

PART II. THE ITEMS ON THE QUESTIONNAIRES

Introduction

In Part I, the process of taking the 1950 Censuses of Population, Housing, and Agriculture was described with primary emphasis on the general procedures and the administration. In Part II, the census operations are re-examined in terms of subject matter. In the three chapters which follow, the various items on the questionnaires are scrutinized to see how the information was collected and prepared for general use.

The major emphasis in this section is the manner in which the various items on the questionnaires moved down the assembly line of collecting, screening, editing, coding, punching, tabulating, and publishing. Like any assembly line operation, these activities had to be kept under control to insure measurable accuracy of the final product. The coordination of the entire process so as to maintain smooth operation and balance in the assembly line was, in itself, a major problem. The establishment of tolerances in terms of ultimate use of data was also an important problem. Specialized technicians prepared instructions for the various operations, and the processing groups turned to these subject-matter specialists for guidance when problems arose.

On the whole, the bulk of the information was accepted as reported. In a relatively small number of instances, however, there were obvious faults, such as omissions, inconsistencies,

and incorrect entries. Enumerators were carefully selected and trained, but the job was of such short duration that few of them worked long enough on this program to achieve excellence. Moreover, the pace of the job and the type of supervision did not permit careful consideration of all problems. Consequently, some errors were expected.

It was therefore both necessary and efficient to eliminate noticeable errors from the results of the enumeration before the raw materials were introduced into the assembly line. If major errors had been permitted to remain unchanged, the results would have been difficult to analyze. The general procedure for finding and remedying errors was described in Chapter VI of Part I. More specific procedures are described in Part II.

The rules for correcting the faults are somewhat lengthy. By comparison, the rules for the general processing are brief. An inverse relationship usually exists between the length of the rules and the amount of material processed under them. By far, the greater amount of the census information was in good order and was processed under short, simple rules; the relatively small amount of defective material was handled under longer, more complex procedures.

CHAPTER VIII

POPULATION

In the first Census of Population, taken in 1790, about 4 million people were enumerated. In the 1950 Census, more than 150 million people were counted; and information was obtained on age, race, sex, nativity, marital status, geographic mobility, education, income, and occupation. Most of this information was entered on the Population and Housing (P1) Schedule, but some data were collected on supplementary forms (see Appendix A).

Identification Items

Heading Items

The heading of the Population and Housing (P1) Schedule carried items to identify the area enumerated on the sheet, the enumerator, the date of enumeration, and the number of the sheet. If the Crew Leader reviewed the sheet, he signed his name and the date. Special types of living quarters enumerated on the sheet were also described in the heading.

The geographic location of the area enumerated on the sheet was obtained by entering the names of the State (item a), the county (item b), the incorporated place or township (item c), and the number of the enumeration district (item d).¹ If the place was an independent city not in a county, the enumerator wrote the name of the city in item b (the county item) with "city" after it. If a township and an incorporated place had the same name, the enumerator indicated the appropriate term (city or township) after the name in item c.

In Washington, the screener checked the area identification by comparing the enumeration district number on the first sheet in the portfolio with that on the Portfolio Control Label. If they did not agree, the portfolio was rejected at that stage and held for further examination. If they did agree, other sheets were examined to see if they belonged there. When the portfolio reached the coder, he, too, checked the enumeration district numbers.

The description of special types of living quarters in item e was needed to code the information for persons living in those places. The enumerator was instructed to give the full name of

the place and the type (hotel, State prison, etc.). If it was an institution, he indicated in item e the kind of persons cared for and the kind of agency in charge (for example, private home for the aged). Finally he identified the schedule lines used to enumerate persons at that place. When a screener found an entry of this kind, he pasted a "Quasi Household" sticker in the lower right hand corner of the Portfolio Control Label.

The Population and Housing Schedules were numbered serially throughout an enumeration district beginning with "1". Sheets for persons enumerated out of order were numbered beginning with "71." In the screening operation, the numbers of the sheets were checked to be sure that they followed this pattern. If they did not, the portfolio was set aside for further examination. At this time, also, sheets which had been copied were eliminated.

Numbering regular-order sheets from "1" to "70" and out-of-order sheets from "71" on, worked well in the small enumeration districts; but if the district was large, the enumerator needed more than 70 regular-order sheets. Since the enumerator's instructions did not indicate what number to use after "70", the field offices devised various methods for numbering these additional sheets. Any system of numbering was acceptable if it did not involve duplication or 3 digits. For example, some offices used "1"- "70" and "86"- "99" for regular-order sheets and "71"- "85" for out-of-order sheets.

The signatures of the enumerator and Crew Leader and the dates (items f, g, and h) were used only for administrative purposes. They were not transferred to the punch card.

Household Identification

Households enumerated in the census were identified by the street and house number or road and description of house (items 1 and 2) and by a serial number (item 3). This information, which was the same for every person in the household, was entered only on the line for the head. Hotels, institutions, and other special types of living quarters were similarly identified, but additional information regarding them was entered in heading item e.

¹See page 12 for a description of the enumeration district.

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The name of the street or road was likely to be the same for several households. Consequently, it was written vertically in the column and when the enumerator came to a new street, he put a horizontal line across the column to indicate the change. The house number (or, in a rural area, the description of the place) gave the location of the individual dwelling unit.

Accurate entries for house number and street were essential for checking coverage and for specific identification. During the processing operations, however, they were used only for secondary purposes, such as determining whether or not a person lived in a separate household. The data were not transferred to the punch card.

The serial number, on the other hand, was carried through the processing operations. It identified the household and permitted matching the population and housing information. The enumerator assigned a serial number to each household and quasi household in the enumeration district. He entered it on the line for the household head on the population side of the schedule and on the housing line for that household on the housing side of the schedule. Numbers were given to units which were "Vacant", or "Occupied by nonresidents", and to units with an entry of "No one at home." On the "No one at home" line, a reference indicated the number of the out-of-order sheet with the population and housing information for that household.

In the screening process, portfolios were rejected for: (a) blanks or omissions in serial numbers, (b) duplicate numbers, (c) illegible or confused numbers, and (d) numbers with 4 digits. Procedures were established for correcting each type of error.

(a) Blanks or omissions.--If the entries on the population side of the schedule indicated that the enumerator had listed a new household but failed to assign a serial number, the numbers on the housing side were examined. (The household could usually be identified on the housing side by checking the number of persons in housing item 8 against the number listed on the population side.) If the serial number was entered correctly on the housing side, that number was used on the population side. If a number was not entered on the housing side, a number from the 900 series (901, 902, etc.) was assigned.

(b) Duplicate numbers.--If the same serial number was assigned to two different dwelling units, one was changed on both the population and housing sides to a number in the 900 series. In the assignment of new serial numbers, special precautions were taken to avoid duplication.

(c) Illegible or confused numbers.--Serial numbers were sometimes so badly jumbled that they had to be corrected for households on one or more schedules. In such cases, gummed strips of paper for new entries were pasted over item 3 on the population side and over item 1 on the housing side. Serial numbers were then assigned in an orderly manner, following the rules for blanks if the original entries could not be deciphered.

(d) Four-digit numbers.--A four-digit number was sometimes merely an error of adding a digit to a correct number. The numbers on adjacent households would make this evident. But if the error was not clear and if many four-digit numbers were used, the subject-matter specialist reviewed carefully the numbers for the entire enumeration district and assigned unused 3-digit numbers to the households.

Two questions were asked to locate farms and to determine whether an Agriculture Questionnaire was required (items 4 and 5). The number of the Agriculture Questionnaire, which was taken for the Census of Agriculture, was entered in item 6. This information also was entered only on the line for the head of the household.

The farm population of the country was determined from the answers to item 4, "Is this house on a farm (or ranch)?" In rural areas, the enumerator asked the question and entered the respondent's answer unless the occupant paid cash rent for the house and yard only, or the place was an institution, summer camp, or tourist cabin. In those cases, he entered, "No."

If the enumerator left item 4 blank in a rural area, coders gave persons in the household a "Yes" code if an Agriculture Questionnaire number was entered in item 6, if households on both sides were on farms, or if any household member was a "farmer," "rancher" or "sharecropper." The decoder deleted a "Yes" entry in item 4 for institutions.

Institutions

Before the 1950 Censuses were taken, several government and private agencies pointed to the need for more adequate statistics on people living in institutions. A primary objective was to obtain a better classification by type of institution. Accordingly, plans were made to identify this segment of the population (about 1 percent of the total) more carefully.

Places of the following types were classified as institutions: (a) correctional and penal institutions (Federal and State prisons,

jails, public and private schools for juvenile delinquents, and detention homes); (b) mental institutions (Federal, State, local government, and private mental hospitals; public and private homes and schools for mentally handicapped); (c) homes for the aged and needy (Federal, State, local government, and nonprofit private homes for the aged and needy; commercial homes for the aged; public and private homes for neglected and dependent children; maternity homes for unmarried mothers); (d) homes and hospitals for the chronically ill or handicapped (Federal, State, local government, and private tuberculosis hospitals; chronic hospitals; public and private homes and schools for physically handicapped; nursing, convalescent and rest homes).

Places of the following types were classified as special types of living quarters but not as institutions: general hospitals, nurses' homes, convents and monasteries, military installations, crew quarters on inland vessels, dormitories for students or workers, large lodging houses, residential clubs, hotels, missions, and flophouses. (Persons enumerated in such places were counted as members of quasi households, as were also inmates of institutions.)

If a general hospital had one or more wards for persons ordinarily in institutions (such as a ward for tubercular or mental cases), patients in those wards were treated as inmates of institutions.

A list of institutions was prepared from published sources and from information obtained from such organizations as State Public Welfare Departments, State Public Health Departments, and community chests. Although the list was incomplete, it proved very helpful in processing the data.

Many of the larger institutions were set up as separate enumeration districts. Arrangements for enumeration were made in advance with the institution officials. In some cases, enumerators interviewed inmates; but in other cases, they took the information from institution records or from Individual Census Reports filled by the inmates or their attendants.

Most of the schedule entries were made according to the general rules for enumeration. Some items, however, required special treatment. These were: heading item e for special types of living quarters, the relationship item, and the labor force items.

For every institution, the enumerator filled heading item e. This gave the name of the institution, the type (kind of persons cared for and agency operating), and the sheet lines used for enumeration.

One serial number was assigned to all inmates of a single institution. If staff members lived in the institution but did not live in dwelling units, they were given the same serial number as the inmates. If they lived in dwelling units, they were assigned separate serial numbers.

The relationship entries in item 8 were adapted to the type of institution--"prisoner" for a jail, "patient" for a hospital, etc. "Inmate" was entered only if no more descriptive term was available.

Information on work status of inmates was not needed; so "Inmate" was written in item 15 and the remaining labor force items were left blank. For staff members of the institution, however, the labor force items were filled.

Correct classification of the institution into its proper type was a major problem; and the coder was relied on to correct the enumerator's errors and to identify the institution. Screeners did not give institutions special attention except to paste a "Quasi Household" sticker on the portfolio.

Instructions to coders suggested ways of identifying various types of institutions. The heading item was not relied on entirely, but was examined in connection with entries for age, relationship, and occupation. In addition, the coder consulted the list of known institutions.

The institution code was substituted for the serial number of the dwelling unit in the coding process. The relationship code for inmates (V) differentiated them from staff members living in the institution.

The special tabulations on the institutional population revealed that some types of institutions had relatively small numbers of inmates. Those types were combined with others. Combinations were also made when the classifications appeared to be unreliable. For example, commercial boarding homes for the aged were not clearly distinguishable from nursing and convalescent homes; accordingly, the two groups were combined.

The following codes were used to identify different types of institutions:

Institutions for Juveniles

	<u>Code</u>
Schools for juvenile delinquents--Public.....	V11
Schools for juvenile delinquents--Private.....	V12

Detention homes.....	V13
Homes for neglected and dependent children--Public.....	V14
Homes for neglected and dependent children--Private.....	V15

Homes and Schools for the Handicapped

Homes and schools for mentally handicapped--Public.....	V21
Homes and schools for mentally handicapped--Private.....	V22
Homes and schools for physically handicapped--Public....	V23
Homes and schools for physically handicapped--Private...	V24

Institutions for Specialized Medical Care

Mental hospitals--Federal.....	V31
Mental hospitals--State and local.....	V32
Mental hospitals--Private.....	V33
Tuberculosis hospitals--Federal.....	V34
Tuberculosis hospitals--State and local.....	V35
Tuberculosis hospitals--Private.....	V36
Chronic hospitals.....	V37
Nursing and convalescent homes.....	V38
Maternity homes for unmarried mothers.....	V39

Homes for the Aged

Homes for the aged--Federal and State.....	V41
Homes for the aged--Local government homes.....	V42
Homes for the aged--Private, nonprofit.....	V43
Homes for the aged--Private, commercial.....	V44

Correctional Institutions

Federal prisons.....	Code V51
State prisons.....	V52
Jails.....	V53

Relationship and Family Status

Relationship

The relationship of each person to the head of the household in which he lived was described in item 8 on the population side of the schedule. "Head", "wife", "son", and "lodger" were usual entries. From this item, data were obtained not only on the household relationship of persons but also on their family status. This item also provided a count of households and of quasi households.² In addition, it was used in establishing family groups for the statistics on fertility and families.

In each household or quasi household, the enumerator was instructed to list one person as head and to assign one serial number. Since a new serial number and an entry of "head" both marked a new household, the two items were checked against each other.

If an entry of "head" was not accompanied by a new serial number, other entries on the sheet (age, sex, relationship and names of other persons in the household, house number, and housing data) were examined to see if this was a new household. If it was not, the most reasonable relationship for the person erroneously designated as "head" was determined and entered. If it was not a new household, a new serial number was assigned.

If a serial number was not accompanied by an entry of "head", the same method was used to determine whether this was a new household. If it was, "head" was assigned to the proper person in the household. If it was not, the serial number was canceled.

Irregularities in serial numbers, particularly duplications, were regarded as a possible indication of errors in identifying households. Accordingly, sheets on which serial numbers were not entered systematically were checked with special care.

A violation of the prescribed sequence for relationship entries--head, wife, child, other relative, and nonrelative--often accompanied errors in the entries themselves. Consequently, this sequence was inspected. If the entries were in the proper order, they were assumed to be correct. If they were not, the names and the age, sex, and marital status entries were examined to determine the correct relationships.

