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Migration Trends and Population Change in New York Counties, 1950-1975

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HIGHLIGHTS

After decades of continuous growth, New York State's population appears to be declining. This change has important implications for the economy of the state and for the social and political life of its communities.

Of the two components of population change, natural increase and net migration, natural increase is the most carefully monitored and recorded, but net migration varies more widely and has a more direct and more immediate effect on population numbers and demographic characteristics.

Trends in the direction and volume of net migration during the past 25 years indicate that the reversal of the nonmetropolitan-metropolitan migration is a continuation of redistribution that began with the movement to the suburbs. Geographically, reversal of the traditional population flow from rural to urban areas is illustrated by an expanding wave of population movement away from the central cities of metropolitan areas, first to the suburbs and then to nonmetropolitan counties beyond. Although the direction of overall net migration has changed, both streams of migration continue. But they involve different age segments of the population.

Net migration was directly associated with natural

increase during the 1950-60 decade; that is, net migration was high and natural increase rates were high. But by the 1970-75 period that association had weakened substantially, especially in nonmetropolitan and central city metropolitan counties, reflecting changes in the age composition of the migrant streams as the movement from nonmetropolitan to metropolitan areas was reversed.

Analysis of net migration data by age for counties shows that net movements tend to occur simultaneously in four age clusters: 0-14, 15-29, 30-59, and 60 and older. Furthermore, two of these clusters, the 0-14 and 30-59, or the family age groups, tend to move together.

Whereas youth predominates in nonmetropolitan to metropolitan migration, the family age groups 0-14 and 30-59 are the predominant age groups of metropolitan to nonmetropolitan migration. In fact, many metropolitan counties continue to attract youth (15-24 years old) while losing population in the other age groups.

During the two decades 1950-60 and 1960-70 New York State exchanged older population for younger population with other states. New York has also been exchanging white for nonwhite population.

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Introduction

Population and population trends are very important to many persons and groups, including business and industrial interests, governments, developers, planning commissions, school boards, and many others who are concerned with state and local community affairs. Concerns over population trends are especially heightened when a change in the direction of trends occurs, as has happened in New York State in recent years.

Since 1970 New York State has been declining in population. The decline is most pronounced in metropolitan centers, especially the central cities, and has become of major concern to state as well as city officials. Although the experience of losing population is not a new one for communities of the state, it has previously happened mostly in rural areas rather than large urban ones.

The crises confronted by communities with declining population are therefore not new, but because the communities currently experiencing decline are primarily the large urban centers, more people are involved. Furthermore, because the metropolitan population constitutes such a large proportion of the total state population, their problems affect the state as a whole more intensely. New York City budget crises, for example, produce budget crises for the state government that reverberate into local communities of all sizes across the state.

To understand the meaning of population decline it is important to understand the components of population change. Only then can efforts to find solutions to the problems caused by population decline hope to be successful.

The purpose of this report is to describe the components of population change and suggest how they have influenced population trends and how they may be better understood in order to anticipate possible effects.

Population change has two components, natural increase, which is the balance between births and deaths, and net migration. In our highly mobile society, net migration is the more variable of the two and, consequently, more important in explaining major or rapid change in population numbers. Also, because it is generally selective on demographic characteristics such as age, sex, family status, educational level, occupational skills, and income, migration affects an area's social structure more directly, more quickly, and more extensively than does natural increase. Migration's impact on schools and other social services and on commercial services and other sectors of the economy can be sudden and sometimes cataclysmic.

Data Sources

Data on population are available from the decennial censuses since 1790 and in yearly estimates since 1970 for counties and larger governmental units.

Data on migration are not so widely available. Movements of people are not routinely recorded as are births and deaths. Despite our being a nation of high mobility, attention to mobility and systematic attempts to measure it and its effects are of quite recent origin, and we still do not have a comprehensive program for recording migration.

Because we lack extensive direct data, information on movements of population must be inferred from other records. Specifically, migration is inferred from residuals of population change after natural increase (births minus deaths) is accounted for. This is one of the major sources of migration data. Other sources include state of birth information collected by the Census, which measures lifetime movements of people, and information on place of residence one year or five years before the census year, which provides information on streams of migration. The Social Security system provides another source of information on migration of the portion of the population in covered employment in the continuous work history records (only a 1% sample).

Considering the great importance of migration in understanding population change and accompanying changes in the social and economic structure of communities, it is hard to understand why we have not developed a better reporting system.

Comparative Population Trends in New York State

Although the primary emphasis in this report is on population changes in the counties of New York State, how the state compares with the Northeast region and with the entire United States is important background.

Table 1 shows the annual rates of population change for the United States, the four census regions of the nation, the Middle Atlantic division, and New York State for the period 1900-1975. See figure 1 for the boundaries of census regions and the Middle Atlantic division.

The rate of population growth in the United States has varied from decade to decade, with low points in growth rates during the decade of the Great Depression (1930-40) and during the most recent period (1970-75). All four major geographic regions reflect the same general growth pattern through the decade of the 1950s, with the principal difference being the much larger rate of annual growth in the West. Since 1960 the rate of growth has declined for all regions except the South. The South has had an increase in

Table 1. Annual rates of population change for the United States, regions of the U.S., and New York State: 1900-75

	Annual rate of population change								1975 Total population
	1900-1910	1910-1920	1920-1930	1930-1940	1940-1950	1950-1960	1960-1970	1970-1975	
United States	1.90	1.39	1.50	.70	1.35	1.69	1.25	.96	213,032,000
North Central	1.26	1.29	1.26	.39	1.02	1.49	.92	.37	57,636,000
South	1.81	1.20	1.33	.96	1.24	1.52	1.33	1.66	68,041,000
West	4.87	2.62	2.89	1.54	3.36	3.26	2.15	1.76	37,899,000
Northeast	2.06	1.37	1.49	.44	.93	1.24	.93	.16	49,456,000
Middle Atlantic	2.22	1.42	1.65	.48	.91	1.25	.85	.03	37,269,000
New York State	2.25	1.30	1.92	.68	.95	1.24	.83	-.18	18,076,000

Source: U.S. Census of Population through 1970; 1975 estimates from Current Population Reports, Series P-25, No. 642, December 1976.

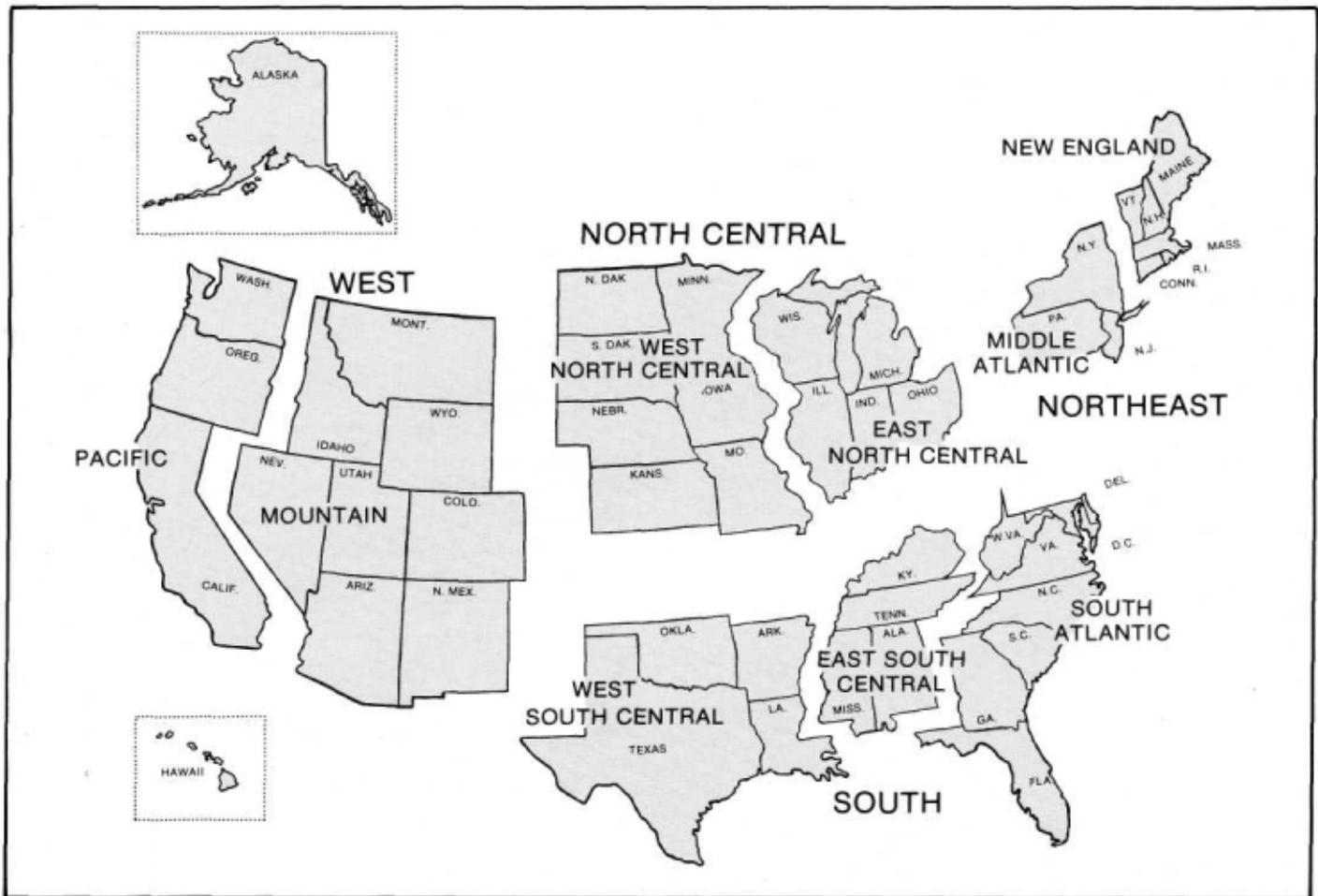


Figure 1. Regions and geographic divisions of the United States (Source: Department of Commerce, Bureau of the Census)

rate in the most recent (1970-75) period and, if current trends continue, is likely to be the fastest growing census region by the end of the decade. Among the four regions, the Northeast and the North

Central regions have experienced the greatest decline in rate of growth. Within the Northeast, growth rates in the Middle Atlantic states have declined slightly more than those of the region as a whole, and within the Middle Atlantic, New

York's growth rate has declined more than that of the Middle Atlantic group as a whole. Before 1970, New York experienced a pattern of decline in growth rate only slightly greater than that of the Northeast and the Middle Atlantic division. But since 1970 and probably since some date in the 1960s (had we year-to-year data), New York has actually declined in population, while both the Northeast and the Middle Atlantic states have continued a very slow growth.

Components of Population Change

Long-term trends in population and the comparative contributions of natural increase and net migration to these trends since 1870 are presented in table 2. (Estimates of net migration are available only since the decade 1870-80.)

Of the two components of population change, natural increase is the most stable, since its fluctuations reflect trends in birth rates and death rates. Death rates have been declining rather steadily, but birth rates have fluctuated, reaching low points in the 1930s and the 1970s, with a high in

between. Natural increase, therefore, most closely follows fluctuations in birth rates.

In contrast to natural increase, net migration rates have fluctuated widely, ranging from a high of 15 percent for the decade 1900-10 (for an average annual rate of 1.5%) to a negative rate of -0.30 for the five-year period 1970-75 (an average rate of -0.06%). If annual data on migration were available, they would probably show that since some time in the mid-1960s more people have been leaving New York State than have been moving in. Projection of present trends indicates a substantial net out-migration for the current decade. Opinions on these prospects vary widely, with some expressing optimism that current trends are only a temporary adjustment and others expecting that the flight of businesses and people from the state will continue for some time at the same or even at an accelerating rate. Preliminary data for 1978 support the latter opinion.

Disaggregating the Statewide Trends

Statewide trends are a combination, or averaging, of trends in various segments of the state's population—that is, state trends represent the average of trends among different racial groups, among different age groups, and between metropolitan and nonmetropolitan populations.

Table 2. Population trends and components of population change in New York State: 1800-1975

Year	Population*	Percent change from preceding census	Estimated annual rate of natural increase†	Estimated annual rate of net migration‡
1800				
1810	959,049	62.8		
1820	1,372,812	43.1		
1830	1,918,608	39.8		
1840	2,428,921	26.6		
1850	3,097,394	27.5		
1860	3,880,735	25.3		
1870	4,382,759	12.9		
1880	5,082,871	16.0	1.46	0.14
1890	6,003,174	18.1	1.03	0.78
1900	7,268,894	21.1	1.10	1.01
1910	9,113,614	25.4	1.08	1.46
1920	10,385,227	14.0	0.89	0.51
1930	12,588,066	21.2	1.10	1.02
1940	13,479,142	7.1	0.40	0.31
1950	14,830,192	10.0	0.94	0.06
1960	16,782,304	13.2	1.17	0.15
1970	18,241,398	8.7	0.91	-0.04
1975‡	18,076,000	-0.9	0.42	-0.06

Sources:

*U.S. Bureau of the Census (1937b: table 1).

†Rates for the period 1870-1950 are based on estimates of net migration in Lee et al. (1957: Vol. I, p. 182). The others are from the U.S. Census of Population.

‡1975 data from U.S. Bureau of the Census (1976: No. 640).

Race

Interstate migration has been redistributing racial groups among the regions of the United States in recent decades. Most dramatic is the movement of blacks from the rural South to the urban centers of the Northeast and the North Central region. In more recent years there has been some return movement of population from the Northeast and the North Central region to the South, including blacks (Long and Hansen, 1977).

Figure 2 provides a general picture of the participation of New York State in the geographic redistribution of racial groups during the two decades 1950-60 and 1960-70. Both numbers of people and migration rates are presented, because the difference in size between the white and the nonwhite segments of the population can make comparison of rates misleading in interpreting effects on the total population.

