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Family Income and Expenditure in Chicago, 1935-36

VOLUME I

Family Income

+

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Bulletin No. 642

April 1938

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1939

STUDY OF CONSUMER PURCHASES: URBAN SERIES

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PREFACE

The present bulletin is the first of a series of reports on annual incomes and expenditures of urban families in the United States. They are based on data secured from a survey conducted in 1936 by the United States Bureau of Labor Statistics in 32 cities varying in size and representing different sections of the country. The Urban Study of Consumer Purchases is paralleled by a survey of small city, village, and farm families conducted by the Bureau of Home Economics of the United States Department of Agriculture. Both surveys, which together constitute the Study of Consumer Purchases, were administered under a grant of funds from the Works Progress Administration. The National Resources Committee and the Central Statistical Board both cooperated in the Nation-wide study. The plans for the project were developed and the administration was coordinated by a Technical Committee composed of representatives of the following agencies: National Resources Committee, Hildegard Kneeland, chairman; Bureau of Labor Statistics, Faith M. Williams; Bureau of Home Economics, Day Monroe; Works Progress Administration, Milton Forster; and Central Statistical Board, Samuel J. Dennis.

The general purpose of the investigation was to throw light on the patterns of consumption prevailing among families of different income levels, occupations, and family types. The information will be presented in a number of special studies dealing with the economic distribution of families in the community, and with the consumption of specific commodities and services.

The two agencies engaged in the conduct of the surveys are preparing separate reports on the distribution of income and family disbursements in the communities or areas which their respective surveys have covered. The National Resources Committee is utilizing the results in the preparation of estimates of national consumption, as related to the social-economic distribution of the American population. A general report on the scope and methodology of the project and a final summary report involving a comprehensive analysis of the separate bureau publications are to be prepared jointly by the two operating bureaus and the consumption research staff of the National Resources Committee.

The Study of Consumer Purchases has been directed toward two related objectives. The first is to ascertain the distribution of families according to income, occupation, and family composition.

The second is to learn how families of different incomes, occupations and family types apportion their expenditures among specific goods and services in different parts of the country.

In selecting the data to be secured and the analyses to be made, consideration has been given to the different interests which may be served by a study of consumer purchases. Scientific groups as well as legislative bodies and administrative agencies of the Government regularly need analyses of family incomes and expenditures to aid them in the study of such social and economic problems as taxation, social security, consumer protection, and wage adjustments.

Simultaneous studies of rural and urban family incomes, and the manner of their disbursement, can shed light on the relative abilities of farm and city to absorb each other's products, and on the manner in which that capacity changes as rural and urban incomes change. Welfare agencies are concerned with data bearing on the budgetary requirements of families in the maintenance of minimum standards of subsistence. Manufacturers and distributors will utilize the information on income distribution and consumer preferences in the planning of their production and sales programs. Finally, there is general interest in knowing how actual levels of living differ from commonly accepted standards of living.

Obviously, any economic program must have, as one fundamental prerequisite, a definite knowledge of the distribution of families by incomes and of the choices made by families in the disbursement of their incomes. Heretofore we have not lacked impressive statistics of national production, bank clearings, and factory pay rolls. But with respect to the individual choices of the consumer—whose willingness and ability to absorb the offerings of the market go far to determine the smoothness with which the economic order functions—we have had to content ourselves with theories which changed with the current fashion in psychology, with guesses derived from data on population, total sales, and general price movements. We have not known at what income level a family of a given type is likely to enter the market for recreational equipment, electrical appliances, or other luxury goods. Even with respect to staple articles we are in doubt as to what proportion of the population must find them beyond economic reach. Moreover, the variation in purchasing habits of the population in different regions of the country, or of families living in cities of different size, has yet to be shown in terms which would measure the influence of these factors upon actual quantities purchased and prices paid.

In recent years specific demands for such information have been partially met by the development of research agencies within trade associations and large business units. They have devoted substantial portions of their annual budgets to the study of consumer preference

for their own particular commodities. Charity organizations have made special studies bearing on the minimum requirements of indigent families under their care. Employee groups have occasionally submitted family budgets for examination in connection with the establishment of pension funds, determination of rentals in company housing, or wage discussions. It has been obviously impossible, however, for any comprehensive outline of American consumption, with all of its important implications, to be put together from such scattered studies, specialized in character, each gathered with a different purpose in mind.

The closest approach to date to a general study of family consumption of goods and services was provided by the series of surveys among families of wage earners and clerical workers conducted by the Bureau of Labor Statistics for the United States Department of Labor in 1918-19, which furnished the basis for the present cost of living index. Aside from the fact that this study was limited in scope, it is becoming obsolete for current purposes, inasmuch as the pattern of consumer purchases has materially altered since 1919. Not only does the price structure of today differ significantly from that of 1919, but we have to reckon with numerous new goods and services that have entered the market, often at the expense of former staples which are declining in use or disappearing entirely.

In response to the increasingly apparent need for bringing its data on consumer buying habits more nearly up to date, the Cost of Living Division of the Bureau of Labor Statistics was engaged from 1934 to 1936 upon new studies of expenditures among the families of wage earners and low-salaried clerical workers in 55 cities.¹ These have already brought into statistical relief certain characteristics of the changing pattern of consumer purchases. They have indicated, for example, that transportation, heavily weighted with automobile expense, now vies with clothing as a major item of expenditure in the family budget; that changing relationships among retail prices, and changing consumption habits, have resulted in somewhat lower expenditures for food and clothing and increases in the money spent for transportation, recreation, and miscellaneous items of personal service. But these recent surveys, which cover only wage earner and clerical families, while valuable in giving greater current accuracy to the cost of living index, and in supplying purchasing information regarding two important occupational groups, still left room for the larger objectives of a comprehensive study showing the distribution of income for the whole population, and the pattern of expenditures at a wider range of economic levels.

The present study of consumer purchases differs from those previously undertaken in that it is designed to cover a large enough

¹ A list of these cities will be found in appendix A.

number of families to allow for comparison, not only between different sections of the country, between urban and rural communities, and between cities of different size, but also between families at different income levels, and, within any given income level, between families of different composition and occupational groups. Eighteen income classes are differentiated, ranging from families having less than \$250 in current income per annum to those with \$10,000 a year and more. In addition to the wage earner, clerical, and farm groups which have been the subject of previous investigations, the present study includes professional and business categories, both salaried and self-employed, as well as families whose incomes are not dependent upon current employment. The classification by composition of the family distinguishes five distinct types in all communities, and in certain communities as many as eight, varying from single individuals and families which contain only the husband and wife, to families of seven or eight persons, classified so as to take into account the age of family members other than husband and wife. The desire to classify the information on consumer purchases by these major factors has determined both the number and types of families interviewed.

The combined study of consumer purchases for urban and rural families covers 2 metropolitan communities; 6 large cities averaging 300,000 inhabitants; 14 middle-sized cities of 30,000 to 75,000; 29 smaller cities of from 10,000 to 20,000; 140 villages; and 64 farm counties. A list of the cities and a description of the techniques of the general investigations will be found in appendixes A and B.

Acknowledgments.—In addition to the agencies mentioned as participants, and the supervisory staff listed on page 2 of the cover, the Urban Study has had the benefit of cordial cooperation and advice from a number of other units within the Government. The Bureau of Labor Statistics wishes also to acknowledge the assistance it has received from interested individuals and civic bodies outside the Government, too numerous to be mentioned here by name. In particular, the collaboration of two groups must be recognized as having made the studies possible: The W. P. A. workers, who performed the field collection and office tabulation of the data, often under unfavorable conditions, on a high plane of professional responsibility; and the householders, more especially the housewives, who laid aside their household tasks long enough to furnish answers to the detailed questions in the schedules.

Volume I of this bulletin on Chicago families is concerned with the distribution of families in the community by income, occupation, and family type. Volume II will consider the summary of expenditures by main categories of the family budget.

ISADOR LUBIN,
Commissioner of Labor Statistics.

APRIL 1938.

Appendix A

Scope and Character of Samples Taken in the Study of Consumer Purchases

The cities covered by the Bureau of Labor Statistics in the Study of Consumer Purchases are as follows:

Region	Metropolitan and large cities	Middle-sized cities	Small cities
Northeast.....	New York, N. Y. ^{1,2}	Haverhill, Mass.....	Wallingford, Conn.
Southeast.....	Providence, R. I. Atlanta, Ga. ²	New Britain, Conn. Columbia, S. C. ²	Willimantic, Conn. Albany, Ga. ² Gastonia, N. C. ²
East Central.....	Chicago, Ill. ¹ Columbus, Ohio. ²	Mobile, Ala. ² Muncie, Ind. New Castle, Pa. Springfield, Ill.	Beaver Falls, Pa. Connellsville, Pa. Loansport, Ind. Martoon, Ill. Peru, Ind. Billings, Mont.
West Central.....	Omaha, Nebr.—Council Bluffs, Iowa Denver, Colo.	Dubuque, Iowa Springfield, Mo. Butte, Mont. Pueblo, Colo.	
Pacific Northwest.....	Portland, Oreg.....	Aberdeen—Hoquiam, Wash. Bellingham, Wash. Everett, Wash.	

¹ The metropolitan centers of Chicago and New York have been treated separately from the other large cities.

² Information obtained from both white and Negro families.

Communities covered by the Bureau of Home Economics are as follows:

Region	Small cities	Villages	Farm counties
New England.....	Westbrook, Maine. Greenfield, Mass. Mt. Vernon, Ohio. New Philadelphia, Ohio.	6 in Vermont. 8 in Massachusetts. 7 in Pennsylvania. 6 in Ohio.	2 in Vermont.
Central.....	Beaver Dam, Wis. Lincoln, Ill. Boone, Iowa. Moberly, Mo. Columbia, Mo. Dodge City, Kans. Greeley, Colo. Logan, Utah. Provo, Utah.	8 in Michigan. 6 in Wisconsin. 8 in Illinois. 11 in Iowa. 6 in Kansas. 9 in North Dakota. 4 in Colorado. 1 in Montana. 2 in South Dakota. 12 in California. 5 in Oregon. 7 in Washington.	3 in New Jersey. 1 in Pennsylvania. 3 in Ohio. 1 in Michigan. 1 in Wisconsin. 4 in Illinois. 5 in Iowa. 4 in Kansas. 4 in North Dakota. 3 in Colorado. 1 in Montana. 1 in South Dakota. 1 in Central California. 2 in Southern California. 5 in Oregon. 1 in Washington. 2 in North Carolina. 2 in South Carolina. 7 in Georgia. 2 in Mississippi.
Pacific.....	Astoria, Oreg. Eugene, Oreg. Klamath Falls, Oreg. Olympia, Wash. Griffin, Ga. Sumter, S. C.	8 in Georgia. 7 in South Carolina. 8 in North Carolina. 10 in Mississippi.	2 in Southern California. 5 in Oregon. 1 in Washington. 2 in North Carolina. 2 in South Carolina. 7 in Georgia. 2 in Mississippi.
Southeast.....			
White and negro families.			
White families only.....			
Negro families only.....		1 in Mississippi.	

