from the Farm Expenditure and Income Survey related to the operation of motor vehicles and power machinery are being used in preparing the intercensal revisions of estimates of farm operating expenses. These data have enabled a separate estimate of the operating expenses for balers, and have provided the basis for assessing the importance of separate estimates for other power machinery such as forage harvesters, sprayers and dusters. It is anticipated that the survey data will contribute substantially to the improvement of estimates for other expense items which have been prepared for many years in the past. Direct estimating procedures, which were not possible previously, can be initiated for farm expenses such as insurance, veterinary services and interest on short-term debt. The Prices Division also has obtained data on farm business expenditures from the survey for use in improving and developing the weights of components required in the construction of more effective index numbers of prices paid by farmers and farm families.

BUSINESS FINANCE DIVISION

The Business Finance Division is concerned with the collection and analysis of data on profits, assets and liabilities, capital expenditures, research and development expenditures, cheques cashed, commercial failures, construction, housing and building permits. The Division participates also in the development of special studies on the flow of funds between sectors of the economy and on estimates of the stock of fixed capital held by various sectors.

Surveys of corporation profits and related data are conducted quarterly and the results are published in a report entitled *Corporation Profits*. Data on profits, taxes, sales and capital cost allowance are presently provided for twenty-five broad industrial groups. This profits survey has now been combined with a quarterly survey of corporation balance sheets which was initiated in 1961 as a separate survey 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. Although the quarterly profits and assets and liabilities surveys have been combined, separate reports are issued for each. A report first released in May 1963, gives quarterly balance sheet data on trust companies, mortgage loan companies, sales finance companies and consumer loan companies. Tables on

mutual funds and closed end funds were introduced during 1964. Development work is continuing on major industrial groups of the non-financial sector and these will be included in this publication as the information being collected is edited, improved and analysed.

Estimates of capital and repair expenditures on construction and machinery and equipment are obtained three times each year from business, institutions and governments. 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; and *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. A start was made during 1964 on preparing estimates of capital and repair expenditures in manufacturing by economic region in each province and, where the provisions of the Statistics Act permit, results will be made available to users outside of DBS.

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

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*. This report 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 expenditures or investment surveys. The labour and material content of these construction expenditures is estimated by applying ratios of labour and materials to total value of work put in place. The ratios are developed mainly from extensive surveys of construction contractors. 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. Starting with the 1964 survey of contractors, annual data is being collected on total monthly wages paid by contractors. These data in conjunction with information on wage rates collected by the Labour Division will permit construction of a monthly index of man-hours worked in the construction industry.

The Division also prepares the monthly report *New Residential Construction* which provides detailed statistics by municipality of units started, completed and under construction. This report is based on nation-wide surveys by the Central Mortgage and Housing Corporation which collects data by type of unit on the number of dwelling units started and completed each month and the number under construction at the end of the month. All municipalities of 5,000 population and over are enumerated completely each month. Municipalities of less than 5,000 population are also enumerated each month in instances where they form part of a major urban or metropolitan area. The remainder of the country is covered quarterly on a sample basis.

During 1964 a research program was initiated for the purpose of providing more accurate quarterly estimates of the value of housing put in place. This work is based on administrative records maintained in regional offices of Central Mortgage and Housing Corporation. Further work was done in 1964 on a

reconciliation of changes in the stock of housing between 1951 and 1961 with additions to the stock as estimated in the intervening years from the starts and completions surveys.

Monthly statistics on construction activity, as reflected by building permits data collected from more than 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, metropolitan areas, municipalities and some economic regions on the number and value of housing units by type, for which permits have been issued, along with value data as stated on the permits for industrial, commercial, institutional and government building construction. The February issue gives annual totals for the previous year with greater detail by type of structure, by province.

During 1964 the classification systems in the Building Permits Survey and the Contracts Awarded series (a survey by a private firm) have been brought into line so that direct comparisons of the two are now possible thus permitting maximum utilization of the data.

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, by type of research and by scientific field. They also provide information about personnel employed in research and development, by level of training, by field and by type of research. During the year, the survey Federal Government Expenditures on Scientific Activities, 1962-63 to 1964-65 was completed and is now being published. This report provides actual expenditures for 1962-63 and estimates for 1963-64 and 1964-65. The survey Industrial Research and Development Expenditures in Canada is in its final stages and should be published in the near future. This publication will contain actual expenditures for 1963 and estimates for 1964.

In 1963, the Business Finance Division was invited by the Organization for Economic Co-operation and Development to participate in a meeting of experts on measurement of scientific research activity in Italy for the purpose of reviewing and revising the concepts to be used in surveys of scientific activities. In May of 1964 a member of the Division took part in a meeting in Paris organized by the O.E.C.D. for the purpose of approving the proposed standard practice for surveys of research and development and to participate in the organization of the International Research and Development Statistical Year. Questionnaires relating to the federal government scientific activities and industrial research and development were revised to conform to the standards agreed upon at the O.E.C.D. meetings. The results of the most recent surveys will be used in completing the O.E.C.D. questionnaire for the International Research and Development Statistical Year.

In addition, the industrial questionnaire has been expanded to try and obtain some qualitative information on the effect of federal government fiscal incentives on research and development.

Considerable time was devoted during 1964 to the preparation of preliminary estimates of fixed capital stocks for all the sectors in the economy. A progress report on this subject was published in the *Canadian Statistical Review* of 1964. Preliminary estimates of fixed capital flows and stocks for the years 1946 to 1960 were published in a special supplement to the *DBS Daily Bulletin* in

December 1964. Some of this material has since been revised. A monograph containing more detailed figures and a review of concepts, sources and methods, as well as a comparative appraisal of data was completed, in part, in 1964 and is expected to be released in the form of a reference document in the middle of 1965. More detailed estimates of fixed capital stock for the non-manufacturing industries are being prepared and it is possible that a research paper dealing with this subject will be made available to the public late in 1965.

Reports on commercial failures in Canada are issued quarterly and are based on material supplied to the Bureau under the Provisions of the Bankruptcy and Winding Up Acts. The number of failures and the amount of liabilities are published by region and by industry. Reports are issued monthly on the total value of cheques cashed in fifty-one clearing centres in Canada from material supplied by the Canadian Bankers' Association. This survey covers 88 per cent of all cheques cashed. An annual report on this subject is published in May each year.

CANADA YEAR BOOK, HANDBOOK AND LIBRARY DIVISION

The program of the Division includes the planning, compiling, editing and publication annually of the English and French language editions of two official compendia of information on the Canadian economy, the *Canada Year Book* and the handbook *Canada*, the planning and production of a special volume designed to commemorate Canada's Centenary of Confederation, the revision of material relative to Canada for a score of national and international yearbooks, and the maintenance of a suitably stocked library with appropriate services for statistical research and study.

The compiling, editing and printing of the *Canada Year Book 1965* extended throughout the fiscal year and publication took place in mid-June 1965.

Canada 1964 was published in English and French editions by photo-offset process and the two editions were released simultaneously on August 20, 1964. The planning, preparation and editing of material for *Canada 1965* were carried on during the latter months of the fiscal year and production was sufficiently advanced to anticipate publication by September 1965.

The Division has underway the production of a specially designed publication of some 480 pages to commemorate Canada's Centenary of Confederation. Sponsored by the Bureau and recommended by the Centennial Commission as a Governmental centennial project, it will embody numerous features of the illustrated handbook *Canada* as it endeavours to highlight in textual, illustrative and tabular material a hundred years of Canada's political, economic and social growth from 1867 to 1967. Plans call for publication of English and French editions by April 1967.

The Library of 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 many countries of the world. Demands on the Library continue to increase as the staff of the Bureau was augmented to implement the expanding programs in which they are engaged. A survey of operations conducted in the fall of 1964 indicated that both regular and interlibrary loans were running at a level double that of five years ago.

The Library's resources are used not only by Bureau staff in the various subject-matter divisions and in the research and dispensing of information in answer to inquiries from the general public, but by other government departments and agencies, especially new departments, which have not yet built up their library resources. Similar assistance is being given to the Eastern Ontario Institute of Technology, which requires the use of statistical information by the students in their studies in economics and business management.

Considerable progress was made during the year on the long-term project of reclassification and rearrangement of the library collection. Publications of international organizations and the Canadian government have been completely reorganized.

Preparation of the title index to the Historical Catalogue of DBS Publications has been completed and manuscript copies of the English edition made. Plans call for its publication during the 1965-66 fiscal year.

CENSUS DIVISION

In the year under review, the staff of the Division was engaged in the regular administrative functions including verifications of age from early census and national registration records for some 40,000 applicants.

In connection with the 1961 Census of Canada, the checking of machine tabulations and preparation of reports for the Population and Agriculture Censuses continued. During the year, twenty-nine statistical and analytical reports relating to these subjects as well as to Merchandising were prepared and published. In addition, six reports dealing with the subjects collected from a 20 per cent sample of non-farm households were prepared and published; these included income, migration and family size.

In answer to specific requests a large number of detailed tabulations of Census information were prepared and provided to outside agencies. In order to answer demands for detailed population data, arrangements were made to supply photo reproductions of the machine listings of seven sets of tabulations of population data on an enumeration area basis for the Electoral Districts of Canada. These included such characteristics as age, sex, marital status, religious denomination, ethnic origin, schooling, official language, mother tongue and residence on farms. In the 1951 Census, population totals and household counts only were provided on this small area basis.

Considerable progress was made during the year in the preparation of nine analytical monographs on Canadian economic and social life as revealed by the 1961 Census and other data. Efforts were successful in obtaining an author for the preparation of a monograph on Agriculture. The special tabulations required for the authors of the various monographs were reviewed and compared with the statistical information already obtained from the regular census tabulations. Clerical assistance was given to the authors in preparing statistical tables on their respective subjects.

During the year considerable analytical work was carried out in order to appraise the methods, definitions and concepts used in the 1961 Census. These studies will be of assistance in planning the 1966 Census of Canada. It was

decided by the Government, following requests from many quarters to carry out a small-scale Census of Population and Agriculture to be taken in 1966, the scope of which would of necessity, be along the lines followed in the 1956 Census. This would provide basic "bench-mark" data on population distributions, and characteristics by age, sex, and marital status, household and family size and composition, dwelling types and tenure, and agriculture data on farm areas, crops, livestock and machinery. In addition, plans were initiated for a Census of Merchandising to be taken in 1966, for the first time on a five-year basis.

Following the research studies carried out on the procedures for the 1966 Census, a draft population questionnaire was prepared and a census test of the questionnaire and proposed procedures was conducted in a section of the city of Ottawa. Detailed plans were prepared, as were the necessary administrative forms and instruction manuals. In late November, a field staff of two Census Commissioners and approximately forty enumerators was hired to carry out the enumeration. Following the enumeration, various analyses were made of the information obtained with a view to finalizing plans for the 1966 Census.

