

# INCOME OF URBAN FAMILIES AND INDIVIDUALS IN SINGLE-FAMILY HOUSEHOLDS

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AMONG 931,000 urban families comprised in the Social Security Board's study of family composition, there are 532,000 in which the family, as defined in the study,<sup>1</sup> constitutes the entire household. These single-family households represent more than 57 percent of all families and nearly 70 percent of all individuals included in the study's sample of the urban population of the United States. This paper deals with the income reported for these single-family households in the National Health Survey, made in the winter of 1935-36. In that survey families were asked to indicate whether or not a member had received relief in the past year, or, if relief was not received, the income interval representing their total money income during the 12 months preceding the date of the canvass.

## Representation of Family Types and Age Groups in Single-Family Households

As will be seen from table 1, the percentage of families found in single-family households varies widely for families of different types. Nearly 75 percent of all husband-and-wife families are found in single-family households, as contrasted with about 21 percent of the nonparent families.

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<sup>1</sup>To provide information needed by the Social Security Board, "family" was defined, in bio-legal terms, as comprising families of any one of the following 5 types: (1) *Husband-and-wife families*. Families with both spouses, with or without unmarried children; (2) *Husband-or-wife families, husband*. Families with only the male spouse, with or without unmarried children; (3) *Husband-or-wife families, wife*. Families with only the female spouse, with or without unmarried children; (4) *Nonparent families, male*. Families without either spouse, with an unmarried male as the head, with or without unmarried sisters and/or brothers; (5) *Nonparent families, female*. Families without either spouse, with an unmarried female as the head, with or without unmarried sisters and/or brothers. See Sanders, Barkev S., op. cit., pp. 12-13. "Family" is used subsequently in this article within the meaning of this definition.

Similarly, the single-family households include nearly 78 percent of all individuals in husband-and-wife families and only 24 and 25 percent, respectively, of the individuals in nonparent families with a male head and with a female head.<sup>2</sup>

Table 1.—Total number of urban families and persons and number and percent in single-family households, by type of family

[Preliminary data subject to revision]

Type of family <sup>1</sup>	Number of families		Number of persons		Single-family households as percent of total	
	Total	In single-family households	Total	In single-family households	Families	Persons
All types.....	931,379	532,393	2,504,104	1,735,978	57.2	69.3
Husband and wife.....	554,186	415,234	1,926,389	1,406,794	74.9	77.7
Husband or wife, husband.....	63,509	20,295	95,356	39,023	31.9	40.9
Husband or wife, wife.....	176,844	67,900	325,847	161,470	38.4	49.6
Nonparent, male.....	62,782	13,464	70,984	17,057	21.4	24.0
Nonparent, female.....	73,968	15,484	85,498	21,534	20.9	25.2

<sup>1</sup> For definitions of types of families, see footnote 1 in text.

Wide variations are found likewise in the percentage in single-family households among families classified according to the age of the head of the family. As is shown in table 2, there is a negligible representation in single-family households of families in which the head is aged less than 16. Among families in which the head is aged 16-24, more than 28 percent are in single-family households, while for the age groups 25-44 and 45-59 the percentages are 63.1 and 64.5, respectively. For subsequent age groups there is a decline to 45.1 percent for families in which the head is aged 65 or over. Table 2 shows also a similar trend for the individuals in groups of families classified according to the age of the head of the family; there is an increase in the percentage of persons in such groups who are found in single-

<sup>2</sup> The head of the family was determined as follows: In husband-and-wife families, the husband was always designated as the head. In one-spouse families, the spouse was considered the head, and in nonparent families, the oldest person.

**Table 2.—Total number of urban families and persons and number and percent in single-family households, by age of head of family**

[Preliminary data subject to revision]

Age group of head of family (years)	Number of families		Number of persons		Single-family households as percent of total	
	Total	In single-family households	Total	In single-family households	Families	Persons
All ages.....	931, 379	532, 383	2, 504, 149	1, 735, 878	57.2	69.3
Under 16.....	11, 472	13	13, 534	19	.1	.1
16-24.....	72, 851	20, 474	118, 272	47, 041	28.1	39.8
25-44.....	409, 923	258, 795	1, 224, 972	868, 580	63.1	72.5
45-59.....	257, 018	165, 599	791, 312	587, 509	64.5	74.2
60-64.....	59, 118	32, 814	136, 798	90, 089	55.5	65.9
65 and over.....	118, 712	53, 598	215, 261	120, 677	45.1	56.1
Unknown.....	2, 285	790	4, 000	1, 963	34.6	49.1

family households for each successive age group up to the maximum of 74 percent for individuals in families in which the head is aged 45-59, followed by a decline to 56 percent for persons in families in which the head is aged 65 or over.

When all persons in single-family households are classified by age, a substantially different age distribution is found, as is evident from table 3. Of all children under age 16 enumerated in the urban sample, more than 76 percent are in single-family households. Of persons aged 60-64 and 65 and over, on the other hand, the single-family households include only 59 and 49 percent, respectively.

In relation to the total urban sample, therefore, the single-family households include a relatively high proportion of families with both spouses and of those in which the head of the family is in the ages 25-59. Conversely, these include, with respect to the total urban sample, relatively low

**Table 3.—Total number of urban persons and number and percent in single-family households, by age of person**

[Preliminary data subject to revision]

Age group of person (years)	Number of persons		Persons in single-family households as percent of total
	Total	In single-family households	
All ages.....	2, 504, 104	1, 735, 871	69.3
Under 16.....	847, 639	492, 895	76.1
16-24.....	401, 916	275, 817	68.6
25-44.....	821, 732	573, 013	69.7
45-59.....	404, 595	274, 508	67.8
60-64.....	82, 068	48, 496	59.1
65 and over.....	142, 504	69, 909	49.0
Unknown.....	3, 500	1, 233	34.6

percentages of nonparent families, families with only one spouse, and families in which the head of the family is aged less than 25 or 60 or over. These single-family households include a relatively high percentage of all urban children under age 16 and a low percentage of persons aged 60 or over.

