USE OF SOCIAL SECURITY'S CONTINUOUS WORK HISTORY SAMPLE FOR MEASUREMENT OF NET MIGRATION BY GEOGRAPHIC AREA*

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This paper considers the potential of a newly developed resource, the Social Security Administration's Continuous Work History Sample, for use in derivation of estimates of net resident migration for geographic areas such as regions, States, and Standard Metropolitan Statistical Areas. The nature of the Work History File, its coverage, its limitations and the procedural problems associated with its use for measurement of resident migration are discussed. Estimates of net migration derived from the Work History File for regions, States, and SMSA's by race for 1960-65 are compared with closely corresponding estimates from other sources, such as the 1960 Census, postcensal surveys, and independent population estimates prepared at the Bureau of the Census.

Nature and coverage of the Work History File.--In any study involving a secondary use of administrative statistics one needs to consider most carefully applicability of the data to the problem at hand and the amount of manipulation necessary to make the data "fit the need." In the present case, a File containing incomplete employment data is examined for its applicability to the problem of measuring resident migration. As limiting as such a File may appear initially, it nevertheless constitutes an important source of information now regularly available to students of population movements.

The Continuous Work History Sample (CWHS) is a one-percent sample of all persons who have a Social Security account number and have worked in covered employment. The characteristics of persons in the Sample--age, sex, and race--come from the individual's application for a Social Security account number (Form SS-5). Information on earnings and employment is obtained from the quarterly earnings reports (annually in the case of farm workers) filed by each employer for his employees in covered employment (Forms IRS-941, IRS-942, IRS-943, and OAR-53). A separate sample file is maintained for selfemployed persons. (The present study excludes the latter.)

The sample is selected on the basis of specified digits in the last four places of the nine-digit Social Security account number. Once an account number falls in the sample, it will reappear each year that the person works in covered employment. It is thus possible to make year-to-year comparisons for the same individual and to keep track of changes in his place of employment, coded by address of employer to State and SMSA.

In 1966 the workers in OASDHI programs comprised 88 percent of total civilian employment. The great majority of workers presently excluded from coverage fall into three categories: Federal civilian employees and some State and local government employees; household workers and farm workers who do not work long enough or earn enough to meet minimum requirements; and very low income self-employed persons.

Use of the File on the national level .- - An overall summary of how well the Work History File reflects interstate migration of employed persons is provided in Table 1. In it, national summaries of the annual number of the Work History File's interstate migrants (reflecting change of place of employment and not necessarily change of residence) are compared with interstate migrants obtained from the Census Bureau's Current Population Survey (reflecting change of residence). 1/ Table 1 will be used to illustrate the basic problems of working with the File on the national level, although the description of the limitations and meaning of File data applies to all geographic levels and will be amplified when areas below the national level are discussed.

Length of migration period.--As Table 1 indicates, data from the Work History File were available both on a "calendar-year" and "first quarter-year" basis. The "calendar-year" tabulations include everybody who worked at any time during the year in covered employment. Geographic areas are assigned on the basis of the employer with whom the employee had maximum quarterly earnings. The "first quarter-year" figures cover only wage earners who worked in

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the first calendar quarter. (The self-employed are excluded in both instances. For the purpose of measuring migration, comparison should be made at identical points of the year in order to obtain change over a 12-month period. From this standpoint, first-quarter data are more appropriate than calendar-year statistics. Full calendar-year data for 1961 and 1962 are nonetheless used in this study in obtaining migration rates for the 1960-65 period, as firstquarter data for those years had not been reconstructed at the time of this writing. The inclusion in Table 1 of calendar-year statistics for 1961-64 and first-quarter statistics for 1963-65 serve to demonstrate the extent of the differences between the two time series. It is apparent, for example, that calendar-year data provide a substantially broader base to work from, since the total number of workers based on calendar-year data is 15-20 percent greater than the number derived from first-quarter data. The advantage which might be gained by using the larger number of sample cases is cancelled out, however, by greater uncertainty regarding the length of the migration period. Because of the overlap of the two series in 1963 and 1964. it is also possible to demonstrate rate differences which result from the use of different bases.

<u>Area of coverage</u>.--The first two blocks of information in Table 1 refer to "total file" and "50-State area only." The total file includes persons in covered employment in the 50-State area, abroad (including Puerto Rico and other outlying areas), and the military. The 50-State area excludes the military (which is treated in the file as a separate "State") and all persons working in covered employment outside territorial United States. Since the 50-State universe encompasses movement between States but excludes movement between the States and the military, we are able to isolate and focus on civilian interstate migration within the United States.

The third block of information contained in Table 1 refers to CPS-employed interstate migrants 18 to 64 years of age. The Social Security data include the entire working population, but for the purposes of this study, the File's population was considered to be synonymous with the age group 18 to 64. The ratios used to compare CPS employed interstate migrants with File migrants are therefore consistent as to area of movement and employment status, but not entirely consistent as to nature of the migration (change in place of employment versus place of residence) or age of migrants.

<u>The migration base</u>.-Of major substantive interest for this study is the observation that about 85 percent of persons in covered employment in a given year had also been working in the preceding year. These are the "matched cases" whose migration experience forms the core of this analysis. An 85 percent "match rate" is highly encouraging in itself; the absolute number of matched cases available from year to year produces a very substantial base for the computation of migration rates. 2/

Interstate migration and contiguity.--It is noteworthy that the Work History File generates a much larger number of interstate migrants than is found in the Current Population Surveys. (The overstatement is substantially greater when calendar-year data are used.) The excess is apparent in the Social Security data even though moves caused by interchange between the military and civilian employment have been excluded from the CWHS but not entirely from CPS. It is clear that the problem is caused primarily by changes in State of employment which are not accompanied by a change in residence. When the number of interstate movers from the two sources are compared separately for contiguous or noncontiguous States, the figures become more understandable.

If we examine moves between noncontiguous States, the number of migrants from the File does not differ greatly from the number obtained from the Current Population Survey, their ratios varying from 1.03 in 1962-63 to 1.25 in 1964-65 (first-quarter data). In the case of moves between contiguous States, the File generates from 35 percent to 55 percent more migrants than indicated by the Survey data. These data confirm what is evident, that many changes of employment between contiguous States do not involve any change in residence.

"Job migrants" versus resident migrants.--The problem of excess migrants being generated by the File is only one of several which arise when movements between contiguous States are examined. Indeed, excess migration would not be a matter for concern if the movement were proportionate to population and the balancing out resulted in a "true" net figure. This is not the case, since some States are in a more favorable position to gain "job migrants" as against resident migrants. Several examples were chosen to illustrate the directional bias involved. Migration stream data for 1955-60 (from 1960 Census data on residence migration) and for 1957-63 (from the Work History File) were assembled for a number of large metropolitan areas which form the nucleus of contiguous State movement. These include the New York metropolitan area (New York-New Jersey), Philadelphia (Pennsylvania-New Jersey), District of Columbia-Maryland-Virginia, and several others. The data are summarized below as follows:

		CWHS	(Sociál Securit	y)
Origin	Destination	All out- migrants from origin (1)	Out-migrants to indicated State (2)	Percent (3)= $\binom{(2)}{(1)} \times 100$
New York	New Jersey	647.3	111.8	17.3
New Jersey	New York	271.3	94.5	34.8
Penn s ylvania	New Jersey	379.5	64.6	17.0
New Jersey	Pennsylvania	271.3	39.3	14.5
District of Col.	Maryland	93.3	28.4	30.4
Maryland	District of Col.	132.5	20.0	15.1
Rhode Island	Massachusetts	38.6	12.5	32.4
Massachusetts	Rhode Island	187.7	15.1	8.0
			Census Data	
		All out- migrants from origin (4)	Out-migrants to indicated State (5)	$\frac{\text{Percent}}{(6)=(5)} \times 100$
New York	New Jersey	990.5	181.3	18.3
New Jersey	New York	388.5	74.4	19.1
Pennsylvania New Japane	New Jersev	678.6	115.0	17.0
New Jersey	Pennsylvania	388.5	57.6	14.8
New Jersey	Pennsylvania	388.5	57.6	14.8
District of Col.	Maryland	193.3	77.5	40.1
Maryland	District of Col.	259.7	18.3	7.0

It is clear that the overall impact of contiguous and noncontiguous State movements is substantial and must be considered in interpreting the migration data from the CWHS.

<u>Regions, divisions, and States</u>.--Because of differences in the geographic distribution of industries and occupations, the Work History Sample presents a biased view of migration by State of employment, which in turn compounds the difficulties of converting job migration into residence migration. States with larger proportions of their work force in covered employment have a disproportionate influence on migration derived from the File compared to States with smaller proportions.

Comparisons of the States' representation in the Work History File with the distribution of employed persons reported in the 1960 Census demonstrates the variation in worker coverage derived from the two sources. Table 2 presents ratios of one to the other. These ratios vary considerably from State to State, as expected. The lowest ratios are in the more rural Southern States and Plains States, notably North and South Dakota, Mississippi, Arkansas, and Iowa. In each of these States, the number of workers covered by Social Security provisions amounts to less than 70 percent of the working population counted by the Census. At the other end of the scale, there are industralized States like Delaware and New York whose ratios approach 100 percent.