In March the Government gave approval for the 1966 Census, the content of the population and agriculture questionnaires and for arrangements with other government departments to assist in the Census. At the year's end, final arrangements for the administration and processing of the Censuses of Population, Agriculture and Merchandising were being prepared.

In the Analysis Section of the Division, the regular series of population estimates and annual reports were prepared for publication. These include population estimates by provinces on an annual and quarterly basis; annual estimates of population for provinces by age and sex; annual estimates by marital status, age and sex; annual estimates for the thirteen largest metropolitan areas and cities. Two annual reports *Canadian Citizenship Statistics* and *Estimates of Families in Canada* were prepared and published during the year. A paper dealing with some characteristics of the older population of Canada was prepared for the Senate Committee on Aging, and the Chief of the Section appeared before the Committee to answer inquiries on the statistics prepared.

Representatives of the Division served on various DBS committees and participated in the training program for the United States Census of Agriculture. A program for training a number of United Nations and International Co-operation Administrative Fellows and other international students was held during the year.

Plans for reorganization and strengthening the Division for future censuses were developed further. Two officers were appointed to direct the Demographic Analysis and Research Section and the Methods Research Section, and additional supporting staff were recruited during the past year.

EDUCATION DIVISION

A variety of considerations is influencing the Education Division which functions as an agency for the collecting, compiling, analysing and disseminating information describing the state of Canadian education. Since decisions concerning the conduct of formal education within each province are the responsibility of the provincial government, it is inevitable that the pattern of the Division's

activities reflects the demands and needs of those who are actually responsible for the education structure, while at the same time taking cognizance of the needs of federal government departments and of international bodies.

Education rates high among news items today. It is a subject in which both laymen and specialists are interested. In terms of persons involved, capital investment and operating costs, as a business it overshadows most of the industrial empires. Because it is growing so rapidly there is much concern over costs and contributions necessary at the municipal level, while at the same time greater demands are being made of the education institutions and graduates. To keep up with changes and to direct progress both educators and businessmen have become more involved in education planning and the use of electronic data processing and decision-making procedures. These important conceptual changes will be reflected in the work of the Education Division and its reports.

At the Winnipeg meeting of the Ministers of Education in September 1964, it was decided to establish an *ad hoc* committee to study the possibility of setting up a complete information system and data bank on education, using modern techniques and covering all of Canada. Officials of the Education Division were invited to participate as partners. At the same time the provinces, one by one, are adapting their data processing activities to the computer. This will in time affect timeliness, coverage and validity of data for the provinces and for all Canada.

To co-ordinate the Division's efforts with the Ministers' Committee on Data Processing, the whole range of data collected, the uses made of the derived statistics, and the relationship of these to planning, will be considered. It is also expected that efforts will be directed towards obtaining agreement on definitions throughout Canada, since this is basic to data collecting and processing.

To keep abreast of the more advanced countries, attention has been directed towards planning in education and the relationship of education to social and economic development. To this end a report, *Education Planning and the Expanding Economy*, was produced after surveying the extent of such planning in the provincial departments of education, universities and larger city school boards, as well as some countries abroad. Attention is now being directed towards expanding our coverage, and determining new series which will meet the needs of departmental officials and educational organizations in the light of information obtained from the survey, discussions and correspondence.

The Education Division along with the provincial Departments of Education, Canadian Education Association, the Canadian Teachers' Federation, the Canadian Universities Foundation and other bodies continue to share the responsibilities of a documentation and information centre. Because the Division is the only unit of the federal government which compiles information on all phases of education, it brings these together for international bodies, national organizations, departments of government, associations and individuals. This service is in addition to its annual and occasional publications, most of which include regular series compiled in a variety of ways.

During the year, the Division produced sixteen publications, of which twelve are now regular annual surveys in the elementary, secondary, higher, adult and vocational fields and finance. The occasional publications covered such areas as planning, university student income and expenditure and a selected bibliography.

Data for the reports are compiled in many ways. At the elementary-secondary level, forms used are designed co-operatively with and distributed and collected by the 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 after consultation with interested bodies or individuals.

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. It is the aim of the Division to provide a composite picture of educational opportunities available in Canada and of the numbers enrolled at the various levels from kindergarten to post-graduate university levels. Recent expansion and interest in the adult education area, much of which is in preparatory courses and vocational-technical education, are reflected in this expansion. The whole field of in-service training now forms a large sector of education, as does informal education which is even more difficult to evaluate statistically.

A primary function of the Division is that of co-ordinating provincial data to provide totals for Canada. Differences in grade structure and curricula from province to province are being enlarged rather than lessened. The elementary-secondary divisions cover eleven, twelve or thirteen years and the high school division may begin after six, seven, eight or nine years. Other variations in organization are being introduced as the old grade structure is being replaced by a more functional organization in several provinces.

More use is being made of the statistical data on salaries in institutions of higher education year by year and the Higher Education Section is contributing through providing these data to teachers, administrators, teachers' associations, departments of government and others interested in such factual data. Information on salary schedules has also been supplied to interested bodies.

An article prepared for the Canadian Universities Foundation was undertaken, which related the estimated awarding of degrees by faculty to the Canadian University Federation forecasts to 1976-77. Some progress was also made in preparing historical material on university enrolment which eventually will be published by DBS.

The seventh and largest Federal-Provincial Conference on Education Statistics attracted fourteen delegates from the provincial departments, five from national educational associations, four from provincial trustees' associations and six from provincial teachers' federations. Discussions covered the obtaining of greater uniformity, exploring new series, the possibility of standardizing terms and newer methods of collecting and compiling data. Report forms are being adapted in line with recommendations.

The Chief of the Elementary-Secondary Section spent about half the year as a member of the Secretariat for the Third Commonwealth Education Conference held in Ottawa from August 21 to September 4, 1964.

The Vocational-Technical Section continued to expand its coverage of the field. Among publications prepared were the *Survey of Vocational Education and Training*, special releases for the institutes and trade schools, and *Organized In-Service Training in Four Major Industries* which will be released soon. In addition, a chart showing course offerings of thirty-eight institutes of technology and related institutions was given wide circulation. New forms are being tried out in order to provide additional data in the field.

The preparation of two reports using Census data together with work on a revised version of *Pupil Progress Through the Schools* has occupied the attention of the Research Section most of the year.

In the Adult Education Section, the annual surveys of adult education, public libraries, and academic libraries were prepared and a survey of museums and art galleries is now under way.

The Finance Section released the annual financial statistics of education and prepared a new publication, *Canadian Universities, Income and Expenditure, 1961-62, 1962-63*. A Federal-Provincial Conference was held in DBS to put the *Manual for School Board Secretary-Treasurers* in final form. It is expected that it will be printed and released by this fall.

During the year the number of special requests continued to increase in both number and variety. Attendance at conferences and meetings also increased as new demands were made on education. Among these were special meetings on education finance and economics, vocational-technical education and productive society, manpower, adult education, the trimester system of organizing universities and on foreign students. In addition, many articles and reports were prepared for professional educational publications.

EXTERNAL TRADE DIVISION

The External Trade Division is responsible for statistics of Canada's commodity trade with other countries. These statistics are published in the *Trade of Canada* series of reports, and are widely used in the business world and in government for specific market analysis, general economic analysis and as a guide to international economic relations.

The Division is comprised of two sections and a central staff. The Operations Section has responsibility for the compilation of commodity trade statistics and the preparation of export and import reports. The Classification and Surveys Section is responsible for the development and control of the classification system within which these statistics are compiled and of the alternative classifications within which they are presented. The central staff is responsible for overall planning, for general research and analysis, and for information services.

The period under review marks the first full year in which both export and import statistics were compiled within the general framework of the Standard Commodity Classification. The new Import Commodity Classification, introduced in January 1964, represents a substantial improvement over that which preceded it. Trade data are now much more comparable with those of other commodity series, and the new classification has facilitated an expansion in the degree of detail shown in trade statistics through the reduction or elimination of large "basket" or "not elsewhere specified" classes.

The year 1964-65 was characterized by particularly large increases in the volume of Canadian trade with foreign countries. By mid-1964 this factor led to the accumulation of a substantially larger backlog of unprocessed import documents than had been anticipated would result from the introduction of the new import commodity classification. To maintain the publication schedule it

became necessary to modify compilation procedures in several respects, the most important of which was the elimination of commodity detail on customs import entries individually valued between \$100 and \$199. These measures have led to a gradual improvement in the timeliness of the monthly import report.

The procedure, initiated in 1964, whereby large import entries are individually scrutinized to ensure that they reflect appropriate value figures has been extended from the beginning of 1965. Approximately 25 per cent of the total value of imports now receive this special attention.

An experimental preliminary import report for 1964 was issued at the end of March 1965, thereby advancing by about one month the availability of annual import totals with commodity by country detail. This initial report was prepared by merging the cumulative import totals for the first ten months of the year with first-run tabulations for November and December 1964. It is expected that such a preliminary report will prove accurate enough for useful service during the interval until the regular December issue becomes available. All value figures shown in this report were rounded to the nearest thousand dollars, and the comments of users were invited, as consideration is being given to limiting the presentation of values in regular *Trade of Canada* reports to thousands of dollars.

At the close of the fiscal year an initial publication on the mode of transport used to carry exported goods from Canada was being prepared for release. This report will relate to exports during the last nine months of 1963, and will be the forerunner of annual tabulations of exports by mode of transport for succeeding years.

In January 1965 the Division began to compile information on the province of lading of export shipments with a view to tabulating this information for annual and monthly release.

Release dates of the annual three volume *Trade of Canada* report continues to lag, with only *Volume II (Exports)* for 1961-62 having been released during the fiscal year under review. An accelerated program for restoring the timeliness of these volumes should result in a marked improvement during 1965-66.

HEALTH AND WELFARE DIVISION

This Division is responsible for the production of statistics on the state of 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 statistics on health. The Vital Statistics Section is concerned with recording births, deaths, marriages and divorces. In particular, it carries out studies on natality, mortality, fertility and life expectancy. The Institutions Section is concerned with the services, facilities, staffing and finances of general and special hospitals, and of mental and tuberculosis institutions. The Public Health Section is concerned with the individual conditions and the personal characteristics of patients in hospitals of every treatment type. It is also concerned with 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, the Penitentiary Service 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 supplying basic tabulations to the provinces 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, from other government departments, and from other users, continued to be unusually high. Questions were asked about mortality from particular diseases, about groups of related diagnostic conditions, about the course of demographic changes and about trends in nuptiality and fertility, continuing the pattern established in previous years by calling for detailed analyses both of current and of historical records. Before it was possible to answer many specific requests it was necessary to carry out individual investigations, as the information has either not been published, not been calculated, or not been compiled. To supply a number of such demands and to satisfy the needs of special interest groups, several series of analytical studies have been published or planned in the fields of cancer, accidents, foetal and infant mortality, as well as in the area of life expectancy and survivorship. These analytical reports will focus attention on particular trends and will highlight the factors that bear on the problems posed by the trends.