### **Relationship of Income to Size of Family**

Nearly half—45.7 percent—of all urban single-family households reported either receipt of relief<sup>3</sup> at some time during the 12 preceding months or incomes of less than \$1,000; 39.2 percent reported incomes from \$1,000-\$1,999; 10.4 percent, incomes of \$2,000-\$2,999; and 4.7 percent, incomes of \$3,000 or more (table 4). These figures are highly significant in throwing light on the problem of the distribution of income among the urban population of the country.

Since adequacy of family income is directly related to the number of persons who share it, a more significant relationship is that between income distribution and the size of the family, as shown in table 4. It is strikingly evident that the relative proportion of families on relief increases as the size of family increases. The relative percentage of nonrelief families with incomes of less than \$1,000, on the other hand, decreases as the size of the family increases. There is also a negative correlation between income and size of family in the income groups \$1,000-\$1,499 and \$1,500-\$1,999, though to a much lesser extent. In the income groups \$3,000 and over, the relative percentage of families tends to increase with the increase in the size of the family, though there is a definite sagging in the trend of these percentages for the groups of families with 5-11 persons.

This association between family size and income is shown more clearly in an analysis of the mean and median incomes for families of specified size. Moreover, the problem of the adequacy of income

<sup>3</sup> The National Health Survey defined relief as follows: "Families were identified as having received relief, if at any time during the year covered by the report one or more members had had assistance such as work relief (but not PWA or CCC wages), direct relief, mothers' pension, pension for the blind, or a grant for any similar purpose from public funds administered by a Federal, State, or local government. Families which reported the receipt of relief were not asked to specify the amount of income received during the year." U.S. Public Health Service, National Institute of Health, *The Relief and Income Status of the Urban Population of the United States, 1935, 1938*, J-1317, pp. 1-2. If a relief family volunteered income data, the information was included in the schedule. Doubtless some families classified as "relief" were wholly or partly self-supporting during at least part of the period. It is believed also that some families failed to report receipt of relief.

becomes more significant when one considers the per capita incomes of individuals in families of specified size.

Since the National Health Survey did not regularly obtain income data for families which reported receipt of relief, it was necessary to estimate mean income with the aid of figures given by the National Resources Committee. The mean income of relief families was estimated by using as guides the mean income of the relief families and that of 1-person families obtained by the National Resources Committee.<sup>5</sup> The Committee study shows that the mean income of 1-person families on relief was \$407 per annum, that is, about one-third of the income of 1-person families not on relief. The same study indicates that the mean income of all relief families was \$657 per annum, which is about two-fifths of the mean income of all nonrelief families. This relationship indicates that the proportionate income of relief families, as compared with nonrelief families, is higher in families of larger size than in 1-person families. It was assumed, therefore, that this ratio increases progressively with increasing family size.<sup>6</sup>

<sup>5</sup> National Resources Committee, *Consumer Incomes in the United States*, August 1938, table 5B, p. 96.

<sup>6</sup> A more plausible assumption would have been that the ratio rises up to a certain size and then declines, but since there was no way to determine this optimal size it was believed that the simpler procedure was justified for the present purpose.

Taking into consideration the fact that relief provisions in cities have been relatively more adequate than in rural areas, the probable mean income of 1-person relief families was assumed to be about 40 percent of the estimated income of the corresponding nonrelief families; in 2-person families this ratio was assumed to be approximately 42 percent, and so on, progressively, until it reached a ratio of 60 percent in families of 10 or more persons. The estimated mean and per capita incomes thus obtained are given in table 5, together with the percentage distribution of individuals in families of specified sizes for which mean and per capita incomes are shown. On the basis of these assumptions, the estimated income of 1-person families on relief is given as \$416 per annum, which is not materially different from the amount actually observed by the National Resources Committee—\$407 per annum. The mean rises with increasing family size, attaining a maximum of \$1,262 as the income of relief families with 11 members. The mean income of all relief families is \$724, which is not unreasonable as compared with the mean income of \$657 obtained by the National Resources Committee for both urban and rural families on relief. It is believed that the estimated mean and per capita incomes for relief families of different sizes are probably not far from actuality, judging from the available information on the income of families which

Table 4.—Number of urban single-family households of specified size, and percentage distribution by income status<sup>1</sup>

[Preliminary data subject to revision]