As a result of these differences, the migration rates for States derived from the File are not of uniform validity as measures of residential migration of the total population. As the migration of covered workers represents only a portion of the migration of total employment, leaving a large uncovered category, the migration rates themselves may be biased simply because the opportunity of being reported as an outmigrant is higher in the high coverage States than in the low coverage States. Because of this differential exposure to risk, it appears more likely that the File will pick up inmigration to low coverage States from high coverage States, and less likely to reflect out-migration from low coverage States to high coverage States.

Evidence provided by the Current Population Surveys further complicates the picture by revealing sharp migration differences by occupation, even in occupations normally covered by Social Security provisions. The data in Table 1A, "Interstate Migration of the Employed Male Population 18-64 by Class of Worker and Occupational Status: 1960-65" indicate that among wage and salary workers, farm workers had the highest interstate migration rate (5.5 percent), white collar workers the second (4.5 percent), and manual and service workers the lowest (2.8 percent). Thus, in States with the smallest proportions of workers in covered employment, there appears to be the strongest tendency toward interstate migration.

Interesting geographic differences by age and race are apparent from Table 3, in which workers in covered employment are compared with State populations 15-64 years of age in 1960. The two racial groups used in making this comparison are those available from the Work History File (which includes nonwhite races other than Negro) and Negro. Among the white population, Social Security workers comprised 58 percent of the national population 15-64 years of age in 1960. By State, the percentages were lowest in rural Southern and Plains States and highest in the industrialized Northeast, ranging from 43 percent in Kentucky to 69 percent in New York. Negro percentages, while about the same as the white nationally, are higher than white percentages in all States except Michigan and most of the Southern States. They also have a much wider spread than white percentages, extending from a low of 44 percent in Alabama to an astonishing high of 84 percent in Connecticut.

Net migration rates for regions and States. --Bearing in mind the limitations of the Social Security data, the net civilian migration rates derived from these data can now be compared with those taken from other sources. Tables 4, 5, and 6 present a variety of migration rates for regions and States which pertain to different periods. The rates were derived by dividing the net migrants cumulated for the 1960-65 period by the average annual matched workers in the File. Since only the persons we were able to match from year to year were exposed to the risk of migration, they were taken to constitute the appropriate population base for the computation of rates. Thus, persons in the File in only one of two successive years would not enter into the estimating equation at any time.

Table 4 shows closely comparable net migration rates by region. Civilian rates from the Work History File for 1960-65 are compared with rates for 1950-60, 1955-60, and 1960-65 taken from three different sources--the Censuses of 1950 and 1960, the Current Population Surveys, and independent estimates prepared at the Census Bureau. The Work History rates compare favorably with CPS rates, and less well with rates derived through independent estimates. They also suggest that 1960-65 regional net migration was very similar to that prevailing in the preceding 5-year period, 1955-60.

Differences for the South, however, are noteworthy. It has been speculated that the long-term net out-migration from the South may have halted in the 1960's, and that, in fact, there may have been a small net in-migration. The Work History Sample suggests, on the contrary, that net out-migration has continued at about the rate of the late 1950's. Indeed, looking at the data by race, it is not clear that a significant slowdown of net out-migration of Negroes from the South, which has been suggested, has been taking place at all. Independent estimates of net migration are not available by race, but both the Work History Sample and the CPS data suggest the continuation of net out-migration of Negroes from the South, roughly at the level of that of the late 1950's.

While the rate at which the white population is moving to the West appears to be confirmed by all three sources showing data by color, the Work History File shows a much heavier net in-migration of Negroes to the West in 1960-65 than does the CPS. Again, we must point to the nature of the coverage of the Work History File and note that the migration patterns of persons in covered employment may be atypical of the total population.

The net migration rates on a State-by-State basis (Table 5) provide some insight into the differences between the Work History File and the independent estimates for 1960-65. The differences are particularly acute in Florida and in the D.C.-Maryland-Virginia area. In both areas, peculiar local circumstances make utilization of an employment file highly questionable. Heavy net in-migration of the retired population to Florida would clearly not be reflected by the File. The D.C. Area presents a unique problem, for it is not a State, but the core of a large metropolitan area marked by heavy commuting from two States. In addition, its chief employer, the Federal Government, is hardly covered in the Work History File at all. Use of employment data for measuring residence changes is particularly inappropriate in this case.

The net migration rates obtained from the Work History File for the States more often than not agree with or are very close to the independent State estimates for the same periods. Differences in New York State may be attributed, in part, to the New York-New Jersey stream of migration and, in part, to the role played by net immigration from abroad. Although the effect of immigration from abroad is reflected in the Work History data as well, it is not possible to isolate this component for special study. As soon as an immigrant acquires a Social Security number and enters employment, he loses his original identity (as an immigrant) and is merged with all other workers in covered employment.

Table 6 shows net migration rates for States for white and Negro separately. These rates represent the only systematic measure of State Negro migration for the period since 1960. Unfortunately, the sampling errors on these rates appear to be quite large and their exact meaning has not yet been determined. However, the CWHS clearly indicates that many of the Southern States are still experiencing significant net out-migration of Negroes, many of them running well in excess of five percent.

Net migration rates, by sex, have also been computed. These appear in Appendix Table 1 where they are compared with 1955-60 residence migration rates obtained from the Census. Greater variation by sex is apparent in the Work History data than in the Census data. With only one exception, Hawaii, the Census migration rates by sex bear the same signs. Examples of opposing migration tendencies by sex are numerous in the Work History series; however, considerable differences in rates for males and females are also noticeable in some States, even when they are moving in the same direction.

Standard Metropolitan Statistical Areas

The manner in which the File is used for the derivation of migration patterns for SMSA's in the main resembles that already described for States. The size and selection of the sample, the use of first calendar quarters for measuring the migration period, the presumed age of the migrants (18-64), and the use of matched workers as the migration base are the same for SMSA's as for States. Analysis of Work History data for the SMSA's is likewise hampered by many of the same problems which affect the States. However, in the case of the SMSA's, there is the advantage that a change in Area of employment is more than likely to result in a change of Area of residence also.

The analysis for this paper was made on the basis of the 1968 definition of SMSA's. 1960 population figures were made to conform to the 1968 definition; new SMSA's added after April 1960 were included in the ranking and grouping which preceded the selection of SMSA's shown in Tables 7 and 8, and Appendix Table 2. All data drawn from the Work History File for 1960-65 similarly conform to the 1968 definition of Areas.

A given SMSA's migration is classified in two ways: as movement between the SMSA and other metropolitan areas, and as movement between the SMSA and nonmetropolitan areas. The military are shown as a separate component of nonmetropolitan area movement. By adding up the in- and out-migrants obtained for individual SMSA's, the metropolitan-nonmetropolitan exchange of workers in covered employment is closely approximated. Summary data rates computed for the country as a whole are shown below:

	Total <u>1</u> /			Civilian <u>1</u> /			
	A11 Classes	White <u>2</u> /	Negro	A11 Classes	White <u>2</u> /	Negro	
Out-migrants from							
SMSA's							
Total	14,837.3	13,723.2	1,114.1	13,749.3	12,722.8	1.026.5	
To other SMSA's	9,627.1	8,911.3	715.8	9,627.1	8,911.3	715.8	
To non-SMSA's	5,210.2	4,811.9	398.3	4,122.2	3,811.5	310.7	
<u>In-migrants to</u> SMSA's							
Total	15.503.1	14.314.3	1.188.8	14,110,9	13.011.7	1.099.2	
From other SMSA's	9.627.1	8.911.3	715.8	9.627.1	8,911,3	715.8	
From non-SMSA's	5,876.0	5,403.0	473.0	4,483.8	4,100.4	383.4	
Net migrants to SMSA's							
from non-SMSA's	+665.8	+591.1	+74.7	+361.6	+288.9	+72.7	
Percent net migrants							
SMSA to	+2 0	±1 0	+2 /	1, ,3/	10^{-3}		
	+2.0	71.9	TZ.4	71.1-	+0.9-	+2.3-	
NON-SMSA'S	-3.9	-3.9	-4.3	-2.1	-1.9	-4.2	

Total	and	Civilian	Net	Migration	for	SMSA's:	1960-65
	(1	in thousar	nds.	50-State	area	only.)	

1/ "Total" includes moves to and from military; "civilian" excludes military moves.

2/ Includes nonwhite population other than Negro.

3/ Base includes military.

Unlike the situation noted for States, the military component of SMSA migration was identified, but was not deleted from the total matched work force. Pure civilian migration rates could thus not be computed for SMSA's in the above text table. For the individual SMSA's shown in Table 8, the net migration rates include movement to and from the military and can be compared directly with the 1960-65 rates from the Bureau's independent estimates which also include the military.

In compiling SMSA data for this paper, we restricted our universe to the 55 metropolitan areas whose populations in 1960 included 50,000 or more Negroes. These SMSA's were subdivided into three groups ranked by the number of Negroes in 1960. Table 7 shows for these 55 Areas ratios of workers from the Social Security File to 1960 Census population 15-64 years of age by race. Surprisingly, the percent workers of population varies widely among the Areas for both races: for whites, from a low of 30 to a high of 69; for nonwhites from a low of 32 to a high of 64. One would expect somewhat less variation in coverage among metropolitan population than for States.

