CHAPTER IV
COLLECTING THE INFORMATION

On April 1, 1950, Census enumerators began the visits which eventually took them to the 46,000,000 homes in the United States. From each home, they collected the information for the 1950 Censuses of Population, Housing, and Agriculture, or they made appropriate arrangements to obtain what was needed.

The Washington Office of the Bureau maintained close supervision over these visits although enumerators were far removed geographically and administratively. The enumerator was responsible to a Crew Leader who reported to the District Supervisor or Assistant District Supervisor in the District Office. The District Supervisor reported to an Area Supervisor in the Area Office; and the Area Supervisor reported to the Washington Office through the Assistant Chief of the Field Division for Operations. These were the normal administrative channels of communication. They were effective for over-all control, but they did not permit quick solution of problems. Accordingly, the Assistant Chief for Operations established a field inspection staff of six persons to work directly with Area Supervisors and District Offices. This staff could give immediate aid to a District Office that faced an unforeseen and urgent problem.

The Time Schedule

Field operations followed a predetermined time schedule. Under this schedule: (1) all District Supervisors were to be appointed by January 31, 1950; (2) all Crew Leaders were to be selected and trained during the first two weeks of March; (3) all enumerators were to be selected before and trained during the last week of March; (4) enumeration was to begin on April 1; (5) the bulk of the enumeration was to be completed before the end of May; and (6) all District Offices were to complete their work on the 1950 Censuses by June 30.

In a few districts, this schedule had to be modified because of bad weather, floods, recruitment problems, short working hours, and unsatisfactory enumeration. Late winter storms in North Dakota and South Dakota blocked all rural enumeration in those States for about six weeks; while floods along the Mississippi River and other waterways delayed enumeration in the flooded areas. Some offices failed to recruit their quota of enumerators, so that only 136,000 of the 144,000 enumerators authorized for the operation were ready to enumerate on April 1. Then, later examination of reports revealed that some enumerators spent only about six hours a day at work instead of the eight hours required. Finally, some enumerators failed to do satisfactory work and had to re-canvass their districts. Despite these hindrances, only eight of the 476 District Offices failed to complete their work on the 1950 Censuses by June 30.

The Enumerator's Job

The enumerator's job was outlined in the Enumerator's Reference Manual. This manual served as the basis for his training and as a guide to the solution of problems he encountered in the field.

A method of canvass was prescribed to assure complete coverage. Where an urban area was divided into blocks, the enumerator was to canvass one block at a time, beginning at a corner and proceeding clockwise around the block until he reached his starting point. He was to number the blocks (if they were not already numbered), and he was to put a mark (✓) on the map in each block after he canvassed it.

If his district was in a rural area or in a town or village without blocks, he was to canvass the population street by street and road by road. He was to indicate on his map with a light line the areas he had completed; and he was to enter on the map the serial numbers of the dwelling units he had enumerated. The Crew Leader could thus detect an area that had not been canvassed.

When the enumerator completed his training, he received the portfolio for the enumeration district to which he was assigned. This contained all the forms and supplies which he would need and a map of the area he was to canvass.

Population

The interview in each household started with the Population and Housing (P1) Schedule. On that schedule, the enumerator listed the names of all persons in the household who usually lived there. He also listed the names of persons who were living there and who did not have a usual place of residence elsewhere. If he was in doubt about the usual place of residence of someone, he referred to the chart at the back of the Enumerator's Reference Manual, which summarized the instructions on persons he should enumerate (see Figure).

In some cases, the enumerator also got population information for nonresidents (persons temporarily living in the enumeration district but having a usual place of residence elsewhere); but he
visit. If an Agriculture Questionnaire was filled, its number was entered to facilitate cross-reference information on name, age, sex, race, marital status, relationship to household head, place of birth, and citizenship was obtained for all persons; but questions on labor force were asked only for persons 14 years of age and over. For one person out of five, additional questions were asked; some of these did not apply to children under 14. Finally, for one person out of thirty, a few more questions were asked. (See Chapter I for a description of the population samples.)

