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# Chapter 17. THE 1970 RESIDENTIAL FINANCE PROGRAM

## INTRODUCTION

### Scope

The 1970 Residential Finance Program was part of the 1970 Census of Population and Housing. This program consisted of a national mail survey of approximately 49,000 residential properties and was conducted from the early spring through the fall of 1971.<sup>1</sup> The basic unit for the survey was the property. Questionnaires were mailed to homeowners and owners of rental properties and to lenders who held mortgages on the properties. The sample was selected to represent a cross-section of all nonfarm residential properties in the country. (The sample and its design are described on p. 4.)

Data were collected on the following:

1. Mortgage characteristics, such as number of mortgages, original and outstanding amounts of loans, frequency and amount of payments, items covered by payments, government insurance status, and type of lender.
2. Property characteristics, such as current value, purchase price, year built, year acquired, number of housing units, number of rooms, and housing expenses such as taxes and insurance.
3. Owner characteristics, such as race, sex, age, size of household, veteran status, and income of owner-occupants of one-housing-unit properties; and type of owner (individual, corporation, etc.) of rental property.

The data collected were summarized for the entire United States, for the four census regions (Northeast, North Central, South, and West), for metropolitan areas collectively, for the central cities and for the balance of metropolitan areas collectively, and by size of place. The results were published in one case-bound volume, 1970 Census of Housing, Volume V, Residential Finance, Series HC(5), issued in the summer of 1973.

Because of the tremendous amount of money required for building, marketing, and maintaining the Nation's housing, information gained from this survey and from previous similar surveys has been used widely in planning and decision-making by the following groups:

1. Government, including Congress and various Federal agencies, which needs such information to formulate policies and programs for--

a. Regulating the credit flow;

b. Encouraging residential building by providing government mortgage insurance or guaranties (through the Federal Housing Administration and the Veterans Administration) and by facilitating a market for residential mortgages (through activities of the Government National Mortgage Association and the Federal National Mortgage Association); and

c. Stimulating provision of housing for low and moderate income families through grants to local public housing agencies, interest subsidies for home buyers, and rent supplements for renters.

2. Lending institutions--such as banks, insurance companies, and savings and loan associations--for evaluating their current mortgage portfolios and determining the scope and terms of future lending activities.

3. Builders, for assessing the housing market situation in terms of the financial capabilities of prospective home buyers and property investors.

### Historical Background

As early as 1890, the Bureau (then the Census Division of the Department of the Interior) collected detailed statistics on real estate mortgages. In 1920, a special mail survey was made on the financing of nonfarm owner-occupied homes.

In the 1940 Census of Housing, information was obtained on a limited number of mortgage finance items as part of the regular enumeration, but only for owner-occupied one- to four-family homes containing no business.

In 1950, as part of the 1950 Census of Housing, a separate sample survey was conducted by mail to obtain information for both owner-occupied and rental properties by size groups on an extensive range of mortgage, property, and owner characteristics for nonfarm, privately owned, residential mortgaged properties.

In 1956, as part of the National Housing Inventory, a sample survey was made of owner-occupied properties having from one to four dwelling units to obtain information on mortgage status and on the characteristics of the mortgages, properties, and owners.

In 1959-60, as part of the 1960 decennial program, a residential finance (RF) survey was conducted. Since the sample used for this survey was a subsample of the units used for the 1959-60 Components of Change Survey, the two surveys were administered as a joint program

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<sup>1</sup>Since the survey was conducted in 1971, it is sometimes called the 1971 Residential Finance Survey, and the data refer to 1971; but the survey is also referred to as the 1970 Residential Finance (RF) Survey because it was part of the 1970 census program.

called the Survey of Components of Change and Residential Finance, or SCARF. As in 1950, the RF survey again provided data on the financing of nonfarm, privately owned residential properties, both mortgaged and not mortgaged. Information obtained from lenders and owners was used to relate characteristics of mortgages to selected characteristics of the properties and owners.

### Comparison of 1971 RF and 1970 Housing Census Data

The 1971 RF survey provides data on the financing of the nonfarm, privately owned residential properties in the Nation. Certain of the property and owner characteristics for which data are presented in the RF report are also presented in other 1970 housing census publications, and the definitions generally are the same. However, there are several differences:

1. The basic tabulation unit in the RF survey was the property; in the 1970 Census of Housing it was the housing unit. This has particular significance for the one-unit homeowner property data. In the census a one-unit owner-occupied housing unit is just that; in the RF such a unit may have been covered by a mortgage which also covered another housing unit. Therefore, the first unit was considered part of a two-housing-unit property for purposes of the RF survey. Thus, in the RF survey, the number of one-unit homeowner properties is less than the one-unit owner-occupied housing units shown in other census volumes.
2. The RF data were restricted to nonfarm, privately owned residential properties, whereas the housing census included all housing units regardless of location or type of ownership (except for group quarters).
3. The RF data were collected in 1971; the 1970 housing census data a year earlier. This difference in timing contributes to some differences between the two programs in data relating to property and owner characteristics.
4. The monthly rental receipts tabulations in the RF survey were based on the average rent of all housing units in the property. In the basic housing census reports, the monthly rent data were tabulated for each of the individual rental housing units.
5. The RF data were based on a sample selected from 1970 census records. Data for the 1970 Census of Housing, on the other hand, were based on a complete count of all housing units for some items or on a systematic sample of the housing units for other items.

### Procedures

Most of the procedures for the 1971 survey were identical to those for the 1960 survey. There were, however, two major changes from the 1960 survey. In 1960 the RF sample was selected from two sources: Part of the sample was a subsample of the Components of Change area sample; the remainder came from an

independent list of all known large rental properties (i.e., those with 50 or more housing units). For 1971, the RF sample was completely independent from the Components of Inventory Change sample, and the use of the large rental property list was abandoned. These two changes substantially reduced the complexity of the RF processing.

### PLANNING THE 1971 RF SURVEY

In December 1966, the Financial Statistics Subcommittee of the Census Advisory Committee on Housing Statistics met to discuss the proposed 1970 RF program. In 1968 the advisory committee was expanded, and its subcommittees were reorganized. At that time a Residential Finance Subcommittee was set up; it met several times in 1968 and 1969. (There was some overlap of membership between the two aforementioned subcommittees.) The major change from previous RF surveys proposed by the subcommittees was with respect to geographic coverage. The subcommittees strongly supported the publication of data on an inside-outside SMSA (standard metropolitan statistical area) basis and by size of place. They proposed dropping data for individual SMSA's in order to accommodate this. (The 1960 RF survey provided homeowner data for 17 SMSA's; the 1950 survey produced statistics for both homeowner and rental properties in 26 SMSA's.) The Residential Finance Subcommittee recommended that homeowner and small and large rental properties be included in the survey since all types of construction were likely to increase significantly in the future. All of these proposals were adopted.

### Content Changes

Because changes had occurred in the housing and mortgage markets after 1960, some new items were added for 1970. Among these were: Reason for refinancing or renewal, source of the owner's equity or down-payment, presence of variable contract interest rates in currently outstanding mortgages, and whether the lender participated in the earnings of income property. Most users agreed on the importance of collecting and publishing data on secondary market activity; therefore, a single question (item 16 of the H-12 lender questionnaire) on this was included. (In 1960, several questions on the subject were asked, but the data were not published.) A question on whether the property was new or previously occupied when acquired was dropped. (For a description of the RF items, see pp. 13-26.)

### Pretests

Sumter County, S.C., and Dane County, Wis.--The first field test of the 1970 residential finance procedures took place in February 1969. This pilot study was designed to explore three aspects of the coming survey: (1) The mail-out/mail-back procedure conducted from the Bureau's Jeffersonville, Ind., facility; (2) the use of a followup edit letter to secure better response to

certain questions; and (3) the comparison between the number of units at an address as obtained from the sample sources (census address register or listing book) and the number of units in the property as reported by the owner.

The sample included 1,096 properties in Sumter County, S.C., and Dane County (Madison SMSA), Wis. The former is a predominantly rural area in the South, while the latter is an area of urban, suburban, semi-rural, and rural places of a North Central State. The sample was selected from the address registers created for the 1968 dress rehearsal of the 1970 mail-out/mail-back census procedures in Dane County, and from the listing books (handwritten address registers) from the 1968 dress rehearsal of 1970 conventional enumeration procedures in Sumter County.

The initial mailing on February 20, 1969, consisted of homeowner questionnaires sent to all units at addresses having one to four housing units and owner-seeker letters sent to as many as 10 renters at addresses with five or more housing units. Owners or agents identified by owner-seeker letters then were sent a rental property questionnaire.

Ten calendar days after the initial mailout, followup letters were sent to those addresses from which there had been no response. Ten days thereafter, field enumeration was undertaken at those addresses still not responding and at those addresses that the Post Office had reported as undeliverable. (There was no contact with lenders in the procedure for this stage, which did not differ from that of previous surveys.)

Of the 1,096 properties in the pretest sample, the final count of good questionnaires received was 850; of these, 456 (60 percent) were received by mail and 394 were completed in the field. The remainder were properties not in the scope of the survey or not located. Followup letters were mailed to 65 respondents who failed to answer certain questions. Replies were received from 45.

There were only 90 cases of disagreement between the sample sources and the owners as to the number of housing units at the address. It was concluded that perhaps 5 percent of the addresses in the final survey would have to be followed up to reconcile differences.

The response to the owner-seeker letters in Dane County was 100 percent (i.e., at least one questionnaire was returned from each building in the test). This was considered unusually high and of little value in estimating the workload for the survey itself. Therefore, a second city--Trenton, N.J.--was selected for another mail trial.

Trenton, N.J.--The selection of the sample properties came from the address registers for Trenton, N.J., where another dress rehearsal of the 1970 census had been conducted in 1968. On June 2, 1969, 813 owner-seeker letters and homeowner questionnaires were mailed to 349 buildings in Trenton (homeowner questionnaires were sent to 303 buildings with one to four housing units;

owner-seeker letters were sent to 46 buildings with five or more housing units). Receiving at least one questionnaire or letter from a building was considered a response.

Of the 349 buildings surveyed, responses were obtained from 119 (34 percent); 17 (5 percent) were listed by the postmaster as bad addresses or vacancies, and 213 (61 percent) were nonresponse cases. This response rate was considered as probably more typical than that of Dane County. No followup was undertaken in Trenton.

The 1969 pretest results seemed indicative of what might be expected on a national basis in 1971, and no major procedural changes appeared to be necessary.

### Forms Design and Printing

Beginning in the winter of 1968-69, a variety of forms were designed for the RF survey, including three questionnaires, the owner-seeker letter, four control cards, six cover letters, a reminder post card, five followup letters used to obtain different kinds of missing information, and several forms and worksheets used for processing control. Design costs were approximately \$6,300. (See also chapter 4.)

The principal expenditure for printing was for the following items, all printed by the Government Printing Office:

220,000 Form 70-H10 Homeowner Questionnaires, size 14" x 16", folded to 14" x 8", printed in green ink on white paper, at a cost of \$2,603, and delivered in October 1970.

160,000 Form 70-H11 Rental Property Questionnaires, size 14" x 16", folded to 14" x 8", printed in black ink on yellow stock, at a cost of \$2,259, and delivered in November 1970.

370,000 (185,000 sets) of Form 70H-12 Mortgagee (Lender) Questionnaires, size 10 1/2" x 16", folded to 10 1/2" x 8", original printed in black ink on white stock and the respondent's file copy printed in black ink on green paper, at a cost of \$3,242, and delivered in November 1970.

350,000 Form 70-H13 Owner-Seeker Letters, size 8" x 10 1/2", printed in blue ink on white stock, at a cost of \$1,112, and delivered in October 1970.

The questionnaires were not FOSDIC-readable; therefore, no special measures were needed to ensure exact printing specifications. One problem did arise, however: The inside pages of the RF questionnaires did not carry the form number. The printing plate for page 3 of the H-10 questionnaires, which was similar to that of the H-11, was inadvertently used for the H-11 job so that the H-11 questionnaires had to be reprinted. Standard Census Bureau envelopes, overprinted for the RF survey, were used for mail-out and mail-back purposes.

**General Survey Plan**

It was decided that the sample would consist of about 65,000 properties with housing units, half of which were expected to be homeowner properties and the other half rental. The data would be collected primarily by mail, and personal interviews would be limited to respondents who did not return a questionnaire. Data would be collected on both mortgaged and nonmortgaged properties. Final tabulations would be limited to the privately owned, nonfarm residential properties. It was decided to publish separate data on homeowner properties and on rental and vacant properties.