The question of how well statistics from the Work History Sample reflect the race and age composition of SMSA's may be answered, in part, by the comparison shown in Table 2 of the Appendix. In this table, we see the percent Negro of the 1960 Census population 15-64 years of age alongside the percent Negro of the total Work History File in 1960. The two columns are remarkably similar for most SMSA's. All except four SMSA's are within five percentage points' difference of one another. 44 are within three percentage points of one another.

Net migration rates for SMSA's.--Table 8 contrasts net migration rates produced by the Work History File with rates taken from the Bureau's independent estimates. The latter refer to residential migration and to all ages only. They are not available by race. Overall by size class, the net migration rates derived from these two sources compare very favorably. Considered individually, in 43 of the 55 SMSA's shown, there is agreement on the basic question of whether there was a net gain or a net loss of population through migration between 1960 and 1965. (Of the 12 which do not agree, 10 are in the South, and 3 of these are Florida resort or retirement centers.) In more than half of the SMSA's there is substantial correspondence (i.e., less than three percentage points difference) between the rates obtained from the independent estimates and rates yielded by the Social Security data. There is no discernible geographic or size pattern which would account for the fact that estimates for some SMSA's compare more favorably than for others or which explains the several very large differences.

Sampling errors

A thorough investigation of the effect of sampling error on the migration rates shown in the various tables is still in process $\frac{2}{A}$ preliminary review suggests that the File will not provide very meaningful rates (i.e., not statistically different from zero) on an annual basis. Computed over a longer period of time, however, such as the five-year period used here, the sampling errors become manageable in a large number of instances. Rates for regions shown in Table 4 have already been tested and found significant (2-sigma level) in most cases. Rates for the large States and those generating large numbers of migrants (e.g., Negroes of Southern States) are also likely to be significant. This is probably true for the large SMSA's also. Rates for small States and SMSA's may fail the test of significance. (See Appendix Tables 3 and 4.)

Conclusion

The Continuous Work History Sample can be manipulated to provide postcensal estimates of net migration (resident) at a level of demographic and geographic detail which has not hitherto been available. There are, however, serious limitations to the use and interpretation of CWHS-derived migration rates, particularly when considered in conjunction with their use in a regular program of postcensal population estimates such as that carried on by the Bureau of the Census. What we see as the favorable aspects of the File for measurement of resident migration are:

1. The broad extent of Social Security coverage, amounting to 90 percent of total civilian employment.

2. The high percentage of matched cases from year to year, i.e., of workers whose migration experience we are able to follow, accounting for 85 percent of the total Social Security File in the 1960-65 period.

3. Consistent annual data on a firstquarter basis from 1963 on, which allows migration to be measured for fairly precise time intervals.

4. The race detail available from the File which compares well with Census population data for both States and SMSA's (see Table 3 and Appendix Table 2).

5. The fair degree of consistency in net migration rates computed from different data sources for the 1955-60 and 1960-65 periods (see tables 4 and 6).

On the negative side, there are still several problems to consider:

1. We must point out again that in spite of the apparent consistency between the CWHS net migration rates and those from other sources noted above, we have not established the extent to which migration rates based on employment changes reflect true resident migration. Here, we need to wait for the 1965-70 resident migration data which will be forthcoming from the 1970 Census to provide a firmer basis for analysis than is now available.

2. The size of the sample, which probably precludes deriving rates for many States and SMSA's in which we are interested, even cumulated over a number of years; and

3. The timeliness of the data. The timing of the CWHS has to be substantially improved if migration rates derived from the File are to be useful in any <u>regular</u> current program of population estimation. The lag is now close to three years, for the last year for which data are available is 1966.

Footnotes

- <u>1</u>/ <u>Current Population Reports</u>, Series P-20, annual report on mobility, of which No. 171, "Mobility of the Population of the United States, March 1966 to March 1967," is the most recent issue.
- 2/ Although the number of covered workers not matched in the File is not considered in this study, it should be of interest to those concerned with gross changes in the labor force. Looking ahead from year to year, unmatched cases in the 50-State area represent mainly persons who leave the labor force (or the 50-State area), shift to "noncovered" employment, enter the military, or die. Looking backward, new entrants (including persons returning from military duty) probably make up the bulk of the group.
- 3/ Investigation of the effect of sampling error on the CWHS-derived migration rates shown in this paper was completed after the main text had been written. The results of this investigation are shown in Appendix Tables 3 and 4 which contain standard errors (1 Sigma) of net migration rates by color for States and SMSA's. The results generally support conclusions drawn from a preliminary review of the material.

Table 1.--SUMMARY DATA FROM CONTINUOUS WORK HISTORY SAMPLE OF SOCIAL SECURITY AND COMPARISON OF INTERSTATE MIGRANTS FROM CWHS AND CPS: 1961 TO 1965

(Numbers in thousands)

	Calendar Year <u>1</u> /				First Quarter of Year <u>2</u> /		
	1961	1962	1963	1964	1963	1964	1965
Total file 3/							
Working in year indicated	66.434.7	68.058.4	69.466.7	71.474.0	56 591.0	57 854 9	60 078 2
Working in preceding year	59, 594, 7	60,515,4	61,884.5	63 415 9	48 610 9	49 684 1	50 677 5
Same State	55 148.3	56,082.4	57 286 5	58 675 9	45,010.7	46 402 3	47 205 0
Different State - number	4.446.4	4,433.0	4 598 0	4 740 0	3 264 6	3 281 8	3 472 5
	75	73	7 /	7 5	5,204.0	5,201.0	5,4/2.5
	7.5	7.5	/ • -	1.5	0.7	0.0	0.9
50-State area only <u>4</u> /							
Working in year indicated	62,969.0	64,358.5	65,676.6	67,681.7	53,351.1	54,462.8	56,431.2
Working in preceding year	55,922.7	56,643.0	57,825.0	59,272.1	45,233.9	46,259.8	48,154.3
Same State	52,498.6	53,240.7	54,319.2	55,712.6	42,871.2	43,876.2	45,650.8
Different State - number	3,424.1	3,402.3	3,505.8	3,559.5	2,362.7	2,383.6	2,503.5
- percent	6.1	6.0	6.1	6.0	5.2	5.2	5.2
Contiguous State	1,439,2	1,450.7	1,463.5	1,492.9	994.2	1,012.4	1,080.3
Noncontiguous State	1,984.9	1,951.6	2,042.3	2,066.6	1,368.5	1,371.2	1,423.2
Tata and a minimum to form CDC	·						
Interstate migrants from UPS							
employed persons only <u>5</u> /			0.070.0		0.050.0	1 00/ 0	1 000 0
Total 18-64 - number	1,//8.0	1,702.0	2,052.0	1,894.0	2,052.0	1,894.0	1,839.0
- percent	3.0	2.8	3.3	3.0	3.3	3.0	2.8
Contiguous State	NA	616.0	725.0	677.0	/25.0	6//.0	69/.0
Noncontiguous State	NA	1,086.0	1,327.0	1,217.0	1,327.0	1,217.0	1,142.0
Ratio: CWHS interstate migrants to CPS							
Total	1.93	2.00	1.71	1.88	1.15	1.26	1.36
Contiguous State	NA	2.36	2.02	2,21	1.37	1,50	1,55
Noncontiguous State	NA	1.80	1.54	1.70	1.03	1,13	1.25
Moncontriguous state	141	1.00	1. J4	1.70	1.05	1.15	1.23

 $\underline{1}$ / Includes persons who worked at any time during year.

2/ Includes only those working in first calendar quarter.

- 3/ Includes persons working in the 50 States, U.S. territories and possessions, on ships at sea, and military personnel.
- 4/ Excludes military personnel and all persons working outside the 50 States.
- 5/ Employed at time of Current Population Survey. Excludes persons in Armed Forces.
- NA Not available.

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Table 1A.--INTERSTATE MIGRATION OF THE EMPLOYED MALE POPULATION 18-64 BY CLASS OF WORKER AND OCCUPATIONAL STATUS: CURRENT POPULATION SURVEY, 1960-65 AVERAGE

	Interstate Migration Rate (percent)
Total male civilian population	
18-64	3.5
Employed	3.1
Wage and salary <u>1</u> /	3.5
White collar workers	4.5
Manual and service workers	2.8
Farm workers	5.5
Self-employed	1.2

1/ Includes government workers.

