



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

The Composition of Net Migration Among Counties in the United States, 1950-60¹

By Gladys K. Bowles and James D. Tarver

IN 1962, the Bureau of the Census published 1950 to 1960 intercensal estimates of the total net migration for all counties (4).² A cooperative project of the Economic Research Service and Oklahoma State University, supported in part by the Area Redevelopment Administration of the Department of Commerce, extends the migration estimates in the Census report to estimates by age-sex-color groups for counties, and analytical groupings of counties, and provides the basis for this paper. The authors wish to acknowledge the advice and assistance of persons at the Bureau of the Census, the National Vital Statistics Division, the University of Pennsylvania, and others at various stages in the development of the net migration estimates.

This paper presents some highlights of net migration patterns for regions and counties grouped in classes based on (a) percentage of the population urban in 1950, (b) level of median family income in 1959, and (c) Area Redevelopment Act eligibility criteria (8).

Note on interpretation of the net migration estimates.--The estimates represent the balance between the numbers of persons migrating into and out of a specified area. They show the net gain or loss of population due to internal migration, and reflect also the balance of movement of civilian and military population between the United States proper and other areas, including Puerto Rico, outlying areas of U.S. sovereignty or jurisdiction, and foreign countries. The Bureau of the Census estimates that in the decade net immigration into the United States was about 2.7 million persons (5). Thus, the national difference between the sum of estimates for all counties with net immigration and the sum of the estimates for all counties

with net outmigration is approximately this magnitude. During the 1950-60 decade, outmigration counties (or county equivalents³) had a net loss of 11.3 million persons, while immigration counties had a net gain of 13.9 million persons through migration. A county's net migration estimate is not equivalent to its total population change. The total change reflects the difference between births and deaths as well as migration during the decade.

The standard census-survival ratios residual method was utilized in developing the estimates for counties (using U.S. census-survival ratios for native whites and native nonwhites (6, 7) developed by the Bureau of the Census) with the following two major exceptions: (1) Estimates of net migration for children born during the decade were developed, and (2) survival ratios estimates of net migration for age-sex-color groups for each county were adjusted to Bureau of the Census vital statistics method estimates at the county level (4), and to vital statistics method estimates by color for States (5).

Estimates for other areas, such as States and regions, were developed by summation of appropriate county net migration estimates. Rates of net migration for age-sex-color groups, and for the totals of areas, are estimates expressed as a percentage of the 1960 survivors of the 1950 population and births during the 1950-60 decade.

Regional patterns (figs. 1 and 2).--The South and the North Central Regions had overall population losses and the Northeast and the West had overall population gains as a result of migration during 1950-60. These changes

¹ Revision of a paper presented at meeting of the Population Association of America, June 11-13, 1964, San Francisco, Calif.

² Underlined figures in parentheses refer to references cited on page 19.

³ The 130 counties and independent cities of Virginia existing in 1960 were combined into 96 subdivisions of the State to obtain comparable geographic areas throughout 1950-60; the entire State of Hawaii was treated as one area due to the absence of 1950 age-sex-color county data; and the 24 Election Districts of Alaska in 1960 were combined into three areas, corresponding to the State Economic Areas of Bogue and Beale (1).