The Division prepared alphabetic registers of births, marriages and deaths on behalf of the provinces and since 1945 of the Family Allowances Administration. For some years now, negotiations have been under way with the agencies concerned in an attempt to cut down on operations like these which are not completely statistical in nature. Some success has been achieved and negotiations to this end are continuing. In addition to negotiations concerning alphabetic registers, arrangements have been concluded with several provinces to purchase copies of punched card records of statistical events. These arrangements, which have been made possible through standardization of coding and of recording procedures, will make it unnecessary to prepare original statistical cards in two places. Negotiations are proceeding with the other provinces in order that they too may be afforded the opportunity of sharing with the Bureau the cost of producing such basic records. At the same time as the change in the way in which the information arrives is being arranged, the processing operations in the Bureau itself are being progressively converted to a series of automated steps. Once completed conversion to computer operations has taken place, it will be easier to make plans in cooperation with the provincial authorities, to advance publication dates, and to answer new and continuing demands for additional vital statistics.

The Division each year provides the Vital Statistics Council for Canada with its secretariat service. Besides the work immediately associated with the Council meetings, the secretariat service usually involves the examination of a number of problem areas designated by the Council. Some of the areas relate to legal and administrative features of the vital statistics system and others extend beyond the immediate operations of the system into the general sphere of social statistics. Examples of both types of referral are the redesigning of the registration forms used by the provinces and the reconsidering of the statistical headings to be placed on these forms. These technical and conceptual examples illustrate the nature of the problems referred to the Division by the Council. The review being carried out of the content of the items on the vital event forms is the last step in a series of moves to standardize the forms completely in size, order of headings, and content. The immediate benefits anticipated from this complete standardization are those of economy in printing, convenience of processing and ease of record exchange. Printing economies are a direct benefit to the Bureau,

since, under the terms of the Dominion-Provincial agreement, forms are supplied free to the provinces. The benefits ultimately anticipated are those of improved and integrated vital statistics.

In characterizing the operations and finances of hospitals of all types, the Division produces a wide range of statistics. It was possible to accelerate the production of these statistics this year, and even more improvement in timeliness is anticipated in future years. The most important advance has been in the general and special hospital areas where questionnaires were returned sooner and processed on the computer more quickly than in previous years due to a reduction in tabulation requirements, which resulted from two years of experience in handling automated output, as well as a major recasting of Volume VII of the annual *Hospital Statistics* report, "*Hospital Indicators*".

The Division introduced several material changes into its hospital reports this year. One change was to provide estimates of unreported basic data which appear in the current tables in the regular hospital publications; they are also being calculated for inclusion in the historical tables. Estimates for unreported basic data were also published in the latest preliminary hospital statistics volume. It was of special value to have these estimates in the preliminary volume, which is designed to provide summary statistics at as early a date as possible. Another change in content concerned the "*Indicator*" report, which now contains standard deviations and quartiles, in addition to arithmetic means. Trend information is now becoming available, with three years of comparable statistics. More analysis will be required, particularly analysis of the interrelationships among various factors, before it is possible to make maximum use of this pool of information.

In 1964, the Division distributed to tuberculosis sanatoria comprehensive forms similar to those used by general and allied special hospitals. With these extended forms now in use, plans are under way eventually to process tuberculosis sanatoria data in much the same way as general hospital figures are treated now. Such similarity in treatment will permit valid comparisons between various types of institutions. Revisions were made this year in the general schedules for mental institutions. Revisions are also planned to take place in the coming year in connection with the financial returns filed by the mental institutions.

Divisional officers participated in a number of institutes and training sessions that were held in various provinces which resulted in improvement in the quality of hospital data reported to the Bureau. Field work at provincial hospital commission headquarters was also carried out, and this contributed in part to the improvement in timeliness that took place this year. As a further contribution to liaison between correspondents and the Bureau, statistical material was transported to annual meetings of hospital associations, and put on display there. These exhibitions proved most successful and more of them are being planned for the future.

The Division continued to publish information on the medical conditions and other characteristics of patients in hospitals of all types. In particular the Division published a first report on hospital morbidity in general and allied special hospitals. This report shows detailed diagnostic information for over two million cases. The report covers eight provinces with a population of between eleven and twelve million. Along with information on diagnosis and on days of care, the publication shows population rates that are subdivided by age and sex. Information of similar detail and scope has not been published before for an

identified population of this size, and its release therefore represents a significant Canadian addition to morbidity knowledge. For many diseases these hospital case figures constitute the only published information available.

In addition to publishing a regular report on patients in mental institutions, the Division produced a special brochure relating to mental retardation in Canada, which was prepared for the Federal-Provincial Conference on Mental Retardation which was held in Ottawa from October 19 to 22, 1964. Along with its other mental health activities, the Division gave substantial help to one province which was setting up a central mental health records system. From this central office the Bureau now obtains the information it requires for preparing annual reports and answering special requests.

During the year regular reports were published on morbidity in tuberculosis institutions. In addition, a series of monthly reports were issued on the incidence of tuberculosis of known active, inactive and reactivated cases, the data for which were received from the provincial registers.

Weekly bulletins on the occurrence of communicable diseases were released for the benefit of public health authorities; these figures were later incorporated into an annual publication. All provinces except Alberta supply information on communicable diseases by way of weekly case summaries. Alberta forwards individual case records for all diseases except venereal infections. From these individual records, tabulations subdivided by age, sex, city and health unit, are prepared and sent to Alberta on a weekly and on a four-weekly basis. Venereal infection was itself the subject of special tabulations forwarded by the Division to the Department of National Health and Welfare. Many special requests for morbidity information were received during the year from federal and provincial government departments as well as individuals. Extensive information for use in emergency health planning was requested as well as information to be used in determining the distribution of hospital beds in a province and information regarding the course of particular diseases.

During the year the Division published information on police administration, juvenile delinquency and correctional institutions, sent 1963 consolidations of crime and traffic enforcement data to correspondents for verification, released comparative 1962 and 1963 figures on a variety of policing activities, and also prepared statistical material for publication both by the National Parole Board and by the Commissioner of Penitentiaries. For the first time, the Division released statistics on the offences of arson and attempted arson.

In addition to continuing its established collection procedures the Division made arrangements with the Canadian Bankers' Association to obtain reports of robberies and attempted robberies, and of breaking and entering offences and attempts, both as related to the chartered banks, commencing with the 1965 calendar year. After a series of discussions aimed at simplifying the collection and improving the quality of court statistics, the major courts have begun to send in their reports each month, this change having shown a beneficial effect already. In preparation for the introduction of improved methods of reporting penitentiary statistics, a work group of divisional and penitentiary officials met in the Bureau. Crime and traffic enforcement data which were formerly processed by a combination of punched card printouts and desk calculations have now been converted to an automated operation.

A number of feasibility studies have been carried out in connection with the integration of statistics. Other important developments were discussed during

visits to provincial correctional institutions and to probation authorities. Suggestions made were received with approbation, as their acceptance and implementation would bridge long-standing gaps in correctional statistics but to become effective, the proposals would require new resources.

Officers of the Division visited correspondents in the judicial field in order to assist them in the collecting and recording of judicial data. In addition a number of general meetings and conferences were held or attended; among these were the National Conference on Training Schools; the annual meeting of the Canadian Association of Chiefs of Police; the annual meetings of regional police chief associations; the annual meeting of the International Association of Chiefs of Police; and the National Conference on Sentencing. Bureau officers also attended the Third Criminal Law Conference, which was held at Osgoode Hall, Toronto, in April 1964. At this conference the discussions gave those attending an appreciation of the value of statistics both in the administration and enforcement of law, in the carrying out of the correctional process, and an understanding of the technical and resource problems involved in producing statistical information. Besides putting forward a number of specific suggestions, conference members confirmed the desirability of integrating police, court, correctional and aftercare statistics.

INDUSTRY DIVISION

The Industry Division is responsible for the development of a co-ordinated program of industry and energy statistics, for the development of productivity measures for the whole economy and for individual industries and groups of industries. The Division consists of four main sections: Industry Statistics; Productivity Research and Analysis; Energy Statistics; and Shipments, Inventories and Orders. A separate administration staff is responsible for the preparation of the Division's annual general reports on manufacturing statistics for Canada, the provinces and sub-provincial areas, the development and control of the Division's computer processing program and the collection and assembly of 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 is responsible for industry and commodity statistics on an annual and current basis in the fields of manufacturing, mining, forestry and fishing. 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 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 and/or shipments of important commodities is of primary importance and a considerable number of commodity surveys on a monthly, quarterly or semi-annual 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 major emphasis in the Section was placed on regaining lost timeliness in the release of industry statistics and in the consolidation or completion of projects initiated during previous years. The most

important of these was the completion, for manufacturing statistics, of the change to the new establishment concept together with the compilation of principal statistics on both the "manufacturing activity" and "total activity" bases for the years 1961 and 1962. By year-end, one-third of the 1962 annual manufacturing industry reports had been published on the new basis and the remainder were all in various stages of preparation.

With the completion of the changes in classification and concepts which were carried out over the past few years and which resulted in significant loss of timeliness, considerable progress has been made with respect to the 1963 and 1964 censuses of manufacturing. Through changes in operational procedures and greater use of computer editing, considerable savings have been made in the processing of the 1963 Census of Manufactures which at the end of the fiscal year was over 85% completed. Preparation of 1963 reports started shortly thereafter. This represented a saving of about five months over the 1962 Census. Further progress is anticipated in the processing of the 1964 Census. The 1964 questionnaires were mailed out at the beginning of January 1965, representing a saving of about two months over the 1963 Census. Editing of the 1964 Census will be in full operation by the middle of May 1965.

Some progress has also been made in improving timeliness of publication of the Section's 171 current commodity surveys but late or delinquent response continues to be the chief factor limiting significant gains.

Substantial progress has been made towards the full implementation of the new establishment concept in connection with the annual censuses of mines and logging. It is planned to issue the 1963 reports for these industries on the new basis and to re-work the data back to 1961. Work in connection with the proposed new census of fishing establishments is progressing slowly because of the large amount of information required in the development of a suitable sample frame for surveying small establishments. It is hoped, however, that the first survey will be carried out next year.

During the year the Section was also involved in a number of important new developments. Work was begun on the revised classification of individual items of materials and products reported in industry questionnaires. Based on the Standard Commodity Classification, the implementation of this new classification in the Division's surveys will greatly facilitate comparison at certain levels of aggregation between industrial materials consumed, products shipped, exports and imports. It will also achieve greater consistency of commodity statistics between the numerous industry series and enable the data to be programmed for computer editing and tabulation. More than half of the work has been completed and it is expected that the new commodity classification will be fully implemented in the 1966 Census of Manufactures.