Character of the sample.—In the effort to secure reliable data on family incomes and expenditures, a very careful sampling procedure was employed. To begin with, a random sample was taken of the total family population in the communities selected for study. This sample ranged from 4 percent of the family population in New York and 10 percent in Chicago up to 100 percent in most of the smaller cities and in the farm and village communities. For the Urban Study of Consumer Purchases this sample included a total of about 625,000 families. From them were selected about 250,000 families which completed the short schedule, referred to as the "family schedule";¹ giving information on income and sources of income; occupations of the employed members; the membership of the economic family; home tenure; and the rent or rental value of the premises. Similar information was secured by the Bureau of Home Economics from approximately 80,000 families living in small cities, villages, or farm communities.

This selected random sample consisted of families which met certain criteria of eligibility. In order to isolate the effect on consumer purchases of differences in income, occupation, and family type, it was decided to limit the detailed study of family expenditures, except in a few communities where Negro families were selected for study, to native white families which included both the husband and wife and which had not been on relief throughout the year for which the information was obtained. These limitations safeguarded the data from variations due to special race characteristics, foreign birth, or the absence of the husband or wife from the family group, and made it possible to restrict the analysis to the more permanent expenditure patterns.

In order, however, to ascertain the relative position of the "eligible" sample in the total population, family schedules, including the data on incomes, were also taken in each community from every family in a selected part of the random sample. This comprehensive sample of all elements in the population ranged in different communities from 0.4 to 10 percent of the total family population of the community. The comprehensive sample made it possible to build up a picture of the income, occupation, and family type distribution of all families in each of the communities studied.

From the selected random sample of native white families including both husband and wife, a smaller group—totaling approximately 60,000 families for the combined rural-urban study—were chosen to provide the data on family expenditures. The purpose controlling the selection of families in this smaller group was to provide, so far as practicable, a uniform number of families for study in each comparable "cell"—a cell comprising families of similar occupation, family compo-

¹ For facsimile of the family schedule, see appendix C, p. 189.

sition, and income level. The expenditure schedules obtained from the controlled sample were supplemented by check lists supplied by some of the families for food, clothing, and items of housefurnishings. Thus data are available concerning the quantities of goods and services purchased and the amounts paid for specific commodities. In building up the expenditure pattern for the community represented by the selected random sample, the data for each of the controlled cells were multiplied by the frequency of that cell in the larger sample.

The random sample of native white families including both husband and wife which supplied the family schedules thus served two main purposes. It indicated the income, occupation, and family type distribution of all such families in the community, and therefore supplied the weights to be used in analyzing the controlled sample. It also yielded most of the cases needed for the controlled sample. For some of the cells (chiefly in the higher income bands and the rarer occupational groups), the random sample did not yield a sufficient number of families with the desired characteristics. In such cases, the study reached out for the additional families needed by means of a special stratified sample, secured from professional listings or from particular neighborhoods that would yield a maximum number of families with the desired characteristics. The cases secured in the stratified sample did not, of course, affect the weights or frequencies established by the random sample.

While the detailed analysis of collection procedure and the problems arising therein will be the subject of a separate publication, it is desirable to include a brief explanation at this point.

The information has been secured by the schedule method, through field visits. The training of field investigators has involved thoroughly familiarizing them with a general schedule supported by carefully detailed check lists. Following the interview, the information obtained was reviewed by a process of careful checking of items of expenditure against current income and other receipts, the family being revisited when necessary in order to reconcile income and expenditures without "forcing" the data. Expenditure schedules in which, after this review, total receipts and total disbursements did not balance within 5 percent were discarded as unreliable.

The question has been raised as to whether information on items relating to annual income and expenditures can be given offhand by members of the family. The field experience in previous studies has shown that if the average householder is asked, for example, "What does your family spend for recreation?", she cannot reply accurately. But it has been found that if she is asked for recreation expense item by item, she can remember or refer to what has been spent with a high degree of accuracy. Similarly, a single figure for total income is less trustworthy than a total which is built

up from definite questions bearing on the specific job held by each employed member of the family, the number of weeks of employment, the rate of pay, the dividends from securities held, interest from property, the amounts received from roomers and boarders, and the like.

One of the major problems to be faced at the outset was the expected resistance from a portion of the community to a schedule which would be detailed enough to provide accurate information, since such a schedule requires a considerable amount of cooperation on the part of the family interviewed. The use of a short and a long schedule tended to overcome this difficulty in large part.² The short family schedule, obtained in most cases with relative ease from the families in the selected random sample, provided the basic information as to the distribution of families within the community. For the detailed expenditures schedules and check lists, which were relatively difficult to obtain, it was only necessary to secure a limited number of cases in each cell conforming to the control factors of income, occupation, and family type. The process of weighting the data from these cells has already been described. When the selected random sample did not yield the number of cases needed for the controlled sample, additional families were secured through the stratified sample, already referred to.

The schedule year.—The data secured in the Urban Study of Consumer Purchases refer chiefly to the years 1935–36.³ During that period, the index of retail food costs in Chicago (base, 1923–25), which had declined from a high in 1929 of 109.5 to 71.0 in 1932, was gradually recovering, the index for 1935 being 80.5 and for the next year 84.7 (these figures are for July of the years mentioned).⁴ The index of living costs (base, 1923–25) was also on its way up after a considerable decline in the early thirties. For Chicago it stood at 76.0 in July 1935, and at 77.6 in July 1936.⁵ These figures on living costs are to be compared with employment and pay rolls figures, which were correspondingly low. The index of employment in manufacturing industries in Chicago (base, 1925–27) stood at 64.8 in July 1935 and at 73.6 in July 1936. The index figures for pay rolls were 45.9 and 56.4, respectively.⁶

² In Chicago this involved collecting 29,049 short schedules from native white families meeting eligibility requirements and 2,711 expenditure schedules from among this sample. Details of the Chicago sample are discussed in appendix B.

³ The families were asked to furnish information for a 12-month period, either the calendar year 1935 or the 12 months ending on the last day of the month immediately preceding the date of interview. See appendix C, p. 190.

⁴ Monthly Labor Review, September 1936, p. 756.

⁵ Monthly Labor Review, December 1935, p. 1724; October 1936, p. 1070.

⁶ Employment, Payrolls, and Average Weekly Earnings in Illinois, by City. Illinois Department of Labor, Division of Statistics and Research, Aug. 28, 1936.

Appendix B

Chicago Sampling Procedure

Since the findings presented in this study of Chicago families are based upon data secured from random samples of households, a detailed statement of the sampling procedure by which the community pattern was ascertained is now presented. A statement of the sampling method employed in the study of expenditures will be included in volume II of the Chicago bulletin.

The Record Card Sample

Selection of the random sample.—The plan called for a 10-percent sample of all families in Chicago. This would amount to 82,000 or 84,000 families, depending upon whether the 1934 or the 1930 census enumerations were regarded as the best estimates for the year 1936.¹ Practical considerations required that insofar as possible the sample be drawn in the office under careful supervision rather than in the field by the agents. The 1934 C. W. A. census provided the most complete listing of families available for sampling and was used, therefore, as the chief source of the sample. Families living in 830 of the 935 tracts in Chicago were drawn from the listing of families in this census. These tracts contained approximately 92 percent of the families in the city. For reasons to be discussed later, the other 8 percent residing in 105 tracts were selected by field agents who compiled "block sheets" or records of the total number of families in each block from which the 10-percent sample was drawn.

Although the plans called for a 10-percent sample of the total family population of Chicago, there was some uncertainty as to whether time and funds would permit the completion of a sample this size. It was necessary, therefore, to draw a number of smaller samples (which when combined would amount to a 10-percent coverage) each as representative as possible of the Chicago population. Because of the transportation and time costs of sending the agents over the entire city a number of times, it was decided to draw at random 110 tracts for each of 8 subsamples, with the remaining 55 tracts constituting the ninth sample. These samples were designated as samples "A," "B," etc., through "I." Fortunately, the field work in all of these subsamples was completed, thus giving a 10-percent

¹ The 1934 C. W. A. census enumerated 822,637 families; the 1930 census reported 842,578.

coverage of the entire city. These subsamples served a second purpose, however, which will be discussed in connection with the comprehensive sample.

For every tenth family in each of 830 tracts, a "control card" was prepared from the census block sheets, giving the tract number, enumeration district, address, and an indication of the dwelling unit at each address (i. e., 6502 Marquette St., third family).² The address recorded on this "control card" was then transcribed to the "record card" which served as the assignment to the agent of the family to be interviewed. Since census regulations did not permit the taking off of names of householders, special instructions were given the agents for locating the specific dwelling unit belonging in the sample at a given address.

It will be recalled that one of the primary purposes for obtaining the income distribution of families in Chicago was to provide a basis for selecting families at all income levels from which to seek information on expenditures. Early in the study it was realized that time and other administrative considerations would not permit a study of expenditures of families of all nativity and color groups in every city surveyed, so the Chicago survey of expenditures was limited to white families in which both the husband and wife were born in the United States. In view of this restriction, it was decided that the locating of native white families would be expedited if the survey of districts in which the foreign born and Negro population predominated were postponed. Thus the sampling of 88 tracts containing two-thirds or more Negro and foreign population was deferred until the last period of the study.

In addition to the 88 tracts not sampled in the original drawing from the 1934 C. W. A. census sheets, 27 tracts could not be sampled because the census sheets were missing. Since there was no other complete list of householders for these 27 tracts, and since the census block sheets were not available when the 88 tracts were to be sampled, the sample for these 105 tracts was drawn by field agents. They compiled "block record sheets" showing the number of dwelling units at every address in each block and indicated every tenth dwelling unit, which constituted the sample case.³

² This sample yielded 76,086 addresses or control cards. Of this number, a net figure of 1,343 did not yield families for interviewing, largely because the address could not be located, or if located, the building had become vacant since 1934, had been transformed into a business unit, or had been demolished completely. In all these cases an attempt was made to substitute a neighboring address for the one originally drawn, but despite these efforts there were 1,343 cases for which no satisfactory substitute could be found. Efforts were made also to sample buildings erected between the 1934 census enumeration and the present survey, but since building activity during this period was rather limited, the number of families in new buildings was not sufficient to bring the loss in the original sample below 1,343 addresses.

