98-1951-I-1 c.1

98-1951 1-1

## **CENSUS COMMISSIONER'S PUBLICITY KIT**



NOT FOR LOAN NE S'EMPRUNTE PAS

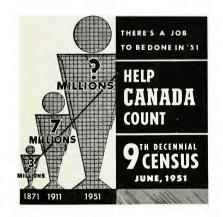
DOES NOT CIRCULATE

NE PAS PRETER

## NINTH DECENNIAL CENSUS OF CANADA. JUNE. 1951.

PROOFS OF MATS AND CUTS AVAILABLE FROM THE PRESS AND PUBLICITY SECTION, DOMINION BUREAU OF STATISTICS. SUSSEX STREET, OTTAWA, ONTARIO







Radio Script

## 1951 Census

Announcer:

Commissioner:

Woll, (John, Allan, Bill) this census, which will be taken in June, is the Winth Decemnial Consus of Canada. That is to say, it is the ninth census at ten-year intervals since Confideration. It will be the biggest census that Canada has ever had. For the first time we are to enumerate 14 million people, and, also for the first time, we are going to include Newfoundland.

Announcer:

That means a biggor population and a larger area than ever before in a Canadian Census. That ten-year interval sounds as if the Consus had to obey a law of cyclical recurrence or something.

Commissioner:

So it does. There is a legal requirement to take a Census every ten years under the British North Amorica Act. That is bocause our representation in Parliament is based on population, and we have to find out what proportion of the total livos in ---- --- (name of province). Then we shall know whether we have the correct number of Members of Parliament or not. After all, (John, Allan, Bill) you would not like to see ----- (name of province) with fewer members than it is ontitled to, would you?

Announcer:

I certainly would not! But, tell me, Mr. - - - - - - - - , don't you ask a lot of questions that have nothing to do with representation in Parliament;

Commissioner:

Certainly we do. We ask a number of personal questions designed to give a statistical pattern of the characteristics of Canadian people in different areas as well as throughout the whole country. It would be almost impossible for business or government organizations to do any intelligent planning without this information.

Announcer:

I can understand the application of the Census to representation in Parliament, and the administration of government, but private business is something else. What use is this kind of information to a hard-headed businessman?

Commissioner:

Why there's nothing which gives the businessman a better idea of the home market than census figures. The manufacturer who makes shoes or clothing regulates his production according to the sex and age groups of the population in the areas where he hopes to sell these commodities. He knows the extent of the potential market in the areas where he has sent his salesmen. He can also discover the availability of skilled labour, or living accommodation for additional employees in an area where he is thinking of opening a new factory. Businessmen are always writing to Ottewa for information of this kind.

Announcer:

What you are trying to say is that the businessman studies his customers.

Commissioner:

Not only his customers and potential customers, but the producers who make the goods he sells. Consus statistics are an invaluable tool under the free enterprise system for planning production and the maintenance of full employment.

Announcer:

On that basis I can see that the Census figures would be usoful for almost anyone engaged on any project.

Commissioner:

You're porfectly right, (John, Allan, Bill). Charities and social workers, roligious groups and municipal authorities, all find practical use for the statistics. So many grants depend upon a statistical basis that their budgets would be seriously crippled without them. Whether in childhood or old age, the population figures affect plans for such varied things as school accommodation for the young, or pensions for the old.

Announcor:

I think you've made it perfectly clear that the Census benefits us all from the cradle to the grave - but if it were anyone but the census taker I would certainly have reservations about answering some of the personal questions.

Commissioner:

You can rest perfectly easy on that score! Not the timiest detail of any information you give can be revealed to anyone for any purpose. It is fed into electrical machines which are so marvelously designed that they read the marks made by the enumerator and convert thom mechanically into statistical totals. Not even government departments can obtain any information regarding individuals. It cannot be used for income tax, military call up, allocation of manpower, or any other purpose whatsoever. There are legal penalties for failing to give accurate information to the enumerator. He, in turn, is sworn to an eath of absolute secrecy, subject to fine and imprisonment for any breach of confidence.

Announcer:

It sounds protty drastic - but it's quite nice to know that the individual information is kept so completely confidential. What are the questions like?

Commissioner:

In the first place (John, Allan, Bill), some of these questions have been asked in every consus of Canada from the very beginning. As for others, government departments, business associations, organized labour, educational authorities and various other agencies asked the Federal Government to get them certain kinds of information about the population. Census experts then arrange the questions in such a way that as few questions as possible are asked in order to get a maximum of information.

Announcer:

So, the questions are really applicable to many purposes beyond those of the government?

Commissioner:

Definitely. Of course, governments want to know things too. And, by that I do not mean Ottawa only. The provincial governments want information, and municipal governments also use the results when they have been compiled. However, the Consus is a co-operative enterprise throughout. The individual co-operates with the enumerator, the government co-operates with its citizens and with various groups and organizations within the country. The census is to obtain information for intelligent planning of both private business and public affairs. Labour organizations, too, are heavy users of consus statistics.

Announcer:

Well, I hope you are going to co-operate and give me some warning about when the enumerator will come knocking on my door.

Commissioner:

I wish I could (John, Allan, Bill), I'd certainly like to. But, all I can say is that it will be between June 1 and June 23 for those who live in the cities and towns, but for farmers and those who live in rural areas it may continue as late as the last week of June.

Announcer:

Suppose the enumerator calls at my house when I am not there? He might easily find me out. What happens in that case?

Commissioner:

He will ask the neighbours when he is most likely to find you at home. If, however, there is anybedy at your house who can give the required information, that will be sufficient. If you should be away for a few days, a special form will be left for you to complete when you return. The enumerator will call back for this form. Of one thing you can be sure, the enumerator will leave no stoke unturned to get the facts about you.

Announcer:

A moment ago, you said that the Census would start on June 1. Does that mean we can have the results semetime in July?

Commissioner:

Not so fast, (John, Allan, Bill). We need time to check, to punch cards for our statistical machines, to tatulate, edit and print the results. If all goes well we should be able to give you some preliminary figures before the end of the year. Final figures will not be ready before 1952. After all, (John, Allan, Bill), did you ever try counting up to a million? Going without rest night and day for three or four months you might be able to reach the million mark. Think of all the counting there must be for 14 million people. Even if you do use machines, it's still a lot of counting.

Announcer:

Very well, I'll curb my impatience but not my curiosity. But tell me, how am I to know that the man or woman who knocks at my door is a genuine census enumerator?

Commissioner:

In the first place, (John, Allan, Bill) every genuine enumerator has been supplied with a small green identification card. This card has been signed by your Consus Commissioner and countersigned by the enumerator himself. The card will be produced when the enumerator makes his call. He will also have with him a buff-coloured folder containing the official census documents. He will discuss census matters only and will not be selling or collecting anything except census information.

Announcer:

Now, Mr. - - - - - - - - - , suppose I want to help take the Census? How do I go about it?

Commissioner:

If you want to be an enumerator you leave your name with me and I will see what can be done about it. You would have to have a high school education or the equivalent in experience. You must be in good health and of good character and reputation. You should be able to devote full time to the job. For work in rural areas a car is essential.

Announcer:

In short, Mr. - - - - - - - - , you are looking for an average Canadian. Are the hours of work long?

Commissioner:

I should not say so. The enumerator begins his rounds as early in the morning as is practicable. In many cases evening work will be necessary, especially where people are away at work by day. This may make the day seem long. You have to remember, too, that enumerators are expected to finish their work within a limited period of time, without regard to the customery number of hours worked each day or week.

Announcer:

There must be some kind of a test to ensure that you get the right kind of person as onumerators? Do they have to pass oxaminations, or how do you go about getting suitable candidates for the job?

Commissionor:

Yes, we do have examinations, or rather tests. These are both written and oral so that we can be sure of getting suitable candidates.

Announcer:

Now, Mr. - - - - - . I see our time is running short. Is there any special message you have for the people who are to be enumerated in your district?

Commissioner:

Just this one thing, (John, Allan, Bill). The Census is one of the most important undertakings in which the individual citizen participates. It is a co-operative enterprise on a national scale in which every man, woman and child has an equal part. Only by means of a Census are we able to tell how many and what kind of people we are. It is one sure way of

measuring the nation's human resources. I should like to appeal to overybody to receive the enumerator courteously and to answer all his questions to the utmost of their ability. Finally, I wish to thank you (John, Allan, Bill), and Station - - - - - , for giving me this time so that the radio audience of this Station might learn something about the Census of 1951.

Spot No. 1.
30 Seconds.

Canada's 1941 Census showed there were seven times as

many people in the City of Toronto as in the whole province of

Prince Edward Island. That's a fact! And it's a fact, too,

that the 1951 Census - starting June 1 - will show the greatest

population increase in history. When the enumerator calls you

can do your part by giving him all the facts he needs quickly and

accurately. It's completely confidential - so Help Canada Count!

Be ready for your census taker when he calls on or soon after June 1.

Spot No. 2.

There's a job to be done in '51 - Help Canada Count:,

In June, 1941, the Canadian population numbered 11 1/2 millions.

Now it's estimated at more than 14 million.

Only the Census can tell us what the exact figure really is.

This and much more important information will be gathered,

for the benefit of all Canadians, by the 1951 Census, starting

June 1. Be ready for your census taker when he calls on, or soon

after June 1.

Spot Ne. 3. 30 Seconds.

In the fiscal year ended March 31, 1950, Canadian families received nearly 298 million dollars in family allowances.

The population under 16 has increased in recent years, and other significant changes have taken place which have a bearing on all long-term government, social and business planning.

Information on which such plans can be based will be provided by the most important Census in Canada's history starting June 1st. Be ready with all the information about

Spot No. 4.
30 Seconds.

It takes a variety of people to make a nation.

The lumberjack of British Columbia, the oil driller of Alberta,
the grain farmer of the Prairies, the motor mechanic of
Ontario, the rock miner of Quebec, the logger of New Brunswick,
the coal miner in Nova Scotia, the potato grower of Prince
Edward Island, the fisherman of Newfoundland, and the trapper of
the Northwest Territories and the Yukon, all will be counted in
the 1951 Census -- the greatest national stock taking in Canada's
history. An accurate Census is everybody's job and to everybody's
benefit. When the census taker calls, on or soon after June 1st,
be ready with quick and accurate information. Help Canada counti

Spot No. 5.

When the Census taker calls in June, the information you give is kept in strictest confidence. The law is very definite that it may be used only for statistical purposes, and that it must not be revealed even to other government departments. Every census official is sworn to secrecy, so that you may feel perfectly free to answer his questions fully when he calls.

Knowledge is power - and the information to be obtained by the 1951 Census will provide the knowledge which gives us the power to plan intelligently for the future - whether in private business or public affairs.

The Census is a national project for the general welfare benefiting everybody and harming none. Be ready with quick
and accurate information for the census taker when he calls on
you in June.

Spot No. 7. 30 Seconds.

Like a ship without a rudder - or a navigator without a chart - is the private businessman or public official who attempts to plot a course without adequate statistical information. The businessman planning expansion must estimate the number of potential customers and their purchasing power, as well as their needs for his own particular product. School authorities must have some idea of the trend of child population. In every field of our activities there will be beneficial use for the information obtained by the ninth decennial census of Canada, starting June 1st. Be ready with quick and accurate answers for the census taker when he calls on you in June. Help Canada count;

Since 1921 the Canadian birthrate has fluctuated from 27 per thousand between 1921 and 1925 to just over 20 per thousand between 1936 and 1940. Rising with prosperity, declining in depression years, it exceeded 28 per thousand in 1947. Accurate statistics about the children of Canada will be obtained by the most important census in Canada's history this June. It will be equally useful to private business and public authorities for the general benefit of all Canadians. Be ready with quick and accurate information for your census taker when he calls. Help Canada Count:

Spot No. 9

Every builder needs a plan to follow - and the builders of Canada - whether private businessmen or public officials - can only be successful if their plans are based on a sure foundation of facts. That's the reason for the ninth Decemnial Census of Canada, starting June the first.

The answers you give to the census taker will contribute to a common stock of facts and figures on which can be built the plans of government, business and individuals for a bigger and better Canada. Help Canada count!

Spot No. 10 30 Seconds.

People of many races and nations have contributed their intelligence and enterprise to make Canada a great and progressive country. The more we know about ourselves and our accomplishment, the more we will be able to achieve.