If a person did not wish to tell the enumerator the amount of his income, the enumerator left a form, Confidential Report on Income (P6), for him to complete. This report was to be mailed to the Washington Office of the Bureau. Eventually, the income information for that person was entered on the Population and Housing Schedule which carried the other information about him.

When the enumerator listed an infant born in January, February, or March 1940, he was required to fill an Infant Card (P3). He could copy most of the information for this card from the Population and Housing Schedule, but he had to get some additional information, such as the name of the hospital, type of attendant, and maiden name of mother. With this information, the Infant Cards could be checked against the birth records, and the completeness of the census enumeration of infants and of the birth registration.

Housing

After the enumerator completed the population items, he turned the schedule over and filled the housing items for the dwelling unit. In general, a dwelling unit was defined as a group of rooms, or a single room, occupied or intended for occupancy as a separate living quarters by a family or other group of persons living together or by a person living alone. More precisely, such quarters constituted a dwelling unit if they had (a) separate cooking equipment, or (b) two or more rooms and separate entrance.

Some persons live in places which are not dwelling units, such as military barracks; and some live in places which have some dwelling units and some not forming units such as a mental hospital or, where the doctors live in a dwelling unit, but the patients do not. A summary table, "How to Enumerate Special Types of Living Quarters" in the Enumerators Reference Manual outlined the instructions for getting the housing information in these places (see Fig. 7).

The enumerator filled 16 housing items for each dwelling unit; he filled another one for all vacant dwelling units, two more for nonfarm vacant dwelling units, three more for nonfarm dwelling units occupied by the owner, and four more for nonfarm dwelling units occupied by the renter. Only three items were filled for nondwelling-unit quarters.

Agriculture

Before enumeration started, the Bureau sent Agriculture Questionnaires (A1) to mail boxholders in areas which did not have city-type mail delivery, except in North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana, and 65 of the 75 counties in Arkansas. Since an accompanying letter, which explained the conditions under which a questionnaire was required, if one was required, it asked the farm operator to examine the questionnaire and answer as many questions as possible before the enumerator called. The procedure gave the farmer time to check his records and to get information not readily available.

When the enumerator called, he determined whether an Agriculture Questionnaire was required. One was to be filled for:

- Every place locally considered a farm
- Every place of three or more acres, whether or not it was considered a farm
- Specialized operations on which (1) Every greenhouse or nursery (2) Every place on which there were 100 or more poultry or on which 300 or more dozen eggs were produced in 1949
- Every place having three or more hives of bees

If an urban enumerator, who was not trained for agricultural enumeration, found one of these places in his district, he filled a Special Agriculture Questionnaire (A2). This was a short form which gave enough information about the farm production to indicate whether an entire Agriculture Questionnaire (A1) was needed. If it was, an enumerator trained in agricultural enumeration later returned to the place to get the necessary information.

If a rural enumerator found a place requiring an Agriculture Questionnaire, he determined who was in charge of the place and, if it was a self-enumeration territory, whether it explained the conditions under which a questionnaire was required; if one was required, he asked the farm operator to examine the questionnaire and answer as many questions as possible before the enumerator called. This procedure gave the farmer time to check his records and to get information not readily available. Moreover, he often could get better information from the landlord than from the tenants, especially if the tenant was a new operator on that farm.
Irrigation

The Census of Irrigation was conducted in 20 States: Arizona, California, Colorado, Idaho, Kansas, Mississippi, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, Arkansas, Louisiana, and Florida. Irrigated land, for the purpose of the Census, was land to which water was applied for agricultural purposes by means other than rainfall. The states in which the work was done were identified at the time of the Census and the data were analyzed by state. The data were then compiled and published in a report issued by the Census Bureau in 1949. The report was titled "Irrigation Census, 1949." It provided detailed information on the amount of irrigated land in each state and the methods used for irrigation. The report also included information on the economic and social impact of irrigation on the states. The data were used to improve irrigation practices and to develop policies to promote sustainable irrigation practices.

Drainage

Special enumerators collected the data for the 1950 Census of Drainage. The Census was designed to measure the amount of drainage equipment and the amount of drainage work performed in each state. The data were collected from a sample of Drainage Districts in each state and were reported in a report titled "Drainage Census, 1950." The data were used to improve drainage practices and to develop policies to promote sustainable drainage practices.