Table 2.--COMPARISON OF CWHS FILE AND CENSUS: 1960

(Numbers in thousands)

		Workers	
Region, Division, and State	CWHS 1960 <u>1</u> /	Census 1960 <u>2</u> /	CWHS as a per- cent of Census
United States, Total	62,715.8	75,634.7	82.9
Regions			
Northeastern States	17,969.3	19,662.7	91.4
North Central States	18,043.2	22,055.7	81.8
The South	17,018.0	21,934.8	77.6
The West	9,685.3	11,981.5	80.8
Northeast			
New England	4,072.7	4,706.0	86.5
Middle Atlantic	13,896.6	14,956.6	92.9
North Central			
East North Central	13,095.1	15,452.3	84.7
West North Central	4,948.1	6,603.4	74.9
South	• • · • •		22.2
South Atlantic	8,547.4	10,572.4	80.8
East South Central	3,354.1	4,655.1	/2.1
West South Central	5,110.5	6,/0/.3	/0.3
West	0.005.5	2 202 0	70 /
	2,240.0	2,802.0	/9.4
	/,409.0	9,1/9.5	01.3
New England	222 0	417 0	70 /
	266 7	41/.7	87.6
Vormont	244.7	172 3	73 0
Massachusetts	2 015.6	2 314.9	87.1
Rhode Island	321.0	369.3	86.9
Connecticut	1.033.7	1,152,3	89.7
Middle Atlantic	•		
New York	7,318.0	7,539.2	97.1
New Jersey	2,353.4	2,659.8	88.5
Pennsylvania	4,225.2	4,757.6	88.8
East North Central			
Ohio	3,385.8	4,057.1	83.5
Indiana	1,671.3	1,989.9	84.0
Illinois	3,861.6	4,472.8	86.3
Michigan	2,807.4	3,207.7	87.5
Wisconsin	1,369.0	1,724.8	79.4
West North Central	1 077 7	1 / 77 0	70.0
	1,0//./	1,4//.8	/2.9 60 E
	010.0 1 560 7	1,204.1	09.J 85.6
Marth Dekota	1,500.2	1,032.0	50 A
South Dekote	181 1	200.7	63.5
Nebraska	463.6	613.4	75.6
Kansas	663.3	924.0	71.8

	Workers				
Region, Division, and State	CWHS 1960 <u>1</u> /	Census 1960 <u>2</u> /	CWHS as a per- cent of Census		
South Atlantic					
Delaware	185.2	187.8	98.6		
Maryland	1,049.9	1,296.5	81.0		
District of Columbia	398.5	379.8	104.9		
Virginia	1,211.9	1,561.6	77.6		
West Virginia	530.4	642.2	82.6		
North Carolina	1,517.8	1,936.9	78.4		
South Carolina	705.4	941.4	74.9		
Georgia	1,305.3	1,609.4	81.1		
Florida	1,643.0	2,016.8	81.5		
East South Central					
Kentucky	775.3	1,100.2	70.5		
Tennessee	1,124.9	1,443.4	77.9		
Alabama	914.2	1,255.0	72.8		
Mississippi	539.7	856.5	63.0		
West South Central					
Arkansas	460.5	716.8	64.2		
Louisiana	880.0	1,185.5	74.2		
Oklahoma	718.0	932.2	77.0		
Texas	3,058.0	3,872.8	79.0		
Mountain					
Montana	219.4	285.9	76.7		
Idaho	210.1	289.0	72.7		
Wyoming	113.4	144.8	78.3		
Colorado	563.6	741.3	76.0		
New Mexico	261.7	338.9	77.2		
Arizona	430.0	507.8	84.7		
	309.5	362.1	85.5		
Nevada	117.8	132.3	89.0		
Pacific					
washington	9/2.8	1,228.7	79.2		
Uregon	630.2	804.2	78.4		
California	5,589.7	6,827.2	81.9		
Alaska	60.0	79.2	75.8		
Hawaii	207.1	240.2	86.2		

1/ Excluding Armed Forces.

 $\underline{2}$ / Civilian population 14 years of age and over who worked at all in 1959.

.

Table 3.--CWHS FILE WORKERS COMPARED WITH 1960 CENSUS POPULATION 15-64 YEARS OF AGE, BY RACE

(Numbers in thousands)

	White <u>1</u> /		Neg	ro
- Region, Division, and State	CWHS 1960 <u>2</u> /	Percent CWHS of Population 15-64 Years	CWHS 1960 <u>2</u> /	Percent CWHS of Population 15-64 Years
United States, Total	56,466.0	58.4	6,249.8	59.0
Regions Northeastern States North Central States The South The West	16,549.8 16,792.1 13,821.0 9,303.1	64.5 59.0 52.3 57.5	1,419.5 1,251.1 3,197.0 382.2	75.9 63.0 52.5 59.3
Northeast New England Middle Atlantic North Central	3,960.1 12,589.7	63.9 64.7	112.6 1,306.9	78.7 75.7
West North Central	4,737.8	55.0	210.3	67.2
South South Atlantic East South Central West South Central	6,746.8 2,721.7 4,352.5	54.7 48.4 51.3	1,800.6 632.4 764.0	56.0 45.1 51.8
West Mountain Pacific	2,179.2 7,123.9	56.0 58.0	46.3 335.9	65.6 58.5
New England Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut	330.9 243.9 125.2 1,964.9 314.6 980.6	58.9 68.2 55.8 64.6 60.7 65.9	(Z) (Z) (Z) 50.7 (Z) 53.1	(B) (B) (7.2 (B) 83.9
Middle Atlantic New York New Jersey Pennsylvania	6,582.7 2,104.2 3,902.8	68.6 60.8 60.9	735.3 249.2 322.4	81.4 80.3 63.0
East North Central Ohio Indiana Illinois Michigan Wisconsin	3,111.4 1,570.3 3,465.7 2,570.0 1,336.9	58.8 60.5 62.8 61.4 59.4	274.4 101.0 395.9 237.4 (Z)	59.9 66.3 65.5 56.7 (B)
West North Central Minnesota Iowa Missouri North Dakota South Dakota Nebraska	1,065.1 825.9 1,425.4 156.7 180.7 450.4	55.0 52.7 60.8 43.8 47.3 56.5	(Z) (Z) 142.8 (Z) (Z) (Z)	(B) (B) 65.4 (B) (B) (B)

Table 3 continued

	Wr	lite <u>1</u> /	Negro	
Region, Division, and State	CWHS 1960 <u>2</u> /	Percent CWHS of Population 15-64 Years	CWHS 1960 <u>2</u> /	Percent CWHS of Population 15-64 Years
South Atlantic				
Delaware	157.1	67.4	28.1	80.3
Maryland	822.4	51.8	227.5	76.0
District of Columbia	287.1	115.2	111.4	44.0
Virginia	944.8	48.5	267.1	58.2
West Virginia	504.7	48.2	(Z)	(B)
North Carolina	1,204.5	56.4	313.3	52.3
South Carolina	513.1	53.3	192.3	45.4
Georgia	989.9	57.2	315.4	52.5
Florida	1,323.2	54.2	319.8	64.2
East South Central				
Kentucky	703.2	42.6	72.1	59.5
Tennessee	955.8	52.6	169.1	52.8
Alabama	692.0	49.8	222.2	43.5
Mississippi	370.7	48.8	169.0	37.6
West South Central				
Arkansas	374.5	45.0	86.0	44.6
Louisiana	630.4	47.4	249.6	46.2
Oklahoma	674.5	51.7	43.5	53.7
Texas	2,673.1	53.3	384.9	58.2
Mountain				4 - 5
Montana	219.0	57.2	(Z)	(B)
Idaho	209.4	55.4	(Z)	(B)
Wyoming	112.8	58.7	(Z)	(B)
Colorado	547.6	54.5	(Z)	(B)
New Mexico	256.0	48.2	(Z)	(B)
Arizona	415.3	56.3	(Z)	(B)
Utah	306.7	61.8	(Z)	(B)
Nevada	112.4	65.4	(Z)	(B)
Pacific				(-)
Washington	957.5	57.8	(Z)	(B)
Oregon	623.0	60.3	(Z)	(B)
California	5,277.7	58.2	312.0	59.2
Alaska	59.2	43.7	(Z)	(B)
Hawaii	206.5	53.9	(Z)	(B)

 $\underline{1}$ / Includes nonwhite races other than Negro.

2/ Excludes Armed Forces-

(Z) - Having less than 50,000 Negro population 15-64 years of age in 1960.

(B) - Base less than 50,000.

1

	1950-60 <u>1</u> / 1955-60 <u>2</u> /		1960-65 <u>3</u> /	1960-65 <u>4</u> / 1960-65 <u>5</u> /	
Region and Color	Censuses of 1950 and 1960	Census of 1960	CWHS Data	Current Population Surveys	Independent estimate by Census Bureau
<u>U. S., All Classes</u>	+1.8	-	-	-	+1.1
Northeastern States	+0.9	-1.7	-0.4	-0.8	+1.2
North Central States	-0.3	-1.9	-1.6	-2.2	-1.8
The South	-3.0	-0.1	-0.7	-1.1	+1.3
The West	+19.1	+6.2	+4.8	+6.9	+5.6
U. S., White	+2.0	-	-	-	
Northeastern States	-0.6	-2.1	-0.9	-1.5	
North Central States	-1.6	-2.2	-1.8	-2.6	
The South	+0.1	+0.7	+0.2	-0.3	
The West	+18.7	+6.2	+4.5	+7.1	
U. S., Nonwhite	-0.2	-	-	-	
Northeastern States	+26.0	+3.8	+6.1	+6.4	
North Central States	+23.8	+2.3	+1.4	+1.9	
The South	-14.1	-3.4	-4.9	-4.2	
The West	+23.6	+6.5	+11.8	+5.6	

Table 4 .-- NET MIGRATION RATES FOR SELECTED PERIODS, BY REGION AND COLOR

 $\underline{1}$ All ages. Includes military and immigrants from abroad.