In the extremely small number of cases where the enumerator listed as head a woman whose husband was a member of the household or quasi household, the woman's relationship was changed to "wife", and the husband was classified as "head." At the same time, the serial number was entered on the line for the head.

² A household occupies a dwelling unit. A quasi household (an institution or other type) occupies nondwelling-unit quarters (special types of living quarters).

Quasi households had to be identified in coding relationship because the codes for persons living in such quarters were different from those in regular households.

Each of the following had a different relationship code:

<u>Relationship to household head</u>	<u>Code</u>
a. Head of household.....	1
b. Other member of household	
(1) Wife.....	2
(2) Child.....	3
(3) Son- or daughter-in-law.....	4
(4) Grandchild.....	5
(5) Parent.....	6
(6) Other relative.....	7
(7) Resident employee (or member of resident employee's family).....	8
(8) Other nonrelative of household head and members of his family (lodger, etc.).....	9
c. Head of quasi household.....	X
d. Other member of quasi household, except inmate ...	O
e. Inmate of institution.....	Y

Identification of institutions (discussed above) was only part of the problem of identifying quasi households. Such living quarters as hotels, dormitories, convents, nurses' homes, and general hospitals also had to be located on the schedules. The entries in heading item e for special types of living quarters helped, but the enumerator sometimes forgot to identify the more obscure quasi households, such as small rooming houses or rest homes with three or four patients. Places clearly designated as quasi households were so classified however small they were; thus, a hotel with only one guest and a jail with only one prisoner were treated as quasi households. Moreover, a group of persons which in all other respects might qualify as a regular household was classified as a quasi household if it included five or more nonrelatives of the head other than employees. The enumerator had been asked to describe in item e rooming houses with 10 or more roomers but not the smaller establishments. Hence, these smaller places had to be ferreted out.

Quasi households were often recognized by relationship entries of "manager" or "superintendent" for the head of the household and by entries of "roomer" or "patient" for other members. Sometimes an entry of "manager, nursing home" for occupation and industry marked a quasi household. Coders examined all entries for persons who might make up a quasi household. They also consulted the list of institutions.

The publication tables, covering both households and quasi households, did not have a category "not reported", since relationship entries were supplied if the enumerator omitted them. These entries were made on the basis of other information, such as name, age, and marital status. If such information was insufficient, a classification was arbitrarily assigned--usually "other relative of household head" or "other nonrelative of household head".

Persons listed on out-of-order sheets sometimes belonged with a household listed in regular order. The relationship entries of these persons were examined in connection with other members of the household and corrected if necessary.

Persons enumerated on Individual Census Reports or other special forms presented special problems in relationship because the entry often was not acceptable. For example, an entry of "head" was not satisfactory without evidence of a household, such as a matching dwelling unit listed on the regular population schedule. Retention of such a "head" entry would have made an overcount of households. An entry of "wife" was not acceptable without evidence that her husband was head of a household. Consequently, entries of "head" or "wife" were sometimes changed to "other relative."

When Individual Census Reports were successfully matched with a dwelling unit listed on a regular schedule, all relationship entries for the household were examined and revised if necessary. If relationship was not indicated on Individual Census Reports or could not be determined by inspection, the classification "other relative" was arbitrarily assigned.

Relationship entries were mechanically edited during tabulation to correct punching errors and to eliminate inconsistent relationship classifications not discovered in earlier operations. Persons with no relationship entry were designated "other relative of the head." Persons whose relationship entry was inconsistent with one or more other characteristics were also classified as "other relative". Such cases included: "wives" who were male or whose marital status was not "married, spouse present"; heads, wives, sons-in-law, or daughters-in-law who were under 14 years of age; parents of the household

head who were under 30 years old; children 70 years old and over, grandchildren 40 and over; and sons-in-law, daughters-in-law, and parents whose marital status was "never married." Female heads of households or quasi households who were "married, spouse present" were changed to "wives."

Family Status of Persons

The family status of one person out of five was developed from the relationship entries. A family, as defined in the 1950 Census, is a group of two or more persons related by blood, marriage or adoption and living together; all such persons are considered as members of one family. Thus, the household head and any persons in the household related to him comprised a family; but a household head with no relatives living with him was not a family. On the other hand, such related groups as a roomer and her sister (not related to the household head) or an employee and his wife also comprised families. In quasi households, as well as in regular households, groups of related persons (other than inmates of institutions) were considered families. Thus, the household, which was determined on the basis of living arrangements, might have one or more families or none at all. Persons (other than inmates of institutions) who were not living with any relatives were classified as "unrelated individuals".

Each person on a sample line was put in one of the following groups and given the appropriate "sample family code." The distinction made for family heads and unrelated individuals between those living with unrelated persons and those not doing so was needed for the housing tabulations.

Family Status	Code
a. Head of family:	
(1) With all persons in household related to the head.....	1
(2) With one or more persons in household unrelated to the head of the household.....	2
b. Other family member.....	5
c. Unrelated individual:	
(1) Living alone.....	3
(2) Living with persons who were not related to him.....	4
d. Inmate of institution.....	V

Enumerators' entries such as "lodger's wife", "maid's mother", etc., facilitated the determination of secondary families (families not related to the household head or families in quasi households). However, if relationship was not indicated, identical last names in households or identical last names listed consecutively in quasi households were considered evidence of a family.

The family head was generally the first person listed in the group and was usually a husband, a parent, or the oldest of two or more relatives. As in households, a woman was not classified as the head of a family if her husband was present.

The family status of a person enumerated on an Individual Census Report was determined from his household relationship if he had been assigned to a household. If he had not been so assigned, he was classified as a family member other than the head.

Tabulation procedures for family status were so designed that blanks and unauthorized codes were allocated to recognized categories. Inconsistencies between family status and other characteristics (such as relationship to household head, age, and marital status) were not revealed in the Series B and C tabulations. In the more detailed tabulations for the 3 1/3 sample, however, some inconsistencies were found, and the family status classification was changed. Thus, family status of "unrelated individual" was changed to "other family member" if the marital status was "married, spouse present," or if relationship was "wife", "son", or "other relative." A woman classified as a family head was corrected to "other family member" if her marital status was "married, spouse present."

Marital Status

Current Marital Status.--Each person was to be reported in item 12 of the Population and Housing (P1) Schedule as married (Mar), widowed (Wd), divorced (D), separated (Sep), or never married (Nev). For children under the age of 14, the enumerator entered "Nev" (never married) without asking the question. Data on marital status were presented for persons aged 14 and over (instead of 15 and over as in most tables in previous censuses), because economic data were presented for persons in that age group.

In the screening process, if a superficial inspection of a portfolio disclosed many errors or omissions in this item, the

marital status entries for the entire portfolio were carefully reviewed. In other portfolios, however, only the sample lines were examined before the cards were punched.

Entries which conformed to those prescribed in the instructions were generally accepted without question. Since married persons on sample lines were coded either "married, spouse present" or "married, spouse absent," an entry of "Mar" required examination of adjacent lines to see if the spouse was present in the household or quasi household. The coder examined entries of name, relationship, age, sex, and marital status, if necessary, to see whether the spouse was present.

For persons listed on out-of-order sheets or transcribed from Individual Census Reports, reference was made to entries for other members of the household, if available, to determine the proper marital status classification.

Enumerators sometimes used incorrect codes, such as "S", which might designate "single" or "separated". The enumerator's work was first inspected to see if he consistently used "S" for one of these terms. If no pattern was evident, the entry was changed to "separated" if the person had one or more children, and to "never married" if he did not.

If entries were missing, illegible, or otherwise unacceptable, marital status was determined by looking at the information for all persons in the household. If some member of the household was evidently the spouse of the person in question, the code for "married, spouse present," was used. If a spouse was not present and the person was under 25 years of age, he was classified as "married, spouse absent" if he had one or more children, and he was classified as "never married" if he had none. Persons 25 to 54 years old with no spouse in the household were classified as "married, spouse absent" regardless of the presence or absence of children, and persons 55 and over with no spouse were classified as widowed. Thus, persons with no report on marital status were assigned to the modal marital status category for persons of their age, with exceptions indicated below.

Persons in convents and monasteries were coded as never married. In institutions, marital status was often omitted and supplementary information was not available. Marital status was assigned on the basis of age and sex from a random system developed from available statistics on the marital status of the institutional population.

Blanks which were not filled before cards were punched were filled during the punching operations in accordance with the above instructions.

Unacceptable and inconsistent marital status classifications were eliminated mechanically in the tabulation process by: (1) excluding all persons under 14 years old; (2) tabulating blanks and unauthorized codes as never married; (3) classifying all married persons in institutions as "married, spouse absent"; and (4) tabulating other married persons with presence of spouse unknown as "married, spouse present," except for female heads of households or quasi households, who were classified as "married, spouse absent."

Times Married and Duration of Marital Status.--For one person out of thirty, if ever married, there were two additional questions on marital status: "Has this person been married more than once?" (item 36) and "How many years since this person was married, widowed, divorced, or separated?" (item 37).

The answers to these questions were not punched on the regular population punch card (P), but they were punched on the family (F) and fertility (C) cards.

For the family card, no attempt was made to supply missing information; but estimates were made to complete the data for the fertility card.

If an enumerator entered a date in item 37 instead of the number of years in present marital status, the date was converted to years. An arbitrary assumption was made on the proportion reaching an anniversary before and after the enumeration date.

General Characteristics

Race

The enumerator was instructed to determine race by observation; only in case of doubt was he to ask a question. For most races, he entered an abbreviation in item 9 of the population (P1) schedule.

"Negro" was returned for persons of mixed Negro and Indian blood unless the Indian blood very definitely predominated and the person was accepted in the community as an Indian. American Indians were so reported if the Indian blood was one-fourth or more, or if they were regarded as Indians in the community where they lived. Chinese, Japanese, Filipino, and other races were identified as such. Persons with mixed white and nonwhite parentage were given the race of the nonwhite parent, and where both

parents were nonwhite, the race of the father was reported.

In certain communities in the Eastern United States, persons of mixed ancestry are locally recognized by special names, such as "Moor", "Slouian", "Croatan", "Tunica", etc. The enumerator entered the appropriate name in item 9 and when the portfolio was received for editing, the screener pasted a "Mixed Stock" label on it. The race entries were then specially coded.

White persons with Spanish surname are not a racial group, but separate information on these persons was needed for special studies. As a matter of convenience, they were identified in the column in which race was normally coded. This was done only in five Southwestern States (Arizona, California, Colorado, New Mexico, and Texas). A list of common Spanish surnames was used as a guide. The coder also examined entries in State or country of birth (item 13) and parents' birthplace (item 25) for contributing information.

Race entries were manually coded only for the 5 Southwestern States and the "Mixed Stock" communities. For other areas, the operator punched the proper code on the punchcard directly from the enumerator's entry. The code scheme was as follows:

Race	Schedule entry	Code
White (except persons with Spanish surnames in 5 Southwestern States).....	W	1
Negro.....	Neg	2
American Indian.....	Ind	3
Japanese.....	Jap	4
Chinese.....	Chi	5
Filipino.....	Fil	6
Asiatic Indian, Korean, Eskimo, Malayan, Polynesian, Hawaiian, and "Mixed Stock" races in selected counties.....	-	7
White-Spanish surname (only in 5 Southwestern States).....	W	0

Sometimes race was not reported, or the entries were illegible or obviously incorrect. In those cases, the editors entered the race of other members of the family. If that was not known, the race was assumed to be the same as that of most persons in the block or neighborhood.

There is doubtless some error in statistics for whites and Negroes and a larger discrepancy in the smaller racial groups. The smaller groups are reasonably well identified in areas where they are relatively numerous but may be misclassified where they are rare. For example, American Indians were probably correctly identified in New Mexico and Arizona, but they may have been misclassified in the District of Columbia. Asiatic Indians, Koreans, etc., as well as the mixed racial groups, presented similar problems.

Sex

The enumerator entered in item 10 of the population (P1) schedule an M or an F to indicate the sex of the individual listed on that line. For absent household members, he determined the proper entry from given name and relationship. He was cautioned, however, that some given names are common to both sexes, and he was instructed to ask questions if he had any doubt.

In a small number of cases, errors were found in item 10. Sometimes, the enumerator failed to fill the item, or he made an illegible entry, or he entered here an abbreviation for race (which was in an adjacent column). In the editing process, these errors were corrected in terms of other entries on the schedule--given name, relationship, occupation, and the like. If the sex of the individual could not thus be determined, it was assigned arbitrarily by line number; persons falling on lines with odd numbers were classified as male and those on lines with even numbers as female.

The edited cases were only a very small fraction of one percent of the total; consequently, the editing procedure had very little effect on the final distribution of the population by sex.

Age

The enumerator was instructed to enter in item 11 of the schedule the age of the person at his last birthday before the enumerator's visit. (Using the date of the enumerator's visit instead of April 1, 1950, meant that for a small fraction of the total a different age was reported than would have been obtained had April 1 been used.) The enumerator was further instructed to enter the month of birth for children under one year of age, and if the respondent reported an age in multiples of 5 (40, 45, or 60), to ask further questions in an attempt to determine the age more exactly. An entry of "over 21" was not acceptable, and

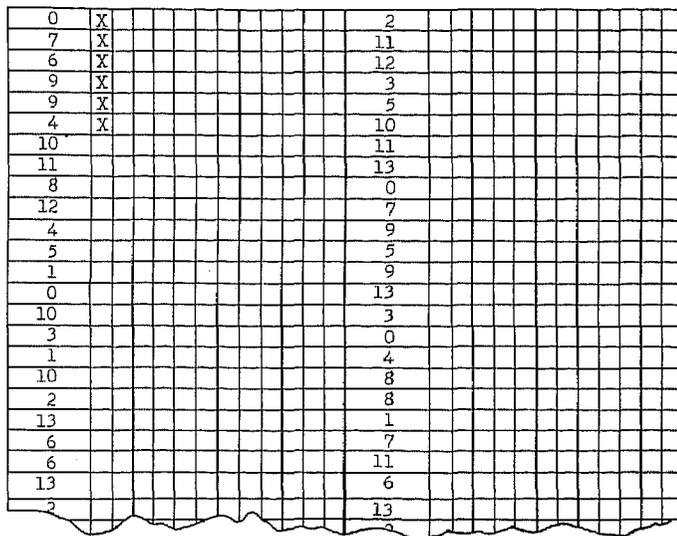
the enumerator was told to estimate the age if accurate information was not furnished.