Figure 7. - How to Enumerate Special Types of Living Quarters

<table>
<thead>
<tr>
<th>Type of Accommodation</th>
<th>Method of Enumeration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dormitory, sorority house, fraternity house, residential club, campus room, sorority house, &quot;tophouse&quot;</td>
<td>Enumerate as a separate dwelling unit in a college housing unit.</td>
</tr>
<tr>
<td>Hospital, general hospital</td>
<td>Enumerate as a separate dwelling unit in a college or university.</td>
</tr>
<tr>
<td>Building containing only family quarters</td>
<td>Enumerate as a separate dwelling unit in a college or university.</td>
</tr>
<tr>
<td>Building(s) containing living quarters for nonfarm members, such as jail inmates or prisoners</td>
<td>Enumerate as a separate dwelling unit in a college or university.</td>
</tr>
<tr>
<td>Housing unit in a college or university</td>
<td>Enumerate as a separate dwelling unit in a college or university.</td>
</tr>
<tr>
<td>Military installation: barracks, officer quarters, reservations, lepers' hospital</td>
<td>Enumerate as a separate dwelling unit in a college or university.</td>
</tr>
</tbody>
</table>

Separate structure for apartment use

- Hotel, lodge, motel, motor court, tourist court
- Before you must enumerate in a hotel, motel, or motor court, etc., determine whether the majority (more than one-half) of the rooms, suites, or other accommodations are "permanent" or "transient." Permanent accommodations are those that are occupied for a period of time, such as apartments, that are rented for a period of time, such as apartments, that are rented for a period of time. TRANSIENT accommodations are those that are occupied for a period of time, such as apartments, that are rented for a period of time. TRANSIENT accommodations are those that are occupied for a period of time, such as apartments, that are rented for a period of time. TRANSIENT accommodations are those that are occupied for a period of time, such as apartments, that are rented for a period of time. TRANSIENT accommodations are those that are occupied for a period of time, such as apartments, that are rented for a period of time. TRANSIENT accommodations are those that are occupied for a period of time, such as apartments, that are rented for a period of time. TRANSIENT accommodations are those that are occupied for a period of time, such as apartments, that are rented for a period of time.
- Do not make any entries on the Population and Housing Schedule. Persons will be enumerated on ICRs by special assignment.
- Enumerate as a separate dwelling unit in a college or university.
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The D-2 questionnaire was used in 30 drainage-district States. It was filled for every drainage enterprise of 500 acres or more, which was (a) organized as one drainage district, or (b) assessed for the same public drain, or (c) drained by works operated as one undertaking under private or corporate ownership. Drainage supervisors trained special enumerators and supervised the drainage enumeration in these States. The enumerators obtained information from a variety of sources, such as officials of drainage enterprises, county engineers, drainage companies, and county records; and they plotted the drained areas on maps. They used lists of projects compiled from the 1940 Census, but these lists had not been brought up to date so the enumerators used them only as guides to locate the large drainage projects.

Reports and Field Controls

Because of the magnitude and timing of the enumeration, those directing the operation had to be informed quickly on the progress of the work. Some 2-1/4 million homes were visited every day at an approximate cost of $1,000,000; so it was necessary to spot trouble quickly and to expedite the work if it failed to proceed at the planned rate. The usual methods of reporting were too slow to permit swift corrective action. For example, a lag of only three days during which enumeration was delayed or improperly carried out might mean a considerable unnecessary cost. Consequently, reporting techniques were highly streamlined during the period of greatest field activity.

General Program

A staffing and cost pattern was given to each District Supervisor before the work started. This pattern indicated how many employees he should have on specified dates and how much he might spend for travel and overtime. Every Friday, the District Supervisor reported to the Area and Washington Offices the number of workers employed, amount of payrolls prepared, travel expense incurred, and other office operations. The Area Office checked these reports against allotments and authorizations and took action necessary to bring office operations into line.