³ In the 105 tracts for which block sampling was employed, a total of 8,333 families were interviewed. Of this number, 6,237 were regarded as coming within the 10-percent sample of the 1934 C. W. A. census. (The reasons for this reduction are explained later, in the comparison of the record card sample with the 1934 C. W. A. census.) The 76,086 control cards from the 830 tracts, plus the 6,237 cases in the 105 tracts, make up the total of 82,323 addresses which constitute the Chicago 10-percent random sample (see p. 184).

Collection of the record card sample.—The 82,323 addresses comprising the 10-percent sample were visited to obtain the record card information ⁴ from the family residing at the assigned dwelling unit. The agents were instructed to fill out every item on the card. In addition to data needed for identifying the dwelling unit, the following information was obtained from all families interviewed for the record card data:

Item 8.—Whether the family member interviewed was white, Negro, or other color.

Item 9.—Whether two or more persons were living together and dependent on a common income.

A one-person family was defined as a person who lives alone or who has others living in his household but not sharing his income or expenses. Two persons living together financially independent of each other were regarded as two one-person families.

Items 10 and 11.—Whether or not the husband and wife, or male or female head of the family was born in continental United States or Alaska.

Item 12.—Whether the family maintained its own housekeeping quarters, that is, had access to kitchen facilities, or was rooming with another family in a rooming house, hotel, or institution.

Item 13.—Whether the family included both a husband and a wife. If so, whether they had been married less than 1 year.

If the dwelling unit visited proved to be uninhabited the agent returned the card to the office with a notation to that effect. Since the sample was drawn from a listing of families rather than of dwelling units, no vacant dwelling units would have been drawn had the listing been up to date.⁵ In order, therefore, to maintain a 10-percent sample of families, provision was made for the substitution of the family next door for the vacancy. This substitution was done by supervisors or check interviewers rather than by the original agent. When no neighboring family could be found living in the same rental level comparable with that of the address drawn in the original sample, no substitution was made.

In order to insure the collection of the random sample as chosen, certain measures of control and appraisal were employed. For 92 percent of the cases the agent was assigned specific dwelling units at which families were to be interviewed. For the selection of the other 8 percent in the field, only the most reliable and well-trained agents were employed.⁶ All schedules of every agent were carefully checked by the supervisory staff in the office and a sample of each agent's work was checked through the reinterviewing of families by a supervisor. There is reason to feel that the schedules turned into the office represent the families assigned to agents.

By reinterviewing families and shifting agents, the number of unacceptable schedules and refusals to give the information called for on the record card was kept at a minimum. Of the total of 74,743

⁴ See facsimile of "record card," appendix C, p. 188.

⁵ Due to movement of families since the 1934 enumeration, it was inevitable that vacant dwelling units were found at the time of this survey.

⁶ Reasons for employing field sampling are discussed earlier in this appendix.

dwelling units in the 830 tracts first sampled, only 332 families either could not be found at home or refused to give information.⁷

Comparison of the record card sample with the 1934 C. W. A. census.—When comparing the race and nativity distribution of the Urban Study sample with the census distribution, a number of factors must be taken into account. To begin with, there is reason to believe that the 1934 census figures are too low for foreign families and too high for native. The 1934 census reported approximately 57,000 fewer foreign families than did the 1930 census.⁸ This great difference cannot be accounted for on the basis of mortality rate of foreign heads, combining or doubling of families, or of migration from the city.

The figures relating to Negroes in the 1934 census also are difficult to explain. The Negro families and other races enumerated in 1934 were 2,446 fewer than in 1930. If one-half of the doubled families in 1934 were attributed to a real increase in the number of families which had combined living quarters since 1930, the adjusted figure would indicate about the same number of Negro families in 1934 as in 1930. The field sampling findings in the Negro areas indicate that there should have been even more Negroes in 1934 than in 1930. According to the Urban Study field sampling, the number of Negro families increased 40 percent from 1930 to 1936. This is in keeping with the trend between 1920 and 1930, when the number of Negro families in Chicago increased 114 percent.⁹

Although 8,687 record cards were obtained by field sampling of the 105 tracts, only 6,237 would have been secured had the sample for these tracts been drawn from the 1934 census listings. The difference is chiefly due to the greater number of Negroes found in these areas than were enumerated in the 1934 census. Since the major part of

⁷ These were in addition to the 1,343 vacancies and unlocated addresses referred to above.

⁸ Some decrease in foreign families and increase in native should be expected, in view of the stoppage of immigration during the last decade, and of the establishment of new families by the native born children of the older immigrant groups.

In 1934 a certain section of public opinion in Chicago was against giving relief to foreign born aliens. Thus families were less likely to report foreign birth than in 1930. Another reason for the differences may be the different formulation of the questions on nativity in the two censuses. In 1930 the country of birth of the head was asked, while in 1934 the head had only to specify whether he was native or foreign.

Comparison of the age distribution of foreign heads in 1930 with the mortality rate accounts for only a small proportion of the 57,000 decrease. The only other reasons for the decrease could be doubling of families and migration from the city. It is unlikely that either of these factors was sufficiently important to account for the difference.

Neither is the decrease in foreign families in 1934 to be accounted for on the basis of combining families. Although there were 24,323 foreign families which were doubled in 1934, 23,800 contained only two families. The other 1,520 consisted of three or more families. If we allow an average of 2.5 extra families for these 1,520 households, we obtain 3,800 doubled families which, when added to the 23,800 combined families above, gives 27,600 "extra" families in 1934. Evidence from other sources has indicated that even in 1930 there was considerable doubling; enough so that only about half of the doubled families in 1934 might be attributed to a real increase over 1930.

As for migration from Chicago, there is little reason to believe that foreign families left the city in large numbers during this period.

⁹ Negroes in the United States 1920-32, Bureau of the Census 1935, p. 275.

the Chicago sample was drawn from the 1934 census it was decided to assume for weighting purposes that the number of cases drawn in the field sampling equaled the number which would have been obtained had the census sheets been available for these 105 tracts. Thus by adding 6,237 to the 76,086 control cards drawn from the 830 tracts, we arrive at our figures of 82,323 families, which represents our random sample, approximating 10 percent of the 822,687 families enumerated in the 1934 C. W. A. census of Chicago families.

While this sample furnishes the basis for a true cross-section study of Chicago incomes, it was not a census of all families and is thus subject to certain limitations. There is a source of error in the fact that the sample drawn for this study carries forward any errors of under-enumeration in the C. W. A. census. It follows that the present study might yield an almost exact estimate, for example, of the percentage of all families which had incomes of less than \$1,000. Since, however, we lack a precise figure for the total number of families in the city in 1935, it is not possible to make an equally exact estimate of the number of families with incomes of less than \$1,000.

An adjustment of the census figures must be made in order to compare the number of families of each nativity or color drawn in the Urban Study sample with the census. The Urban Study classifies as foreign born, families in which either the husband or wife is foreign. The census has regard only to the nativity of the husband in complete families. Thus, families with native husbands and foreign wives are classed as foreign in the Urban Study and as native in the census classification. An examination of a sample of 500 families classified as foreign in the Urban Study revealed that 7 percent of the foreign families were such "mixed nativity cases." Adjusting the census figures for this difference in definition, the comparison of the Consumer Purchases Study sample and the census appears as in table 1.

TABLE 1.—Comparison of color and nativity of families in Chicago reported in 1934 C. W. A. census with sample of record cards obtained in Consumer Purchases Study.

Class	1934 C. W. A. census	Consumer Study record cards (10-percent sample) (estimated)
Total families.....	822,687	¹ 82,323
Native white	² 438,735	40,350
Foreign husbands with native or foreign wives and native husbands with foreign wives.....	³ 326,530	36,329
Negro.....	53,718	⁴ 5,280
Other races.....	3,704	364

¹ Including 1,343 unobtained schedules (see discussion).

² 461,502 reported in census minus 22,857 estimated number of native husbands with foreign wives.

³ 303,673 reported in census as foreign born plus 22,857 cases just noted.

⁴ Reducing by approximately 3,000 the number drawn by sampling in field to 4,980, the number which could have been drawn from a 10-percent sample of census listings in the 105 tracts.

The Family Schedule Sample

As mentioned above, the final goal of this survey was to obtain data on expenditures from families of such a homogeneous character that definite conclusions could be reached with regard to consumption patterns of different income groups, occupational groups, or family types. Since native white families containing both a husband and a wife were selected as a homogeneous group for the expenditure study, the major emphasis of the income or family schedule survey was also placed upon this group.

Within the random sample of 82,323 record card cases all families having specified characteristics were asked at the time of the first interview to give the family schedule¹⁰ information. The required characteristics are referred to as "eligibility requirements" and the families meeting these specifications are designated as the "eligible" families. Eligibility for the family schedule information was ascertained from the record card information. Tables included in Tabular Summary, section B, relate to these "eligible" families. They constitute 37 percent of all families interviewed, and represent approximately 75 percent of all native white families.

Eligibility requirements.—The eligibility requirements for the family schedule are as follows:

Color.—Only white families were eligible for the regular sample in Chicago. Since the agent was instructed to observe rather than ask the color of the family, it is possible that if the family member interviewed was a white person married to a Negro, Oriental, or Indian, the family was classified as white.

Nativity.—Only families with a native born husband and wife were eligible. To be classified as a native family, both the husband and wife must have been born in the continental United States or in Alaska.

Housekeeping arrangements.—Only families having the use of kitchen facilities at the date of interview were eligible. Thus families rooming in lodging houses, hotels, or institutions were not asked to give family schedule information.

Family composition.—Only families containing both a husband and a wife at the date of interview were eligible for the family schedule.¹¹

Number of years married.—Only families in which the husband and wife had been married for more than 1 year were eligible for the regular sample.

The number of cases in the so-called "eligible" or "regular" sample as compared with the total native white family population is shown in the accompanying table 2.

Every effort was made to maintain a random sample of eligible native white families. A preliminary check of the incomplete cases or refusals revealed that families in the upper income groups had a relatively high percentage of refusals, and that a significant number could not be interviewed. Steps were taken, therefore, to reduce

¹⁰ See facsimile of "family schedule," appendix C, p. 189.