Officers of the Section continued to emphasize personal contacts with officials of firms and associations and made numerous visits during the year. This has led to more understanding and better co-operation on the part of respondents and more satisfactory reporting in a number of areas. In line with the objective of improving liaison between the Section and major users and suppliers of industry statistics, two new committees were formed during the year in the foods and textiles areas. The Canadian Food Processors' Association formed a statistical committee which will represent the industry on the new Committee on Food Processing. In textiles, a new joint Government-DBS-Industry Committee was formed to review the general needs of users in this field and to recommend

changes in existing surveys or the initiation of new surveys as required. The Departments of Finance and Industry and various trade associations are represented on this committee.

As a result of experience with the new Standard Industrial Classification introduced in the 1960 censuses of industry and consultation with users, a number of industries have been redefined and their statistics will be recompiled back to 1957. Among these are Sawmills, Sash, Door and Planing Mills, Railroad Rolling Stock and industries in the printing and publishing field.

In the Productivity Research and Analysis Section, the major development during the year under review was the release of the reference paper *Indexes of Output per Person Employed and per Man-Hour Commercial Nonagricultural Industries, Canada, 1947-63*. At the present time, separate detail is available only for the manufacturing and nonmanufacturing components of the commercial nonagricultural universe, but during the year a program of refinement and extension of the Bureau's aggregate productivity measures was initiated which, it is hoped, will lead to the provision of separate indexes of output per person employed and per man-hour for each industry division in the commercial economy. Work also continued on the development of productivity measures for individual manufacturing industries. Data requirements for six industries were complete or close to completion by the year-end. For three of them, namely Synthetic Textile Mills, Breweries, and Pulp and Paper Mills, draft reports including descriptive background material, technical notes and an analysis of results, were expected to be ready soon for restricted circulation prior to general publication. As part of the computer application for the processing of Census of Manufactures principal statistics, arrangements were made for the provision of a number of analytical ratios. It is expected that these ratios, which are stratified by size of establishment according to the number of persons employed, will provide a useful supplement to the basic productivity ratios, and during the year some experimental analysis was carried out on tabulations of the 1961 and 1962 Census data. Contact was also maintained with important users, such as the Economic Council of Canada, to discuss and anticipate their statistical requirements in the field of productivity. A paper on Canadian sources of data for industrial productivity measures was prepared for the Organization for Economic Co-operation and Development by the Chief of the Section.

In the Energy Statistics Section, the major effort during the past year was placed on the consolidation and further development of projects and surveys undertaken in previous years. An organizational change was effected whereby the current surveys on refined petroleum products and coal, and the annual census surveys of oil and gas producers were transferred from the Industry Statistics Section to the Energy Statistics Section. As a result of the introduction of new reporting forms, a monthly supply-demand series of electric energy was instituted. Considerable progress was also made in improving the timeliness of annual statistics on electricity. In co-operation with the Interdepartmental Advisory Committee on Energy Statistics, intensive studies were carried out on coal statistics with a view to introducing changes in these statistics during the coming year.

In the field of oil and gas statistics, major efforts were made to improve timeliness and by year-end, publications were being released on a more timely basis. In co-operation with the Business Finance Division, new joint reporting procedures were being discussed with representatives of the oil and gas industry. The new approach is designed to improve the statistics reported to both divisions and reduce duplication of reporting while at the same time meeting the statistical

needs of the industry. A new monthly series on supply-demand of natural gas was introduced which supplements the supply-demand statistics on crude oil developed in the previous year. Statistics were also made available for the first time on sales of liquefied petroleum gases, and on sales of major petroleum products by type of customer.

In the Shipments, Inventories and Orders Section, the new establishment concept was implemented in the monthly survey at the beginning of the year on the basis of the 1961 Census of Manufactures results. Revised values for 1960 were also published at the same time and comparable values for 1958 and 1959 have since been prepared and are being distributed on request. The monthly series on Shipments, Inventories and Orders will again be revised during the coming year on the basis of the 1962 Census of Manufactures results. The timing of the annual revisions in the future will depend on the availability of the census data and, as the latter improves in timeliness, so will the up-dating of the monthly series. The Section is now engaged in developing revised values on the new basis for the economic use grouping of the monthly inventories, shipments and orders series. At the same time seasonally adjusted data are being developed for the industry group classes. Coverage of the monthly survey is also being extended to the printing and publishing and sawmills industries, data for which have been heretofore either estimated or based on related information. Last year the distilleries and bakeries industries were surveyed for the first time and the results are now incorporated in the regular monthly series. The Chief of the Section has participated actively in the investigation and resolving of reporting problems resulting from the change to the new establishment and "total activity" concepts in the Census of Manufactures.

In the Emergency Supply Planning Unit, emphasis during the past year was placed on the development of data on drugs and medical supplies as a result of special requests by the Department of National Health and Welfare. Other major developments were the adaptation of the Unit's commodity series to computer requirements and the change in presentation format to assemble all food data on a "district by food group" basis rather than on a "food group by district" basis as in the past. This arrangement now permits all the information pertaining to a district to be assembled in one report.

During the past year, strong emphasis has been placed on applying computer processing to the Division's operations. The computer processing system for the editing and tabulation of the "principal statistics" of the 1961 and 1962 censuses of manufactures was fully implemented. The computer edit has supplemented the regular edit and, in the case of "short" forms returned by small establishments, has replaced much of the manual edit. Tabulations are several times more extensive than formerly but the machine processing costs remain substantially unchanged. Returns for 1963 are now being processed through the system and 1964 returns will follow shortly. Timeliness in editing and tabulation is thus being improved and, with the development of a computer program for photo-reproduction of statistical tables now in process, the time spent in preparation of publications will also be reduced. In the development of this program, allowance is also being made to accommodate requests for special compilations. Divisional methods and procedures are being adapted to the particular requirements of computer processing and the computer application is rapidly becoming a routine part of the Division's operations.

Experience gained during the past year, together with information obtained on major users' statistical needs, are important factors in planning extensions to the computer application. The processing and publication of principal statistics

will be facilitated during the coming year by extending and improving the machine edit of raw data, by the use of the photo-print process and by the provision of additional tabulations for analytical and checking purposes. The main extension to the system, however, will be the processing and tabulation of commodity data, planned for the 1966 Census of Manufactures. Planning for this development will provide for the needs of the Input-Output project and the revision of the Index of Industrial Production. The Division's computer staff is also participating actively with the Central Classifications Staff in the study and use of the Bureau's central list of respondent and standard classifications in computer compilation.

The changeover to computer processing together with the classification and conceptual changes implemented in recent years have resulted in substantial delays in the publication of the Division's annual general reports on manufacturing statistics, including the report containing fine geographic breakdowns of principal statistics and a substantial increase in the number of requests for information and special compilations resulted. These additional demands have originated primarily from the Department of Industry and from the provinces. The increased emphasis now being placed by the provinces on economic planning has resulted in greater pressure for statistical services and for more joint participation in industry surveys.

Among the more important special projects undertaken by the Division in the past year were the recompilation on the revised classification basis of the commodity statistics in the 1959 Census of Manufactures for purposes of the revision of the Index of Industrial Production; the tabulation for publication of the special 1962 survey carried out for purposes of the Input-Output project on containers and shipping materials used by manufacturing establishments; and the assembling and tabulation in co-operation with the National Accounts and Balance of Payments Division of principal statistics, by industry, for foreign-owned manufacturing establishments.

INFORMATION AND PUBLIC RELATIONS DIVISION

During the year the Division continued and improved its activities in the dissemination of information and in answering inquiries. Progress was also made on meeting the Division's other responsibilities and in reorganizing to deal with them on a more adequate basis. These other responsibilities are mainly the improvement of relationships between the Bureau and respondents to DBS surveys and extension of the uses of DBS statistics.

A multi-purpose four-panel exhibit, designed to facilitate the display of literature, was produced during the latter part of the year. It was used with satisfactory results at four conferences and meetings involving the Industry Division and the Education Division. A special display was provided in co-operation with the Health and Welfare Division for a meeting of the Ontario Hospital Association in Toronto.

Pamphlets and other promotional literature were produced and a number of special articles prepared for trade magazines and other special interest publications. Press coverage for conferences was arranged and materials for speeches assembled. Leaflets were produced to promote the distribution of DBS statistical publications with good results being obtained. Articles explaining the signifi-

cance of the annual Census of Industry were published in trade magazines, and other promotion undertaken to bring about wider general use of DBS statistics in these journals. A pamphlet was produced to assist in DBS recruiting activities, mainly at universities. More than 2,500 copies were distributed, mainly on request.

Work was begun on the development of a booklet, designed to better acquaint business firms with the uses that are made of DBS information. A small advisory committee comprising representatives from industry was formed to assist with the project.

A new system of releasing statistical information, in the form of a series of service bulletins, was begun at the end of the year. The system is intended to bring together numerous small items of information previously released individually, with each bulletin serving a distinct "interest area" among the users of DBS information. This should result in better service to the users concerned. The first bulletin to be issued contains information of interest to those concerned with the food and beverage industries. It is expected that if the reactions to the first one are satisfactory several other service bulletins will be started.

The Census Division was provided with publicity support for the 1966 census test in Ottawa in November 1964. This involved press relations work with newspapers, radio and television and the production of a pamphlet for door-to-door distribution in the area concerned, outlining the reasons for the test and listing the questions to be asked.

Planning was well advanced during the year on the publicity activities to be undertaken for the 1966 Census. Cost estimates were developed with the assistance of the advertising agency and the general outlines drawn for the advertising campaign. The Division provided staff support for the Census Publicity Committee which was appointed during the year.

The volume of both telephone and written inquiries continued to increase during the year and staff of the Division received numerous visitors to the Bureau seeking information. Written inquiries were handled at a rate of between 30 and 35 daily. In many cases, materials for replies had to be assembled from a number of sources and in some instances special tabulations were made. The majority of the inquiries received were from sources within Canada but they included many requests from foreign countries.

During the year, 251 issues of the Daily Bulletin were published, summarizing for the benefit of users and the press, the daily output of DBS information. The Bulletin had an average circulation of about 1,600 English and 300 French copies per issue. The Weekly Bulletin was published each week, with a total circulation of some 1,650 copies per week.

The 1964 edition of the DBS Catalogue of Publications was issued in March 1965. The new edition brought the listings of DBS published material up to date to November 1964, and revised the listings contained in the second edition published in 1960 and the supplement of 1962. The new catalogue contained a combined title, subject and commodity index for greater convenience to the public. It replaces the separate title, commodity and subject indexes which had appeared in the DBS catalogue previously. All title changes, new titles and discontinued titles which had occurred since the publication of the earlier catalogues are listed in the main body of the new edition and in separate sections. This provides the public with a picture of the developments that took place in the DBS publications program in the period since the former catalogue

was published. The catalogue also lists 1961 Decennial Census publications and, in addition, incorporates the changes in the publications of the DBS Industry Division that resulted from the adoption of the revised Standard Industrial Classification.