Comprehensive and accurate knowledge about the Canadian people and their circumstances helps government and business to plan more efficiently for future progress. That is why the ninth decennial census, starting June 1st, is such a worthwhile project - benefiting everybody and harming none. Be ready with quick and accurate information for your census taker when he calls in June, Help Canada Counti

Fifty years ago nearly half the male population of Canada was employed in agriculture: ten years ago there was only one-third. Nevertheless, production has increased, and the value of farm implements multiplied five times in the first forty years of the century. The 1951 Census, which begins on June 1, will gather a great deal of information about agriculture as well as population. It will reveal what further progress has been made by agriculture in the past 10 years. It will tell what advances have been made in productive efficiency and in conditions under which farmers live. It will provide a great mass and variety of data that will be useful to governments. farm organizations and individuals. Farmers are asked to be ready with quick and accurate information for the census taker when he calls in June. Help Canada Count!

In 1941 Prince Edward Island, the smallest province of Canada, had 43 persons per square mile, while Newfoundland, the newest province, had only five persons for every two square miles. Nova Scotia ranked high with 31 per square mile, and New Brunswick had 19. Ontario had just over 12. Quebec 7. The Prairie Provinces and British Columbia all had about 3. The 1951 Census, starting in June, will show the changes in density and shifts in population that have taken place in the last ten years. The facts and figures which will be obtained are essential for successful management of our private business and public affairs. They benefit all of us in many different ways. Be ready with quick and accurate information for your census taker when he calls. Help Canada Count:

In the early days of Confederation Canadians carried \$36 million of life insurance. Today they carry 364 times that much.

Canada's development has been a mighty achievement for so young a country - and with your help that growth will be accurately measured this June by the most important census in Canada's history.

Canadians need this information for further progress, and successful management of our private business and public affairs. Be ready with quick and accurate information for your census taker when he calls.

Help Canada Count!

Eighty years ago in Canada horse-drawn reapers and binders could harvest 10 to 15 acres a day; today the self-propelled combine can reap and thresh 50 to 75 acres a day.

Canada's development has been a mighty achievement for
so young a country - and with your help that growth will be
accurately measured this June by the most important census in Canada's
history. Canadians need this information for further progress, and
successful management of their private business and public affairs.

Be ready with quick and accurate information for your census taker
when he calls. Help Canada Count:

In 1906 it was predicted that there would never be people with sufficient money to buy cars to warrant the establishment of an automobile manufacturing industry in this country; in 1950 over 390,000 motor vehicles were made in Canada, and upwards of 2 million passenger cars and trucks were registered.

Canada's development has been a mighty achievement for
so young a country - and with your help that growth will be
accurately measured this June by the most important census in Canada's
history. Canadians need this information for further progress, and
successful management of our private business and public affairs.

Be ready with quick and accurate information for your census taker
when he calls. Help Canada Count;

A hundred years ago census takers complained that they were received ungraciously. But people today welcome the census taker as a man who is doing a valuable job for the benefit of all. They know he is sworn to secrecy, and that the information they give him is kept in strictest confidence to be used only for census statistics. They know it cannot, by law, be revealed to anyone for any other purpose. They know these facts and figures are used for the benefit of themselves and their communities. And so nowadays they welcome the census taker as a trusted and valued public servant.

Horace Greeley's famous addice 100 years ago, "Go west, young man go west", has been justified by events. The population of Canada's Western Provinces is composed to a large extent of people, or the descendants of people, who came from Eastern Canada as well as of those people and their descendants who came from the British Isles, the United States and elsewhere. The 1951 Census will show whether this historic westward movement is still contributing to the population growth of the west and what proportion of the population is made up of native born. Interesting information and valuable facts about your own community will be developed by your answers to the census taker when he calls in June. Help Canada count.

At every fifth home in Canada the census taker will ask a number of special questions about the house and its equipment when he calls in June. This twenty per cent sample will be used in statistical tabulations to yield necessary data on Canada's housing conditions and needs. It will give our managers of private business or public affairs useful information on the extent to which Canadians enjoy or lack modern facilities for convenience or recreation. If you should be among the group selected for this housing sample please help to make it as accurate and useful as possible by being ready with quick and specific information for your census taker when he calls in June. Help

June will be census-taking time in Canada but this will not interfere with your work or pleasure. In some countries the taking of the census is the occasion for the combination of public duty with the spirit of a national holiday. There the head of each household goes to a government centre and supplies the information specified by law. In others people are required to stay at home on census day until the enumerator calls. In Canada, however, a special effort is made to suit your convenience. The enumerators make a house-to-house canvass to obtain the necessary information. You are asked only to lighten the task of the census taker by being ready with quick and accurate information when he calls in June. Help Canada Count;

### CENSUS COMMISSIONER'S OFFICE ESTABLISHED

Local preparations are now undor way for taking the Ninth Docennial
Census of Canada this June, according to the Census Commissioner for
, census district, Mr,
of Street.
The district includes
This area has been subdivided into subdistricts, which
will require a staff of enumerators.

The enumerators will make house-to-house calls to collect the information required. In urban areas they will take the censuses of population, housing, and distribution (wholesale and retail trade and services). In rural areas they will also take the census of agriculture. (There will also be a census of commercial fishing in those areas where commercial fishermen live).

The work of the enumerators will be checked by field supervisors and the Consus Commissioner to ensure that the census is as accurate and complete as possible.

#### CENSUS ENUMERATORS PROPERLY ACCREDITED

When the census enumerator calls on you this June at your home,
your place of business, or on the farm, he will present his credentials
in the form of a small card, issued by the Dominion Statistician. It
states that he has been appointed by the Minister of Trade and Commerce
for the Consus of 1951, and that he is authorized to collect the information required by law from everyone in Canada. This eard will have the
enumerator's own signature and will be countersigned by -----consus district.

The enumerator will also carry an official portfolio, on which there will be the district number, the number of the subdistrict in which you reside, and the enumerator's name and address. In the portfolio he will have the census documents which he is required to complete by asking questions, the answers to which he will check off or write down on the documents. He is not authorized to conduct any private business while making his call. He has taken an eath, under severe penalties for infringement, not to divulge to anyone any of the information given to him.

The material he gathers is immediately transcribed to anonymous cards which bear no indication of the identity of the individual.

#### TWENTY-NINE QUESTIONS TO BE ASKED IN CENSUS OF POPULATION

Bosides requiring your name and address, the enumerator will ask about your relationship to the head of the household, your sox, age, and marital status, whether you are living on a farm or not, your years of schooling, whother you have attended school during the current school year, whother you are able to speak English or French or both, the language you first spoke as a child and still understand, your religion, birthplace, poriod of immigration, citizenship, and origin. If you are under 14, that is all he will lask.

If you are 14 years of ago and ovor he will have a number of additionel questions. He will ask about your war service, whether you had a job or not in the wook prior to June 2, and the number of hours you worked. If you worked, had a job but did not work, or wore looking for work, he will ask the nature of your employment to determine the kind of business or industry in which you were employed and your occupation in that industry in the wock before the Consus. If your occupation that week differs from your usual occupation, he will ask your usual activity. He will further ask if you were employed as a wage-earnor, on your own account, or as an employer. If you worked for salary or wages, he will ask how many weeks you worked in the twelve months prior to June, 1951, and your wages or salary for that period.

Thus, overybody will not be asked the same number of questions. This will depend on such facts as age, whether you had a job or not in the week before the Census and whether you worked for salary or wages or for no pay. At every fifth house questions will be asked about the dwelling in which the household lives.

None of this information may be divulged to any third party and it will be used for statistical purposes only. Nothing but totals will be published.

### QUICK CENSUS FACTS

- The Consus of 1951 will begin on June 1.
- More than 14,000,000 porsons will be enumerated.
- 3,500,000 dwolling units will be described in the Census of Housing, by means of a 20 per cent sample.
- There will be more than 730,000 farms enumerated in the Census of Agriculture.
- There will be 261 Consus Commissioners, each in charge of a district corresponding to a followal constituency.
- A total of 20,000 sensus workers will be employed, of which 18,000 will be enumerators.
- The work of the enumerators will be supervised and checked by 850 field supervisors.
- The Census will be decentralized for the first time. There are six regional offices where proliminary work on census returns will be done. These are located at St. John's (Newfoundland), Halifax, Montreal, Toronto, Winnipsk, and Vargouyer.
- There are eight consus questionnaires. These deal with (1) population, (2) the blind and deaf, (3) housing, (4) agriculture, (5) irrigation,
  - (6) live stock and greenhouses elsewhere than on farms, (7) commercial fishermon, and (8) diswribution (retail and wholesale trades and services).
- More than 20,000,000 copies of census questionnaires, and more than 40,000.000 much eards will be wrinted.
- Special pons and : 20.3? ink will be used by the enumerators to facilitate the work of modelin-punching the cards.
- There will be 12 electronic statistical machines, 56 punching machines, 15 sorting machines, and 8 tabulators or electric accounting machines used in processing comsus returns.
- Preliminary figure: on the Consus will be released before the end of 1951, and final figures in the early months of 1952.
- All consus information is kept completely confidential by the enumerator, under an oath of secrety enforced by severe penaltics. This information is immediately transferred to anonymous eards with no indication of the identity of any individual.

#### OUTLINE OF SPEECH TO SERVICE CLUBS

The following outline has been drawn up to serve as a guide for talks to service clubs and other public audiences. It is not intended that it should be followed completely. It is, however, suggested that those parts of it might be chosen which have most appeal to the members of particular clubs and which are likely to fit into the time alloted for the talk.

References in brackets are to the information bulletins which form a part of this publicity kit. Appropriate and more extensive material will be found in those bulletins to illustrate points you particularly wish to stress in your talks.

#### 1. The Census will be taken beginning June 1, 1951

- (a) Canada has the distinction of having taken the first consus of modern times -- that of 1666 (see Bulletin 2, p.2).
- (b) The present Decennial Census dates from 1871.
- (c) This is the Ninth Deconnial Census.
- (d) It is the largest census ever taken in Canada by reason ef-
  - (ii ) Largest population ever recorded in Canada (1: million).
- (e) It will be different from proceding consuses by reason of-(i) Decentralization through regional offices of the Dominion Euroau of Statistics, and
  - (ii ) Extensive use of new statistical machines.

# 2. Legal reasons for taking the Consus (See Bulletin 2, p.2)

- (a) The Eritish North America Act of 1867 (as amended in 1946), generally speaking, assigns representation in the House of Commons at Ottewa to each province on the basis of dividing the total population of the them nine provinces by 254 and dividing the population of each province by the quetient so obtained. An additional member for the Yukon, and seven for Newfoundland, make a total of 262. Re-adjustments in representation must be made after each census.
- (b) The amounts of fodoral subsidies under the British North America Act and under the Tax Agreements entered into with eight of the provinces are determined, at least in part, by the population count.

#### 3. The Census of 1951 will include

- (a) Population (See Bulletin 2, p.3): To find out exactly how many people there are in Canada and what they are like (whether there are more men than women; whether the population is, on the average, growing older; what occupations they follow; their origins; the languages they speak; their years of schooling; the changes in proportion of rural and urban population, etc.)
- (b) Housing (See Bulletin 8): To find out about housing conditions (type of house; principal exterior material; number of rooms; heat, light and water fecilities; whether the house is owned or rented; monthly root, etc.). This will be done in 1951 on a sample basis, every fifth householder being questioned.
- (c) Agriculture (See Bulletin 11): To find out the condition of agriculture (location, area and tenure of farm; crops produced; condition of land; irrigation; now breaking and forest fires; machinery and equipment; employment; live stock; forest products; dairy products, otc.). A separate sweller agricultural schedulawill be used in Newfound hand there egriculture is of limited diversity.
- (d) Fisherios (See Bulletin 10): This pert of the census being taken for the first time; two perts - one in June and one later in the year when fishermen are at home. Fishermen will be classified as-
  - ( i ) Working on own account)
  - (ii ) Working on shares ) According to number of days spent in fishing
  - (iii) Working for wages
- (c) Distribution (wholesale and retail trade and services) (See Bulletin 9): This also will be in two parts one in June and the other early in 1952. In June the questions will be:
  - ( i ) Name and address.
  - (ii ) Kind of business.
  - (iii) Relative sales-size.
- (f) Supplementary quostionnaires (See Bulletin 2, p.4)
  - ( i ) Blind and deaf.
  - (ii ) Aroa of irrigated land.
  - (iii) Number of live stock and area and value of production of greenhouses not on farms; cattle, poultry, bees, goats, swine, etc.; on holdings of less than three acros.