2/ Population 15-64 years of age in 1960. Includes military.

3/ 18-64 years of age. Includes an unknown number of immigrants from abroad. Excludes military. "Nonwhite" here refers to Negro only.

- 4/ Population 1 year of age and over. Excludes Armed Forces in barracks.
- 5/ All ages. Includes immigrants from abroad. Excludes military.

Region, Division, and State	1955-60 <u>1</u> / Census	1960-65 <u>2</u> / CWHS	1960-65 <u>3</u> / Independent Estimate
United States, Total	-	_	+1.1
Regions			
Northeastern States	-1.7	-0.4	+1.2
North Central States	-1.9	-1.6	-1.8
The South	-0.1	-0.7	+1.3
The West	+6.2	+4.8	+5.6
Negtherest			
Northeast New Fraterd	0.7	0.2	+0 2
Meddla Atlantia	-0.7	-0.2	+0.2
	-1.9	-0.4	+1.5
North Central			
East North Central	-1.3	-1.3	-1.2
West North Central	-3.2	-2.3	-3,3
South			
South Atlantic	+2.3	-0.6	+2.7
East South Central	-3.4	-1.6	-1.0
West South Central	-1.3	-0.2	+0.7
West			
Mountain	+4.4	+1.5	+2.3
Pacific	+6.8	+5.7	+6.7
New England	o /		<i>.</i> –
Maine	-3.4	- 5.4	-4./
Verment	T1.4	-0.7	T4.0 2.0
	-2.0	-0.7	-2.0
Rhode Teland	-1.4	-0.1	-1.5
	+1.7	+1.7	-1.4
		• 1 • /	- 3.5
Middle Atlantic			
New York	-2.6	-1.9	+2.5
New Jersey	+2.2	+7.9	+5.9
Pennsylvania	-3.2	-2.5	-2.4
East North Central			
Ohio	-0.6	-2.5	-0.8
Indiana	-1.2	(Z)	-1.9
Illinois	-1.2	-0.4	-0.9
Michigan	-2.6	-1.3	-1,2
Wisconsin	-1.2	-2.4	-2.2
West North Central			
Minnesota	-1.1	-0.7	-3.3
Iowa	-4.5	-6.0	-5.8
Missouri	-1.8	-2.3	-1.1
North Dakota	-7.2	-7.2	-6.7
South Dakota	-7.0	-6.2	-6.9
Nebraska	-5.1	-3.8	-3.5
Kansas	-4.1	+2.8	-2.5

Table 5.--NET MIGRATION RATES FOR STATES AND REGIONS FROM CENSUS, CWHS, AND INDEPENDENT ESTIMATE: 1955-60 AND 1960-65

Region, Division, and State	1955-60 <u>1</u> / Census	1960-65 <u>2</u> / CWHS	1960-65 <u>3</u> / Independent Estimate
South Atlantic			
	+4.7	+9.2	+4.8
Marvland	+3.6	+7.2	+5.5
District of Columbia	-10.1	-19.6	-2.8
Virginia	+1.8	+2.4	+3.1
West Virginia	-9.8	-5.6	-7.9
North Carolina	-2.1	-2.3	-0.1
South Carolina	-2.2	+0.3	-1.8
Georgia	-1.2	-3.3	+2.1
Florida	+17.2	+0.4	+9.9
	2	- • •	
Last South Central		. -	
Kentucky	-4.7	-0.7	-2.3
Tennessee	-2.9	-0.4	+0.7
Alabama	-2.3	-2.7	-0.9
Mississippi	-4.4	-3.4	-2.1
West South Central			
Arkansas	-5.4	+1.0	+1.4
Louisiana	-0.4	+1.8	-0.6
Oklahoma	-4.2	-1.6	-0.6
Texas	-0.2	-0.7	+1.2
Mountain			
Montono	2 1	5 5	6.0
	-3.1	-3.5	-4.0
	-2.4	-/.1	-3.9
	-2.1	-0.4	-0.0
	T4.1	+3.5	TZ • 9
	+14 0	-10.5	- 3. /
	+14.0	+0.0	T9.3
UCAN	TU.Y	-0.2	-0.3
Nevada	+9.2	+20./	+32.9
Pacific			
Washington	+1.3	+1.2	-1.8
Oregon	-0.7	+0.4	+3.8
California	+8.7	+7.2	+8.7
Alaska	+8.3	+10.1	+3.7
Hawaii	+2.7	-0.4	+1.0

-

 $\underline{1}$ / Net migrants as a percent of census population 15-64 years of age. Includes military.

<u>2</u>/ Net employed civilian migrants as a percent of average base population in Work History File. 1960-65 includes unknown number of immigrants from abroad.

3/ Net civilian migrants as percent of mid-period population. Includes immigrants from abroad.

(Z) - Less than 0.05.

B. I.w. Bistalas		White		,	Nonwhite	
and State	1950-60 <u>1</u> / Censuses	1955-60 <u>2</u> / Census	1960-65 <u>3</u> / CWHS	1950-60 <u>1</u> / Censuses	1955-60 <u>2</u> / Census	1960-65 <u>3</u> / CWHS
United States, Tot	al +2.0	-	-	-0.2	-	-
Regions						
Northeastern States	0.6	-2.1	-0.9	+26.0	+3.8	+6.1
North Central States.	1.6	-2.2	-1.8	+23.8	+2.3	+1.4
The South	+0.1	+0.7	+0,2	-14.1	-3.4	-4.9
The West	•• +18.7	+6.2	+4.5	+23.6	+6.5	+11.8
Northeast						
New England	-0.5	-0.9	-0.5	+45.6	+8.8	+12.6
Middle Atlantic	-0.6	-2.5	-1.0	+24.5	+3.4	+5.6
North Control						
East North Control	+0.6	-1.7	-1.5	+28.1	+2.5	+1.0
West North Central	-6.3	-3.4	-2.4	+7.6	+1.3	-0.7
	-015	-3.4		.,	- 110	
South					~ /	
South Atlantic	+7.4	+3.5	+0.4	-10.5	-2.4	-4.5
East South Central	-9.0	-2.8	-0.2	-22.9	-0.2	-8.2
west South Central	•• -2.4	-1.0	+0.3	-11.0	-2.9	-3.3
West						
Mountain	+11.3	+4.5	+1.5	+3.6	+3.1	+2.7
Pacific	+21.3	+6.7	+5.4	+27.4	+7.1	+12.9
New England						
Maine	7.5	-3.5	-5.4	(B)	(B)	(B)
New Hampshire	+2.1	+1.2	-0.4	(B)	(B)	(B)
Vermont	-10.1	-2.8	-0.9	(B)	(B)	(B)
Massachusetts	-2.6	-1.6	-0.5	+32.1	+6.7	+12.1
Rhode Island	-3.6	-1.8	-1.5	(B)	(B)	(B)
Connecticut	+10.0	+1.4	+1.0	+71.1	+10.3	+14.1
Middle Atlantic						
New York	-0.5	-3.3	-2.5	+29.5	+3.9	+4.3
New Jersey	. +10.3	+1.8	+7.0	+34.6	+6.5	+15.9
Pennsylvania	5.6	-3.6	-2.7	+12.0	+0.7	+0.6
Fast North Control						
	+3.7	-0.9	-2.7	+25.6	+3.1	+0.3
Indiana	+0.5	-1.4	-0.1	+25.4	+2.5	+1.3
Illinois	-0.8	-1.7	-0.9	+28.3	+3.2	+4.3
Michigan	+0.5	-2.9	-1.4	+27.9	(Z)	+0.1
Wisconsin	-2.4	-1.4	-2.5	(B)	(B)	(B)
Host North Control						
West North Central Minnesota	2 /.	-1 2	-0 0	(B)	(B)	(B)
		-4.6	-6.1	(B)	(B)	(B)
Missouri	-4.3	-2.1	-2.0	+9.3	+1.0	-4.8
North Dakota	-16.9	-7.3	-6.6	(B)	(B)	(B)
South Dakota	-14.3	-7.3	-6.4	(B)	(B)	(B)
Nebraska	-9.3	-5.4	-3.7	(B)	(B)	(B)
Kansas	-2.7	-4.3	+2.1	+6.5	+0.2	+16.7

