

Technical Studies

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Series P-23, No. 19
August 24, 1966CHARACTERISTICS OF FAMILIES RESIDING IN "POVERTY AREAS"
MARCH 1966

This report presents summary statistics on families in March 1966 residing in "Poverty Areas" within standard metropolitan statistical areas (SMSA's) with a 1960 population of 250,000 or more. The Poverty Area designation was developed by the Bureau of the Census as part of its work for the Office of Economic Opportunity to improve the measurement of statistics on poverty in the United States. It classifies households included in the Current Population Survey by their neighborhood characteristics, using 1960 Census data. This concept makes it possible, for the first time, to compare the characteristics of families residing in areas of major concentrations of poverty with those living in other portions of large metropolitan areas of the United States. It is not intended as a current measure of poverty status for individual SMSA's.

Nonwhite families are concentrated to a much larger extent in these Poverty Areas than are white families (table A). This relationship also holds true for each of the four regions (table B). In March 1966 more than one-half (57 percent) of all nonwhite families residing in SMSA's of 250,000 or more

lived in Poverty Areas, compared with only one-tenth of all white families. Moreover, nonwhite families comprised about 12 percent of all families in SMSA's of 250,000 or more but made up 42 percent of all families in Poverty Areas and only 6 percent of all families in Nonpoverty Areas. Other subgroups of the population proportionately over-represented in Poverty Areas are families headed by a woman, families containing a large number (five or more) of related children under 18 years old and families headed by an unemployed person or by semiskilled (operatives) and unskilled workers (laborers and service workers).

Plans are currently being developed to classify families and unrelated individuals above or below the poverty level (using the poverty income standard developed by the Social Security Administration) by residence in Poverty or Nonpoverty Areas and by other selected characteristics, on the basis of surveys conducted by the Bureau of the Census in February and March of 1966 for the Office of Economic Opportunity. Preliminary estimates indicate that close to two-thirds of

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For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, 15 cents.
Annual subscription (Series P-20, P-23, P-25, P-27, P-28 summaries, P-60, and P-65, combined), \$4.00; foreign mailing, \$5.25.



Table A.—SELECTED CHARACTERISTICS OF FAMILIES IN STANDARD METROPOLITAN STATISTICAL AREAS OF 250,000 OR MORE, BY POVERTY-NONPOVERTY AREA: MARCH 1966
(Numbers in thousands)

| Selected characteristics | Total | | In Nonpoverty Area | | In Poverty Area | | In Poverty Area as percent of total |
|--------------------------------------|--------|---------|--------------------|---------|-----------------|---------|-------------------------------------|
| | Number | Percent | Number | Percent | Number | Percent | |
| COLOR | | | | | | | |
| All families..... | 26,695 | 100.0 | 22,474 | 100.0 | 4,221 | 100.0 | 15.8 |
| White..... | 23,565 | 88.3 | 21,119 | 94.0 | 2,446 | 57.9 | 10.4 |
| Nonwhite..... | 3,130 | 11.7 | 1,355 | 6.0 | 1,775 | 42.1 | 56.7 |
| SEX OF HEAD | | | | | | | |
| All families..... | 26,695 | 100.0 | 22,474 | 100.0 | 4,221 | 100.0 | 15.8 |
| Male..... | 23,719 | 88.9 | 20,348 | 90.5 | 3,371 | 79.9 | 14.2 |
| Female..... | 2,976 | 11.1 | 2,126 | 9.5 | 850 | 20.1 | 28.6 |
| RELATED CHILDREN UNDER 18 | | | | | | | |
| All families..... | 26,695 | 100.0 | 22,474 | 100.0 | 4,221 | 100.0 | 15.8 |
| None under 18..... | 11,275 | 42.2 | 9,549 | 42.5 | 1,726 | 40.9 | 15.3 |
| 1 to 4 under 18..... | 14,057 | 52.7 | 11,920 | 53.0 | 2,137 | 50.6 | 15.2 |
| 5 or more under 18..... | 1,363 | 5.1 | 1,005 | 4.5 | 358 | 8.5 | 26.3 |
| LABOR FORCE STATUS OF HEAD | | | | | | | |
| All families..... | 26,695 | 100.0 | 22,474 | 100.0 | 4,221 | 100.0 | 15.8 |
| Employed..... | 21,569 | 80.8 | 18,531 | 82.4 | 3,038 | 72.0 | 14.1 |
| Unemployed..... | 579 | 2.2 | 419 | 1.9 | 160 | 3.8 | 27.6 |
| Not in civilian labor force..... | 4,547 | 17.0 | 3,524 | 15.7 | 1,023 | 24.2 | 22.5 |
| OCCUPATION GROUP OF EMPLOYED HEAD | | | | | | | |
| All families with employed head..... | 21,569 | 100.0 | 18,531 | 100.0 | 3,038 | 100.0 | 14.1 |
| Operatives..... | 4,346 | 20.2 | 3,381 | 18.2 | 965 | 31.8 | 22.2 |
| Laborers and service workers..... | 2,750 | 12.7 | 1,905 | 10.3 | 845 | 27.8 | 30.7 |
| All other occupation groups..... | 14,473 | 67.1 | 13,245 | 71.5 | 1,228 | 40.4 | 8.5 |