#### 4. Confidential nature of answers to census questions

- (a) Questions designed after careful consideration and consultation with federal and provincial departments of governments on basis of Canadian and foreign experience - every question justified as being of use to government, business, agriculture, social work, justice, education, etc.
- (b) Every enumerator able to identify himself by means of a card signed by himself and countersigned by Jensus Commissioner.
- (c) Every enumerator and all other employees of the Dominion Bureau of Statistics under eath of secrecy not to reveal any information about any individual or business under penalty of fine or imprisonment, or both.
- (d) Statistics Act of 1948 forbids Dominion Bureau of Statistics to issue any statement that would lay bare any personal matter.
- (e) Census information relating to the individual cannot be used for taxation, military service, etc., nor put at the disposal of any government department for administrative purposes.
- (f) Names are taken merely for checking the completeness and accuracy of the census and cannot be passed on to other government departments.

#### 5. Organization for taking the census (See Bulletin 2, p.5)

- (a) Small permanent staff at Ottawa which maintains connection between one census and the next so that experience is continuous and cumulative.
- (b) Census Executive Committee at Ottawa an expansion of the permanent staff by the addition of other personnel of the Dominion Bureau of Statistics.
- (c) Census Commissioners (261), each in charge of a census district corresponding to a federal constituency.
- (d) Consus enumerators (approximately 18,000), each in charge of a subdistrict; this is the only official with whom the general public will come into direct contact.
- (e) Field supervisors (850), to supervise and check the work of the enumerators.

# 6. The Census in this district

- (a) Describe the district.
- (b) In this district there will be ----- onumerators and \_\_\_\_\_ supervisors.
- (c) There will be censuses of

Population )
Housing )
Agriculture )

Strike out any that do not apply to this district.

Fisherios )
Distribution)

(d) Supplementary information will be obtained on
Blind and deaf.
Irrigation.
Live stock and greenhouses not on farms.

- (e) On these documents the following are some of the more important questions that will be asked:
  - ( i ) Pick out from census documents some of the questions that will be asked.
  - (ii ) Show the audience what these documents look like.
  - (iii) Repeat that answers to questions are confidential in this district as well as in the rest of Canada.
- 7. Uses of the information collected in the Census (See Bulletin 2, p.2)
  - (a) To determine representation in Parliament.
  - (b) To determine amounts of federal subsidies paid to provinces.
  - (c) To assist federal, provincial and municipal governments to draw up suitable legislation and carry out administration; e.g., appropriations for schools, institutions, otc.
  - (d) To provide bench marks on which to base estimates in years between censuses.
  - (e) To assist the business man (See Bulletin 6):
    - In making merkot analyses, especially infields which are not provided for in annual estimates which the Dominion Euroau of Statistics makes on a semule basis.
    - (ii ) In determining possibilities of home market, particularly in those parts of Canada which he has not hitherto exploited.
    - (iii) In estimating occupational skills available in areas which might be considered for a new f ctory or scles outlet.
    - ( iv) In obtaining area statistics for planning expansion programs or changes in services currently supplied.
    - (v) In providing to potential advertisers, particularly on the rudio and in newspapers, information on the origin, language, religion and other characteristics of the population in the area served.
    - ( vi) In estimating the importance of changes being made in the character of farming, types of machinery used, etc.
    - (vii) In weighing the conditions in those areas in which he might wish to invest or advise others to invest.
    - (viii) In determining sales quotas.

- (f) To assist sociologists and welfare societies:
  - ( i ) To appraise conditions that call for improvement.
  - (ii ) To determine what areas are most likely to call on them for their services.
- (g) To assist the clergy, educators, authors and lecturers by supplying them with information about Canada that they may need in their respective fields.
- (h) To assist the man in the street:
  - ( i ) To know his country better.
  - (ii ) To assess the suitability of proposed legislation that may affect him or his business or profession.

#### 8. New features of the Census of 1951

- (a) Use of mark-sense documents, with special pen and ink to facilitate machine work.
- (b) Decentralization through regional offices of the Dominion Bureau of Statistics.
- (c) New machines (See Bulletin 13):
  - ( i ) Sort all cards into groups.
  - (ii ) Add figures punched in particular fields.
  - (iii) Count cards punched for certain characteristics, e.g., occupation - carpenter, taking off up to 60 items from the cards, each card going through in 1/8 of a second.

## 9. Processing the returns (See Bulletin 2, p.6, and Bulletin 13):

- (a) On the completion of the work in each census district the returns will be sent by the Census Commissioner to one of the six regional offices of the Dominion Bureau of Statistics. These regional offices are located at St. John's (Newfoundland), Halifax, Montreal, Toronto, Winnipes, and Vancouver.
- (b) Temporary staff at regional offices will-
  - (i) Make further check for inconsistencies due to enumeration errors, e.g., dector with only four years of schooling, married at age 6, etc.
  - (ii ) Punch on specially propared cards perforations which will show by their location on the card the exact information obtained by the enumerator.
  - (iii) Forward the punched cards to Ottawa.
- (c) Pormanent staff at Ottawa will make final tabulations and odit and publish the results.



- 10. Co-oporation of the public, including members of organization forming the audience
  - (a) Mombors should co-operate with the Consus since it is a form of co-operative saterprise by 14 million Canadians for the benefit of all. Everybody has something to gain but nothing to lose.
  - (b) Members should draw attention of employees to the Consus and urgo them to co-operate.
  - (c) Co-operation with the Census is good citizenship.



#### THE CENSUS OF 1951

#### Introduction

Once every ten years since Confederation a census of the people of Canada has been taken. The first of these decennial censuses, as they are called, was taken in 1871: the ninth will be taken on June 1, 1951. It will be a project of the greatest magnitude, greater than ever before, since its organization will not only extend as in the last Census from the United States border to the most northerly settlements in the Arctic but for the first time from the east coast of Newfoundland to the islands off the ceast of British Columbia. It will enumerate a pepulation over a fifth larger than any reviously recorded in Canada.

The coming Census will be a census of population, housing, agriculture, fisheries and distribution. Its value in determining the progress of Canada will be inestimable. More particularly the 1951 Census will be a yard stick in determining the progress that Canada has made in the first half of the twentieth century. Its uses are so varied that there is scarcely a phase of human activity that cannot be related to it. It is of aid to government, business, social welfare, justice and education and thus helps to make Canada a better place in which to live. With its information available to everyone, the census is democratic in its results.

Since the census is for the common good of all, the co-operation of every Canadian in making it as complete and successful as possible is only a part of good citizenship. To be sure, the law, enacted by the representatives of the people, requires everyone to answer the questions on the census schedules put to him by the enumerator. The success of the census does not rest on this legal requirement, however, but on a general appreciation of the purposes of the census and the willing co-operation of everyone in answering the questions as fully and accurately as he or she can. In short, the census will be only as good as the Canadian people make it.

## Historical Background

The taking of a census is a very ancient idea dating back to the pre-Christian era. Besides the better known enumerations of certain classifications of people mentioned in the Old Testament at the time of the Excdus and in the days of King David censuses for one purpose or another were taken in Babylon (3,800 B.C.), China (3,000 B.C.), the Egypt of the Pharachs (2,200 B.C.), Greece (600-500 B.C.) and Rome (500 B.C.). The Romans, indeed, were assiduous census-takers, both under the Republic and in the days of the Roman Empire.

In the Middle Ages the outstanding example of a census was the survey of England made in 1086 by Milliam the Conqueror which we know as Domesday Book. The survey was made by commissioners who empanelled juries to state under oath the extent, value and nature of each estate, the names, number and social status of the inhabitants and the amounts due to the royal treasury. It was an unpopular procedure and, thereafter, no other such survey was made in England for several centuries. Indeed, as late as 1753, it was stated in Parliament that the taking of a census might be a prelude to "some great public misfortume or epidemical distemper".

claims to have made the earliest census in the New World have been made for the Incas of Peru. Censuses were also taken by the Spaniards in 1548 in Peru, in 1576 in North America and again in Peru in 1606. Virginia had a census in 1635, New York in 1698 and there were 36 other colonial censuses in what is now the limited States before the first American decemnial census in 1790.

\*\*\*\*\*\*\* × \*\*\*\*

\*\*

.

- y - 0

To Canada belongs the credit of taking the first census of modern times. This was the Census of the Colony of New France in 1666, which was continued periodically until 1754. The Census of 1666 was the first modern census on a name-by-name basis, taken for a fixed date by a personal canvass, showing age, sex, place of residence, occupation and conjugal condition of each person. The Census recorded a population of 3,215. When it is recalled that in Europe and America the first modern censuses date only from the eighteenth century, the taking of the census of the Colony of New France was a remarkable innovation.

During the French regime censuses were taken no fewer than 37 times, and, in addition, nine partial censuses were made. Some of these obtained information on areas under cultivation and pasture, the production of wheat, barley, cate, peas, corn, flax, hemp and tobacco, the numbers of horses, cattle, sheep and swine, and the numbers of public buildings, churches, grist-mills, saw-mills, fire-arms and swords.

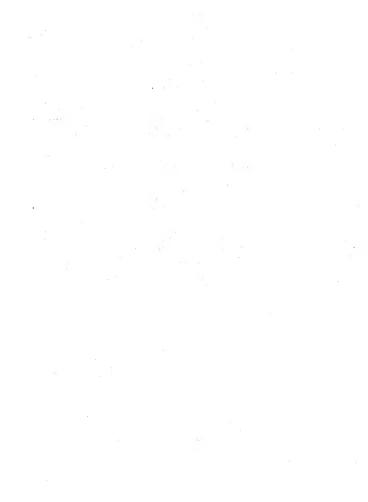
After the British occupation there were censuses at various times but it was not until 1841 that the first Canadian Census Act was passed. Under the Act a census of Upper Canada was taken in 1842 and in the following year provision was made for a census of Lower Canada. A regular periodical census, to be taken every ten years, was initiated for the United Provinces in 1851 and, since censuses were taken at the same time in 1851 and 1861 in Nova Scotia and New Brunswick, respectively, the Act of 1851 may be regarded as originating the present decennial census,

Three years after Confederation an Act was passed providing for "the first Census in Canada to be taken in the year 1871". The census was to obtain, for the four provinces and each of the electoral districts and their divisions, statistics on population and population characteristics, housing, land, the valuation of real and personal property, agriculture, fisheries, lumbering, mining, manufacturing and other industries, and municipal, educational, charitable and other institutions. The Census Act of 1905 made provision for the quinquennial census of the Prairie Provinces, a step confirmed by the Statistics Acts of 1918 and 1948. It was under the authority of the Statistics Act of 1918 that the decennial censuses of 1921, 1931 and 1941 and the quinquennial censuses of the Prairie Provinces of 1926, 1936 and 1946 were taken; the ninth decennial census is being taken under authority of the Statistics Act of 1948.

#### Objects and Uses of the Census

The objects of the censuses of the pre-Christian era and of the Middle Ages were very limited and would not meet with approval in modern times. Mainly they were used as a means of ascertaining what men could be called to the army and the amounts of money that could be wrung from individuals in taxation. This conception of the object of the census is a alien to the modern idea that it is expressly forbidden by law to use census data for any such purpose.

In Canada the fundamental legal reason for the taking of the census is to be found in the British North America Act of 1867 as amended in 1946. By this legislation, representation was assigned to each province on the basis of "dividing the total population of the province by the hundred and fifty four and by dividing the population of each province by the quotient so obtained". If the number of members thereby assigned to a province should be less than the number of senators for that province then the number of Members of Parliament for that province are increased to equal its number of senators. This is the case with Prince Edward Island, In addition Yukon was awarded one member and in 1949, on the entry of Newfoundland into Confederation, provision was made for seven members for the new province.



Readjustments are to be made after each decennial census so that, should the population of any province have increased or decreased by the amount of the quotient mentioned in the Act, that province will have its representation in Parliament increased or decreased accordingly. The Canadian Census is taken primarily, therefore, to determine the representation of each of the provinces in the Federal House of Commons.

A second reason, of great importance from the provincial standpoint; is the fact that a number of the federal subsidies to the provinces are based on population. The original subsidies granted under the British North America act are all based on population, namely, those respecting government and legislation, debt allowance and the general per capits subsidy. Subsequently, the tax agreements entered into with seven of the provinces are predicated, amongst other things, on population increases in relation to other factors.

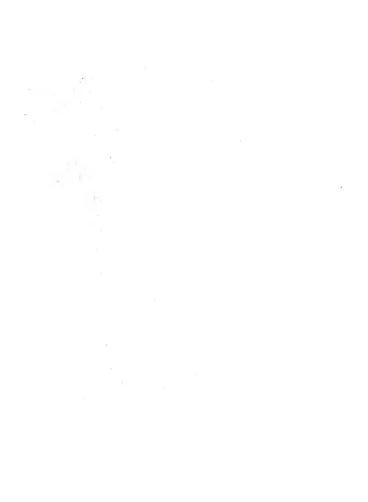
The census, however, has a far wider application than the fixing of representation and federal subsidies. Periodically all businesses take inventory of what is on their shelves and in their store rooms, estimate the value of their plant and generally take stock of their financial position. The government equivalent of this procedure is the taking of the census. The primary asset is the population itself, not merely the number of people but the various attributes that collectively make the Canadian people different from those of other countries. Data about sex, age, occupation, origin, language, years of schooling, etc., are facts in themselves of the greatest mement. They constitute the background against which almost all other facts must be projected if the latter are to have any real significance. The well-being of the state, physical, moral and economic, can be apprehended and interpreted only through the medium of population statistics.