New York State has been trading white for nonwhite population. The State had a net out-migration of whites and a net in-migration of nonwhites in both decades. In the 1950-60 decade the net in-migration of nonwhites exceeded the net out-migration of whites, giving the state an overall net in-migration for the decade. But in the 1960s, net out-migration of whites increased so much (from 72,002 to 549,864) that although net in-migration of nonwhites also increased, it was not sufficient to prevent a net out-migration of total population from the state.

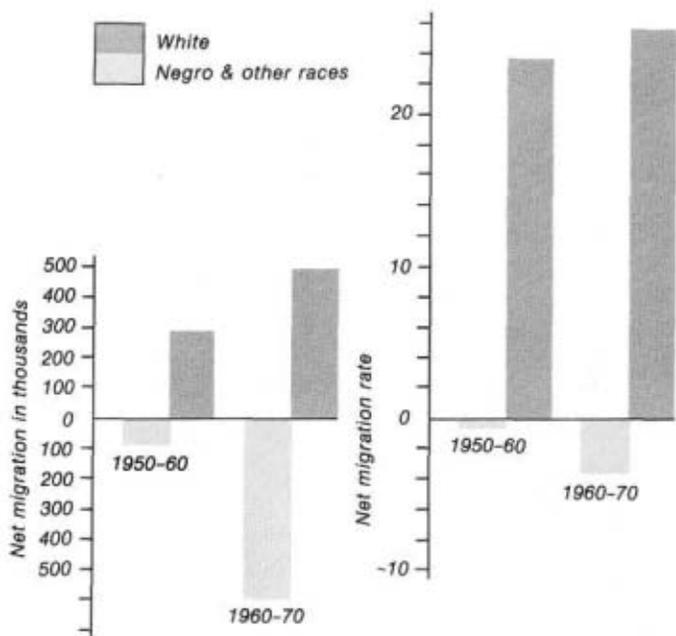


Figure 2. Net migration and net migration rates of New York State population by race: 1950-60 and 1960-70

Age Groups

Age composition of the population affects and is affected by both natural increase and net migration. Furthermore, changes in age composition have important social consequences, with major effects on such factors as the proportion of productive workers in the population, the kinds of social and commercial services necessary, and the relative level of demand for certain services (schools, medical services, hospitals, and so on).

The nature of the social consequences of changes in age composition is affected by differences in reasons for migration of persons in the same age group. For example, young people seeking college education transfer purchasing power and demand for services typical of that age group to college communities from other communities, but since most of them will leave the community after a stay of about four years, they add little of permanence to the population base. On the other hand, in-migration of young adults taking jobs in a community adds productive capacity and creates demand for housing, schools, and other child-related goods and services and adds to the permanent population base.

Although the relationship between age composition and components of population is circular in the sense that migration influences age composition and age composition in turn influences rates of natural increase, it is possible to extract segments of the relationship and treat them as linear. For example, high birth rates and low or medium death rates result in high natural increase, which, when coupled with little or no net migration, produces a young population. On

the other hand, a situation of declining birth rates and stable death rates with net out-migration—the situation prevailing in the state in recent decades—causes the median age to increase. It also changes the service structure of communities by reducing the demand for school facilities and other goods and services required by families with children and by expanding the demand for geriatric facilities and other goods and services required for older people.

Presentation of the effect of the components of population change on the age distribution of the population over time is complicated by the progression of age cohorts through the population pyramid. Table 3 presents the percent change in New York population by five-year age groups for the two decades 1950-60 and 1960-70. Changes in the rates of growth or decline of specific age groups were substantial. For example, the 0-4 age group increased 24 percent during the 1950-60 decade and declined 12 percent during the 1960-70 decade, while the age group 20-24 declined 15 percent in the 1950s but increased 48 percent in the 1960s. Obviously the growth rate change in the 0-4 age group was caused mainly by changes in number of births, with a small but unknown contribution from net migration. The change in population in the 20-24 age group reflects changes in number of births two decades earlier—that is, changes from the decade of the 1930s to the decade of the 1940s—and quite likely included a substantial contribution from net migration during the interim period.

Table 3. Percent change in New York State population by age group: 1950-60 and 1960-70

Age group	1950-1960*	1960-1970†
0-4	23.9	-12.1
5-9	39.8	9.7
10-14	57.5	21.8
15-19	21.0	42.9
20-24	-14.9	47.9
25-29	-15.2	19.7
30-34	-0.8	-10.8
35-39	2.0	-15.3
40-44	1.3	-1.9
45-49	8.0	1.7
50-54	5.3	2.3
55-59	12.6	5.0
60-64	18.1	6.6
65-69	26.7	3.7
70-74	39.1	11.7
75+	39.8	36.3
All ages	13.2	8.7

Sources:

*U.S. Bureau of the Census (1961: table 138).

†U.S. Bureau of the Census (1973: table 16).

Some appreciation of the nature of this phenomenon can be obtained by inspecting figure 3. In figure 3 the population aged 0-4 in 1960 (1,691,000) is in the 10-14 year category in 1970 (1,712,000), the 5-9 group of 1960 (1,531,000) is in the 15-19 year group in 1970 (1,563,000), and so on. Thus, when a large age cohort resulting from high birth rates such as occurred in the late 1940s and early 1950s follows a smaller cohort such as those born in the late 1930s and early 1940s, population by age group exhibits a wave of increases that ripples up through the population pyramid. A bulge or indentation in the population pyramid may be reduced or expanded by net migration, but it is likely to remain visible throughout the life span of the cohorts involved. For example, the small cohort of persons born during the 1930s is evident in the size of the two age groups 20-24 and 25-29 in 1960 and the 30-34 and 35-39-year-olds in 1970 (figure 3).

Because of variations in size of birth cohorts it is possible to have a decline in the population of an age group (as distinct from an age cohort) coupled with net in-migration of population in that age group. For example, between 1950

and 1960 the population of New York State in the age group 25-29 declined by 15 percent (table 3) although net in-migration of the population 25-29 was 15 percent (table 4).

Migration is selective by age. Generally speaking, youth and young adults are more likely to change residence than are older adults with families, especially families with school-age children. Older persons whose children are grown and have left home are intermediate in mobility.

Not only the amount but the direction of migration varies with age. Figure 4 presents the data of table 4 in chart form and graphically illustrates this variation. For New York State during both decades, 1950-60 and 1960-70, there was net out-migration of persons in all age groups 40 and older, but for most age groups under 40 there was net in-migration. A striking fact is that in rates (but not number of persons) the out-migration of older persons was as high as the in-migration of younger persons. The pattern was most pronounced in the decade 1950-60, when there was net in-migration of all age groups under 40 and net out-migration of all age groups 40 and older. In the 1960-70

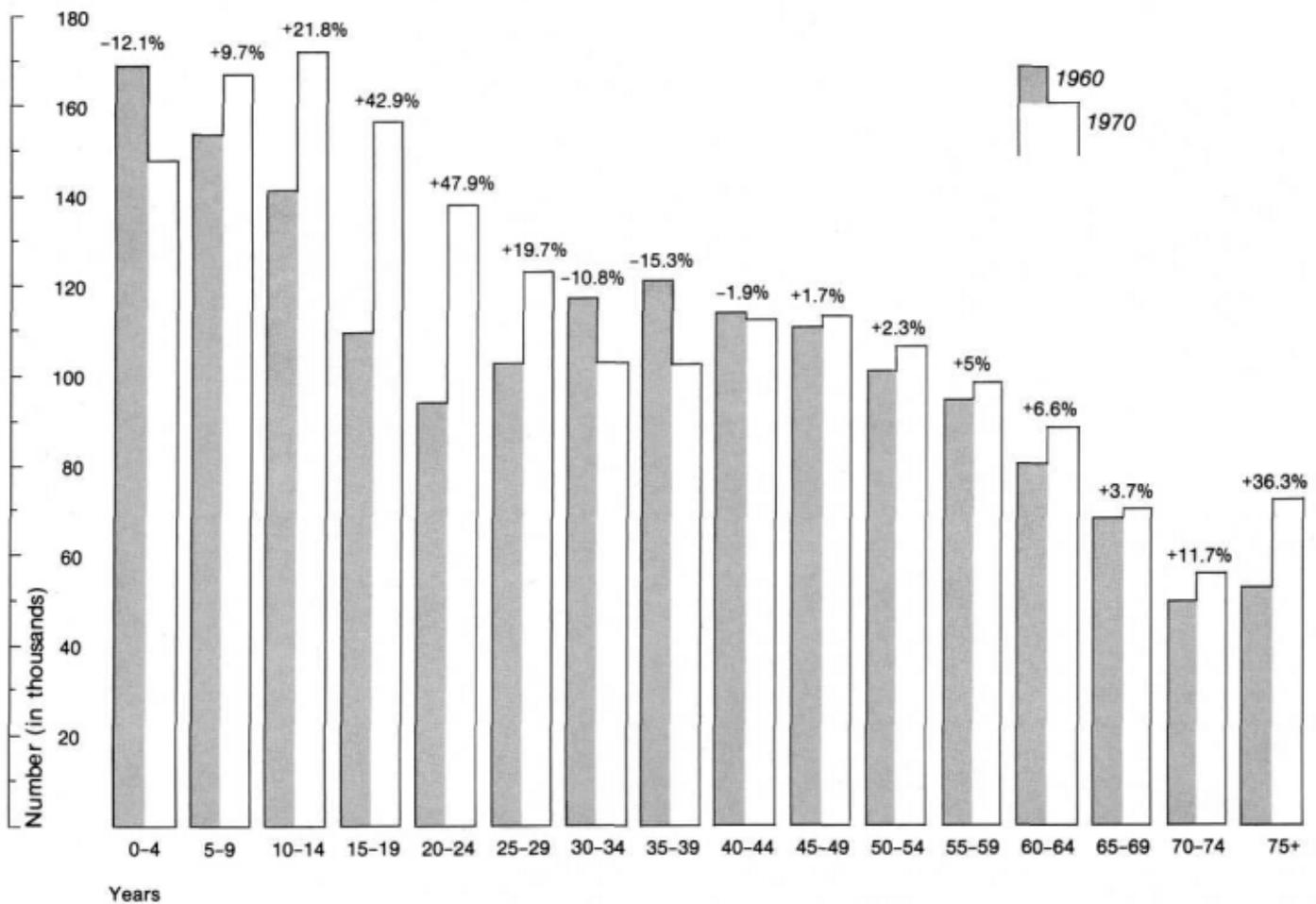


Figure 3. New York population by age: 1970 and 1960. (Source: *U.S. Bureau of the Census [1973: table 20]; †[1961: table 16].)

Table 4. Net migration rates of New York State population by age group: 1950-60 and 1960-70

Age group	1950-60*	1960-1970†
0-4	0.9	-0.6
5-9	1.0	-0.5
10-14	1.8	1.0
15-19	1.9	1.5
20-24	9.7	-0.6
25-29	15.3	14.4
30-34	7.7	11.5
35-39	1.7	1.4
40-44	-0.2	-1.2
45-49	-0.5	-1.8
50-54	-0.9	-2.4
55-59	-1.3	-3.5
60-64	-3.4	-6.4
65-69	-4.6	-9.4
70-74	-6.7	-11.0
75+	-9.2	-8.2
All ages	1.3	-0.4

Sources:

*Bowles and Tarver, 1965, Vol. I, p. 43.

†Bowles, Beale, and Lee, 1977, Part I, p. 46.

decade all age groups 40 and older had net out-migration, whereas five of the eight groups under 40 were in the in-migration column, and the other three with net out-migration had very low rates.

When we split the population into two groups, those under 40 and those 40 and older, we find that the state experienced an exchange of older persons for younger persons. In the 1950s the state gained about twice as many persons under 40 as it lost persons over 40, whereas in the 1960s it lost population in the exchange because the number of out-migrants 40 and older exceeded the number of in-migrants under 40 by about one-fourth. Thus, although the interchange of population with other states through migration resulted in a net gain of younger population, the relative volumes were such that in the 1950s the trade resulted in a net gain of 210,000 total population while in the 1960s it resulted in a net loss of 67,000.