Table 1 indicates the time schedule followed for the RF operations.

**SAMPLE SELECTION**

**Sample Design**

The RF sample was a multistage probability sample selected by computer from the 1970 Census of Population and Housing records according to the following specifications:

The first stage of sampling involved classifying primary sampling units (PSU's) into 357 strata and selecting one PSU from each stratum. A PSU consisted of a county, a group of counties, or an SMSA. There were 112 of these strata (containing approximately 58 percent of the 1970 population) that consisted of only one PSU each. Such PSU's are termed self-representing. The remaining 245 strata comprised more than one PSU. From each of these strata one PSU was selected with probability proportionate to its 1960 census population. These sample PSU's are termed nonself-representing. The 357 sample PSU's comprised 701 counties and independent cities with coverage in each of the 50 States and the District of Columbia.

Within each sample PSU, a sample of residential homeowner and rental properties was obtained from a sample of addresses enumerated in the 1970 census. In order to control the effect of large properties on the reliability of the sample estimates, a stratum of addresses containing 50 or more housing units was created. Such addresses were considered likely to be properties of 50 or more units or to be contained in such properties. This stratum was created by searching for addresses containing 50 or more units in 1970 census enumeration districts (ED's) located in areas in the sample PSU's within which the 1970 census was conducted by mail. (See tape address register and prelist areas below.) The remaining ED's (i.e., those in conventional areas, see below) in the sample PSU's were not searched, as they contained relatively few of the 50-or-more-unit addresses. Units at addresses identified in the ED search as containing 50-99 units in self-representing PSU's were sampled at the rate of 1 in 110, and the addresses containing the selected units were in the sample. All addresses identified in the ED search as containing 50 or more units in nonself-representing PSU's or 100

or more units in self-representing PSU's, were included in the sample. Units in the remaining addresses in all PSU's were sampled at the overall sampling rate of 1 in 1,300, and the addresses containing the selected units were in the sample.

**Table 1. The 1971 RF Survey Operational Timing Chart**

Operation	Started	Completed
Computerized sample selection.....	June 1970	Feb. 1971
Sample identification.....	Oct. 1970	Apr. 1971
Preparation of homeowner questionnaires and control cards.....	June 1970	Apr. 1971
Mailout of owner-seeker letters, homeowner and rental property questionnaires.	Feb. 1971	Apr. 1971
Preparation of lender questionnaires and control cards.....	June 1971	Aug. 1971
Mailout of lender questionnaires.....	July 1971	Sep. 1971
Receipt control and screening.....	Mar. 1971	Dec. 1971
Property edit and coding.....	May 1971	Jan. 1972
Mortgage consistency edit.....	Sep. 1971	Feb. 1972
Mortgage edit and coding.....	Oct. 1971	Mar. 1972
Data punching (excludes correction punching).....	Sep. 1971	Apr. 1972
Computer edits (including correction of rejects)		
Preedit.....	Aug. 1971	Feb. 1972
Nonmortgaged properties.....	Aug. 1971	Mar. 1972
Mortgaged properties.....	Apr. 1972	June 1972
Match-cleanup.....	June 1972	June 1972
Weighting and ratio estimation.....	June 1972	June 1972
Input to variance tabulation.....	Nov. 1972	Nov. 1972
Recoding.....	Aug. 1972	Sep. 1972
Tabulation (includes all reruns).....	Oct. 1972	Nov. 1972
Review of data.....	Aug. 1972	Nov. 1972
Typing of publication tables.....	Oct. 1972	Dec. 1972
Machine check and correction of typed tables.....	Nov. 1972	Jan. 1973
Preparation of text.....	Sep. 1972	Dec. 1972
Preparation of sampling statement.....	Aug. 1972	Jan. 1973
Editing and composition of text.....	Dec. 1972	Mar. 1973
Printing of final report at GPO.....	Mar. 1973	Sep. 1973

**Identification**

Clerks at the Bureau's Jeffersonville facility were responsible for identifying the types of housing units at the addresses of the sample properties that were selected by the computer. Mobile homes and trailers, trailer courts, hotels and motels with less than 50 percent of their rooms occupied by permanent guests, YMCA's, etc., were excluded from the survey as out-of-scope cases.

There were three types of 1970 census enumeration areas:

1. Tape address register areas--Post Office city delivery areas for which computerized mailing lists of residential addresses had been developed;
2. Prelist (listing) areas--areas for which census enumerators had prepared mailing lists by hand in advance of the census (these lists were not computerized); and
3. Conventional (nonmail) areas--areas where census enumerators canvassed all housing units and recorded the addresses at the time of enumeration.

Each type of area required different clerical action, as follows:

Tape address register areas.--The RF clerical unit was provided with a high-speed printer sample listing of the computer-selected addresses in each PSU in the 357 strata and a control card for each address. The listing included the State name, 1970 county and ED codes, and a computer-assigned address serial number (ASN) for each sample address. The sample listing also included three numbers to be added to the computer-assigned ASN for a listed sample address if it was necessary to select additional sample addresses from enumerator additions and for housing units in special places, e.g., hotels, institutions, hospitals.

The ASN was used by the clerks to locate the computer-selected sample address in the appropriate ED address register. If the enumerator had made changes in the preprinted address or had deleted the address, such changes were carried to the sample listing and the control card. Next, each address register was checked for the presence of additions that had been made by enumerators and for housing units in special places. When enumerator additions or housing units in special places were present, additional sample addresses were selected from these sources.

The computer programs that were used to select the RF sample also were used to produce sets of mailing labels in addition to the sample listings. These labels were affixed to control cards, homeowner questionnaires, reminder cards, and owner-seeker letters. For sample addresses selected from enumerator additions and housing units in special places, labels for questionnaires, owner-seeker letters, and followup letters were produced via tape encoding from transcription sheets prepared by RF clerks. A Homeowner Control Card, Form 70H-14, was prepared for sample addresses of one-to four-unit properties. A Rental Property Control Card, Form 70H-15, was prepared for sample addresses of properties with five or more housing units.

Listing areas.--In listing areas, as in tape address register areas, the RF sample was selected by the computer. However, since there were no computerized mailing lists for listing areas, their RF sample listings did not provide mailing addresses. RF clerks, using the address serial numbers, searched the appropriate address register to obtain the address for the RF sample properties. In addition, the listing-area sample identification processing included searching all pre-listed ED's in the PSU for sample addresses with 50 or more housing units at the same address. Form 70H-14 or 70H-15 control cards were prepared for the listing area sample properties. Tape-encoder transcription sheets were prepared clerically to provide the required labels for questionnaires, owner-seeker letters, and followup materials. The major difference between the sample identification in listing areas and in tape address register areas was that the occupant's name at the time of the census enumeration was obtained for the sample address whenever it was given in the address register.

Conventional areas.--The sample identification in conventional areas was essentially the same as for listing areas. The only major exception was that no attempt was made to identify addresses with 50 or more

units. The inclusion of the occupant's name at the sample address at the time of census enumeration was very important in conventional areas because of the numerous rural addresses. Delivery of the questionnaires, owner-seeker letters, and other RF materials would have been virtually impossible without names.

A total of 59,000 ED's were processed. Of these, 14,000 were prelist ED's that were searched for 50-or-more-housing-unit properties only.

### Verification

The sample identification operation was verified, using the dependent verification system in all types of areas. Different clerks than those who performed the original processing repeated the processing as specified in the sample identification procedures. If the number of missed units, erroneous identifications, or name and address transcriptions exceeded established tolerances, the ED was reprocessed. Transcription errors found in verification were corrected.

Approximately 92 man-months were required between September 1970 and April 1971 to complete sampling and verification. This operation was extended 2 months beyond its original schedule because certain address registers still were being used in the decennial census processing and were not available for this operation in the survey.

## COLLECTING THE DATA

A questionnaire was mailed from Jeffersonville to each sample address to identify the specific property associated with the address. (In the RF survey, a property comprised all of the buildings and land covered by a single first mortgage. If the property was not mortgaged, the owner's definition of the property was used.) The questionnaire provided for the reporting of the name of the owner, the characteristics of the property, and the name and address of the firm or person to whom payments were made on mortgages on the property. The sample property was classified as "homeowner" if it contained one to four units and one of the units was occupied by the owner. The remaining sample properties were classified as "rental" or "vacant".

### Questionnaires

Four different questionnaires were used to collect data for the 1970 Residential Finance Program:<sup>2</sup>

1. Homeowner Questionnaire, Form 70H-10. This questionnaire was mailed to occupants of properties with one to four housing units.

<sup>2</sup>For facsimiles of the questionnaires, see U.S. Bureau of the Census, 1970 Census of Population and Housing, Surveys of Components of Change and Residential Finance, Principal Data-Collection Forms and Procedures, PHC (R)-4.

2. Rental Property Questionnaire, Form 70H-11. This questionnaire was mailed to owners or agents of all other residential properties (i.e., those properties with five or more housing units or those with less than five units when none was owner-occupied, as indicated by responses on the H-10 and H-13 questionnaires).

3. Mortgagee (Lender) Questionnaire, Form 70H-12. This questionnaire was mailed to lenders to whom mortgage payments were made, as identified on H-10 and H-11 questionnaires.

4. Owner-Seeker Letter, Form 70H-13. This form was sent to apartments in properties with five or more units in order to determine the name and address of the owner or agent to whom rental payments were made. Form H-11 could then be mailed to these owners or agents. (A maximum of 10 owner-seeker letters were sent to any one address.)

### Address Labels

Address labels were printed out by the computer for the selected buildings in sufficient quantity for an original and two followup mailings. The procedure differed depending upon the number of housing units in the building:

1. One to four housing units. An address label was prepared for each unit. Labels were affixed to control cards and H-10 homeowner questionnaires. (The questionnaire had a screening question asking for the name and address of the owner.)

2. Five or more housing units. Address labels were produced for up to 10 units. These labels were affixed to the control card for the property and to the H-13 owner-seeker letters, which asked the name and address of the owner or agent to whom rental payments were made. Initially, a wave of five of these forms was mailed. If no reply was received from at least one, the remaining forms were mailed. Upon receipt of a reply, a form H-11 rental property questionnaire was mailed to the owner or agent listed.

Typists prepared those labels not generated by the computer. Between February and April 1971, they typed approximately 2,400 labels for H-13 owner-seeker letters and approximately 20,000 labels for the H-11 rental property questionnaires.

### Mailout

The mailing and control of receipts was handled in Jeffersonville; in the 1960 survey this phase had been conducted in the Bureau's regional offices. The centralization of this phase had many advantages. Among the most important advantages were that mechanical equipment was used for labelling, folding, and stuffing; and that changes in procedures and answers to questions about the procedures were communicated simultaneously to everyone concerned.

The H-10 homeowner questionnaires for tape address register areas with computer-generated labels were mailed out on February 26, with a mail followup (a reminder post card) on March 12; those for the other areas were mailed out on March 15 and 31, with a mail followup on April 9.

The first wave of H-13 owner-seeker letters for tape address register areas, with computer-generated address labels, also was mailed out on February 26, and a second wave was mailed on March 12. The H-13 letters with typed labels were mailed on March 12 and March 29, without followup reminder cards. (These letters were sent to apartment occupants in rental properties in the sample in order to determine the names and addresses of the owners or rental agents to whom the H-11 rental property questionnaires should be sent.)

The H-11 rental property questionnaires were mailed out on April 9.

Respondents filled in and returned the questionnaires to Jeffersonville.

Most persons who received an H-10 questionnaire also received a reminder post card. The post card said, "If you have already returned the questionnaire, thank you for your cooperation. If not, would you please fill it out and mail it as soon as possible." However, a significant volume of mail was generated as respondents wrote to say they had already returned the questionnaire or to request a second one. This response had not been anticipated and no procedures had been developed to cope with it. None of this mail was answered; requests for duplicate questionnaires were assumed to be covered by followup procedures in which letters and duplicate questionnaires were sent to all owners who failed to respond to the original questionnaire within a reasonable amount of time. If no response was received after a second letter, the case was turned over to the appropriate regional office for followup.

Names and addresses of the mortgage holders or their agents were transcribed from completed homeowner and rental properties questionnaires to the mortgagee questionnaires. The mortgagee questionnaires were mailed in three cycles--in July, August, and September 1971. Followup letters were sent to lenders who failed to respond. However, no followup letters were sent to lenders who received six or more questionnaires; instead, such cases were assigned directly to the field. A total of 38,000 lender questionnaires were mailed to 18,000 mortgagees and approximately 33,000 of these questionnaires were returned by mail.