In the allocation of grants by provincial authorities for educational, health and other purposes population figures for rural and urban divisions are required by provincial governments. Occupational statistics are useful to these same provincial authorities in setting up such things as public health services and arranging for provincial highway development. In many other ways the provincial authorities place reliance on census figures in the same way as the Federal Government does.

Thus the census supplies basic information necessary to assist government in directing the affairs of the Canadian people. By means of the census, government at all levels -- federal, provincial and municipal -- is enabled to work more effectively and economically in the interest of everyone in the country. Without the census, legislation would be passed and administration carried on in the dark. There would be no adequate means of knowing whether the country was on the road to success or disaster, or what constitutes the norm or standard of its progress in almost any particular.

The census also has its uses for the business man. It supplies him with information on the size of and potentialities of the home market. It helps him to decide on the advisability of expansion and in what areas expansion is justified. It helps him to determine quotas for his salesmen. It shows him where the occupational skills he needs are to be found. It supplies the investment broker, the banker and other financiers with a variety of information that they need for sound appraisal of business developments and projects and of investment conditions and opportunities.

Boards of trade, chambers of commerce and public utilities are enabled to advise and assist civic and municipal authorities in community planning, locating new schools, determining new bus routes, erecting new electric and other facilities, etc. They are also better prepared to point out to manufacturers and retailers the advantages of obtaining factory sites and sales outlets in their particular locality



by being able to quote a disinterested authority on the labour market and the strength of local purchasing power.

Advertisers and radio broadsasting companies can present more cogently their case for patronage by prospective customers when they can produce figures on the population characteristics, such as language, origin and religion, in the areas in which they operate.

There is, as a matter of fact, scarcely a branch of business activity — manufacturing, selling or financing — that does not have specific uses for census figures. They are as important to business as they are to government.

Census figures are also useful to schools of social work, social agencies and societies interested in the improvement of social conditions generally. They learn which areas are less prosperous than others and where family income ranges and other factors are such that there is likely to be a greater need of their services.

Origin, language and religion figures are of value to church authorities in planning the location of new churches, church buildings and schools. Provincial and church authorities find schooling statistics useful in measuring the educational level of various parts of the country.

Teachers and students, authors and lecturers and many ther private citizens write to the Bureau for population figures and the United Nations and its agencies reproduce in statistical publications census material supplied by the Bureau.

Last, but not least, the individual Canadian citizen uses census statistics even though he may not be conscious of this. He does this in reading his newspaper, listening to his radio, scanning the advortisements and in many other ways.

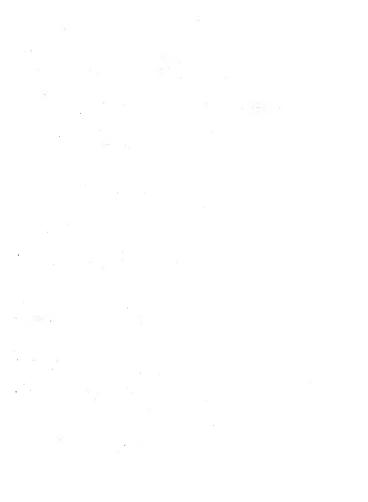
#### Census Documents

Eight documents will be used in the 1951 Census. These deal with (1) population, (2) blind and deaf, (3) housing, (4) agriculture, (5) irrigation, (6) live stock and greenhouses elsewhere than on farms, (7) commercial fishermen, and (8) distribution.

The population card has 29 questions to be asked of each person by the enumerator who will thereby record the name, address, relation to head of household, age, sex, marital status, birthplace, citizenship or nationality, origin, language, religion, education, occupation and employment, etc., of every individual.

The census of the blind and deaf is primarily to determine who are blind, deaf or blind and deaf, their ages, and the age at which their disability occurred. The record of the blind and deaf is to supplement the information obtained from the population card and to facilitate the work of educational and other institutions for those with such disabilities.

The housing document will record for every fifth house such things as type of dwelling, number of dwelling units in the structure, principal exterior material, need of repair, number of rooms, water supply, heating and other facilities, tenure and monthly rent.



The general farm schedule of the Census of Agriculture will record information about the farm operator; the location, area, tenure and value of the farm; field crops, fruits, greenhouses and nurseries; condition of the land; irrigation, new breaking and forest fires; farm machinery and equipment; employment; live stock; forest products; dairy products, etc. This schedule was drawn up in consultation with Dominion and provincial Departments of Agriculture and other agricultural authorities, and in the light of suggestions made for a World Census of agriculture by the Food and Agriculture Organization of the United Nations.

Owing to its limited agricultural activity, there will be separate, smaller agriculture schedule for Newfoundland. On the form for recording live stock and greenhouses elsewhere than on farms information will be collected about the numbers of cattle, poultry, bees, goats, swine, and the area of greenhouses and the value of their production, on holdings of less than three acres.

The enumeration booklet for commercial fishermen will classify fishermen as fishing on their own account, on shares or "lay", or for wages in four groupings according to the number of days spent in fishing. This information will provide the basis of a sample survey to be taken later in the year.

On the enumeration folio for the Census of Distribution the enumerators will enter details concerning the name, address, kind of business and relative salessize classification of all retail, wholesale and service establishments. This will provide a mailing record which will serve as a basis for the conduct of a mail questionnaire survey early in 1952.

The irrigation schedule is applicable only to those sections of Canada where irrigation is an important aspect of the farm picture, and will supply basic data, for the Government Departments concerned, of the acreages affected and other relevant facts.

In connection with these scnewhat elaborate and searching inquiries three points should be emphasized: (1) that no question has been inserted merely to gratify idle curiosity but only because the resulting tabulation of the information has a distinct bearing on basic social or economic conditions; (2) that census information obtained from or about an individual nay not be used for taxation or for military purposes; and (3) that the answers given by the individual are absolutely confidential, every enumerator and all other employees of the Eureau being under oath not to reveal any single item about any individual under penalty of fine or imprisonment or both: the Eureau itself is also forbidden by the Statistics Act 19/8 to issue any statement that would lay bere any personal matter. Though the name of every person is taken down by the enumerator this is not for the purpose of associating the individual with any of the facts recorded but merely to serve as a check on the accuracy and completeness of the enumeration. The census is first and last for statistical purposes only. It should also be noted that enumerators are required to use courtesy and text in collecting the information.

# Organization for Taking the Census

To carry out this far-flung investigation, and to reduce its results to comprehensible and usable form, necessarily requires a large organization. Its nucleus exists in a small permanent staff constituting one of the branches of the Bureau of Statistics. This branch maintains connection between census and census, so that experience is continuous and cumulative. This organization has been expanded for the planning of the forthcoming Census by the creation of a Census Executive Committee, into which have been drawn other senior officers of the Bureau with appropriate administrative or technical skills, besides those of the Bureau's



## Demography (Census) Division.

In planning the field work the country is divided first into census districts, each of which is placed in charge of a census commissioner. There are approximately 260 of these census districts, Each district is then subdivided into subdistricts, varying in population from 600 to 800 in rural localities and from 1,000 to 1,500 in urban areas. The subdistricts, which number approximately 18,000, are allotted to census enumerators. These are the officials who go from door to door collecting the information required by the census. They are the only officials with whom the general public comes in direct contact. Their work is supervised by some 850 field supervisors.

Since one object of the census is to determine Parliamentary representation, the Act directs that the census districts and subdistricts shall correspond, respectively, "as nearly as may be, with the electoral divisions and subdivisions for the time being" l.e. with the federal constituencies and polling subdivisions.

Census commissioners will be appointed by the Minister of Trade and Commerce with the assistance of the Members of Farliament, and will be instructed by officers of the Deminion Bureau of Statistics. Working under the direction of the commissioners will be a number of field supervisors each responsible for a group of subdistricts. The supervisors will train the enumerators in their areas and give detailed supervision to their work. The enumerators will be recommended by the Commissioners on the basis of their suitability. Supervisors and enumerators are required to pass a practical test in the work before appointment. All field officers are paid, for the most part, on a piece work basis, i.e. according to the population, farms, etc., enumerated.

For a census that covers half a continent, embracing the most varied conditions of nature and settlement, uniformity of plan is clearly impossible. In Labrador, the northern parts of the Prairie Provinces, the Eastern Arctic, New Quebec and the remote parts of the North, the Census will be taken by the R.C.M.P. and officials of the Department of Resources and Development and of the Department of Citizenship and Immigration.

Practically every known means of locomotion will be used. Some enumerators will, of course, go on foot and others will use automotiles. In the far north, river steamers and dog sleds will be employed and to reach many of the settlements in Newfoundland it will be necessary to go by ship or boat. In some districts aircraft will be used.

# Compilation of Census Statistics

When the enumerators have finished their work, and it has all been checked by the field supervisors, the returns will be forwarded to the Bureau's regional offices at St. John's, N'f'ld, Halifax, N.S., Montreal, Que., Toronto, Ont., Winnipeg, Man., and Vancouver, B.C. There the returns will be in part processed by a staff of nearly 2,000 temporary employees. Formerly this work was done at Ottwa but, for the first time, the Dureau is decentralizing its activities in the matter of the census. This staff will punch on specially designed cards perforations showing by their location on the cards the exact information obtained at the census. The complete editing, coding and revision of the census material will be undertaken at the regional offices. The punched cards will be then forwarded to Ottawa for machine tabulation.

At Ottawa the cards will be run through a machine one at a time, an electrical impulse being allowed to pass whenever a hole appears. The machine is instructed by means of a control panel or switches how to interpret these impulses and what to do with them. One machine will sort all the cards into groups, i.e., those punched in the first position in the column being dealt with being piled in one stack, those punched in the second position in another stack, and so on. Another machine will add the figures punched in particular fields from each card in somewhat the same way as an adding machine. A third will count the cards punched for a certain characteristic, such as occupation, "carpenter". These functions of first reading the card and then sorting, adding and counting will be carried out by cominations of relays. A card takes 1/8 of a second to pass through a machine in which time it may be examined for 30 or 40 different items. The machines will print the basic tabulations resulting from these operations and the tabulations will then be analyzed, arranged, edited and published by the Bureau's certral staff.

### Conclusion

The Census of 1951 has been planned with the utmost care over a period of years. The experience of previous censuses in Canada and in other countries has been freely drawn upon. It contains no inquiry that is not fully justified and its uses for government, business, social work, justice, education, etc., are almost without limit. It merits the support of everyone as a patriotic duty notwithstanding anything that may be considered irksome. It is a duty towards one's neighbours, the whole fourteen million of them.

It helps to show that Canada merits the place that has been accorded her in the family of nations. It is a further link in recording the growth of our country from colony to nation and from nation to world power. It is efficient, business-like, democratic and modern. It is every Canadian's own business and he ought to look after it by giving it his unqualified support.

# 1951 CENSUS MOST IMPORTANT YET FROM NATIONAL AND INTERNATIONAL POLINT OF VIEW

The Census which will be taken in Canada in June, 1951, will be the most important since the first Census of the Dominion in 1871. In the first place, it is at the half-way mark of the century and will give us more measurement of the progress made during that period. It will show us how we compare today in human resources, the greatest asset of a nation, and how the greatest of our primary industries - agriculture - compares with the beginnings of a half century of development.

In the second place, it will reveal many changes as compared with the Census of 1941. In the interval we have experienced the great cataclysm of the Second World War, which changed vastly the pattern of our economy. There have been important shifts in population as between provinces. Since the industrialization of the Dominion was considerably accelerated, more and more people moved to the cities and towns from rural areas. At the same time, the eccupations of the people have undergone substantial changes. The population has also continued to become older on the average. These and many more changes from 1941 will be brought out in the 1951 Census.

The next Census will also be especially important because it will mark the introduction of drastic changes in technique. Canada is introducing new procedures which may set a new pattern for other countries. Owing to the importance of census date and their usefulness for a vast variety of purposes, it is essential that the census be completed with greater speed. In the past it has been a time-consuming process to get out the final results. The increased costs of taking a census make it imperative to find new means of shortening the collection and tabulation processes. The Bureau of Statistics has attacked the problem in several ways.