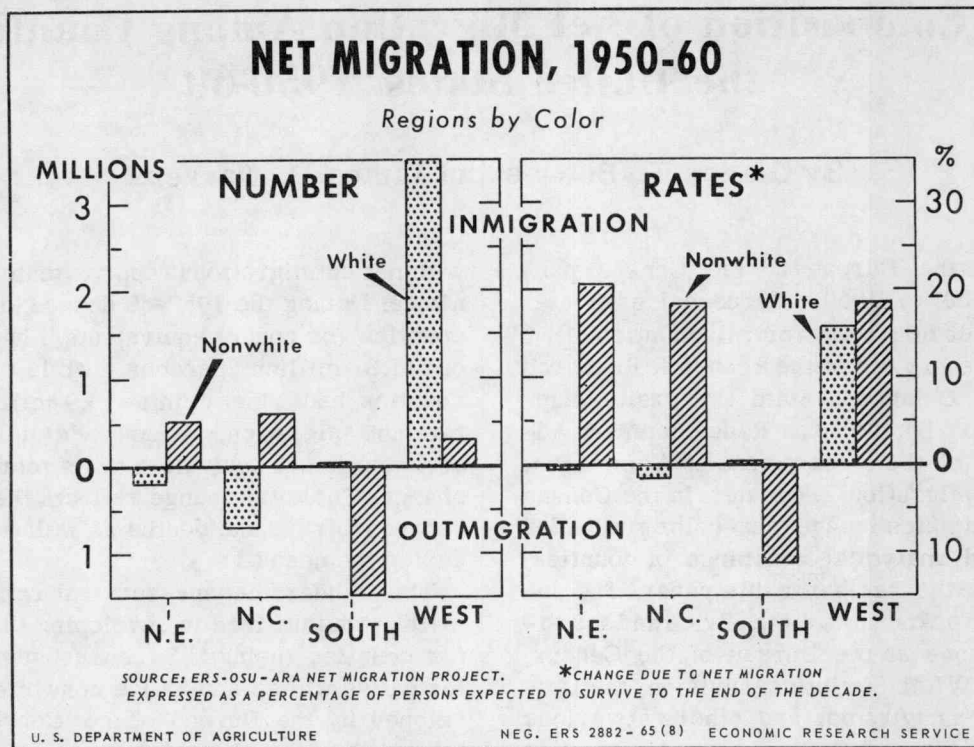


Figure 1

include different patterns of movement of whites and nonwhites among the regions (fig. 1).

The two northern regions had losses of whites and gains of nonwhites; the South had a nominal gain of whites and large loss of nonwhites; and the West gained in both color groups. The out-movement of nonwhites from the South is perhaps one of the most discussed population shifts of the decade. The South had a net loss of over 1.4 million nonwhites. The overall gain among the white population of the South was due to the in-movement of middle-aged and older adults which more than offset the out-movement of younger white people. With the exception of the Southern region, the patterns of migration of males and females (both white and nonwhite) were relatively similar. In the South, however, there was a net out-movement of white males but a net in-movement of white females.

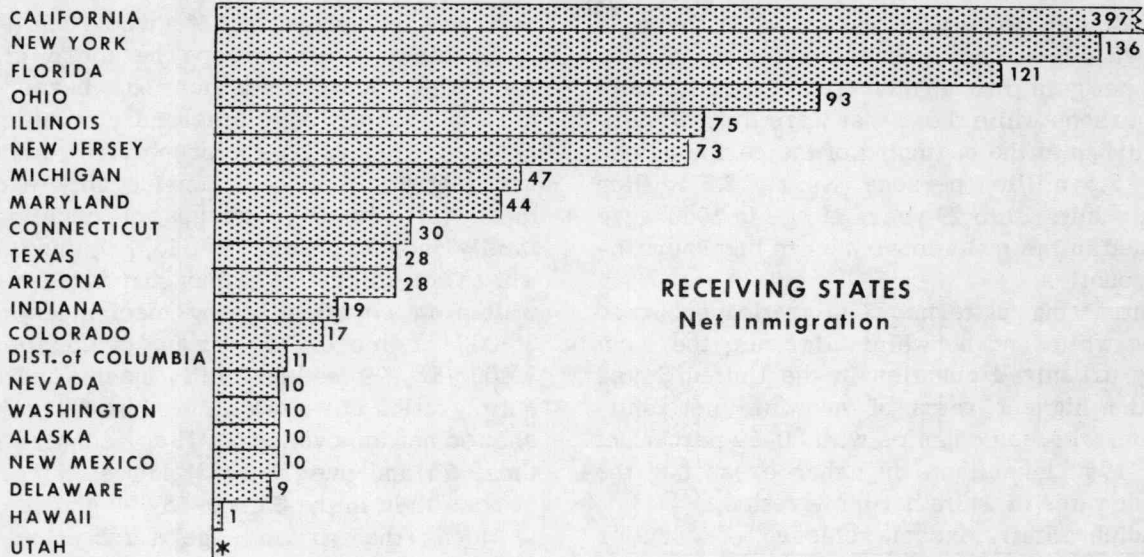
Patterns of migration, by age, vary considerably among the various regions and States. Rather than attempt to discuss these in detail, we have selected the age-cohort 25-29 in 1960 for illustration. The tremendous gains through migration of people in this age group in certain States and the offsetting losses among other States are readily observed in figure 2. (The top