LABOUR DIVISION

The Director of the Division, Mr. H. F. Greenway retired in February 1965 after some thirty-six years' service in the Bureau. Mr. D. J. Bailey is the new Director of the Labour Division which consists of three Sections: the Employment Section, the Unemployment Insurance and Pensions Section, and the Research and Analysis Section. The Employment Section collects industrial establishment records of employment, hours of work and wages and salaries; it publishes index numbers of employment and payrolls, and per capita figures of hours and earnings. The Unemployment Insurance and Pensions Section provides the Unemployment Insurance Commission with operational statistics. It also publishes statistics of public interest concerning persons covered by unemployment insurance and persons claiming benefit as well as statistics of private pension plans from an annual survey of trustee plans. The Research and Analysis Section issues labour income estimates giving industry and area totals and undertakes research and analysis pertaining to the general field of labour statistics.

The Employment Section continued the regular program of preparing statistics of employment, hours and earnings. This program consists of a monthly survey of employment, hours and earnings in larger firms, a monthly sample survey of employment in smaller firms, and a detailed annual survey of hours and earnings in manufacturing. In co-operation with a team of management analysis specialists, a thorough study was made of clerical operations connected with the monthly Survey of Employment and Payrolls. As a result of this investigation overall efficiency was increased by a number of changes in procedures and the transfer of all more routine calculating operations to the Tabulating Services Division. The schedule for the monthly Employment and Payrolls Survey was reviewed and the format and instructions revised for greater ease of completion. The revised schedule was used experimentally for a sample of firms in mid-summer, receiving favourable comment, and was then instituted in January 1965.

The initial issue of a new monthly publication *Estimates of Employees by Industry and Province* was distributed in March 1965. The data in this publication combine the results of the regular large firm survey and the sample survey of smaller firms to provide industry by provincial aggregates for the commercial nonagricultural sector of the economy. As the initial step in a program to obtain employment data for industries not covered by the regular employment surveys described above, a monthly survey of hospital employment was initiated in January 1965. Preliminary arrangements were also made to undertake a monthly survey of employment in education.

Work was continued in connection with the revision project involving transfer of the monthly survey of Employment and Payrolls to the new Standard Industrial Classification code, implementation of the standard establishment concept, adoption of new geographical code and conversion from a 1949 to a 1961 base. It is anticipated that this long-run project can be completed early in 1966.

In addition to continuing its regular program of unemployment insurance and pensions statistics, the Unemployment Insurance and Pensions Section undertook a number of special projects. At the request of the Unemployment Insurance Commission, a senior officer of the Section revised those sections of the Commission's Contribution Manual concerning statistics, which were later reviewed and adopted at a conference of the Unemployment Insurance Commission Regional Contribution and Coverage Officers. Technical advice and assistance was provided the Unemployment Insurance Commission and the Department of Agriculture regarding proposals for extension of unemployment insurance coverage to agriculture. The assistance included conduct of a study using records held in the Section for persons giving agriculture as their current or most recent industrial attachment.

In co-operation with the Unemployment Insurance Commission, the Section undertook preparation of statistics concerning those issued Social Insurance Numbers during April to June 1964. The statistics produced from this source included data annually prepared for the insured population together with information concerning the personal characteristics, industrial and occupational attachment of uninsured persons who obtained Social Insurance Numbers. Arrangements were made to further extend computer applications to the tabulation of unemployment insurance statistics. For example, in conjunction with the establishment of a new continuous work history sample necessitated by the assignment of Social Insurance Numbers to persons covered by unemployment insurance, the processing of the continuous work history sample maintained in the Section is being transferred to the computer. Hence, certain processes formerly executed manually in the Section will now be carried out by computer. This was expedited in order to utilize the magnetic tape obtained from the Department of Finance providing basic information for the establishment of the new continuous work history sample, and for new Social Insurance Numbers issued subsequently.

The annual Trusteed Pension Plans survey was reviewed and a number of improvements made in both the survey schedule and format of the published report. Preliminary plans have been made for a survey of the nonfinancial statistics of all private pension plans to be carried out in 1965.

A senior officer of the Section represented the Bureau at meetings of the Interdepartmental Task Force Committee on the Canada Pension Plan. Officers of the Section also attended meetings of the Interdepartmental Committee on Canada Pension Plan Subcommittee on Statistics. A detailed report on private pension plans in Canada was prepared as a background document for the joint Senate-Commons Committee on the Canada Pension Plan. Officers of the Section participated in preparation of a report outlining the statistical possibilities of the Canada Pension Plan. This report was circulated among federal government departments and a number of provincial departments of labour.

A long-range research program was designed by the Chief of the Research and Analysis Section and a start was made on selected projects. Work continued on the revision of estimates of labour income 1951 to date to take account of the new Standard Industrial Classification and the new establishment concept. The publication of the monthly, quarterly and annual estimates of labour income was also maintained.

A number of commissioned projects were undertaken for outside agencies including a study of the occupational patterns of older workers between 1951 and 1961 for the Canadian Welfare Council, and a study of the length of the average work-week in the post-war period for the Canadian Broadcasting

Corporation. Several projects were also undertaken for the Economic Council of Canada. In co-operation with the Special Surveys Division, a Work Experience Survey and a survey of Educational Attainment were planned, and taken in January 1965 and February 1965, respectively.

The Section played a major role in preparing a reference paper to be published in conjunction with the issuance of the new monthly publication providing employment aggregates by province and industry. Senior personnel of the Section participated in preparatory work in connection with the new monthly survey of employment in hospitals which was initiated in January and a similar survey of education planned for later in the year. The planning of these surveys was carried out in co-operation with the Health and Welfare, Public Finance and Transportation, and Education Divisions.

The Section has the responsibility for the preparation of labour input measures for global productivity indexes. During the year, indexes of employment and man-hours worked in the commercial nonagricultural industries of the economy for the period 1947-63 were prepared. A reconciliation study of estimates of paid workers for the same period obtained from the Employment Survey and Labour Force Survey was also completed.

MERCHANDISING AND SERVICES DIVISION

This Division was set up to provide a wide range of statistics on the retail, wholesale and service trades and on specific aspects of distribution not necessarily limited to these trades, such as advertising expenditures and channels of distribution. In the past, the Decennial Census of Merchandising and Services has made available statistical information within structural classifications, whether by trades or by groupings of businesses according to ownership, affiliation and by geographical distribution down to the level of census tracts in metropolitan centres. This information has been quite extensive, including commodity detail of sales. Intercensally, sample-type surveys are maintained to permit estimates of total business done and inventories held at the retail and wholesale level, and for department stores and corporate chains. Estimates are also made for consumer credit extended by retail businesses and some financial institutions. In the service trades seven important trades are covered annually.

During the year, proposals were put forward designed to modernize the statistical approaches and to provide the necessary supporting organization. As a result of these, the Census timing is being changed from decennial to quinquennial, beginning with 1966. At the same time, the Census enquiry is being limited to exclude fine detail of commodities sold and operating expenses; the detail will be sought by sampling as a post-Census effort in each intercensal period. As a result of these changes, the basic data provided by the Census will be available more frequently and with a minimum time-lag between the period surveyed and the date of publication, while the detail to be secured by sampling will be available more frequently and will be part of a flexible sampling program in which priorities can be developed according to the current needs of users. Going beyond this, statistics for wholesale trade are being developed on an annual, total-coverage basis, and will remain within the Census framework in the quinquennial years only to the extent required to ensure across-the-board comparisons. The Census Section of the Division consists of a permanent nucleus staff into which is incorporated both subject-matter and operational activities. In the current (non-Census) area, subject-matter and operational activities are

divided. Three subject-matter sections have been set up: the Current Statistics Section uses the store as the statistical unit of measure and includes all monthly and quarterly surveys of sales, inventories, credit, as well as special surveys of department stores, corporate chains, discount houses and shopping centres; the Special Surveys Section of the Division is responsible for current surveys and uses the establishment as the statistical unit including all surveys of gross trading margin, operating expenses, and such special surveys as total advertising expenditures and manufacturers' channels of distribution; and the Research and Development Section of the Division is responsible for the development of employment and payroll data, and measures of productivity, together with specific problems of quality and integration. Surveys required by these three subject-matter sections will be undertaken by the Current Surveys Section which has been subdivided into units reflecting basic survey approach divisions; the Full Coverage Unit, the Sample Surveys Unit and the Special and Occasional Surveys Unit.

Work connected with the final stages of the 1961 Decennial Census of Merchandising and Services was further advanced by the publication of eight bulletins dealing with retail trade and the service trades, and with three other bulletins in various stages of the printing process. In addition, special releases of commodity data for retail trade are now under way and a preliminary release on wholesale trade at the total level was made. It should be noted that the bulletins already published for retail and services deal with data reflecting the activities of individual stores or business locations and they present the same range of "store type" data as has been available from the total effort in the past censuses. The bulletins still to be released during the year 1965-66 represent an additional effort undertaken for the 1961 Census to collect complete and more detailed employment and financial statistics from the ownership entity rather than the individual business location in all cases of multi-activity and/or multi-location businesses. This latter effort enables the Census to present a set of statistics in conformity with the important purposes of the "new establishment definition" adopted for DBS as a whole.

The results of the Channels of Distribution survey covering manufacturing industries for 1961, and taken in conjunction with the Merchandising Census, will be published early in the new fiscal year. The reconciliation of these data with the final revised data to be published on manufacturing for 1961 has been carried on during the year and has delayed the release of figures longer than originally anticipated.

In addition to the foregoing, a good deal of ground work was done in connection with the analysis of retail, wholesale and service census results, in preparation for the release of the respective introductory bulletins and administrative report. This work involved relating data for the 1961 Census with previous censuses and describing in detail the method by which the Census of 1961 was conducted. Other tabulations were produced for the census monograph "Trends in Canadian Merchandising", business users, and the Emergency Measures Organization.

In preparation for the 1966 Census the redesign of enumeration documents has been undertaken and tabulations have been prepared to assist in planning the distribution of material to be used by enumerators in securing listings.

In the field of Current Statistics, the standard monthly and quarterly series were maintained and published, the samples used being those devised from the Census of 1951. During this period, work was advanced on the new retail trade

sample, based on the Census of 1961, and it is expected that the new sample will be operative in a few months' time, with a bridge of some eighteen months. The introduction of the new sample has been somewhat delayed, due to a desire to introduce computer application in all stages, including the later production of monthly estimates. It has seemed wise to make this investment in terms of obvious long-term improvements and resource savings. Tied to the delay in introducing the new sample has been the withholding of three annual reports, i.e., *Chain Stores*, *Shopping Centres* and *Annual Retail Trade*. Such annuals must reflect the new definitions and classifications used in the 1961 Census; until the new 1961 sample becomes fully operative, annuals based on 1961 will present data in conflict with current estimates still based on 1951. However, this situation will adjust itself over the coming year.