1. For the Population and Housing Census, the usual cumberscme 'line' schedule into which all information had to be written is being replaced by a 'mark-sense' card for each individual.

In a mark-sense document, a question is answered by making a mark in a pre-arranged space instead of writing the answer in full. Special electronic machines read the marks and produce automatically, as an 'end' product, a punched card. One great advantage of this new procedure is the elimination of most of the hand-punching of hollerith cards, which was one of the delaying factors in past censuses.

2. New machines - The electronic statistical machine, a recent invention, will be used for the census compilations. These machines are far superior to any hitherto available, including machines which had been invented in the Bureau for use in the 1931 Census and which increased census autput immensely. The new electronic statistical machine can count and sort at the same time; it permits of a wider range of simultaneous cross-classifications, and is much speedier in operation. The machine-processing of documents and punch cards for a Test Census revealed that the hand editing of documents to correct errors could be eliminated. The electronic statistical machine quickly and accurately rejects punch cards containing errors and indicates, in general groups, the type of error present on the card. Thus, a much more economical editing procedure is possible.

3. Decentralization will be an important aspect of the coming Census. Hitherto, all schedules have been returned to Ottawa for editing and processing. In the coming Census, six Regional Offices across Canada will act as sectional centres, centrolling the enumeration in their territories and supervising the office processing of returns to the card-punching stage. This change has the advantage of spreading the work of processing returns across the Dominion, and of having the agencies which do the initial processing close to the area covered, where difficulties can be quickly dealt with. Incidentally, some 1500 clerks are required for processing from three months to a year, and the housing situation makes it practically impossible to concentrate that number in any one centre.

During the years 1950 and 1951, the world is experiencing census-taking activity on an unprecedented scale. Some 40 countries are engaged in this activity. In the Western Hemisphere, 22 countries are working co-operatively to take a Census of the Americas. This is the first attempt to gather vital economic and social data about the 300,000,000 inhabitants of North and South America at approximately the same census period.

program co-ordinated by the Inter-American Statistical Institute, of which Canada is a member and in the work of which Canada's census experts have participated. While each nation will take its own census and publish the results, a minimum program has been accepted by all, involving the use of certain basic minimum standards as to consus questions, definitions and published results. Thus, as between countries, the statistics will be comparable.

Census-taking in South American countries in the past has varied widely in character. The range is from no census at all, through partial and indifferent, to adequate efforts. In some, the last attempt at a census was from 20 all the way to 50 years ago. It is obvious, therefore, that personnel capable of taking a census had to be trained from the beginning in seme countries. To meet this need, the Inter-American Statistical Institute and the Food and Agriculture Organization of the United Nations organized classes in which considerable numbers were trained for consus-taking.

Special efforts to promote the teking of ourrent censuses have gone farther afield than the Census of the Americas. The latter have the endorsement of the Economic and Social Council of the United Nations, together with its Population and Statistical Commissions, the Food and Agriculture Organization and the International Labour Office. These same bodies have also strongly endorsed the plan for the World Census of Agriculture which is being promoted by the Food and Agriculture Organization, and have urged all commissions to take a World Census of Population. The Population and Statistical Commissions have set out suggestions for questions, definitions and procedures, and RAO has done the same thing for the World Census of Agriculture. For this wider effort, training schools were organized in different sections of the world. Dr. O.A. Lemieux, the Director of the Census Division of the Dominion Bureau of Statistics, was lent for this purpose and instructed for three months in the training centre at Ceiro.



These efforts by international organizations to promote census-taking on a world-wide scale spell out the need for reliable evaluations of the human and economic resources of all nations. For the formulation of policy to achieve their high objectives, the various United Nations organizations require a vastly improved record of the population, food and other resources of the nations. While census information in itself cannot yiald the solution of the many problems concerned with social and economic welfare which confront the United Nations; these statistical data furnish a basis to which many other facts can be related and by which they may be appraised. In connection with the vital problem of population versus food supply, an adequate World Census would show, on one hand, the national and world production of food through the Agricultural Census and, on the other, through the Population Census, the numbers who have to be fed - thus providing a basic picture of needs in relation to supply.

It is not to be expected, however, that the long-cherished objective of a World Census enumerated according to an internationally recommended plan; complete and comparable as between nations, will be achieved in 1950 and 1951 or for many years thereafter. Nevertheless, through the efforts of international statistical organization, considerable gains in that direction will be achieved in the current census program.

## THE 1951 CENSUS AND BUSINESS

The coming census will provide a wealth of information useful to business. Every questionnaire being used will be fruitful from the business point of view. First in coverage, the population card will have questions on age, sex, marital status, citizenship, origin, occupation, etc. The resultant data will furnish a vast amount of material on the character of consumer markets. For instance, the sale of different kinds of goods is related to the number of people with definite characteristics as, for example, children's shoes and age groups. The numbers who speak English or French or both is a matter of first-rate importance to those concerned with marketing problems and advertising. Information on the occupations of the poople, when cross-classified with data on age, sex and other facts revealed in the census, will prove useful in estimating potential markets as well as manpower resources. Tabulations on earnings from salaries and wages will furnish a rough approximation of purchasing power by local areas. Census returns will show the number and location of Canadian families, and since families rather than the individual are the important consumer unit for some firms, this information will be of particular value to them.

This knowledge of the population characteristics is essential to many kinds of business because it makes possible the delineation of "class markets".

It is easy to see how data from the population census furnish an essential background for marketing policy. Compare, for example, the population of Montreal and Toronto. Since Montreal is the larger, someone studying possible markets for a particular commodity might conclude, on the basis of total figures, that Montreal was the larger market. But if the solution of the problem depends on population figures, then the market investigator must consider more than total numbers for various qualities of the population may have a vital bearing on the question. Age composition, origin, religion, literacy, birthplace, occupation, and other factors affect the relative demand as between the two cities. In age composition Montreal is quite different from Toronto, the average age being considerably higher in Toronto than in Mantreal because of the different birth-rates in the two cities. The different age composition might render Toronto the better market for the commedity under investigation even though the population is smaller than that of Montreal. On the other hand, the market for articles for children would be more than proportionately greater in Montreal because of the large percentage of children in its pepulation. Differences in religion and origin also affect the demand for certain commodities.

This sort of analysis can be applied broadly over the whole Deminion. The centituent aliments which go to make up our population have a very important influence on the character of demand in different areas. Areas with exactly equal population will reveal quite different demand potentials for specific commodities as a result of different population characteristics.

In connection with the influence of bithplace on demand, for example, it may be noted that more than one-quarter of the adult population of Canada in 1941 had their origin in other countries. It is reasonable to assume that the damand for commodities in Canada would be influenced to an important dogree by the fact that so many adults brought with them into Canada the social pattern of other nations. When one considers the situation by provinces or smaller areas, this

influence is bound to be accentuated and would have to be taken into consideration in a study relating to the demand for any particular commodity. Such influences would be least important in the Maritime Provinces, but proceeding westward they are increasingly so. The 1941 Census shows that in Nova Scotia, about 10 per cent of the adult population were born outside Canada; in Quebec, 11 per cent; in Ontario, 27 per cent; in Manitchea, 40 per cent; in Saskatchewan, 45 per cent; in Alberta, 50 per cent; and in British Columbia, 51 per cent. Population in Canada has a heterogeneous composition which requires analysis for the correct planning of marketing policy based to any extent on population statistics.

The 1951 Census will furnish a greatly improved presentation of the rural-urban distribution of the population, which when cross-classified and used in conjunction with other facts will be very helpful. In addition to providing the total population counts for all incorporated urban centres, the 1951 totals will initiate a more rational scheme for distinguishing between urban and rural population than has been used in the past. Previously, the Canadian Census classified people as urban or rural according to whether or not they lived in a place that was legally recognized as a city, twm or village. The great developments around our cities during the last few years have made such a classification of less interest. The new definition is very simple: urban population is that which lives in built-up places of 1,000 population or more, whether incorporated or not. In 1951 the number of people in the incorporated City of Toronto, for example, will be counted as before but, what is more important for the business man, those who live in the recognized metropolitan area of Toronto will be counted as well. Tabulations will be made of all people, including those who live outside the city limits but whose work is closely connected with the city, The rural areas beyond such boundaries will no longer include the fringes of large cities but will be genuinely non-urban.

Many cities, however, cover a very large area. Mentreal has more than 50 square miles, on each of which lives an average of 20,000 people. To have the facts about Montreal as a while is not satisfactory for many marketing studies and other purposes. A grocery chain, for example, might be interested in knowing where population and traffic are concentrated and whuld like to obtain census dava for areas as small as blocks. While it is out of the question to tabulate information for such small areas, a set of statistical units (census tracts) has been devised. Each of these tracts comprises a few city blocks and centains typically about 5,000 people: for each of them a summary of census facts is planned, including main occupations, industries, age, conjugal condition, religion, language, earnings from salaries and wages, etc.

Since the last Census great changes have taken place. In the interval we have experienced the great cataclysm of the Second World War, which altered considerably the pattern of the economy. There have been important shifts in pepulation as between provinces. The occupations of the people have undergone considerable changes since the industrialization of Canada was speeded up. More people have become urban. Average incrmes due to high employment have increased. Since the War many thousands of immigrants have come to Canada. New Largo have been constructed on an unprecedented scale. An inventory of all these changes will be taken in the 15% Census, which will furnish new yardsticks for business. The next Census will afford



new and better opportunities for increasing the efficiency with which business can plan, sell, allocate, design or conduct marketing and advertising research and progress.

Together with the Population Census, the Housing Census will provide a panoramic view of the Canadian people and indicate the conditions in which they live. Comparisons of living conditions in different communities or areas will be possible with some degree of objective measurement. Thus depressed areas, middle-class areas, and economically superior areas will be revealed. Conveniences will be assessed in terms of lighting and heating equipment, water supply, plumbing, and facilities for cocking and refrigeration. The number of households with power washing machines, vacuum cleaners, telephones and radios will be known. Such data will provide the manufacturer and distributor with a wealth of material for market analysis.

The 1951 Census of Agriculture will measure a continuation of the long-term decline of the farm population. The 1941 farm population was 3,152,000 - it will be less in 1951. This, however, does not mean that the farm market is of less importance today than it was in 1941. On the contrary, farm income (important measurement of farm market potential) increased from \$89,000,000 in 1941 to \$2,457,000,000 in 1949. There is a richer farm market today than ever before. Manufacturers who depend on the Canadian farmer-fore a market for their goods will find the Agricultural Census particularly valuable, since it will furnish them with a comprehensive picture of farming activities (acreages, production, sales, implements, etc.) classified by local areas. The data obtained through the Agricultural Schedule, when tabulated by small areas, will thereby give many indications of farm market potentials, which will be useful to the business man.

The Census of Commercial Fishing will supply, for the first time, information on the numbers and characteristics of commercial fishermen. It will indicate their degree of dependence on the fishing industry, whether fishing is their main source of income or only a supplementary source. Such information, when shown by geographical areas, will be of assistance to manufacturers in estimating market potentials for fishing gear and other articles of special interest to fishermen.

The Census of Distribution (retail, wholesale and service establishments) is designed specially to assist business. Some of the ways in which it was of help to business in previous censuses are listed below. The coming Census will contain improvements which will make it even more useful.

Manufacturers have used the Census of Distribution data supplied in previous censuses in the following ways:

- (a) for market analysis to determine consumer demand and potential markets for given commodities in specified areas;
- (b) as a basis for rational marketing policy--a policy to get the best returns with the least sales effort;
- (c) as a basis for establishing sales quotas, organizing sales territories and moving salesmen from one area to another and for setting up territorial budgets and bomus plans;

- (d) to compare their own business results with average results in the same and other industries; sometimes conditions in one industry are very accurately reflected by sales in another;
- (e) for planning advertising and checking results;
- (f) to obtain knowledge of the relative importance of different channels of distribution;
- (g) for presentation of a general picture of wholesale and retail trade;
- (h) for measuring the relative importance of different types of merchandising concerns, e.g., chains and independents, general and specialty stores, as indicated by number of establishments and volume of sales.

Advertising agencies preparing market surveys for their clients have used the material in the same ways and for such other purposes as:

- (a) checking circulation of various publications against market facts to estimate their value as advertising media;
- (b) comparison of different markets in Canada and in the United States:
- (c) comparison of clients' experience with general distribution of goods by types of outlet;
- (d) in connection with general surveys of particular districts.

Trade associations have used census material, too, in various ways. They have found it useful in such ways as:

- (a) drawing members' attention to average results for comparison with individual results;
- (b) determining general trends;
- (c) obtaining a general picture of wholesale and retail trade;
- (d) preparation of articles and addresses.