Size of family (persons)	Number of families <sup>2</sup>	Income status of family							
		All families	Relief families	Nonrelief families					
				Under \$1,000	\$1,000-\$1,499	\$1,500-\$1,999	\$2,000-\$2,999	\$3,000-\$4,999	\$5,000 and over
All sizes.....	519,813	100.0	16.6	20.1	23.3	15.9	10.4	3.6	1.2
1 person.....	55,903	100.0	17.1	54.4	15.3	7.4	3.8	1.3	.7
2 persons.....	154,384	100.0	12.3	33.2	23.8	15.9	10.2	3.3	1.3
3 persons.....	118,610	100.0	13.6	25.3	25.9	18.2	11.9	3.9	1.2
4 persons.....	89,166	100.0	16.2	21.4	25.2	18.7	12.7	4.4	1.4
5 persons.....	48,504	100.0	21.5	21.0	23.8	17.1	11.1	4.1	1.4
6 persons.....	25,313	100.0	27.1	20.1	22.0	15.5	10.4	3.7	1.2
7 persons.....	13,346	100.0	32.2	19.5	21.1	13.6	9.3	3.2	1.1
8 persons.....	7,657	100.0	37.1	17.5	19.5	13.6	8.4	2.8	1.1
9 persons.....	3,523	100.0	42.4	15.6	17.3	11.5	9.0	2.9	1.3
10 persons.....	1,852	100.0	42.6	16.0	18.1	11.2	8.0	3.2	.9
11 persons.....	861	100.0	45.1	12.0	16.9	11.6	9.9	3.5	1.0
12 persons.....	392	100.0	39.3	12.5	17.3	13.0	11.0	5.1	1.8
13 persons.....	149	100.0	47.7	8.0	12.1	18.8	8.0	4.7	.7
14 persons.....	66	100.0	45.5	10.6	12.1	16.6	7.6	7.0	-----
15 persons.....	10	(?)	(?)	(?)	(?)	(?)	(?)	(?)	-----
16 persons.....	8	(?)	(?)	(?)	(?)	(?)	(?)	(?)	-----
17 persons.....	3	(?)	(?)	(?)	(?)	(?)	(?)	(?)	-----

<sup>1</sup> Excludes 12,570 families of unknown income status. For definitions of income status, see p. 26, footnote 3.

<sup>2</sup> Not computed, because base is less than 25.

have been on relief or have had one or more members on relief for any length of time within a 12-month period.

While the National Health Survey made no consistent effort to obtain the actual income of relief families, such incomes, whenever in excess of \$1,000, were often reported voluntarily and recorded by the canvassers. The analysis of this return for Detroit indicates that at least 8 percent of the relief families had annual incomes of \$1,000 or over. The study of the National Resources Committee indicates that about 23 percent of the families on relief had incomes in excess of \$1,000 per annum. The estimated income distributions are consistent with these observations.

For nonrelief families the information on income distribution obtained by the National Health Survey for the specified income groups was used, and intermediate points were obtained by graphic interpolation. The more detailed distribution of incomes for the category of less than \$1,000 was obtained from the National Resources Committee material, and the distribution of incomes above \$5,000 was obtained by using data given by the National Resources Committee and also the income-tax returns of the Treasury.

Table 5 shows an estimated mean income of \$724 for relief families, \$1,544 for nonrelief families, and \$1,408 for all families in urban single-family households. The respective per capita incomes are \$190, \$490, and \$432. In comparing these mean

incomes with those given by the National Resources Committee, it must be remembered that there are several important differences. By definition, the National Resources Committee includes in income the imputed value of the home, the value of products raised for home consumption, and payments in kind; it includes both urban and rural families, and considers the economic family-consumer unit. The estimates of the National Resources Committee refer in general to the fiscal year 1935-36, while the National Health Survey covers the 12 months antedating the day of the canvass during the winter of 1935-36. A wholly independent estimate<sup>7</sup> which has recently been made on distribution of incomes gives figures for estimated per capita income for the United States which are in close agreement with those in table 5. This estimate gives the mean per capita income in the United States as \$419 for 1934 and \$450 for 1935. These figures refer to both urban and rural population, but the definition of income is broader than that adopted in the National Health Survey.

It is clear from table 5 that the mean income for all nonrelief families increases with the size of the family up to families with 4 members. In families of 5-10 persons there is no definite association between income and family size, while families of 11 and 12 or more persons show markedly higher mean incomes. These higher figures for the very

<sup>7</sup> U. S. Department of Commerce, *State Income Payments, 1929-37, 1939*, table III, p. 6.

Table 5.—Percentage distribution of persons in urban single-family households and estimated average family income and per capita income, by size of family<sup>1</sup>

[Preliminary data subject to revision]

Size of family (persons)	Percentage distribution of persons in—			Mean income						Median family income of nonrelief families
				All families		Relief families		Nonrelief families		
	All families	Relief families	Nonrelief families	Per family	Per capita	Per family	Per capita	Per family	Per capita	
All sizes.....	100.0	<sup>2</sup> 100.0	<sup>3</sup> 100.0	\$1,408	\$432	\$724	\$190	\$1,544	\$490	\$1,270
1 person.....	3.3	2.9	3.4	934	934	416	416	1,040	1,040	800
2 persons.....	18.2	11.5	19.9	1,393	697	630	315	1,500	750	1,225
3 persons.....	21.0	14.7	22.5	1,488	496	708	236	1,610	537	1,345
4 persons.....	21.0	17.6	21.9	1,558	390	785	196	1,707	427	1,407
5 persons.....	14.3	15.9	13.9	1,507	302	831	166	1,693	339	1,382
6 persons.....	9.0	12.5	8.1	1,442	240	848	141	1,663	277	1,370
7 persons.....	5.5	9.2	4.7	1,392	199	869	124	1,640	234	1,340
8 persons.....	3.6	6.9	2.8	1,383	173	913	114	1,650	208	1,356
9 persons.....	1.9	4.1	1.3	1,453	162	1,013	113	1,778	198	1,382
10 persons.....	1.1	2.4	.8	1,395	139	1,009	101	1,682	168	1,348
11 persons.....	.6	1.3	.4	1,723	157	1,262	115	2,101	191	1,457
12 or more persons.....	.5	1.0	.3	1,651	131	1,191	95	1,985	158	1,580

<sup>1</sup> The method of arriving at these estimates is described in the text (p. 27).  
<sup>2</sup> 328,577 individuals in urban single-family relief households.

<sup>3</sup> 1,365,334 individuals in urban single-family nonrelief households.

large families may indicate the presence of more income producers than in smaller families. The per capita income, on the other hand, with only one minor irregularity, shows a progressive diminution as the size of the family increases. The diminution is particularly sharp in passing from 1-person families to 2-person families and from 2- to 3-person families.