In a small number of cases (0.19 percent of the total), age was not reported. Editors assigned an age to such individuals on the basis of other information, such as marital status, school attendance, employment status, occupation, age of other members of the family, and type of household. (For example, husbands are, on the average, about three years older than their wives.)

If age could not be determined from other entries on the schedule, an age was selected. A list of numbers had been prepared for each population group which was known to have a characteristic age distribution. For each of these groups, the single years of age within the characteristic range were listed in random fashion; and each single year of age was represented in proportion to its representation in the known age distribution of the particular group. For example, since approximately 9 percent of the children under 14 are 1 year of age, the number "1" appeared 9 percent of the time in the list of ages for this particular group (see Figure 12). The editor used the numbers in the order given, putting an "X" opposite each one as he used it.

Since the number of cases in which age was not reported constituted such a small proportion of the total and since the assignment of age was made in conformity with known age distributions, the editing procedure had little effect on the final age distributions. The elimination of all unknown ages effected considerable savings in terms of operating efficiency and use.

Figure 12. --Age Assignment Chart for General Population Under 14 Years of Age



Place of Birth and Citizenship

To determine place of birth, the enumerator asked, "What State (or foreign country) were you born in?" and entered in item 13 the name of the State, Territory, possession, or foreign country. The foreign country was to be reported according to international boundaries in April 1950. Persons born in Canada were to be reported as "Canada-French" if they spoke French before entering this country and as "Canada-Other" if they did not.

For persons born in a foreign country or at sea, the enumerator asked, "Is he naturalized?" and entered the answer in item 14. If the person was born of American parents abroad or at sea, he entered "AP."

Foreign countries were not always reported according to the instructions. In particular, "Austria-Hungary" and "Canada" were sometimes entered on the schedules. To get these into their proper classifications, guide lists were given to the coders. A list of typical French-Canadian surnames assisted the coder to identify persons who should be coded, "Canada-French." If the person's last name was not on the list, the person was coded, "Canada-Other." Similarly, a list of surnames common to Austria, Hungary, Czechoslovakia, and Yugoslavia enabled the coder to change the entry "Austria-Hungary" to one for a country now in existence.

When the place of birth was omitted, the entries for other members of the family were examined in an effort to determine

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the proper entry. Sometimes a child of the person in question was enumerated on a sample line and the parent's birthplace could be found in item 25. If the birthplace could not be inferred from other entries, the person was assumed to have been born in the United States with the State unknown.

If citizenship was not reported for a person born in a foreign country, the item was left blank; but most of these persons were presumed to be aliens and were often so classified in summary figures.

Some enumerators did not know Puerto Rico was a United States possession and entered an answer for citizenship. Many of these errors slipped through the coding operation; so the tabulating machines were wired to reject Puerto Rican cards which were punched incorrectly. The mechanical edit was limited to New York State, where about 90 percent of the Puerto Ricans in the continental United States live.

Birthplace and citizenship were considered together in the coding operation. The code scheme is given below:

Item 13, Birthplace	Item 14 Citizenship	Code		
		1st digit	2nd digit	3rd digit
Same State as State of enumeration.....	--	Enter no code		
U.S. State (other than State of enumeration).....	--	0	Enter State code	
U.S. Territory or possession.....	--	0	Enter code for Territory or possession	
Foreign country.....	Yes	1	{ Enter code for foreign country	
Foreign country.....	No	2		
Foreign country.....	AP ¹	3		
Foreign country.....	Blank	V		
Blank or "At sea".....	Yes	1	V	V
Blank or "At sea".....	No	2	V	V
Blank or "At sea".....	AP ¹	3	V	V
Blank (and no clues from other entries) or "At sea".....	Blank	0	V	V

¹ Born of American Parents abroad or at sea.

Figure 13.--States Code

Division and State	State code	Division and State	State code
NEW ENGLAND		SOUTH ATLANTIC--Continued	
Maine.....	11	North Carolina.....	56
New Hampshire.....	12	South Carolina.....	57
Vermont.....	13	Georgia.....	58
Massachusetts.....	14	Florida.....	59
Rhode Island.....	15		
Connecticut.....	16	EAST SOUTH CENTRAL	
MIDDLE ATLANTIC		Kentucky.....	61
New York.....	21	Tennessee.....	62
New Jersey.....	22	Alabama.....	63
Pennsylvania.....	23	Mississippi.....	64
EAST NORTH CENTRAL		WEST SOUTH CENTRAL	
Ohio.....	31	Arkansas.....	71
Indiana.....	32	Louisiana.....	72
Illinois.....	33	Oklahoma.....	73
Michigan.....	34	Texas.....	74
Wisconsin.....	35	MOUNTAIN	
WEST NORTH CENTRAL		Montana.....	81
Minnesota.....	41	Idaho.....	82
Iowa.....	42	Wyoming.....	83
Missouri.....	43	Colorado.....	84
North Dakota.....	44	New Mexico.....	85
South Dakota.....	45	Arizona.....	86
Nebraska.....	46	Utah.....	87
Kansas.....	47	Nevada.....	88
SOUTH ATLANTIC		PACIFIC	
Delaware.....	51	Washington.....	91
Maryland.....	52	Oregon.....	92
District of Columbia.....	53	California.....	93
Virginia.....	54		
West Virginia.....	55		

Each State, Territory, possession, and foreign country was given a two-digit code to be used in the appropriate place. The first digit of the State code was the same for every State in the geographic division; the second digit distinguished that State from others in the division (see Figure 13). Territories and possessions were treated as a group and were given a distinguishing first digit. Codes of foreign countries also were assigned according to the geographic location of the country (see Figure 14).

Under the scheme used, a code was not entered for persons born in the State where they were enumerated. The number was obtained during the processing of the final results by subtracting the native population born outside the State from the total native population of the State.

The code scheme permitted a classification of the population into two basic groups, native and foreign-born. Native included all persons born in the United States or its Territories or possessions. It also included a small group of persons who, although born in a foreign country or at sea, were American citizens because their parents were. Since the Republic of the Philippines was established as an independent country in 1946, persons born there were classified as foreign-born in the 1950 Census although they were considered native in earlier censuses.

The classification of citizenship embraced two major categories, citizen and alien, and a minor one, foreign-born with

citizenship not reported. Citizens included natives (who were all assumed to be citizens) and foreign-born persons who had been naturalized. Alien included foreign-born persons who had not been naturalized. In some tables, figures on aliens were combined with those for "citizenship unknown."

Birthplace of Parents

"What country were his father and mother born in?" was asked for persons listed on sample lines of the population (P1) schedule. In entering the answer in item 25, the enumerator was to follow the rules for item 13 except that he entered "U.S." instead of the State.

If the item was blank or the entry was illegible, the coder inspected entries for other members of the household. Sometimes the parents lived in the same household, or a person with the same parents was enumerated on another sample line. If information was not available, the parent was assumed to have been born in the same country as the person enumerated.

Under the code scheme, the first of the three digits indicated whether the father, mother, or both parents were foreign-born (or born in a Territory or possession). The second and third digits represented the country of birth of the parent not born in the continental United States. If both parents were foreign-born

Figure 14. --Codes for Foreign Countries

Foreign country	Code	Foreign country	Code
EUROPE		ASIA--Continued	
England.....	10	U.S.S.R.....	55
Scotland.....	11	Byelorussian S.S.R.....	56
Wales.....	12	Ukrainian S.S.R.....	57
Northern Ireland.....	13		
Ireland (Eire).....	14	NORTH AMERICA	
Norway.....	15	Canada-French.....	60
Sweden.....	16	Canada-Other.....	61
Denmark.....	17	Mexico.....	62
Netherlands.....	18	Guatemala.....	63
Belgium.....	19	British Honduras.....	64
Switzerland.....	20	Honduras.....	65
France.....	21	Nicaragua.....	66
Germany.....	22	El Salvador.....	67
Poland.....	23	Costa Rica.....	68
Czechoslovakia.....	24	Panama.....	69
Austria.....	25	Cuba.....	70
Hungary.....	26	Jamaica.....	71
Yugoslavia.....	27	Other British West Indies.....	72
Latvia.....	28	Dominican Republic.....	73
Estonia.....	29	Haiti.....	74
Lithuania.....	30	Other West Indies.....	75
Finland.....	31		
Romania.....	32	SOUTH AMERICA	
Bulgaria.....	33	Colombia.....	76
Greece.....	34	Venezuela.....	77
Dodecanese Islands.....	35	Ecuador.....	78
Italy.....	36	Peru.....	79
Spain.....	37	Bolivia.....	80
Portugal.....	38	Brazil.....	81
Iceland.....	39	Paraguay.....	82
Luxembourg.....	40	Uruguay.....	83
Albania.....	41	Chile.....	84
Other Europe.....	42	Argentina.....	85
		Other South America.....	86
ASIA			
Turkey.....	43	ALL OTHER	
Lebanon.....	44	Africa.....	90
Syria.....	45	Azores.....	91
Israel.....	46	Other Atlantic Islands.....	92
Arab Palestine.....	47	Australia.....	93
Pakistan.....	48	New Zealand.....	94
India.....	49	Trust Territories (U. S. Admin.).....	95
China.....	50	Other Pacific Islands.....	96
Japan.....	51		
Korea.....	52		
Philippine Islands.....	53		
Other Asia.....	54		

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or both were born in a Territory or possession, the father's birthplace was coded. If one was born in a foreign country and one in a Territory or possession, the foreign country was coded. Following is the code scheme:

identified, item 24 was assumed to be correct and other entries were changed if necessary. (4) Incomplete entries in item 24. The county was identified wherever possible.

Father's birthplace	Mother's birthplace	Code		
		1st digit	2nd digit	3rd digit
U.S.....	U.S.....	Enter no code		
Terr. or poss.....	Terr. or poss.....	1	Enter code for Territory or possession	
Terr. or poss.....	U.S.....	2		
U.S.....	Terr. or poss.....	3		
Foreign.....	Foreign.....	4	Enter code for foreign country	
Foreign.....	U.S.; Terr. or poss.....	5		
U.S.; Terr. or poss.....	Foreign.....	6		

Migration

Migration status was determined for all persons who were enumerated on sample lines. These persons were to be finally classified into four major groups according to their residence a year before the date of interview:

- (1) Those who lived in the same house
- (2) Those who lived in a different house but in the same county
- (3) Those who lived in a different county or abroad
- (4) Those who did not report 1949 residence

Those persons who moved from one county to another within the year (group (3)) were considered migrants.

The Bureau developed the following questions (items 21-24b) for the population (P1) schedule to get the information on migration status:

- 21. Was he living in this same house a year ago?
If the answer was, "Yes," that person's classification was "same house" and no more migration questions were asked. If the answer was, "No," two additional questions were asked:
- 22. Was he living on a farm a year ago?
- 23. Was he living in this same county a year ago?

If the answer to item 23 was "Yes," that person belonged in the "same county" group and no more migration questions were asked. If the answer was, "No," he belonged in the "different county" group, but to get the extent of his migration, another question was asked:

- 24. What county and State was he living in a year ago?
24a. County (or nearest place)
24b. State or foreign country

In the screening process, every fourth schedule in the portfolio was examined. If this inspection showed that migration entries were incorrectly made, the screener rejected the portfolio and sent it to the editor for "repair." In his review, the editor found four types of inconsistencies:

(1) "Yes" in item 21, "No" in item 23, and no entry in item 24. These entries put the person in "same house" and "different county." Such cases are possible but very rare; so both entries were canceled, and migration status was considered unknown.

(2) "Yes" in item 21, with county in item 24 different from county of enumeration. These entries also put the person both in "same house" and "different county." Because it is easier to check the wrong box than to write in the wrong county, item 24 was assumed to be correct and the entry in item 21 was changed to "No."

(3) "Yes" in item 23, with county in item 24 different from county of enumeration. Such entries put the person in both "same county" and "different county." Again, item 24 was assumed to be correct and the entry in item 23 was changed to "No."

(4) "No" in items 21 and 23 with county of enumeration in item 24. Item 24 was again assumed to be correct so the entry in item 23 was changed to "Yes."

Four types of partial entries and omissions appeared:

- (1) "No" in item 21 and blanks in items 23 and 24. A "No" in item 21 requires an entry in item 23.
- (2) "No" in item 23 and blank in item 24. "No" in item 23 requires an entry in item 24.

For both types (1) and (2), the entire portfolio was examined to see if the enumerator consistently made a certain kind of error. Corrections were made where possible.

(3) "Yes" in item 21 or item 23, partial entry in item 24 not clearly the county of enumeration. If the person lived in the same house or same county a year ago, the county in item 24 should be the county of enumeration. The entry in item 24 was carefully examined to see if it might be a "nearest place" in the county of enumeration or if it might be otherwise identified. If

About one person out of five moves to a different house in the course of a year. Consequently, any portfolio showing all or nearly all people living in the same house as a year ago was carefully examined. In particular, the housing items were inspected to see if people were living in houses built in 1949 or 1950.

The code scheme is summarized as follows:

Summary steps	Code		
	1st digit	2nd digit	3rd digit

Step I--Inspect item 21 entry:			
Yes (same house).....		Enter no code	
No or blank. Perform Steps II and III			
Step II--Code item 22 (farm residence)			
Yes (farm).....	1		
No (nonfarm).....	2		
Blank (unknown).....	V		
Step III--Look at item 24 (county and State)			
If items 24a and b are blank, code item 23			
Yes (same county).....		X	
No (county and State unknown).....		0	X
Blank (migration status unknown).....		V	X
If the State and county of enumeration appears in item 24, or if the State of enumeration appears but county is blank, see the instructions below. If an entry other than county and State of enumeration appears, perform Steps IV and VI.			
Step IV--If a State appears in item 24b, enter contiguity code as indicated below			
Entry in 24b			
Same as State of Enumeration.....		1	
Contiguous State.....		2	
Noncontiguous State.....		3	
Proceed to Step VI			
Step V--If a Territory, possession or foreign country appears in item 24, code:			
Any foreign country.....		4	X
Alaska.....		5	X
Hawaii.....		6	X
Puerto Rico.....		7	X
Other possessions.....		8	X

Summary Steps	
Step VI--(a). Find county in Counties List, or:	Enter 4 more
(b). Find place name in Place List :	digits for State
If neither county or place name appears in	and county
Item 24a, enter two-digit State code, followed by "X."	