Approximately 4,700 mailing pieces were returned by the Post Office as undeliverable. Some had no labels or were so labeled and stuffed that the addresses could not be read. The latter were corrected and remailed. Those marked "demolished, razed, or torn down" were considered out-of-scope and removed from the survey. All other undelivered pieces were checked against the survey records and either corrected and remailed or referred to the regional offices for followup.

## Followup

Field interviews were utilized only when the mail effort was unsuccessful. Field work generally was necessary because of three types of problems: (1) The original mailing pieces were returned by the Post Office as undeliverable; (2) no usable response was received from a property (i.e., no H-10 or H-13 questionnaire was returned) so that the owner was not identified; and (3) the owner was identified by way of an H-10 or H-13 questionnaire, but no usable response was received from the owner. Cases of owners who were not identified were sent to the regional offices for followup on April 30, and cases of owners who did not respond were sent for followup on May 10.

The field workload for the first phase of the survey (60,000 properties to which homeowner questionnaires and owner-seeker letters had been mailed) was 38,000 properties. By regional office, the range was from 1,200 in Seattle to 7,400 in New York City. Approximately 12,000 usable late mail returns were received in Jeffersonville after the followup materials had been sent to the field. Teletype was used to so inform the appropriate offices, but this procedure did not prove entirely satisfactory, largely because any mistake in transcribing a control number resulted in considerable confusion. The total field workload for the second phase of the survey (the lender questionnaires) was about 9,000 cases, with 2,500 in the New York office. Again, the late mail returns presented a control problem which could have been diminished by lengthening the period between mailout and referral to the field. However, the more time that elapsed between the contacts with the owner and with the lender, the more chance there was that the mortgage would be terminated or changed in some manner.

Of approximately 64,800 properties designated for the sample, data were obtained for about 26,600 homeowner properties, 6,800 rental properties with 1 to 4 units, 4,300 rental properties with 5 to 49 units, and 11,400 rental properties with 50 or more units. The remaining 15,700 properties included those not within the scope of the survey (13,700) and those for which no data were obtained (2,000).

## Field Organization and Training

The field work was conducted from the Bureau's 12 regional offices (later called data collection centers) with the regular staff in charge. One program supervisor in each office was assigned to the RF field program on a part-time basis. These persons trained and supervised a total of 636 interviewers, most of whom had been working on current-survey projects or had had census experience. Current program interviewers were paid \$2.80 per hour, and new interviewers were paid \$2.50 an hour.

Approximately 2 months after the initial mailout of the homeowner and rental property questionnaires, the first phase of field work began with a field supervisors' training session held at Bureau headquarters on April 22,

1971. The training lasted 1 day and included background information on the uses of the data, the source of the sample, how the mail portion of the survey was conducted in Jeffersonville, and field procedures for follow-up cases; and formal training on the homeowner and rental property questionnaires, a review of administrative procedures, and a brief description of the lender phase of the survey.

The supervisors then trained the interviewers in a 1-day session during the week of April 25. They covered field followup of property questionnaires for the first phase of the RF survey, using the following materials that had been employed in the supervisors' own training:

1. Guide for Training RF Interviewers, prepared for the use of the RF supervisors in training interviewers. It provided uniform training and interviewing techniques, as well as descriptions and practice interviews for the homeowner and rental property questionnaires.

2. 1970 Census of Housing Residential Finance Interviewer's Manual, prepared for reference use by the RF supervisors and interviewers. It provided general background information concerning the purposes and the importance of the survey, as well as answers to questions of a technical nature expected to arise in connection with cases of unusual financial arrangements. The purpose of each question on the owner and lender questionnaires was discussed in the manual. Instructions for clarifying the intent of the question to the respondent and for handling problem situations also were included.

3. An Interviewer's Home Study manual and an Interviewer's Workbook contained essentially the same material as the interviewer's manual; however, the home study manuals were written from the viewpoint of the interviewer and contained quizzes, mock interviews, practice exercises, and a home study review test.

For the lender phase of the survey, interviewers did not receive formal training on use of the lender questionnaire and followup procedures; they learned this through home study during October 1971. A Lender Interviewer's Manual and a Lender Interviewer's Home Study book were prepared for this purpose.

## Publicity

Preparations for the Residential Finance Survey included coverage in the news media. Television and radio were not expected to be useful in reaching RF respondents; therefore, publicity was concentrated in newspapers and specialized periodicals. The Bureau prepared a press release for each major stage of the survey: (1) The mailout, (2) the followup of homeowners' and renters' questionnaires, and (3) the mailout of lender questionnaires. In February, April, and July 1971, respectively, these releases, together with full lists of the counties and metropolitan areas covered

by the survey, were sent to approximately 300 daily newspapers in or near the 357 PSU's affected and were made available to wire services and Washington news bureau representatives. Releases also were sent to a list of 70 specialized periodicals dealing with building management and banking. Interviewers carried copies of the first release, which included a description of the purpose of the survey, for their own information and that of respondents. Arrangements were made with national associations of builders, real estate boards, and financial institutions to publicize the survey through endorsements and newsletters.

The extent to which publicity assisted completion of the survey is not known. It did elicit inquiries for further information from real estate and financial editors, and the number of clippings sent to the Bureau gave evidence of wide use of the press materials.

Instead of publishing advance reports of the RF survey results, two press releases were issued in March 1973 and another was issued in June 1973, all containing advance final data. (A few tables based on preliminary data were prepared, but they were not released to the general public.) The press releases were distributed nationally as well as to the periodicals that received the original information.

The cost of the RF publicity effort, including approximately \$1,000 for printing of materials, is included in the figures on costs of public information for the decennial census. (See also chapters 1 and 6.)

## PROCESSING THE DATA

### Introduction

The conversion of data from responses into finished tables involved a series of clerical processing steps, including card punching, which extended from the time the first questionnaires arrived in Jeffersonville in March 1971 until the fall of 1972. After the data on punchcards had been transmitted from Jeffersonville and placed on tape in Suitland, preedit checks and data edits were performed in Suitland. Rejects from the preedit checks and data edits were corrected clerically and recycled mechanically before the ratio-estimate factors were applied via computer. After the basic data files were edited and corrected, the data were recoded and tabulated.

All data concerning property and owner characteristics were obtained from the homeowner and rental property questionnaires. Data concerning mortgages and lenders were obtained from the mortgagee questionnaires.

Data for the sample properties were processed in the following order:

1. Preparation of the questionnaires for editing
  - a. Receipt and check-in
  - b. Screening and check of completeness

2. Editing and coding
  - a. Property editing and coding
  - b. Mortgage consistency editing
  - c. Mortgage editing and coding
3. Data punching
4. Data transmission and card-to-tape transfer
5. Computer preedit processing
6. Clerical review and correction of preedit rejects
7. Mechanical recycling of preedit corrections
8. Computer data-edit processing
9. Clerical review and correction of data edit rejects
10. Merger, match, and geographic coding of property and mortgage data files
11. Clerical review and correction of match clean-up rejects
12. Mechanical recycling of match clean-up corrections
13. Weighting, ratio estimating, and input to variance via computer
14. Creation of final weighted detail tape
15. Recoding and tabulation
16. Tabulation review
17. Table preparation
18. Machine checking of tabulations
19. Text preparation
20. Professional review of tables
21. Printing and publication

These steps are described in greater detail below.

### Receipt and Check-In

RF questionnaires were received in Jeffersonville from two sources and at two points in time. The first source was via mail directly from the owner-occupant for homeowner properties or the owner or agent for rental properties. Those requests for information that were not satisfied by mail (owner not identified, property not located, nonresponse cases, etc.) were sent to the Bureau's regional offices for followup by field enumerators, and these provided the second source of RF survey receipts.

Homeowner (H-10) and rental property (H-11) questionnaires were separated and arranged in sequence by PSU, stratum, serial number, and suffix (control number). Each questionnaire was matched to its appropriate control card, and the date of receipt was entered on the card.

### Screening

Both homeowner and rental questionnaires were reviewed to ensure that the correct form had been used (i.e., homeowner properties were to be reported on H-10 forms and rental properties and properties with five or more housing units were to be reported on H-11 forms). Information on properties reported on incorrect forms was transcribed to the correct forms and the control cards were altered to reflect the change from homeowner to rental property, and vice versa.

If the respondent submitted a completed H-10 questionnaire for a property which was classified as "rental," an edit letter was used to obtain only those answers needed for the rental property questionnaire. In the reverse instance (i.e., a rental property questionnaire was obtained for a homeowner property), no attempt was made to obtain answers to the questions unique to the homeowner questionnaire, since such instances were rare.

Notes, enclosures, and transmittal letters were reviewed to determine whether the respondent had received more than one questionnaire with different control numbers. Also, the presence of two or more control cards for the same property was evidence that a property was in the sample more than once. Those properties that were found to be in the sample more than once were coded to indicate the duplication, and this code was used later as part of the weight adjustment.

All questionnaires determined to be within the scope of the survey were reviewed for changes in the property address. If the changes were minor and served to clarify the property location, they were accepted. Any change that altered the identity of the property was referred for professional review.

After determining that the questionnaire received was for the correct sample property, a comparison was made between the reported number of housing units and the expected number of housing units, as shown on the address label. Usually, if the owner reported more housing units than expected, the owner's reply was accepted. When the owner reported fewer units, attempts were made to reconcile the difference. These attempts included telephone calls or letters to the owners and, in some cases, field investigation. If the reported and expected number of units were within the established tolerances, a check then was made to determine whether the property was owner-occupied, rented, or vacant. Those properties having from one to four units with the owner living on the premises were classified as "owner-occupied." Those properties with five or more units, or with the owner living elsewhere, were classified as "rental".

Each questionnaire was then reviewed for mortgage information. Those questionnaires for properties found not to be mortgaged were set aside for property editing and coding. The questionnaires for properties found to be mortgaged were reviewed for the name and address of the lender. If a complete name and address were given, they were used for preparation of the lender (mortgagee) questionnaire (form H-12) and lender control card (form H-17). If questionnaires for mortgaged properties lacked complete names and addresses for the lenders, they were referred to specialists who consulted reference materials (membership directories of lenders' trade associations for example). Again, telephone calls and correspondence with owners, as well as some field work, were used if necessary. After the lender questionnaires were addressed, the property questionnaires were held for further processing after their matching lender questionnaires were completed and returned by the lenders.

## Editing and Coding

Property editing and coding.--There were three main purposes of the property edit and coding operation: (1) To identify problems, which then were resolved by subject-matter specialists on the basis of all information on the property questionnaires; (2) to code items that were not precoded; and (3) to edit dollar amounts for misplaced decimals and commas, deleting cents and rounding up to the next whole dollar amounts when required. Before referring questionnaires to the specialists, as much as possible of the editing and coding were completed. In some cases an edit letter was sent to owners to obtain missing information in lieu of referring the questionnaires to the specialists. Approximately 49,000 questionnaires were edited; of these, approximately 10,000 required referral.

After the editing and coding had been verified, questionnaires for mortgaged properties were held for mortgage consistency editing and mortgage editing and coding. Questionnaires for nonmortgaged properties were key-punched at this stage.

Mortgage consistency edit.--The purpose of this edit was to determine whether the property owner and lender were reporting for the same mortgage and to verify that all lender questionnaires for each mortgaged property had been accounted for.

Any property having more mortgages (i.e., lender questionnaires) than were reported on the property questionnaire, or having four or more mortgages, was referred. Comparison of data reported by the owner and the lender was made and, whenever differences failed the established tolerances, such cases also were referred. Approximately one-third of the 33,000 mortgaged property questionnaires failed this consistency edit. Those property and lender questionnaires which passed the mortgage consistency edit were forwarded for mortgage editing and coding.

Mortgage editing and coding.--The mortgage editing and coding operation included the following steps:

1. A completeness check to ensure that all mortgage data were contained on the lender questionnaire, which was to be used as the only source document for punching;
2. Editing of all dollar amounts and deleting cents when reported;
3. Checking all numeric entries for misplaced commas, decimal points, and dropped digits;
4. Making a final comparison of the property and lender questionnaires for consistency; and
5. Coding those items that were not precoded on the lender questionnaire.

In the case of missing data, other items on the questionnaire were used to derive the omissions. For example, if type of holder was missing, the name of the mortgage holder was used to obtain the missing code.