Because of the broad categories in which incomes were reported in the National Health Survey, and more especially because of the two open ends in the distribution of income, the mean incomes given in table 5 for nonrelief families may perhaps be considered less reliable than the median incomes. It is apparent, however, that median income, like mean income, increases with the size of family for families of 1-4 persons, shows little relation to family size for families of 5-10

persons, and is the highest for families with 11 and 12 or more members.

The estimates in table 5 indicate, therefore, that among nonrelief families there is some positive association between average income and size of family but that this relationship is largely limited to families of certain sizes. The per capita incomes, on the other hand, indicate a marked and consistently negative association with family size. As is indicated in the table, more than one-fifth (23.3 percent) of the persons in nonrelief families are in 1- and 2-person households, in which per capita income averages \$750 or more; less than three-fifths (58.3 percent) are in families of 3-5 persons, in which per capita incomes range from \$540 to \$340; and less than one-fifth (18.4 percent) are in the larger families,

Table 6.—Number of urban single-family households of specified size and type, and percentage distribution by income status <sup>1</sup>

[Preliminary data subject to revision]

Size and type of family	Number of families <sup>1</sup>	Income status of family							
		All families	Relief families	Nonrelief families					
				Under \$1,000	\$1,000-\$1,499	\$1,500-\$1,999	\$2,000-\$2,999	\$3,000-\$4,999	\$5,000 and over
<b>All sizes:</b>									
All types.....	510,813	100.0	16.6	29.1	23.3	15.9	10.4	3.5	1.2
Husband and wife.....	405,705	100.0	15.5	26.1	24.9	17.7	11.6	3.9	1.3
Husband or wife, husband.....	19,856	100.0	22.5	37.9	17.8	10.9	7.0	2.7	1.2
Husband or wife, wife.....	66,200	100.0	24.3	43.5	10.4	8.6	4.9	1.7	.6
Nonparent, male.....	13,159	100.0	15.4	44.8	18.9	10.8	6.2	2.6	1.3
Nonparent, female.....	14,863	100.0	6.6	47.3	21.3	13.7	7.9	2.4	.8
<b>1 person:</b>									
All types.....	55,963	100.0	17.1	54.4	15.3	7.4	3.8	1.3	.7
Husband or wife, husband.....	11,838	100.0	23.8	46.7	15.1	7.3	4.4	1.7	1.0
Husband or wife, wife.....	22,341	100.0	18.9	62.4	11.1	4.2	2.0	.9	.5
Nonparent, male.....	10,997	100.0	16.3	48.1	18.4	9.4	4.9	1.9	1.0
Nonparent, female.....	10,787	100.0	6.6	52.9	21.2	12.1	5.6	1.2	.4
<b>2 persons:</b>									
All types.....	154,384	100.0	12.3	33.2	23.8	18.9	10.2	3.3	1.3
Husband and wife.....	126,899	100.0	11.1	31.8	24.3	16.8	11.0	3.6	1.4
Husband or wife, husband.....	3,282	100.0	17.1	32.2	22.2	15.0	9.4	3.0	1.1
Husband or wife, wife.....	19,867	100.0	20.1	41.7	21.2	10.5	4.8	1.2	.5
Nonparent, male.....	1,427	100.0	11.0	33.8	20.8	17.0	11.0	4.2	2.2
Nonparent, female.....	2,909	100.0	6.8	36.2	22.5	16.8	12.4	4.2	1.1
<b>3-4 persons:</b>									
All types.....	207,782	100.0	14.7	23.7	25.6	18.4	12.2	4.1	1.3
Husband and wife.....	184,638	100.0	13.3	23.1	26.4	19.1	12.6	4.2	1.3
Husband or wife, husband.....	3,351	100.0	20.6	21.9	22.2	16.8	11.8	5.0	1.7
Husband or wife, wife.....	18,071	100.0	28.9	29.6	18.7	11.7	7.9	2.4	.8
Nonparent, male.....	658	100.0	9.4	19.8	22.8	17.6	15.8	9.9	4.7
Nonparent, female.....	1,064	100.0	5.4	23.3	20.8	19.9	18.5	8.7	3.4
<b>5-6 persons:</b>									
All types.....	73,817	100.0	23.5	20.6	23.2	16.6	10.9	3.9	1.3
Husband and wife.....	68,029	100.0	22.1	20.7	23.9	17.0	11.1	3.9	1.3
Husband or wife, husband.....	1,047	100.0	27.7	16.4	19.7	17.0	11.5	6.5	2.2
Husband or wife, wife.....	4,561	100.0	45.0	20.9	14.1	10.0	7.1	3.0	1.0
Nonparent, male.....	93	100.0	14.0	18.1	17.2	19.3	18.3	9.7	5.4
Nonparent, female.....	87	100.0	13.8	12.6	12.6	25.3	10.4	11.5	13.8
<b>7 or more persons:</b>									
All types.....	27,867	100.0	36.1	17.8	19.7	13.2	9.0	3.1	1.1
Husband and wife.....	26,139	100.0	35.4	17.9	20.1	13.4	9.0	3.1	1.1
Husband or wife, husband.....	338	100.0	35.7	13.9	17.1	16.0	13.3	3.6	2.4
Husband or wife, wife.....	1,360	100.0	52.1	18.3	12.6	8.2	7.6	2.3	.9
Nonparent, male.....	14	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Nonparent, female.....	16	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> Excludes 12,570 families of unknown income status.

<sup>2</sup> Not computed, because base is less than 25.

in which the range of per capita incomes, decreasing as size of family increases, is \$280 to \$140.