In addition to the introduction of new samples following each Census, estimates for intercensal years based on a sample designed from the previous Census must be checked against the benchmark results of the new Census and necessary revisions made. The difference between the 1961 estimates of retail sales (based on a 1951 sample) and the actual totals resulting from the 1961 Census have been assessed by trade and province. The first steps of planning the method and procedure of revising the estimates based on the continuing sample have been completed; the actual revision remains to be carried out. In the area of new surveys to be considered as part of the modernization program, considerable progress was made.

The first part of the retail trade operating results series which was designed to cover the universe in a three-year cycle was carried out during 1964 for the year 1963. This part of the project covered the food trades with a mailing list of 9,959 firms. The survey was designed to yield operating expense data for the three main segments of the food trades:—corporate chain stores, voluntary affiliated independent stores and non-affiliated independent stores. Both the corporate and voluntary chains were covered in total while the non-affiliated independent stores were represented by a sample, with a fairly good response. Processing of returns is almost complete and figures for food chains should be available soon followed by unaffiliated independent stores and voluntary affiliated independent stores. It should be noted that this survey cuts across other regular surveys such as voluntary chain stores, independent retail stores and corporate retail chains. To avoid the adverse effect of double canvassing, the operating results questionnaires were designed to yield data required for the other surveys. Plans are being finalized to cover the general merchandise, apparel and accessories, and the hardware and home furnishings group for 1964.

The survey of voluntary chains for the year 1963 was in fact a survey of affiliated independent food stores, rather than of all stores linked on a voluntary basis. As mentioned previously, the survey of operating expenses in retail trade was designed to yield the information required for this survey. Plans for the 1964 survey included voluntary groups in all kinds of business.

The first phase towards a complete census of wholesale trade was implemented early in 1964 by the mailing of forms covering the 1963 business year to some 13,000 wholesale establishments in the wholesaler proper category. Timing for this first attempt was handicapped by the fact that lists from the Census were not available and the list used had to be taken from the records of an experimental survey undertaken for the year 1958. A more up-to-date list was provided by the 1961 Census in July of 1964 which, after a matching process, gave another 14,000 establishments, which were surveyed as an additional mailing. The remaining sectors of wholesale trade—agents and brokers,

manufacturers' sales branches, assemblers of primary products and bulk tank stations—will be added to the 1964 survey. This will increase coverage by about 7,500 more establishments and will complete the wholesale trade universe.

In the Research and Development Section, plans were agreed on for intensive analysis of the employment and payroll data available from the 1961 Census. Data available for paid full-time and part-time employees, for working proprietors and for unpaid family workers permit the calculation of all employees in full-time, man-year equivalents, and very roughly, in man-hours. The full processing and analysis of these data will be spread over a considerable time, but should provide a major study of labour-input, seasonal shifts, and total job opportunities in the Census year. In addition, a series of historical tables were prepared covering number of stores, employment, sales and gross trading margin, for significant retail trades, together with graphs of change calculated in several significant ways. These tables will provide basic historical background for the more intensive work in the field of productivity as presently contemplated, and may be recommended for publication at a later date.

Developments in the possible use of lists of merchandising business and sales data collected by other departments, both federal and provincial, have been furthered to some extent during the year. Close co-operation has been established between the Alberta Provincial Bureau of Statistics and the Merchandising and Services Division concerning the use by both of an annual merchandising survey and a monthly survey of wholesale trade. This has involved the development of mutually acceptable classification systems and questionnaires and the careful checking by DBS of some 20,000 licensees included in the Alberta surveys. In four other provinces, Nova Scotia, New Brunswick, Prince Edward Island and Ontario, the emphasis has been on the use of sales tax data, and in each case, acceptable classification systems have been worked out which tie into the DBS classification and also make possible comparisons between provinces. Much detailed work remains to be done before regular tabulations of data from these sources can be secured, but the detail has been studied and the difficulties are not insurmountable. In any event, usable lists of retail businesses will be available to DBS from these provinces. This program will be extended to include more provinces next year.

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 involves 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 macroeconomic 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.

Recent extensions of government activity in the sphere of economic analysis and investigations have augmented demands for macroeconomic data produced in the Division such as the national accounts and real output. These data and many supplementary series relating to them including seasonally adjusted series

are parts of the systems of economic intelligence used by official groups concerned with considerations of long-range economic problems as well as of more current trends. The meeting of these new requirements for data as well as the continued assessment and use of new statistical data originating in other divisions in the construction of economic accounts has been absorbing increasing resources. For example, the development of statistics of financial flows involves frequent consultations and is leading to reassessments of certain aspects of the economic accounts already developed.

During the year, quarterly publication was instituted of indexes of "Real Domestic Product Less Agriculture" which had been first introduced in the previous year; these indexes are now a part of the monthly report *Index of Industrial Production*.

In the balance of payments field, there has continued to be close public attention to statistics relating to this subject. Contributing to this have been the passage of the Interest Equalization Tax legislation in the United States in 1964 with the granting of exemptions to Canadian new issues, the change in the position of sterling in the latter part of 1964, and more recently the announcement in the United States by the President of measures designed to bring the United States balance of payments into balance. As a result of this international background, normal demands for balance of payments information have been increasing.

The principal recent developments in information in the balance of payments field have been some extensions in data relating to short-term capital movements, and the quarterly publication of the geographical distribution of net movements of long-term capital. In the field of travel statistics, new monthly details are now available on the countries of origin of non-immigrant travellers to Canada from overseas countries, and new arrangements have been introduced for sampling the expenditures of Canadian travellers returning from the United States. International investment records are being jointly used with the Industry Division in assembling statistics relating to manufacturing in plants owned by foreign controlled companies.

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.

The Retail Prices Section confined most of its activities during the 1964-65 fiscal year to immediate current problems arising in the production and publication of the Consumer Price Index. Toward the close of the year, the extensive review of retail price survey procedures and techniques initiated in 1963 was revitalized. This review includes an evaluation of alternative ways and

means of collecting prices and measuring price changes of commodities and services purchased by urban families of given size and income. In addition, the index item content and weighting pattern will be revised in accordance with 1962 urban family expenditures and the price reference base will be updated to 1961 from 1949.

Publication of *Residential Rents in Major Canadian Cities* was deferred pending completion of a study analysing sources of sampling variance evident in the rent data. As a result of the redesign of the Labour Force Survey frame, used for the rent survey, tabulation procedures were adjusted to reflect the differences throughout Canada in sampling ratios arising during the transition stage. Additional study of sampling variance in selected cities was initiated to appraise the effect of location within a city on reported rents, and to determine the relative importance of various services included in rents.

The major development in the Consumer Expenditure Surveys Section was a recall survey of the complete family budget, taken in February-March 1965 to cover the calendar year 1964. This survey was similar in purpose to the 1959 survey, in that it was designed to obtain expenditure information for all families and individuals regardless of income level, and was thus broader in scope than the restricted surveys of 1953, 1955, 1957 and 1962, which were directed primarily towards uses in connection with the Consumer Price Index. The 1964 survey, although similar in size to the 1959 survey, referred to eleven urban areas instead of all cities of 15,000 and over, as in 1959. The intention was to provide more adequate samples for larger cities, rather than regional coverage with relatively small samples in individual cities. Approximately 3,000 households were selected from households which had participated in the Labour Force Survey earlier in the year. Field work was carried out by the regional offices of the Special Surveys Division.

Because of the enlargement of the complete budget survey, no inquiry into family food expenditures was carried out in 1964. Activities in the Section were mainly concentrated on analysis of the 1962 survey of urban family food expenditure, planning and preparation for the 1964 survey, and work connected with the computer edit for the 1962 complete budget survey. Plans for processing the 1964 survey were based on 1962 experience and include more comprehensive preliminary hand edits in areas where the 1962 electronic edit was proven to be unsatisfactory or uneconomical. In addition to work on current and future surveys, a considerable quantity of information from the 1959 survey was issued in answer to special requests.

During the fiscal year 1964-65, developmental work in the Wholesale Prices Section was largely devoted to revising the Industry Selling Price Indexes relating to manufacturing, to a 1961 base. This involves the revision of both the commodity content and weighting patterns, and the price reference period. The number of prices included in each industry index has also been expanded. It is expected that the revision will be completed during the coming fiscal year.

Further progress was made in developing input price indexes of manufacturing industries and output price indexes of mining industries. A substantial number have been completed in both cases. The input series include indexes of materials used and fuel and electricity, and the output indexes relate to industry selling prices.

In addition to indexes of prices of farm products and prices paid by farmers, the Farm and Special Purpose Prices Section prepares and publishes price indexes of industrial materials, highway construction, building materials and common and preferred stocks. Revision and developmental work was pursued in connection with most of these indexes during 1964-65.

The revision of the weighting pattern and item content of the Prices Paid by Farmers Indexes was begun in 1964, based on the Farm Expenditure and Income Survey. A review and revision of concepts and methodology has also been undertaken. Input price indexes relating to farm operation will be published late in 1965 on a 1961 price reference base.

The coverage of the Price Indexes of Highway Construction in Canada 1956=100 was expanded as additional cost data were acquired. Late in the year, a start was made on the revision of these indexes to a 1961 base. Continued progress was made in the collection and analysis of construction cost data from public and private electrical utilities. Preliminary indexes for the transmission, distribution and stations (switching and transformation) components of the Electrical Utility Construction Price Index were completed toward the end of the year. A pricing program for inputs into hydro and thermal generating plants was initiated in 1964.

In order to assist in the determination of appropriate allowance levels for civil servants stationed outside Canada, the International Prices Section analysed living cost surveys carried out at about sixty locations abroad, and reviewed studies previously undertaken at approximately twenty foreign locations. In addition, the Section processed surveys of comparative price levels and accommodation costs encountered by Canadian military personnel stationed in Western Europe. Discussions have been held, during the course of the year, with representatives of the Treasury Board and other federal government departments regarding the results of the food and domestic fuel and utility cost surveys carried out at over two hundred isolated locations within Canada.

PUBLIC FINANCE AND TRANSPORTATION DIVISION

The function of this Division is to produce statistics on the financial structure of all levels of government in Canada with details on numbers employed and payrolls, the performance and financial condition of rail, road, water, air, pipeline, other forms of transport, communications media and other public utilities.

Plans are well under way to further develop municipal government employment and payrolls data. It is intended to continue surveying all urban municipalities with a population of 10,000 or over and in addition a sample survey will be made of all smaller urban municipalities and all rural municipalities.

At the request of the Treasury Board, the Civil Service Sick Leave Survey was redesigned and is now known as the Benefit Usage Survey. Coverage was changed to obtain more information concerning certain classes of federal government employees.

The Division assumed responsibility for the preparation of a quarterly analysis of the balance sheet of the Government of Canada designed to produce a flow of funds statement. This analysis is a logical extension of the income and expenditure analysis used in connection with the National Accounts in that it indicates the nature of the assets acquired and the liabilities incurred or discharged which are relative to income and expenditure transactions.