¹¹ In some cases it was determined after the family schedule information had been obtained, that either the husband or the wife had not been a member of the economic family for 27 weeks or longer. (See "Definition of Items on the Family Schedule" for discussion of membership in the economic family.) Such schedules were not included in the analysis of the regular sample.

this bias by sending the superior interviewers to these districts and by substituting other families in a similar income class for these unobtainable cases.

TABLE 2.—*Analysis of native white sample of Chicago Study of Consumer Purchases by eligibility for family schedule interview*

Estimated number of total native white families in sample.....	40, 350
Estimated number native white families eligible for family schedule....	29, 949
Estimated number native white families ineligible for family schedule....	10, 401
Reasons for ineligibility: ¹	
(a) One-person households.....	2, 979
(b) Families did not live in housekeeping quarters.....	299
(c) Families did not contain both husband and wife.....	6, 343
(d) Husband and wife married less than 1 year.....	780

¹ Some families were ineligible for the family schedule for several reasons. The list given shows only a single cause for ineligibility. The procedure used was to determine ineligibility from the order of questions on the record cards, which is the order shown above. Note should be made, however, that the number of families not living in housekeeping quarters is not a true cross section of such families since the sample was drawn from a list of householders, and only those household units which were converted into nonhousekeeping quarters since the 1934 census enumeration are included above.

Despite efforts to secure a family schedule from every one of the eligible families in the record card sample, not all of the 29,949 families estimated to have been eligible were actually scheduled. There were 526 families which either refused or were unable to give the desired information. We must add to this number the 132 families from which record cards were not obtained, but which we estimated would have been eligible for a family schedule had the record card data been obtained. Together these two groups amount to 658 cases, or slightly over 2 percent of the eligible families. Part of the shortage of schedules occurred at all income levels, but relatively it was greater in the high incomes than in the low. The shortage can hardly affect any generalizations with reference to the lower income groups. At the very worst, if it is assumed that refusals occurred only among the higher income groups, it would mean families with incomes of more than \$5,000 should be described as 5 percent rather than 3 percent of the native white complete families.

In addition to these 658 families which were probably eligible for the family schedule, we estimate that 776 of the 1,343 control cards which turned out to be clerical errors in addresses, vacancies, business buildings, and errors of agent, should have yielded family schedules had it been possible to substitute a neighboring family for these unobtainable record cards.¹² The omission of these cases probably has little or no effect upon the randomness of the sample obtained. The clerical errors either in the original listings of the census or in the transcription of the addresses to the control cards certainly were random. The demolition of buildings and conversion of housing units into business

¹² The 1,343 control cards not yielding families for interviews were concentrated in those native white tracts which had a higher percentage of eligible families than was the case for the city as a whole.

buildings probably resulted in a slight bias in favor of the upper income groups. Taken as a whole, however, the best assumption seems to be that of randomness for these unobtained cases.

In order to arrive at the estimate of 29,949 eligible native white families, we add to the 28,515 tabulated schedules, 132 record card refusals which should have yielded family schedules, 526 unsuccessful family schedule interviews, and 776 control card errors and changes since 1934, for which a substitution should have been made.

The comprehensive sample.—In subsamples E and F, representing about one-fourth of all families interviewed, agents were instructed to ask every family interviewed to give the information shown on the family schedule. The "eligible" family schedules in these samples were tabulated with the "eligible" cases in all the other samples, while the "ineligibles" were tabulated separately and weighted according to the frequency of such cases in the total city sample. These "ineligibles" include native white families in which the husband and wife had been married less than 1 year, families rooming rather than maintaining housekeeping quarters, as well as all foreign born, Negro, and other color families. Generally speaking, very few families not maintaining housekeeping quarters should have been drawn in the sample, since the addresses were drawn only from families with separate housekeeping dwelling units.

TABLE 3.—Distribution of families in each sample in Chicago, according to eligibility and ineligibility for family schedules

URBAN STUDY RECORD CARD ANALYSIS

Subsample	Estimated number of families in 10-percent sample									
	Total families in sample	Eligible for family schedule	Ineligible for family schedule	Negro and other color	Reasons for ineligibility					
					Foreign nativity		Native white			
					Single individual householders	All other	Single individual householders	Incomplete	Married less than 1 year	Rooming
A.....	9,702	3,587	6,115	681	255	3,943	353	753	80	50
B.....	8,799	2,756	6,043	576	302	3,943	417	696	80	39
C.....	8,759	3,345	5,414	395	209	3,717	289	689	83	32
D.....	10,022	3,782	6,240	796	272	3,832	376	821	108	34
E.....	10,182	4,101	6,081	529	264	4,026	364	766	101	31
F.....	10,317	3,889	6,428	702	234	4,264	323	790	93	22
G.....	10,045	3,489	6,556	857	251	4,267	347	706	101	27
H.....	10,405	3,797	6,608	650	283	4,340	391	806	98	40
I.....	4,092	1,203	2,889	458	86	1,840	119	326	36	24
Total.....	82,323	29,949	52,374	3,644	2,157	34,172	2,979	6,343	780	299

The number of "ineligible" families in the city, according to the record card analysis, is shown in table 3. The distribution in each subsample is presented so that samples E and F may be viewed in

relation to the other samples and to the total. Persons familiar with sampling will note that the tract subsamples show greater variability than would be expected from true random samples of the same size. This comparison of different samples does, however, show enough consistency from sample to sample to justify the belief in the accuracy of the total sample for the city.

Weights for different nativity and race groups.—It was necessary to bring the field work in Chicago to a close before every "ineligible" family in samples E and F had been interviewed for the family schedule information. Instead, therefore, of 12,509 family schedules from "ineligible" families in these samples, only 7,854 were actually completed. Furthermore, since samples E and F were random by tracts rather than from the entire city, the various nativity and race groups are not represented in exactly the same proportions as in the city as a whole. Comparison of the completed cases in each ineligible group with the number expected on the basis of record card information, indicated that the Negro sample was most complete, while the sample of native white families without both husband and wife was least complete. Different weights are used, therefore, for each nativity and race group to arrive at the total number of families in each group for a 10-percent sample of Chicago families. The number of schedules tabulated, the weights used, and the total number of families in each group in a 10-percent sample are shown below:

TABLE 4.—*Number of family schedules tabulated, weights, and estimated number of families in a 10-percent sample*

Color and nativity	Number of family schedules tabulated	Weights	Estimated number of families in a 10-percent sample of Chicago
Complete native white.....	26,515	¹ 1.08567	² 30,958
Incomplete native white.....	986	9.52535	9,392
Foreign white.....	5,423	6.69906	36,329
Negro.....	1,231	4.26919	5,280
Other color.....	68	5.35294	364

¹ This step-up allowed for the inclusion of families married less than 1 year with families containing both husband and wife, although no tabulations of this group have been made.

² Includes 780 couples married less than 1 year, and 229 without housekeeping facilities.

With few exceptions the weights just described have been applied to the original family schedule data for the 36,223 families whose schedules were tabulated, to obtain the estimated distribution by income of the total population. This was done, in general, even for data which appeared to show the effect of random fluctuations in the sample.

On the other hand, there were instances of schedules representing incomes above \$5,000 which hardly indicated anything more than

that such a report had been received and was to be accounted for. For example, 1 isolated report was received of a \$7,500 income in a racial group where only 1 case was sampled out of each 53 in the community. In cases of this sort the complete step-up could not be applied solely at the point reported, but had to be distributed among adjoining income bands, applying such judgment as could be brought to bear upon the case to produce the most reasonable estimate as to the probable distribution. In general it may be said that such manipulation occurs among the cases of incomplete families above \$5,000; and whenever the estimates represent a figure of less than 50 cases in the total population at a given income level, some manipulation in the interests of reasonableness is to be assumed. Precisely because there has been some departure from a strictly mechanical handling of the higher income reports, the text usually lumps incomes of \$5,000 and up. Wherever a finer break-down is shown, it may be assumed that manipulation has had no real influence in determining the distribution of the total population.

APPENDIX C
Schedule Forms and Glossary

FACSIMILE OF RECORD CARD—FACE AND BACK

CONFIDENTIAL—The information requested in this schedule is strictly confidential. Omit it or falsify it will not be seen by any agency having access to the computing machines and will not be available for (a) tax purposes.

STUDY OF CONSUMER PURCHASES
A FEDERAL WORKS PROJECT
RECORD CARD—URBAN

U. S. DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
IN COOPERATION WITH
NATIONAL RESOURCES COMMITTEE
WORKS PROGRESS ADMINISTRATION
DEPARTMENT OF AGRICULTURE
WASHINGTON

Schedule No. _____
E. D. _____
Agent _____
Editor _____

(City) _____ (State) _____

1. Street and number _____

2. Type of structure¹ _____

3. Apartment or floor _____ Vacant

4. Name _____ Telephone _____

Visit	Date	Time of day	At home		Information obtained	Person interviewed
			Yes	No		
5. First						
6. Second						
7. Third						

8. Color: a. White b. Negro c. Other

9. Number in economic family: a. Two or more persons b. One person

10. Yes No **BORN IN UNITED STATES**

11. Husband or male head Wife or female head

12. Residence in (a) housekeeping quarters, or (b) rooms with another family, in rooming house, hotel, or institution:
a. Housekeeping quarters b. Rooms only

13. Economic family includes husband and wife:
a. Yes No
If yes:
c. Number of years married:
(1) Less than one (2) One or more

If there is NO CHECK in any of the heavy boxes, request family schedule.

¹Specify one-family house, detached, semi-detached or row; two-family house, side by side or two duplex; three-, four-, five- or more family apartment building; business building; hotel; institution.
²In filing record cards for institutions, file separately cards for families which are multiple only because they come under 13a.

The items set off by heavy boxes varied according to the eligibility requirements for the family schedule sample in cities of different size and sections of the country.

(FILE IN FOR ALL FAMILIES ELIGIBLE FOR ONE OR BOTH SCHEDULES)

	Family schedule	Expenditure schedule	Check years		
			Food	Clothing	Furnishings
14. Schedules completed (date) _____	1936	1936	1936	1936	1936
15. Interview time _____	min.	min.	min.	min.	min.
16. Person interviewed (relation to head of family) _____	(Check)	(Check)	(Check)	(Check)	(Check)
17. Partial information (or none): Willing, not able _____ Not willing _____ Cannot be interviewed: Out of town _____ Sick _____ Not home _____ Other (specify) _____					
	Not Eligible for Family Schedule (Check)	Not Eligible for Expenditure Schedule (Check)	Food Schedule		
				First	Second
18. Color [see item (8)] _____	24. Family type _____	(Check)	31. Completed _____		
19. Number in family (9) _____	25. Boarder and/or lodger-years _____		32. Dates covered _____		
20. Nativity (10 and 11) _____	26. Residence in community _____		33. Requested, not obtained _____		
21. Housekeeping arrangements (12) _____	27. Occupancy of dwelling _____				
22. Family composition (13 b) _____	28. Income _____				
23. Married less than year (13 c) _____	29. Relief _____				
	30. Other _____				

FACSIMILE OF FAMILY SCHEDULE—FACE AND BACK

CONFIDENTIAL—The information requested in this schedule is strictly confidential. Give it to nobody. It will not be given by any direct means to the cooperating agencies and will not be available for taxation purposes.