all nonwhite families below the poverty level in 1965 lived in Poverty Areas, as compared with only one-fifth of all white families below the poverty level.

Table B.—PERCENT DISTRIBUTION OF FAMILIES IN STANDARD METROPOLITAN STATISTICAL AREAS OF 250,000 OR MORE, BY POVERTY-NONPOVERTY AREA, COLOR, AND REGION: MARCH 1966

| Region and color | Total | In Non-poverty Area | In Poverty Area | In Poverty Area as percent of total |
|--------------------------|-------|---------------------|-----------------|-------------------------------------|
| Total..... | 100.0 | 100.0 | 100.0 | 15.8 |
| Northeast, total..... | 31.9 | 32.5 | 28.3 | 14.1 |
| White..... | 29.2 | 31.1 | 18.6 | 10.1 |
| Nonwhite..... | 2.7 | 1.4 | 9.7 | 56.3 |
| North Central, total.... | 26.1 | 27.5 | 18.9 | 11.4 |
| White..... | 23.0 | 25.9 | 7.8 | 5.3 |
| Nonwhite..... | 3.1 | 1.6 | 11.1 | 57.1 |
| South, total..... | 21.0 | 17.5 | 39.9 | 30.0 |
| White..... | 17.1 | 16.0 | 23.3 | 21.5 |
| Nonwhite..... | 3.9 | 1.5 | 16.6 | 67.7 |
| West, total..... | 21.0 | 22.5 | 12.9 | 9.7 |
| White..... | 19.0 | 21.0 | 8.3 | 6.9 |
| Nonwhite..... | 2.0 | 1.5 | 4.6 | 35.8 |

Since the figures presented in this report are based on sample data, they are subject to sampling variability and may differ from the results that would have been obtained from a complete census using the same schedules, instructions, and enumerators. The sampling variability may be relatively large where the size of the percentage or the size of the total on which the percentage is based is small. The results are also subject to errors of response and nonreporting.

Generally, the subjects covered here are defined in Current Population Reports, Series P-60, No. 48, with one exception, the Poverty Area concept itself. A description of the methodology used in developing Poverty Areas within SMSA's of 250,000 or more follows.

PROCEDURES USED FOR DETERMINING POVERTY AREAS

Definition of Poverty Area

A. Composition of the poverty index.-- Poverty Areas were determined by first ranking

census tracts¹ in SMSA's of 250,000 or more according to the relative presence (as reported in the 1960 Census) of each of five equally weighted poverty-linked characteristics, and then combining these rankings into an overall measure termed a "poverty index." The five socioeconomic characteristics used to construct this poverty index were:

1. Percent of families with money incomes under \$3,000 in 1959.
2. Percent of children under 18 years old not living with both parents.
3. Percent of males 25 years old and over with less than 8 years of school completed.
4. Percent of unskilled males (laborers and service workers) in the employed civilian labor force.
5. Percent of housing units dilapidated or lacking some or all plumbing facilities.

B. Preliminary definition of Poverty Area.--After each tract had been ranked by the poverty index, those falling in the "lowest"² quartile were designated as "poor" tracts.

In an attempt to approximate neighborhood concentrations of poverty, the following Poverty Area definition was developed:

1. Any area having five or more contiguous poor tracts regardless of the number of families contained within.
2. Any area of one to four contiguous poor tracts, containing an aggregate of 4,000 or more families.
3. Any area of one or two contiguous tracts not ranked in the lowest quartile that was completely surrounded by poor tracts. In some cases, areas of three or four contiguous tracts, not themselves poor but surrounded by poor tracts, were included in the neighborhood after analysis of their characteristics. Areas of five or more contiguous tracts not ranked in the lowest quartile but surrounded by poor tracts were not designated as poor tracts.