For some time it has been apparent that the analysis of government expenditures by economic categories should be reconciled to the classification of expenditures by function. These two classifications have been combined in one table providing a broader framework for fiscal management analysis and economic forecasting. A table of this nature analysing federal government expenditures has been published and similar tables for provincial and municipal governments will be issued in a few months. Working in co-operation with the federal-provincial Tax Structure Committee, this Division undertook a comprehensive review of financial statistics of all governments in Canada covering the period 1952 to 1962. The review covered revenue, expenditure and debt transactions. These statistics will be presented as a published document in the late fall of 1965. To eliminate duplication, arrangements have been made to have the New Brunswick Department of Municipal Affairs collect current revenue and expenditure data from municipalities in that Province. Under this scheme one collection system will provide the information required by the Department and this Division. A similar arrangement is in effect in the Province of Quebec.

The Expenditure Coding Committee of the Government of Canada, with representation from this Division, met on a number of occasions for the purpose of designing a system of coding federal government expenditure accounts in a manner best suited to meet the requirements of various federal government agencies.

Considerable progress was made in developing a new series of statistics on the activities of community television antennae systems. A reporting schedule has been designed which will meet the requirements of DBS, the Department of Transport and the National Community Antennae Association. An annual survey will be initiated within the next few months. With the assistance of the National Advisory Committee on Telephone Statistics and the National Advisory Committee on Broadcasting Statistics, considerable revisions were made to reporting schedules. The DBS working with the National Advisory Committee on Telephone Statistics compiled a glossary of technical terms for use in DBS statistical publications.

Considerable progress was also made with respect to the introduction of the Standard Industrial Classification to transportation statistical series. This classification system and the establishment concept was discussed with a number of transportation agencies including the major railways and steamship lines.

Arrangements were completed to revise the annual *Water Transportation and Civil Aviation* reports so as to differentiate between establishment and activity statistics.

With the assistance of the Canadian National and Canadian Pacific Railways a revised edition of *Uniform Canadian Classification of Railway Employees* was completed. The revised edition is expected to improve the quality of railway

employee data. A committee consisting of officials of the Board of Transport Commissioners, the major Canadian railways and DBS, known as the DBS Advisory Committee on Rail Transport Statistics, was organized during the year and two subcommittees were formed. One subcommittee was directed to examine the railway organizational structure and identify establishments in a manner consistent with the Standard Industrial Classification and arrange for reporting to DBS according to the establishment concept. The second subcommittee was directed to arrange with the railways for the reporting of commodity statistics according to the Standard Commodity Classification. Because the American and most Canadian railways are using the new United States Standard Transportation Commodity Classification System arrangements were made to produce a convertibility tape to enable Canadian railways to convert and report commodity data to DBS according to the Standard Commodity Classification.

The review of the Motor Transport Traffic Survey was continued. A number of important changes were implemented in 1964 including a major reduction in the size of the sample. A number of other studies are under way with respect to this survey which will improve the collection and analytical operations. One of these studies is the feasibility of transferring the survey to the electronic computer. Computer program specifications for the Province of Alberta have been prepared. A new series entitled *Motor Carrier—Freight Quarterly* was introduced in 1964. The series includes operating revenues, expenses, number of employees, tonnage and operating ratios for for-hire intercity carriers. The new report met with highly favourable response from the industry. A comprehensive review was made of the commodity classification code system used in the production of freight traffic statistics for water and road transport. A revised condensed version of the Standard Commodity Classification was introduced into the road, shipping and canal statistics series permitting more precise intermodal comparisons and convertibility between these series.

In co-operation with the Canals Division of the Department of Transport a review of their method of collecting statistics concerning canal operations was conducted. As a result a joint questionnaire was devised replacing some 15 questionnaires formerly in use.

An extensive analysis of shipping statistics covering the period 1959 to 1963 was completed for the Royal Commission on Pilotage showing a breakdown of port activity by pilotage districts. The analysis covered the operations at 375 ports.

The requirements of the Canadian Maritime Commission for statistical analysis of shipping operations were considerably expanded. The Division now provides the Commission with monthly vessel activity data showing commodities carried and ports of call by the 300 Canadian registered vessels of 1,000 gross tons and over. Arrangements were also made to have the National Harbours Board use a condensed version of the Standard Commodity Classification commencing January 1, 1965. The Classification will be used by the Board in coding commodities transported into and out of the eight ports under the jurisdiction of the Board. This arrangement will provide greater comparability between the data produced by the Board and this division.

Arrangements were completed with Air Canada to code commodities transported according to the Standard Commodity Classification. Assistance was provided the Emergency Measures Organization to develop a survey of private

and for-hire truck fleets in Canada. Assistance was also provided to the External Trade Division of DBS in its development of an annual report on exports by mode of transport.

SPECIAL SURVEYS DIVISION

Through its eight Regional Offices, the Special Surveys Division is responsible for operation of the field offices 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. Special questions are added from time to time to obtain a variety of other information. For instance, in the May 1964 survey, special questions were asked dealing with household facilities and equipment available in Canadian homes. In the August 1964 survey, at the request of the Department of National Health and Welfare, special questions were asked dealing with the smoking habits of Canadians. In the January 1965 survey, additional questions were asked which will permit the analysis of individual work patterns and stretches of unemployment during the twelve-month period of 1964.

As part of their continuing duties, the Regional Offices collect monthly data on retail prices and services 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.

Good progress was made in the redesign of the sample of households used in the monthly Labour Force Survey, which was introduced during 1963. The new sample was introduced in Alberta in March 1964, Prince Edward Island in July 1964, Nova Scotia in October 1964 and in New Brunswick and Quebec in February 1965. It is scheduled for introduction in the remaining five provinces during 1965. The new sample design uses the most recent Census data and incorporates new technical features to improve its efficiency and accuracy. Before being adopted for each province, it is completely field tested over a three-month period and detailed comparisons are made of the results obtained from the new sample and the old. To date, those differences have been within the range that can be readily attributed to normal sampling variability and the new sample gives evidence of being quite superior to the old.

One important general feature of the new design is the ease with which it lends itself to modification as abnormal shifts and growths in population occur over time. The new sample design automatically reflects population growth. However, this can be more accurately done under the new sample design by means of simplified procedures for modifying the sample in those city areas

experiencing heavy new residential construction. In most large cities, large apartment buildings are sampled separately and as new ones are constructed, sampling is automatically extended to cover them also.

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 and the Tabulating Services Division provides a service, using a variety of methods, to process the data reducing it to more manageable form for further analysis. Broadly speaking, there are three methods of data processing 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 of 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, as well as 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. 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. Editing of the data by mechanical means and seeking out inconsistencies which may arise through misinterpretation of instructions and definitions governing the collection of data and errors in recording answers are important functions of the unit record tabulation. Another group of operators uses 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.

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 computer system and two IBM 1401 computers, one of which was acquired in October 1964 and as a result, unit record tabulators are gradually being released with a consequent

net reduction in operating costs. Throughout the year, the computer operations were on a two-shift, five-day per week basis with some week-end work as well, making a total of 5,600 productive hours on the 705 computer system and 5,700 productive hours on the 1401 computer system.

In the 1964-65 fiscal year, in excess of 26,000 hours were used on various types of tabulating equipment (exclusive of auxiliary equipment such as sorters, reproducers and collators), using a total of approximately 27,800,000 punch cards and 2,300,000 sheets of original tabulations.

A technique was recently developed within the Dominion Bureau of Statistics whereby a medium-sized computer was programmed to simulate the action of various types of unit record equipment. The projects handled by the unit record equipment were analysed to determine the specifications for such a program. From this definition of what was required, three programs were developed which provided the features necessary. Thus instead of wiring a control panel for a unit record application, or writing a special program for each step for a computer application, control cards were specified for each tabulation. This operation requires less set-up time than was formerly required for unit record equipment although it is less efficient than a specialized program. However, it provides a satisfactory transitional method until programmer time is available to program a continuing operation. It is also an efficient method for handling one-time applications where programming effort would be excessive in comparison with machine time.

The processing of the 1961 Census continued to absorb a large part of the computer time during the year. The first stages of preparation for the 1966 Census were undertaken with the commencement of planning and program testing. During December and January, the results of a census field test were processed through the "document reader" and the first edit stages prior to authorization to proceed with the printing of the questionnaires.

In addition to the regular projects of the Bureau, a number were undertaken 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 substituting computer processing, thus freeing clerical staff for other aspects of statistical data collection, processing, analysis and publication.

During the current fiscal year, there has been an increasing demand for feasibility studies and systems analysis studies prior to consideration of proposed computer applications by the DBS Computer Committee. This has meant a shifting of analysis work from the senior analysts to junior programmer analysts. Generalized programs are now in widespread use but these will continue to require a good deal of maintenance time.

The Central Programming Division, which consists of two sections, wrote a total of 439 programs during the year under review. The Scientific Programming Section works 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 a variety of programs for analysis of tabulated data, seasonal adjustment of time series, and the institution and improvement of sampling technique. Programming time of the Scientific Programming Group was almost all spent on work for DBS divisions. The Data Programming Group spent thirty per cent of their time on work for the Census Division, both in preparation of the 1966 Census and in monograph and special purpose projects resulting from the 1961 Census; work of other DBS divisions used fifty per cent while requests from other federal departments or agencies occupied over fifteen per cent of this group's time.

Programming resources continue to be a limiting factor. During the year under review, there were four separations and eight additions to the staff. The Bureau continues to co-operate with the Civil Service Commission in providing training in their "trainee recruitment" plan. One course in Fortran programming was given to mathematical statisticians in the Bureau.

DBS is co-operating with the Civil Service Commission in a University Computer Programming course whereby students alternate between university lectures and "field training". In addition, trips were made to the Massachusetts Institute of Technology in connection with hospital statistics; to the University of Chicago in connection with factor analysis programs and to the United States Bureau of the Census. Also, during the year, visitors from Pakistan, Trinidad and the United States spent some time with the staff of the Programming Division.

ADMINISTRATIVE 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 pools, 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 Section. 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, 1965 numbered 2,057, an increase of 87 from the number employed on March 31, 1964. During the year, 63 statisticians and economists were recruited and 28 were separated. There were 32 research assistants engaged on summer projects. Throughout the year 273 promotional competitions were conducted. The 1961 Census temporary staff at Head Office, which numbered 218 on March 31, 1964, was reduced to 107 by March 31, 1965.