half of the figure shows the receiving States and the bottom half the sending or losing States.) California was by far the largest receiving State of persons in this age-cohort, with a gain of nearly 400,000. New York and Florida each gained over 120,000 while Ohio, Illinois, and New Jersey had gains through migration of between 73,000 and 93,000. Heaviest losers were the Southern States of Mississippi, Kentucky, North Carolina, Arkansas, Alabama, and West Virginia, and Pennsylvania from among the Northeastern States, each of which lost 65,000 or more in the decade.

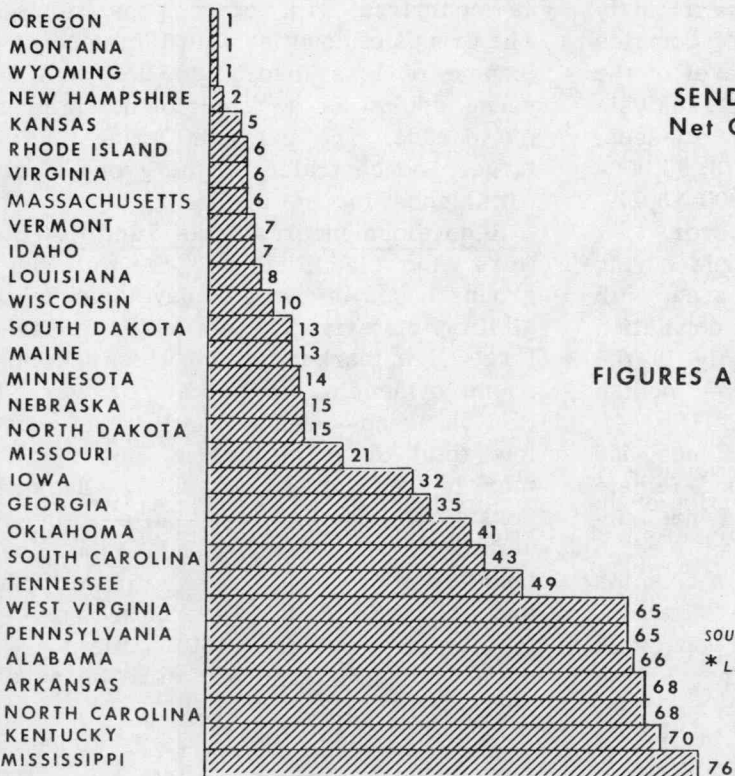
Rural-urban classification of counties (fig. 3).--The major shifts of population from rural areas to the highly urbanized areas has been the subject of much discussion since the 1960 Census data became available. The ERS-Oklahoma project sheds some additional light on the gains and losses due to migration among rural and urban counties. For this analysis counties were grouped into five classes based on the percentage of the total population residing in urban areas in 1950: (1) No urban, (2) 1-29 percent urban, (3) 30-49 percent urban, (4) 50-69 percent urban, and (5) 70 percent and over urban.

NET MIGRATION, 1950-60

Persons 25-29 Years of Age in 1960, by States



RECEIVING STATES
Net Immigration



SENDING STATES
Net Outmigration

FIGURES ARE IN THOUSANDS

SOURCE: ERS-OSU-ARA NET MIGRATION PROJECT.
* LESS THAN 1,000.