Considering all families, both relief and non-relief, it is observed that about one-fifth (21.5 percent) of the individuals are in families of 1-2 persons, with per capita incomes of about \$700 or more; about two-fifths (42.0 percent) are in families of 3-4 persons, with per capita incomes of, roughly, \$500 to \$400. Nearly one-fourth (23.3 percent) are in families of 5-6 persons, with per capita incomes of \$300 to about \$240; and the remaining individuals, about 13 percent, are in families of 7 or more members, with per capita incomes ranging from a high of almost \$200 to a low of \$130 per annum. It must be remembered that almost 10 percent of the income is the estimated income of the relief families, who constitute nearly 20 percent of the sampled population, and that a large part of this income is from relief.

#### *Income in Relation to Size and Type of Family*

The comparative income distribution of families of different types and of specified sizes is given in table 6. It will be observed that among families of each of the designated sizes, nonparent families with a female head have the lowest percentage on relief, followed by nonparent families with a male head. In all but the 1-person families, the highest percentages with relief status are found among one-spouse families with a female head.

In general, nonparent families with a female head have the most favorable income distribution, though nonparent families with a male head have somewhat higher percentages in the income categories \$3,000 and over. The least favorable distribution is that for one-spouse families in which the wife is the head. Generally speaking, the husband-and-wife families occupy an intermediate position; in the small families, this type has a more favorable income distribution than either type of one-spouse family, while among the larger families the position is less favorable than that of families with the male spouse only.

The pattern of income distribution among non-relief families is shown in table 7 in terms of mean and median incomes in single-family households of specified type and size. For families of specified type, there is, with one unimportant exception, a consistent decline in per capita income for each

type of family with increasing size of family. In families of different sizes, however, there are important variations in the rank of the several types.

In all but 5-6 person families, the highest mean income is that of nonparent families with a male head; in 5-6 person families, nonparent families with a female head have the highest mean income, followed by nonparent families headed by a male. In 2-person households, husband-and-wife families

**Table 7.—Estimated average family income and per capita income of urban nonrelief single-family households of specified size and type**

[Preliminary data subject to revision]

Size and type of family	Median family income	Mean family income	Per capita income
<b>All sizes:</b>			
All types .....	\$1,134	\$1,547	\$491
Husband and wife .....	1,421	1,629	469
Husband or wife, husband.....	1,015	1,371	723
Husband or wife, wife.....	845	1,181	523
Nonparent, male.....	960	1,308	1,028
Nonparent, female.....	985	1,249	900
<b>1 person:</b>			
Husband or wife, husband.....	863	1,164	1,184
Husband or wife, wife.....	734	888	888
Nonparent, male.....	903	1,183	1,183
Nonparent, female.....	909	1,078	1,078
<b>2 persons:</b>			
Husband and wife .....	1,259	1,525	768
Husband or wife, husband.....	1,207	1,472	736
Husband or wife, wife.....	968	1,142	571
Nonparent, male.....	1,216	1,662	831
Nonparent, female.....	1,223	1,494	747
<b>3-4 persons:</b>			
Husband and wife.....	1,287	1,670	467
Husband or wife, husband.....	1,400	1,760	525
Husband or wife, wife.....	1,133	1,402	422
Nonparent, male.....	1,564	2,328	708
Nonparent, female.....	1,580	2,104	651
<b>5-6 persons:</b>			
Husband and wife.....	1,281	1,678	315
Husband or wife, husband.....	1,502	1,981	374
Husband or wife, wife.....	1,238	1,639	308
Nonparent, male <sup>1</sup> .....	1,746	2,513	484
Nonparent, female <sup>2</sup> .....	1,603	3,702	702
<b>7 or more persons:</b>			
Husband and wife.....	1,356	1,675	212
Husband or wife, husband.....	1,550	2,061	261
Husband or wife, wife.....	1,298	1,685	223
Nonparent, male.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Nonparent, female.....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Based on 80 families.

<sup>2</sup> Based on 75 families.

<sup>3</sup> Insufficient cases in sample.

have the next highest mean income, followed by nonparent families with a female head. In families of 3-4 persons and 5-6 persons, the nonparent families have the highest mean incomes, followed by families with the male spouse only; in households of these sizes the husband-and-wife families hold fourth place in terms of mean income. Except for families of 7 or more, the lowest average income, whether measured by mean or median, is that of one-spouse families headed by a female. Irrespective of size, husband-and-wife families have the highest median and mean income, but when size is taken into consideration this advan-

tage is completely lost. The per capita income of husband-and-wife families is lowest of all, while that of nonparent families with a male head is the highest.

For nonparent families and one-spouse families there is a marked association between income and family size, which may be evidence of a direct relationship between family size and number of income producers. The higher mean incomes are generally found in nonparent families, where the relation between family size and number of income producers is likely to be the closest. In one-spouse families, also, a large family may often mean the presence of other income producers in the family. In husband-and-wife families, however, a large family more often means the presence of young children; by definition, in single-family households all members of the family aside from the husband and wife are unmarried sons and daughters, who would be predominantly in the younger ages. It will be noted that there is relatively little difference between mean incomes in husband-and-wife families of 3-4, 5-6, and 7 or more persons, while in median income there is some decline with increasing size of family. This suggests a bimodal tendency brought about by segregation of families of specified size into those with young children and those with children of working age.

It seems likely that the positive association between income and size of family in these nonparent and one-spouse families indicates that adequacy of income is an important factor among nonrelief families in holding members of a family together when one or both parents are dead or absent. On the other hand, the relation of cause and effect may be reversed in some cases; it may be, for example, that character traits which tend toward family solidarity may also be a factor in promoting earning capacity. Further, there are additional factors, such as the age and sex composition, which may influence or determine the number of income producers.