Metropolitan and Nonmetropolitan Areas

The recent heavy net out-migration from the state and the consequent declines in population have been accounted for primarily by losses from metropolitan areas (fig. 5). This does not mean, as we shall see in analyzing county data, that all metropolitan counties have experienced net out-migration and all nonmetropolitan counties have experienced net in-migration. But it is clear that metropolitan counties are primarily responsible for population decline in the state, with net migration the principal contributing factor. However, it should be noted that natural increase

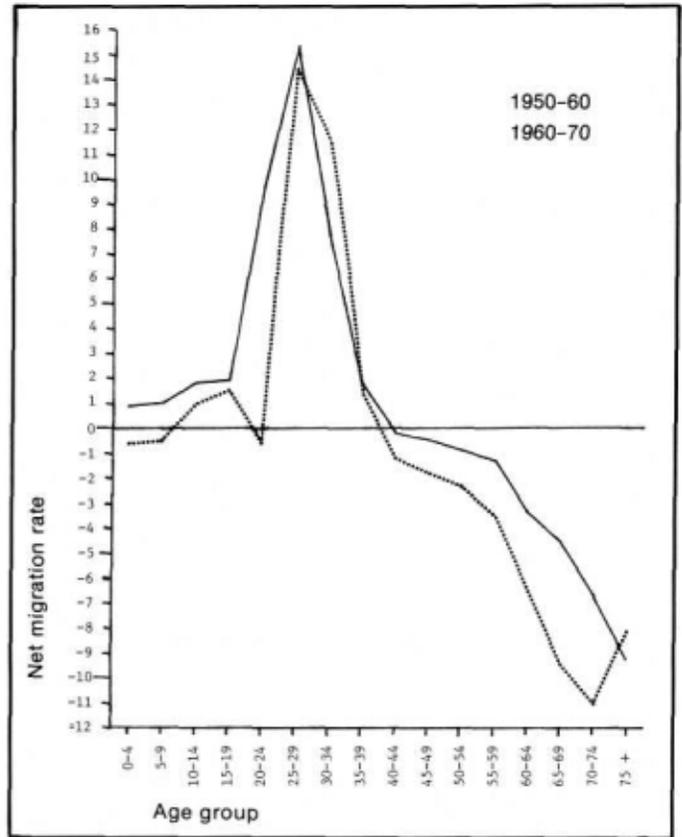
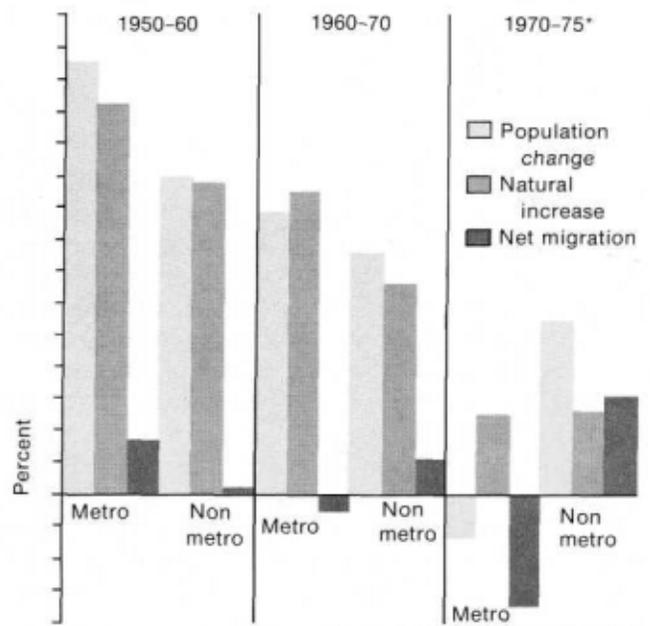


Figure 4. Net migration rates of New York State population by age, 1950-60 and 1960-70



*1970-75 rates are 5-year rates.

Figure 5. Components of population change in metropolitan and nonmetropolitan populations of New York State: 1950-60, 1960-70, and 1970-75*

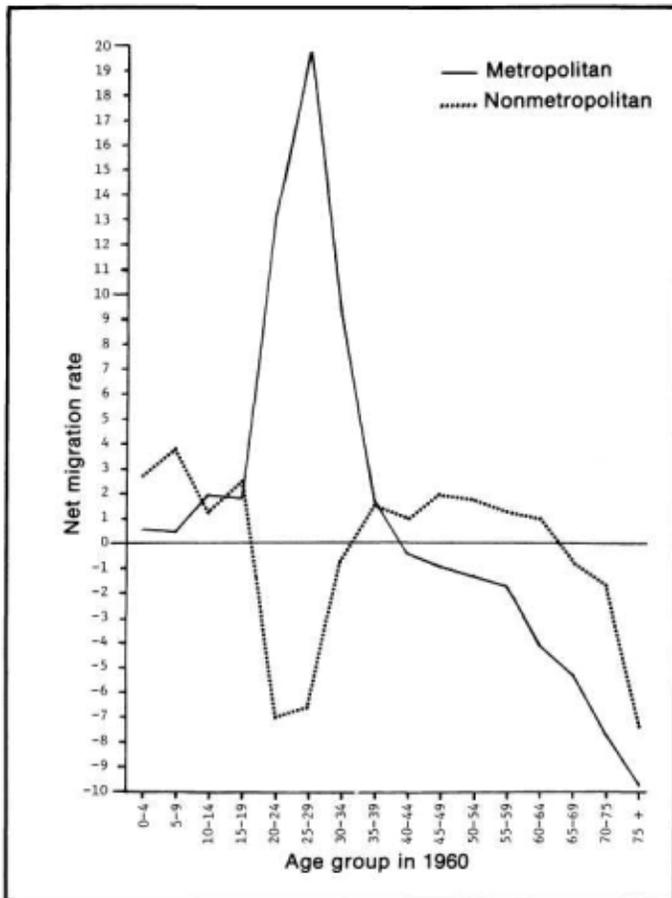


Figure 6. Net migration rates of the metropolitan and nonmetropolitan populations of New York State by age group, 1950-60. (Source: Bowles and Tarver, 1965, Vol. II.)

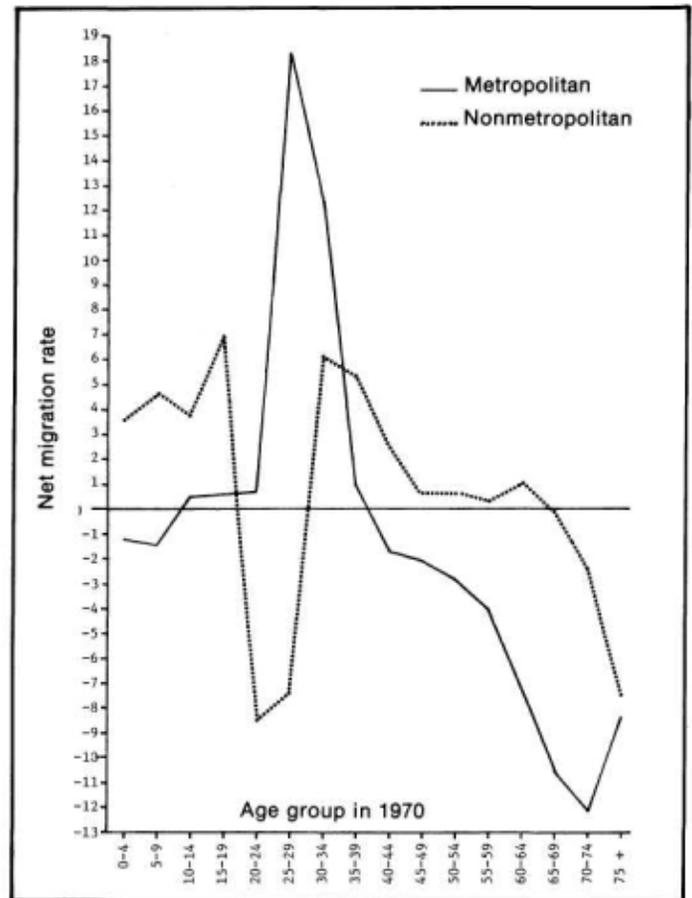


Figure 7. Net migration rates of the metropolitan and nonmetropolitan populations of New York State by age group, 1960-70. (Source: Bowles, Beale, and Lee, 1977, Part 7.)

also declined in both nonmetropolitan and metropolitan areas.

By considering age and metro/nonmetro classification together (figures 6 and 7) we see that the age distribution of migration to and from metropolitan areas differs from that to and from nonmetropolitan places. In both decades major differences in the direction of migration as well as in the ratio of net migration for the various age groups occurred. The major differences were in the direction of net migration of the population in the young adult age groups (20-24 and 25-29). More people in these age groups left nonmetropolitan areas than entered them, and more people in these age groups entered metropolitan areas than left them during both decades. The percentage of net in-migration of 20-24-year-olds to metropolitan areas was greater in the 1950-60 decade than in the 1960s, but otherwise the patterns for the two decades were very similar.

There was a net out-migration of adults in all age groups 40 and older from metropolitan areas of the state in both decades, and the rates generally increased as age increased. In contrast, nonmetropolitan areas experienced net out-

migration of young adults 20-29 and a net in-migration of the groups aged 30-60 with an accompanying in-migration of their children (0-19-year-olds), reflecting primarily the movement of families to suburbs and smaller cities outside metropolitan areas.

In 1950-60 New York State had a net out-migration of 186,545 persons 40 and older, of which 152,941 (or 82%) were 60 or older. In 1960-70 the number was still larger, 357,391, of which 261,150 (or 73%) were 60 or older. It follows, therefore, that a substantial percentage of the net out-migration of older people from individual counties was migration out of the state. It is impossible to determine from available data what the proportion was for each county, but it seems likely that the major portion was from the metropolitan counties, since they account for a majority of the total population of the state.

As far as the interchange of people between metropolitan and nonmetropolitan areas within the state is concerned, metropolitan populations traded families of adults 30-60 years of age and their children to nonmetropolitan populations for young adults in their 20s from the nonmetropolitan

areas. The traditional attraction of the metropolitan areas for young people appears to persist in spite of growing urban problems and central city decay.

State of Birth

Net migration figures tell whether the state has gained or lost population from migration and the amount and rate of gain or loss during a specific period, but they do not tell where the in-migrants came from or the destinations of the out-migrants. Two kinds of information obtained by the census provide some clues as to the origin and destination of migrants. These are data on state of birth and place of residence five years before the census.

New York has continued to have a relatively large foreign-born population, 13.6% in 1960 and 11.5% in 1970. Of the native population in 1970, four-fifths (77%) were born in the state, while 14 percent were born in another state and 4 percent were born in an outlying U.S. area (primarily Puerto Rico) or born abroad. (Another 5% did not report the state of their birth.) Among those born in a different state, the largest group (45%) were born in another state in the Northeast and the second largest group (37%) were born in the South. The proportions for the 1960 population were very similar.

Table 6 provides another view of migration by showing the proportion of the population living in the same house at the time of the 1970 census as they were living in five years earlier. These data are presented by major racial group to provide information on differences in origin of migrants by race.

Three-fifths (60%) of all persons in the state in 1970 were living in the same house in April 1970 as they were living in five years earlier. Another 33 percent were in a different house in the U.S. These are classified as movers. Among the movers three-fifths (59%) had moved from a house in the same county and 29 percent had moved from a house in a different county but in the same state, leaving only about 11 percent who had moved from out of state. Nearly half of the out-of-state movers (4.5% of all movers) had come from another state in the Northeast.

There were major differences between races in the proportion still in the same house. Blacks and Puerto Ricans were more likely to have changed residence. Also there were major differences between races in the region of origin of those coming from out of state. Whereas nearly half of the out-of-state whites came from the Northeast, three-fourths of the out-of-state blacks came from the South. Out-of-state Puerto Ricans came primarily from Puerto Rico.

Population Change and Net Migration for Counties

From the above discussion of net migration and population change in New York State as a whole and in the various age, racial, and residential segments of the state's population, we turn to an analysis of net migration and population change at the county level. Changes in county

Table 5. State of birth of New York State population: 1960 and 1970

State of birth	1960*	1970†
	<i>percent</i>	
Total native population	100.0	100.0
Born in New York State	77.3	77.0
Born in different state	15.3	13.8
Born in an outlying U.S. area or born abroad of native parents‡	3.4	3.9
State of birth not reported	4.0	5.2
Born in different state	100.0	100.0
Born in Northeast	42.5	44.8
Born in North Central region	15.3	14.8
Born in South	37.6	36.9
Born in West	4.6	3.5

Sources:

*U.S. Bureau of the Census (1961: table 98).

†U.S. Bureau of the Census (1973: table 140).

‡This group is mainly composed of persons born in Puerto Rico.

Table 6. Residence in 1965 of the New York State population 5 years old or older in 1970, by race

Residence in 1965	Total	White	Negro	Puerto Rican*
	<i>percent</i>			
Total population 5 years old or older in 1970	100.0	100.0	100.0	100.0
Same house	59.6	60.9	51.8	43.9
Different house in U.S.	33.1	32.8	35.5	42.3
Abroad	2.5	2.1	3.9	7.7
Moved, 1965 residence not reported	4.8	4.3	8.7	6.1
Total movers within the U.S.	100.0	100.0	100.0	100.0
Same county	59.3	58.6	64.6	70.6
Different county	29.4	30.0	24.8	70.6
Same state	29.4	30.0	24.8	70.6
Different state:				
Northeast	4.5	5.0	1.4	1.0
North Central region	2.1	2.2	1.0	0.4
South	3.3	2.7	7.6	0.4
West	1.4	1.5	0.5	0.2

Source: U.S. Census of Population, 1970, Vol. 1, Characteristics of the Population, Part 34, New York, table 50.

*Puerto Rican birth or parentage.