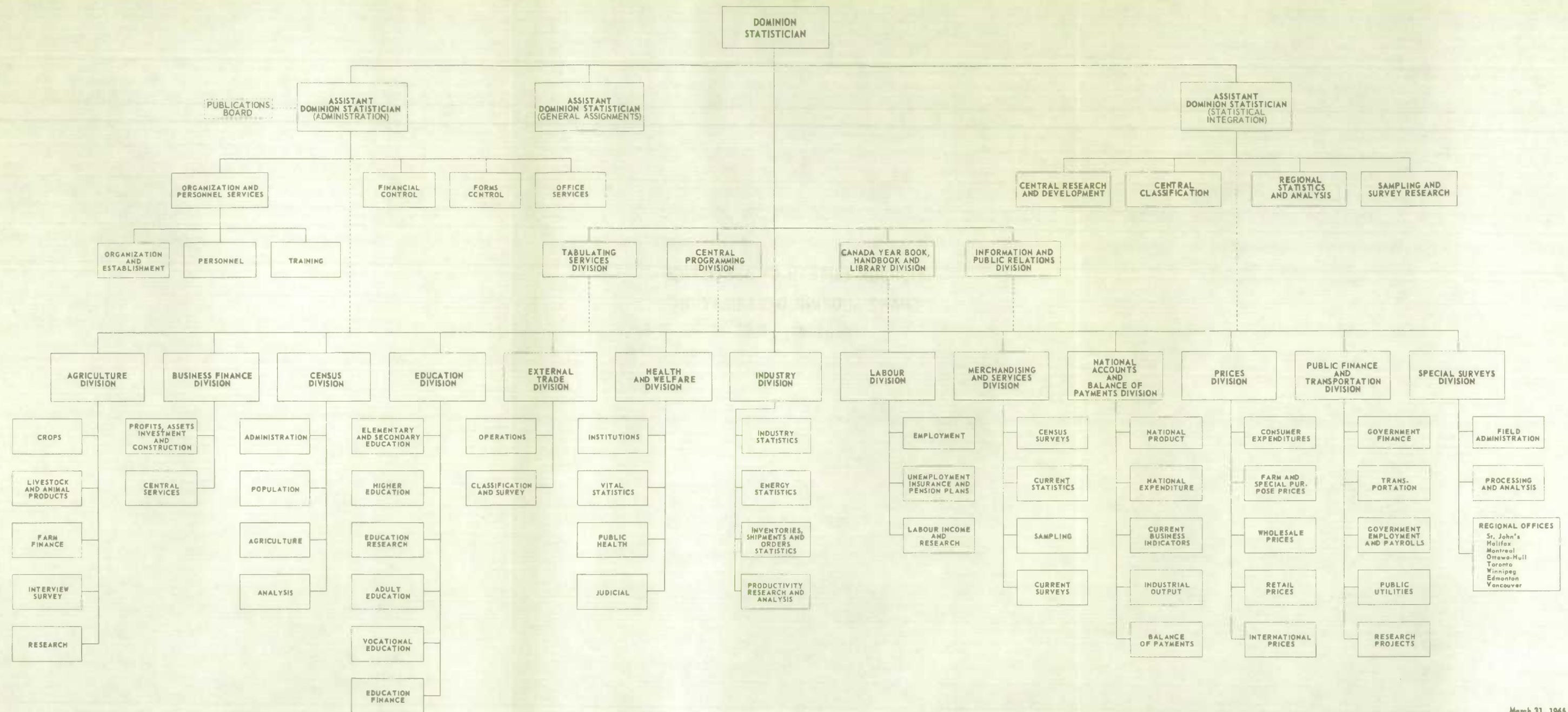
The establishment authorized for the fiscal year was 2,167 positions and 103.12 man-years of casual clerical assistance for continuing operations, and 149 man-years for 1961 Census processing.

DOMINION BUREAU OF STATISTICS

CHART SHOWING ORGANIZATION

March 31, 1965

DOMINION BUREAU OF STATISTICS
GENERAL ORGANIZATION



Staff training and development continued with the DBS Training Officer acting 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, 31 suggestions from DBS employees were considered by the Suggestion Award Committee; two were adopted and awards made; a third has been adopted and the employee suggesting it will be receiving an award when the savings have been estimated.

Financial Control Section

This section consists of two units, one concerned with the control of funds, audit and processing of accounts, co-ordination of the estimates and internal accounting. The second section is concerned with the sale and distribution of Dominion Bureau of Statistics publications.

During the past year, in addition to its other functions, the Accounts Unit assumed full responsibility for the audit of travel accounts.

The Publications Distribution Unit completed the conversion of mailing lists required by the adoption of the *Standard Industrial Classification Manual* by the Census of Industry. Packages of publications mailed during the year numbered 1,200,000. The subscription mailing list now contains 164,000 addressograph plates.

Forms Control

Work continued on the simplification, standardization and revision of forms, methods and publications, which resulted in savings of both time and material. In addition, comprehensive analytical studies of procedure, forms, collection of data and processing were carried out in five sections of the Bureau, resulting in some reorganization and general improvement in the monthly employment survey, the corporation financial statements, coal statistics, the External Trade Division filing system and the uniform crime reporting program.

During the year under review, the Forms Control Section processed 3,460 forms consisting of 10,430 pages of reprints, revisions and new or redesigned forms. In addition, 450 specialty forms and envelopes were prepared and 2,065 other miscellaneous printing jobs processed.

Office Services

During the year, a Typing and Transcribing Services Section was set up with a centralized control system, based on the results of a Civil Service Commission survey conducted the previous year. In addition to the then existing

main Typing Unit, a reallocation of typing and transcribing personnel was effected which resulted in three additional typing units being established, one on each floor of the building to service a predetermined number of subject-matter divisions. It is expected that overall efficiency, improved quality of copy and increased production will result from more effective management, standardization of dictating equipment and the overall use in the units of electric typewriters.

The new Printing Liaison Services Unit, in addition to maintaining liaison with the Vari-type and Printing Sections of the Canadian Government Printing Bureau situated at DBS, is responsible for examining manuscript of DBS publications being submitted for composition and advising on layout, format, standards, stock and binding of publications as well as co-ordinating work-flow and assigning printing priorities. Records of printing progress of the publications are kept from the original requisition through proofreading, meeting deadlines to the finished product. During the 1964-65 fiscal year, this Unit processed and prepared for printing 12,175 pages of copy.

The Office Services Section prepared various layout studies of the DBS building and other space required in order to accommodate staff increases.

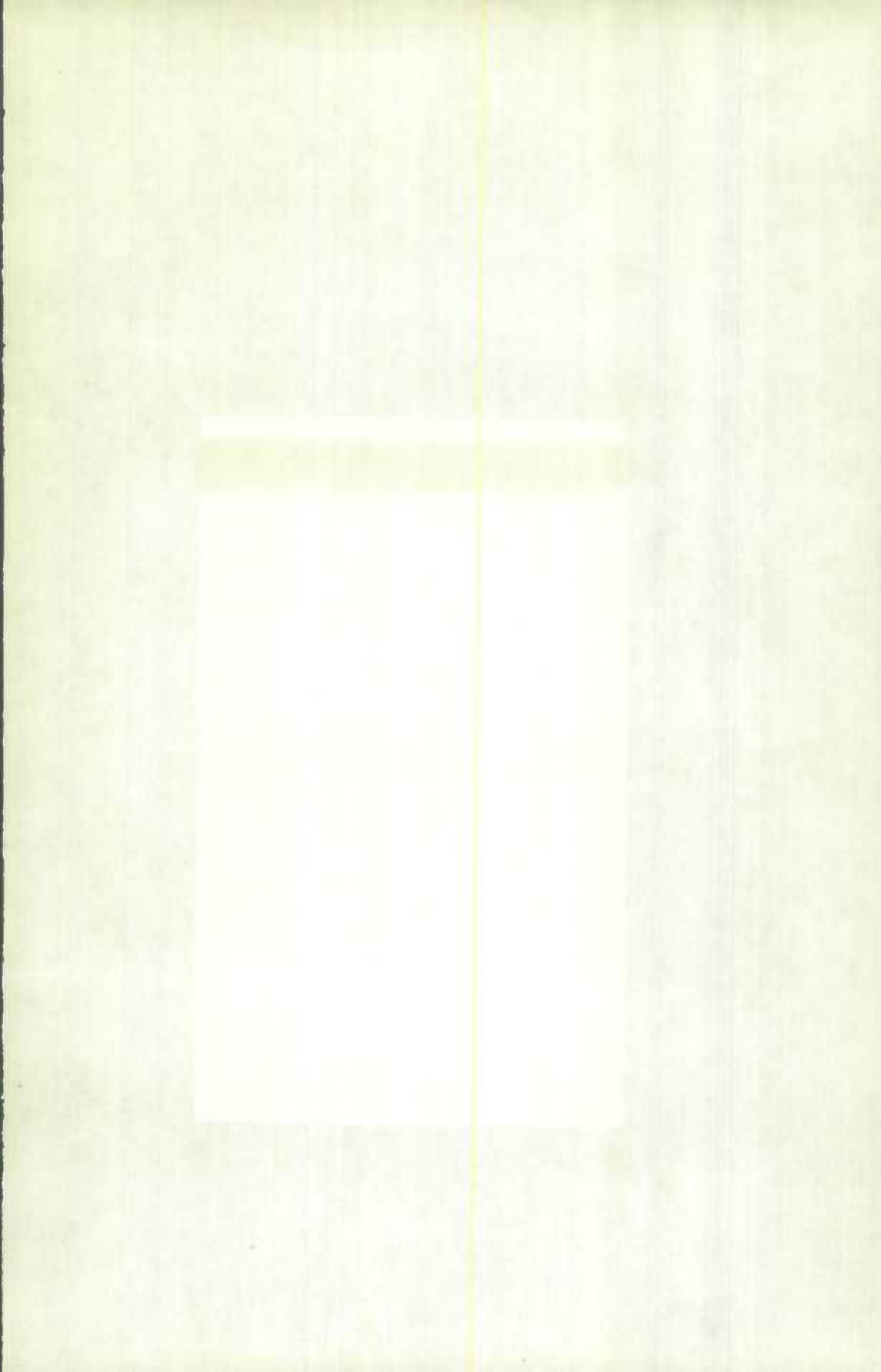
The Drafting Unit prepared 2,254 economic charts, maps, diagrams and various illustrations for the divisions of the Bureau and other departments and agencies of the Government, an increase of 12.5% over the previous year. In addition, the Unit completed a series of 37 charts for the Royal Commission on Health Services.

During the period under review, 448,050 prints were completed in the Contact and Xerox Duplicating Unit.

The outgoing mail numbered 23,195 bags; this included, in addition to the regular first and second class mail, 9,169 pieces of registered mail, 17,899 pieces of air mail; 886 pieces of special delivery mail and 4,145 parcels posted.

In the Addressograph Unit 13,917,663 forms were addressed for the various divisions of the Bureau. In addition, 244,474 plates were embossed, 158,891 corrected and 187,187 deleted.

The Supplies Unit submitted 628 printing and stationery requisitions to the Department of Defence Production, for a value of \$475,036. The supplies inventory as at March 31, 1965 was \$30,105; the annual stock turnover rate, therefore, was 15.8. Value of DBS office machine and equipment inventory, based on original cost, was \$675,951.



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