Figure 2

All three groups of counties with fewer than 50 percent of their 1950 inhabitants living in urban places had population losses through migration in nearly every sex and age group, with the rate of net migration losses generally increasing as rurality increased (fig. 3). Counties with 50-69 percent urban population in 1950 had a net gain through migration of over 1.8 million persons while those that were over 70 percent urban at the beginning of the period gained about 5.5 million persons. Nearly 2.5 million young adults 20 to 29 years of age in 1960 were included in the mass movement to highly urbanized counties.

Contrasting patterns of migration occurred among white and nonwhite migrants; the most highly urbanized counties in the United States had the highest rates of nonwhite net immigration, whereas counties with 50-69 percent of their 1950 inhabitants in urban areas had the highest rates of white net immigration.

Median family income classes of counties (fig. 4).--The relationship between the economic level of counties and net migration is strikingly illustrated by the gains or losses of counties grouped according to the county level of the median family income in 1959. For this analysis counties were grouped into seven classes: (1) Under \$2,000, (2) \$2,000-\$2,999, (3) \$3,000-\$3,999, (4) \$4,000-\$4,999, (5) \$5,000-\$5,999, (6) \$6,000-\$7,499, and (7) \$7,500 and over.

Nationwide, the movement of people during 1950 to 1960 was predominantly to areas with high income; gains in the total population through net migration occurred only in the groups of counties which had 1959 median family incomes of \$6,000 and over (fig. 4). All county groups with lower incomes had migration losses in both male and female total populations, with the rates of net outmigration increasing consistently as median family income declined. The group of counties with lowest median family income sustained a net loss of over 28 percent of the population expected to survive to 1960 while the next lowest had a net loss of about 22 percent. In contrast, the group of counties with median income of between \$5,000-\$5,999 had just a small loss, less than 1 percent. Counties with \$6,000-\$7,499 median income gained the equivalent of 11 percent of the population expected to survive to 1960. With some exceptions, most age groups

conformed to the general patterns of movement in or out of the income classes of counties.

The association between net migration and level of county income was found for both color groups, but there were some major color contrasts in the degree of association (the relationships would perhaps be more clearcut were the county classifications based on the median income of whites and nonwhites separately). Generally, the proportionate nonwhite net migration losses considerably exceeded those for whites in groups of counties with family income of less than \$5,000, and the nonwhite net migration gains surpassed those of whites in counties having median incomes of \$6,000 or more. The group of counties with \$5,000-\$5,999 median family income had overall outmigration of whites although some age groups showed net inmovement. All age cohorts (except those 75 and over in 1960) showed inmovement of nonwhites in the \$5,000-\$5,999 group.

Among the striking age differentials which may be mentioned are the rates for young adults as compared with other population groups. The groups of counties with 1959 median family income of less than \$3,000 lost half of their young adults as a result of net migration in the decade. The gains in young adults were largely concentrated in the group of counties with highest income levels.

Redevelopment areas (figs. 5 and 6).--Counties were also classified into the following three groups based on Area Redevelopment Act eligibility criteria: (1) Section 5a areas--those large labor market areas in which nontemporary unemployment was 6 percent or over, (2) Section 5b areas--predominantly rural counties of low total or farm income, and small labor market areas characterized by substantial and persistent unemployment and certain counties with Indian reservations, and (3) the noneligible counties, which have better economic conditions and are ineligible for Federal assistance under the Act. Approximately 150 counties were designated 5a and around 850 were 5b as of February 1, 1963 (8).

In the decade, there was a pronounced net movement to the noneligible areas from the designated redevelopment areas, with numerical and proportionate losses being higher in the 5b than in the 5a areas (fig. 5). The loss exceeded 2.6 million persons from the 5b counties and