I. YEAR COVERED BY SCHEDULE
Twelve months beginning _____, 1935,
and ending _____, 1935.

II. FAMILY COMPOSITION (during schedule year)

A	B	C	D	E
Members of economic family (all persons sharing family income, including in an temporary away from home)	Sex	Age at last birthday	Number of weeks other than home	
1. Husband	M			
2. Wife	F			
Other members of family (give relationship)				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

If any member of family died during year, state number in front of name.

**U. S. DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
NATIONAL RESOURCES COMMITTEE
WORKS PROGRESS ADMINISTRATION
DEPARTMENT OF AGRICULTURE
WASHINGTON**

**STUDY OF CONSUMER PURCHASES
A FEDERAL WORKS PROJECT
FAMILY SCHEDULE—URBAN**

III. OTHER MEMBERS OF HOUSEHOLD (during schedule year)

Relationship	Present	No. weeks
1. Sons and daughters boarding and rooming at home: Age _____ sex _____		
2. Other roomers with board		
3. Roomers without board		
4. Boarders without room		
5. Tourists or transients		
6. Guests		
7. Paid help living in _____		

IV. HOME OWNERSHIP

1. Number of months during schedule year living:
a. As renter _____ b. As owner: 1st home _____ 2d home _____

IF AN OWNER:	1st home	2d home
2. Monthly rental value \$ _____		
3. Has been mortgaged (or being mortgaged) (check one): a. <input type="checkbox"/> Yes b. <input type="checkbox"/> No		
4. Is mortgage, interest on mortgage (or both) (check one) for sale tax _____		

Code No. _____
Schedule No. _____
City _____ Dist. _____
Agent _____
Date of interview _____ 1935

V. RESIDENCE IN THIS CITY
For how many months of schedule year did the family live in this city? _____

VI. LIVING QUARTERS OCCUPIED (at date of interview)

- Did family occupy these living quarters at end of schedule year? a. Yes b. No
 - Does family own or lease these living quarters?
 - Monthly rent \$ _____, if renter.
 - Type of living quarters:
 - One-family house:
 - Detached.
 - Attached.
 - Two-family house:
 - Side by side.
 - Two decker.
 - Apartment in building for:
 - Three families.
 - Four families.
 - Five or more families.
 - Dwelling unit in business bldg.:
 - A.
 - B.
 - Room or roomer:
 - With another family.
 - In rooming house.
 - Other:
 - A.
 - B.
- VII. COLOR**
a. White b. Negro

VIII. MONEY EARNINGS OF FAMILY FROM EMPLOYMENT OR BUSINESS OUTSIDE OF HOME OR AT HOME (during schedule year)

A	B	C	D	E	F	G	H	J
Members of family gainfully employed	Sex	Age	OCCUPATION during year	Status of worker (A, B, C)	Rate of earnings per week or time	Time employed (use same time unit as in G)	Total money earned from employment or business	
Relationship	Male		Kind of work (such as machinist, bookkeeper, merchant, actor)	Nature of industry (such as retail, hotel, drug store, independent)				
1.					\$ _____ per _____		\$ _____	
2.					per _____			
3.					per _____			
4.					per _____			
5.					per _____			
6.					per _____			
7.					per _____			
8.					per _____			
9.					per _____			
10.					per _____			

IX. OTHER MONEY INCOME	Total for year	X. OTHER MONEY INCOME (continued)	Total for year
1. Income from roomers and boarders (gross)	\$ _____	7. Gifts in cash for current use from persons not members of economic family	\$ _____
2. Income from work in home not entered in VIII above (specify) _____	\$ _____	8. Losses in business (subtracted)	\$ _____
3. Interest and dividends from stocks, bonds, bank accounts, trust funds, etc.	\$ _____	9. Total money income	\$ _____
4. Pains or interest in life insurance	\$ _____	10. Has family received direct relief (in cash or kind), during schedule year? a. <input type="checkbox"/> Yes b. <input type="checkbox"/> No	
5. Bequests from property, less expenses	\$ _____	11. Has any member of family had work relief during schedule year? a. <input type="checkbox"/> Cash b. <input type="checkbox"/> Kind c. <input type="checkbox"/> None	
6. Pensions, annuities, benefits	\$ _____		

Section 1. Definition of Items on the Family Schedule

This section includes such definitions, numbered with the section and item numbers appearing on the family schedule, as are needed for the interpretation of the text and accompanying tables. It represents a summary of the more detailed instructions which were issued in connection with the field collection and editing of the data. The reader is referred to section 2 of this glossary for definitions used in the analysis of the data by income, occupation, and family type.

I. Year Covered by the Schedule Information

The information on family composition, income, and occupation pertains to the situation of the family over a yearly period, sometimes referred to on the tables as the "report year" or "schedule year." The family was asked to choose the period for which it could give the more accurate information; either the 1935 calendar year or the 12 months ending on the last day of the month immediately preceding the date of interview. Of the 28,515 Chicago families included in the regular sample and for which family schedules were analyzed, 15.8 percent chose for the schedule year period the calendar year ending December 31, 1935. The 12-month period from June 1, 1935, to May 31, 1936, was chosen by more families than was any other given period (19.2 percent). Information covering a period after July 31, 1936, was obtained for only 3.1 percent of the families. Table 19 in the tabular summary, section B, shows a distribution of the other 61.9 percent of Chicago families by the schedule year period chosen.

II. Family Composition—the Economic Family

Since family income and other family characteristics refer to the economic family, it is important to have the definition of this group clearly in mind.

The economic family is defined as a group of persons belonging to the same household and dependent upon a common income. In most cases the members of the economic family were related by blood, marriage, or adoption. Persons thus related and either living under the same roof or eating at least two meals daily with the family and whose income could be determined were considered members. Thus adult sons and daughters living in the household were regarded as members of the economic family provided that their income could be determined, even though they paid a stipulated amount for room and board instead of pooling their earnings.

Related persons whose homes were with members of the economic family and who were dependent on the economic family for at least 75 percent of their support were considered members even though they were away at school or in an institution. Persons who were

usually members of the economic family but who had been in an institution at no expense to the family for a period of a month or less at some time during the schedule year were considered members of the economic family away from home. If they were in an institution without expense to the family for more than a month continuously during the year, they were members of the economic family only during that part of the year which they spent at home. Persons not related but living together and pooling all of their earnings or receiving all of their support from the family fund (i. e., dependent on a common income) were considered members of an economic family. In an economic family consisting of more than one married couple, the oldest married male was designated as the head, or husband. It is always his wife who is referred to on the tables as "wife."

III. Other Members of the Household

The household includes, in addition to the members of the economic family, all persons who lived in the family home for 1 week or longer during the schedule year and who were not dependent upon the common income, and did not pool their income. These other members of the household might be roomers, boarders, tourists, transients, guests or paid help living in the home.

1. *Sons and daughters boarding and rooming.*—Adult sons and daughters of members of the economic family were classified as roomers and boarders only if it was impossible to ascertain their income. When their income could be determined they were members of the economic family even though they paid for room and board rather than pooled their incomes.

2. *Other roomers with board.*—Persons who slept in the home and paid for their room were classified as roomers with board if they regularly took one or more meals daily in the home.

3. *Roomers without board.*—Roomers who took no meals with the family were included in this category. Adult sons and daughters who roomed but did not board with the family were classified as roomers without board if they were not members of the economic family.

4. *Boarders without room.*—Persons who took one or more meals daily in the home and paid for their board, but did not live in the household, were considered as boarders. (The number of equivalent weeks during which they were boarders was computed on the basis of 21 meals per week.)

5. *Tourists or transients.*—Classed as tourists or transients were persons who roomed and/or boarded in the home for less than a week, and who paid for such accommodations. Only families having tourists or transients for a total of 1 week or more during the year were classified as households with such members.

6. *Guests*.—Persons related or unrelated who were not members of the economic family, but who lived in the household 1 or more nights without payment for rent or food, were guests. The time spent in the household by all guests must total more than 1 week before the family was classified as one having guests. When a person described by the family as a guest remained in the household for 26 weeks or longer, without making payment for room or board, an attempt was made to determine this person's income so that he might be classified as a member of the economic family.

7. *Paid help living in*.—All servants sleeping under the family roof or in dwelling quarters provided free by the family were included in this category.

IV. Home Ownership

Home ownership refers to the ownership of the home by any member of the economic family. To make possible the computation of nonmoney income from home ownership,¹ information was obtained on the number of months during which the family occupied an owned home, the family's estimate of the monthly rental value, and the amount of interest incurred during occupancy of a mortgaged home. Because of the desirability of keeping the family schedule interview as brief as possible, no detailed information was obtained during this interview on expenses other than interest, which is usually the major expense of an owned home.

Rent as pay.—If the family lived for all or part of the year in a dwelling furnished as part of wages or salary (as in the case of a parsonage furnished to a minister or an apartment furnished to a janitor) the estimated monthly rental value and the number of months rent as pay was received, were written on the schedule. The value of rent received as pay was later included in computing total family income.

Rent as gift.—If the family occupied a home owned by a relative or a friend on a rent-free basis during the year, when it had no home of its own, the number of months so occupied and the estimated rental value of such residence were included in the agent's notes attached to the schedule but the rental value was not included in the computation of total income.

VI. Living Quarters Occupied

Information on the type of living quarters relates to those quarters occupied at the date of interview but was tabulated only for those families which did not move between the end of the schedule year and the date of interview.

Of the types specified on the schedule the dwelling unit in a business building and the "other" types have special meaning in this study.

¹ See "Imputed Income From Owned Home," section 2, Terms Used in the Text and Tabular Summary, p. 200.

4-h. *Dwelling unit in business building* was a dwelling in a structure used also for business purposes. A building used for both dwelling and business was considered a business building if a third or more of the floor space (not counting the basement) was used for business.