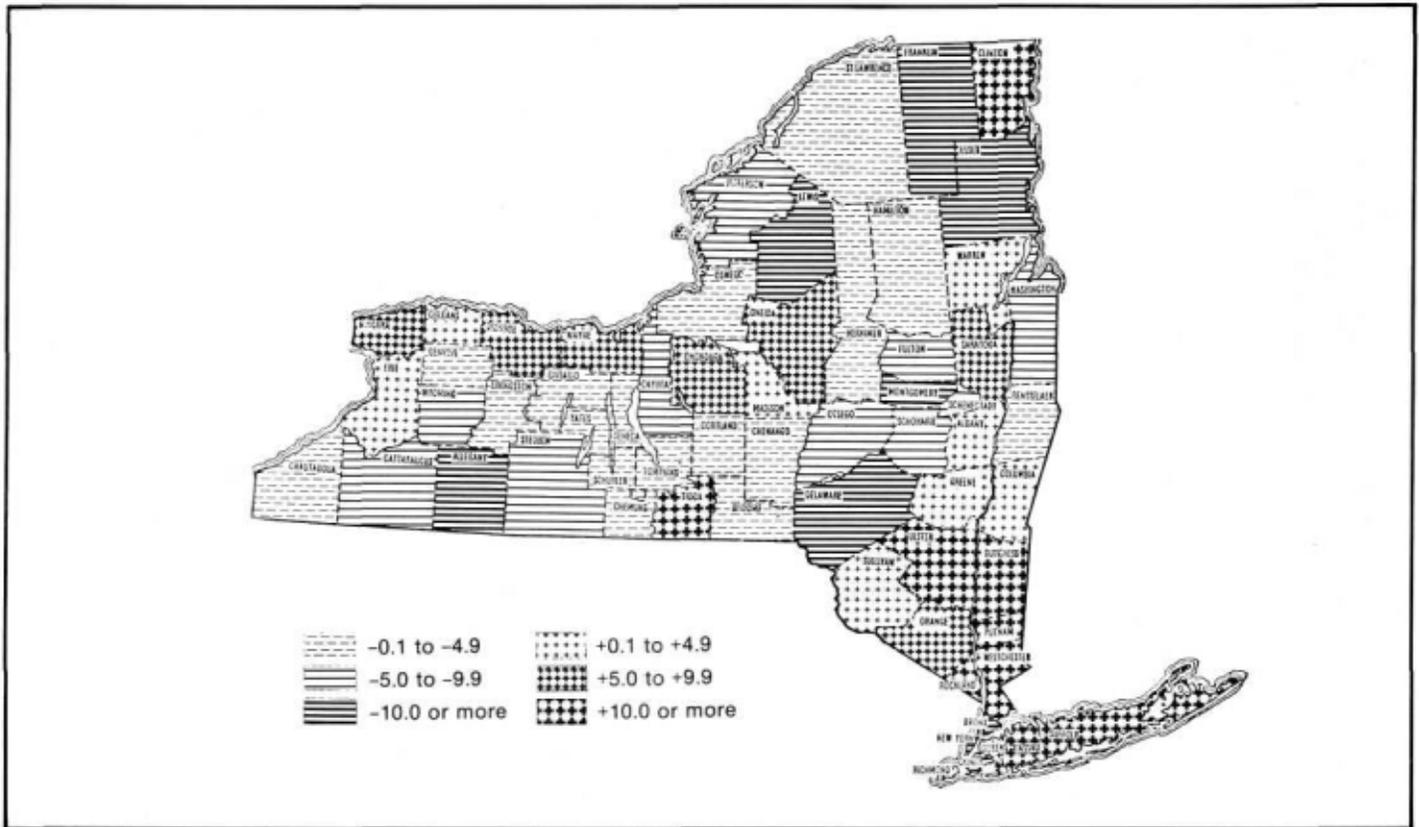


Figure 8. Net migration, direction, and volume: 1950-60

populations from census period to census period are available for every decade since the first census of population, but net migration data are less available. Unpublished estimates were made by Gardner and Cohen (n.d.) for the 1930-40 and 1940-50 decades, but published data are available only for the two decades 1950-60 and 1960-70 and for the five-year period 1970-75. This analysis has been limited to published data.

Detailed information on population change and characteristics of the population of individual counties is presented in the *People of* series (Larson, 1973), which provides a bulletin, based on the 1970 census, for each county in the state except the boroughs of New York City. Therefore focus here is on net migration data and will include only enough population change data to facilitate understanding the relationship between population change and net migration.

Two kinds of net migration data are available. The census provides estimates of net migration of the total population for each decennial period before 1970 and annually since 1970. In addition, the work of Gladys Bowles and others (Bowles & Tarver, 1965; Bowles, Beale, & Lee, 1975) has made available age-specific net migration data broken down by sex and race (white and nonwhite) for all counties in the state for the decades 1950-60 and 1960-70. (Racial breakdowns are available for only those counties with 5000 or more nonwhites.) Tables containing these data for each

county are reproduced in the appendix. To discuss the details for each would be too lengthy for publication. Instead, data on net migration trends of the total population of counties will be discussed first and then age-specific net migration rates for selected counties will be discussed to illustrate typical situations and to demonstrate the usefulness of the data.

Counties Classified by Direction of Net Migration, 1950-60, 1960-70, and 1970-75

First, to present an overview of variations in patterns of migration, counties were classified according to the direction and rate of net migration during three periods of time: 1950-60, 1960-70, and 1970-75. Three maps (figures 8, 9, and 10) show the direction and volume of net migration for each county during these three time periods. Rates of net migration are divided into three categories—0-4 percent, 5-9 percent, and 10 or more percent—and are represented by different hatch patterns on the maps. Percentages for 1970-75 were doubled to make them comparable to the decennial percentages.

For the 1950-60 decade, counties with net in-migration were primarily in four areas of the state: around New York City, along the Hudson River, in the central Mohawk Valley, and along the southern shore of Lake Ontario. Net

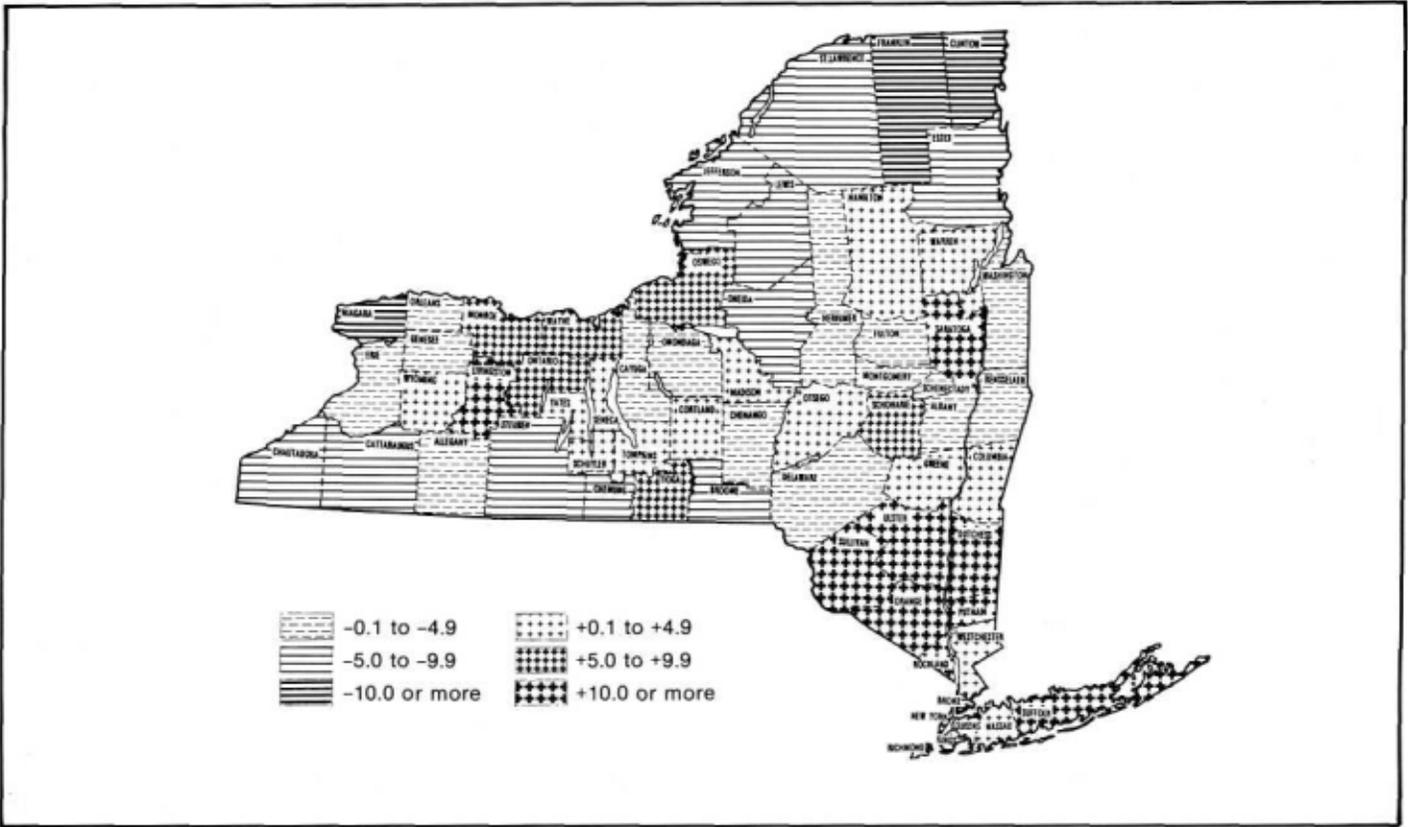


Figure 9. Net migration, direction, and volume: 1960-70

out-migration counties included the central city counties of New York City, most of the rural counties, and a few scattered ones with urban places under 50,000. Two rural counties, Tioga and Clinton, do not fit this generalization, having had substantial net in-migration (10% or more).

During the 1960-70 decade, counties around New York City continued to experience substantial net in-migration, with some northward expansion of the area to include Schoharie and Otsego counties. The area of in-migration centered on Saratoga County expanded to include Hamilton County and Warren County. Eight counties in the Finger Lakes region became net in-migration counties, together with Oswego and Madison, producing a block of in-migration counties in the center of the state with only Cayuga and Onondaga in the out-migration column. Except for these changes and Clinton County, the out-migration counties remained the same. The central-city counties of New York City were joined in the 1960s by three counties in the Buffalo area (Erie, Niagara, and Orleans) and Onondaga County in the out-migration category, and Clinton County joined the other rural counties outside the Finger Lakes region in the out-migration category.

In the five-year period 1970-75 some of the shifts noticeable in the 1960-70 decade continued. The in-migration pattern around New York City advanced outward from the city, bringing Delaware County into the in-

migration category, while counties such as Westchester, Nassau, and Queens joined the central-city counties New York, Kings, and Bronx in the out-migration category. The area of net in-migration around Saratoga County expanded still further to include Fulton and Washington counties. Monroe, Wayne, and Seneca counties changed to net out-migration, and two western Southern Tier counties, Cattaraugus and Allegany, became net in-migration counties. Tioga County, which had experienced net in-migration during both the 1950s and the 1960s, joined Steuben, Chemung, and Broome counties in the net out-migration category, and Clinton County switched back to net in-migration.

The map in figure 11 summarizes the trends in net migration over the three time periods by classifying counties into three main categories: those with net out-migration during all three periods (Out-Out-Out), those with net in-migration during all three periods (In-In-In), and those shifting from one type to the other. The latter group were further classified according to their positions in each period into those changing from out- to in-migration (Out-Out-In and Out-In-In), those changing from in- to out-migration (In-In-Out and In-Out-Out) and those shifting categories twice and thus ending up as they began (Out-In-Out and In-Out-In).

The counties consistently experiencing net in-migration

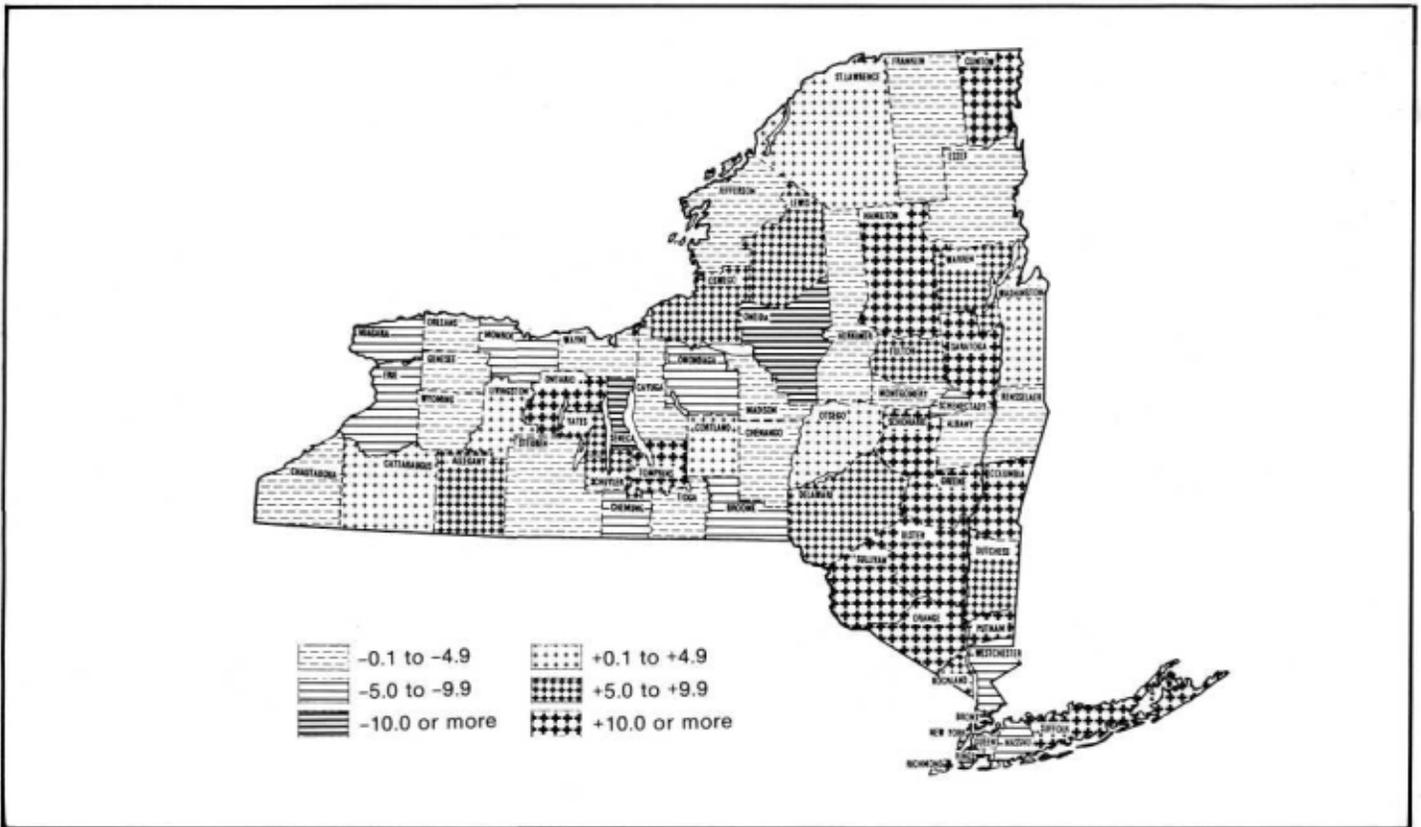


Figure 10. Net migration, direction, and volume: 1970-75

were in two groups: suburban counties around New York City and two counties (Saratoga and Warren) in the Saratoga Springs-Lake George area. These were the only two areas of the state that consistently attracted more people than they lost to other areas throughout the 25-year period 1950-75.