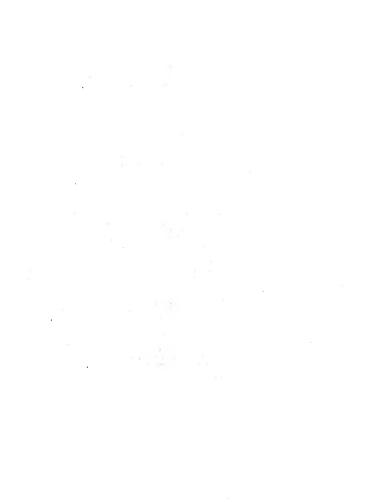
Local pride dictates that Boards of Trade have recourse to census data in various ways the result of which might lead to the greater prosperity of their community. Accordingly they have used them for:

- (a) answering specific inquiries;
- (b) assistance in preparation of articles on general business conditions:
- (c) dissemination of census extracts to members;
- (d) assistance in surveying trading position of certain cities in relation to their markets.

Trade journals, which have the interests of their subscribers at heart if they are to continue to exist, have used the material for:

(a) providing readers with authoritative statistics on their own kinds of business;





## HOUSTBLE VILLETTONS ABOUT THE ULHSUS OF 1951

#### General

## 1. Why do we take a census?

The legal reason for taking the census is to determine representation in the federal parliament. The British North America? Act prescribed that a census be taken in 1871 and every tenth year thereafter for that purpose. Population figures are also a basic factor in the determination of federal subsidies to the provinces. But the census has far wider uses than to fix electoral representation. It constitutes, under the modern system, nothing less than a great periodical stock-taking of the Canadian people, designed to show from the widest angle the point that has been reached in the general progress of the nation. It is difficult within brief compass to explain how this function is fulfilled. Fundamentally, the importance of the census hinges upon its analysis of the human element or man power of the country. The people themselves are, after all, the basic asset of every state. Their numbers, sex, age, occupation, origin, language, education, etc., etc., are facts in themselves of the greatest moment. They constitute, moreover, the background against which almost all other facts must be projected if the latter are to have real significance. The well-being of the state - physical, moral, economic - (including such varied phases as birth and death rates, education, transportation facilities, financial conditions, etc.), together with its ills in any form, can be apprehended and interpreted only through the medium of population statistics. Even if the cansus went no further it would be the basis of all study of our social and economic conditions. Linked with other official data, however, it rounds out the scheme of information which assists governments to direct their affairs. Without the Census, it is literal truth to say that legislation and administration would be carried on in the dark. and that there would be no means of knowing whether the country was on the road to success or disaster. So cogently is this felt that censuses at five-year intervals, instead of ten, are frequently advocated, the chief drawback being the heavy cost.

The Census, however, is just as important for business men, social workers and the general public. It supplies a wealth of information, for example, to business men which they use for market analysis and many other purposes.

## Do any other countries take a census?

The census-taking movement has spread rapidly through the world during the last 100 years. The United States took its first census in 1790, Great Britain its first in 1841 and the present Canadian census series started in 1871. The Scandinavlan countries and several nations of Western Europe have census records extending back 100 years or more. During the twendest century the census-taking movement has gathered mementum.

The United Nations and its specialized agencies such as the Food and Agriculture Organization have made special efforts to promote censuses of population and agriculture in all countries during 1950 and 1951.

#### On what dates will the census be taken?

The coming Census of Canada will be taken on June 1, 1951, as far as the count of population is concerned, - everyone who was born before that date and still alive at midnight between May 31 and June 1 is to be included. Asking the questions will take the enumerators across the country up to one month. Some of the questions will refer not to a single moment of time but to period. Most of the questions on agriculture apply either to the calendar year 1950 or to the spring of 1951. The census of retail stores and other trading establishments which is to be taken will refer to the calendar year 1951.

4. Does the census cover Newfoundland, visitors from other countries, Canadians in other countries, Canadians in penitentiaries and other institutions, the United Nations Special Force, navy and merchant marine, aircrew on flights abroad, etc.?

The census covers the whole area of Canada as of June 1, 1951. Thus it includes Newfoundland. It also takes in Canadian legations and other diplomatic missions abroad, but excludes such foreign missions in Canada.

However, the census does not include everyone who happens to be in Canadian territory at the census date, but only those people who are usually resident in Canadian territory. Thus temporary visitors from other countries, such as American tourists, who are in Canada on June 1 will not be included, while Canadian residents who are touring abroad will be counted. Also to be counted will be Canadian aircrew on flights abroad, the Canadian Navy and Merchant Marine and of course the United Nations Special Force. Within the country there will be no exceptions for any regular Canadian resident; Canadians will be counted who are in penitentiaries, hospitals, travelling on trains at the time of the census, on Arctic patrols or fishing off the East or West Coasts.

## 5. What do you estimate the population of Canada will be?

The population of Canada cannot be given in advance of the count with any great degree of accuracy, but calculations have been made using the 1941 figures and the numbers of births and deaths which have taken place since. It seems very likely that the count will exceed the figure of 14.000,000, and it may possibly do so by a margin of 100,000 persons.

# 6. What else besides population is covered by the census?

The census will cover agriculture (including irrigation, live stock, animal products and greenhouses not on farms), distribution (wholesale and retail trade), housing, commercial fishing and other aspects of our national life.

7. What is the coverage of the questions asked on the agriculture schedule?

The general farm schedule will elicit information on farm areas, (whether owned or rented), condition of occupied lands, number of live stock, area and production of field crops in 1950, area of field, garden and fruit crops in 1951, machinery and other equipment on farms, number of hired workers, forest products cut on farms, production of maple products, and revenues from the various farm products sold in 1950. Data on farming expenditures, production of milk, farm indebtedness and value of products consumed will be elicited from every fifth operator.

In the three Prairie Provinces and British Columbia a special questionnaire on irrigation will be used. This questionnaire elicits information on the area of crops, including pasture, grown under irrigation, and the type of irrigation used.

8. How long do we wait for results?

Preliminary counts by municipalities will be available in November or December of 1951. These will be subject to correction when the final tabulation is made. The first results from the final tabulation will be available in March of 1952. This will include details by municipalities and electoral districts as well as details of sex, age distribution, etc. Tabulation will continue throughout 1952, and it is expected that all material will be aveilable by March, 1953.

9. How do you arrange for complete coverage of the country?

Map work carried on for two years prior to the census divides the whole country into 18,000 areas. Care is taken to see that these areas do not overlap one another and that together they include the entire territory of the country. Checks are made prior to the census to be sure that their boundaries can be located on the ground. Once this has been done every Canadian resident is automatically located in the territory assigned to one enumerator according to the place where he customarily resides; some enumerator will therefore secure the census information concerning him.

#### Organization

10. How will the field staff of the census be organized?

The most important unit in the census organization is the enumerator. He covers a sh-district which contains between 600 and 1,500 people and he reports to a commissioner. Each commissioner has from 40 to 80 enumerators under his charge and has full responsibility for the enumeration of the census in one electoral district. In each of the regions, into which the country is divided, is a permanent office of the Bureau; these offices report to the Dominion Statistician.

#### 19. How will enumerators be trained?

Enumerators will be trained by commissioners or other census officials who have in turn been put through an intensive course given by permanent officers of the Bureau of Statistics. The training will cover all aspects of the census, including map reading to make sure that the whole territory assigned to each enumerator will be covered by him, marking the document that is to be used with the special pen and ink provided, the definitions of all the census questions so that he will accept only clear-cut answers. After being trained on these points the enumerators will be given practice enumeration problems. The subsequent work of enumeration should be an interesting and valuable experience to the enumerator personally.

### 20. How are enumerators paid?

Enumerators work on a piece-rate basis, that is, their payment depends on the number of persons they enumerate or the number of schedules they complete; during a recent test the rate of pay was 8 cents for each person enumerated on a population card, 10 cents for each dwelling unit enumerated on the housing schedule and 50 cents for each farm enumerated on the agricultural schedule. Enumerators are also naid for the time tiev spend in being trained.

21. What are the probable average earnings of an enumerator in an urban area? In a rural area?

Since the payments are on a piece-rate basis, the earnings of an enumerator will depend upon the size and type of his territory and upon the speed with which he completes his work. An energetic census enumerator should earn from \$8 to \$10 a day.

22. How long will the enumeration require in urban areas? In rural areas?

Enumeration is planned to take two weeks in urban areas and four weeks in rural.

23. How many regional offices are there and where are they located?

There will be six regional offices located in Vancouver, Winnipeg, Toronto. Montreal, Halifax, and St. John's, Nfld.

24. How many questions will be asked in the population census?

There will be a document for each person in Canada. The total number of questions on the document is 29, although not all questions will be asked of all people. For all persons under 14 years of age only 17 questions will be asked, and for persons 14 years of age and over further questions will be asked up to a total of 29.

25. What questions will there be on the population document?

The basic questions used to describe the population of Canada will concern sex, age, marital status, school attendance, mother tongue, religion, birthplace, immigration, citizenship and origin. In addition

there will be questions concerning participation in the labour force, including occupation and industry as well as hours of work and earnings for wage-earners.

### 26. What different kinds of tabulating machines will be used?

About 12 or 15 different kinds of machines will be used. The three machines to be used for the first time in census-taking in Canada are the electronic statistical machine, the numbering punch, and the document punch. The last two are especially designed to process the census document, and the first mentioned will be used to edit, sort and tabulate the punch cards prepared. In conjunction with these machines a wide range of standard ancillary equipment will be used.

#### 27. How much will the machines cost?

The machines to be used are not purchased but are obtained on a rental basis. The total rental for the census job is estimated at something less than \$600,000.

### 28. What does the census cost?

The final cost of the census will only be known when it is completed, since census-takers are paid according to the number of persons they enumerate. It will also depend on such matters as the scope of the tabulation program, which in some respects has to be decided as the program programs.

It is estimated that the cost of the census may be in the neighbourhood of \$9,000,000.

29. How will this money be spent in relation to the whole of Canada?

More than Top.cof the cost will be paid out to enumerators throughout Canada and to staffs located in seven processing centres from coast to coast. The balance will be spent for supplies, shipping charges, travel and rental of machines.

#### THE CENSUS OF HOUSING

The material progress of a people finds reflection in its homes. Canada is fortunate in having excellent records from which to study changes in the homes of her people from the days of earliest settlement right up to the present time. Until eighty years ago this was almost entirely the work of historians. Since then the statistician has helped to provide a progressively better record of Canadian homes. At first the statistician's contribution was little more than a straight count of dwellings, but more recently it has been highly descriptive. It is now possible to give a statistical picture of these homes along with a description of the people living in thom.

An interesting sample from the historian's archives is the work of Pickering, an English farmer who landed in the United States and travelled north in search of a new home in 1832. He has left us this graphic sketch of Upper Canada's early settlers and their first homes:

"The settlers in the woods appear to be the most independent and contented people, in their way. I have ever met with; perhaps with only a log house unplastered, containing two rooms, one above and one below, sometimes only one below, with a large open fire place and a log fire. The chimney-back and hearth built of stone picked up about the farm; a board floor unplaned, perhaps hewed only, and sometimes at first, none; doors and gates with wooden hinges. A few articles of common household utensils, two spinning wheels -- one for flax and one for wool, with reaves of spun varn hung around the inside of the house on wooden pegs driven into the logs; an upright churn (women always milk the cows and churn); a gun or rifle: one. two. or more dogs: an oven out of doors at a little distance from the house, sometimes built of clay only, and others of brick or stones often placed on the stump of a tree near the house, and a shed covered with the bark of a tree, or slabs to keep it dry; a yoke of oxen, some young steers, two or three cows, eight or ten sheep, perhaps a horse or 'span', a sleigh, waggon, plough and harrow, the latter, perhaps, with wooden teeth, form all their riches except the land, and they often raise 100 or 200 bushels of wheat, 80 or 100 of corn, some oats, peas, and perhaps buckwheat and a patch of flax, and fatten three or four hogs, and a cow, or yoke of oxen. besides seven or eight more store pigs, and a sow or two."

In 1832, Pickering travelled the countryside according to the dictates of his fancy. In 1951, the Dominion Bureau of Statistics will send out carefully trained enumerators with instructions to cover the whole Dominion in systematic fashion, obtaining the answers to a definite list of questions regarding Canadian homes. From these answers, it will be possible to compare the homes which Pickering saw with those in the same area in 1951. It will, of course, also be possible to compare those homes with those in any other part of Canada that one wishes. This will constitute the second housing consus of Canada. The first was taken in 1941, although earlier consuses since 1871 had furnished a record of the numbers of homes and certain other basic feats regarding them. The decision to devote a special census schedule entirely to housing in 1941 was influenced by experience after the First World War when a scrious housing shortage occurred and efforts to cope with it were greatly hampered by the lack of any comprehensive statistical

background upon which to assess needs and base plans. The housing shortage following the Second World War was even more serious, and the 1941 record proved of real value in providing housing background material which was at hand when it was needed. However, Canada's growth in the past decade has been so phenomenal that a continuous record of new homes was required. This led to the establishment soon after the war ended, of a quarterly record of housing statistics which has been collected by the Bureau's Special Surveys Unit.