Table 6.--NET MIGRATION RATES BY COLOR FROM CENSUS AND CWHS DATA: SELECTED PERIODS, 1950-1965

Table 6 continued

		White			Nonwhite	<u> </u>
Region, Division, - and State	1950-60 <u>1</u> / Censuses	1955-60 <u>2</u> / Census	1960-65 <u>3</u> / CWHS	1950-60 <u>1</u> / Censuses	1955-60 <u>2</u> / Census	1960-65 <u>3</u> / CWHS
South Atlantic						
Delaware	+21.0	+4.9	+10.7	+14.6	+3.5	-0.5
Maryland	. +14.5	+3.9	+6.6	+9.3	+2.2	+9.8
District of Columbia	41.1	-25.9	-19.0	+19.2	+4.6	-21.3
Virginia	+3.3	+2.9	+3.2	-9.5	-2.9	-0.3
West Virginia	21.5	-9.7	-5.5	(B)	(B)	(B)
North Carolina	4.0	-1.1	-0.6	-19.2	-5.6	-9.8
South Carolina	0.3	+0.7	+2.2	-26.5	-8.6	-5.6
Georgia	0.4	+0.1	-1.9	-19.2	-5.0	-8.0
Florida	. +70.0	+19.8	+1.2	+16.6	+4.7	-3.3
East South Central						
Kentucky	-13.7	-4.9	-0.7	-7.6	-3.3	-1.1
Tennessee	7.8	-2.8	+0.2	-10.7	-3.0	-3.7
Alabama	6.9	-0.9	+0.1	-22.8	-6.0	-12.4
Mississippi	9.3	-1.4	-0.7	-32.7	-9.4	-10.5
West South Central						
Arkansas	-19.1	-4.5	+2.9	-35.0	-9.3	-8.3
Louisiana	+2.4	+0.7	+4.7	-10.4	-3.0	-6.5
Oklahoma	-9.5	-4.2	-1.5	-13.0	-3.9	-2.9
Texas	. +2.1	-0.1	-0.7	-2.7	-0.8	-0.3
Mountain						
Montana	-4.0	-3.2	-5.6	(B)	(B)	(B)
Idaho	7.0	-2.4	-7.0	(B)	(B)	(B)
Wyoming	6.5	-2.0	-8.0	(B)	(B)	(B)
Colorado	. +11.5	+4.0	+3.6	(B)	(B)	(B)
New Mexico	. +8.5	+6.0	-10.8	(B)	(B)	(B)
Arizona	. +51.9	+15.3	+8.2	(B)	(B)	(B)
Utah	. +1.4	+0.9	(Z)	(B)	(B)	(B)
Nevada	. +53.2	+9.0	+28.8	(B)	(B)	(B)
Pacific						
Washington	+3.0	+1.2	+1.2	(B)	(B)	(B)
Oregon	+0.7	-0.7	+0.1	(B)	(B)	(B)
California	+28.2	+8.5	+6.8	+52.7	+11.0	+13.1
Alaska	. +45.5	+9.1	+9.7	(B)	(B)	(B)
Hawaii	. +48.0	+15.2	-0.2	(B)	(B)	(B)

 $\underline{1}$ / All ages. Includes military and immigrants from abroad.

 $\underline{2}$ Net migrants as a percent of census population 15-64 years of age. Includes military.

3/ Net employed civilian migrants as a percent of average base population in the Work History File, 1960-65. Includes an unknown number of immigrants from abroad. "Nonwhite" here refers to Negro only.

(Z) Less than 0.05.

(B) Having less than 50,000 nonwhite or Negro population 15-64 years of age in 1960.

Standard Metropolitan	Ratio of Workers From CWHS, 1960 Census Population 15-64 Years of		
Statistical Area <u>1</u> /	White <u>2</u> /	Negro	
250,000+ Negro population, 1960			
New York, N. Y.	60.3	60.5	
Los Angeles-Long Beach, Calif	54.7	48.3	
Chicago, Ill.	58.9	50.4	
Philadelphia, PaN. J.	52.5	47.3	
Detroit. Mich.	56.5	42.9	
St. Louis. MoIll.	55.5	45.9	
Washington, D. CMdVe.	40.4	43.5	
Cleveland Obio	57 2	50 6	
Baltimore Md	52 2	50.3	
Houston Toxas	50 7	JU.J	
Non Onlease Le	50.7	44.0	
New Orleans, La.	4/.9	43.5	
Memphis, TennArk.	49.7	37.1	
100,000-249,000 Negro population, 1960	40.0	22.0	
San Francisco-Oakland, Calle.	49.0	33.0	
Pittsburgh, Pa.	51.1	41.4	
Newark, N. J.	58.1	47.9	
Cincinnati, Ohio-KyInd	52.5	42.1	
Dallas, Texas	60.5	52.5	
Kansas City, MoKans	56.0	49.0	
Atlanta, Ga	65.5	52.8	
Indianapolis, Ind	60.9	48.1	
Miami, Fla.	54.8	64.2	
Birmingham, Ala,	52.1	41.6	
Norfolk-Portemouth Ve	20 7	41.0	
Groonshore Winsten Salem High Point N C	66 5	56 3	
Jocksonwille Fle	60.5	JU.J	
Disharad Va	42.0	44.5	
Kichmond, Va	05.8 38.2	60.4 32.4	
50,000,00,000 Norma population 1060	50.2	J2 • 4	
Boston Mass	66 E	60 E	
DOSCON, MASS.	00.5	00.5	
	54.8	51.8	
Milwaukee, Wisc.	57.9	59.2	
Tampa-St. Petersburg, Fla.	44.0	44.5	
Columbus, Ohio	50.0	38.2	
Dayton, Ohio	50.8	36.5	
Louisville, KyInd	52.9	49.8	
Gary-Hammond-East Chicago, Ind	58.3	48.4	
Fort Worth, Texas	47.5	42.9	
Nashville, Tenn.	55.6	38.0	
Fort Lauderdale-Hollywood, Fla.	39.7	48.0	
Orlando Ela	44 9	38.5	
Charlotte N C	69 0	62 1	
Boumont Dant Anthun Onango Towag	47 5	02.I 42 E	
Chattaneers Tenn Co	4/•J	4J.J 10 0	
Charlanooga, lennGa.	01.2	48.9	
Snreveport, La.	38.3	35.4	
Little Kock-North Little Rock, Ark	50.7	47.9	
Columbia, S. C	41.9	43.0	
Charleston, S. C.	34.5	37.7	
Baton Rouge, La	44.2	35.9	
West Palm Beach, Fla	47.1	36.9	
Newport News-Hampton, Va	34.2	37.9	
Jackson, Miss.	61.0	37.6	
	36.5	37.0	
Columbus, GaAla,			
Columbus, GaAla.	41.6	36.0	
Columbus, GaAla Augusta, GaS.C Montgomery Ala	41.6	36.9	
Columbus, GaAla Augusta, GaS.C Montgomery, Ala	41.6 55.1	36.9 39.3 48.0	
Columbus, GaAla Augusta, GaS.C Montgomery, Ala Savannah, Ga	41.6 55.1 50.2	36.9 39.3 48.0	

Table 7.--RATIO OF WORKERS FROM CWHS FILE TO CENSUS POPULATION 15-64 YEARS OF AGE, BY RACE, FOR STANDARD METROPOLITAN STATISTICAL AREAS WITH 50,000 OR MORE NEGRO POPULATION IN 1960

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Standard Metropolitan Statistical Area	Social	Independent Estimate <u>2</u> /		
Rank and Size Group	All Classes	White 3/	Negro	All Classes
250,000+ Negro population, 1960				
New York, N. Y.	+0.3	-0.5	+6.5	+1.1
Los Angeles-Long Beach, Calif	+10.3	+9.7	+18.6	+4.7
Chicago, I11	+0.2	-0.2	+3.5	+0.4
Philadelphia, PaN. J	-2.3	-2.6	-0.3	+1.3
Detroit, Mich.	-0.2	-0.7	+3.5	-1.4
St. Louis, MoI11.	+3.0	+3.2	+2.0	-0.1
Washington, D. CMdVa.	+10.2	+10.5	+9.3	+10.1
Cleveland, Ohio	-0.5	-0.6	-0.2	-1.5
Baltimore, Md.	-0.3	-0.4	-0.1	+0.2
Houston, Texas	+0.0	+/.5	+2.2	+8.9
New Orleans, La.	+10.8	+13.8	+2.0	+4.0
Memphis, lennArk.	+1./	T3. Z	-2.3	+0.7
100,000-249,000 Negro population, 1960				
San Francisco-Oakland, Calif	+6.8	+6.5	+12.2	+3.7
Pittsburgh, Pa	-0.7	-0.4	-6.5	-6.0
Newark, N. J	+3.4	+2.6	+10.5	+3.8
Cincinnati, Ohio-KyInd	-3.8	-4.5	+4.0	-1.1
Dallas, Texas	+6.5	+6.6	+6.0	+8.8
Kansas City, MoKans	+4.3	+4.5	+2.3	+0.8
Atlanta, Ga	-0.4	+0.4	-4.6	+9.5
Indianapolis, Ind	-0.2	-0.1	-2.0	-0.8
Miami, Fla	-7.8	-7.7	-8.1	+7.6
Birmingham, Ala	-7.3	-6.4	-10.6	-4.7
Norfolk-Portsmouth, Va	-0.5	+4.0	-11.1	-0.3
Greensboro-Winston-Salem-High Point, N.C.	+3.1	+4.2	-2.7	+0.4
Jacksonville, Fla.	+4.1	+5.6	-1.9	-0.2
Richmond, Va.	+3.8	+6.2	-4.4	+4.3
Mobile, Ala	-1.9	-0.2	-7.4	-2.1
50,000-99,000 Negro population, 1960				
Boston, Mass.	(Z)	-0.4	+14.0	-2.7
Buffalo, N. Y	-2.2	-2.7	+5.6	-4.9
Milwaukee, Wisc	-1.5	-1.9	+6.7	-4.2
Tampa-St. Petersburg, Fla	-2.1	-1.7	-4.7	+9.4
Columbus, Ohio	+1.8	+2.0	-0.7	+3.4
Dayton, Ohio	+0.3	+0.1	+3.1	+1.1
Louisville, KyInd	+6.3	+6.8	+1.0	-1.1
Gary-Hammond-East Chicago, Ind	-4.2	-6.3	+11.4	-5.0
Fort Worth, Texas	+6.2	+5.6	+12.0	+1.5
Nashville, Tenn.	+0.6	+2.0	-9.5	+3.1
Fort Lauderdale-Hollywood, Fla	+0.1	+1.4	-7.0	+22.7
Orlando, Fla.	+5.1	+4.5	+8.7	+7.5
Charlotte, N. C.	-1.9	-0.3	-8./	+4.4
Beaumont-Port Arthur, Texas	-5./	-4.3	-11.8	-5.8
Chattanooga, lennGa.	-4.1	-3.2	-10.2	-3.1
Jittle Book North Little Book Ank	-3.3	-3.2 +6 1	-3.7	-0.0
Columbia S C	+J•2	+6 0	-10.9	+2 2
Charleston S C	-0.8	+1 0	-14•4 _5 8	+4.4
Baton Rouge. La.	+16.0	+25.8	-19.0	+0.8
West Palm Beach, Fla	+9.2	+10.2	+4.2	+15.7
Newport News-Hampton. Va.	+19.5	+17.6	+24.1	+8.9
Jackson. Miss.	+2.0	+6.7	-11.2	+2.5
Columbus, GaAla,	-1.6	+0.9	-8.3	+6.7
Augusta, GaS. C.	+4.9	+6.7	-0.8	+0.9
Montgomery, Ala,	(Z)	+6.8	-18.8	-3.4
Savannah, Ga.	-11.7	-13.5	-7.4	-6.3
Macon, Ga	-10.3	-5.7	-22.4	+2.1