The consistently net out-migration counties included three central metropolitan counties of New York City (Bronx, Kings, and New York) and three upstate metropolitan counties (Broome, Rensselaer, and Schenectady), but otherwise they were scattered around the state and included both rural counties and nonmetropolitan urban counties, that is, counties with urban places of under 50,000 but over 10,000 population.

Counties shifting from out- to in-migration were concentrated in five areas: the Finger Lakes region, three counties on the fringe of the suburban growth area around New York City (Delaware, Schoharie, and Otsego), three counties around the Saratoga-Warren growth center, three North Country counties (Oswego, Lewis, and St. Lawrence), and two counties (Cattaraugus and Allegany) in the western Southern Tier.

Counties shifting from in- to out-migration included several upstate metropolitan and adjoining suburban counties: Erie, Niagara, Orleans, Monroe, Wayne, Onondaga, Madison, Oneida, and Albany. Tioga County in the

Southern Tier was also in this group.

Only three counties went full circle in changing from one classification to the other and back again. Clinton County shifted from in- to out- and back to in-migration, while Seneca and Wyoming counties shifted from out- to in- and back to out-migration.

The map in figure 11 shows only the gross patterns of change. Table 7 groups the counties by major pattern of change and also shows the shifts in relative volume of population movement. The latter is of importance in assessing the probable effects of migration on specific counties. For example, among the net in-migration counties some, such as Suffolk and Dutchess, experienced steadily declining rates of net in-migration, whereas others, such as Warren and Sullivan, experienced steadily increasing rates. This is important information to know in assessing current effects and projecting probable future trends. For example, projection of present trends indicates that Suffolk and Dutchess are likely to shift to net out-migration within the next 10 years.

Reversal of Direction Between Nonmetropolitan and Metropolitan Centers

We noted in figure 5 that net migration rates for the state as a whole conform to the observed trend in the nation. In

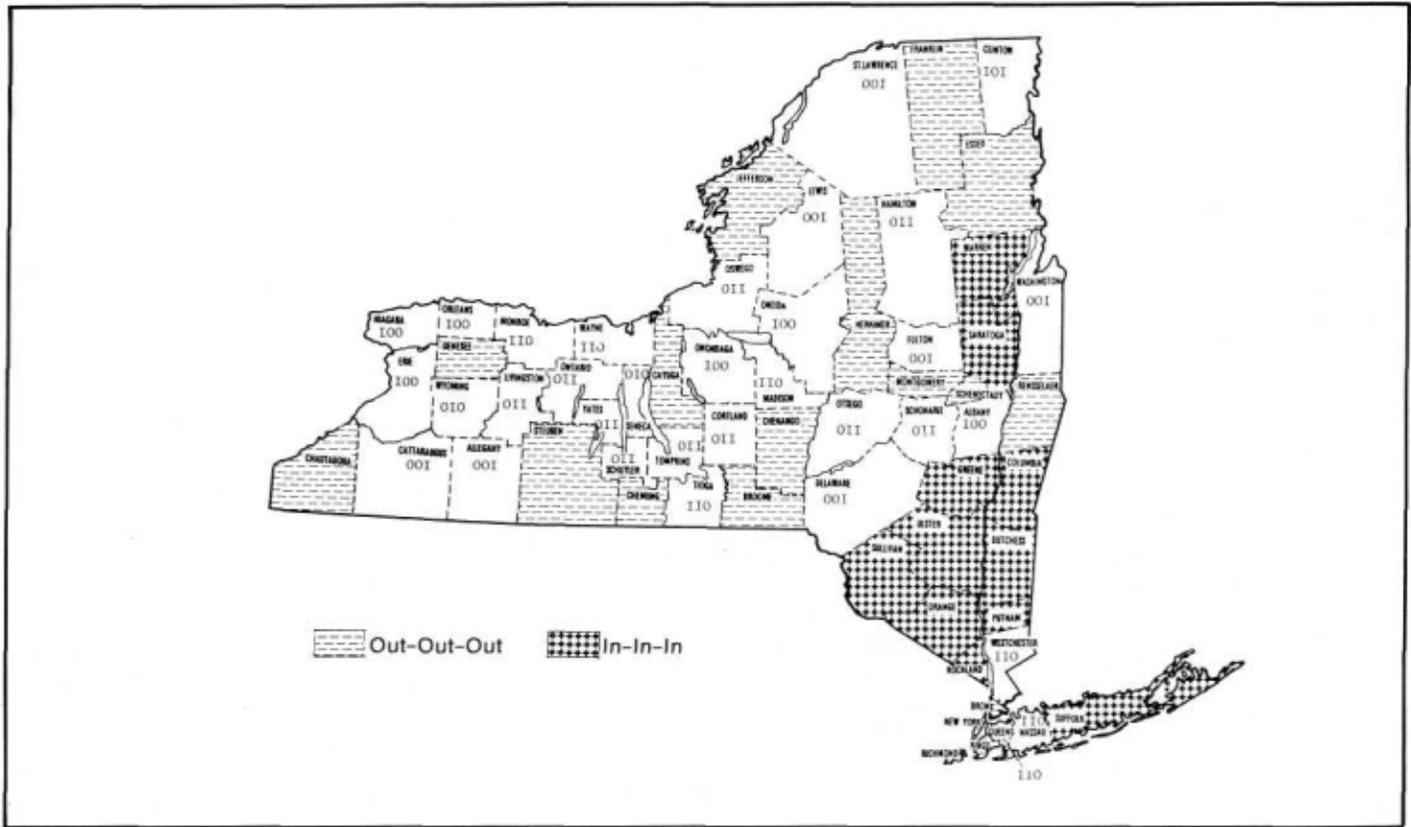


Figure 11. Summary types of net migration for three time periods: 1950-60, 1960-70, and 1970-75

fact, New York figures indicate that the reversal of net migration between nonmetropolitan and metropolitan areas began earlier here than in the nation as a whole. Figures 8 through 11 indicate the possibility that this reversal in New York State counties is a continuation of the movement to the suburbs that began much earlier, that the process has proceeded at different speeds in different parts of the state, and that it is continuing. A major feature of the population redistribution process is the expanding wave of outward movement from major metropolitan centers.

The gradual nature of the reversal can be seen by comparing trends in metropolitan and nonmetropolitan counties. In 1970, 26 of New York's 62 counties were metropolitan and 36 were nonmetropolitan. Of the 26 metropolitan counties, 9 had net out-migration in the 1950-60 decade, 13 had net out-migration in the 1960-70 decade, and 19 had net out-migration in the period 1970-75 (table 8). Among the 36 nonmetropolitan counties, only 9 had net in-migration in the 1950-60 decade, 18 had net in-migration in the 1960-70 decade, and 24 had net in-migration between 1970 and 1975.

Support for the theory that population movement around major metropolitan centers takes the form of an expanding wave is found in the fact that the metropolitan counties already registering net out-migration in the 1950s and remaining in that pattern throughout the 25-year period

were the central-city counties of New York City (Kings, New York, and the Bronx), plus Broome in the Southern Tier and Rensselaer and Schenectady in the Albany-Schenectady-Troy metropolitan area. The other net out-migration metropolitan counties were upstate suburban counties—Oswego, Livingston, and Herkimer—which (with the exception of Herkimer) were behaving essentially like nonmetropolitan counties but shifted to the net in-migration side in the 1960s and have remained there ever since.

During the 1960s, all the central-city metropolitan counties except Monroe and Queens had net out-migration, and they were joined by two first-tier suburban counties, Niagara and Orleans. In the 1970s, completing the change-over in central-city counties, Monroe and Queens switched to net out-migration and five more suburban counties joined them. Meanwhile the nonmetropolitan counties on the fringes of growth areas around major metropolitan centers were shifting to net in-migration.

Net Migration and Natural Increase

So far the discussion of population change for counties has considered only one of the components of population: net migration. Although less dynamic, the other component, natural increase, also varies and thus influences differences in total population change.

Table 7. Classification of New York counties by direction and volume of net migration: 1950-60, 1960-70, and 1970-75

	1950-60	1960-70	1970-75*		1950-60	1960-70	1970-75*
Out-Out-Out				In-In-Out			
Bronx	-10.8	- 6.2	-19.0	Madison	3.2	3.2	- 0.4
Broome	- 0.3	- 6.6	- 7.8	Monroe	6.2	9.4	- 7.4
Cayuga	- 5.6	- 2.8	- 4.0	Nassau	68.8	1.1	- 8.6
Chautauqua	- 3.5	- 5.1	- 3.8	Queens	4.4	1.1	- 4.0
Chemung	- 1.6	- 6.3	- 7.2	Tioga	10.3	7.6	- 0.4
Chenango	- 1.3	- 2.6	- 4.8	Wayne	7.0	6.4	- 0.6
Essex	-11.2	- 9.3	- 0.4	Westchester	17.3	2.2	- 6.6
Franklin	-12.6	-10.5	- 1.2	In-Out-In			
Genesee	- 0.8	- 2.3	- 1.4	Clinton	15.6	-17.9	17.6
Herkimer	- 1.8	- 4.7	- 0.4	Out-In-In			
Jefferson	- 8.6	- 7.9	- 1.0	Cortland	- 1.9	1.1	3.0
Kings	-14.0	-10.7	-19.4	Hamilton	- 4.7	4.9	10.4
Montgomery	-10.5	- 4.3	- 1.2	Livingston	- 2.5	12.5	4.6
New York	-18.6	-12.9	-10.0	Ontario	- 0.6	6.1	10.0
Rensselaer	- 2.7	- 0.6	- 2.6	Otsego	- 5.0	4.6	4.8
Schenectady	- 5.6	- 1.2	- 6.8	Oswego	- 1.9	5.1	8.8
Steuben	- 6.6	- 6.9	- 2.4	Schoharie	- 8.2	5.1	27.0
In-Out-Out				Schuyler	- 3.9	2.8	5.2
Albany	3.3	- 3.1	- 0.4	Tompkins	- 3.3	3.3	12.6
Erie	3.6	- 4.8	- 7.6	Yates	- 3.5	2.0	9.4
Niagara	8.2	-13.4	- 5.0	In-In-In			
Oneida	5.0	- 6.8	-10.0	Columbia	3.4	4.6	12.6
Onondaga	7.1	- 0.05	- 6.2	Dutchess	17.1	14.8	5.2
Orleans	3.8	- 0.7	- 3.2	Greene	4.4	3.7	29.8
Out-In-Out				Orange	9.9	10.5	12.4
Seneca	- 3.6	1.2	-10.6	Putnam	43.8	65.6	35.8
Wyoming	- 5.1	0.4	- 2.8	Richmond	3.9	21.8	13.4
Out-Out-In				Rockland	38.6	52.4	9.2
Allegany	-11.5	- 1.5	7.6	Saratoga	6.5	25.2	24.6
Cattaraugus	- 9.6	- 6.4	1.0	Suffolk	116.6	49.3	11.0
Delaware	-11.1	- 3.3	8.0	Sullivan	4.5	12.7	28.6
Fulton	- 6.3	- 1.2	5.2	Ulster	18.8	10.8	15.8
Lewis	-12.5	- 9.8	5.2	Warren	0.7	2.4	6.4
St. Lawrence	- 4.2	- 9.0	0.6				
Washington	- 8.1	- 0.5	0.2				

*1970-75 rate doubled to estimate 1970-80 rate and make it comparable to previous decennial periods.

Table 9 presents the detailed information on components of population change for each county of the state for the three time periods we have been considering—1950-60, 1960-70, and 1970-75. A quick glance at table 9 shows how easy it would be to get bogged down in detail trying to explain and interpret all the changes that have occurred. The table provides the reader with the necessary information on any county that might be of interest; the discussion that follows will necessarily be limited to some general descriptive statements and illustrations of how the data may be used to understand what has happened and, by projection, what is likely to happen in different types of counties.

Table 9 indicates that generally during the 1950-60 decade the higher the rate of net in-migration (or the lower the net

out-migration), the higher the rate of natural increase. But in the 1970-75 period this relationship appears to no longer hold. Scatter diagrams confirmed this change in association, so correlation coefficients were computed. The coefficients indicated a strong positive relationship in the 1950-60 decade ($r = .86$), a less strong but still substantial relationship in the 1960s ($r = .67$), and a value ($r = .11$) too small to be significantly different from no correlation in the period 1970-75.

Since a logical way that net migration influences natural increase is by changing the proportion of persons in the family formation and child-bearing ages, it follows that the observed change in association between net migration and natural increase reflects differences in the age composition

Table 8. Direction of net migration in three periods of time — 1950-60, 1960-70, and 1970-75 — for metropolitan and nonmetropolitan counties

<i>Metropolitan counties</i>				<i>Nonmetropolitan counties</i>			
<i>County</i>	<i>Direction of net migration</i>			<i>County</i>	<i>Direction of net migration</i>		
	1950-60	1960-70	1970-75		1950-60	1960-70	1970-75
Albany	+	-	-	Allegany	-	-	+
Bronx	-	-	-	Cattaraugus	-	-	+
Broome	-	-	-	Cayuga	-	-	-
Erie	+	-	-	Chautauqua	-	-	-
Herkimer	-	-	+	Chemung*	-	-	-
Kings	-	-	-	Chenango	-	-	-
Livingston	-	+	+	Clinton	+	-	+
Madison	+	+	-	Columbia	+	+	+
Monroe	+	+	-	Cortland	-	+	+
Nassau	+	+	-	Delaware	-	-	+
New York	-	-	-	Dutchess*	+	+	+
Niagara	+	-	-	Essex	-	-	-
Oneida	+	-	-	Franklin	-	-	-
Onondaga	+	-	-	Fulton	-	-	+
Orleans	+	-	-	Genesee	-	-	-
Oswego	-	+	+	Greene	+	+	+
Queens	+	+	-	Hamilton	-	+	+
Rensselaer	-	-	-	Jefferson	-	-	-
Richmond	+	+	+	Lewis	-	-	+
Rockland	+	+	+	Montgomery*	-	-	-
Saratoga	+	+	+	Ontario*	-	+	+
Schenectady	-	-	-	Orange	+	+	+
Suffolk	+	+	+	Otsego	-	+	+
Tioga	+	+	-	Putnam*	+	+	+
Wayne	+	+	-	Seneca	-	+	-
Westchester	+	+	-	St. Lawrence	-	-	+
				Schoharie	-	+	+
				Schuyler	-	+	+
				Steuben	-	-	-
				Sullivan	+	+	+
				Tompkins	-	+	+
				Ulster	+	+	+
				Warren	+	+	+
				Washington	-	-	+
				Wyoming	-	+	-
				Yates	-	+	+

*Counties reclassified metropolitan since 1970.

of different migrant streams. In the 1950-60 decade net migration was still predominantly from nonmetropolitan to metropolitan areas. This flow of population has traditionally contained a heavy concentration of young adults. Their migration tended to reduce the normally high natural increase rates in the rural areas they left and to increase natural increase rates in the urban areas they entered. A second movement occurring primarily among metropolitan counties was the movement to the suburbs, which had a similar and very likely an even more immediate and greater effect on natural increase rates because it was predominantly

composed of young families.