## Punching and Transmission of Data

When the mortgage editing and coding operation was completed, the property and lender questionnaires were sent for punching of their data input records.

Data punching.--Two or more data cards were punched for each in-scope property. Out-of-scope properties required only one data card. The control card was the source document for out-of-scope properties. A separate data card was punched for each mortgage. Both homeowner and rental properties that were not mortgaged required two cards, whereas mortgaged properties required not only two data cards for the property and owner characteristics but also a card for each of the mortgages up to three.

Data transmission and card-to-tape transfer.--Data from the punched cards were transmitted from Jeffersonville via telephone datalink to Suitland, where the data were converted to IV-C computer tape. (The questionnaires were microfilmed, and the film was stored.) The IV-C computer tape was converted to III-A tape for processing on the Bureau's model 1107 computer.

## Computer Processing

Preedit computer processing.--Before the property, owner, and mortgage data could be edited by computer, the sample records from the three sample sources were combined, sorted, and matched to the 1970 census geographic reference tape. The main purposes of this process were (1) to create a residential finance geographic reference tape and (2) to check the sample records for unacceptable identification codes and record types and for records that did not match the census tape. Those sample records with impossible codes and those that did not match the census tape were "flagged" and displayed on a listing for clerical review and correction. The necessary corrections were punched and transmitted, and the file was recycled. When all sample records had been assigned proper identification and record-type codes and had been matched with the census geographic reference tape, the result was the final RF geographic reference tape.

Similarly, before the data edits were performed, the RF data file was checked for the following:

1. Duplicate cards
2. Missing property or owner cards
3. Homeowner and rental properties with the same identification
4. Difference in the number of mortgages coded on the property record and the number of mortgage records
5. Mortgage records with missing property records
6. Data records unmatched to the RF geographic reference tape
7. Impossible-correction type
8. Unacceptable combinations of record type and card type
9. Out-of-scope records without unique control numbers.

Data records failing one or more of these checks were displayed on a disposition listing or diary for clerical review and correction, punching of correction cards, and recycling. When all rejects were corrected and recycled, the RF data file was then ready for the computer data edits.

Computer data edit processing.--There were three computer data edit programs. The first was used to edit the property and owner characteristics of both nonmortgaged and mortgaged properties; the second, to edit the mortgage characteristics; and the third, to edit out-of-scope properties.

The main purposes of the property edit were (1) to detect impossible codes and blanks resulting from punching errors and omissions; (2) to perform consistency checks on two or more related data items; (3) to code "not applicable" or "not reported" when necessary, including cases where the respondent provided the answer but the answer should have been "not applicable"; and (4) to test dollar amounts and dates against established tolerances, rejecting and flagging those items that were outside the established tolerance.

The main purposes of the computer mortgage edit were the same as those for the property edit with a major difference, namely, that mortgage data consistency checks compared items that were present on both the property and lender questionnaires. In instances where data reported by the owner differed from that reported by the lender, the edit performed adjustments or flagged such items for professional review. For example, annual real estate taxes reported on the owner questionnaire were compared with monthly taxes reported on the lender questionnaire. Depending on the result of this comparison, one of the following actions was taken:

1. If the owner did not report payment of any taxes and the lender did, the annual amount paid for taxes was transferred to the owner's data record.
2. If both the owner and the lender reported an amount for taxes and the owner's amount was less than 50 percent of the lender's amount, the edit added the two amounts together and entered the sum in the owner's data record.
3. If the owner's amount was between 50 and 89 percent of the lender's amount, the lender's amount was accepted.
4. If the owner's amount was between 90 and 149 percent of the lender's amount, the owner's amount was accepted.
5. If the difference between the two records was 150 percent or more, the edit flagged the annual taxes item for a subject-matter specialist to review.

Data records having one or more error flags as a result of the property or mortgage edits were displayed on the edit diary for clerical review and correction.

Review and correction of data-edit rejects.--Review and correction were performed by the clerical unit in Jeffersonville and by subject-matter specialists in both Jeffersonville and Suitland. The clerical review consisted of (1) pulling the owner and lender questionnaires

for the data records that failed one or more edits, (2) reviewing the items that failed for punching errors, (3) preparing punch correction documents to correct punching errors found in the review, and (4) referring for a subject-matter specialist's attention those cases that could not be resolved by the clerical unit. Correction data were punched and transmitted, and the computer edits were rerun (recycled). The review, correction, and recycling process was repeated until the final RF edited detail tapes were created.

Merge, match, and geographic coding of property and mortgage data files.--After the data were edited, reviewed, corrected, and recycled, three sets of final RF edited data tapes were created--one set for nonmortgaged properties, one set for mortgaged properties, and one for out-of-scope properties. The three sets were merged and the records were arranged in sequence by PSU, stratum, and control number before being matched to the RF geographic reference tape. During the match, geographic codes and basic property weight (see below) were applied to each data record, and the required lists and counts were generated. Three outputs were generated during the merge-match computer run, as follows:

1. Basic property weight edited detail file, consisting of the edited detail with geographic codes and basic property weights.
2. Disposition listing, consisting of the listing of all data records that did not match the RF geographic reference tape and cases of two or more property data records with the same control number.
3. Lists and counts for weighting (for a subject-matter specialist's review), consisting of the following:
  - a. Listing of all in-scope properties in the sample more than once.
  - b. Listing in specified size groups of all in-scope properties with one to 49 units at one address or with 100 units or more at one address and in one building.
  - c. Listing in specified size groups of all in-scope properties with 100 or more units at one address in two or more buildings.
  - d. Separate counts of all out-of-scope properties, homeowner properties, and rental or vacant properties by size group and geographic region.

Review and correction of match rejects.--The review and correction of match rejects consisted of (1) obtaining the missing geographic codes from the sample listings or from the homeowner and rental property control cards for RF geographic reference tape nonmatches and (2) pulling the matching property and mortgage questionnaires and determining which of the duplicate property data records was to be retained. Punch documents for geographic nonmatches and duplicates of property records were prepared and sent for punching of correction cards.

When all match rejects had been corrected, the edited detail file was updated with the corrections for RF geographic reference tape nonmatches and duplicates. The updated edited detail file then was ready for the application of final weighting, ratio estimating, and non-interview adjustment factors.

Weighting, ratio estimating, and noninterview adjustment computer processing.--The necessary factors for final weighting, ratio estimation, and noninterview adjustment were assembled, computed, and applied to each data record mechanically. The final weighted detail file was the output of this computer processing.

Estimates for the RF report were obtained by using ratio estimators. In general, these estimators produced more reliable results than would have been obtained by inflating the data for the sample properties by the reciprocal of their probabilities of selection (i.e., by using a simple inflation estimate). A ratio estimator will produce improved reliability when there is a sufficiently high positive correlation between the characteristic being estimated and a statistic which can be estimated from the sample survey and for which figures are available from an independent source (such as the census). Ratio estimates for this survey were produced by multiplying the simple inflation estimates of the characteristics by the ratio of the census total for the correlated statistic to the simple inflation estimate of the correlated statistic obtained from the sample. The simple inflation estimates were adjusted to account for the sample properties for which no data were obtained.

Characteristics of homeowner properties were obtained using the survey estimates of the number of owner-occupied units in one- to four-unit homeowner properties as the denominators of the ratios. The numerators were 1970 census counts of owner-occupied units in one- to four-unit structures. For characteristics of rental properties, the denominators of the ratios were the survey estimates of the number of renter-occupied and vacant units in all homeowner and rental properties. The numerators were the 1970 census counts of renter-occupied and vacant units and owner-occupied units in five-or-more-unit structures. Separate ratio estimates were computed within each census region for three SMSA-size classes by inside and outside the central cities, and for areas outside of SMSA's by urban and rural (1970 census definitions). The SMSA-size classes (1970 census population) were 1 million or more, 250,000 to 999,999, and less than 250,000.

Recoding and tabulation.--Before the final weighted detail file could be tabulated, data recodes had to be developed and other preparatory work performed. For example, in order to tabulate and display "rental receipts as percent of value," the quotient obtained by dividing value by total rental receipts was recorded so that it could be tallied in its appropriate cell. This preparatory work included the development of the RF dictionary which defined the variables to be tabulated. The data were tabulated using the GENER8, a standardized computer-tabulation program.

## PUBLICATION

### Table and Text Preparation

Before the tabulations were released for typing, each set of tabulations was reviewed by subject-matter

specialists. This review included (1) checking for internal consistency, (2) suppressing data as necessary to avoid disclosure of information about any individual or firm in the published tables, and (3) inserting symbols to facilitate the typing of the tables. Most tables were typed on preprinted table outlines. The original (camera copy) was retained in Suitland, and a photocopy was used for the machine checking operation in Jeffersonville. Clerks in Jeffersonville verified the accuracy of the typing operation by adding columnar and linear detail data on the photocopies of the typed tables to obtain grand totals, subtotals, and internal subtotals. When errors were found, the changes were indicated, and corrections were carried to the camera copy of the affected tables.

Subject-matter specialists reviewed editorially the camera copies of each publication table. A final check was made to verify that all the errors found in the initial review had been corrected.

Text preparation.--During the period when the tabulations were being run and reviewed and tables were being typed, the RF publication text was written. It included (1) a general description of the contents of this volume of the 1970 Census of Housing, (2) summaries of RF data collection and processing procedures, (3) statements concerning comparability with 1960 and 1950 Residential Finance Surveys and with data from other sources, and (4) appendixes which contained explanations of the publication-area classifications and definitions and explanations of the terms and table symbols.

### Printing and Publication

After final verification of the camera copies of the tables, the text and tables were assembled and transmitted to the printer for reproduction by photo-offset and for binding in one volume, 1970 Census of Housing, Residential Finance, Series HC(5), which was issued in September 1973. Table 2 indicates the distribution of tables in the above volume by geographic area. Prior to the publication of this information in one volume, four supplementary reports in the HC(S1) series were prepared from the RF data. Report number 17 was based on a special tabulation of real estate tax data; numbers 18, 19, and 20 reproduced tables for homeowner properties which later appeared in the final volume. Special tabulations were made available on a cost-of-preparation basis.

## RELIABILITY OF THE ESTIMATES

### Sampling Variability

The particular sample used for this survey was only one of a large number of possible samples of the same size that could have been selected, using the same sample design, sample-selection procedures, questionnaires, measurement procedures, and interviewers. Estimates derived from these difference samples would differ from each other. The standard error of a survey estimate is a measure of the variation among the esti-

mates from all possible samples and is, therefore, a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples. The estimate and its associated standard error may be used to construct a confidence interval; that is, an interval having prescribed probability that it would include the average result of all possible samples. The chances are about 68 out of 100 that the survey estimate will differ from the average result of all possible samples by less than one standard error (plus or minus). Similarly, the chances are about 95 out of 100 that the difference would be less than twice the standard error, and there are 99 out of 100 chances that it would be less than 2 1/2 times the standard error.

### Nonsampling Errors

In addition to sampling error, the survey estimates are subject to nonsampling errors. These errors can be attributed to many sources: incorrect or incomplete reporting by the owner and/or lender, substitution for missing data, and mistakes in transcription, coding, and processing of the data. Such errors also occur in complete censuses. It is believed, however, that most of the nonsampling errors were detected and corrected as a result of the extensive editing and review of the data for consistency and reasonableness.

The accuracy of a survey estimate is determined by the joint effect of sampling and nonsampling errors. As calculated for the RF report, the standard errors partially measure the effect of random response errors but do not reflect any systematic biases in the data. For most estimates in this survey, the total error is usually of the order of size indicated by the sample standard error, or only moderately larger.

### Computation of Sampling Errors

A number of approximations were required to derive standard errors applicable to the wide variety of estimates presented in the RF statistics. As a result, the standard error tables provide an indication of the order of magnitude of the standard error rather than the precise standard error for a specific characteristic. It was necessary to produce special tabulations in order to derive estimates of the standard errors for this survey. The production of these tabulations was costly and, as result, it was not feasible to calculate the standard error of each of the published statistics. Therefore, approximately 200 homeowner and rental property characteristics of varied magnitudes were selected to represent the different variance behavior patterns produced by the various stages of selection. The selected characteristics included those representing counts of properties with specific characteristics and statistics representing aggregates such as outstanding mortgage debt.