The instructions below were given the coders if the State and county of enumeration appeared in item 24, or if the State of enumeration appeared but the county was blank (see Step III above):

Item 24b	Item 24a	Item 23	2nd and 3rd digits
State of enumeration	County of enumeration	Disregard	X
State of enumeration	Blank	Yes	X
State of enumeration	Blank	Blank	VX
State of enumeration	Blank	No	See Step IV

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Figure 15. -- Reasonable and Acceptable Grades for Each Year of Age¹

Age (years)	Reasonable grades	Acceptable grades	Age (years)	Reasonable grades	Acceptable grades
5.....	K	S2	14.....	S9	S11
6.....	S1	S3	15.....	S10	S12
7.....	S2	S4	16.....	S11	C1
8.....	S3	S5	17.....	S12	C2
9.....	S4	S6	18.....	C1	C3
10.....	S5	S7	19.....	C2	C4
11.....	S6	S8	20.....	C3	C5
12.....	S7	S9	21.....	C4	C5
13.....	S8	S10	22.....	C5	C5

¹ Any grade below the grade given is also reasonable or acceptable.

Although codes were entered for counties, the final classification was not by counties but by State economic areas. This was done by giving the same code to all the counties in one State economic area. These areas were used extensively in the migration tabulations. Economic subregions, which are combinations of State economic areas, were also used in some tabulations.

Education

Until 1940, census data on education were derived from questions on school enrollment and literacy. In 1940, a question on years of school completed replaced the literacy question. The number of illiterates in the country had become too small to warrant counting and reporting. At the same time, information on educational attainment was needed to characterize population groups.

In 1950, questions on educational attainment (items 26 and 27) were asked for all persons on sample lines--one-fifth of the total. The question on school enrollment (item 28) was limited to those 5 to 29 years old. The questions were:

Item 26--What is the highest grade of school that he has attended?

Item 27--Did he finish this grade?

Item 28--Has he attended school at any time since February 1st?

Two questions (items 26 and 27) were asked to get completed years of school. This approach was used because some people give the highest grade attended when asked for the highest grade completed. A second question, "Did he finish this grade?" was designed to prevent overstatement.

To get current enrollment, the question on enrollment referred to the period between February 1 and the time of enumeration. A September date would have included persons who had dropped out after the first semester. A March date would have excluded persons enrolled in schools which closed for the school year at or before that date. For enrolled persons, it was not necessary to ask the grade of enrollment, because that would be the same as the highest grade attended (item 26).

Schools in these questions referred only to "regular schools". These were defined as schools which advance a person toward an elementary or high school diploma, or a college, university, or professional school degree. By this definition, schools not in the regular school system, such as vocational, trade, or business schools, were excluded.

The enumerator entered one of the following codes in item 26 to indicate highest grade attended:

Grade	Code
None	0
Kindergarten.....	K
ELEMENTARY, HIGH	
Elementary (8 grades).....	S1 to S8
High (4 years).....	S9, S10, S11, S12
ELEMENTARY, JUNIOR-SENIOR HIGH	
Elementary (6 grades).....	S1 to S6
Junior high (3 years).....	S7, S8, S9
Senior high (3 years).....	S10, S11, S12
COLLEGE OR UNIVERSITY	
Undergraduate (4 years).....	C1, C2, C3, C4
Graduate or professional school (1 year or more).....	C5

During the screening process, folios were rejected for:

- (1) More than one entry in Item 26 (highest grade attended)
- (2) Incorrect prefixes in Item 26, such as "H", "HS", "JH", "JC", "U", etc. ("GS", "E", and "ES" were to be accepted as grade school or elementary school.)
- (3) "No" in all or most of the entries in Item 27 (did not finish the grade.)
- (4) Prefixes of "C" for all or most of the entries in Item 26.

Rejected portfolios were given to editors for repair. In correcting the entries for highest grade attended, the editors used two tables. The first gave "reasonable" grades for each year of age. A "reasonable" grade is a grade which is not higher than the grade which is reported oftenest (the modal grade) for persons of that age. When the enumerator entered an impossible code, such as S13, the editor looked at the age of the person. If he was 8 years old, the entry was changed to S3 which was a "reasonable" grade for that age. Reasonable grades are shown in Figure 15.

The second table gave acceptable grades for each year of age. This table allowed for children who progressed faster than the group. For example, an entry of second grade for a 5-year old

Figure 16. -- Tabulation of Highest Grade Attended and School Enrollment From Schedule Entries Specified¹

Tabulation		Schedule entries		
Highest grade attended	Enrolled in school	Age (item 11)	Highest grade attended (item 26)	Enrolled in school (item 28)
Grade.....	Yes.....	5-17 18-29	Grade	Yes, NA
Kindergarten.....	Yes.....		Grade	Yes
		5-6 5-17	Kindergarten	Yes, NA
NA.....	Yes.....		7-17	Kindergarten
		5-17 14-17	None	Yes
			18-29	None
		5-13 5-17	NA, None, Kindergarten	Yes
Grade not tabulated ²	No.....		5-13	None
		5-17 18-29	Disregard	No
			Disregard	No, NA

¹ The following abbreviations are used: NA, not available; Grade, highest grade attended as reported on schedule, other than kindergarten.

² Highest grade attended not tabulated for persons not enrolled in school.

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Figure 17. -- Tabulation of Highest Grade Completed from Schedule Entries Specified¹

Tabulation of highest grade completed	Schedule entries			
	Age (item 11)	Highest grade attended (item 26)	Was grade completed? (item 27)	Enrolled in school (item 28)
Grade.....	{ 5-17 { 5-17 { 18-29 { 18-29 { 18-29 { 30 +	Grade	Yes	Disregard
		Grade	NA	No
		Grade	Yes	Disregard
		Grade	NA	No
		Grade	NA	NA
		Grade	Yes, NA	(2)
Kindergarten.....	{ 5-6 { 5-17	Kindergarten	Disregard	Disregard
		Grade	No	Disregard
Grade minus 1.....	{ 5-17 { 18-29 { 18-29 { 30 +	Grade	NA	Yes, NA
		Grade	No	Disregard
		Grade	NA	Yes
		Grade	No	Disregard
		Grade	NA	Yes
		Grade	No	(2)
None.....	{ 14-17 { 14-17 { 5-17 { 18-29 { 30 +	Kindergarten	Disregard	Disregard
		None	Disregard	Yes
		None	Disregard	No, NA
		None, Kindergarten	Disregard	Disregard
		None, Kindergarten	Disregard	(2)
		Kindergarten	Disregard	Disregard
NA.....	{ 7-13 { 5-13 { 5-17 { 18-29 { 30 +	Kindergarten	Disregard	Disregard
		None	Disregard	Yes
		NA	Disregard	Disregard
		NA	Disregard	Disregard
		NA	Disregard	Disregard
		NA	Disregard	(2)

¹ The following abbreviations are used: NA, not available; Grade, highest grade attended as reported on schedule.
² Persons aged 30 or over were not asked whether they were enrolled in school.

child was acceptable. The editor used this table when the enumerator made two or more entries. The editor kept the first entry which was acceptable in terms of the table and canceled the others. For example, the enumerator entered S6 and S4 for an 8-year old child. S6 was not acceptable according to the table, but S4 was. The editor therefore canceled S6. Acceptable grades are shown in Figure 15.

If all entries made in item 26 for a person under 21 years old were unreasonable, they were all canceled and the box was treated as if blank. For those persons 21 years old and over, the highest entry listed was accepted. Blanks in highest grade attended were not filled.

If the portfolio was rejected because of an unacceptable prefix in code for highest grade attended, that prefix was edited as follows:

Prefix	Interpretation	Code
E, ES, or GS 1-8	Elementary or grade school	S1-8
H or HS 1-4	High school	S9-12
JH or JHS 1-3	Junior high school	S7-9
SH or SHS 1-3	Senior high school	S10-12
JC 1-2	Junior college	C1-2
U 1-5	University	C1-5

Education entries were not coded during the general coding operations. Instead, operators punched the cards directly from the enumerators' entries. The codes for item 26 (highest grade attended) were as follows:

Highest grade attended	Code
None.....	00
Kindergarten.....	11
S1 (Elementary, 1st grade) to S8 (Elementary, 8th grade).....	21 to 28
S9 (High school, 9th grade).....	29
S10 (High school, 10th grade).....	20
S11 (High school, 11th grade).....	2X
S12 (High school, 12th grade).....	2V
C1 (College, 1st year) to C5.....	31 to 35
Blank.....	VV

For items 27 and 28, the operator punched "1" for "Yes," "2" for "No," and "V" if the item was blank or if both "Yes" and "No" were checked. In item 28, "V" was also punched for a person 30 years old or over.

In the initial tabulations, persons with school attendance unknown were tabulated as not attending if they were 18 to 29 years of age and as attending if they were 5 to 17 years of age. According to the U. S. Office of Education, children between 7 and

17 years of age are almost always covered by compulsory attendance laws. They should therefore be attending school. To simplify mechanical editing procedures, children of 5 and 6 years of age with no report on enrollment were also assumed to be in school.

Preliminary sample tabulations of the 1950 Census data, however, indicated that many of the younger children were not in school. Later tabulations of persons for whom school enrollment was not reported were therefore based not only on entries for age and enrollment but also on the entry for highest grade attended. Figure 16 shows how enrollment and highest grade attended were determined from these entries.

Tabulations of highest grade completed were based on entries in four items--age, highest grade attended, completion of grade, and current enrollment. Figure 17 shows how these items were combined for the final tabulations.

Labor Force

To determine the economic activity of the population, questions were asked about current employment status, hours worked during the census week (the calendar week before enumeration), type of job held, duration of unemployment, extent of employment during the preceding year, and income. Types of jobs (occupation, industry, and class of worker) and income are discussed in separate sections. The remaining items are described below.

Current Employment Status

Four questions were used to find out what persons 14 years old and over were in the labor force. The questions were designed to identify the following groups:

- A. Persons at work--those who did any work at all during the census week;
- B. Unemployed--those who did not work but were looking for work;
- C. Persons with a job--those who neither worked nor looked for work but had a job or business from which they were temporarily absent; and
- D. Persons not in the labor force--those who neither worked, looked for work, nor had a job.

The four questions in items 15 to 18 of the population (P1) schedule were:

15. What was this person doing most of last week--working, keeping house, or something else?

If the answer to item 15 was, "Working," the person could be classified as at work (Group A) and further questions in items 16-18 were not asked. If the answer was, "Unable to work," or if the person was an inmate of an institution, further questions on employment status would not be productive, so they were

omitted. If the answer was "keeping house" or something else, the enumerator asked the question in item 16.

16. Did this person do any work at all last week, not counting work around the house?

If the answer was, "Yes," the person could be put in Group A and the questions in items 17 and 18 were omitted. If it was, "No," the enumerator asked the next question.

17. Was this person looking for work?

If the answer was, "Yes," the person could be classified as unemployed (Group B) and the question in item 18 was omitted. Otherwise, the enumerator proceeded to item 18.

18. Even though he didn't work last week, does he have a job or business?

If the answer was "Yes," the person could be put in Group C--with a job.

When answers to all of the last three items (16, 17, and 18) were "No," the person was not in the labor force and was put in Group D. So also were persons who were unable to work or who were inmates of institutions.

Persons at work and those with a job constitute the employed; the employed and the unemployed constitute the civilian labor force. Members of the armed forces are added to the civilian labor force to obtain the total labor force. Persons falling into none of these categories are outside the labor force and are further classified, on the basis of their response to item 15, into the following groups: keeping house, unable to work, inmate of institution, and "other" (the latter consisted primarily of students, retired persons, and seasonal workers in an off season).

In the employment status classification, any labor force activity was given priority over nonworker activity. Thus, persons

Figure 18. --Employment Status Recode for Persons 14 Years of Age and Over

Employment status	Recode	Schedule entries						
		Relationship ¹ (item 8)	Main activity ² (item 15)	Work at all (item 16)	Looking for work (item 17)	Have a job (item 18)	Hours (item 19)	Class of worker ³ (item 20c)
At work, civilian	1	N.I.	Wk	Disregard	Disregard	Disregard	Disregard	P,G,O,New,Blank
		N.I.	Wk	Disregard	Disregard	Disregard	15 +	NP
		N.I.	H,U,Ot,Blank	Yes	Disregard	Disregard	Disregard	P,G,O,New,Blank
		N.I.	H,U,Ot,Blank	Yes	Disregard	Disregard	15 +	NP
		N.I.	H,U,Ot,Blank	Blank	No,Blank	No,Blank	1-14, 15+	P,G,O
With a job, not at work.....	2	N.I.	H,U,Ot,Blank	No,Blank	No,Blank	Yes	Disregard	P,G,O,New,Blank
		N.I.	H,U,Ot,Blank	No,Blank	Yes	Disregard	Disregard	Not new
Unemployed, experienced....	3	N.I.	Wk	Disregard	Yes	Disregard	1-14,O, Blank	NP
		N.I.	H,U,Ot,Blank	Yes	Yes	Disregard	1-14,O, Blank	NP
Unemployed, new worker.....	4	N.I.	H,U,Ot,Blank	No,Blank	Yes	Disregard	Disregard	New
Armed forces....	5	N.I.	AF	Disregard	Disregard	Disregard	Disregard	Disregard
		N.I.	Wk	Disregard	Disregard	Disregard	Disregard	AF
		N.I.	H,U,Ot,Blank	Yes	Disregard	Disregard	Disregard	AF
		N.I.	H,U,Ot,Blank	No,Blank	No,Blank	Yes	Disregard	AF
		N.I.	H,U,Ot,Blank	Blank	No,Blank	No,Blank	1-14, 15+	AF
Keeping house....	6	N.I.	H	No	No,Blank	No,Blank	Disregard	P,G,O,AF
		N.I.	H	Blank	No,Blank	No,Blank	O,Blank	P,G,O,AF
		N.I.	H	No,Blank	No,Blank	No,Blank	Disregard	New,Blank
		N.I.	H	Disregard	No,Blank	Disregard	1-14,O, Blank	NP
		N.I.	H	No	No,Blank	Disregard	15 +	NP
Unable to work...	7	N.I.	U	No	No,Blank	No,Blank	Disregard	P,G,O,NP,AF
		N.I.	U	Blank	No,Blank	No,Blank	O,Blank	P,G,O,AF
		N.I.	U	No,Blank	No,Blank	No,Blank	Disregard	New,Blank
		N.I.	U	Blank	No,Blank	No,Blank	1-14,O, Blank	NP
		N.I.	U	Blank	No,Blank	No,Blank	1-14,O, Blank	NP
Other, not in labor force....	8	N.I.	Wk	Disregard	No,Blank	Disregard	1-14,O, Blank	NP
		N.I.	Ot	No	No,Blank	No,Blank	Disregard	P,G,O,AF
		N.I.	Ot	Blank	No,Blank	No,Blank	O,Blank	P,G,O,AF
		N.I.	Ot	No,Blank	No,Blank	No,Blank	Disregard	New,Blank
		N.I.	Ot	No	No,Blank	No,Blank	15 +	NP
		N.I.	Ot	Disregard	No,Blank	Disregard	1-14,O, Blank	NP
		N.I.	U	Yes	No,Blank	Disregard	1-14,O, Blank	NP
		N.I.	U	No	No,Blank	Yes	Disregard	NP
		N.I.	U	Blank	No,Blank	Yes	1-14,O, Blank	NP
		N.I.	Blank	No	No,Blank	No,Blank	Disregard	Disregard
Employment status not reported...	9	N.I.	Blank	Yes	No,Blank	Disregard	1-14,O, Blank	NP
		N.I.	Blank	No	No,Blank	Yes	Disregard	NP
		N.I.	Blank	No	No,Blank	Yes	1-14,O, Blank	NP
		N.I.	Blank	Blank	No,Blank	No,Blank	1-14	NP
		N.I.	Blank	Blank	No,Blank	No,Blank	1-14,15+	New,Blank
Inmate of institution....	V	Inmate	Disregard	Disregard	Disregard	Disregard	Disregard	

¹ N.I. is used for "not inmate" of institution.