Later on, as the net out-migration of families from metropolitan areas increased and extended to nonmetropolitan counties while net in-migration continued for some metropolitan counties, the effects of net migration on natural increase were cancelled by opposing effects, counter-flows of population. Since the volume and direction of net migration were different in metropolitan versus nonmetropolitan counties, it is possible that the change in association between net migration and natural increase differed between these two classes of counties.

Table 9. Components of population change for New York counties by type: 1950-60, 1960-70, and 1970-75

Type and county	1950-60*			1960-70†			1970-75‡		
	Percent change	Natural increase	Net migration	Percent change	Natural increase	Net migration	Percent change	Natural increase	Net migration
Metropolitan (with central city):									
<i>New York City:</i>									
Bronx	- 1.8	9.0	-10.8	3.3	9.5	- 6.2	- 6.1	3.4	- 9.5
Kings	- 4.0	10.0	-14.0	- 1.0	9.7	-10.7	- 6.4	3.3	- 9.7
New York	-13.4	5.2	-18.6	- 9.4	3.5	-12.9	- 5.5	- 0.5	- 5.0
Queens	16.7	12.3	4.4	9.8	8.7	1.1	- 0.6	1.4	- 2.0
Richmond	15.9	12.0	3.9	33.1	11.3	21.8	10.0	3.3	6.7
<i>Upstate:</i>									
Albany	14.0	10.7	3.3	4.7	7.8	- 3.1	0.7	0.9	- 0.2
Broome	15.1	15.4	- 0.3	4.3	10.9	- 6.6	- 1.6	2.3	- 3.9
Erie	18.4	15.3	3.1	4.6	9.4	- 4.8	- 2.0	1.8	- 3.8
Monroe	20.3	14.1	6.2	21.4	12.0	9.4	- 0.5	3.2	- 3.7
Oneida	18.6	13.6	5.0	3.3	10.1	- 6.8	- 2.5	2.5	- 5.0
Onondaga	23.8	16.7	7.1	11.8	13.1	- 1.2	Z	3.1	- 3.1
Rensselaer	7.5	10.2	- 2.7	7.0	7.6	- 0.6	0.7	2.0	- 1.3
Schenectady	7.3	12.9	- 5.6	5.4	6.6	- 1.2	- 1.9	1.5	- 3.4
Suburban metropolitan (without central city):									
Herkimer	8.1	9.9	- 1.8	1.6	6.3	- 4.7	1.5	1.7	0.2
Livingston	9.4	11.9	- 2.5	22.7	10.2	12.5	6.0	3.7	2.3
Madison	18.7	15.5	3.2	15.1	11.9	3.2	3.6	3.8	- 0.2
Nassau	93.3	24.5	68.8	9.9	8.8	1.1	- 3.2	1.1	- 4.3
Niagara	27.5	19.3	8.2	- 2.7	10.7	-13.4	Z	2.5	- 2.5
Orleans	14.5	10.7	3.8	9.2	9.9	- 0.7	2.0	3.6	- 1.6
Oswego	11.6	13.5	- 1.9	17.2	12.1	5.1	8.9	4.5	4.4
Rockland	53.2	14.4	38.6	68.1	15.7	52.4	8.4	3.8	4.6
Saratoga	19.0	12.5	6.5	36.7	11.5	25.2	17.4	5.1	12.3
Suffolk	141.5	24.9	116.6	69.0	19.7	49.3	10.0	4.5	5.5
Tioga	25.3	15.0	10.3	23.0	15.4	7.6	3.9	4.1	- 0.2
Wayne	18.6	11.6	7.0	16.8	10.4	6.4	3.6	3.9	- 0.3
Westchester	29.3	12.0	17.3	10.6	8.4	2.2	- 1.9	1.4	- 3.3
Nonmetropolitan with urban center of 10,000+:									
Cattaraugus	2.9	12.5	- 9.6	1.8	8.2	- 6.4	3.4	2.9	0.5
Cayuga	5.4	11.0	- 5.6	4.7	7.5	- 2.8	0.4	2.4	- 2.0
Chautauqua	7.5	11.0	- 3.5	1.3	6.4	- 5.1	- 0.3	1.6	- 1.9
Chemung	13.7	15.3	- 1.6	2.9	9.2	- 6.3	- 1.4	2.2	- 3.6
Clinton	35.6	20.0	15.6	0.3	17.6	-17.9	14.1	5.3	8.8
Cortland	10.6	12.5	- 1.9	11.6	10.5	1.1	4.6	3.1	1.5
Dutchess	28.7	11.6	17.1	26.3	11.5	14.8	5.6	3.0	2.6
Fulton	0.6	6.9	- 6.3	2.6	3.8	- 1.2	3.6	1.0	2.6
Genesee	13.5	14.3	- 0.8	8.8	11.1	- 2.3	2.9	3.6	- 0.7
Jefferson	2.7	11.3	- 8.6	0.8	8.7	- 7.9	1.9	2.4	- 0.5
Montgomery	- 4.0	6.5	-10.5	- 2.4	1.9	- 4.3	- 0.5	0.1	- 0.6
Ontario	13.1	12.5	- 0.6	15.8	9.7	6.1	8.0	3.0	5.0
Otsego	2.3	7.3	- 5.0	8.2	3.6	4.6	3.0	0.6	2.4
St. Lawrence	12.5	16.7	- 4.2	1.0	8.0	- 9.0	3.5	3.2	0.3
Steuben	6.8	13.4	- 6.6	1.9	8.8	- 6.9	1.2	2.4	- 1.2
Tompkins	11.9	15.2	- 3.3	16.5	13.2	3.3	9.9	3.6	6.3
Ulster	28.3	9.5	18.8	18.9	8.1	10.8	9.7	1.8	7.9
Warren	12.2	11.5	0.7	12.3	9.9	2.4	6.1	2.9	3.2

Table 9. Continued

Type and county	1950-60*			1960-70†			1970-75‡		
	Percent change	Natural increase	Net migration	Percent change	Natural increase	Net migration	Percent change	Natural increase	Net migration
Nonmetropolitan without center of 10,000+:									
Allegany	0.4	11.9	-11.5	5.6	7.1	- 1.5	7.1	3.3	3.8
Chenango	10.5	11.8	- 1.3	7.2	9.8	- 2.6	0.4	2.8	- 2.4
Columbia	4.6	1.2	3.4	8.9	4.3	4.6	7.0	0.7	6.3
Delaware	- 2.0	9.1	-11.1	2.7	6.0	- 3.3	5.3	1.3	4.0
Essex	0.6	11.8	-11.2	- 1.9	7.4	- 9.3	1.3	1.5	- 0.2
Franklin	- 0.2	12.4	-12.6	- 1.8	8.7	-10.5	1.1	1.7	- 0.6
Greene	9.1	4.7	4.4	5.6	1.9	3.7	15.3	0.4	14.9
Hamilton	3.9	8.6	- 4.7	10.5	5.6	4.9	4.7	- 0.5	5.2
Lewis	3.2	15.7	-12.5	1.7	11.5	- 9.8	6.2	3.6	2.6
Orange	20.7	10.8	9.9	20.6	10.1	10.5	9.4	3.2	6.2
Putnam	56.2	12.4	43.8	78.7	13.1	65.6	22.4	4.5	17.9
Schoharie	- 0.4	7.8	- 8.2	9.4	4.3	5.1	15.4	1.9	13.5
Schuyler	6.1	11.0	- 3.9	11.3	8.5	2.8	5.3	2.7	2.6
Seneca	9.3	12.9	- 3.6	9.7	8.5	1.2	- 3.0	2.3	- 5.3
Sullivan	11.1	6.6	4.5	16.1	3.4	12.7	14.7	0.4	14.3
Washington	2.8	10.9	- 8.1	8.8	9.3	- 0.5	2.8	2.7	0.1
Wyoming	6.0	11.1	- 5.1	8.3	7.9	0.4	1.8	3.2	- 1.4
Yates	5.7	9.2	- 3.5	6.5	4.5	2.0	5.5	0.8	4.7

Sources:

*County and City Data Book, 1962, U.S. Bureau of the Census.

†County and City Data Book, 1972, U.S. Bureau of the Census.

‡Current Population Reports, Series P-25, No. 631, July 1976.

Z: Less than 50 persons or less than 0.05 percent.

To test for this possibility, counties were divided into four groups and the association between net migration and natural increase was observed for each group. The four groups were obtained by dividing metropolitan into those containing central cities, which tend to have low natural increase rates unless they have heavy net in-migration, and suburban counties, where net in-migration of families tends to increase natural increase rates. Nonmetropolitan counties were divided into those containing urban places of 10,000 population or more (considered urban) and those without an urban center of 10,000 or more (considered rural).

In all four groups of counties, net migration rates were positively associated with rates of natural increase in the 1950-60 decade, but the relationship was weakest among urban counties (table 10). This was a period when the flow of population was predominantly from nonmetropolitan counties to central-city metropolitan counties and from central city to suburban within the metropolitan counties. Thus the strong positive association held for all categories of counties except the nonmetropolitan counties with urban places of 10,000 or more population. The age composition of net migration streams for the urban counties apparently differed from that of the other groups of counties.

During the 1960-70 decade the pattern of association remained the same, except that there was no indication of association between net migration and natural increase rates

Table 10. Zero-order correlation coefficients for the relationship between net migration rates and natural increase rates for four groups of counties during three time periods

County group	Number	1950-60	1960-70	1970-75
Central city metropolitan	13	.876**	.645**	-.055
Suburban metropolitan	13	.962**	.901**	.771**
Urban nonmetropolitan	18	.389*	.055	.052
Rural nonmetropolitan	18	.519*	.732**	-.047

*Significant at the .05 level.

**Significant at the .001 level.

among urban counties. In the next period, 1970-75, only among suburban counties was there a significant association.

Analysis of the age composition of net migration streams partially confirms the hypothesis that the change in the relationship between net migration and natural increase occurred because of a change in the predominance of different age groups in the metropolitan-nonmetropolitan interchange of population.

Unfortunately, age-specific migration data are not available for the current decade and will not be available until after the 1980 census. Thus, the age factors accounting

for the more substantial change in the relationship of net migration and natural increase indicated for the 1970-75 period cannot be demonstrated. However, analysis of changes in age-specific net migration patterns between the two decades for which data are available (1950-60 and 1960-70) provides some indication of what the age-specific migration patterns of the current period are.

Age-Specific Net Migration Patterns

Although the detailed data have not been available until recently, it has long been recognized from studies of specific migration streams that migration tends to be selective on age. The availability of age-specific net migration data for 16 five-year age groups makes possible very detailed analysis. However, such detail presents very complex combinations or patterns. Therefore, a first objective was to examine the data for evidence of simpler patterns useful for explaining the change in association of net migration and natural increase.

For each of the 62 counties, bar charts were constructed showing net migration rates for each five-year age group during each decade. The charts were viewed at length in an effort to identify a small number of patterns which would provide a basis for generalizations regarding the probable effects of net migration. Although 16 age groups make possible a very large number of different combinations, studying the charts clearly showed that certain age groups tend to have net movements in the same direction. Combining this information with the knowledge that, except for youth striking out on their own, people tend to move as members of families, a recombination of age groups was sought that would hold to a minimum the loss of detail and still provide a manageable number of age categories. Study of the patterns of migration directions indicated that a clustering of the 16 five-year age groups into four larger groupings appeared to be the best compromise. These four clusters were: 0-14 years, 15-29 years, 30-59 years, and 60 years and older. Within each cluster the direction of net migration for each of the five-year age groups was generally in the same direction, but since the number of people involved varied greatly, net migration figures were aggregated into the four clusters to make certain that where divergent groups existed they were not a major part of the larger cluster. Any collapsing of age categories reduces detail and may obscure important variations among the component age groups of the larger clusters, just as the five-year cluster is likely to obscure important variations among single-year age groups. But risking some loss of detail was necessary in order to facilitate identification of the more general patterns and trends among all the counties of the state. For more detailed analysis of individual counties or small groups of counties, the most detailed age-specific net migration data available (in 16 five-year age groups) would be preferable. Therefore, the more detailed data is included in an appendix so that the reader may have the maximum

information available for the study of an individual county.¹

Seven patterns based on the direction of net migration in each of the 4 clusters accounted for all but 7 of the 124 cases. These patterns are shown in table 11, together with the number of cases in each pattern.