The standard error of an estimate from the 357-PSU design reflects a contribution from the PSU's in strata containing only one PSU (i.e., self-representing) and a contribution from the PSU's selected in strata con-

**Table 2. Table-Finding Guides for Types of Property, by Geographic Area**  
 (From 1970 Census of Housing, Residential Finance Survey, Series HC(5))

Geographic area	Type of property				
	One-unit homeowner properties		Rental and vacant properties		
	Total	With Negro owner	With 1 to 4 units	With 5 to 49 units	With 50 or more units
United States, total.....	1-14	1,2	1-11	1-11	1-11
REGION					
Northeast.....	1-5	-	1,2	-	1,2
North Central.....	1-5	-	1,2	-	1,2
South.....	1-5	-	1,2	-	1,2
West.....	1-5	-	1,2	-	1,2
INSIDE SMSA's					
Total.....	1-5	-	1,2	1,2	1,2
In central cities.....	1-5	-	1,2	1,2	1,2
Places of 1 million or more.....	1,2,4	-	1,2	-	1,2
Places of 250,000 to 999,999.....	1,2,4	-	1,2	-	1,2
Places of 50,000 to 249,000.....	1,2,4	-	1,2	-	1,2
Places of less than 50,000 and rural.	1,2,4	-	1,2	-	1,2
OUTSIDE SMSA's					
Total.....	1-5	-	1,2	1,2	1,2
Places of 10,000 or more.....	1,2,4	-	1,2	-	-
Places of less than 10,000 and rural.	1,2,4	-	1,2	-	-

taining more than one PSU (i.e., nonself-representing). Estimates from these two classes of PSU's exhibit different variance behavior patterns, and different methods of variance estimation were required for each class. The variance estimation methods outlined below produce standard errors that reflect the level of variability associated with all stages of estimation.

For the class of PSU's designated as self-representing, estimates of the standard errors were obtained by (1) combining self-representing PSU's into 62 geographically related groups, (2) selecting systematic half samples of the properties within each group, and (3) for each statistic, summing the squared differences of the half-sample totals for a linearized form of the ratio estimator.

For the class of nonself-representing PSU's, the estimation procedure involved combining strata and using the squared difference between the individual stratum totals of the linearized form of the ratio estimator and the weighted average of this total for the combined strata.

As a final step, the standard error estimates were further refined by applying a regression technique. This refinement tended to reduce the variability of the estimated standard errors and to control the effect of having selected only a small subset of the characteristics included in the final publication for the purpose of producing the estimates.

## SURVEY ITEMS

### Introduction

As explained previously, three questionnaires were used to obtain information for the RF survey. The homeowner questionnaire (H-10) was mailed to owners of properties with one to four housing units, one of which was presumed to be owner-occupied. The rental property questionnaire (H-11) was mailed to owners of all other types of residential properties. These two questionnaires were referred to as "property questionnaires." The lender questionnaire (H-12) was mailed to lenders reported to be holding mortgages on properties. The questionnaires are reproduced in full in a separate publication, U.S. Bureau of the Census, 1970 Census of Population and Housing, Surveys of Components of Inventory Change and Residential Finance: Principal Data-Collection Forms and Procedures, Series PHC(R)-4. Pertinent portions of the questionnaires are reproduced below along with a discussion of the items of data collected under three major headings--mortgage, property, and owner characteristics.

All of the items described below appeared as the subjects of boxheads or stubs in the published statistical tables on residential finance. Some items also were used to restrict the separate tables to certain classes of properties; others were derived from the data con-

tained in two or more questionnaire entries which were combined by computer. (A few items were used primarily for control purposes and were not recorded on the basic data cards.) Regardless of the source, each entry on the questionnaires which was used in a published tabulation went through a series of processing steps to convert the data into a form convenient for punching and to improve the usefulness of the final results by reducing errors and supplying missing information. (See also the section on processing on pp. 8-11.)

**Mortgage Characteristics**

Form of debt and number of mortgages on property-- Question 4 of the property questionnaires asked whether there was any debt on the property and, if so, the nature of the debt. Mortgages, deeds of trust, and trustees' debts were considered mortgages. Contracts to purchase, land contracts, and contracts for deed comprised a second category of real estate debt. This information was verified by the lender in question 1 of the lender questionnaire.

Property questionnaires

**4. Do you have a mortgage, deed of trust, contract to purchase, or similar debt on this property?**

1  Mortgage, deed of trust, trustee's deed

2  Contract to purchase (including land contract, contract for deed, etc.)

3  Some other debt connected with the property

Specify \_\_\_\_\_

4  No, property is not mortgaged -- Skip to question 15a

Lender questionnaire

**1. Do you hold or service a mortgage or similar debt on the property listed above?**

Yes -- Continue with question 2

No --

Hold or service other indebtedness

Mortgage has been transferred to --

Name	
Address (Number and street)	
City	
State	ZIP code

STOP HERE and return in enclosed envelope.

No record of any mortgage on subject property

Mortgage terminated on --

Month \_\_\_\_\_ 19 \_\_\_\_\_

*If mortgage terminated within past 3 months, complete questionnaire. Otherwise, return it.*

The owners were asked in question 5 how many mortgages (including a contract to purchase) were on the property. This information was verified by the lenders in question 2 of the H-12 questionnaire.

Property questionnaires

**5. How many mortgages (including contract to purchase) are there on this property?**

1  One

2  Both a first and a second

More than two -- How many? \_\_\_\_\_

Lender questionnaire

**2. The mortgage you hold or service is -- (Mark applicable boxes)**

1st mortgage (land contract or contract to purchase)

2nd mortgage

3rd mortgage

Other -- Specify \_\_\_\_\_

The intent of questions 4 and 5 on the property questionnaires was to determine if the owner had pledged the property as security for one or more loans. Property improvement loans and personal loans used for the down payment which were not liens against the property were not counted as mortgages. The owner was asked to describe these other loans. As a check against the owner's responses, the person(s) or institution(s) to whom the owner made payments on his loan(s) was asked whether they held or serviced any debt for which the property was pledged as security.

Some respondents reported information about a mortgage that they had recently paid off or were about to pay off. Lenders were instructed to report the date the mortgage was terminated for such cases and to complete the questionnaire if the mortgage had been terminated within the past 3 months.

As part of the office screening operation, the number of mortgages was verified by an examination of the entries in question 5 on the property questionnaires and the answers received from the holder or servicer of the loan on the lender questionnaire. The clerks were instructed to refer cases with complicated financial arrangements to Bureau subject-matter specialists.

In the computer edit, the entry for the number of mortgages was checked against the number of mortgage data records. All mortgaged properties were to have one mortgage record for each mortgage. Cases with no mortgages were tabulated separately from those with mortgages.

Government insurance status of first mortgage-- Because of its importance, this item appeared on both the property and the lender questionnaires. In question 6 of the property questionnaires, the owner was asked whether the present mortgage was insured by the Federal Housing Administration (FHA), guaranteed or insured by the Veterans Administration (VA), insured by the Farmers Home Administration, or none of these.

**6. Is the present mortgage --**

FIRST MORTGAGE (or contract to purchase)

1  Insured by Federal Housing Administration?

2  Guaranteed or insured by Veterans Administration?

3  Insured by the Farmers Home Administration?

4  None of the above?

SECOND MORTGAGE

2  Guaranteed or insured by Veterans Administration?

3  Insured by the Farmers Home Administration?

4  None of the above?

The lender was asked the same question, with an additional answer choice of "insured by a private mortgage insurance company." In the tabulations, mortgages insured by the Farmers Home Administration and by private mortgage insurance companies were combined with those not insured or guaranteed into the category "conventional." (The relatively small number of these types of insured loans reported in the survey did not warrant separate tabulation.)

**6. Is the mortgage --**

FIRST MORTGAGE

1  Insured by Federal Housing Administration?

2  Guaranteed or insured by Veterans Administration?

3  Insured by the Farmers Home Administration?

4  Insured by private mortgage insurance company? (*Do not include borrower's life insurance.*)

5  Not insured or guaranteed?

JUNIOR MORTGAGE

2  Guaranteed or insured by Veterans Administration?

3  Insured by the Farmers Home Administration?

4  Insured by private mortgage insurance company? (*Do not include borrower's life insurance.*)

5  Not insured or guaranteed?

The type of mortgage for FHA and VA loans was verified by determining whether the characteristics of the mortgage were consistent with the laws and administrative regulations relating to FHA and VA loans.

Checks were made for FHA loans as part of the editing procedure to verify the following:

The loan was for a first mortgage  
 Year made was 1940 or later  
 Term was from 5 to 49 years (could not be "indefinite" or "on demand")  
 Interest rates did not exceed 8.99 percent and could not be changed during the life of the mortgage

Face amount of the mortgages for one-housing-unit properties could not exceed \$35,000

Mortgage payments were monthly and included:

- (a) Both interest and principal payment  
 (b) Real estate taxes and property insurance  
 (c) FHA insurance premium (except for some cases where the borrower was in the military service)

Mortgage holder was not an individual

Checks were made for VA loans to verify the following:

The loan was for a first mortgage

Year made was 1944 or later

Term was from 5 to 30 years

Interest rates did not exceed 8.99 percent and could not be changed during the life of the mortgage

Face amount of the mortgages for one-housing-unit properties could not exceed \$35,000

Mortgages made under the provisions of the California Veterans Farm and Home Purchase Act or under the provisions of veterans' laws of other States were considered conventional mortgages. In the few cases where the lender failed to supply an answer to question 6 of the lender questionnaire, the owner's answer was accepted if the answer did not violate the rules governing FHA or VA loans. Most of the clerical edits for this item were repeated as part of the computer edits.

Origin of first mortgage.--This item related to how the owner of the property obtained the mortgage in relation to his acquisition of the property. The information came from the responses to questions 12 and 13 on the property questionnaires. The first mortgage was classified as to whether it was placed on the property at the time the property was acquired, whether it was already on the property and assumed by the present owner when he acquired it, or whether the mortgage was placed after acquisition. This latter group was further classified as to whether it was a refinancing of a previous mortgage or placed on a property owned free and clear of debt.

**12. Is your present first mortgage --**

1  The same mortgage that was PLACED on the property when you acquired it? -- *Skip to question 15a*

2  The same mortgage that you ASSUMED from previous owner? -- *Skip to question 15a*

3  A mortgage placed AFTER you acquired the property? (Include a refinancing of a previous mortgage.) -- *Go to question 13*

**13. If your present mortgage was made after you acquired the property, was it --**

0  A refinancing of a previous loan made or assumed by you?

Was it refinanced by --

1  Same lender?

2  Different lender? Year \_\_\_\_\_

3  A mortgage placed on a property owned free and clear of debt?

The purchase price of the property was checked for mortgages that were placed at the time the property was acquired or were assumed from the previous owner. If the purchase price was equal to or greater than the face amount of the mortgage when made or assumed, the origin of the first mortgage was accepted. Otherwise, this item was referred to a subject-matter specialist for resolution.

Purpose of first mortgage placed later.--The source of this item was question 14 of the property questionnaires. The data were shown only for properties with a first mortgage made subsequent to the acquisition of the property. If more than one reason was checked by the respondent, the first one listed was used.

**14. If your present first mortgage was placed AFTER you acquired the property, what was its CHIEF purpose?**

- 1  To renew or extend a loan that had fallen due, without increasing the outstanding balance
- 2  To secure better terms (lower interest rate, longer payment period, etc.)
- To provide funds for --
- 3  Additions, improvements, or repairs to this property
- 4  Investment in other real estate
- 5  Other types of investments
- 6  Educational or medical expenses
- 7  Other -- *Specify* \_\_\_\_\_

Year first mortgage made or assumed.--The source of this item was question 7 on the property questionnaires, "When did you make or assume this loan?" A similar question, "When was this mortgage made or assumed?" appeared on the lender questionnaire. The owner was asked this question because some lenders do not always record information relating to the assumption of an existing loan by a new purchaser. For the purposes of this survey, the year the current owner made or assumed the loan was used, not the year the mortgage was originally made.

**7. In what year was the present mortgage placed by you or assumed by you?**

FIRST MORTGAGE (or contract to purchase)

Year \_\_\_\_\_

SECOND MORTGAGE

Year \_\_\_\_\_

THIRD MORTGAGE

Year \_\_\_\_\_

As part of the central office editing procedure, the blank entries were imputed from the reported information, and inconsistencies between the property and lender reports were resolved. Some of the inconsistencies between questionnaires were brought about because the mortgage had been renewed or refinanced. The date of

the latest renewal or refinancing (as indicated by the entries for question 7 on the lender questionnaire) was used as the year the mortgage was made.