² The following abbreviations are used: Wk, working; H, keeping house; U, unable to work; Ot, other activity, not working;

AF, armed forces.

³ The following abbreviations are used: P, private wage or salary worker; G, government worker; O, self-employed worker; NP, unpaid family worker; New, new worker (inexperienced); AF, armed forces.

working, looking for work, or holding a job were classified as members of the labor force even though a greater part of the week may have been spent in attending school or keeping house. Within the labor force, persons who worked at all were classified as at work, even though a greater part of the week was spent in looking for work. On the other hand, the classification, unemployed, had priority over the category "with a job"--that is, a person looking for work was considered unemployed even if he had a job from which he was absent all week. As an exception to this priority scheme, unpaid family workers who worked less than 15 hours were classified as "not in labor force", or if they were also looking for work, as "unemployed;" in their unpaid family work, they were presumed to have been engaged only in incidental chores.

Employment status items were coded by machine, and the code scheme provided for all possible combinations of entries. Moreover, it selected the most plausible interpretation if labor force entries were omitted or if they were inconsistent. This recode is shown in Figure 18.

All errors, however, could not be eliminated in coding; so labor force items were examined in the screening process to detect the work of those enumerators who had completely misunderstood the instructions. Some errors were detected by comparing entries in the employment status items (15 to 18) with those for occupation, industry, and class of worker (item 20). If a person was in the labor force, his job should have been described in item 20. If he was not, item 20 should have been blank.

Nonworkers were sometimes reported as workers. Some enumerators entered "WK" (for working) in item 15 and described the job in item 20 as "Housewife" or "Student." If an enumerator consistently made such entries, he evidently misunderstood the Census definition of work. The entry in item 15 was therefore changed. Sometimes an entry of "Yes" in item 18 (Did he have a job?) was accompanied by an entry like "Retired carpenter" in item 20. The entry in item 18 was changed to "No," if this error occurred throughout the enumerator's work.

Conversely, some workers were reported as nonworkers. Student nurses were frequently enumerated as students. Staff members of institutions, particularly religious institutions, were sometimes reported as nonworkers. The correct entries were made for those persons.

Few problems arose during the card punching process. Entries of "Yes" and "No" in item 15 were interpreted as working and not working, respectively. Evidently the question was understood as "Were you working last week?" If the entry in item 15 was illegible, the person was classified as not working unless other items (such as a report of 1 or more hours of work) indicated a job attachment.

In the coding operation, the machine assigned an employment status recode to each person 14 years old and over (see employment status recode in Figure 18). The recode was derived from the answers to items 15 to 18 and from the entries for hours worked and class of worker. The relationship entry in item 8 was used to identify inmates of institutions. A different recode was assigned for each of the following groups:

1. At work
2. With a job but not at work
3. Experienced unemployed
4. Unemployed, new worker
5. Armed forces
6. Keeping house
7. Unable to work
8. Other, not in the labor force
9. Employment status not reported
10. Inmate of institution

Persons were coded at work if "Wk" was entered in item 15 or "Yes" was entered in item 16. In addition, a small number of persons (about 0.15 percent of the population 14 years old and over) were classified as working solely on the basis of reporting hours of work and class of worker.

Persons were not coded as unemployed (looking for work) or as having a job unless the schedule entry clearly placed them in that classification. New workers were distinguished from the experienced unemployed by the class of worker entry. Members of the armed forces were identified either by the entry in item 15 or by the class of worker entry. Unpaid family workers who worked less than 15 hours were classified as not in the labor force; however, if they also indicated that they were looking for work, they were put in the unemployed group.

Persons reported in item 15 as keeping house, unable to work, or "other" were classified as not in the labor force if they did not work, look for work, or have a job. If the enumerator failed to determine whether they worked, looked for work, or had a job, they were also classified as not in the labor force. Some per-

sons in this group may have been workers, but most of them probably were not.

Persons for whom employment status could not be determined were coded "not reported"; but in the published tables they appear as not in the labor force. About 1.2 million or 1 percent of all persons 14 years of age and over were in this group. Analysis of their characteristics (age, sex, marital status, school enrollment, and urban-rural residence) suggests that about half a million might have been classified in the labor force if the enumerator had provided complete information.

Persons for whom employment status was not reported and those classified as "other, not in the labor force," were grouped together in most of the published tables. Where possible, they were presented by age group to identify students and those retired persons who were not reported as unable to work.

In tabulation, impossible codes were sometimes found on the punch cards. They resulted from punching errors and, therefore, did not represent a known category or classification. In the initial tabulations, such cards were re-examined individually to determine the correct code. If any were discovered in subsequent tabulations, however, they were generally put in the "not reported" group.

Some inconsistencies in the tabulated data were corrected. For example, persons 14 to 16 years of age who were reported as members of the armed forces were reclassified as employed civilians in the basic tables. Similarly, if rural-farm residence was reported for inmates of institutions, it was changed to rural nonfarm, because institutions, by definition, were not on farms, even if they engaged in farming activities.

Hours Worked During Census Week

"How many hours did he work last week?" (item 19) was asked for all persons who worked in the week before enumeration. The data are used primarily to distinguish full-time from part-time workers. The enumerator was instructed to obtain the actual number of hours worked. For persons working at more than one job, he was to report total hours worked at all jobs during the week.

Entries for hours worked were not screened or coded. When the cards were punched, entries in units other than hours were converted into the estimated equivalent hours. For example, "full time" was changed to the number of full-time hours worked by persons in the same occupation in that area. Blanks, however, were not filled, and the number not reporting hours worked was published as a separate category.

Inconsistencies between employment status entries and hours worked were generally resolved in the employment status recode by assuming that the employment status entries were correct. Thus, persons who reported they had worked, but who also had entries of "0" hours, were retained in the "at work" category and were assumed to have worked 1 to 14 hours. Persons who reported that they did not work, but also reported a number of hours worked, were classified as not at work and the hours entry was disregarded.

Impossible codes which turned up in tabulating were allocated. If the tens digit was mispunched, the person was classified as "not reported," because the actual figure might range from the lowest to the highest class interval. When only the units digit was in error, the approximate level of hours was known. A unit could, in most cases, be arbitrarily assigned without affecting the results. However, for unpaid family workers with a tens digit of 1 in hours, selection of the unit affected the labor force classification; a unit digit of 0 to 4 would take the person out of the labor force, while a digit of 5 to 9 would put him in. Since enumerator errors generally tend to understate the size of the labor force, the unit selected for such cases was 9.

Duration of Unemployment

Unemployed persons enumerated on sample lines were to be asked "How many weeks has he been looking for work?" (item 29). It became clear at an early stage, however, that this information was not generally obtained. Publication plans for this item were therefore abandoned and the data were not processed.

Weeks Worked in 1949

Weeks worked in 1949 were determined from entries in item 30, "Last year, in how many weeks did this person do any work at all, not counting work around the house?" This question was asked only for persons 14 years old and over enumerated on sample lines. The weeks to be counted were those in which the person did any work for pay or profit (including paid vacations and sick leave) or worked without pay on a family farm or in a family business. Enumerators were also instructed to include

weeks of active service in the armed forces. If months were reported, the enumerator was to multiply the number by $4 \frac{1}{3}$.

The special editing procedure was of significance only where persons reported no weeks worked but some earnings received in 1949 (item 31). These entries were assumed to be correct in the few cases where persons who did not work in 1949 received pay in that year for work done in 1948; but if an enumerator made frequent entries of this kind, the number of weeks worked was probably incorrect. The entries were therefore canceled and, in the absence of further knowledge, these persons were classified as "not reported."

In the card punch operation, as in the enumeration, units other than weeks were converted into weeks. In tabulation, impossible codes in the tens digit column were changed to "not reported". Mispunched codes in the unit column, however, were assumed to be 4. The use of 4 instead of 9 (as for the distribution by hours worked) made a difference in only one category. The class limits of this interval were such as to make 4 a better choice.

Despite precautions, some "heaping" occurred at multiples of 4 weeks, indicating that months were frequently used and were multiplied by 4 rather than $4 \frac{1}{3}$ weeks. This possibility had been anticipated, and the class intervals for the publication tables were so constructed that the months figure would fall in the same interval whether it was multiplied by 4 or $4 \frac{1}{3}$.

Occupation, Industry, and Class of Worker

In 1950, three aspects of the person's job were described: his occupation (the kind of work he did), his industry (the kind of business in which he worked), and the class of worker (whether he was a private wage or salary worker, a government worker, a self-employed person, or an unpaid family worker).

A detailed inventory of the types of jobs held by workers was obtained from these questions. Moreover, persons in specific occupations, industries, and classes of worker were described in terms of age, sex, income, and other characteristics.

Information on occupation, industry, and class of worker was collected on a 100-percent basis for persons in the labor force during the census week (that is, the calendar week before enumeration). The three parts of the question (schedule items 20a, b, and c) all related to one specific job. For an employed person, the job at which he was employed during the census week was described. If he held two or more jobs during the census week, the job at which he worked the greatest number of hours during that week was described. For an unemployed person, his last job was described. If the unemployed person had never worked, he was designated as a new worker, and no job information was obtained. Persons in the armed forces during the census week were so identified, and no information obtained on type of job.

Information on occupation, industry, and class of worker was also collected for persons not in the labor force during the census week, but who had worked at any time during 1949 (schedule items 35a, b, and c). This question was asked for a sample of one out of every 30 persons. The first tabulations revealed a very large "not reported" rate, possibly because this question had to be asked so rarely that the enumerators frequently forgot it altogether. These data have not been included in the regular reports of the 1950 Census, although a limited amount of this type of information was used in special studies.

Occupational and Industrial Classification Systems

Occupation and industry cannot be described quantitatively (like income or weeks worked), by yes-no or simple multiple-choice answers (like farm residence or marital status), or by a reasonably limited number of alternative responses (like highest grade of school attended). Occupation and industry have thousands of variants, which are complex and hard to describe. Often neither the respondent nor the enumerator has a first-hand knowledge of the particular occupation and industry under consideration.

Because of the large numbers of different occupations and industries, as well as the lack of precise reporting, systems of categories are used in presenting these data. However, occupations and industries do not always fall into easily defined categories. In many cases, there is no clear dividing line between two recognizable fields. The lack of precision in reporting makes it even more difficult to describe the boundaries for each category. For example, it would be desirable to show separate statistics for secretaries and stenographers. It is difficult, however, to distinguish between these two fields both in concept and practice. Furthermore, the enumerator frequently cannot obtain enough information to separate these two occupations from a third, typists. As a result, all three are combined into a single category, "Stenographers, typists, and secretaries."

The development of a complete classification system for occupation and industry is thus long and complex. In addition to concept and reporting problems, it involves consideration of previous census systems, systems used by other government agencies, needs for data, and costs. Earlier census systems are considered in the interests of historical comparability. The problem of compromising between historical comparability of the data and revisions necessitated by the constant changes in the occupational and industrial structures of the economy is one of the major difficulties in developing the classification systems.

Another comparability problem is the relationship of the Population Census system to classification systems of other Government agencies, although these systems may have been designed for somewhat different purposes. The occupational classification developed by the United States Employment Service for its Dictionary of Occupational Titles is used primarily for placement and counselling purposes. The Standard Industrial Classification, developed under the sponsorship of the United States Bureau of the Budget, is primarily for reports from establishments (rather than household enumeration). For both occupation and industry, international standard classifications have been developed under the auspices of the United Nations and the International Labour Office. Comparability between these systems and the Population Census systems is maintained as far as possible.

There is constant pressure from users of census materials to present figures for many individual occupations and industries not currently shown separately. The decision to give figures for a particular item hinges primarily on whether the census returns will provide reliable information and whether the need warrants it. In 1950, for example, more professional and technical occupations were shown separately than in 1940, because manpower planning agencies needed these data.

Cost, of course, enters into the design of classification systems. Costs will generally be reduced by simplifying coding or tabulating processes and increased by complicating them. For example, in 1950, changes in the code numbers simplified tabulating as compared with 1940. On the other hand, subdividing private household workers into "living in" and "living out" groups added some complications.

The 1950 occupational classification system contained 270 specific occupation categories, including a "not reported" category. Thirteen of them were further subdivided according to such criteria as class of worker and industry. The total number of items in the occupational classification system used for 1950 was 469, compared to 452 in 1940. While changes were made in most major groups between 1940 and 1950, perhaps the increase in the number of categories in the professional and technical group was most significant.