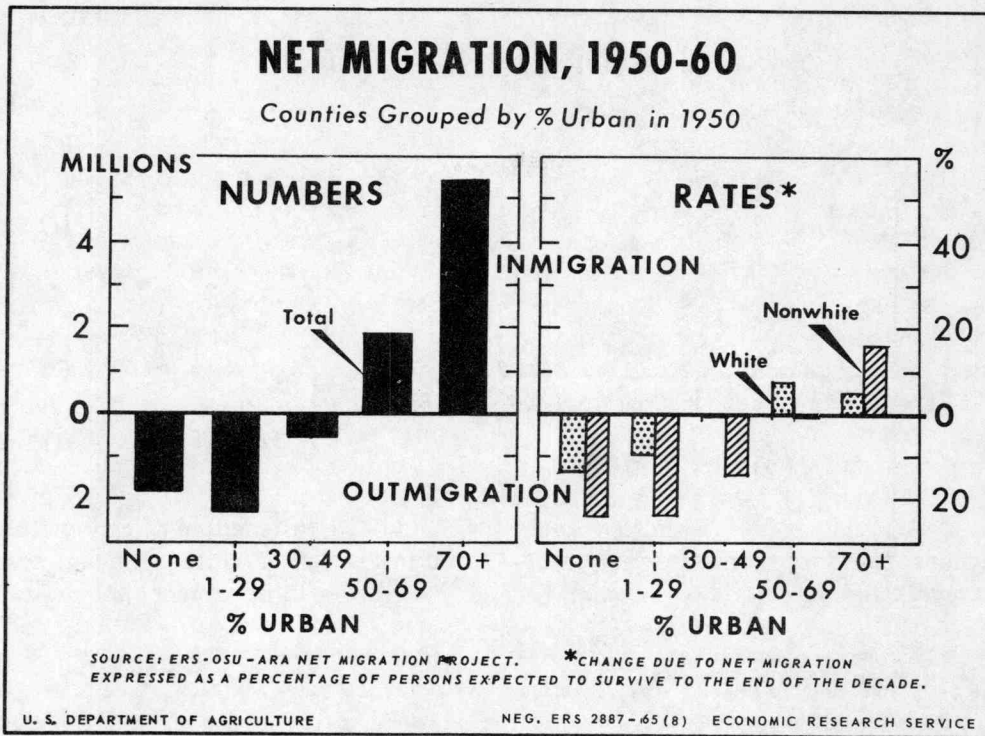


Figure 3

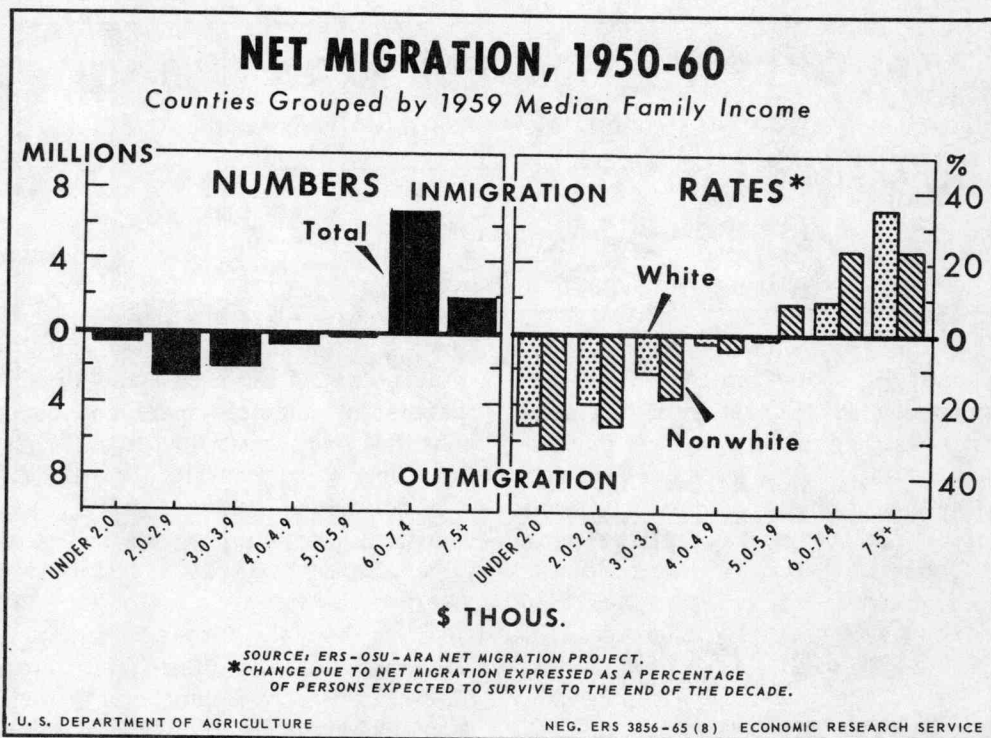
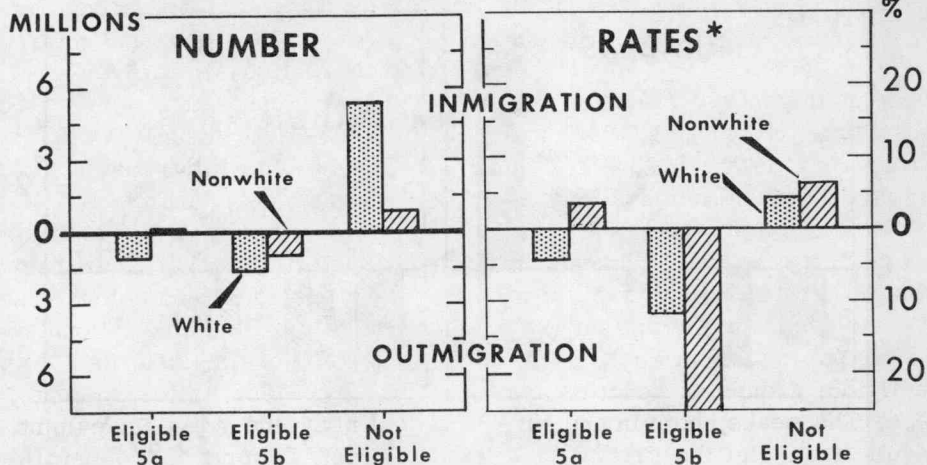


Figure 4

NET MIGRATION, 1950-60

Counties Grouped by ARA Eligibility Criteria ^Δ



SOURCE: ERS-OSU-ARA NET MIGRATION PROJECT. ^Δ AREA REDEVELOPMENT ACT, SECTIONS 