Table 8.--NET MIGRATION RATES BY RACE FOR SMSA'S WITH 50,000 OR MORE NEGRO POPULATION IN 1960: SOCIAL SECURITY DATA AND INDEPENDENT ESTIMATES FOR 1960-65

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1/ Net employed migrants as a percent of average base population, 1960-65. Includes military. 2/ Includes military. 3/ Includes nonwhite races other than Negro. (2) Less than 0.05.

Destar Dist.	Mal	e	Female	
Region, Division, — and State	1955-60 Census <u>1</u> /	1960-65 CWHS <u>2</u> /	1955-60 Census <u>1</u> /	1960-65 CWHS <u>2</u> /
United States, Total	-	-	-	-
Regions				
Northeastern States	-2.0	-0.2	-1.4	-0.6
North Central States	-2.2	-1.5	-1.6	-1.6
The South	+0.2	-0.7	-0.3	-0.7
The West	+6.5	+4.4	+5.9	+5.5
Northeast				
New England	-0,6	-0.1	-0.8	-0.4
Middle Atlantic	-2.4	-0.2	-1.6	-0.7
North Central				
East North Central	-1.7	-1.4	-1.0	-1.1
West North Central	-3.3	-2.0	-3.2	-2.8
South				_
South Atlantic	+2.7	-0.9	+1.9	-0.1
East South Central	-3.2	-1.5	-3.7	-1.8
West South Central	-1.3	+0.2	-1.4	-1.1
West				
Mountain	+4.2	+0.8	+4.7	+2.9
Pacific	+7.2	+5.4	+6.3	+6.2
New England				
Maine	-2.9	-5.6	-3.9	-5.1
New Hampshire	+1.7	-1.5	+1.1	+0.7
Vermont	-2.6	-1.5	-2.9	+1.0
Massachusetts	-1.5	-0.6	-1.2	+0.6
Rhode Island	-0.2	-1.4	-2.9	-1.0
Connecticut	+1.6	+3.2	+1.9	-1.1
Middle Atlantic				
New York	-3.1	-2.0	-2.1	-1.6
New Jersey	+2.3	+8.9	+2.2	+6.0
Pennsylvania	-3.8	-2.3	-2.7	-2.8
East North Central				
Ohio	-1.0	-2.9	-0.1	-1.5
Indiana	-1.2	-0.1	-1.1	(Z)
Illinois	-1.4	-0.1	-1.0	-0.9
Michigan	-3.2	-1.2	-2.0	-1.6
Wisconsin	-1.5	-2.9	-0.9	-1.3
West North Central				• -
Minnesota	-1.5	(Z)	-0.8	-2.1
	-4.8	-7.3	-4.3	-3.9
Missouri	-1.0	-1.5	-2.1	-3.7
North Dakota	-0.5	-4.3	-7.9	-11.2
South Dakota	-7.1	-7.3	-7.0	-4.4
N A sector				
Nebraska	-5.1	-4.9	-5.1	-2.0

Appendix Table 1.--NET MIGRATION RATES, BY SEX, FROM CENSUS AND CWHS: 1955-60 AND 1960-65

Appendix Table 1 continued

Devision Directoria	Male		Fema	le s
and State	1955-60 Census <u>1</u> /	1960-65 CWHS <u>2</u> /	1955-60 Census <u>1</u> /	1960-65 CWHS <u>2</u>
South Atlantic				
Delaware	+4.6	+12.2	+4.9	+3.7
Maryland	+3.7	+7.2	+3.5	+7.3
District of Columbia	-10.8	-22.3	-9.6	-15.4
Virginia	+2.6	+1.9	+1.0	+3.4
West Virginia	-10.1	-5.9	-9.6	-4.8
North Carolina	-1.4	-2.2	-2.8	-2.5
South Carolina	-0.5	+0.6	-3.8	-0.2
Georgia	-0.7	-4.3	-1.7	-1.5
Florida	+16.8	(Z)	+17.6	+1.1
East South Central				
Kentucky	-4.3	-0.8	-5.1	-0.5
Tennessee	-2.7	+0.9	-3.0	-2.6
Alabama	-2.2	-3.6	-2.4	-1.1
Mississippi	-4.0	-3.9	-4.8	-2.6
West South Central				
Arkansas	-5.5	+1.0	-5.3	+1.0
Louisiana	-0.5	+4.2	-0.2	-4.2
Oklahoma	-4.0	-1.6	-4.4	-1.6
Texas	-0.1	-0.7	-0.3	-0.6
Mountain				
Montana	-3.1	-3.9	-3.2	-8.6
Idaho	-1.9	-7.8	-2.9	-5.6
Wyoming	-2.5	-11.0	-1.8	-3.6
Colorado	+3.8	+3.1	+4.5	+4.2
New Mexico	+6.0	-13.9	+5.5	-3.3
Arizona	+13.5	+6.8	+14.7	+10.5
Utah	+0.7	-0.4	+1.0	+0.2
Nevada	+8.3	+29.0	+10.1	+28.1
Pacific				
Washington	+1.6	+1.7	+1.0	+0.2
Oregon	-0.9	+0.4	-0.5	+0.5
California	+9.1	+6.8	+8.3	+7.9
Alaska	+10.1	+19.3	+5.5	+18.3
Hawaii	+5.0	-3.3	-0.2	+3.5

 $\underline{1}$ / Net migrants as a percent of census population 15-64 years of age. Includes military.

<u>2</u>/ Net employed civilian migrants as a percent of average base population in the Work History File, 1960-65. Includes an unknown number of immigrants from abroad.

(Z) Less than 0.05.