The detailed occupations were organized into 12 major groups, as follows:

- Professional, technical, and kindred workers
- Farmers and farm managers
- Managers, officials, and proprietors, except farm
- Clerical and kindred workers
- Sales workers
- Craftsmen, foremen, and kindred workers
- Operatives and kindred workers
- Private household workers
- Service workers, except private household
- Farm laborers and foremen
- Laborers, except farm and mine
- Occupation not reported

The most detailed listing of occupations in the regular 1950 Census reports included only 446 categories. This contraction from 469 was part of a plan whereby certain professional occupations were coded and tabulated separately, but published in combination. There was great need for data on these occupations, but it seemed questionable whether the census could provide reliable figures for the specific groups.

The classification of industries had fewer categories than the classification of occupations. The total number for 1950 was 148, including a "not reported" category and subdividing "educational services" into private and government segments. Two of the 148 categories were not adequately reported in the 1950 Census; so they were combined with other categories. Greater detail in the service industries accounted for most of the increase over the 132 categories of 1940.

The 1950 Census industrial classification system was organized into 13 major groups, as follows:

- Agriculture, forestry, and fisheries
- Mining
- Construction
- Manufacturing
- Transportation, communication, and other public utilities
- Wholesale and retail trade

Finance, insurance, and real estate
 Business and repair services
 Personal services
 Entertainment and recreation services
 Professional and related services
 Public administration
 Industry not reported

Detailed occupational and industrial classifications are frequently not the most appropriate way to present the data. In the smaller areas, for example, classification of a few people into 446 occupation categories is statistically undesirable and would involve great expense. Consequently, condensed or intermediate classification systems were prepared by selecting some items in the detailed systems and combining others. An intermediate system of 158 occupations for males and 67 for females was used when occupation was cross-classified with such items as age, race, and income for States and large urban places. When industry was similarly cross-classified, an intermediate classification of 77 industries was used (see Figure 19). For counties and small urban places, only the major occupation groups and a condensed classification of 41 industries were shown.

In developing its occupational and industrial classification systems, the Census Bureau had the cooperation of many Government and private agencies. The Joint Committee on Occupational Classification, sponsored by the American Statistical Association and the U. S. Bureau of the Budget, was particularly helpful.

Instructions to Enumerators

Instructions to enumerators on occupation and industry emphasized the need for "clear and specific" entries. This rather general approach was adopted because it was impossible to give a full set of rules and criteria against which the adequacy of the returns could be evaluated. Acceptable and unacceptable illustrative entries were shown, and the enumerator was warned about some of the common errors.

The need for consistency in the three parts of the question (occupation, industry, and class of worker) was explained. These parts referred to a single job, and an entry like "Barber, Retail jewelry store, P" was not acceptable. This point was emphasized in the filmstrip used to train the enumerators on this question.

Enumerators were instructed to question reports of young persons in professional and craft occupations. Also, special care was to be given to entering full descriptions for seven occupation fields: agent, clerk, engineer, fireman, mechanic, nurse, and teacher.

Short explanations were given on how to report Government agencies, multi-activity businesses, and "home" businesses. The enumerators were cautioned not to report the company name but to give a description of the business.

Fairly short and precise instructions could be given for class of worker, where only four entries were possible--P (for private employment), G (for Government employment), O (for self-employment), and NP (for unpaid family work). Special instructions were given for reporting clergymen, partnerships, work for pay in kind, and odd-job or casual work.

The enumerators were not provided with a standard question to ask for class of worker (as they had for occupation and industry). In a large proportion of cases, the answer was obvious from the responses to the occupation and industry questions. If it was not, the enumerator was instructed to mention one or two of the most appropriate categories to get the information.

Coding Procedure

Specially trained clerks coded occupation, industry, and class of worker by entering a seven digit code. The first three digits were for occupation, the second three were for industry, and the final one was for class of worker.

The basic document used by the clerks in this coding operation was the publication, 1950 Census of Population, Alphabetical Index of Occupations and Industries. This Index gives codes for some 25,000 different occupation and industry titles. A companion volume, Classified Index of Occupations and Industries, groups the titles according to their appropriate occupation and industry categories and is useful in interpreting the tabulations and published reports.

Although the Alphabetical Index is a comprehensive volume, it does not include many of the entries which appeared on the census schedules. The Index, of course, was prepared before the census was taken; and, despite intensive research, all new titles which arose from technological and other changes could not be

anticipated.³ Then too, the number of different entries on the schedules was so great (probably well in excess of 100,000) that a volume showing them all would be too large for the coders to use efficiently. These limitations meant that the coder could not immediately find every title in the Index, and he therefore had to be trained to relate the schedule entries to the titles given in the Index.

Among the steps taken to meet this problem were: (1) occupation-industry-class of worker coding was set up as a separate process, (2) the clerks who seemed best qualified to do this work were selected, (3) the clerks were given a full five-day training and testing program, and (4) emphasis was placed on the selection and development of the technical assistants who provided first-line supervision.

At the outset, entries not listed in the Index were referred by the regular coders to more experienced personnel. As the regular coders gained experience, these limitations were relaxed; but special coders continued to classify problem cases. Problems in industry classification were frequently referred to selected personnel who consulted reference volumes on industrial activities in the area.

Except for certain problem cases (where helpful indications might be obtained from such items as sex, age, and education), the occupation, industry, and class of worker entries were coded without reference to other items on the schedule. This approach maximized the operational efficiency but it probably had a slight negative effect on quality.

A "not reported" code was entered for occupation or industry when these items were unknown. For unknowns in class of worker, however, the clerk was instructed to classify the person as a private wage or salary worker, unless the occupation and/or industry returns provided evidence that one of the other class-of-worker categories was more appropriate.

During the early stages of the processing, a "screening" operation was set up to detect poorly-enumerated portfolios. This did not prove effective, mainly because of the shortage of experienced personnel, and it was abandoned. Later, a different procedure was introduced and was effective in cutting down the number of problems referred to the specialists. About a week before the portfolios for a particular city were to be delivered to the coders, a specialist looked through a sample of them for recurring problems. These problems were resolved, and instructions were in the hands of the coders by the time they got the portfolios. This procedure not only reduced referrals; it also improved the coding.

Machine Tabulation Procedures

Punching the occupation-industry-class of worker codes was a fairly simple procedure. Only two situations were acceptable for punching--a complete blank or a seven-digit code. If the code had fewer or more than seven digits, the schedule was referred to a specially assigned, and immediately available, code clerk, who resolved the problem.

In general, the data were tabulated with a minimum of cross-checking to eliminate errors and possible inconsistencies. The capacity of the tabulation machines, as well as the complexities these checks would have introduced into the wiring, limited the mechanical edit; consequently, some minor inconsistencies slipped into the final data. As in other subjects, however, the processing was geared to accept small discrepancies at the various stages.

Since the occupation, industry, and class of worker tabulations were made only for employed and experienced unemployed persons, the employment status codes were used to identify these groups. In tabulating occupation and industry, no distinction was made between those "not reported" cases where only one or two of the three items was unreported, and those where all three items were unreported.

Although the "not reported" cases were generally only between one and two percent of employed persons, and only slightly more of the entire experienced civilian labor force, no occupation or industry category was large enough to absorb them without distorting the data. Separate "not reported" categories were, therefore, established for these two items. Unknowns in class of worker, however, could be absorbed by the "private wage and salary workers" category, which had about 70 percent of the total employed. The unknowns in class of worker were therefore put into the private wage and salary group.

³ Some of the titles which have recently been added to the Index are: artificial inseminator (agriculture), baby sitter (private family), crop duster (agriculture), rat farmer (farm), ramp attendant (airport), and space controller (airline).

Presentation of Data

In publication, greatest emphasis was placed on the larger areas, for which detailed occupation and industry inventory figures and intermediate levels of cross-classifications were provided. For smaller areas, the data were limited to major group or comparatively condensed inventories. The primary publication program was supplemented by a detailed set of cross-classifications for the country as a whole, based on the 3-1/3-percent sample.

In 1950, relatively little was done to eliminate those figures which appeared unusual or even incorrect unless a gross error had obviously occurred. Census data are subject to errors from a number of sources. The editing process was limited and small frequencies in "unusual" cells of the published tables must be used with discretion.

Differences between the 1950 classification systems and those used in earlier censuses involve comparability problems. Explanations of these changes are sometimes complex and too lengthy to be included in the regular reports. Some of this information appears in text statements, and a fuller explanation for specific problems can be furnished on request.

Income

To get income information in the 1950 Census, three questions were asked of all persons 14 years old and over who were enumerated on sample lines of the population (P1) schedule. They were:

- 31a. Last year (1949), how much money did he earn working as an employee for wages or salary?
- 31b. Last year, how much money did he earn working in his own business, professional practice, or farm?
- 31c. Last year, how much money did he receive from interest, dividends, veteran's allowances, pensions, rents, or other income (aside from earnings)?

If the person on the sample line was the head of a primary or secondary family, the same questions were repeated for the other family members as a group (item 32a, 32b, and 32c). The total family income was computed from answers to the six questions; the total income of the individual was obtained from the first three questions.

The procedure for obtaining information on income provided an unbiased 20-percent sample of families and persons, but it resulted in some underreporting in family income. If each member of the family had been questioned individually about each type of income, probably a larger amount would have been reported.

An entry was required for each type of income. If the person received no income, the "None" box was to be checked. Income received during the year was recorded to the nearest whole dollar; and if more than \$10,000 was reported, the enumerator entered "10,000 +." An entry of "Even" was to be made whenever a respondent reported that his business expenses just balanced his business receipts. If the expenses of the business or farm exceeded the receipts, the word "Loss" was to be written above the amount of the loss.

Definition of Income Concepts

The Enumerator's Reference Manual contained extensive instructions on the income concepts. In addition, a film strip "Income--What It Is and How to Report It" was used to present the most important rules for getting the information accurately. Instructions to enumerators emphasized the following points:

1. Wage or salary income is the total pay received from all jobs, before payroll deductions for taxes, bonds, union dues, etc. This income category also includes commissions, tips, piece-rate payments, and armed forces pay and allowances, but does not include payments "in kind" or the salaries that some owners of businesses pay to themselves.
2. Self-employment income is the net income from the operation of a business, a professional practice, or a farm; that is, it is the total money receipts less the operating expenses. (Various types of business or farm expenses were listed in the instructions, and distinctions were drawn between operating expenses and expenditures for other items, such as food, shelter, personal taxes, capital improvements, etc.)
3. Income from sources other than earnings is of various types, and enumerators should be familiar with them. (The types were listed and defined.)
4. The following money receipts are not considered income: allowances, capital gains or losses, withdrawals from savings, lump-sum inheritances, and the like.

5. A primary family head is the same as a household head; a secondary family head is "a person unrelated to the household head but with persons related to him listed below him on the schedule, such as a lodger with wife present in the household."
6. The special form, Confidential Report on Income, is for respondents who prefer to mail the income information directly to Washington, D.C. rather than to answer the local enumerator's questions. (Only 300,000 copies of this form were used, and some of them were used to avoid a return visit rather than to obtain secrecy. The form undoubtedly reassured many people that the income queries were treated with absolute confidentiality.)

Processing the Income Data

Three broad categories of errors were expected in collecting and processing the income data: (1) reporting errors, such as the misclassification of income; (2) blanks or other incomplete entries on the schedule; and (3) coding and punching errors. Plans were made to correct as many of the errors as possible at different stages of the processing operation, either in screening and editing, coding, or tabulating.

Screening.--Reporting errors could not be corrected to any great extent; but some errors were corrected in a special screening operation. If the enumerator consistently misclassified the business income of farmers or other self-employed persons as wage or salary income, the income entries were changed. If he frequently reported no income for self-employed persons who had worked during 1949, the entries were edited to "Even" on the assumption that the respondent reported that he did not make a profit. Similarly, if the enumerator consistently failed to report income for wage or salary workers who had worked during the previous year, the entries were edited to "Not reported"; this was believed to be more accurate than an entry of "None."

Coding.--Coding consisted essentially of converting the enumerator's entries for each type of income into two-digit codes representing hundred-dollar intervals (for example, 34 for \$3,400). In addition, the coder added the amounts reported in items 31a, 31b, and 31c and coded the sum as the individual's total income. Total family income was coded by adding the income reported for other family members in items 32a, 32b, and 32c to that of the family head. Family income was coded only when an amount was reported for other family members. In tabulation, the machines were wired to pick up the family head's income if the family income had not been coded. This procedure eliminated unnecessary clerical work.

Incomplete entries were corrected whenever possible in the coding operation. Blanks were converted to zero under specified circumstances. For example, if the person had not worked at all during 1949, blank earnings items (wages or salary, self-employment income) were changed to entries of "None". If earnings were reported and other items were blank, the earnings were assumed to be the total income of the person. These procedures were adopted because inexperienced enumerators often left a blank when the respondent reported no income instead of checking "None". Moreover, previous income surveys had shown that most persons receive income from only one source.

Despite corrections for incomplete entries, about seven percent of all persons 14 years of age and over were classified as having "total income not reported." This group consists not only of those with no information at all, but also of those with limited information which could not be coded according to the above rules.

In the interest of economy, incomplete entries for family income were edited under the relatively simple procedure described above. That is, the income of the head was assumed to be the total family income if income for other family members was not reported. This method did not seriously distort the reported family income distribution. It did, however, add 0.5 million families to the 1.1 million families who had specifically reported that they had no income.

Tabulation.--Impossible codes were the only coding and punching errors corrected during tabulation. Income entries had been converted into two-digit codes representing hundred-dollar intervals. If the second digit of the income code was not acceptable or was not punched, the correct thousand-dollar interval was determined from the first digit, and the income was allocated to the lower half of this interval. However, when the first digit was not acceptable, the income was treated as "not reported."