5a AND 5b DESIGNATIONS AS OF FEB. 1963. * CHANGE DUE TO NET MIGRATION EXPRESSED AS A PERCENTAGE OF PERSONS EXPECTED TO SURVIVE TO THE END OF THE DECADE.

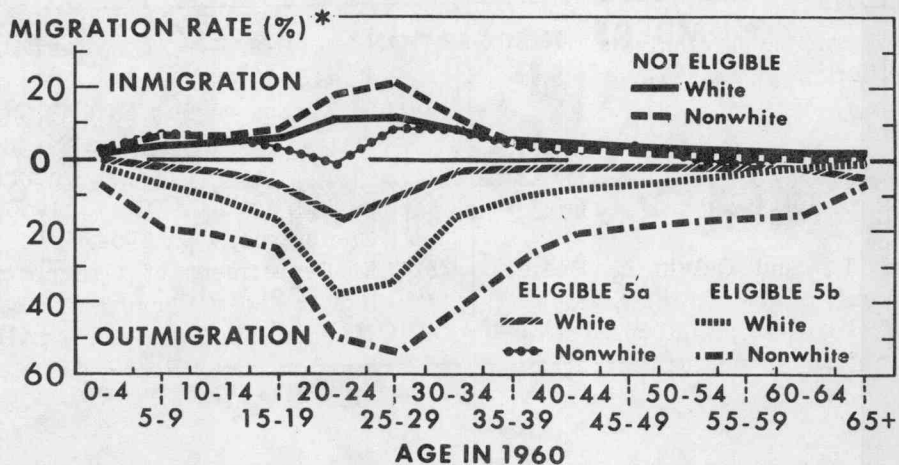
U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2883-65 (8) ECONOMIC RESEARCH SERVICE