4-k. *Other* included living quarters over a private garage, a housekeeping apartment in an institution, rooms without housekeeping facilities in a hotel. The classification "other" on the tables includes also rooms with another family or in a rooming house (4-i and 4-j). Since the sampling method was designed to select householders, schedules were obtained from very few families having rooms without housekeeping facilities in a hotel or with another family, or in a rooming house. These schedules were obtained only in the comprehensive sample.

VIII. Money Earnings From Employment

Employment.—Employment was any work for which persons while members of the economic family normally received, or expected to receive, money as compensation for services. Persons who had worked during the year but whose losses exceeded or equaled earnings were regarded as employed. Employment on work-relief projects was considered as gainful employment and money earnings from such sources were included in income.

Status of worker.—To facilitate coding of an individual's occupation, the symbol "s" was used for salaried workers and all wage earners; "o" for persons working on their own account, and "x" to indicate that employment was on a work-relief project. To determine status of certain workers, such as carpenters, dressmakers, etc., who represent borderline cases between wage earners and independent businessmen, it was necessary to set up the following qualifications, one or more of which the person classified as in independent business must meet:

(1) The investment of either his own or borrowed capital in his business, as in a truck, stock of materials, shop, or special equipment for his place of business, which might be in the home (the tools of a workman such as he would need in his capacity as a wage earner were not considered a capital investment); (2) the taking of business risks; (3) the employment of others to work for him in his own business; (4) the production of goods on the chance of finding a purchaser.

A person was considered as on work relief if he was required to demonstrate to the public or private agency granting the work that he had insufficient means to support his family according to the standards adopted by the agency concerned. Educational aid received by students under N. Y. A. and F. E. R. A. to permit them to complete their education was not considered work relief.

Net money earnings.—The earnings entered on the family schedule were net earnings and were money earnings exclusively. Included in money earnings were all commissions, tips, and bonuses which were received during the schedule year. Money earnings of persons working on their own account represented the salary or profits drawn from the business for family use.

The following expenses were considered occupational expense and as such were deducted from gross earnings in arriving at net earnings: Union dues and fees; business and professional association dues; expense for technical books and journals directly related to the person's occupation; room rent paid out of family funds while a member was working away from home; the portion of operating expense for business use of automobile not covered by an expense account; and expense for workmen's tools which are frequently replaced.

The following items were not considered to be occupational expenses and consequently were not deducted from gross earnings: Clothing worn at work and food eaten at work; amounts deducted from pay checks for health and life insurance, retirement funds, etc.; and transportation to and from work.

Overhead expenses such as rent for business premises, office supplies, telephone, and large sums expended for tools and equipment which are in the nature of capital outlays were treated as business expense rather than as occupational expense. The agent, with the cooperation of the family, deducted such business expenses from the earnings figure before entering it on the schedule.

Time employed.—Time employed, as entered on the schedule, represents the number of hours, days, weeks, or months during which the person had some employment. The unit chosen for reporting the length of time employed was usually the unit by which the individual was paid. When the length of time employed was reported in hours or days, it was reduced, for purposes of analysis, to equivalent weeks by using a 5-day or 40-hour week as the basis.

Since it was frequently impossible for the respondents to give the number of weeks employed full time and the number of hours worked in periods of part-time employment, tables showing time employed in weeks do not distinguish between full-time and part-time employment.

Income from roomers and boarders and from work in the home.—Although the schedule form provided for the entry of gross income from roomers and boarders and income from casual work in the home under "other money income," in the analysis or tabulation of this item, net income from roomers and boarders and income from work in the home were considered as earnings. Income from work in the home which was irregular in nature was classified on the schedule as "other money income"; had the work been regular, it would have been shown originally under earnings.

IX. Other Money Income

This consisted of money income from sources other than earnings, which was available for the current use of the family during the schedule year. The value of income received in kind was not obtained in this survey. Direct relief or relief in kind, the eligibility for which was determined by a means test, was not included as other money income. Some other items not included in the money income figure are enumerated later on.

The components of other money income are:

3. *Interest and dividends.*—Only amounts received as interest and dividends from stocks, bonds, bank accounts, trust funds, etc., which could be drawn in cash for family use were reported on this schedule. Dividends received from paid-up insurance policies were also included in this category. If, however, these dividends were reinvested in the insurance policies they would not be reported.

4. *Profits.*—Net profits drawn from a business owned, but not managed, by the family were included as other money income. Profits drawn for family use from a business which was actively managed by the family were included under earnings.

5. *Rents from property.*—Net rents from property owned by the family were computed by deducting current expenses on the property from the gross rental income. Expenses for improvements or additions to the property or for payments on the principal of the mortgage were considered an investment and as such were not deducted from gross rent.

When the family owned a multifamily dwelling, occupying a portion of it and renting the remainder, only the proportion of the expenses which was applicable to the tenants' share of the home was deducted from rental receipts in arriving at net income from rents.

6. *Pensions, annuities, benefits.*—This included amounts received from veterans' pensions, pensions from employers, income from annuities, compensation under workmen's compensation laws, unemployment benefits from trade-unions, and benefits from sickness and accident insurance. Income from old-age pensions, mothers' pensions, and pensions for the blind, which are paid by local and Federal governments only after demonstration of need, was not included in other money income. The receipts of such income classified a family with other families receiving relief.

7. *Gifts in cash.*—Included here are only those gifts in cash which were for current use of the family and which were made by persons other than members of the economic family. Amounts received from relief agencies and the cash evaluation of income received in kind were not considered gifts in cash.

7-a. *Money income from other sources.*—Income received from sources other than those specified above was classified in this category. Such sources are: Money found or received as a prize or as a reward for finding a lost article, alimony, net gains from gambling, net income from the sale of home-produced foods; amounts received from the Government when members of the family are at C. C. C. camps; that amount of the soldiers' bonus which was spent for current living;² and money earned prior to the schedule year and received during the schedule year.

Items not included in money income.—Some items which are commonly considered money income were not covered by the Study of Consumer Purchases because it was impossible in a survey of this sort to ascertain the amount of certain types of income. The procedures used in the study excluded the following sources of income: That share of profits to individuals participating in an entrepreneurial business, partnership, syndicate, or pool which was not withdrawn for family use; profits received from sales or exchanges of capital assets (real estate, stocks, bonds, investments in business and other property), unless such transactions constituted the primary occupation of some member of the family; interest and dividends from stocks, bonds, bank accounts, trust funds, etc., which had accrued, but had not been received into the family funds; direct relief in cash or in kind; the value of income in kind, except income from owned homes; money received in a lump sum as a bequest or a gift in cash which was not used for current expenses. Withdrawals from assets, borrowings, and other nonincome receipts were not covered on the family schedule.

8. *Losses in business.*—Classified here are only those net losses from real estate operations or other businesses during the year which were met from the family income, or by an increase in the family's liabilities. Among the cases included are those in which the actual expense for real estate held by any member of the economic family exceeded the actual income, and cases in which traveling expenses for business purposes exceeded the allowance provided by employers for such expenses.

Losses in business were charged against the specific type of family business. For example, if the family's net rents from property totaled \$500, but the family's expenses on other businesses owned but not managed by the family were \$500 more than the income from this source, the family would appear on the "other money" income tables as a family having an income of \$500 from rents and would

² A large proportion of the families were scheduled before payment of the soldiers' bonus began on June 15, 1936. Therefore, families which were entitled to a bonus but which gave schedule information for a yearly period ending on or before May 31, 1936, would not have an opportunity to report receipts from this source. Of the Chicago native white complete families, only 16 percent were scheduled for a period extending beyond May 31, 1936; some of these families reported having received and cashed a bonus.

also appear as a family having a loss in business of \$500. These two figures cancel out in the computation of the figure for total money income for the family.

Apparently the losses in business which were reported by families were for the most part not entrepreneurial, but were instead losses incurred in the rental of owned property, etc. Although an entrepreneur might actually have had a net business loss for the year, any withdrawals from his business to support his family were considered as family income. When withdrawals from the family fund to meet business losses exceeded the contribution to the family income, families were classified as having suffered business losses for the enterprise in question.

10 and 11. *Relief.*—The family was classified as having received relief if at any time during the schedule year any member of the family received aid from a public or private agency and if, to prove eligibility for such aid, it was usually necessary to pass a means test. The inclusion as "relief families," of families who had received relief for as short a period as 1 day, and who may have had relatively high incomes during part of the schedule year, accounts for occasional relief families in the higher income brackets. Since occasionally churches and other organizations give support by a regular allotment to members who would otherwise have to apply for relief, or to members who are ineligible for public relief, such cash allotments were considered relief even though the family was not required to submit to a formal means test.

The study covers a period during which first F. E. R. A. and then W. P. A. administered work relief. In most cities there was a lag between the separation of clients from F. E. R. A. work projects and their placement on W. P. A. work projects in the fall of 1935. During this lag families were commonly carried on direct relief in cash or in kind. As a rule relief families distinguished F. E. R. A. from W. P. A. by the fact that the allotment from the latter was based on the occupational classification of the worker, while the former relief set-up budgeted the family on the basis of number and age of members. Families with members who had worked on P. W. A. projects were considered relief families only if their assignment to such projects was dependent upon the passing of a means test. Families of students who received educational aid under N. Y. A. and F. E. R. A., permitting them to complete their education, were not classified as relief families if this was the only aid received. Families with members attending C. C. C. camps were not classified as having received work relief unless some other members of the families had been assigned to a work project. Persons in C. C. C. camps were not members of the

economic family during their stay in camp and, consequently, the C. C. C. work was not shown as employment. C. C. C. enrollment was not in itself sufficient grounds for considering a family as on relief. In view of an Executive order of April 1935, however, which instructed that men be sent to C. C. C. camps only from families on relief, it is apparent that the large majority of families with members in C. C. C. camps were also in the relief classification.

No figures on the amount of direct relief received in cash or in kind were requested from families. Earnings on work-relief projects were included with earnings from other sources, although families receiving work relief were classified with families receiving direct relief rather than with the nonrelief families.

Section 2. Terms Used in the Text and Tabular Summary

(With particular reference to A. Income; B. Occupation; C. Family type)

A. Income

Total income.—The income by which families were classified in the text and appendix tables represents net money income of all members of the economic family, as well as imputed income from owned home (see below for definition) and rental value of dwelling quarters received in payment for work rendered. Total income does not include money received as direct relief, or the value of goods received in kind.

Components of total family income—

1. *Net money income.*—Net money income included net earnings from gainful occupations of family members (wages, salaries, profits, and other withdrawals from business for family use, tips, commissions, and bonuses); minus occupational expenses; net income from roomers, boarders, tourists, and transients; net income from casual work in the home; and income from all other sources indicated under the discussion of other money income on page 195. Of these items, the methods of computing net income from roomers and boarders, imputed income from owned home, and rent received as pay, need to be explained.