### ***Income, Family Size, and Age of Family Head***

One such influencing factor may be the age of the head of the family. Table 8 shows the distribution by income of families grouped according to the age of the family head. When size of family is left out of consideration there is no marked

variation in the percentages of families on relief in the various groups, though the percentage of relief families is slightly higher for groups in which the head of the family is aged 16-24 years or more than 64. In the nonrelief groups, however, there is a marked variation. Nearly half the families in which the head is 16-24 years of age and nearly 42 percent of those in which the head is 65 or over have incomes under \$1,000. Of those in which the head of the family is aged 45-59, on the other hand, less than 26 percent are found in this income category.

When family size is considered, however, it becomes evident that the association between income and age of the family head is decidedly more important than would be assumed from the relationships observed above. For instance, in 1-person families the proportion on relief increases progressively from 4 to 24 percent as one passes from families with heads aged 16-24 to those with heads aged 65 and over. In families of 2 persons, the lowest percentage on relief is found among those with heads 25-44, and those with heads aged 16-24 are second in rank, while families with heads aged 65 and over contribute the highest relative percentage. In families of 3-4 persons the direction is completely reversed. There the highest percentage with relief status is for families headed by persons aged 16-24. The percentage drops sharply for families with heads aged 25-44, and there is a further decrease for those headed by older persons. In families of 5-6 persons this negative association between age of family head and the relative frequency on relief is much more pronounced than in families of 3-4 persons, and the negative association is still more pronounced in families of 7 or more.

For the nonrelief groups, families headed by persons aged 16-24 are most prevalent, by far, in the lowest income group among families of each of the specified sizes, but their relative excess becomes more and more pronounced with increasing size of family. Families with heads aged 25-44 are most frequently found in intermediate groups, and their relative proportion shifts toward the lower incomes with increase in family size. Families with heads aged 45-59 show the highest relative frequencies in the higher income categories in families of 1 and 2 persons, but in those of larger size their relative highest frequencies shift to the intermediate in-

come categories. In families headed by persons aged 60-64 the highest relative frequencies are found in families with the lowest and highest incomes in 1-person families, and as family size increases the relative higher frequency is found in the intermediate and higher incomes. Finally, in families with heads aged 65 and over, the highest relative frequencies are observed in the lowest and highest income categories in 1-person families, and as family size increases there is a shift of relative highest frequency toward higher incomes.

In general, therefore, the income distribution of families headed by young persons is the least favorable; as the family size increases the income distribution of this group becomes progressively more unfavorable. That of families with heads in

intermediate ages is, on the whole, most favorable, since it is concentrated in intermediate income groups. And, finally, the distribution for families headed by aged persons shows a concentration in the lowest income group and a relative concentration in the highest income group in smaller families, and as the family size increases there is a progressive shift of the concentration toward the intermediate and higher incomes.

Examination of the variations in income status with respect to family size for families classified according to the age of the family head shows that, for families with heads aged 16-24, as family size increases the relative proportion of families on relief increases sharply. The positive association between size and relative frequency on relief is less marked and less regular in families headed by

Table 8.—Number of urban single-family households of specified size and age of family head, and percentage distribution by income status

[Preliminary data subject to revision]

Size of family and age group of head of family	Number of families <sup>1</sup>	Income status of family							
		All families	Relief families	Nonrelief families					
				Under \$1,000	\$1,000-\$1,499	\$1,500-\$1,999	\$2,000-\$2,999	\$3,000-\$4,999	\$5,000 and over
<b>All sizes:</b>									
All age groups <sup>2</sup> .....	519,813	100.0	18.6	29.1	23.3	15.9	10.4	3.5	1.2
16-24 years.....	20,226	100.0	18.4	49.3	22.6	7.4	1.9	.3	.1
25-44 years.....	255,096	100.0	16.4	28.4	25.0	17.4	10.4	2.8	.7
45-59 years.....	160,582	100.0	16.7	25.8	21.8	16.7	12.2	4.9	1.9
60-64 years.....	31,629	100.0	15.3	32.9	20.2	14.4	10.5	4.7	2.0
65 years and over.....	61,718	100.0	17.6	41.9	17.7	10.7	7.3	3.2	1.6
<b>1 person:</b>									
All age groups.....	55,963	100.0	17.1	54.4	15.3	7.4	3.8	1.3	.7
16-24 years.....	4,057	100.0	4.1	74.0	16.6	4.3	.7	.2	.1
25-44 years.....	17,955	100.0	11.8	48.0	21.1	11.7	5.3	1.5	.6
45-59 years.....	15,604	100.0	19.4	51.3	14.9	7.3	4.5	1.7	.9
60-64 years.....	5,202	100.0	20.4	57.2	11.3	5.1	3.5	1.6	.9
65 years and over.....	12,994	100.0	24.3	59.8	9.0	3.0	1.7	.9	.7
<b>2 persons:</b>									
All age groups.....	154,384	100.0	12.3	33.2	23.8	15.9	10.2	3.3	1.3
16-24 years.....	8,358	100.0	12.4	45.5	27.4	10.9	3.2	.5	.1
25-44 years.....	64,769	100.0	9.7	28.8	25.9	18.8	12.5	3.4	.9
45-59 years.....	44,104	100.0	13.3	30.9	22.7	16.1	10.8	4.3	1.9
60-64 years.....	12,832	100.0	13.5	35.9	22.6	13.9	9.1	3.3	1.7
65 years and over.....	24,120	100.0	16.5	43.4	19.5	10.8	6.2	2.3	1.3
<b>3-4 persons:</b>									
All age groups.....	207,782	100.0	14.7	23.6	25.6	18.4	12.3	4.1	1.3
16-24 years.....	7,409	100.0	31.2	40.7	21.2	5.5	1.2	.1	.1
25-44 years.....	118,641	100.0	14.6	23.7	27.7	18.9	11.3	3.0	.8
45-59 years.....	59,669	100.0	13.5	21.2	22.9	19.3	14.9	6.0	2.2
60-64 years.....	9,885	100.0	12.9	22.6	22.6	18.8	14.1	6.6	2.4
65 years and over.....	12,026	100.0	12.6	25.6	23.2	16.3	13.4	5.9	2.5
<b>5-6 persons:</b>									
All age groups.....	73,817	100.0	23.5	20.8	23.2	16.6	10.9	3.9	1.3
16-24 years.....	388	100.0	50.8	36.8	11.6	1.5			.3
25-44 years.....	40,803	100.0	26.2	22.7	24.4	15.3	8.5	2.2	.7
45-59 years.....	27,798	100.0	20.1	18.3	22.3	18.4	13.5	5.5	1.9
60-64 years.....	2,717	100.0	18.8	16.1	10.1	17.9	16.3	8.6	3.2
65 years and over.....	2,072	100.0	14.6	15.8	19.0	17.6	17.6	11.4	4.0
<b>7 or more persons:</b>									
All age groups.....	27,867	100.0	36.1	17.8	19.7	13.2	9.0	3.1	1.1
16-24 years.....	14	100.0	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )				
25-44 years.....	12,938	100.0	41.6	20.7	19.7	10.8	5.8	1.2	.2
45-59 years.....	13,407	100.0	32.0	15.5	20.3	15.1	11.5	4.2	1.4
60-64 years.....	893	100.0	26.3	12.3	15.6	17.9	13.3	10.0	4.6
65 years and over.....	606	100.0	23.9	12.1	16.0	13.8	15.2	10.3	8.7