The 1941 housing schodule provided space for the enumeration of 27 facts related to dwellings, their equipment, and financial factors related to tenancy and ownership. To this group of facts a further 13 were added from the population schedule for purposes of tabular analysis. This material provided a reasonably complete picture of dwellings and the people who lived in them.

Those facts transcribed from the population cassus enumeration included sex, age, occupational status, wage or salary and origin of the principal family head (with the period of immigration, if an immigrant), persons per dwelling, type of household, wage or salary earnors per family, domestics, lodgers and subtenant or lodging families.

From this combined record it was possible to assemble many statistical tables giving separate figures for individual cities and areas dealing with the major facts of housing. More specifically, these facts related to kinds of dwelling structures, numbers of rooms in dwelling units, external conditions of repair, the conveniences they offered (including facilities for heating, lighting, cooking, and refrigeration), water supply, and plumbing equipment. The facts also included financial statistics on rents, mortgages, and values of owned homes. In addition to tables presenting this picture of housing conditions, it was possible to propare many analytical tables showing variations in crowding pressure, relationships between carnings and conditions of living, etc.

When Pickering wrote his book in 1832 he made its purpose evident in the title "Emigrants Guide to Canada." It would not be possible to devise a title that would indicate the many purposes served by a modern housing census.

The 1941 Census of Housing, together with the population census, provided a panoramic view of the Canadian people and the conditions in which they lived. It made possible the examination of crowded areas in relation to crass where living space was adequate. Studies of dwollings could be made in terms of structural types, principal exterior materials, conditions of the exterior and tonure. Conveniences could be assessed in terms of lighting and heating equipment, water supply, plumbing, and facilities for cooking and refrigeration.

Periodic housing censuses are of proven value. They give eyes to those concerned with planning the development of expanding communities and the remodelling of older established ones. They provide the manufacturer and the distributor with a wealth of material for market analysis. They furnish useful information for assessing the fuel requirements of the nation. These are some of the more tan-



gible values. However, records of this kind serve another purpose of a less tangible but porhaps even more important nature. A factual knowledge of living conditions is basic to enlightened public interest regarding the gomeral welfere of the community.

The nore recent quarterly surveys measure progress in now residential construction. These surveys record numbers of new homes started, in process of construction, and completed during successive months. They give separate totals by provinces and principal cities. They also indicate the numbers of different types of new dwellings and rents being paid by tenants in all classes of homes.

The Consus of 1951 will produce a new and improved set of housing bench-mark data. It will make possible the study of housing conditions in greater detail covering a wider range of facts. The same vital relationship between homes and the people living in them will be established. In short, the 1951 Housing Census will furnish the material for a new chapter on the social and economic progress of the Canadian people.

# THE CENSUS OF DISTRIBUTION

The Consus of Distribution furnishes once every ten years a comprehensive picture of the distributive trades, i.e., wholesele, retail and service establishments. This nation-wide survey provides e wealth of material not only describing the changes which have taken place in the marketing structure and the channels of distribution but also a vest amount of information which can be used by business men to assist them in their problems of merketing, sales policy and advertising.

Prior to the first complete Consus of Distribution taken in 1931, there had been many individual studies of the marketing structure and channels through which commodities moved from producer to consumer but the wealth of factual data secured through the Consus greatly aided teachers and writers to describe and evaluate the marketing system as a whole and for particular kinds of business and products.

An adoquate understanding of the structure of marketing activity requires a knowledge of changes which are taking place and this is supplied by the consus data. Distribution consuses have revealed declines in the prevalence of general stores and a change-over from greecry stores and specialty food shops to combination stores; an increase in the variety of goods sold in drug stores; the rise of beauty parlors; the great growth of chain stores - first the corporated chain and then the associations of independents; changes in wholesaling practices indicating a trend toward direct marketing as in the case of 'cash and carry' or truck jobbers; more recently there has been the growth of supermarkets. That these changes are taking place is evident by observation but their quantitative significance is revealed only through the Consus of Distribution. Succeeding consuses give a clear picture of the trends which develop.

That the data furnished by consusos of distribution have been widely used by business is proven by an analysis of a large volume of inquiries received; 20 p.c. of the inquiries came from manufacturing concerns; 18 p.c. were from advertising agencies and research bureaus; 10 p.c. from trade associations; 10 p.c. from trade journals: 9 p.c. from educational institutions: 7 p.c. from magazines and nowspapors; 6 p.c. from retailors; and 4 p.c. from boards of trade. Those figures, however, do not indicate fully the types of business that used the information. Advertising agoncies, for example, used the figures in preparing data for their clients, who included manufacturers, wholesalers, retailers, publishers of magazines, newspapers, etc. Again, while only 6 p.c. of the inquiries came directly from retailors, many trade magazinos and trade associations indicated that they had used the census figures in preparing material for wholesale or retail firms. Large numbers of wholesalers and retailers used the census data through the medium of abswracts in trade journals and other publications. Large retailing organizations obtain consus data directly through consus reports. Smaller retailers probably make More use of articles in trade papers.

As to the specific uses to which statistics furnished by the Consus were put, their application to various phases of market analysis came first. Included in this bread entegory were such projects as the determination of consumer demand and potential markets for specified commodities or groups of commodities, the formulation of bases for equitable sales quotas, and the establishment of trading areas. Since only a Consus of Distribution can provide a complete and comprehensive picture of the distributive trades, it is not surprising that the use of the consus data to study and analyze this general picture of rotail and wholesale trade was only exceeded in importance by their application in market analyses. The use of the data as a bench mark to which annual or monthly trades in wholesale or rotail trade

could be related ranks high in importance as also does the application of the census data to planning advertising campaigns and chocking their results.

The Consus of Distribution for 1951 will put in the hands of business another record in detail of merchandising activities throughout the Dominion, which businessmen can use in many ways with profit to themselves and to improve the efficiency of the merketime system.

### CENSUS OF THE FISHERIES, 1951

For the first time in the history of Cenada a detailed census of commercial fishing will be taken in connection with the regular Decennial Vensus of 1951. While fishermon, of course, have been included as individuals in the population census on provious occasions, the fishing industry as a whole has not hitherto been covered in the same way as the agricultural industry.

The main purpose of the census is to obtain information on the development and economic and social circumstences of the fishing industry in all parts of Landad from the more personal angle of the fishorman and the community. Details of landings, equipment, employment, production and marketed value, by kinds of fish and product, and by subdivisions of provinces are already being collected yearly. They provide, however, a very inadequate guide to the definition and understanding of the factors that affect the development of the industry and the plane of living of those engaged in it. These are matters of importance to the country as a whole, and are the particular concern of the Department of Fisheries, especially in relation to the work of the Fisheries Frices Support Foard. The assistance given by the Beard to fishermen, and the influence exerted by the Department on the development of the industry, can result in maximum benefits only if they are based on accurate and detailed information such as the Fisheries Gensus of 1951 is designed to provide.

This consus will be undertaken in two stages.

First, in conjunction with the population consus in June -- which includes overybody -- a list will be compiled of all commercial fishermen, classified on three significant bases -- number of days fishing; whether fishing on own account, as a partner or on shares, or for wages; and income from fishing.

For the purposes of the survey, a "commercial fisherman" is defined as: "any person engaged in catching or carrying fish, having carned wages, sold fish or shared in the catch who during the period June 1, 1950, to May 31, 1951, fished for at least 15 days or carned at least  $_{\rm e}100$  from fishing." By this definition, a fisherman who carned \$100 or more in less than 15 days fishing, or who worked for 15 days or more for less than  $_{\rm e}100$ , will be included in the list of commercial fishermen.

The "number of days fishing" classification will be made in four groups: less than 30 days; 30 to 59 days 60 to 89 days; and 90 days or over. Similarly, the "income from fishing" question will not ask a fisherman to state an actual figure in dollars, but only to say whother his income from that source was: less than \$100; from \$100 to \$999; from \$1,000 to .1,999; or \$6,000 or more.

The second stage of the fisheries consus will be carried out at appropriate dates later in the season when fishing activities are at a minimum. At this stage questionnaires will be distributed to fishermen solucted from the lists obtained at the first visit of the enumerators. It is expected that, through the joint cooperation of the fishermen and enumerators, the information obtained at the first stage will be complete enough to make it unnecessary to esk all fishermen to answer this questionnaire. Contain classes of commercial fishermen will be asked to supply details of the vessels and equipment used, kinds of fish taken, expenses of operation, and other items that form part of the evenual economic picture of the fisheries in relation to the individual fishermen.

The information received at all stages of the fisheries consus will be treated as confidential and handled with the utnest regard for sucrey in respect of individual dotails. It will be collected by employees or agents of the Dominion Bureau of Statistics and passed directly to the Bureau for compilation and tabulation, Only the results of the tabulations -- in which information obtained will be shown in groupings that will not disclose details of any individual's operations or circumstances -- will be published or made available to other departments of government and the general public.



### AGRICULTURE AND THE 1951 CENSUS

The 1951 Census of Agriculture will be the ninth taken every ten years since Confederation in 1867. Since the 1871 Consus the industries of Caneda have become much more diversified. Other primary industries, such as mining, have increased greatly in relative importance and the secondary industries, including a great variety of manufacturing activities, surpass agriculture in the not velue of products. Nevertheless, agriculture is still the greatest of our primary industries and in 1941 approximately 32 per cent of the gainfully occupied males in Canada were engaged in agricultural pursuits. In 1949, 20 per cent of the net value of all Canadian production was from agriculture. It is only once every ten years through the census that a complete inventory of this great basic industry can be obtained with sufficient detail to appraise its progress in all parts of Canada and to serve as a bench mark for the annual estimates which are essential for a great variety of purposes.

The magnitude of the Census of Agriculture makes it importative that proparations for it be commenced long before the date of the Census. These preparations have been under way in the Bureau of Statistics for more than two years. The experience of past censuses has been drawn upon; a test census was taken in the autuum of 1949; numerous conferences have been held with federal and provincial officials of Departants of Agriculture; and officials of various agricultural organizations have been consulted. In addition, census procedures have been discussed at several intermetical conferences. The schedule which will be used is therefore the result of long and careful preparation.

As compared with the relatively few questions in the population form the agricultural questionnaire contains many questions. This is easily understood when it is considered that the latter is a consus of an industry and must include questions on the numbers, area, and output of everything produced on the farm, besides other questions the answers to which will illuminate the condition of the industry. The 1871 Consus collected information on the area and production of field crops and the value of production and counts of live stock similar to that which will be collected in 1951. Such information collected every ten years is a good index of the growth of the industry. The data obtained in 1951 will be of particular interest in showing the changes which have taken place in the first half of the contury.

In general, however, the questionnaire of today is different in many respects from those of earlier consuces. The development of agricultural research, of marketing plans and of various controls for the fermer's benefit require an amount and variety of statistical data much beyond what was obtained in 1871 or 1901. The 1951 questionnaire will meet new needs in that it will provide information to classify ferms as grain, beef cattle, dairy farms and so forth. The tabulations will also provide for a classification of farms in turns of across planted, numbers of animals kept, etc. Part-time farms and subsistance farms will also be classified separately.

Tho 1951 Consus schedulo makes provision for the widest possible use of consus data. The great task has been to keep the number of questions to the minimum consistent with the requirements for consus material. The burden of obtaining



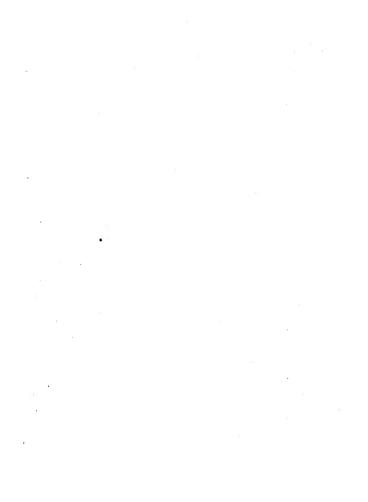
information from thousands of farmers, time of enumerators and time and expense of sorting and tabulating must over be kept in mind. Decisions as to what constitute 'census' questions must be made. For example, many questions could not be included because of the practical difficulty of readily securing the information from the farmer. The problem of jeoperdizing the accuracy of the census for essential data by over-burdening the farmer with too many such questions had to be considered. With those things in mind the Bureau has shortened the 1951 agricultural schedule considerably and a number of questions have been placed on a sample basis whereby only 20 p.c. of the farmers are called upon to answer them. This is the first attempt at enumerative sampling in the agricultural consus.