**7a. When was this mortgage made? (If refinanced or renewed, enter date of most recent action.)**

FIRST MORTGAGE -- Year \_\_\_\_\_

JUNIOR MORTGAGE -- Year \_\_\_\_\_

**b. If mortgage was assumed by present property owner, what was the date of assumption?**

FIRST MORTGAGE -- Year \_\_\_\_\_

JUNIOR MORTGAGE -- Year \_\_\_\_\_

First mortgage loan.--This item appeared on both the property and lender questionnaires. On the lender questionnaire the question was asked in two parts--the amount when made and the amount at the time of assumption by the current property owner if an assumption was involved.<sup>3</sup> The replies of the owner and lender were compared. The amounts reported were expected to be the same, within a certain tolerance. Any major differences caused referral to a subject-matter specialist. In the case of assumed mortgages, the figure used for tabulation was the amount at the time of assumption.

Property questionnaires

**8. What was the amount of the present mortgage when placed by you or assumed by you?**

FIRST MORTGAGE (or contract to purchase) -- \$ \_\_\_\_\_

SECOND MORTGAGE -- \$ \_\_\_\_\_

THIRD MORTGAGE -- \$ \_\_\_\_\_

Lender questionnaire

**8a. What was the amount of this mortgage when made? (If refinanced or renewed, enter amount at time of most recent action.)**

FIRST MORTGAGE -- \$ \_\_\_\_\_

JUNIOR MORTGAGE -- \$ \_\_\_\_\_

**b. If assumed by present property owner, what was the outstanding balance at the time of assumption?**

FIRST MORTGAGE -- \$ \_\_\_\_\_

JUNIOR MORTGAGE -- \$ \_\_\_\_\_

In the few cases where the answer could not be determined from either respondent, subject-matter specialists imputed an amount based on other items on the questionnaires. In the case of refinanced, renewed, or extended loans, the amount of the loan for the latest transaction was determined by an examination of the

<sup>3</sup>The current owner was defined as the owner at the time of the survey. A purchaser of a property with a mortgage still outstanding might have assumed responsibility for paying the unpaid balance as part of the purchase agreement. In such cases, the amount of the unpaid balance at the time of purchase was regarded as the amount of the loan for the purposes of this survey.

amount of the loan and outstanding debt entries. Where it appeared that additional money had been advanced at the time the loan was recast, the amount of the loan was adjusted if there was evidence that the additional amount was not included in the amount-of-loan entry. The amount of the first mortgage loan was used in conjunction with the purchase price to compute the percentage for "first mortgage loan as a percent of purchase price." It also was used in conjunction with the purchase price and the amount of the junior mortgage loans to compute the percentage for "all mortgage loans as a percent of purchase price."

As part of the edits, the amount of the loan was compared with the purchase price and the outstanding debt to determine the reasonableness of these entries.

First mortgage outstanding debt.--This item, with its variation, total mortgage outstanding debt, appeared as the unit of tabulation in two tables--first mortgage outstanding debt and total mortgage debt--of the published report. The source of this item was question 10a of the lender questionnaire, "What is the current unpaid balance?"

<b>10a. What is the current unpaid balance?</b>	
FIRST MORTGAGE \$ _____	JUNIOR MORTGAGE \$ _____
<b>b. As of what date was this balance computed?</b>	
FIRST MORTGAGE (Month and year) _____	JUNIOR MORTGAGE (Month and year) _____

The amount of outstanding debt was checked for consistency and rounded to the nearest dollar. In the computer edit, any case in which the unpaid balance exceeded the market value by more than 10 percent was rejected and reviewed. The rejects were checked for rounding and punching errors, corrected, and recycled. In cases where the debt exceeded the value and the difference was not due to processing errors, no corrective action was taken.

Total mortgage outstanding debt.--This item was used to classify properties by total mortgage debt; i.e., the sum of the unpaid balance for the first and all junior mortgages. Properties with only one mortgage had a total debt equal to the first mortgage debt. The source of this item was question 10a of the lender questionnaire. (See above.) During the computer operation, the amount of the unpaid balance on the first mortgage was added to the amount(s) of the unpaid balance of the junior mortgage(s).

Interest rate of first mortgage.--The source of this item was question 11a of the lender questionnaire, "What is the current contract interest rate?" The respondent was instructed to report the percent per year and to omit the mortgage insurance premiums. The reported amount was coded into a 3-digit number. The first two digits were used for the whole number and the third digit for the decimal. Each of the most frequent decimals (.25, .50, and .75) had a code; the remaining decimals had a code for each group between these most frequent decimals. Thus, there was a separate right-

hand digit for each of the following decimals or decimal groups:

- None
- Less than .25
- .25
- .26-.49
- .50
- .51-.74
- .75
- .76-.99

All blank entries and entries of "none" were referred to specially trained technical assistants, as were cases where the interest rate was for a period other than annual. These were changed to an annual basis. Information on the legal maximum rate of interest for the FHA and VA mortgages was used to fill blank entries in interest for these loans.

<b>11a. What is the current contract interest rate? (Do not include mortgage insurance premium.)</b>			
FIRST MORTGAGE (Percent)		JUNIOR MORTGAGE (Percent)	
_____ %		_____ %	
<b>b. Can the interest rate be changed during the life of the mortgage?</b>			
FIRST MORTGAGE		JUNIOR MORTGAGE	
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Variable interest rate.--The source of this item was question 11b of the lender questionnaire. (See above.) This item was edited for consistency with Government insurance status (question 6). Entries for FHA-insured or VA-guaranteed mortgages with variable interest rates were changed to "no" in 11b. For mortgages with other types of insurance status, a response of "yes" to question 11b was acceptable. Blanks were coded as "no" regardless of insurance status.

The intent of this question was to identify mortgages whose interest rates could be changed in line with increases or decreases in current mortgage money interest rates. The frequency of mortgaging with variable rates may be overstated because there is some indication that lenders misunderstood the intent of this question. Many respondents replied "yes" to this question but qualified it by notes such as "if mortgage is assumed," "if mortgage becomes delinquent," etc.

Term of first mortgage.--The source of this item was question 9 of the lender questionnaire, "What is the term of this mortgage (years from date made to maturity)?" The respondent was instructed to enter "on demand" if the mortgage had been so written that the unpaid balance became due and payable at any time indicated by the lender. Most respondents entered the number of years. In a few cases the answer appeared in some other form, e.g., "no set time" or "until paid." Bureau clerks referred such cases to technical assistants who computed the term using all clues available.

Questionnaires with blank responses for this item were corrected by technical assistants who computed the

term by reference to mortgage-payment calculation tables, using the entries in the face amount of loan when made, interest rate, and principal and interest payment. All cases with unusually short-term mortgages were examined by technical assistants who checked for possible inconsistencies between the term and the amount of the regular payments for principal and interest.

**9. What is the term of this mortgage (years from date made to maturity)? (If mortgage is payable on demand, so state.)**

FIRST MORTGAGE  
(Number of years)

JUNIOR MORTGAGE  
(Number of years)

The computer edit rejected entries for FHA and VA mortgages with terms other than from 5 to 45 years and 5 to 30 years, respectively. Rejects were checked for punching errors, Government insurance status, and term; the records were corrected as necessary and recycled.

Holder of first mortgage.--The source of this item was question 4 of the lender questionnaire.

**4. Who is the holder of this mortgage (mortgagee)? (If more than one type of holder, explain in remarks.)**

FIRST MORTGAGE

- 1  Commercial bank or trust company (held for own account)  
 2  Mutual savings bank  
 3  Savings and loan association (building and loan or homestead association)  
 4  Life insurance company  
 5  Mortgage company  
 6  FNMA  
 7  Federal or federally sponsored agency (GNMA, FHA, VA, etc.)  
 8  Real estate or construction company  
 9  Individual or individual's estate  
 0  Other (e.g., State or local government retirement fund, private pension fund, philanthropic organization, fraternal society, educational endowment, trust fund administered by bank)

Specify \_\_\_\_\_

JUNIOR MORTGAGE

- 1  Commercial bank or trust company (held for own account)  
 2  Mutual savings bank  
 3  Savings and loan association (building and loan or homestead association)  
 4  Life insurance company  
 5  Mortgage company  
 6  FNMA  
 7  Federal or federally sponsored agency (GNMA, FHA, VA, etc.)  
 8  Real estate or construction company  
 9  Individual or individual's estate  
 0  Other (e.g., State or local government retirement fund, private pension fund, philanthropic organization, fraternal society, educational endowment, trust fund administered by bank)

Specify \_\_\_\_\_

During the data-collection phase, cases in which the mortgage was held by a Federal Government agency were referred to Bureau headquarters, where these cases were consolidated and sent to the agencies in groups. In the case of mortgages held by the Federal Housing Administration, care was taken in the editing of these questionnaires to be sure that the type of loan was "conventional," not "FHA insured."

Occasionally, the lender neglected to answer this question. Technical assistants assigned a type of holder on the basis of the name of the lender furnished by the owner or the name which appeared in the address box of the lender questionnaire for cases where the respondent serviced but did not hold the mortgage loan.

The type of holder usually was evident from the name of the lender. If the word "savings" appeared in the name of a bank, it was recorded as "mutual savings bank." Only insurance companies with the word "life" in their name were coded as "life insurance company;" other types of insurance companies were coded as "other."

Location of lender.--Question 5 of the lender questionnaire asked, "Is the holder's principal address in a different State than the property?" If the lender was in a different State, the census region of the lender (Northeast, South, West, or North Central) was coded. (The region in which the property was located was already carried in the record as part of the geographic identification.) The computer assigned the region code for those lenders in the same State as the property.

**5. Is the holder's principal address in a different State than the property?**

FIRST MORTGAGE

- 0  In same State as property  
 In different State than property

State \_\_\_\_\_

JUNIOR MORTGAGE

- 0  In same State as property  
 In different State than property

State \_\_\_\_\_

For mortgages held by Federal agencies or by the Federal National Mortgage Association, the lender was presumed to be in the South region (which includes Washington, D.C.), regardless of the location of the servicing office.

Servicing of first mortgage.--This item distinguished between mortgage holders who service their mortgages and those who let others perform the servicing tasks. Servicing consists of billing the mortgagor, keeping the necessary records, and paying the real estate taxes, insurance, or other items included in the mortgage payment. It is common practice for insurance companies and other mortgage lenders who invest over a

wide geographic area to arrange for local mortgage companies to service their mortgages. The source of this item was question 3 of the lender questionnaire. The respondent was instructed to check one of two boxes, "hold and service" or "service only."

<b>3. Do you hold the mortgage or service only?</b>	
FIRST MORTGAGE	JUNIOR MORTGAGE
1 <input type="checkbox"/> Hold and service	1 <input type="checkbox"/> Hold and service
2 <input type="checkbox"/> Service only	2 <input type="checkbox"/> Service only

When this item was not answered by the lender, the response was derived by an edit of the type-of-holder item (question 4). When the type of holder was a mutual savings bank, an individual, or an individual's estate, or the "other" category was checked in question 4, the case was referred to technical assistants for resolution.

Holder's acquisition of mortgage.--The source of this item was question 16 on the lender questionnaire.

<b>16. Did the present holder of this mortgage --</b>	
FIRST MORTGAGE	
1 <input type="checkbox"/> Originate it directly from borrower?	
2 <input type="checkbox"/> Purchase this mortgage from present servicer?	
3 <input type="checkbox"/> Purchase this mortgage from someone else?	
JUNIOR MORTGAGE	
1 <input type="checkbox"/> Originate it directly from borrower?	
2 <input type="checkbox"/> Purchase this mortgage from present servicer?	
3 <input type="checkbox"/> Purchase this mortgage from someone else?	

Mortgagee participation in property income.--The source of this item was question 12 of the lender questionnaire. It was tabulated only for income-producing properties.

<b>12. Does the holder participate in the earnings of the property over and above the contract interest rate?</b>			
FIRST MORTGAGE		JUNIOR MORTGAGE	
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Method of payment of first mortgage.--This item provided information on whether regular mortgage payments were required and, if so, whether the payment included both interest and principal or only one of these. The source of this item was question 13 of the lender questionnaire.

The category "no regular payments" was used for those few cases where there were no payments or where payments were made occasionally (e.g., when the borrower was able to pay).

A 1-digit code was used to indicate the four possibilities tabulated (i.e., interest only, principal only, both, or neither). As part of the clerical and mechanical edits,

FHA and VA loans which did not have both principal and interest included in the mortgage payments were rejected and referred to technical assistants who examined the other entries on the questionnaire to be sure that the loan was not actually a conventional mortgage.