<sup>1</sup> Excludes 12,570 families of unknown income status.

<sup>2</sup> Includes 13 families with head under 16 and 790 families with head of unknown age.

<sup>3</sup> Not computed, because base is less than 25.

persons aged 25-44. The intensity of the association diminishes as the age of family head increases, so that for families with heads aged 65 and over the net association between family size and proportion on relief is negative.

Among nonrelief families headed by persons in the ages 16-24, the relative proportions in the highest income groups decrease as family size increases above 2 persons. In families with heads aged 25-44 this decrease, which starts after families with more than 2 persons, does not become marked until families of 5 or more are reached. In those with heads aged 45-59 the highest relative frequencies in the higher income groups are found in families of 3-4 persons, and the decrease does not become marked until families of 7 or more are reached. Finally, in families headed by persons aged 60 or more, the maximum relative frequencies in the highest income groups are found among the largest families.

#### *Income, Family Type, Size, and Age of Head*

An analysis, of which only the salient conclusions can be given here, has been made of the interrelationship between income and family size for families of specified types headed by persons of specified ages. This analysis shows that for husband-and-wife families in which the head is aged 16-24, income decreases as family size increases. This negative association between income and size of family decreases as the age of the head of the family increases, and in families in which the head is aged 60 and over the association between income and size is, on the whole, positive.

Among families with the male spouse only, in the few instances in which the head is aged 16-24 there is, on the whole, a small negative association between family size and income. This association is more definitely indicated in families in which the head is aged 25-44. The association, however, is definitely positive for families in which the head is aged 45 and over, and the magnitude of the association increases with advance in the age of the head of the family.

In one-spouse families with a female head, the association is definitely negative for the relatively few instances in which the family head is aged 16-24. The association, though still negative, is less marked in these families when the head is

aged 25-44. For the age group 45-59 the association is, by and large, positive. The intensity of the positive correlation increases for families in which the head is aged 60 and over.

In nonparent families with a male head aged 16-24, there is perhaps a net negative association between income and family size, although the pattern is not at all clear. A definite positive association between income and size exists in such families when the head is aged 25-44, and the magnitude of this association tends to increase with increase in the age of the head of the family.

Although for nonparent families with a female head aged 16-24 the mean size of relief families is larger than that of all families in this age group and type, among nonrelief families there is a positive association between family size and income. Among successive age groups, the positive association increases with advance in the age of the family head.

This further analysis seems to corroborate the hypothesis that, by and large, income is an important factor in preventing the dissolution of the family, but that the age of the head of the family and the family type are also important factors. The positive association between family size and the relative frequency on relief is most marked in families headed by persons in the younger age groups. With few exceptions it decreases progressively with age, and in ages 60-64 the proportion of families on relief is in inverse ratio to the size of family, except for husband-and-wife families. In families of all types in which the head is aged 65 and over, the percentage of relief families decreases as the size of the family increases.

Among the nonrelief families a positive association between size and income predominates, with some notable exceptions confined to families headed by younger persons and especially to husband-and-wife families. Another exception to the general rule is that the positive association between income and family size is limited largely to incomes up to \$4,999 and usually does not hold for the highest income category.

#### *Income of Individuals by Age, Family Size, and Family Type*

The characteristic associations of income as related to family size and type are also evident

from an analysis of individuals segregated according to age, family size, and family type. Such an analysis has been made, and the general findings are summarized below:

(1) Among individuals in relief families there is a general positive correlation between family size and the relative frequency on relief, most marked among individuals in husband-and-wife families, and least marked in nonparent-male families. This positive association is most regular among individuals in younger ages and least among individuals in older ages, so that in some instances (among individuals in older ages and certain family types) the association is actually reversed.

(2) Among individuals in families with incomes of less than \$1,000 a negative association between size of family and the relative frequency in this income category is most marked in families with the female spouse only. The negative association is least regular among individuals in younger ages and tends to increase in regularity among individuals in the more advanced ages.