Provision has been made to obtain certain information from other sources to supplement consus material. Many questions on live-stock values and value of fruit crops have been deleted from the schedule. This information will be provided through other Bureau surveys.

The uses of census material are manifold. In the field of government descriptive information about agriculture is essential to form the basis of policy. Provincial and local governments generally require detailed census material on a county or municipal basis. An enumerative survey is the only means of obtaining such information for small areas.

The data collected in the census not only provides a wealth of information not obtainable in any other way but is also essential as a basis for the Bureau's annual and monthly estimates. For instance, the consus data on agreages of crops and numbers of live stock form bench marks or starting places from which estimates in succeeding years can be made. Each year every farmor in Canada is asked to fill in a schedule on acreage souded to various crops and twice a year ho is asked for numbers of live stock on hand and disposition of live stock. This information will be required during 1951 as well as the regular census data because current estimates will be made in advance of the time census data are available. As soon as the consus data are ready the information will form the official basis of estimates. A large number of farmers reply voluntarily to these annual mailed questionnaires. By getting the information from the same farmers in two succeeding years, percentage changes from the census year can be calculated. Similarly estimates for the production of milk, eggs, and other commedities can be made. The census, therefore, is an integral part of the work of the Bureau of Statistics as well as a source for general information not available in any other way.

The description of the farming enterprises -- number of large and small farms, number keeping cows, horses and pigs and so forth -- is very essential for the conduct of sample surveys to provide the public with up-to-date information in intercensal years. Schools and universities use census data a great deal to teach younger people about Canada and the part played by agriculture in the economy. Industry, too, has need of census information. Many establishments like the dairy and packing industries have been established in Canada to process products from the farm. Other industries, such as farm implement manufacturers and makers of wire, twine, furtilizer, etc., are partly or whelly dependent upon farmors for a market for their products. Trands in production and changes in methods of farming deduced from studies of census material aid those industries in carrying on their businesses in an efficient manner, and also in planning business developments, including sales.



The farmers, too, benefit by having authoritative information about their business. The individual farmer may not find a solution to his particular problems by reading census volumes but the mass of detailed information available to farmers' organizations and to government bodies makes it possible to assess any one of scores of farm problems. Such knowledge about agriculture, coupled with general knowledge learned through experience, is absolutely necessary in formulating such nolicies.

The main categories of questions in the 1951 schedule include the following: (1) for farm operators, their age, birth place and number of years on the farm; (2) the farm holding -- size, value, whether owned, rented or managed; (3) the condition of farm land -- ceres broken, acres devoted to each crop in 1950 and 1951 and production of crops in 1950; (4) the number of each kind of live stock and poultry, the number sold and killed for home use; (5) for those farmers specializing in bookeeping, fruit farming, vegetable gardening, maple syrup production or fur farming, pertinent questions about the size of the business, sales and home use; (6) the number and value of the major items of farm machinery and equipment; (7) the number of hired farm workers and the time spent by the farmer in other work; (3) the value of sales of major items, such as grains, live stock, fruit, etc.; (9) questions asked of every fifth farm concerning major farm expenditures such as taxes, hired labour, food and seed, gaseline and fuel oil, machinery and repairs; also, on a sample basis, questions on milk production, sales and utilization of milk on the farm; and (10) the estimated value of farm commodities consumed by the household on the farm.

The questions about the farm holdings, acroages devoted to crops, fruits, etc. and inventories of live stock are streightforward questions which generally present little difficulty to the farmer in answering. Questions such as value of machinery and value of home-consumed milk, vegstables and mosts require more thought, when possible, market values will be the standard. A copy of the schedule will be mailed to farm operators in advance of the consus date in order that they may complete the forms as fully as possible before the onumerator calls. This is being done to save time for the enumerator and the farmer.

It should be stressed that no information collected in the census can be used for taxation purposes. Indeed the Bursau is forbidden by Statute to disclose any information about a private individual to other government departments or individuals.

## NEW MACHINES AND METHODS IN THE 1951 CENSUS

The administrative aims in any census are threefold: to attain quality in the information with regard to accuracy and completeness; to keep costs as low as possible; and, with full consideration for quality and cost, to issue the results as quickly as possible after the date to which they refer.

The new methods which have been devised for the Canadian Census of 1951 have been directed at all stages towards accomplishing these administrative objectives. Two lines of approach were followed in developing them. On one hand, consideration was given to the mechanical aids which could be utilized; on the other, to the organization which would be best suited to the collection and processing of the material.

On the mechanical side the most spectacular innovation in 1951 will be the application of principles, already established, which enable the census facts about a person to be recorded on a card which can be read directly by a machine. This is the biggest single mechanical development in the 285 years during which censuses have been taken in Canada. It will greatly reduce the cost of what in the past has been a major part of the task of processing densus information - the conversion of the facts recorded by enumerators into a form which can be tabulated. At the same time it will remove some of the possibilities of error in the office part of the job and also speed up the whole process.

In the past, the enumerator who went the rounds of all the households in the area allotted to him wrote down what people told him on large sheets which provided a line for each person. Some enumerators wrote well and some wrote badly. Regardless of the legibility of the entries they had to be read by some eme. In the last four censuss the information was transferred to punch cards by census employees known as key-punch operators and with the varying quality of the material this was a slow task. Before some of the written words could be punched, they had to be reduced to numbers in an operation known as coding.

However it was tackled, this operation was a big job by the time the population of Canada had risen to 10,000,000. Furthermore, without an elaborate checking scheme that doubled the task, errors in serious amount would enter the work during the processing. The difficulty of securing and training clerical staff in sufficient numbers (1500 were needed for the smaller population of 1941) along with the increased demands for speed and accuracy made it evident from the start of planning that the methods used in the past should be thoroughly overhauled and improved wherever possible.

In collaboration with a large manufacturer of business machines, the Bureau has worked out for the coming Gensus a process whereby the information put on a document by the enumerator can be converted to a punch card mechanically. As the first step in this process, the enumerators will enter the perticulars of each person on what the technicians call a mark-sense document. This is a piece of cardboard about the size of a page in an average-sized book printed so as to provide spaces which describe the various characteristics of the people who are the population of Ganada. One consus question, for instance, asks the province or country in which the person was born. The space provided on the document for answers to this question contains a number of ovals - one marked 'Newfoundland', one 'Prince Edward Island', and so on for each of the provinces of Canada, and

one marked 'England', one 'United States of America', etc. The enumerator will make a mark in the appropriate oval with a pen using a specially designed ink which is capable of carrying an electrical current. When passed through it, the card will be 'read' by the machine and in this mechanical reading many of the human errors which can creep in at this stage will be avoided. The machine has a set of brushes or small metal fingers which sweep down the several columns of the document and when they come to an ink mark in a particular column an electrical circuit is closed and the resulting impulse causes a die to punch a hole in a punch card in the corresponding position. The punch card, which has eighty columns, will be punched in about one second for all the entries which have been made by the enumerator in describing a particular person. The card thus punched provides the information on a person in a satisfactory form to be fed through a succession of machines which will finish up by producing the final counts of the Census.

The development of this mechanical procedure has required a considerable amount of inventive activity. It was necessary to invent a machine which could read the mark-sense document, an ink which would conduct electricity, and a pen which would feed the ink.

The bundles of documents completed by the enumerators will be fed through a machine which will make punch cards from them in the manner described, at the rate of about 50 per minute. Once these punch cards are made, they will be checked to see if they are correct, and this also will be done by machine. For the first time in a census a machine is available which compares the various entries made by the enumerator in setting out the various characteristics of a person as represented by the various holes on the punch card. The machine can be set to make many different comparisons at one time and to throw out. for individual examination, cards which show an unlikely combination of characteristics. For example, it will reject cards with an occupation for a person who is under fourteen years of age: it will examine cards to see whether someone with an occupation requiring a great deal of training, such as a doctor, has a predetermined minimum number of years of schooling punched in the space for education. The machine examines cards for many such inconsistencies simultaneously at a rate of 450 per minute. i.e.. 7 each second. Even limiting his examination to a single characteristic, a clerk could not work at one-tenth this speed. In this way a set of punch cards is prepared representing the characteristics of the population, housing and agriculture of Canada and those cards are used in making the counts.

The principal piece of equipment to be used in making the actual count itself, as distinct from the preparatory work of punching cards and editing them, will be the same one as was used in the editing process. Like other punchered equipment, this machine has a set of brushes for 'reading' the card, one to read each of the eighty columns. In this case, too, the cards are 'read' in less than 1/7 of a second. This is about one-quarter the time it takes to say 'Jack Robins-n', but it is sufficient time for the machine to examine the whole card and carry out many counting and sorting operations.

The brushes are small metal fingers which sweep down the several columns of the eard. When they come to a hole they make an electrical contact which initiates the section that the machine has been 'instructed' to carry out. The principal kind of action is moving a counter. For example, the counter adds an additional unit to the count of persons having six years of schooling when a bunch card fulfilling this condition is passed through the machine. At any one

time, the machine can keep track of 60 different and unrelated counts for the cards being examined. After a group of cards has been run through, the machine is 'instructed' to disclose these counts which it has been 'remembering' by printing out the totals in the 60 different counters on a single line of tabulation sheet. This printing operation is done with a typewriter ribbon and type bars and in about 18 seconds all sixty totals are available in printed form.

But counting 60 single facts of this kind is only a small part of what the machine can do with a single reading of the cards. Instead of counting the number of persons with a single characteristic, say speaking English, or having six years of schooling, it may be that the number of persons who fulfil a combination of conditions, say the number who speak French, have five years of schooling and live on a farm, is to be counted. The machine contains a large number of relays (or switchs) which by suitable wiring can be used to bring together the facts which are contained on the card in the form of punches. One switch is made to close for cards punched 'French' under language spoken, and another for cards punched 'five' under years of schooling and yet mother for cards punched 'farm' under residence. It is now easy to connect the current to some counter through all three switches so that only when all three conditions are fulfilled will the card being examined be counted.

While the eards are being 'read', at the rate of 7 every second, and the machine is storing up the counts of the various characteristics, they may be routed into one of 12 pockets corresponding to 12 unrelated characteristics or combinations of characteristics. This will not serve any purpose in the particular count which is being made but will save time for the next count. The reason that sorting is important is because the counts are not made for punch cards representing all the persons in the country but only some specific group. For instance, the 60 counts which the machine is capable of making in a single pass of the cards may be for a particular town, or for all the persons in a particular province who live on farms and are 25 to 34 years of age. The work of tabulation is so arranged that during the first count the electronic statistical machine arranges the cards into the groups that will be required in the second count.

While the use of the mark-sense cards in the field and electronic machines in the processing is the greatest change on the mechanical side, the main difference from the traditional census-taking mothods on the organizational side is the use of six regional centres across Canada for the major part of the office work. No longer, as in the past, will the clerk in Vancouver, for instance, be brought to Ottawa along with the schedules which are to be processed for British Columbia. The whole work will be carried out in promises to be rented for a few months in Vancouver, Winnipsg, Toronto, Montreal, Halifax and St. John's. The original schedules completed by the enumerator will be processed in these centres and the punch cards prepared for later tabulation. A microfilm record of the original documents will be made for future reference and the documents destroyed. Only the punch cards will be sent to Ottawa, where a small staff will tabulate, assemble and publish the results.

Careful study has been given to the organization of the field force, so that it fits closely with the pattern of decentralization. In past censuses, the enumerators were left on their own to a lorge extent and little or no assistance was available to them in the way of technical advice or to meet emergent situations. The quality of the work sometimes fell below the level which should be met.

The training and supervision of the enumerators in 1951 has been planned with quality of results in mind. A group of about 20 master trainers who will become thoroughly familier with all phases of the field work is being assembled. In the month preceding the census date these master trainers will instruct 262 commissioners and 860 field supervisors in training centres from coast to coast. The final stage in the training program will be the instruction of the enumerators by the field supervisors during the week immediately preceding enumeration. Each field supervisor will be responsible for about 20 enumerators and each of these groups will become thoroughly familiar with the instructions, particularly as they relate to individual localities.

During enumeration, the field supervisor will give constant direction and assistance to his group of enumerators. At all times, the trained staff of the regional offices of the Bureau will be available to meet emergencies and straighten out problems. In this way errors can be corrected while the job is in its initial stages and before wrong practices have seriously affected the enumeration.