In ascertaining the income from boarders and lodgers, an attempt was made to obtain the net income after deduction of business expenses—the income available for family spending. Since too much interview time would be required to obtain cost figures on the keeping of roomers and boarders, it was necessary to estimate this cost in the office, using data available from a previous study of the Bureau of Labor Statistics. The estimates were for cost of food only and made no allowance for the costs attached to keeping lodgers and for costs other than food—such as the expense for service, table linen, etc. The cost of boarders' food, however, is probably the largest single item of expense in this type of enterprise.

The cost estimates corresponding to given payments by boarders with room were based on Bureau of Labor Statistics data for 279 wage-earner families living in 10 cities. The line of relationship is represented by the equation Y equals 87.37 plus 0.1004 X , where X equals the annual payment by a boarder with room and Y the corresponding cost of food. This estimated cost of food was subtracted

from the payment made to the family and the remainder was regarded as net income from boarders with room.

Obviously the same payment as above for board without room requires a different cost estimate. The line of relationship between total annual payments by boarders without room and the corresponding cost of food was based on data for 59 wage-earner families in 8 cities. The equation is Y equals 52.83 plus $0.2108X$, where X is the annual payment by a boarder without room and Y the corresponding cost of food. When, by the use of these corrections, the cost of boarders' food was greater than the gross income from boarders, a zero balance rather than a negative income was attributed to the family from this source.

2. *Imputed income from owned home.*—The incomes of home owners were adjusted to take into account their effective "purchasing power" incomes, rather than their money incomes alone. This adjustment had the net effect, in general, of placing the home owners one \$250 interval above the family income scale in which their money incomes alone would have placed them.

The income which was attributed to home owners was the difference between the family's estimate of the rental value of the home and the expenses on the home for the period of occupancy. At the time of the family schedule interview the family was asked for information on the amount of interest on the mortgage or land contract. Other expenses on the owned home—taxes, special assessments, refinancing charges, repairs and replacements, insurance, etc.—were computed on the basis of existing data on the relationship between such expenses and rental value.

This procedure was followed for two reasons: First, because it was not feasible to obtain, during the brief family schedule interview, information on each type of expense of home ownership; and, second, because it seemed satisfactory, and possibly preferable, to use for expenses other than interest on mortgage, a figure which approximated an average for several years rather than a figure equal to the cash expenses for the schedule year itself.

The line of relationship which was derived between "other expenses" and rental value for this purpose was based on Bureau of Labor Statistics' data for 949 home-owning families, including wage earners and low salaried workers, living in 10 cities as well as Federal employees living in Washington. The equation for the line of relationship is Y equals 39.20 plus $0.1726X$ where Y is annual other expenses and X is the annual rental value.

The estimated expenses were added to the interest figure obtained from the family and the whole was deducted from the rental value for the period of occupancy. The resultant figure was the income imputed to home owners. If the figure for "other expenses" was

greater than the rental value of the home, the expenses other than interest were assumed to equal the rental value. In such a case the addition of an expense for interest to these other expenses which were assumed to be zero resulted in a negative income from home ownership; the amount of the negative income was deducted from the combined money income figure and rent as pay (if any) in arriving at the net total income.

3. *Rent received as pay.*—When the free occupancy of the family dwelling was received as pay for services, as is frequently the case with janitors, ministers, etc., the monthly rental value and the number of months of rent as pay was obtained. The value of rent received as pay for the schedule year was later computed and included in total income.

B. Occupation

The classification of occupations prepared by the Works Progress Administration³ was used as a guide in classifying employment into occupational groups. The occupational grouping of the Study of Consumer Purchases is shown below together with the Works Progress Administration classification:

<i>Study classification</i>	<i>W. P. A. classification</i>
Salaried professional and independent professional.	Professional and technical workers.
Salaried business and independent business.	Proprietors, managers, and officials. Farm managers. Owners of nurseries and greenhouses.
Clerical.	Office workers, salesmen, and kindred workers.
Wage earners.	Skilled workers and foremen in building and construction. Skilled workers and foremen in manufacturing and other industries. Farm foremen and overseers. Semiskilled workers in building and construction. Semiskilled workers in manufacturing and other industries. Unskilled laborers. Farm laborers. Domestic and personal service workers. Farm owners and tenants. Farm croppers.
Farm operators.	
Farm croppers.	

A further description of the occupational groupings used by the Study of Consumer Purchases follows:

Salaried professional.—The salaried professional category included all professional, semiprofessional, and technical workers who were employed by others on a salaried and/or commission basis. Appren-

³ Index of Occupations, Occupational Classification and Code, Works Progress Administration Circular No. 2-A, September 1933.

tices to these occupations were also included in this classification. Besides lawyers, teachers, physicians, and dentists, this group included artists, chemists, clergymen, technical engineers, technicians, trained nurses, draftsmen, and journalists. Certain of the technicians and laboratory assistants included here were probably on the border-line between professional and highly skilled wage earners.

Salaried business.—The salaried business category included persons employed by business and manufacturing firms in managerial or official positions, usually on a salaried and/or commission basis. Officials and inspectors employed by the city, State, or Federal governments were classified here. Persons employed as salaried executives of firms were also included. Office managers, as well as credit and advertising managers (except those managing establishments in these two fields), were classified as clerical.

Independent professional.—Included in the independent professional group were professional, semiprofessional, and technical workers working on their own account. (See "Salaried professional" for a partial list of specific professional occupations.)

Independent business.—The independent business group included all entrepreneurs or nonprofessional persons who worked on their own account. Businesses owned but not managed by any member of the family were not included since such cases were included under "other money income" of the family. To be classified as an entrepreneur, one or more of the following qualifications were met: The investment of capital in materials, equipment, etc. (tools of workmen such as were needed by wage earners were not considered capital investments); the taking of business risks; the employment of others; the production of goods on the chance of finding a purchaser. The independent business group included: Retail dealers, wholesale dealers, importers and exporters, building contractors, brokers, bankers, hucksters, and peddlers. Independent business families in the low income levels were composed largely of small shopkeepers and lodging-house keepers, while most families in the upper income groups belonged to large-scale enterprises. Income from roomers, boarders, tourists, or transients was classified as having been derived from independent business.

Clerical and kindred workers.—The clerical occupations included office workers, office and store clerks, commercial travelers, salesmen, and kindred workers. With the exception of office managers, persons exercising control over the work of others were generally excluded from this category. Persons in the clerical occupations are usually remunerated on a weekly, monthly, annual, and/or commission, rather than hourly or daily, basis. Some of the higher paid clerical occupations which border on the salaried business classification were: Accountants (other than certified public accountants), auditors, chief

clerks, purchasing agents, credit managers, office managers, and advertising managers (other than those in advertising agencies).

Wage earner.—In the wage-earner classification were included skilled, semiskilled, and unskilled manual occupations in building and construction, manufacturing, extraction, and transportation industries, etc. Apprentices to the skilled occupations and foremen were included in the wage-earner category. Also included were domestic and personal service workers and farm laborers.

Occupations in the wage-earner category usually involve manual skill and, with the exception of foremen, do not ordinarily involve control over the work of others. Remuneration is usually on an hourly, daily, or weekly, rather than a monthly or annual, basis.

The inclusion of workers of the following types in the wage-earner classification resulted in a representation of the wage-earner group in the income brackets of \$3,500 to \$5,000: Foremen and inspectors, chief engineers, lithographers, engravers, sign painters, furriers, and watchmakers.

No gainfully employed members and farmers.—Families having no members engaged in gainful employment were classified in this group. An individual was considered gainfully employed even though his business losses exceeded or equaled his earnings. These families with no earnings might be retired or unemployed; they might be supported by direct relief, or living on pensions, savings, interest, etc. In Chicago, the families of seven farm operators drawn in the sample were analyzed with this group because there were too few of them to constitute a separate classification. With the exception of these seven families, if there was any income from earnings whatsoever, such as income from boarders and roomers, the family was not shown in this category, but in the category from which the earnings were derived.

Family occupation.—The occupation by which the family was classified was that one of six major occupational groups from which the largest proportion of the total earnings of the economic family was derived. The six occupational groupings are: Salaried professional, salaried business, independent professional, independent business, clerical, and wage earner.

When no member of the economic family had worked during the schedule year because of retirement, unemployment, or for any other reasons, the family was classified as having "no gainfully employed members." If, however, someone had worked during the year, but there were no earnings from occupation because losses exceeded or equaled earnings, the family was considered as having a gainfully employed member and the occupation was classified in the proper one of the six categories. A number of families who would otherwise have been classified as having "no gainfully employed member" were included in the independent business group because of some earnings

from roomers or boarders. In Chicago, seven families of farm operators were grouped with the "no gainfully employed members" because they were not sufficiently numerous to analyze in a separate classification.

Occupation refers to the occupation in which the individual actually worked during the schedule year and not necessarily to what he considered his "usual occupation" as determined by preference, experience, vocational training, etc. The occupation of persons on work-relief projects was confined primarily to wage-earner and clerical work. Obviously the occupational classifications of independent business and independent professional did not apply to relief work. If relief families were classified in these categories it was due to a non-relief position of some member other than the family head or the position held by the head before or after having been engaged on a work-relief project.

The procedure followed in determining family occupation was to combine the total earnings of a family from the four salaried and independent occupations (salaried business and professional, and independent business and professional) and to compare this combined total with the family's earnings from wage-earner occupations and with those from clerical occupations.⁴ If the earnings from the four salaried and independent groups combined were greater than the earnings from either of the other groups, the family was allocated to the particular salaried or independent occupational group from which the earnings were largest. For example, a physician derives \$1,600 from private practice (independent professional) and \$1,000 as salary from an insurance company for his medical services (salaried professional). His son has earnings of \$1,800 during the schedule year as a day laborer. The earnings of the father determine family occupation since, when combined, they are greater than the earnings of the son. Since the father's greater source of earnings is his private practice, the family occupation is independent professional.