Costs were carefully watched in both the Area and Washington Offices. The Area Supervisor adjusted deficits and surpluses within the Area, and the Washington Office withdrew or allotted funds to the Area Offices as needed. The Bureau made arrangements with the Treasury Department to receive daily telegraphic reports on expenditures for Census accounts from the Treasury's 14 regional disbursing offices so it would be quickly and fully informed on the status of its operations. The Bureau was thus able to make emergency allotments when they were needed to keep the work flowing smoothly; but it was also able to keep expenditures within the limits set by the budget.

Enumerators activities, which indicated the progress of the enumeration, were the subject of several reports. The District Offices were required to send telegrams to the Area and Washington Offices on March 24, March 30, and April 1, giving, respectively, the number of enumerators selected, the number beginning training, and the number completing training. Enumerators reported to Crew Leaders daily by post card on the number of persons, farms, and dwelling units they had enumerated. Crew Leaders summarized these reports and telephoned the results to the District Office twice a week. The District Offices reported the totals by telegram to the Area and Washington Offices. Those offices systematically reviewed the progress of the enumeration and took action if any District Offices appeared to be behind schedule. (See Fig. 8.)

Time-Records Program in 40 District Offices

A special time-records program was set up to provide detailed information needed for improving procedures in subsequent large-scale surveys. This program was conducted in 40 District

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**Figure 8. -- Field Reports and Control System**

<table>
<thead>
<tr>
<th>ENUMERATOR</th>
<th>CRAW LEADER</th>
<th>DISTRICT OFFICE</th>
<th>AREA OFFICE</th>
<th>WASHINGTON OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepares Totals on Enumeration Progress Daily, and Sends Post Card Report Form 17 Pd-9 or Form 47 Fld-14</td>
<td>1. Sets up Analysis Sheet Form 17 Fd-9 to Keep Record of Use of Man Hours Against Authorizations and Progress to Date</td>
<td>1. Sets up Paperwork to Record Authorizations and Use of These Authorizations by District Office</td>
<td>1. Sets District Office Authorization of Personnel, Man Hours, and Travel Within Total Field Routes Budget</td>
<td></td>
</tr>
<tr>
<td>2. Summarizes Post Card Reports Twice Weekly on Form 17 Fld-10</td>
<td>2. Preparations Supervisor Signs The Form 17 Fld-01 and Promotes to District Supervisor</td>
<td>2. Area Supervisor Signs The Form 17 Fld-01 and Promotes to District Supervisor</td>
<td>2. Preparations Supervisor Signs The Form 17 Fld-01 and Promotes to District Supervisor</td>
<td></td>
</tr>
<tr>
<td>4. Telephone to District The Number of Enumerators Authorized During Training (March 30) and the Number Completed Training (April 1)</td>
<td>4. Reports on Post Card (Shows 31 of One-time Administrative Functions Completed)</td>
<td>4. Checks for Completion of Administrative Functions of Schedule</td>
<td>4. Checks for Completion of Administrative Functions of Schedule</td>
<td></td>
</tr>
<tr>
<td>5. Sends One-time Telegrams on Selection and Training of Enumerators (Max. 34-Number Selected Max. 33-Number Recommended Training Appr. 1-Number Completed Training)</td>
<td>5. Sends One-time Telegrams on Selection and Training of Enumerators (Max. 34-Number Selected Max. 33-Number Recommended Training Appr. 1-Number Completed Training)</td>
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<td></td>
</tr>
</tbody>
</table>
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Offices to see how much time enumerators, Crew Leaders, and District Office clerical personnel spent on each phase of the Census operations. Detailed field costs were determined by analysing such factors as travel time, enumeration time, frequency and reasons for calling, and telephone time. These data were also used to analyze the price—piece rates paid to enumerators and to evaluate the procedures for editing completed enumeration forms and allocating clerical cost to any corner of the enumeration district and obtained: (1) the name of the head of the household; (2) the complete address; (3) information on whether the house was on a farm; and (4) information on whether the house was on a place of 3 or more acres. The Crew Leader kept these forms, and when the enumerator completed the enumeration district, he checked his list of 10 addresses against the completed schedules to see if the households had been enumerated. The Crew Leader then checked a number of the enumerator's work to be sure that the enumerator was doing his job properly; and he maintained a record of these activities on the Crew Leader's Record of Enumeration Review.