(3) For individuals in families with incomes of \$1,000-\$1,499 there is a small net negative association between family size and the relative frequency in this income category. The negative association is found usually in families of 3 or more persons and is particularly evident in younger ages, tending to disappear or to become positive in older ages, especially in nonparent families.

(4) Among individuals in families with incomes of \$1,500-\$1,999 the association between family size and the relative frequency in this income category is positive, except in families of 5-6 and 7 or more members. This positive association is most marked in nonparent families and least marked in husband-and-wife families. The regularity and intensity of the positive association increases progressively with age.

(5) Among individuals in families with an annual income of \$2,000-\$2,999 the association between family size and the relative frequency in this income category is positive and more marked than in the income group

\$1,500-\$1,999. The positive association is most evident in one-spouse families and least apparent in husband-and-wife families. It rarely holds true for families of 7 or more persons. The positive association increases in intensity with advancing age.

**Table 9.—Percentage distribution of urban single-family households and multi-family households, by income status**

Income group	Single-family households		Multi-family households	
	Percent	Cumulative percent	Percent	Cumulative percent
Total.....	100.0		100.0	
Relief.....	16.6	16.6	16.4	16.4
Nonrelief:				
Under \$1,000.....	29.1	45.7	25.5	41.9
\$1,000-\$1,499.....	23.3	69.0	20.1	62.0
\$1,500-\$1,999.....	15.9	84.9	15.8	77.8
\$2,000-\$2,999.....	10.4	95.3	12.7	90.5
\$3,000-\$4,999.....	3.5	98.8	6.1	96.6
\$5,000 and over.....	1.2	100.0	3.4	100.0

(6) In the income group \$3,000-\$4,999 the association between family size and the relative frequency in this category is positive with few exceptions; the exceptions occur generally in families of 7 or more members. The intensity of the association tends to increase with age.

(7) Among persons in families with incomes of \$5,000 and over the association between family size and the relative frequency in this income category is, on the whole, positive, with a few minor exceptions, and the magnitude of this relationship increases with age.

Both the general patterns described and the exceptions to these patterns indicate that the correlation between income and family size may be attributed to: (a) the differential marriage age and birth rate in the various socio-economic classes, which results in differential family sizes most pronounced in families headed by younger persons; (b) the greater cohesiveness of families with a more adequate income, caused by such factors as favorable mortality experience, later marriage of adult children, and less frequent disorganization because of economic need; and (c) the ratio of gainfully occupied persons to other family members.

### *Income in Single and Multi-Family Households*

In the National Health Survey the income reported for the household represented the total income of all members related to the head of the household. For some households application of the definition of "family" used in the study entails the division into two or more bio-legal families of related persons for whom only aggregate income is available. Therefore it is not possible to make a direct comparison between the incomes of bio-legal families in single-family households and those in multi-family households.

It is possible, however, to compare income in single-family households with that reported for all related persons in households which contain two or more bio-legal families. As will be seen from table 9, there are no great differences in the percentage distribution of income in households of these two types, though somewhat higher percentages of the single-family households are found in the lower-income categories.

When the size of the household is considered, however, it seems probable that per capita income for the two groups is very nearly the same. The 532,383 urban single-family households averaged 3.3 members, while for the 170,649 multi-family households there was an average of 4.0 family members. It is estimated that among nonrelief families per capita income is \$500 in multi-family households, as compared with the estimate of \$490 given previously in this article for persons in nonrelief single-family households.

### *Summary and Conclusions*

The present study has dealt with the analysis of income of single-family households according to family size, family type, age of family head, and the combinations of these factors.

Bio-legal families which constitute the entire household contribute 57 percent of all the bio-legal families and 70 percent of the individuals in the entire urban sample. However, the relative representation of families of different types and families with specified age of head differ in these bio-legal families from the proportions in the sample as a whole. The income of single-family households is not materially different from that of multi-family households, considering the larger average size of the latter.

Analysis of the income of single-family households shows that:

(1) A positive association between family size and income exists, but over certain ranges only.

(2) A marked negative association is found between family size and per capita income.

(3) Nonparent families have, in general, the most favorable income status and show the most marked positive association between income and family size.

(4) Families with only the female spouse have the least favorable income distribution, although among nonrelief families their relative position improves with increased size of family.

(5) Husband-and-wife families have an income distribution more favorable than that of one-spouse families headed by a male in families of two persons, but less favorable in larger families. In nonrelief husband-and-wife families the association between income and family size is negligible.

(6) When families of specified size are grouped according to the age of the head of the family, there is a progressive improvement in income as size of family and age of the head of the family are increased simultaneously.

(7) Classification of nonrelief families by family type and age of the family head reveals the following association pattern between family size and income: For husband-and-wife families the association is markedly negative for families headed by younger persons, but the magnitude of this negative correlation decreases progressively with increase in the age of the head until the association becomes increasingly positive for families headed by persons aged 60 and over. For one-spouse families the association is slightly negative in families headed by young persons and increasingly positive in those headed by persons aged 45 and over. In nonparent families the negative association is absent even in families headed by persons aged 16-24, and the intensity of the positive association between income and family size increases with advancing age of the head of the family.

(8) The relative frequency of individuals in a given income category, classified according to the age of the individuals and the size and type of families from which such individuals are derived, indicates patterns of association analogous to those observed in families classified by family type and age of head.

The patterns of association between family size and income may be accounted for in terms

of the differential marriage age and birth rate, the greater cohesiveness of families of higher economic status, and the relation between the number of gainfully occupied persons and others in the family. Following articles will analyze the income distribution of single-family households of specified size according to the relative numbers of gainful workers and of children under 16 years of age.