For purposes of determining family occupation, net income from roomers and boarders was included in the earnings from independent business occupations. Income from casual work in the home was classified according to the occupational classification of the work (e. g., income from the occasional typing of letters or manuscripts was entered under clerical). Employment on work-relief projects was considered as gainful employment and was classified according to the type of work done. In most cases such work fell under the wage-

⁴ Since the business and professional groups were classified into a fourfold grouping while wage earners were classified as a single group, although they might equally well have been subdivided into skilled, semi-skilled, and unskilled, it was decided to make the business and professional groups comparable with the wage earner by combining the earnings in these four occupations when determining family occupation. In the smaller cities, furthermore, the four business and professional groups were combined into a single occupational group for most tabulations.

earner or clerical occupations, but a few cases fell in the professional group. When rent was received as part payment of services, the value of such rent was included with the earnings of the individual who received it, in determining family occupation. If equal amounts of earnings were derived from each of two or more types of occupations, the chief occupation (i. e., the occupation yielding the largest earnings) of the individual having the largest earnings was considered the family occupation. For example, if the husband in a family earned \$500 from an independent business, while the wife earned \$300 from a wage-earner occupation and a son \$200 also as a wage earner, the family was classified as belonging to the independent business group.

When there were two or more earners in a family, each earning the same amount but from different occupations, the family was classified in the occupation engaged in by the individual who was the head or who was the most closely related to the head of the family or his wife; if the relationship of these members to the head was the same, the occupation of the eldest determined the family occupation. When the earner who determined the family occupation had more than one occupation the family was classified on the basis of the occupation from which he derived the largest portion of his earnings.

Earners.—An earner is a member of the economic family who has been gainfully employed at any time during the schedule year. No minimum earnings or length of employment were arbitrarily set up as a basis for determining whether a person should be called an earner. Persons who worked during the year but who had no earnings from occupation because losses exceeded or equaled earnings were considered to be gainfully employed and were counted as earners.

The *principal earner* is that member of the economic family who has the largest earnings during the year, from all of his occupations combined, if he has more than one occupation. If the family head and another adult had equal earnings, the head is designated as the principal earner. If two persons other than the head have the largest and equal earnings, the principal earner is the one more closely related to the head of the family or his wife; if the degree of relationship is the same for the two persons, the older is designated as the principal earner.

Supplementary earners are all members of the economic family other than the principal earner who received any earnings during the year.

Individual earners are persons to whom earnings could be specifically allocated. Income from roomers and boarders, or income from casual work in the home, usually results from a family enterprise and as a consequence the earnings cannot be attributed to any one individual.

The category "*other male*" earners is comprised of all male members of the economic family, other than the oldest married male (or head), who were gainfully occupied during the schedule year.

The category "*other female*" earners is comprised of all female members of the economic family, other than the wife of the oldest married male, who were gainfully occupied during the schedule year.

C. Family Type

Families were classified into the following types based upon the membership composition of the economic family:

Family type

- I. Husband and wife, and no other persons in the economic family.
 - II. Husband, wife, and one child under 16 years and no other persons in the economic family.
 - III. Husband, wife, and two children under 16 years and no other persons in the economic family.
 - IV. Husband, wife, and one person 16 years or over, and one or no others in the economic family.
 - V. Husband, wife, one child under 16 years, one person 16 years or over, and one or two other persons regardless of age in the economic family.
 - VI. Husband, wife, and three or four children under 16 years and no other persons in the economic family.
 - VII. Husband, wife, at least one child under 16 years, and four or five other persons regardless of age in the economic family.
 - VIII. Husband and wife, and in addition three or four persons over 16 years.
- Other complete families } All other economic families which contain both husband and wife and are not designated above.
- IX.⁵ Families of two or more members without both husband and wife in the economic family.
 - X.⁶ One-person economic families.

The above family types are based upon the equivalent number of persons under 16 years of age and the equivalent number 16 years or over in the economic family during the year. For example, if two children were members of the economic family for 26 weeks each, together they would represent the equivalent of one person for the entire year. Thus a family so constituted would be classified as type II (husband, wife, and one child under 16 years and no other persons in the economic family).

By use of a conversion table, the number of weeks of membership of persons in the economic family for only a portion of the schedule year is expressed in terms of equivalent members. If the economic family contained only one person who was a member for 26 weeks or less, he was not regarded as an equivalent member; had he been in the family for 27 weeks he would have been classified as one equivalent member. If two persons, both of whom were under 16 years, were members of the economic family for a total of from 27 weeks through 78 weeks, together they counted as one equivalent member; had they been members for a total of from 79 through 130 weeks, they would have been counted as two equivalent members. The same method of computation applied to adults. If, however, the family contained an adult for 17 weeks and a child for 17 weeks, neither would be counted

⁵ Family schedules from types IX and X were obtained only from families drawn in the comprehensive sample. These two types are referred to in the text as "broken" or "incomplete" families.

as members of the economic family, although together they might equal 27 weeks or more. In other words, an individual under 16 years, or one over 16 years, in the family less than 27 weeks was disregarded in the family-type classification.

This computation of family types on the basis of equivalent members has resulted in the classification of married couples with an infant less than 6 months of age, into family type I, i. e., husband and wife and no other persons in the economic family.

All weeks during which persons were members of the economic family, whether living in the home or temporarily away from home, were included in computing equivalent members.

Children under 16 years were not necessarily the children of the head and his wife, but might have been grandchildren, foster children, or other relatives.

Appendix D

Note on Earlier Studies of Family Income and Expenditure

Studies of family expenditures by the Department of Labor date back to a survey of workers in the iron and steel industry made in 1888, for the purpose of securing information on wages and levels of living among American and European workers in the same industries. In more recent years the Bureau of Labor Statistics has progressively increased the detail and widened the scope of its studies of family expenditures, which have been conducted primarily to provide weights for its cost of living indexes. The United States Department of Agriculture has been conducting its studies of the expenditures of farm families since 1890. In planning the present study the cooperating agencies have also had the benefit of suggestions contained in the work of a number of private agencies, particularly that of the Social Science Research Council in Its Plan for a Study of Consumption According to Income. The plans for the present study of consumer purchases have been developed jointly by the consumption staff of the National Resources Committee, the Cost of Living Division of the Bureau of Labor Statistics, and the Economics Division of the Bureau of Home Economics, with the cooperation of the Central Statistical Board.

In addition to this study, the Bureau of Labor Statistics conducted expenditure studies among families of wage earners and low-salaried clerical workers in 1934-36 in the following cities:

Baltimore, Md.
Berlin, N. H.
Birmingham, Ala.
Boston, Mass.
Buffalo, N. Y.
Cincinnati, Ohio.
Claremont, N. H.
Cleveland, Ohio.
Columbus, Ohio.
Concord, N. H.
Conway, N. H.
Dallas, Tex.
Denver, Colo.
Detroit, Mich.
Dover, N. H.
Grand Rapids, Mich.
Houston, Tex.
Indianapolis, Ind.
Jackson, Miss.

Jacksonville, Fla.
Johnstown, Ohio.
Kansas City, Mo.
Keene, N. H.
Laconia, N. H.
Lancaster, Ohio.
Lansing, Mich.
Littleton, N. H.
Los Angeles, Calif.
Louisville, Ky.
Manchester, N. H.
Marquette, Mich.
Memphis, Tenn.
Milwaukee, Wis.
Minneapolis-St. Paul, Minn.
Mobile, Ala.
Modesto, Calif.
Nashua, N. H.
New Orleans, La.

New York, N. Y.
 Norfolk-Portsmouth, Va.
 Philadelphia, Pa.
 Pittsburgh, Pa.
 Portland, Maine.
 Portsmouth, N. H.
 Reno, Nev.
 Richmond, Va.
 Rochester, N. Y.

Sacramento, Calif.
 St. Louis, Mo.
 Salt Lake City, Utah.
 San Diego, Calif.
 San Francisco-Oakland, Calif.
 Scranton, Pa.
 Seattle, Wash.
 Springfield, Mass.

Consumption studies in Chicago.—The present investigation is far from being the first study of consumer purchases in Chicago. Ever since the early 1880's studies of family incomes and expenditures have been made among Chicago groups whose living seemed in some way or other important to a research agency. In 1882 the Chicago Trade and Labor Assembly cooperated in an investigation of the relation of current family earnings to current family expenditures among wage earners and clerical workers. The data were secured by the Illinois Bureau of Labor Statistics, and apply to the year 1881-82, a decade after the great Chicago fire. There is a special analysis of rents as related to earnings, the number of persons in the family, and the number of rooms occupied by families of workers in 62 different occupations in the city.¹ This investigation was followed by a number of others, different in scope and purpose, but all alike in that they were restricted to the occupational and income limits set for the first study. One of the earliest is an analysis of the dietary adequacy of food consumed by 32 families living in the vicinity of Hull House.² Another, one of the best-known studies of consumer purchases ever made in the city, was undertaken for the purpose of discovering the relationship between wage rates in the stockyards, and levels of living among stockyards workers.³

A more recent investigation sponsored by the local community research committee of the University of Chicago was initiated for the purpose of determining whether a proposed revision of the Chicago Standard Budget for Dependent Families set a higher standard than would be maintained by families of independent unskilled workers.⁴

The Bureau of Labor Statistics has on numerous occasions collected data from Chicago families, as a part of its inquiries into the cost of living of wage earners and salaried workers. The 1918-19 study presented data on 348 Chicago families at 7 different income levels, the data including sources of family income, group expenditures and

¹ Illinois Bureau of Labor Statistics, Second Biennial Report (1883), pt. III, pp. 288-365.

² U. S. Department of Agriculture. Official Experiment Station. Bulletin No. 129: Dietary Studies in Chicago, by Ellen H. Richards. Washington, 1903, pp. 37-98.

³ Kennedy, J. C., and others: Wages and Family Budgets in the Chicago Stockyards District. An investigation carried on under the direction of the board of the University of Chicago. 80 pp., illus. Chicago, 1914.

⁴ Houghteling, Leila: The Income and Standard of Living of Unskilled Laborers in Chicago. University of Chicago Social Science Studies No. 8. 224 pp. Chicago, 1927.

savings, size of dwelling and type of housing facilities, and expenditures for fuel and light.⁵

The study of the money receipts and disbursements of 100 Federal employees living in Chicago, made by the Bureau of Labor Statistics in 1928 for the Federal Personnel Classification Board, was limited to employees with salaries under \$2,500. It was intended primarily to show how far the families of such employees are dependent on their incomes of supplementary earners, and to what extent their incomes meet their annual disbursements.⁶

⁵U. S. Department of Labor. Bureau of Labor Statistics. Bulletin No. 357: Cost of Living in United States. Washington, 1924, pp. 18, 80, 235, 344.

⁶Monthly Labor Review, vol. 20 (1929), No. 2, pp. 14-61; No. 3, pp. 248-259; No. 4, pp. 251-254; No. 5, pp. 1-10: Cost of Living of Federal Employees in Five Cities.