The 7 cases that did not fit any of the 7 principal patterns were as follows: Out-Out-Out-In (1 case), Out-Out-In-In (1 case), Out-Out-In-Out (2 cases), and Out-In-In-Out (3 cases). Mathematically, several other patterns were possible. They did not appear because of the expected tendency for the two age groups 0-14 and 30-59 to move in the same direction. In only 9 cases—the 7 cases in the third pattern (I-O-O-O) in table 11 and the 3 cases in the last-mentioned minor pattern—did these two groups disagree in direction of net migration. Had it been possible to present age-specific net migration rates for an age classification that did not split the college-age population into two groups—that is, if the two younger age groups were 0-17 and 18-29—it is likely there would have been no cases of disagreement in direction of movement between the 0-17 and the 30-59 group.

The other two age groups, youth (15-29) and the elderly (60+), tended to exhibit the same direction of net migration (in 79 of 124 cases); but if the 47 cases where all four age groups were in agreement are excluded, the instances of agreement between youth and the elderly are less than half, 32 of 77. Furthermore, there do not appear to be any structural reasons for agreement in migration between these two age groups.

Support for the hypothesis, that the changes in associa-

¹The problem of identifying general patterns of age-specific net migration without collapsing the age groups has challenged a number of researchers. Several less subjective procedures such as factor analysis and discriminant analysis have been used but so far with limited success, and no published examples are yet available. (See Lovingood et al., 1978; Bowles and Davis, 1978.)

Table 11. Age-specific net migration patterns for New York counties: 1950-60 and 1960-70

Net migration pattern	Age group				Number of cases
	0-14	15-29	30-59	60+	
O000	Out	Out	Out	Out	30
O100	Out	In	Out	Out	14
I000	In	Out	Out	Out	7
IOIO	In	Out	In	Out	23
IOII	In	Out	In	In	11
IIIO	In	In	In	Out	15
IIII	In	In	In	In	17
Other minor patterns					7
Total					124

tion between net migration rates and natural increase can be explained by differences in the age composition of net migration streams, was found in these data. During the 1950-60 decade net migration of the total population was accompanied by net migration in the same direction of persons in the age groups expected to have the most effect on natural increase (0-14 and 30-59) in all but six counties. The other age groups that could affect natural increase rates agreed with overall net migration in all but 14 cases. In contrast, during the next decade, when the association between net migration and natural increase was weaker, the instances of disagreement had increased to 11 and 19 respectively.

Direction of net migration provides only a partial explanation; relative volume of net migration also influences natural increase rates. Generally speaking, suburban counties had the highest net in-migration rates for persons in the family age group, which would contribute to the strength of the association in those counties.

A complete explanation of the relationship between net migration and natural increase would require a more detailed analysis, but these observations indicate clearly that changes in the migration patterns of specific age groups are primary factors.

Differences in Age Composition of Metropolitan-Nonmetropolitan Migration Streams

Traditionally, rural to urban or nonmetropolitan to metropolitan migration has consisted predominantly of young persons, so much so that a substantial body of theory about the effect of migration on the age structure of population and related institutional structures has evolved around this fact. Examination of age-specific patterns of net migration for counties suggests that where net movement of population from nonmetropolitan to metropolitan areas continues, it retains the predominance of youth, while the reverse movement is characterized by a predominance of different age groups, namely, persons in the family age groups (0-14 and 30-59).

Figure 6 showed clearly that for the state as a whole the migration of youth in both decades was predominantly from nonmetropolitan areas of the state to metropolitan areas, while migration of persons in the family age groups was predominantly from metropolitan to nonmetropolitan areas, with the volume of the latter greater in the 1960-70 decade than in the 1950-60 decade. Migration of the elderly was predominantly out of the state.

Comparison of the direction of movement in each of the four age groups with the direction of overall net migration for individual metropolitan and nonmetropolitan counties provides further evidence of the prevalence of the differences in age composition of these two streams of migration (table 12). All cases of overall net in-migration to metropolitan

counties involved net in-migration of youth, and all cases of overall net in-migration to nonmetropolitan counties involved net in-migration of persons in the family age groups. But among metropolitan counties experiencing overall net out-migration nearly one-half, 4 out of 9 in 1950-60 and 6 out of 13 in 1960-70, continued to have net in-migration of youth. This pattern was most pronounced among central-city metropolitan counties. All out-migration metropolitan counties with in-migration of youth were central-city counties. Suburban counties typically had net out-migration of youth combined with net in-migration of the family age groups.

On the other side of the coin, the 9 nonmetropolitan counties with overall net in-migration in 1950-60 all had net in-migration of family age groups, as did all but 2 of 18 counties in 1960-70. The two exceptions in the 1960-70 decade, Cortland and Tompkins counties, will be discussed in some detail below. Among the 27 nonmetropolitan counties with net out-migration in 1950-60, all but two had net out-migration of youth; and among the 18 with net out-migration in 1960-70, all but one (Clinton) had net out-migration of youth. Several of the net out-migration nonmetropolitan counties had net in-migration of the family age groups, 4 of 27 in 1950-60 and 5 of 18 in the 1960-70 decade. Six different counties were involved, and four of the six changed to overall net in-migration during the next period—that is, either in 1960-70 or 1970-75—thus indicating that change in the direction of migration of persons in the family age groups is predictive of change in overall net migration.

The two exceptions to the general rule that nonmetropolitan counties with overall net in-migration have net in-migration of persons in the family age groups are of special interest. These counties, Tompkins and Cortland, exhibit age-specific net migration patterns more characteristic of metropolitan counties than nonmetropolitan counties. They have in common a single characteristic which would appear to explain their exception to the general rule and also to demonstrate their kinship with certain metropolitan counties. Both contain colleges and/ or universities that had substantial increases in enrollment during the 1960-70 decade, when both counties registered overall net in-migration. Tables showing the age-specific net migration rates for five-year age groups for these counties (Appendices A and B) show that two age groups, 15-19 and 20-24, account for all the net in-migration in Tompkins County and most of it in Cortland. All other age groups in Tompkins registered net out-migration, as did all but 3 in Cortland.

Six central-city metropolitan counties shared the age-specific net migration pattern of Tompkins and Cortland in the 1960s. They were Bronx, Kings, and New York counties in New York City and Albany, Rensselaer, and Onondaga in the upstate area. Each contains colleges or universities and no doubt other features attractive to youth, but they differ from Tompkins and Cortland in that they had overall net out-migration, that is, the youth they attracted didn't come

in large enough numbers to offset the loss of population in the other age groups.

Although Tompkins and Cortland had net overall in-migration because of heavy net in-migration of college age youth, they shared with the out-migration metropolitan counties a declining base for future population growth (persons in the 30-59 age group). Very likely a leveling off in college enrollments would place these two counties in the overall net out-migration group in the current or the next decade. An interesting question for the future is, how long will central-city metropolitan counties maintain their attraction for youth in the face of their declining attractiveness for families?

Queens County had a rather unique age-specific net migration pattern during both decades. It had net in-migration of youth 15-29 and adults 30-59 and net out-migration of children 0-14 and elderly 60 and over. This suggests that Queens was attracting youth and adults without families of young children in large enough numbers to result in a net in-migration of population, but it was losing the elderly and families with young children to suburban and out-of-state locations.

Eleven other metropolitan counties had net in-migration of youth, but they also had net in-migration of two or more of the other three age groups and—with one exception, Monroe—they were suburban counties.

Further evidence of the difference in age composition of metropolitan-to-nonmetropolitan migration and nonmetro-politan-to-metropolitan migration was found in the extent of agreement between overall net migration and age-specific net migration for the two pivotal groups when a change in direction of overall net migration occurred.

In the four metropolitan counties that shifted from net in-migration in 1950-60 to net out-migration in 1960-70, the direction of migration of persons in the family age groups . made the same shift. Similarly, in all but 2 (these 2 are those already discussed, Tompkins and Cortland) of the 19 nonmetropolitan counties that shifted from net out-migration to net in-migration during the 1950-70 period, the direction of migration of the population in the age groups 0-14 and 30-59 agreed with the direction for the population

as a whole. In fact, in 10 of the latter cases the direction of net migration for these two age groups shifted in the time period before the one in which the direction changed for the total population, indicating that net in-migration of families had begun while a net out-migration of total population continued (table 12).

The fourth age cluster identified, the elderly (60 and over), behaved uniquely: It agreed in direction with net overall out-migration in all counties regardless of metropolitan status except for 2 rural counties in 1950-60 and 1 rural county in 1960-70. However, when overall net migration was into the county, the elderly registered net out-migration more often than net in-migration.

The ratio of disagreement to agreement in direction between overall and elderly net migration was greatest in the suburban and urban counties and least in the central-city metropolitan and the rural counties. This was primarily because while other age groups were moving to central cities in greater numbers than they were leaving, the elderly were leaving in greater numbers than they were entering. Among rural counties there were also several instances of opposing movement. Some rural counties were attracting the elderly while losing population in most other age groups.

This discussion has of necessity dealt only with the more general features of net migration and population change in New York counties. Circumstances associated with net migration and population change are so many and so varied that full coverage in a brief report is impossible. Some important general relationships between the components of population change have been presented, and the relationship of age-specific net migration patterns to the exchange of population between metropolitan and nonmetropolitan areas has been described, along with some implications of these relationships for the communities involved. These are intended as guideline suggestions. The reader is invited to combine these generalizations with more detailed data for particular counties supplied in the appendix and with personal knowledge of local situations to increase understanding of the nature of net migration and population change in his or her own community.

APPENDIX

Table 1. Net migration of the population of New York counties, 1950-60, by age

Age 1960	Albany	Allegany	Bronx	Broome	Cattaraugus	Cayuga	Chautauqua	Chemung
<i>Net Migration</i>								
ALL AGES	7918	-5014	-156163	-497	-7459	-3936	-4704	-1358
0-4	273	-41	-6380	51	154	168	113	-62
5-9	435	-357	-14908	-209	-442	-18	173	-120
10-14	830	-614	-14176	-486	-803	-231	-319	-96
15-19	1466	631	-6821	-562	-770	-260	-724	285
20-24	862	-396	7183	-417	-1243	-942	-1610	-160
25-29	856	-1353	1688	1286	-1103	-667	-924	-125
30-34	1178	-1121	-14751	1208	-1007	-151	41	-298
35-39	599	-613	-18384	371	-753	-249	-179	-86
40-44	1066	-274	-18964	-14	-322	-262	-236	-77
45-49	385	-314	-17359	48	-322	-224	84	19
50-54	872	-202	-12669	-23	-134	-227	-17	39
55-59	223	-158	-9238	-160	-158	-240	-2	-167
60-64	-38	-38	-9128	-61	-135	-83	-121	-55
65-69	13	-60	-7562	-588	-154	-163	-317	-161
70-74	-282	23	-6842	-364	-99	-70	-120	-135
75+	-822	-130	-7853	-578	-169	-319	-548	-158
<i>Migration Rate</i>								
ALL AGES	3.0	-10.1	-9.8	-.1	-8.4	-5.0	-3.0	-1.3
0-4	1.0	-.8	-4.7	.2	1.8	2.1	.7	-.4
5-9	1.7	-7.4	-11.9	-.9	-4.9	-1.1	1.2	-1.0
10-14	3.7	-12.5	-11.5	-2.4	-9.3	-3.1	-2.2	-.9
15-19	8.8	16.0	-6.4	-3.8	-11.4	-4.5	-6.7	4.1
20-24	6.4	-11.7	8.4	-3.4	-22.1	-20.4	-18.5	-2.8
25-29	6.0	-36.7	1.8	11.3	-19.9	-15.0	-10.6	-2.1
30-34	7.1	-31.7	-13.3	9.1	-17.2	-3.1	.5	-4.5
35-39	3.3	-20.2	-16.7	2.5	-13.0	-4.7	-1.8	-1.1
40-44	6.1	-10.0	-17.5	-.0	-6.0	-5.0	-2.3	-1.1
45-49	2.2	-12.1	-14.9	.4	-6.5	-4.6	.9	.3
50-54	5.3	-8.0	-11.3	-.1	-2.8	-5.3	-1.1	.8
55-59	1.5	-7.0	-9.0	-1.4	-3.8	-6.7	.0	-3.4
60-64	-.2	-2.0	-10.2	-.5	-3.6	-2.4	-1.6	-1.2
65-69	.1	-3.4	-10.3	-6.7	-4.4	-5.0	-4.8	-4.0
70-74	-3.1	1.6	-12.9	-5.7	-3.5	-2.6	-2.2	-4.2
75+	-7.8	-5.8	-15.9	-7.5	-4.6	-8.3	-7.6	-4.0

Age 1960	Chenango	Clinton	Columbia	Cortland	Delaware	Dutchess	Erie	Essex
<i>Net Migration</i>								
ALL AGES	-492	8382	1472	-721	-4938	23604	27914	-3922
0-4	211	935	240	28	64	1636	1896	19
5-9	208	1296	432	-73	-249	2740	4754	-239
10-14	130	572	369	-263	-445	2158	3474	-405
15-19	-330	781	174	662	-600	1606	-326	-640
20-24	-907	2242	-772	270	-1189	1796	759	-1037
25-29	-325	1386	-731	-587	-705	2591	7848	-461
30-34	402	658	307	-423	-251	3261	9225	-175
35-39	201	781	130	-114	-253	2606	5061	-206
40-44	82	390	97	-97	-253	1279	2286	-92
45-49	27	81	222	113	-237	1043	1840	-118
50-54	7	-101	200	-55	-131	1166	411	-97
55-59	-42	-96	161	-20	-176	713	-434	2
60-64	-57	-91	146	-63	-15	523	-1404	-136
65-69	-30	-107	121	-4	-126	220	-2943	-58
70-74	-56	-84	63	13	-101	158	-1989	-138
75+	-19	-264	-88	-113	-265	-32	-2543	-140
<i>Migration Rate</i>								
ALL AGES	-1.0	13.0	3.2	-1.6	-10.1	15.3	2.7	-9.9
0-4	4.5	10.1	5.7	.6	1.5	9.7	1.6	.5
5-9	4.8	21.0	11.2	-1.7	-5.4	21.6	4.6	-5.8
10-14	3.0	9.7	9.3	-6.4	-9.0	19.4	3.9	-10.0
15-19	-9.5	16.1	5.4	20.8	-14.5	17.4	-.4	-38.6
20-24	-30.9	52.2	-26.7	10.2	-36.4	22.1	1.4	-20.0
25-29	-12.8	31.1	-12.2	-21.4	-24.5	28.4	14.1	-20.2
30-34	18.3	14.4	12.7	-15.5	-9.3	34.1	14.1	-8.0
35-39	7.8	19.5	4.7	-4.1	-8.4	26.3	6.9	-8.5
40-44	3.2	11.0	3.3	-3.8	-8.3	12.5	3.2	-3.8
45-49	1.1	2.3	7.9	5.0	-8.3	10.4	2.8	-5.1
50-54	.3	-3.1	7.4	-2.5	-4.8	12.2	.7	-4.6
55-59	-2.0	-3.4	6.3	-.9	-7.1	8.1	-.7	.1
60-64	-3.2	-3.9	6.4	-3.4	-.6	6.6	-2.8	-8.1
65-69	-1.6	-5.4	5.4	-.2	-6.7	3.1	-6.8	-3.6
70-74	-3.7	-5.4	3.7	1.1	-6.2	2.8	-6.3	-11.5
75+	-.8	-12.2	-3.3	-6.0	-11.6	-.4	-7.7	-8.5