Apartment House Lists

In large cities (those that had a population of 100,000 or more in 1940), the District Office prepared lists of all apartment houses. In the larger cities, the list of apartment houses was supplemented by a list of apartment buildings that were tenants' houses. This information was inserted in the enumerator's portfolio so he could canvass the apartment house quickly and completely.

Large Farm Lists

Large farms may account for a sizable proportion of the farm production in a given area. Moreover, all large farms were to be included in the Agriculture Questionnaire so the number of the Agriculture Questionnaire had to be filled for them. Accordingly, the Bureau took special precautions to see that the large farms were properly enumerated.

A list of large farms for each district was prepared from the 1945 Census of Agriculture. With the assistance of the field staff of the Bureau of Agricultural Economics of the U. S. Department of Agriculture, the Bureau brought the lists up to date. These lists gave the name of the farm operator and the location of the farm.

The lists were sent to the District Offices, and the Crew Leaders were charged with the responsibility for seeing that the Agriculture Questionnaire was properly filled for each large farm during enumeration. As he reviewed the questionnaires, the Crew Leader entered on the list the number of the agricultural farm obtained for the farm and the number of the enumeration district in which it was taken. If a questionnaire was not obtained for a large farm on the list, the reason was to be indicated. For example, a large farm might have been sold to the owner of another large farm who reported the entire operation on one questionnaire.

Consecutive Numbering of Dwelling Units

As the enumerator canvassed an area, he gave a number to each dwelling unit and entered that number on a line on the Population and Housing Schedule. If no one was at home to give him information, he would write in "No one at home" and enter "... lines ..." He was to return later and get the necessary information. When he got that information, he was to indicate the sheet number and the lines on which he enumerated the household on the Population and Housing Schedule. When the Crew Leader reviewed the completed portfolio, he looked for entries of "No one at home" without sheet and line numbers. Such omissions indicated that the enumerator probably had not enumerated the household.

Callback Record

The enumerator used the Callback Record Form to record notations about an enumeration that was incomplete and therefore required a return visit. The enumerator noted there a place which he had to revisit because some one was at home at the time of the first visit, because the respondent was too busy to give him any information at his first visit, because the respondent could give only part of the information, or because he had left
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an individual Census Report for some member of the household, such as a lodger, to complete.

The Callback Record helped the enumerator to plan each day's itinerary so that he would backtrack and to ensure the time needed to check schedules and questionnaires for missing data. It also helped to insure complete coverage by reminding the enumerator that his information was incomplete. The Crew Leader was instructed to review this Callback Record when a district was completed to be sure all callbacks were made.

Dwelling Unit Control Lists

The Bureau prepared Dwelling Unit Control Lists for most cities with 50,000 or more inhabitants and sent them to the District Offices. These lists showed the number of dwelling units in each block. When an enumeration district in one of these cities was completed, the Population and Housing Schedules were checked to be sure that all dwelling units were listed. If more dwelling units were shown on the list than were enumerated on the Population and Housing Schedules, the block was rechecked.

Missed Persons Form

A Missed Persons Form was released locally when the enumeration of an area was nearly complete. This form was printed in newspapers and on post cards. Local radio announcers were asked to mention it.

The form pointed out that the enumeration was nearing completion and requested all persons who believed they had not been counted to fill the form and mail it to the District Office. At the District Office, the form was checked to see if the person should have been enumerated. If he had been missed, a special enumerator called on him to get the necessary information. This enumerator also checked to see whether other persons in the household and in the neighborhood were missed.

Local Announcements

The District Office made a count of population, dwelling units, and farms as soon as enumeration was completed. This count was made for cities with 10,000 or more inhabitants (or for smaller places if required) and for counties if required. The figures were telegraphed to Washington and issued a preliminary local announcement. These announcements made Census data available quickly and gave the community an opportunity to question the accuracy of the figures before they were final.