Veteran Status

Identification of veterans is desirable so that information can be obtained on their occupation, income, education, family status,

QUESTIONNAIRE ITEMS

Figure 19.--Relationships Among Condensed, Intermediate, and Detailed Industrial Classification Systems Used in the 1950 Census of Population

Condensed classification—41 items	Intermediate classification—77 items	Detailed classification—148 items
Agriculture.....	Agriculture.....	Agriculture (01, 07 exc. 0713).
Forestry and fisheries.....	Forestry and fisheries.....	Forestry (08). Fisheries (09).
Mining.....	Coal mining..... Crude petroleum and natural gas extraction..... Mining and quarrying, except fuel.....	Coal mining (11, 12). Crude petroleum and natural gas extraction (13). Metal mining (10). Nonmetallic mining and quarrying, except fuel (14).
Construction.....	Construction.....	Construction (15-17).
Furniture, and lumber and wood products.....	Logging..... Sawmills, planing mills, and mill work..... Miscellaneous wood products..... Furniture and fixtures.....	Logging (241). Sawmills, planing mills, and mill work (242, 243). Miscellaneous wood products (244, 249). Furniture and fixtures (25).
Primary metal industries.....	Primary iron and steel industries..... Primary nonferrous industries.....	Blast furnaces, steel works, and rolling mills (331). Other primary iron and steel industries (332, 339 ¹). Primary nonferrous industries (333-336, 3392 ¹ , 3399 ¹).
Fabricated metal industries (incl. not specified metal).....	Fabricated metal industries (incl. not specified metal).....	Fabricated steel products (19 exc. 104, 341-343, 344 exc. 3444, 346 ² , 348 ² , 3491-3495). Fabricated nonferrous metal products (3444, 3463 ² , 347, 3480 ² , 3406, 3407, 3499). Not specified metal industries. ³
Machinery, except electrical.....	Machinery, except electrical.....	Agricultural machinery and tractors (352). Office and store machines and devices (357). Miscellaneous machinery (351, 353-356, 358, 359).
Electrical machinery, equipment, and supplies.....	Electrical machinery, equipment, and supplies.....	Electrical machinery, equipment, and supplies (36).
Motor vehicles and motor vehicle equipment.....	Motor vehicles and motor vehicle equipment.....	Motor vehicles and motor vehicle equipment (371).
Transportation equipment, exc. motor vehicle.....	Aircraft and parts..... Ship and boat building and repairing..... Railroad and miscellaneous transportation equipment.....	Aircraft and parts (372). Ship and boat building and repairing (373). Railroad and miscellaneous transportation equipment (374, 375, 379).
Other durable goods.....	Glass and glass products..... Stone and clay products..... All other durable goods.....	Glass and glass products (321-323). Cement, and concrete, gypsum, and plaster products (324, 327). Structural clay products (325). Pottery and related products (326). Miscellaneous nonmetallic mineral and stone products (328, 329). Professional equipment and supplies (194, 381-385). Photographic equipment and supplies (386). Watches, clocks, and clockwork-operated devices (387). Miscellaneous manufacturing industries (39).
Food and kindred products.....	Meat products..... Bakery products..... Other food industries.....	Meat products (201). Bakery products (205). Dairy products (202). Canning and preserving fruits, vegetables, and sea foods (203). Grain-mill products (0713, 204). Confectionery and related products (207). Beverage industries (208). Miscellaneous food preparations and kindred products (206, 209). Not specified food industries. ³
Textile mill products.....	Knitting mills..... Yarn, thread, and fabric mills..... Other textile mill products.....	Knitting mills (225). Yarn, thread, and fabric mills (221-224). Dyeing and finishing textiles, except knit goods (226). Carpets, rugs, and other floor coverings (227). Miscellaneous textile mill products (228, 229).
Apparel and other fabricated textile products.....	Apparel and other fabricated textile products.....	Apparel and accessories (23 exc. 230). Miscellaneous fabricated textile products (230).
Printing, publishing, and allied industries.....	Printing, publishing, and allied industries.....	Printing, publishing, and allied industries (27).
Chemicals and allied products.....	Chemicals and allied products.....	Synthetic fibers (2825). Drugs and medicines (283). Paints, varnishes, and related products (285). Miscellaneous chemicals and allied products (281, 282 exc. 2825, 284, 286-289).
Other nondurable goods.....	Tobacco manufactures..... Paper and allied products..... Petroleum and coal products..... Rubber products..... Footwear, except rubber..... Leather and leather products, except footwear.....	Tobacco manufactures (21). Pulp, paper, and paperboard mills (261). Paperboard containers and boxes (267). Miscellaneous paper and pulp products (264-266, 269). Petroleum refining (291). Miscellaneous petroleum and coal products (29 exc. 291). Rubber products (30). Footwear, except rubber (313, 314). Leather: tanned, curried, and finished (311). Leather products, except footwear (312, 315-317, 319).
Not specified manufacturing industries.....	Not specified manufacturing industries.....	Not specified manufacturing industries. ³
Railroads and railway express service.....	Railroads and railway express service.....	Railroads and railway express service (40).
Trucking service and warehousing.....	Trucking service and warehousing.....	Trucking services (421, 428). Warehousing and storage (422-425, 429).
Other transportation.....	Street railways and bus lines..... Water transportation..... Air transportation..... All other transportation.....	Street railways and bus lines (41, 43 exc. 433). Water transportation (44). Air transportation (45). Taxicab service (433). Petroleum and gasoline pipe lines (46). Services incidental to transportation (47).
Telecommunications.....	Telecommunications.....	Telephone (wire and radio) (481). Telegraph (wire and radio) (48 exc. 481).

See footnotes at end of table.

Figure 19.--Relationships Among Condensed, Intermediate, and Detailed Industrial Classification Systems Used in the 1950 Census of Population--Con.

Condensed classification--41 items	Intermediate classification--77 items	Detailed classification--148 items
Utilities and sanitary services.....	Electric and gas utilities..... Water supply, sanitary services, and other utilities.....	Electric light and power ¹ (401). Electric-gas utilities ¹ (403). Gas and steam supply systems (492, 490). Water supply (404). Sanitary services (495). Other and not specified utilities ² (497).
Wholesale trade.....	Wholesale trade.....	Motor vehicles and equipment (501, 5111). Drugs, chemicals, and allied products (502, 5112). Dry goods and apparel (503, 5113, 5132). Food and related products (504, 505, 5114, 5133, 5134, 514). Electrical goods, hardware, and plumbing equipment (506, 507, 5116). Machinery, equipment, and supplies (508, 5118, 5136). Petroleum products (512). Farm products--raw materials (5096, 5135). Miscellaneous wholesale trade (5001-5095, 5097-5099 ³ , 5115, 5117, 5119, 5137-5139 ³). Not specified wholesale trade. ³
Food & dairy products stores, and milk retailing.....	Food and dairy products stores, and milk retailing.....	Food stores, except dairy products (54 exc. 545). Dairy products stores and milk retailing (545).
Eating and drinking places.....	Eating and drinking places.....	Eating and drinking places (58).
Other retail trade.....	General merchandise and five and ten cent stores..... Apparel and accessories stores..... Furniture, home furnishings, and equipment stores..... Motor vehicles and accessories retailing..... Gasoline service stations..... Drug stores..... Hardware, farm implement, & building material retailing..... All other retail trade.....	General merchandise stores (53 exc. 533). Five and ten cent stores (533). Apparel and accessories stores, except shoe stores (56 exc. 566). Shoe stores (566). Furniture and housefurnishings stores (571). Household appliance and radio stores (572). Motor vehicles and accessories retailing (55 exc. 554). Gasoline service stations (554). Drug stores (591). Hardware and farm implement stores (525). Lumber and building material retailing (52 exc. 525). Liquor stores (592). Retail florists (5992). Jewelry stores (597). Fuel and ice retailing (598). Miscellaneous retail stores (593-596, 599 exc. 5992). Not specified retail trade. ³
Finance, insurance, and real estate.....	Banking and other finance..... Insurance and real estate.....	Banking and credit agencies (60, 61). Security and commodity brokerage, and investment companies (62, 67). Insurance (63, 64). Real estate ⁴ (65). Real estate-insurance-law offices ⁴ (66).
Business services.....	Business services.....	Advertising (731). Accounting, auditing, and bookkeeping services (737). Miscellaneous business services (732-736, 739).
Repair services.....	Automobile repair services and garages..... Miscellaneous repair services.....	Automobile repair services and garages (75). Miscellaneous repair services (76).
Private households.....	Private households.....	Private households (88).
Hotels and lodging places.....	Hotels and lodging places.....	Hotels and lodging places (70).
Other personal services.....	Laundrying, cleaning, and dyeing services..... All other personal services.....	Laundrying, cleaning, and dyeing services (721, 722, 727 7). Dressmaking shops (727 7). Shoe repair shops (725). Miscellaneous personal services (723, 724, 726, 729).
Entertainment and recreation services.....	Entertainment and recreation services.....	Radio broadcasting and television (77). Theaters and motion pictures (78, 792). Bowling alleys, and billiard and pool parlors (793). Miscellaneous entertainment and recreation services (791, 794-799, 799).
Medical and other health services.....	Medical and other health services.....	Medical and other health services, except hospitals (80 exc. 806). Hospitals (806).
Educational services, government..... Educational services, private.....	Educational services, government..... Educational services, private.....	Educational services, government } (82, 84). Educational services, private }
Other professional and related services.....	Welfare, religious, and membership organizations..... Legal, engineering, and misc. professional services.....	Welfare and religious services (866, 867). Nonprofit membership organizations (861-865, 869). Legal services (81). Engineering and architectural services (891). Miscellaneous professional and related services (89 exc. 891).
Public administration.....	Postal service..... Federal public administration..... State and local public administration.....	Postal service Federal public administration } (90 8). State public administration Local public administration }
Industry not reported.....	Industry not reported.....	Industry not reported (99).

NOTE: See Executive Office of the President, Bureau of the Budget, *Standard Industrial Classification Manual*, Vol. I, *Manufacturing Industries*, Part I (November 1945 edition); and Vol. II, *Nonmanufacturing Industries* (May 1949 edition), Washington, D. C.

¹ Components of SIC categories 3392 and 3399 are allocated between "Other primary iron and steel industries" and "Primary nonferrous industries" on a ferrous-nonferrous basis.

² Components of SIC categories 3463 and 3489 are allocated between "Fabricated steel products" and "Fabricated nonferrous metal products" on a ferrous-nonferrous basis.

³ In the Population Census system, "not specified" categories were set up within certain groups to take care of schedule returns which were not sufficiently precise for allocation to a specific category within the group.

⁴ "Electric light and power" and "Electric-gas utilities" are combined into a single category in the Volume II tables on detailed industry.

⁵ Components of SIC categories 5099 and 5139 are allocated by type of merchandise to the appropriate Population Census wholesale trade category, wherever possible.

⁶ "Real estate" and "Real estate-insurance-law offices" are combined into a single category in the Volume II tables on detailed industry.

⁷ Dressmaking shops are shown separately from the rest of SIC category 7271, which is included in "Laundrying, cleaning, and dyeing services."

⁸ See text for explanation of basic difference between SIC and Population Census in classification of government workers.

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etc. Accordingly, the following questions (items 33a, 33b, and 33c) were to be asked of all males 14 years of age and over who were enumerated on sample lines of the population (P1) schedule:

Did he ever serve in the U. S. Armed Forces during--

World War II?

World War I?

Any other time, including present service?

The entries on military service were not inspected during the screening and editing processes. Coding was unnecessary because the answers were limited to "yes," "no," and blank.

Data on veteran status in the 1940 Census were not satisfactory. Tabulation of a preliminary sample of the 1950 returns indicated that these data, too, were not reliable. Age and type-of-service entries were sometimes inconsistent, and nonreporting was relatively high. Furthermore, the totals did not check very well with corresponding figures compiled by the Veterans Administration. The location of the question on the schedule may have been responsible for some of the errors.

As a result, it was decided not to publish statistics on veteran status except, possibly, for large area statistics on family and household heads.

Families

Information on family units such as their size, the number of children, and number of nonrelatives, could not be obtained from the population punch cards, because each card represented only one person. Consequently, family data were transcribed from the population schedules to specially designed transcription sheets. The family (F) card was then punched from these sheets.

All persons enumerated on the last sample line of the population schedule were selected for a 3 1/3-percent sample. The last sample line was not always filled, however, so the sample had to be supplemented with prior sample lines. These were selected by procedures designed to maintain the representativeness of the sample. To effect economies, some areas were sampled at a rate of 1 1/9 percent, and New York City was sampled at a rate of 2/3 of one percent. Every third schedule was subsampled in the first case and every fifth schedule in the second.

A family, as indicated previously, was defined as a group of two or more persons related by blood, marriage, or adoption and living together; all such persons were considered as members of one family. A family was "primary" if the family head was also head of the household, or "secondary" if the family head was not related to the household head or was in a quasi household. Secondary families were further classified on the basis of their relationship to the household head--as lodgers, employees, or members of quasi households.

A subfamily was a group of relatives within a primary family. Usually, this was a married couple with or without children living with relatives. It may also have been a parent and one or more children living with relatives. For example, a widow and her 4-year old son were a subfamily when they lived with the widow's parents; they were also part of the primary family, of which her father was the head. Other than the head and wife, the only members of subfamilies were own children who were under 18 years of age and never married.

In families with two or more married couples, the determination of which was the primary family and which the subfamily, generally rested on the respondent's report of who was the head of the household. Thus, in two-generation families, either the father or the son might be reported as the head. The respondent's selection of the head probably depended on who owned or rented the house, who contributed most to the family income, and who was in a dominant position for other reasons.

Members of subfamilies were counted as members of the primary family of which they were a part; but the characteristics and composition of subfamilies were also transcribed separately to provide information about those units.

An unrelated individual, like a family, was classified as "primary" if he was head of a household, or "secondary" if he was a lodger, employee, or member of a quasi household.

Not all population lines in the sample were used for the family study. Information was transcribed only for persons who were heads of primary, secondary, or subfamilies; or who were primary or secondary individuals. In addition, data were transcribed for males who had never been married but who were not heads of units; these data were for a special study of ever-married males by duration of marriage and related subjects. Data for other family members who fell on the selected sample lines were not transcribed.

Each type of unit represented by the persons selected was given a code to identify it in tabulation. The decisions previously made in coding household relationship and family status of persons helped to identify the units.

The following characteristics of the family were transcribed for each family head: the type (primary, secondary, or subfamily), the size, the number of own children in each age group, and the presence of other related children and of aged persons. For primary family heads (those who were also heads of households), information was transcribed on other persons living in the household--subfamilies, unrelated persons, and married couples.

The labor-force participation of the family was indicated by the number of members in the labor force, in the paid labor force, and unemployed. Income of the entire family was classified by source--wage and salary, self-employment, or other. If the family head was married and the wife was in the household, information was transcribed on her age and employment and included on the F card.

For secondary and subfamily heads and for secondary individuals, information was transcribed on relationship to the head of the household. These data show how many sons or daughters and how many parents lived as subfamilies and how many employees, lodgers, and quasi household residents were heads of secondary families.