C. Updating for urban renewal.--Because poverty designations were based on 1960 Census data, it was considered desirable to update these designations on the basis of information on subsequent

¹ Census tracts are small areas into which large cities and adjacent areas have been divided for statistical purposes. The average tract has about 4,000 residents and was originally laid out with attention to achieving some uniformity of population characteristics, economic status, and living conditions.

² For the purpose of this report, tracts in the "lowest" quartile are those with the highest percentages of each characteristic and thus with the highest incidence of "poverty."

urban renewal activities received from local renewal agencies. Any tract where 50 percent or more of the 1960 population was displaced as a result of clearance, rehabilitation, or code enforcement was then further examined on the basis of location as follows:

1. Any previously poor tract completely surrounded by poor tracts was retained as part of the Poverty Area.
2. Any previously poor tract not completely surrounded by poor tracts was excluded from the final Poverty Area designation.
3. A "nonpoor" tract originally surrounded by poor tracts which no longer remained surrounded was also deleted from the final Poverty Area designation.

Methodology for deriving Poverty Areas.--In the process of developing the Poverty Area concept, several statistical and analytical measures were used. Some of the research done in testing various hypotheses is described below:

A. Determination of five-factor poverty index.--In establishing a measure of poverty, a comparison was made of tracts ranked by income alone and those ranked by a combination of income and four other characteristics in order to determine which would provide a more descriptive and appropriate poverty index. To do this, tracts were ranked separately by relative presence of families with incomes below \$3,000 and by a combination of the five socioeconomic characteristics listed above.

In four SMSA's of 250,000 or more in New York State, further analysis was made of those tracts which fell in the lowest quartile in only one of the two methods of ranking. A sample of 80 such tracts was chosen, 40 of which appeared only in the ranking using family income alone and 40 of which appeared only in the five-factor ranking. These represented eight counties in the New York SMSA, including all of New York City, plus the SMSA's of Rochester, Syracuse, and Utica-Rome. An analysis of selected socioeconomic characteristics for these tracts indicated that:

1. Persons in tracts ranked by the sum of five poverty-linked factors had lower educational attainment than those in tracts ranked by family income.
2. The population in tracts ranked by the sum of five poverty-linked factors was younger on the average than that in tracts ranked by family income.
3. The tracts ranked by the sum of five poverty-linked factors contained proportionately less housing in sound condition than those ranked by family income.

A similar analysis of tracts that were not common to both rankings for Alabama, Florida, and the District of Columbia led to the conclusion that the combination of five poverty-associated characteristics in all cases represented a better index of neighborhood poverty than the criterion of family income alone.

B. Selection of socioeconomic characteristics most closely related to poverty.--In an effort to establish an index of poverty, the factors listed below were analyzed and then correlated with each other using Spearman's rank correlation and the coefficient of concordance. Data for counties in the State of Missouri and for all urban places of 50,000 or more in the United States were used for this correlation analysis. Among the factors analyzed were.

1. Percent of unemployed persons in the civilian labor force.
2. Percent of persons 14 to 17 years old not enrolled in school.
3. Percent of unskilled males (laborers and service workers) in the employed civilian labor force.
4. Percent of all persons receiving old age assistance and aid to families with dependent children.³
5. Percent of eligible registered males rejected from military service.⁴
6. Percent of males 25 years old and over with less than eight years of school completed.
7. Percent of children under 18 years old not living with both parents.
8. Percent of housing units dilapidated.
9. Percent of housing units with 1.01 or more persons per room.
10. Percent of housing units dilapidated or lacking some or all plumbing facilities.

Factors numbered 3, 6, 7, and 10 were found to have the highest positive correlation with low family income (under \$3,000) and among themselves. These four factors were combined with a fifth, percent of families with money incomes below \$3,000, to compose the poverty index.

C. Selection of the appropriate geographic area ranking.--Three different methods of ranking tracts--within the United States as a whole, within

³ Based on data published in Public Assistance in Counties of the United States, 1960, Welfare Administration, U.S. Department of Health, Education, and Welfare, and in U.S. Census of Population: 1960, Vol. I, Characteristics of the Population, Part 27, chapter B, table 27.