For tabulation purposes, this item was combined with the information from question 14 of the lender questionnaire. If regular payments of principal were required, the mortgage was further classified as to whether it was fully or partially amortized.

<b>13. What are the required regular payments in connection with this mortgage for --</b>			
FIRST MORTGAGE	Amount (dollars and cents)	Frequency of payment	
		Monthly	Other
a. Interest and principal?			
Paid together . . . . .			
or			
Paid separately -- Interest . . . . .			
Principal . . . . .			
b. Real estate taxes? . . . . .			
<i>(If taxes and insurance are combined in one account, enter on taxes line and bracket b and c.)</i>			
c. Fire and hazard insurance premium? . . . . .			
d. Mortgage insurance premium? . . . . .			
e. Other -- Specify _____			
f. Total payment . . . . .			
JUNIOR MORTGAGE			
a. Interest and principal?			
Paid together . . . . .			
or			
Paid separately -- Interest . . . . .			
Principal . . . . .			
b. Real estate taxes? . . . . .			
<i>(If taxes and insurance are combined in one account, enter on taxes line and bracket b and c.)</i>			
c. Fire and hazard insurance premium? . . . . .			
d. Mortgage insurance premium? . . . . .			
e. Other -- Specify _____			
f. Total payment . . . . .			
<b>14. Will the required regular principal payments pay off the loan completely by the end of the term?</b>			
FIRST MORTGAGE		JUNIOR MORTGAGE	
1 <input type="checkbox"/> Yes		1 <input type="checkbox"/> Yes	
2 <input type="checkbox"/> No		2 <input type="checkbox"/> No	
3 <input type="checkbox"/> No regular principal payments required		3 <input type="checkbox"/> No regular principal payments required	

Items included in payment.--This information was obtained from question 13 of the lender questionnaire. (See above.) The entry of an amount for a given item indicated that that item was included in the mortgage payment. Conversely, the absence of an amount entry was assumed to mean that the item was not included.

Monthly principal and interest of first mortgage.-- Both the owner and lender were asked about the amount of the regular payments on the first mortgage. As part of the screening operation, the answers reported by the owner to questions 9 and 10 of the property questionnaires were compared with the answers reported by the lender in question 13 of the lender questionnaire (see p. 19) to identify for special handling those cases where the owner and lender possibly were not reporting for the same mortgage. For this item, all cents were deleted in editing, and the entry was checked for misplaced commas and decimal points. Also, if the frequency of payment was reported as other than monthly, it was converted to monthly by multiplication or division.

9. What are the regular required payment to the lender? (Round to the nearest dollar.)

FIRST MORTGAGE (or contract to purchase)

\$ \_\_\_\_ .00 per \_\_\_\_ (month, year, etc.)

SECOND MORTGAGE

\$ \_\_\_\_ .00 per \_\_\_\_ (month, year, etc.)

THIRD MORTGAGE

\$ \_\_\_\_ .00 per \_\_\_\_ (month, year, etc.)

10. What does this regular payment include? (Mark all applicable boxes.)

FIRST MORTGAGE (or contract to purchase)

1  Principal

2  Interest

3  Real estate taxes

4  Property insurance

5  Other -- Specify \_\_\_\_\_

SECOND MORTGAGE

1  Principal

2  Interest

THIRD MORTGAGE

1  Principal

2  Interest

As part of the edit, technical assistants examined cases where the lender indicated that the total payment covered items in addition to the principal and interest. The total amount was allocated among the various items included in the payment.

The following situations illustrate some of the types of unusual cases which had to be resolved:

1. The amount of interest was not shown, but there was an entry for the question on rate of interest, or a note stating "plus interest."
2. Payment on interest only was required, but the amount of the payment was not reported.
3. Interest and principal were paid at different frequencies.
4. The payment for principal and interest was less than that required for interest alone.

During the edit, the amount of each entry was compared with the face amount of the loan when made or assumed, as reported by the owner. Cases where the payment exceeded one-tenth of the amount of the loan were rejected and examined. In addition, for one-unit homeowner properties, an edit rejected those properties where the annual principal and interest payments exceeded family income, and the cases were referred to subject-matter specialists for resolution.

Current status of mortgage payments.--The source of this item was question 15 of the lender questionnaire. Mortgages were considered delinquent when the required payments were past due 30 days or more. When payments were past due, mortgages were further classified as to whether foreclosure proceedings were in process at the time of the survey.

15. What is the current status of the mortgage payments?

FIRST MORTGAGE

1  Up-to-date or ahead in scheduled payments (or less than 30 days past due)

2  Delinquent by 30 days or more

a. How many payments are past due?

Number \_\_\_\_\_

b. Are legal foreclosure proceedings now in process?

1  Yes

2  No

JUNIOR MORTGAGE

1  Up-to-date or ahead in scheduled payments (or less than 30 days past due)

2  Delinquent by 30 days or more

a. How many payments are past due?

Number \_\_\_\_\_

b. Are legal foreclosure proceedings now in process?

1  Yes

2  No

This item was edited to convert the respondents' written entries into the published categories. Whenever the respondent did not answer the question, "How many payments are past due?", this item was classified as "not reported." However, when the question about foreclosure proceedings was not answered, it was assumed that foreclosure proceedings had not been started, and a "no" response was tabulated.

### Property Characteristics

Monthly housing costs.--This item was edited, coded, and tabulated for one-unit homeowner properties ac-

quired before 1970. The sources of this item were questions 24a-h of the homeowner questionnaires for all properties, plus the entries in question 13 of the lender questionnaire (see p. 19) for mortgaged properties.

*Answer for one-housing-unit properties only*

**24. What were your expenses on this property during the past year for -- (Report entire amount paid by you. Include payments to your lender.)**

a. Real estate taxes? (Do not include taxes in arrears from prior years.)

\$\_\_\_\_\_.00 or  None

b. Special assessments?

\$\_\_\_\_\_.00 or  None

c. Property insurance? (If paid other than annually, enter average cost per year.)

\$\_\_\_\_\_.00 or  None

*If electricity and gas are paid together, enter amount on electricity line and mark "None" box for gas.*

d. Electricity?

\$\_\_\_\_\_.00 or  None

e. Gas?

\$\_\_\_\_\_.00 or  None

f. Oil, coal, wood, kerosene, or other fuel?

\$\_\_\_\_\_.00 or  None

g. Water, sewer, trash removal? (If included in tax bill, mark "None" box.)

\$\_\_\_\_\_.00 or  None

h. Ground rent?

\$\_\_\_\_\_.00 or  None

This item was considered "not reported" if real estate taxes were unknown or, if the property was mortgaged, when four or more of the remaining expenses in question 24 were unknown. If the property was not mortgaged, the criteria for "not reported" were that real estate taxes were unknown or that two or more of the other expenses in question 24 were unknown. (The editing of responses on real estate taxes is explained in the section below dealing with that item.)

Data on insurance were edited as follows: For mortgaged properties, annual insurance premiums on the owner's and lender's records were compared. If the owner reported "none" or left the question blank, the amount reported by the lender was transferred. If there was an amount on both records and the owner's amount was less than 50 percent of the lender's amount, the two amounts were combined and transferred to the property record. If the owner's amount was between 50 and 89 percent of the lender's amount, the lender's

amount was transferred to the property record. If the owner's amount was 90 percent or more of the lender's amount, the owner's amount was left unchanged.

Whenever the edit of insurance premiums resulted in changing the owner's amount, and the revised amount times 100 was greater than the market value of the property, the property and mortgage records were rejected for resolution in the review operation.

All amounts in this item were converted to yearly amounts before punching if the respondent indicated some other time period. If taxes and insurance were combined, a separate amount was computed for each expense as described for the data on real estate taxes.

Real estate taxes.--The sources of this item were question 24a of the property questionnaires for non-mortgaged properties and, for mortgaged properties, the same question plus question 13b of the lender questionnaire. (See p. 19.)

This item was edited for reasonableness and consistency as follows: For nonmortgaged one-unit homeowner properties, real estate taxes were compared with market value. Whenever taxes times 10 was greater than value, the owner's record was rejected for checking in the review operation. For mortgaged properties, annual real estate taxes on owner's and lender's records were compared. If the owner reported "none" or left this question blank, the amount reported by the lender was transferred to the property record. If there was an amount on both records and the owner's amount was less than 50 percent of the lender's amount, the two amounts were combined and transferred to the property record. If the owner's amount was between 50 and 89 percent of the lender's amount, the lender's amount was transferred to the property record. If the amount reported by the owner was between 90 and 149 percent of the lender's amount, the owner's amount was left unchanged. If the owner's amount was 150 percent or more of the lender's amount, the property and mortgage records were rejected for resolution in the review operation.

Amounts in this item were converted to yearly amounts before punching if the respondent indicated some other time period. If taxes and insurance were combined on the lender questionnaire, separate amounts were computed by subject-matter specialists on the assumption that the property was insured for its full market value and that the premium was \$4 per \$1,000 of value. The derived amount for insurance then was subtracted from the combined figure, and the remainder was used as the amount for taxes.

Whenever the edit of real estate taxes resulted in changing the owner's amount, and the revised amount exceeded 10 percent of the market value, the property and mortgage records were rejected for resolution in the review operation.

Location of property by size of place.--This item was tabulated using geographic information carried as part of the computer record, which included place size and place description codes for each enumeration dis-

strict. Geographic data were picked up as the computer sample was selected. Property records that could not be matched with the census geographic reference tape were rejected during the preedit computer processing or during the match clean-up operation. The required geographic codes were obtained and added to the property record and recycled during the correction phase. (See also p. 10.)

Type of property and number of housing units on the property.--In order to show separate tables for (1) homeowner properties and (2) rental and vacant properties, it was necessary to determine the type of property (i.e., homeowner versus all other) and the number of housing units in each property.

For the purposes of the RF survey, homeowner properties were defined as those which contained four or fewer units, in one of which the owner lived. The initial determination of the type of property was made at the time of sample selection, based on the number of units at the address.

Upon receipt of each property questionnaire, the answer to question 1 (name and address of owner) was compared with the answers to question 2, "Does the owner live on this property?", and question 19, "How many housing units are there in this property?", to determine if the owner lived on the property and if the property contained less than five units. All properties meeting these two criteria were designated homeowner properties; all others were designated rental or vacant properties. If this check revealed that the wrong questionnaire had been used, the data were transcribed to the correct form and the owner control card was modified to reflect the change in classification.

**1. Who is the owner of the property described above?**

Name	
Address (Number and street)	
City	
State	ZIP code

**2. Does the owner live on this property?**

No -- No further entries required. Please return this questionnaire in the enclosed postage-paid envelope.

Yes

<input type="checkbox"/> Principal residence <input type="checkbox"/> Second home	} Please proceed with next question.
--	--------------------------------------

**19. How many housing units (separate living quarters) are in this property?**

Number \_\_\_\_\_

Number of buildings.--The count of the number of buildings was obtained by counting the number of entries in question 20 on the property questionnaires. This item was tabulated only for rental and vacant properties. The number of buildings was edited to ensure that the number was equal to or less than the number of housing units.

**20. If this property includes more than one building, list the address of each building and enter the number of housing units in each building. (If additional space is needed, use remarks area on p. 3.)**

Street address	Number of housing units
a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____

Manner of acquisition.--The source of this item was question 16 on the property questionnaires. The purpose was to determine the financing of the acquisition of the property by the present owner. The mortgage (or mortgages) with which the property was financed need not have been outstanding at the time of the survey. Similarly, a property acquired free of mortgage could later have been mortgaged.

**16. How did you finance the acquisition of this property?**

1  Placed one new mortgage

2  Placed two or more new mortgages

3  Assumed a mortgage(s) already on the property

4  Assumed a mortgage already on the property and placed a new mortgage

5  All cash -- no borrowing

6  Borrowed other than with a mortgage

7  Inheritance or gift -- Skip to question 19

8  Estate of deceased spouse -- Skip to question 19

9  Other manner -- Specify \_\_\_\_\_

The first six categories were considered "acquired by purchase," while the next two were not. The category "other manner" was divided as part of the clerical edit into what were essentially purchase transactions and those which were not. In part, this determination was made on the basis of the amount of the purchase price. For example, a purchase price of \$1 was taken to mean that the transaction was something other than a purchase.

Source of downpayment.--Homeowners and owners of rental properties with 50 or more units both were

asked the source of downpayment or other equity in their properties if they acquired the property after 1964.