Secondary family heads and secondary individuals in quasi households were also classified according to the type of quasi household--institution, large or small rooming house, convent, military barracks, etc.

Information was transcribed in the form of codes. In some cases, codes were simply copied from the population schedule; in other cases, the schedule entry was coded in transcription. With some exceptions, the entries or codes on the schedule were accepted without question.

Some errors in relationship, sex, marital status, and family status were corrected in transcription. If an error in relationship involved a household head, however, no correction was made, because the family card for a primary family head or a primary individual was to be matched with a housing card for the household head; a change in the primary family head would have resulted in a failure to match the cards and a loss of information for that unit. This rule was not followed when a female, married, spouse present, was classified as a household head on the population schedule. As indicated above, the returns for such cases were to have been changed in the coding process so that the husband would be the head. If the coders failed to make the change, such a "head" would have been mechanically corrected to "wife" in the tabulation process. The head of a secondary family or of a subfamily could, of course, be changed to another relationship classification.

The marital status of a family head was corrected to "married, spouse present," if his wife was present even if she had been put in some other marital status category on the population schedule. The classification, "married, spouse present," was changed if the spouse was not in the household.

In the family transcription, cases with no report on number of times married and years in present marital status for family heads or other ever-married males were so recorded; these cases were allocated in the fertility transcription.

Transcription of economic items followed, in general, the rules for coding economic items for persons. In coding employment status of the wife, however, a simplified recode was used.

The family transcription was verified on a sample basis. The error rates in this and fertility transcription were relatively low. The use of selected employees who had coded the population schedules and close supervision of the work probably accounted for the low rates.

For heads of households, the characteristics of the head and the housing information were obtained from the PH cards (the 20-percent sample of housing cards). Other characteristics of households came from the F cards, which were punched from the family transcription sheets. These two sets of cards were collated and the combined information was transferred to magnetic tape for tabulation on the Univac. For heads of secondary families and subfamilies, secondary individuals, and other ever-married males, all items were transcribed; hence only the F cards were used.

Fertility

Information on fertility was obtained by classifying women who had been married by the number of children they had borne. Item 38 on the population schedule, "How many children has she ever borne, not counting stillbirths?" was asked especially for the fertility study of women who had been married. Other data on the schedule which were particularly useful for the study were the information on times married (item 36); on the duration of marital status (item 37), and on the number of children under the age of five who were living with the mother.

A 3 1/3-percent sample of the population was used for the fertility study; and the question on children ever borne was asked

only of women who had been married and who were enumerated on the last sample line of the 30-line schedule.

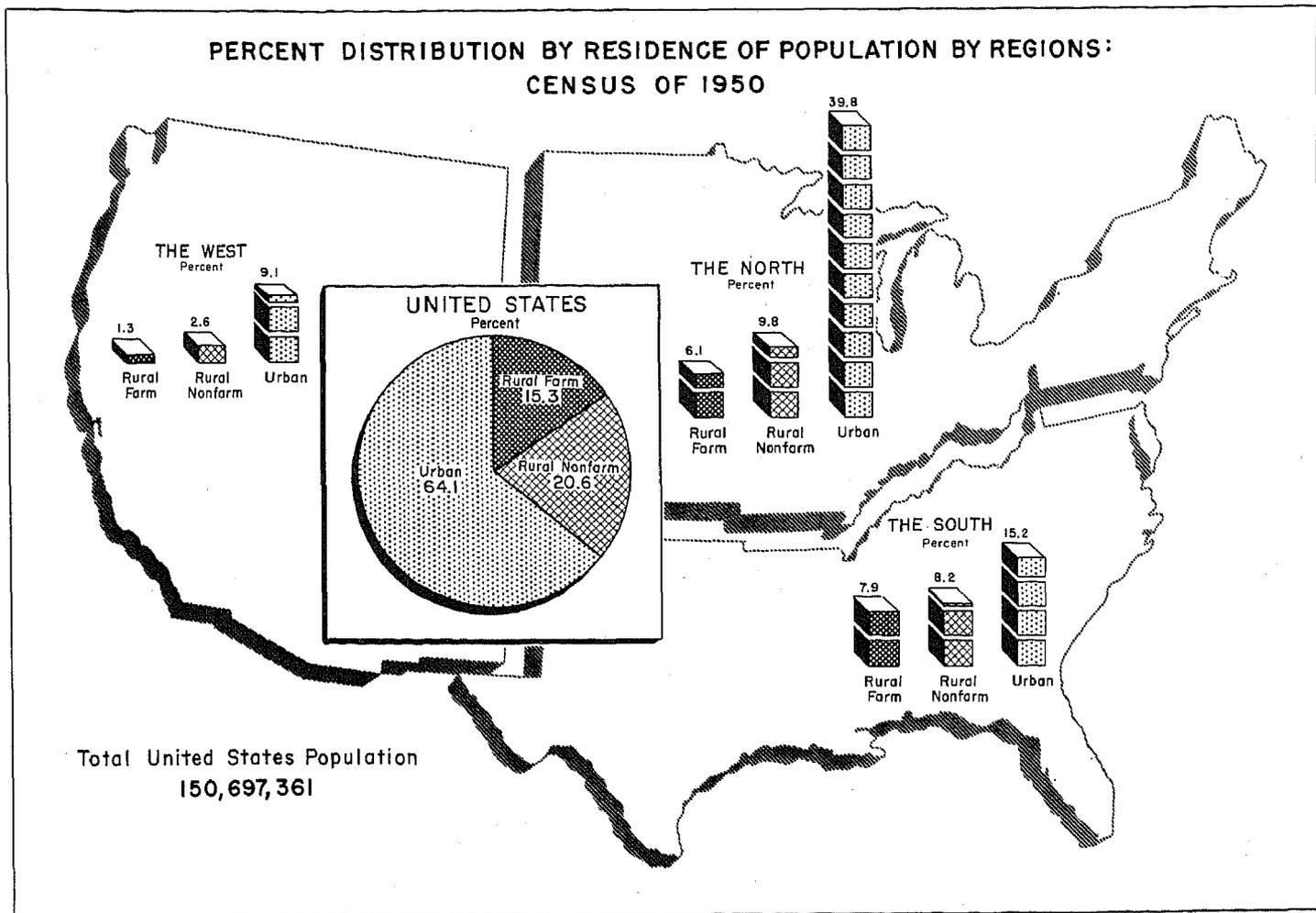
In areas with very small families or many vacant houses, the population schedule was not filled as far as the last sample line. To correct for possible bias, other sample lines on the incomplete population schedules (called "supplemental sample lines") were selected during processing to replace the unfilled sample lines.

To effect economies, the sample was reduced from 3 1/3 percent to 2/3 of 1 percent in New York City, and to 1 1/9 percent in other heavily populated areas. The reduction was made by transcribing data from every fifth population schedule in New York City and from every third schedule in the other areas.

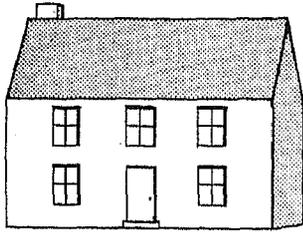
Some of the data needed for the fertility study were taken from the population (P) card for the woman. Most of it, however, was transcribed from the population schedule to the fertility transcription sheet, from which the fertility (C) card was punched. The C and P cards were then matched and the information needed from the P card was mechanically reproduced on the C card.

The data transcribed from the population schedule to the fertility transcription sheet included not only the relevant information about the woman, but also information about her husband--his age, birthplace, employment status, and occupation--and information on the number of her children under the age of five in the household. Ages of the eight oldest children were also entered if the mother fell in the sample selected for the study of child spacing. Procedures for transcribing fertility data were generally similar to those for transcribing family data.

For all women enumerated on the supplemental sample lines, and for some enumerated on last sample lines, information for items 36, 37, and 38 was lacking. Women enumerated on the supplemental sample lines were usually from areas where families were small. Moreover, a sample of 1950 Census schedules disclosed that nonreports on children ever borne (item 38) were generally for women with few or no children in the household. Accordingly, fertility rates based solely on women for whom information was reported in item 38 (number of children ever borne) would represent the larger families and would overstate the degree to which the population tended to reproduce itself. Estimates were therefore made for the missing information. They were based on information from a sample of about 60,000 ever-married women enumerated on last sample lines of the 1950 population schedules.



ILLUSTRATIONS OF LIVING QUARTERS

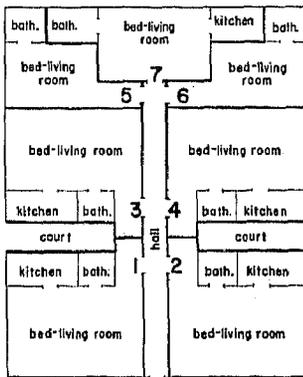


1—Single-family house

A farmer, his wife, and their five small children occupy the whole house.

The entire house is occupied by only one family; it is one dwelling unit.

For "Type of Living Quarters," check box 1, "House, apartment, flat."

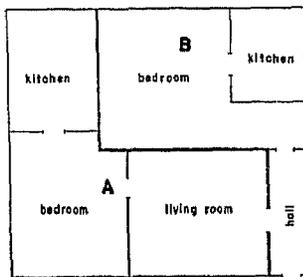


2—Regular apartment house

This is a floor of a regular apartment house. Each numbered unit is occupied by a couple or by a person living alone.

Apartments 1, 2, 3, 4, and 7 have separate cooking equipment and therefore are separate dwelling units. Apartments 5 and 6 are one-room apartments in a regular apartment house and are separate dwelling units even though they have no separate cooking equipment and consist of only one room.

For each of the seven apartments, check box 1, "House, apartment, flat."



3—House with related family group—two dwelling units

A widowed mother occupies the three rooms labeled A. She has a coal stove which she uses for cooking.

Her son and his wife live here, too, but they have two rooms of their own, labeled B. The son and wife cook their meals on their 3-burner electric hotplate.

A and B are separate dwelling units because each has separate cooking equipment. (A has a regular stove, and B has a hotplate which the occupants use for preparing meals.)

For each of the two dwelling units, check box 1, "House, apartment, flat."

4—House with related family group and lodgers—one dwelling unit

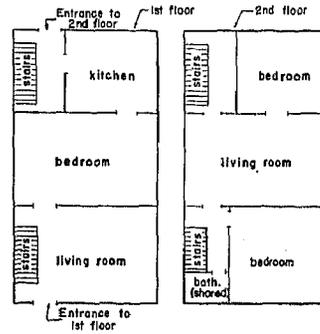
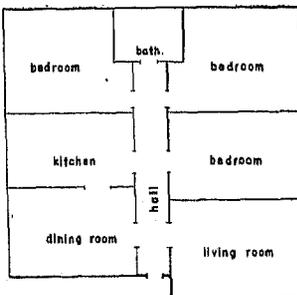
This house is occupied by a man and his wife, their married daughter and her husband, and two lodgers.

The married daughter and her husband do not have their own cooking equipment nor do they have exclusive use of two or more rooms with separate entrance. The lodgers share one room and have no cooking equipment.

Neither the younger couple nor the lodgers have a separate dwelling unit. Their quarters are combined with the quarters of the head and wife, and the combined quarters contain fewer than 10 lodgers.

The entire house constitutes one dwelling unit.

Check box 1, "House, apartment, flat."

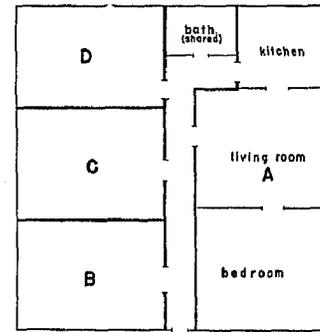


5—Dwelling units with two or more rooms and separate entrance

A man and his wife occupy the rooms on the first floor. A married couple and their daughter occupy the three rooms on the second floor. Although the two families cook at different times and eat separately, they use the same kitchen. Each of the quarters has its own entrance.

Neither the first-floor unit nor the second-floor unit has separate cooking equipment. However, each of the quarters is a separate dwelling unit because each has two or more rooms and a separate entrance. (For the count of rooms, the shared kitchen is counted with the first-floor unit.)

For each of the two dwelling units, check box 1, "House, apartment, flat."



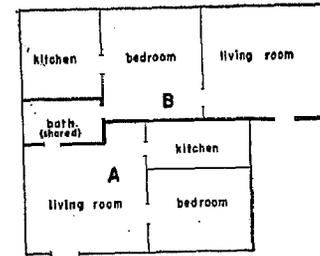
6—One-room dwelling units with separate cooking equipment

The owner converted his house to accommodate several families. He kept three rooms (labeled A) including a kitchen with a gas range, for his own use. He furnished the remaining rooms, B, C, and D, as studio rooms with 2-burner gas hotplates for cooking.

A mother and daughter live in B, a man and his wife in C, and one woman in D. The woman in D seldom cooks but the occupants of the other quarters use their stoves for preparing practically all their meals.

Each of the four quarters is a separate dwelling unit because each has separate cooking equipment. (A has a regular gas range; B and C have hotplates which the occupants use for preparing meals; and the hotplate in D is considered separate cooking equipment because most of the quarters in the structure have cooking equipment for preparing meals.)

For each of the four dwelling units, check box 1, "House, apartment, flat."



7—Vacant dwelling unit

A man, his wife, and son occupy the three rooms labeled A. They have a regular gas stove for cooking.

The wife says there are three vacant rooms in the back (labeled B). The previous tenants in B had their own gas range which they took with them. The new tenants will move in tomorrow.

A and B are separate dwelling units because each has separate cooking equipment. (The vacant dwelling unit B is considered as having separate cooking equipment because the previous occupants had a regular range for cooking.)

For each of the two dwelling units, check box 1, "House, apartment, flat."

8—Large rooming house—non-dwelling-unit quarters

The landlady has a room and kitchen on the first floor. She sublets the remaining 11 rooms in the house as sleeping rooms, with one person occupying each room.

The woman in room 6 has a 1-burner electric hotplate which she uses for occasional snacks. The other roomers have no cooking facilities.

None of the lodgers' quarters are separate dwelling units because none have separate cooking equipment or two or more rooms with separate entrance. (Room 6 is not considered as having separate cooking equipment; it has only a hotplate for occasional use.)

The lodgers' quarters are combined with the landlady's quarters. Because the combined quarters of the head and lodgers contain "10 or more lodgers," enumerate the combination as one nondwelling-unit quarters.

Check box X, "Nondwelling-unit quarters."