Figure 5

AGE-COLOR NET MIGRATION RATES, 1950-60

Counties Grouped by ARA Eligibility Criteria ^Δ



SOURCE: ERS-OSU-ARA NET MIGRATION PROJECT. ^Δ AREA REDEVELOPMENT ACT, SECTIONS 5a AND 5b DESIGNATIONS AS OF FEBRUARY 1963. * CHANGE DUE TO NET MIGRATION EXPRESSED AS A PERCENTAGE OF PERSONS EXPECTED TO SURVIVE TO THE END OF THE DECADE.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 3859-65 (8) ECONOMIC RESEARCH SERVICE

Figure 6

1.1 million from the 5a counties. These losses represent 15 percent and 4 percent, respectively, of the populations expected to survive to 1960 in these groups of counties. The loss to the redevelopment areas combined represents about one-twelfth of the 1950-60 potential human resources of these areas.

A small rate of outmigration was shown for whites from the 5a group of counties, which are more highly urban and northern than the 5b counties, and a small rate of immigration was shown for nonwhites. In contrast rates of outmigration for nonwhites exceeded those of whites from the 5b group, which are more likely to be rural and southern. The age patterns of migration of whites and nonwhites in the 5a, 5b, and noneligible groups of counties are shown in figure 6. The peaks, both in and out, at the young adult ages and the gradual decline in the middle and older ages, which are customarily observed in migration rate figures, are readily observed in these data.

Concluding remarks.--These are just a few of the highlights of the data produced in the ERS-OSU-ARA net migration project. Detailed age-sex-color estimates for counties, States, Economic Areas, and Metropolitan Areas appear in Population-Migration Report, Volume I (ERS, USDA, OSU, ARA, cooperating) (2). Data for analytical groupings of counties appear in Volume II of this series (3). A third volume is planned which will include an analysis of the net migration statistics and a full methodological statement.

Literature Cited

- (1) Bogue, Donald J., and Calvin L. Beale. Economic areas of the United States: A comprehensive statistical and descriptive analysis of socio-economic characteristics. The Free Press of Glencoe, Inc., New York, 1348 pp., 1961.
- (2) Bowles, Gladys K., and James D. Tarver. Net migration of the population, 1950-60, by age, sex, and color: States, counties, economic areas, and metropolitan areas. Population-Migration Rpt., Vol. I, Parts 1-6. Econ. Res. Serv., U.S. Dept. Agr., 1965. (Res. Found., Okla. State Univ., and Area Redevelpmt. Admin., U.S. Dept. Commerce, cooperating.)
- (3) Bowles, Gladys K., and James D. Tarver. Net migration of the population, 1950-60, by age, sex, and color: Analytical groupings of counties. Population-Migration Rpt., Vol. II. Econ. Res. Serv., U.S. Dept. Agr., 1965. (Res. Found., Okla. State Univ., and Area Redevelpmt. Admin., U.S. Dept. Commerce, cooperating.)
- (4) U.S. Bureau of the Census. Components of population change, 1950 to 1960, for counties, standard metropolitan statistical areas, State economic areas, and economic subregions. U.S. Dept. Commerce, Series P-23, No. 7, 89 pp., 1962.
- (5) U.S. Bureau of the Census. Estimates of the components of population change by color, for States: 1950 to 1960. U.S. Dept. Commerce, Series P-25, No. 247, 7pp., 1962.
- (6) U.S. Bureau of the Census. National census survival rates, by color and sex, for 1950 to 1960. U.S. Dept. Commerce, Series P-23, No. 15, 11 pp., 1965.
- (7) U.S. Bureau of the Census. Censal survival ratios for the native population of the United States, by sex and color, for the period from 1950 to 1960. U.S. Dept. Commerce, 1 p., 1964.
- (8) U.S. Department of Commerce. Summary list of redevelopment areas, February 1, 1963. Area Redevelpmt. Admin., Area Designation Status Rpt. 7, 62 pp., 1963.