Appendix Table 2.--PERCENT NEGRO OF TOTAL POPULATION 15-64 YEARS OF AGE AND OF TOTAL WORKERS IN CWHS FILE FOR SMSA'S WITH 50,000 OR MORE NEGRO POPULATION IN 1960

Standard Metropolitan Statistical Area <u>1</u> /	Percent Negro of Total Population 15-64 in 1960	Percent Negro of Total Workers in CWHS File, 1960
250 000t Negro population 1960		
New York, N. Y.	11.5	11.5
Los Angeles Long Beach. Callf.	7.5	6.6
Chicago, Ill.	13.6	11.8
Philadelphia, Pa. N. J.	15.1	13.8
Detroit. Mich.	14.5	11.4
St. Louis. MoI11.	13.2	11.1
Washington, D. CMdVa.	23.3	24.6
Cleveland. Ohio	13.3	11.9
Baltimore. Md.	20.3	19.7
Houston. Texas	18.6	16.8
New Orleans. La.	28.1	26.2
Memohis. TennArk.	34.0	27.8
100.000-249.000 Negro population, 1960	0.1	F 0
San Francisco-Vakland, Callis	8.1	5.8
Fittsburgn, Fa	0.3	3.4
Newark, N. J	12.9	10.9
Cincinnati, Unio-KyInd.	10.2	8.4
	13./	12.1
Kansas City, MoKans.	10.2	9.1
Atlanta, Ga	21.5	18.1
Indianapolis, Ind.	10.5	8.5
Miami, Fla	13.9	15.9
Birmingham, Ala,	29.5	25.0
Norfolk-Portsmouth, Va.	23.9	31.1
Greensboro-Winston-Salem-High Point, N. C.	18.8	10.4
Jacksonville, Fla	22.0	22.7
	25.0	23.4
MODILE, ALA	28.4	25.2
50,000-99,000 Negro population, 1960		
Boston, Mass	2.9	2.7
Buffalo, N. Y.	6.2	5.9
Milwaukee, Wisc	4.5	4.5
Tampa-St. Petersburg, Fla.	11.6	11.8
Columbus, Ohio	10.5	8.2
Dayton, Ohio	9.5	7.0
Louisville, KyInd.	10.9	10.3
Gary-Hammond-East Chicago, Ind.	14.2	12.1
Fort Worth, Texas	9.9	9.0
Nashville, Tenn.	17.9	13.0
Fort Lauderdale-Hollywood, Fla.	15.0	17.6
Orlando, Fla.	16.2	14.2
Charlotte, N. C.	22.2	20.4
Beaumont-Port Arthur-Orange, Texas	19.3	17.9
Chattanooga, IennGa.	16.4	13.6
Shreveport, La.	30.4	28.7
Little Kock-North Little Kock, Ark	17.7	16.9
Coumbia, S. C	25.9	26.4
Unarleston, S. C	33.0	35.6
Daton Kouge, La	29.8	25.0
west falm Beach, Fla	23.2	19.2
Newport News-Hampton, Va.	26.4	28.5
	30.3	25.9
Columbus, GaAla.	26.8	27.0
Augusta, GaS. C.	26.3	24.1
Montgomery, Ala.	34.1	27.0
Savannah, Ga	32.6	31.6
Macon, Ga	28.3	27.8

1/ As defined in 1968.

Appendix Table 3.--STANDARD ERRORS OF 1960-65 NET MIGRATION RATES FOR STATES BASED ON SOCIAL SECURITY DATA

· · · · · · · · · · · · · · · · · · ·			
Region, Division, and State	A11 Classes	White <u>1</u> /	Negro
United States, Total			
Regions			
Northeastern States	0.2	0.2	0.6
North Central States	0.2	0.2	0.6
The South	0.2	0.2	0.5
The West	0.3	0.3	1.4
Northeast			
New England	0.4	0.4	2.7
Middle Atlantic	0.2	0.2	0.6
	0.2		0.0
North Central			
East North Central	0.2	0.2	0.7
West North Central	0.4	0.4	1.9
South			
South Atlantic	0.3	0.3	0.6
East South Central	0.5	0.5	1.0
West South Central	0.4	0.4	0.8
Weet			
Mountain	0.7	0.8	5.9
Pacific	0.3	0.3	1.3
	•••		
New England	. /		(1)
	1.4	1.4	
	1.0	1.0	(B) (B)
	0.5	2.0	(B) (1
Rhode Island	1 3	1 3	(B)
	0.7	0.8	3.8
	•••		510
Middle Atlantic			
New York	0.2	0.3	0.8
	0.4	0.0	1.8
rennsylvania	0.3	0.3	1.2
East North Central			
Ohio	0.4	0.4	1.3
Indiana	0.6	0.6	2.5
Illinois	0.4	0.4	1.1
Michigan	0.4	0.4	1.2
Wisconsin	0.6	0.6	(B)
West North Central			
Minnesota	0.7	0.7	(B)
Iowa	0.9	0.9	(B)
Missouri	0.7	0.7	2.0
North Dakota	2.6	2.6	(B)
South Dakota	2.3	2.3	(B)
Nebraska	1.3	1.3	(B)
Kansas	1.2	1.2	6.3

Appendix Table 3 continued

Region, Division, and State	A11 Classes	White <u>1</u> /	Negro
South Atlantic			
Dolavere	2 /	2.6	6 2
Maruland	0.8	1.0	1.8
District of Columbia	2.0	2 4	3 4
Virginia	0.8	0 0	1.6
Vilginia	1 2	1 2	5 1
North Carolina	0.6	0.7	13
South Carolina	1.0	1 1	1.0
Coorgia	0.8	0.0	1.4
	0.0	0.9	1.4
riorida	0.0	0.9	1.0
East South Central			
Kentucky	1.0	1.1	3.0
Tennessee	0.8	0.9	1.8
Alabama	0.9	1.1	1.7
Mississippi	1.2	1.5	2.0
Wast South Control			
	1 6	1.6	28
Louisiana	1.4	1.0	1 5
	1 1	1 2	4.7
	0.4	0.5	4.7
10A3	V.+	0.5	1.0
Mountain			
Montana	2.2	2.2	(B)
Idaho	2.6	2.6	(B)
Wyoming	3.6	3.6	(B)
Colorado	1.4	1.4	(B)
New Mexico	2.4	2.4	(B)
Arizona	1.7	1.7	(B)
Utah	1.7	1.7	(B)
Nevada	3.9	4.0	(B)
Pacific			
Washington	0.9	0.9	(B)
Aregon	1.2	1 2	(B)
California	03	0.3	1 /
Valltulula	3.7	37	(B)
Alaska	20	2 0	(B)
newell	2.0	2.0	

(B) Having less than 50,000 Negro population 15-64 years of age in 1960.

 $\underline{1}$ / Includes nonwhite races other than Negro.

Appendix Table 4.--STANDARD ERRORS OF 1960-65 NET MIGRATION RATES FOR SMSA'S BASED ON SOCIAL SECURITY DATA

(1 Sigma)

Standard Metropolitan Statistical Area <u>1</u> / Rank and Size Group	A11 Classes	White <u>2</u> /	Negro
250,000+ Negro population, 1960			
New York, N. Y.	0.4	0.4	1.1
Los Angeles-Long Beach, Calif	0.7	0.7	2.5
Chicago, Ill.	0.5	0.6	1.3
Philadelphia, PaN. J.	0.7	0.7	1.6
Detroit, Mich.	0.7	0.7	1.7
St. Louis, MoIll.	1.0	1.1	2.6
Washington, D. CMdVa.	1.4	1.7	2.4
Cleveland, Ohio	1.1	1.2	2.7
Baltimore, Md.	1.0	1.2	2.1
Houston, Texas	1./	1.8	3.0
New Orleans, La.	2.0	2.5	3.3
Memphis, lennArk	2.3	2.0	3.5
100,000-249,000 Negro Population, 1960	_		
San Francisco-Oakland, Calif	1.2	1.3	4.9
Pittsburgh, Pa.	0.9	1.0	3.0
Newark, N. J.	1.3	1.4	4.0
Cincinnati, Unio-Ky-Ind.	1.4	1.4	4.2
Dallas, lexas	1.7	1.0	4.3
Anisas City, MoNans.	1.0	1 0	35
Actanta, Ga	1.6	1.7	4.7
Miami Ela	2.1	2.3	4.6
Birmingham Ala	2.1	2.5	3.9
Norfolk-Portsmouth, Va.	3.1	3.9	5.1
Greenshoro-Winston-Salem-High Point. N. C.	2.1	2.3	4.8
Jacksonville, Fla.	3.5	4.0	7.4
Richmond, Va.	2.3	2.7	4.4
Mobile, Ala	3.9	4.6	7.1
50,000-99,000 Negro population, 1960	0.8	0.8	5 2
Boston, Mass.	0.8	0.0).J
Buffalo, N. Y.	1.2	1.2	5.4
Milwaukee, Wisc Fla	2 6	2.7	7.3
Columbus Obio	2.1	2.2	6.8
Devtop Ohio	1.9	2.0	6.6
Louisville, KyInd.	1.8	1.9	5.3
Gary-Hammond-East Chicago, Ind.	2.0	2.2	4.3
Fort Worth, Texas	2.8	2.9	8.9
Nashville, Tenn.	2.5	2.7	6.4
Fort Lauderdale-Hollywood, Fla	4.6	5.0	10.7
Orlando, Fla	4.5	4.8	12.4
Charlotte, N. C	3.0	3.4	6.3
Beaumont-Port Arthur, Texas	3.5	3.8	8.1
Chattanooga, TennGa	3.0	3.3	7.5
Shreveport, La	4.6	5.6	7.3
Little Rock-North Little Rock, Ark	3.6	4.1	7.2
Columbia, S. C.	3.8	4.4	/.2
Charleston, S. C.	4.4	5.8	0./
Daton Kouge, La.	4.9)•/ 5 E	9.0 11 7
west faim Deach, fla	5.0 / 7	5.6	8.6
newport news-nampton, va	3.0	<u>с</u> .7	6.7
Columbue Co_Ale	4.7	/ 5.7	7.6
Augusta Ga $-S$ C	4.2	5.0	7.4
Montgomery, Ala,	4.6	5.6	7.9
Savannah. Ga.	4.4	5.5	7.4
Macon, Ga.	5.2	6.5	8.6

 $\underline{1}$ / As defined in 1968.

 $\underline{2}$ / Includes nonwhite races other than Negro.