Some communities made special efforts to locate missed persons after the local announcements were made so that their population count would be raised. The District Office enumerated all missed persons who were reported, and it rechecked the figures for areas which appeared to be underenumerated. In addition to finding some areas that had not been enumerated, this operation uncovered some hitherto unreported amendments to cities.

The preliminary announcements also gave the Washington Office a chance to look at the figures and to have them checked while the schedules and questionnaires were still in the field. This Office compared the figures with current estimates and questioned those that appeared to be out of line. Instructions were then sent to the field to check the figures and explain the discrepancies. Field checks of the farm count were made in about 130 counties.

A number of counties and cities expressed dissatisfaction with the Census count after the schedules had left the District Offices. The Bureau asked for the names of persons missed, and 136 communities submitted lists. About 40 percent of the persons listed were immediately found to have been enumerated. Frequently, a neighbor had given information when the enumerator had not. One city in several calls.

The Bureau mailed Individual Census Reports to those not enumerated and asked them to complete them; or, if 20 or more persons had been missed in one enumeration district, the Bureau asked the Area Office to check the addresses for the entire district against the entries on the Population and Housing Schedule in addition to interviewing the missed persons. Completed Individual Census Reports were thus obtained, which made possible a more careful check of the Census figures. In some cases the District Office had found, his record was added to the Census count (see page 27).

Lists of missed persons sent to the Bureau after the final Census count had been made, sometimes indicated additional names that had been missed. Although such persons could not be included in the Census count, information for those missed was added to the Census records so that the Census information on individuals would be as complete as possible.

Other Field Enumerations

Immediately after the regular enumeration for the 1950 Censuses, three supplementary surveys were conducted in selected areas: the Post-Enumeration Survey, the Survey of Residential Financing, and the Local Housing Authority Survey. These surveys utilized the staff of experienced enumerators and other field personnel who were still in the field offices.

Post-Enumeration Survey

The Post-Enumeration Survey was a sample re-enumeration of the 1950 Censuses. It made a coverage check (to determine how completely the people, dwelling units and farms had been covered in the enumeration) and a content check (to see how accurately the population, housing and farm characteristics had been described).

The Survey was administered from the Area Offices. Technical observers from Washington were assigned to various areas to assist in instruction, supervision, and handling technical problems. Supervisors and technical observers were given a 2-week training in turn; and took 1-week course for interviewers. About 250 of the better interviewers who had worked on the regular enumeration were employed. Some had been trained for urban interviewing and some for rural interviewing.

Survey of Residential Financing

The Survey of Residential Financing was part of the 1950 Census of Housing. It was designed to get more detailed information on the financing of residential properties than could be obtained during the regular enumeration. The sample covered properties in selected enumeration districts in about 700 counties. It was selected from the dwelling units for the household head (or a vacant dwelling unit) was listed on a sample line on the population side of the Population and Housing Schedule. The vacant properties were treated as rental properties.

The Survey involved the following broad field operations:

1. Selecting the sample from the Population and Housing Schedule;
2. Transcribing data for selected units from the Population and Housing Schedule to control cards. Comparing properties on these cards with those on the list of large properties compiled in Washington and eliminating duplications;
3. Obtaining from occupants of rental properties the names of owners or rental agents;
4. Mailing schedules to the owners of properties and also to the mortgage holders;
5. Enumerating a subsample of owners and lenders who failed to fill schedules.

The first three operations were performed in the District Offices during the regular enumeration. The last two operations were done after that enumeration had been completed.

Local Housing Authority Survey

Local housing authorities needed population and housing data relating to rental units which were "substandard" according to the Public Housing Administration's definition; and they asked the Bureau to provide advance tabulations for those units. The housing authorities in 22 cities provided funds, and the Bureau transcribed data for a sample of units in those cities from the Population and Housing Schedules. This work was done in the District Offices.

Income information had been obtained only for one person in five; so it was not available for the occupants of each unit in the sample. When income data were not available for a sufficient number of families to yield the desired sampling reliability, additional interviews were conducted to obtain this information.

Advance transcription and tabulation of the housing data put this information to use much earlier than would otherwise have been possible.