Homeowners were asked the major source. If more than one source was indicated, the first one marked was used. Owners of rental property were asked to indicate any source which accounted for a third or more of their equity. Thus, up to three replies were acceptable and were tabulated.

Homeowner questionnaire

Answer 18 only if you acquired this property in 1965-71

18. What was the MAJOR source of the downpayment used for the purchase or construction of this property?
- 1  Sale of previous home (only if sold during 12-month period preceding acquisition of present home)
  - 2  Sale of other real property or other investments (including stocks)
  - 3  Saving (cash, bank deposits, share accounts, or bonds)
  - 4  Borrowing other than a mortgage on this property
  - 5  Gift
  - 6  Land on which structure was built
  - 7  Other - *Specify* \_\_\_\_\_
  - 8  No downpayment required

Rental property questionnaire

Answer for properties with 50 or more housing units acquired in 1965-71

18. What was the major source of the owner's equity or downpayment for this property? (Mark boxes which accounted for one third or more.)

Cash from -

- 1  Sale of stocks, shares, or other securities
- 2  Sale of land or other real estate
- 3  Owner's cash, bank deposits, share accounts, or bonds
- 4  Borrowing other than mortgage on this property
- 5  Other cash source - *Specify* \_\_\_\_\_

Non-cash

- 6  Land used for structure(s) on this property
- 7  Fees (builder's, contractor's, architect's, lawyer's, engineer's)
- 8  Other non-cash source - *Specify* \_\_\_\_\_

The homeowner questionnaire included a category, "no downpayment required." The intention was that owners who obtained 100-percent mortgage financing would check this reply. However, it also was checked by owners who acquired their properties without a mortgage; such replies were edited to "not reported."

Year property acquired.--The source of this item was question 15a of the property questionnaires, "When did you acquire this property?" A space was provided to enter the year. In the data-collection and processing stages it was edited in conjunction with the item on the year the property was built (question 21) and the year the mortgage was made or assumed. This item was edited for consistency in conjunction with "land and building acquisition".

- 15a. When did you acquire this property? (If more than one building, answer for the first acquired.)

Year \_\_\_\_\_

- b. Did you acquire the land and the building within the same 12-month period?

- 1  Yes
- 2  No - owned land previously
- 3  Do not own land

Land and building acquisition.--The source of this item was question 15b on the property questionnaires. This item was checked for consistency with the purchase price and year built. This was done because some respondents interpreted the term "property" as referring only to the land and not to the residential structures on the land. If the purchase price was low in comparison to market value and the year of acquisition was earlier than year built, it was assumed that the respondent was referring to the land. In this case, year of acquisition was changed to agree with year built.

Year built.--The source of this item was question 21 of the property questionnaires, "About when was this building built?" This item was edited in conjunction with the items on year acquired and year mortgage made for properties with mortgages placed at the time of acquisition.

21. About when was this building built? (If more than one building, answer for the first one completed.)

1960 or later - Enter year \_\_\_\_\_

- 50  1950 to 1959
- 40  1940 to 1949
- 30  1939 or earlier

Number of rooms.--The source of this item was question 23 on the property questionnaires. The question was asked only for properties with one housing unit; a kitchen was to be counted as a room.

Answer for one-housing-unit properties only

23. How many rooms are in this house? (Count kitchen but not bathrooms.)

Number \_\_\_\_\_

Purchase price.--The source of this item was question 17 of the property questionnaires, "What was the purchase price of this property when you acquired it?" The respondent was instructed to report both the cost of the land and the construction costs in the event that he built the buildings after acquiring the land.

17. What was the purchase price of this property when you acquired it (excluding closing costs)? (If building was built by or for you, report total land and construction costs.)

\$ \_\_\_\_\_

The intent of this question was to determine the entire cost of the property to the owner at the time of purchase, exclusive of subsequent expenditures for improvements, conversions, or repairs.

As part of the clerical review, this entry was made consistent with the entry on manner of acquisition. If the manner of acquisition was coded as "not purchased," the code for the item on purchase price was "not applicable." All other cases required an entry for purchase price. Each entry giving an amount was checked for misplaced commas and decimals. If the owner reported separate amounts for the lot and the building, these were combined.

This item was used in conjunction with the information on the amount of the mortgage loan(s) for the published data on "first mortgage loan as a percent of purchase price" and "total mortgage loan as a percent of purchase price." It was used in conjunction with data on the "value of property" to determine the purchase price as a percent of value.

Market value (see below) was transcribed to this item when the respondent failed to report the purchase price and the property was acquired between 1968 and 1971. If both purchase price and market value were blank, an attempt was made to obtain them by correspondence with the owner.

Market value.--The source of this item was question 22 on the property questionnaires, "About how much do you think this property would sell for on today's market?" The wording of the question was intended to emphasize the concept of the complete property, i.e., both the land and the structure. While most homeowners own the land their house is on, a few lease the land. The value sought was the expected sale price of both the land and the structure(s).

22. About how much do you think this property would sell for on today's market?

\$ \_\_\_\_\_

In some cases, the value could not be secured during the data-collection phase of the survey. If the property had been purchased between 1967 and 1971, the value was derived from an edit of the purchase price item. If the purchase price was missing for properties acquired

prior to 1967, the value was obtained by correspondence with the owner during the property edit clerical operation.

### Owner Characteristics

Age of principal owner.--The source of this item was question 26 of the homeowner questionnaire, "What is the age of the principal owner of this property?"

26. What is the age of the principal owner of this property? (Give husband's age if jointly owned.)

- |   |   |
|---|---|
| 1 <input type="checkbox"/> Less than 25 years | 4 <input type="checkbox"/> 45 to 54         |
| 2 <input type="checkbox"/> 25 to 34           | 5 <input type="checkbox"/> 55 to 64         |
| 3 <input type="checkbox"/> 35 to 44           | 6 <input type="checkbox"/> 65 years or over |

Race and sex of principal owner.--This information came from questions 25a and 25b of the homeowner questionnaire. For tabulation purposes, the category "husband and wife" was combined with "male."

25. Is the principal owner of this property -- (Answer a and b.)

- |  |  |
|--|--|
| a.   | b.   |
| 1 <input type="checkbox"/> White?          | 1 <input type="checkbox"/> Male?             |
| 2 <input type="checkbox"/> Negro or Black? | 2 <input type="checkbox"/> Female?           |
| 3 <input type="checkbox"/> Other?          | 3 <input type="checkbox"/> Husband and wife? |

Veteran status.--The source of this item was question 27 of the H-10 homeowner questionnaire. The wording of the question was intended to elicit information on active duty service (including noncombatant duty) for any length of time at home or abroad in all branches of the U.S. Armed Forces, on the part of the owner or his or her spouse.

27a. Have you (or your wife or husband) ever served in the Army, Navy, or other Armed Forces of the United States?

- Yes  
 No

b. When was it? (Mark all applicable boxes.)

- 1  Vietnam conflict (August 1964 to present)  
2  Korean War (June 1950 to January 1955)  
3  World War II (September 1940 to July 1947)  
4  World War I (April 1917 to November 1918)  
5  Any other time

If there was more than one entry, the most recent period of service was tabulated, except that the combination of Korean War and World War II was a separate category.

Number of persons in household.--The source of this item was question 28 on the homeowner questionnaire. The total number of persons included all persons, even those not related to the head, such as lodgers, foster children, wards, and resident employees who shared the living quarters of the household head.

**28. How many people live in this house?** (Count all persons who live here and have no other place of residence. Exclude persons away in the Armed Forces, attending college, or in an institution such as a home for the aged or in a mental hospital.)

Number \_\_\_\_\_

Income.--The income of the owner and relatives living with him was published only for one-unit homeowner properties. The source of this item was question 29 of the homeowner questionnaire.

**29. What was the cash income during the past year of all family members in this household from all sources?**

Owner .....\$ \_\_\_\_\_

Owner's spouse .....\$ \_\_\_\_\_

Other family members who live here .....\$ \_\_\_\_\_

TOTAL.....\$ \_\_\_\_\_

*Include as income --*

a. *Wages, salary, commissions, bonuses, or tips (before deductions for taxes, bonds, dues, etc.)*

b. *Business, professional practice, partnership, or farm income (net after business expenses)*

c. *Social Security, pension, veteran's payments, rent (minus expenses), interest, dividends, unemployment insurance, welfare payments, etc.*

As indicated by the instructions accompanying this item, the income of each family member was to be reported. This item was edited at the Bureau's Jeffersonville facility for one-unit homeowner properties only. If any entry was obviously for a period other than a year, it was converted to a yearly basis. If there was more than one entry, they were added together. "No income" was an acceptable entry. This item was used to compute the following ratios and percentages: (1) Annual housing costs as percent of income, (2) interest and principal payments as percent of income, (3) real estate tax as percent of income, and (4) purchase price/income ratio.

Rental receipts.--Owners of rental properties were asked to report their gross receipts from both residential and business units (question 27a on the H-11 questionnaire). Total receipts from both types of units were tabulated. All tabulations involving rental receipts were restricted to properties acquired before 1970. These tabulations were restricted further to properties in which at least 50 percent of the housing units were in

the rental market during the entire year preceding the survey (as determined by the response to question 26 on the rental property questionnaire).

**26. Of the housing units in question 19, how many were rented, or available for rent, during ALL of the past year?** (Exclude units under construction, held for employees' use, or for any other reason not on the rental market the entire year.)

Number \_\_\_\_\_

**27. How much were the total actual receipts from rent during the past year?**

a. Total actual receipts \$ \_\_\_\_\_

    From residential units \$ \_\_\_\_\_

    From business or office units \$ \_\_\_\_\_

b. Estimated vacancy loss (difference between actual receipts and total potential receipts at 100% occupancy) \$ \_\_\_\_\_

Owners also were asked to report their vacancy losses (i.e., the difference between actual and potential receipts). Vacancy losses were tabulated only as a percent of potential receipts.

In the tabulation of monthly rental receipts per housing unit, properties with no receipts were tabulated separately. For all other tabulations relating to rental receipts, such properties were in the "not computed" category.

Owners' expenses.--The source of this item was question 24 of the rental property questionnaire. Selected owners' expenses were tabulated only as a percent of rental receipts. Owners' expenses included real estate taxes (including special assessments), property insurance, and ground rent, if any. Also, for mortgaged properties, debt service (interest, principal, mortgage insurance, etc.) was included. The editing for these components was the same as that for the comparable items for homeowner properties.

**24. What were your expenses on this property during the past year for --** (Report entire amount paid by you, including payments to your lender.)

a. Real estate taxes? (Do not include taxes in arrears from prior years.)

\$ \_\_\_\_\_ .00 or  None

b. Special assessments?

\$ \_\_\_\_\_ .00 or  None

c. Property insurance? (If paid other than annually, enter average cost per year.)

\$ \_\_\_\_\_ .00 or  None

d. Ground rent?

\$ \_\_\_\_\_ .00 or  None

Type of owner.--The source of this item was question 25 on the rental property questionnaire. Questionnaires for which the box for "other" was marked were reviewed to be sure that one of the other categories did not apply. As part of the computer edit, a cooperative housing organization was edited to "other" if there were less than five housing units in the property.

### COSTS

In terms of manpower expended, the only data available for the RF survey are the following figures, reported for the clerical staff in Jeffersonville:

25. Is this property owned by --

1  Individual (includes joint ownership by two or more individuals, including husband and wife, or by estate of deceased owner)?

2  Partnership?

3  Real estate corporation?

4  Real estate investment trust?

5  Financial institution?

6  Housing cooperative organization?

7  Other -- Specify type \_\_\_\_\_

	Man-months	
	Clerical	Supervisory
Total.....	609	59
Prenumeration processing.....	120	12
Data collection.....	247	17
Postenumeration processing.....	242	30

The costs for the RF survey shown below by fiscal year include depreciation, but they do not include the cost of general administration, other general expense, or capital outlay which were recorded only at the appropriation level. These costs are shown in the 1970 Census of Population and Housing cost summary in chapter 1 of this procedural history.

(In thousands of dollars, figures rounded)

Project	Fiscal year					Total
	1969	1970	1971	1972	1973	
Total.....	92	168	934	667	191	2,052
Planning and coordination.....	37	58	74	91	66	326
Pretest.....	50	-	-	-	-	50
Pretest processing.....	5	-	-	-	-	5
Prenumeration processing.....	-	109	206	-	-	315
Data collection.....	-	1	568	271	-	840
Postenumeration processing and publication...	-	-	86	305	<sup>1</sup> 125	516

<sup>1</sup>Includes \$8,560 worth of undelivered printing.

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