⁴ Based on unpublished records from Selective Service System.

each of the four geographic regions, and within each individual State--were considered, and the advantages and disadvantages of each were investigated. The use of State rankings would automatically result in one-fourth of the tracts in each State falling in the lowest quartile. In other words, a high-income State would have proportionately as many tracts selected as a low-income State. Similarly, a high-income region would have proportionately as many tracts selected as a low-income region if this type of ranking were used. On the other hand, State and regional rankings have the advantage of making allowances for differences in cost of living and levels of income that may exist in these areas.

In order to analyze the differences that would arise by the use of alternative procedures, tracts were ranked for each of the three types of areas. Census tracts in the lowest quartile of each of these rankings were then plotted on census tract maps for SMSA's of 250,000 or more in Alabama, New York, and the District of Columbia.

It was found that in most cases the same tracts were identified as poor regardless of the ranking used. These tracts tended to be highly concentrated in what appeared to be Poverty Areas. There were, however, certain tracts that were classified as poor in the State or region but not in the United States ranking and vice versa. An examination of the uncommon tracts revealed that those contained on the State and regional rankings were far more scattered than those based on the United States ranking, which was found to contain more tracts contiguous to large Poverty Areas. On this basis it was decided that the United States ranking provided a better basis for identifying Poverty Areas.

D. Delineation of Poverty Areas on maps.--Using the census tract maps for Alabama, New York, and the District of Columbia on which all poor tracts in the United States ranking were plotted, the total number of families living in areas with fewer than 10 contiguous tracts was obtained. In addition, tracts not contained in the lowest quartile of poor tracts but bounded on three or more sides by poor tracts were examined. The socioeconomic characteristics of these tracts were inspected for differences from those of the neighboring poor tracts. A separate review was also made of nonpoor tracts completely surrounded by poor tracts.

Following this review, the preliminary Poverty Area definition previously described was developed.

This Poverty Area concept was then applied to all 101 SMSA's of 250,000 or more. The tracts within the lowest quartile of the ranking based on

the poverty index, were plotted on SMSA maps. Additional tracts were included and some poor tracts excluded by applying the principles stated above relating to the poverty status and contiguity of surrounding tracts. The boundaries of Poverty Areas before consideration of urban renewal activities were outlined on each of the maps. As a result, 193 poverty neighborhoods were delineated in 100 SMSA's.

E. Changes resulting from urban renewal activities.--Because the Poverty Area designations were based on 1960 Census data, all areas were updated to allow for subsequent urban renewal activities. To accomplish this, local renewal agencies in each jurisdiction were sent maps which included the preliminary Poverty Area boundaries. These agencies were asked to prepare a list (with a cutoff date of February 1, 1966) of city blocks or other distinct land areas from which the families and unrelated individuals resident in April 1960 would have been all or substantially displaced as a result of clearance, rehabilitation, or code

enforcement and to indicate for each block on the list what type of construction had taken place or would take place by the cutoff date.

Replies from these local renewal agencies were then compared with data in 1960 Census of Housing, Vol. III, City Blocks, for each designated area. Each tract from which 50 percent or more of the 1960 Census population had been displaced was then further examined as to its location and classified according to the basic inclusion and exclusion principles described on page 3.

The total number of poverty neighborhoods remained constant at 193, although the boundaries of several of the neighborhoods changed. A report containing sections of census tract maps showing these poverty neighborhoods is in the process of being prepared for publication by the Office of Economic Opportunity.

F. Impact of procedures modifying tract selections.--The following table summarizes the impact of the location and urban renewal adjustments described under D and E on pages 4 and 5.

Table C.--EFFECT OF LOCATION AND URBAN RENEWAL ON COMPOSITION OF THE LOWEST QUARTILE OF TRACTS RANKED BY FIVE POVERTY FACTORS
(Minus sign (-) denotes decrease)

| Subject | Number | Percent |
|--|--------------|-------------|
| Total tracts in SMSA's of 250,000 or more..... | 20,915 | (X) |
| Total tracts in lowest quartile..... | 5,226 | 100.0 |
| Tracts deleted from listing because of location..... | -649 | -12.4 |
| Tracts added to listing because of location..... | +128 | +2.4 |
| Tracts remaining after deletions and additions because of location.. | <u>4,705</u> | <u>90.0</u> |
| Tracts deleted from listing because of urban renewal..... | -45 | -0.9 |
| Tracts in final Poverty Area designations..... | <u>4,660</u> | <u>89.1</u> |

X Not applicable.