Table 1. Continued

Age 1960	Franklin	Fulton	Genesee	Greene	Hamilton	Herkimer	Jefferson	Kings
<i>Net Migration</i>								
ALL AGES	-5641	-3236	-399	1274	-192	-1104	-7369	-383003
0-4	-51	199	5	102	3	342	138	-10350
5-9	-55	-91	458	198	-55	244	-634	-38968
10-14	-541	-205	123	153	8	-14	-757	-43690
15-19	-657	-510	-330	412	-24	-460	-1199	-23353
20-24	-1237	-900	-685	-349	-104	-827	-1800	8795
25-29	-1069	-594	-152	-694	-68	-138	-1065	671
30-34	-528	-40	282	-48	-23	402	-55	-31814
35-39	-431	-142	151	183	11	-79	-453	-48374
40-44	-256	-116	21	157	23	-99	-257	-44989
45-49	-258	-117	114	243	-1	89	-183	-37064
50-54	-122	12	-8	142	8	-12	-167	-26004
55-59	-173	-117	-2	201	13	-68	-212	-17020
60-64	-59	-42	-61	273	6	-9	-64	-18521
65-69	-69	-159	-33	189	31	-150	-137	-15684
70-74	-32	-115	-75	128	1	-148	-111	-15109
75+	-205	-301	-206	-17	-18	-180	-413	-21527
<i>Migration Rate</i>								
ALL AGES	-11.1	-5.8	-4.6	4.2	-4.2	-1.5	-7.6	-12.6
0-4	-0.8	4.2	.1	3.7	.8	5.2	1.4	-3.8
5-9	-1.0	-1.8	8.3	7.7	-11.7	3.8	-6.4	-15.2
10-14	-10.6	-4.1	2.3	6.0	2.0	-1	-8.1	-17.3
15-19	-13.4	-12.8	-7.9	19.0	-7.2	-9.3	-15.8	-11.7
20-24	-35.5	-28.8	-20.0	-19.9	-37.6	-20.6	-29.7	5.6
25-29	-32.2	-20.2	-4.8	-31.6	-27.8	-3.9	-19.2	-4
30-34	-17.3	-1.2	8.7	-2.7	-9.5	11.1	-1.0	-14.8
35-39	-13.6	-4.0	4.3	11.2	4.5	-1.6	-7.6	-21.0
40-44	-8.9	-3.1	.6	9.0	8.3	-2.0	-4.5	-20.5
45-49	-9.5	-3.1	3.5	13.7	-3	2.2	-3.4	-16.9
50-54	-4.7	.4	-2	7.9	2.9	-2	-3.3	-13.1
55-59	-7.1	-4.2	-0	12.5	5.3	-2.0	-4.6	-9.6
60-64	-2.6	-1.5	-2.6	18.1	2.7	-2	-1.4	-11.9
65-69	-3.7	-6.0	-1.5	12.8	16.4	-4.6	-3.6	-12.4
70-74	-2.1	-5.2	-4.3	10.4	.6	-5.7	-3.4	-16.3
75+	-10.2	-10.1	-8.8	-9	-8.4	-5.6	-8.8	-22.9

Age 1960	Lewis	Livingston	Madison	Monroe	Montgomery	Nassau	New York	Niagara
<i>Net Migration</i>								
ALL AGES	-2824	-1004	1479	30100	-6266	462895	-364401	15600
0-4	36	58	371	2036	-29	21668	-29362	767
5-9	-27	230	139	3853	-482	58426	-61239	1829
10-14	-228	-39	248	1891	-488	58203	-41187	1615
15-19	-424	296	825	2027	-733	23637	-9722	419
20-24	-684	-145	340	4538	-1065	8525	28398	1610
25-29	-420	-462	-476	6996	-677	26619	28175	3378
30-34	-148	-426	-455	5587	-365	88839	-23168	2924
35-39	-175	-115	123	2656	-586	64251	-51826	1783
40-44	-91	-22	163	1549	-381	49621	-46627	1273
45-49	-123	-1	125	1819	-318	34147	-38106	1150
50-54	-18	-65	183	806	-170	19160	-29528	848
55-59	-127	62	90	235	-203	11797	-21473	183
60-64	-90	-16	49	-644	-202	8795	-19762	-327
65-69	-76	-119	-18	-1297	-99	7306	-16116	-725
70-74	-65	-61	-39	-984	-124	6377	-14378	-631
75+	-170	-178	-191	-969	-348	5523	-16480	-394
<i>Migration Rate</i>								
ALL AGES	-10.7	-2.1	2.8	5.4	-9.8	56.3	-17.6	6.9
0-4	1.2	1.3	6.1	3.2	-5	17.7	-18.6	2.6
5-9	-9	8.5	2.4	7.1	-8.2	58.2	-36.2	7.6
10-14	-8.4	-9	5.0	3.9	-8.7	71.3	-29.3	7.7
15-19	-19.6	8.6	19.7	5.7	-17.5	40.4	-10.0	2.6
20-24	-37.8	-5.0	10.5	17.2	-31.7	21.9	34.6	12.2
25-29	-25.0	-15.2	-14.0	25.3	-20.4	74.6	29.6	28.6
30-34	-9.8	-13.9	-12.2	16.6	-9.4	139.1	-15.3	20.8
35-39	-11.7	-3.8	3.8	6.7	-12.8	111.9	-29.0	10.9
40-44	-6.6	-7	5.2	4.0	-8.2	83.2	-28.9	8.1
45-49	-8.9	.0	4.4	5.2	-7.0	63.1	-24.1	8.2
50-54	-1.4	-2.7	7.1	2.6	-4.4	38.9	-19.6	7.3
55-59	-11.2	3.0	4.0	.8	-6.1	28.5	-14.9	1.8
60-64	-9.0	-8	2.4	-2.3	-6.2	25.9	-15.6	-3.5
65-69	-7.8	-6.7	-9	-5.2	-3.1	28.1	-15.7	-8.7
70-74	-7.6	-4.1	-2.4	-5.0	-4.8	36.4	-21.2	-10.2
75+	-14.4	-8.7	-8.1	-4.2	-11.2	30.5	-21.0	-6.7

Table 1. Continued

Age 1960	Oneida	Onondaga	Ontario	Orange	Orleans	Oswego	Otsego	Putnam
<i>Net Migration</i>								
ALL AGES	11141	24379	-338	15013	1119	-1431	-2549	8887
0-4	1277	1656	276	824	44	351	96	627
5-9	1731	2260	-132	1767	404	411	-165	1308
10-14	1379	2001	13	1673	246	5	-100	1220
15-19	9	3295	50	2323	-41	153	415	461
20-24	304	5673	-134	2364	-193	-706	-610	73
25-29	1840	4805	-304	793	74	-795	-942	828
30-34	2185	651	-129	3	265	-213	-460	906
35-39	1490	1499	84	1431	146	-58	-134	953
40-44	909	1870	57	915	105	-62	-136	699
45-49	463	1248	107	934	105	62	-15	640
50-54	377	1193	40	921	108	-77	-104	496
55-59	142	321	13	777	58	-1	-94	390
60-64	-101	-36	-1	552	-10	-93	8	282
65-69	-405	-549	-121	263	-8	-39	-10	186
70-74	-182	-417	-66	54	-11	-19	20	103
75+	-279	-794	-91	-586	-169	-353	-301	19
<i>Migration Rate</i>								
ALL AGES	4.4	6.1	-4	8.9	3.4	-1.5	-4.6	38.9
0-4	4.5	3.4	3.8	4.5	1.2	3.4	2.0	21.3
5-9	7.1	5.5	-1.7	11.7	13.1	4.6	-3.2	66.6
10-14	6.1	5.8	.2	11.9	8.1	.1	-1.9	71.5
15-19	.1	13.0	1.1	21.4	-1.5	2.2	9.9	30.6
20-24	2.2	29.2	-3.4	26.5	-9.5	-12.8	-17.9	5.6
25-29	13.7	21.5	-7.7	8.1	4.2	-14.6	-28.5	48.8
30-34	14.6	2.2	-2.8	.0	14.9	-4.0	-14.5	71.7
35-39	8.5	5.1	1.9	13.3	6.9	-9	-4.0	77.4
40-44	5.3	6.0	1.3	8.5	5.0	-1.1	-4.1	51.6
45-49	2.9	5.4	2.7	9.1	5.3	1.3	-4	46.4
50-54	2.8	5.7	1.1	9.5	6.6	-1.7	-3.3	34.1
55-59	1.2	1.7	.4	8.7	3.7	.0	-3.2	27.1
60-64	-.8	-.1	.0	6.8	-.6	-2.5	.3	22.7
65-69	-3.6	-3.4	-4.0	3.5	-.5	-1.1	-.3	18.8
70-74	-2.1	-3.4	-2.7	-.9	-.8	-.6	1.0	12.6
75+	-2.5	-5.5	-2.8	-7.4	-10.1	-9.3	-9.8	1.9

Age 1960	Queens	Rensselaer	Richmond	Rockland	St. Lawrence	Saratoga	Schenectady	Schoharie
<i>Net Migration</i>								
ALL AGES	67879	-3601	7395	34452	-4132	4853	-7998	-1888
0-4	-11371	-16	1244	4168	-848	706	-422	89
5-9	-16332	-562	2494	6141	161	1035	-1966	-33
10-14	-1831	-170	1991	4214	-431	733	-947	-149
15-19	1650	1147	898	1144	1112	221	-899	-122
20-24	15350	402	236	807	-341	-349	-603	-516
25-29	23424	-1083	734	3182	-1265	90	844	-458
30-34	15215	-1880	817	5044	-1862	1036	234	-194
35-39	7868	-916	69	3369	-346	717	-1292	-101
40-44	8441	-82	338	2256	54	355	-879	-69
45-49	11842	47	414	1635	241	234	-277	-101
50-54	10270	180	83	999	51	212	-352	-30
55-59	6660	-109	-81	619	13	191	-232	10
60-64	1877	-180	-483	475	-55	53	-405	-40
65-69	-474	-91	-590	348	-85	-14	-260	-19
70-74	-1923	-53	-283	105	-172	-75	-237	-38
75+	-2789	-439	-488	243	-580	-293	-308	-100
<i>Migration Rate</i>								
ALL AGES	3.9	-2.4	3.4	39.7	-3.5	5.8	-4.9	-7.6
0-4	-6.7	-.0	5.8	34.5	-5.9	7.5	-2.5	4.1
5-9	-10.3	-3.8	12.4	69.0	1.3	12.5	-11.7	-1.4
10-14	-1.2	-1.2	10.4	48.5	-3.7	9.6	-6.9	-6.2
15-19	1.5	11.9	6.1	16.7	12.1	3.5	-8.5	-6.0
20-24	18.0	5.2	2.1	8.6	-4.4	-7.3	-8.2	-31.8
25-29	26.7	-12.4	6.1	59.0	-16.7	1.9	11.1	-28.8
30-34	14.0	-15.9	5.6	79.6	-20.1	20.8	2.3	-13.4
35-39	6.3	-8.9	.4	44.9	-4.7	13.0	-10.0	-6.8
40-44	6.8	-.8	2.2	31.6	.9	6.4	-7.1	-5.0
45-49	9.5	.6	3.0	26.9	4.2	4.5	-2.5	-7.2
50-54	8.4	2.0	.7	16.4	.9	4.7	-3.6	-2.1
55-59	6.0	-1.3	-.6	11.2	.3	4.7	-2.7	.8
60-64	2.0	-2.5	-4.7	9.9	-1.2	1.5	-5.2	-3.3
65-69	-.5	-1.4	-6.7	9.0	-2.1	-.3	-3.8	-1.8
70-74	-3.5	-1.0	-4.4	3.5	-5.4	-2.7	-4.4	-4.8
75+	-5.4	-7.0	-6.9	6.5	-12.1	-8.2	-4.8	-7.8

Table 1. *Continued*

Age 1960	Schuyler	Seneca	Steuben	Suffolk Net Migration	Sullivan	Tioga	Tompkins	Ulster
ALL AGES	-558	-1060	-6012	321953	1817	3096	-1976	17380
0-4	60	-80	-26	22986	206	661	-323	955
5-9	100	-330	-477	42084	364	768	-972	2460
10-14	2	118	-596	34851	220	411	-996	1936
15-19	-113	-228	-1168	16531	161	-165	3628	1391
20-24	-351	-444	-1861	12631	-306	-336	5047	898
25-29	-150	29	-707	28628	-129	431	-1019	1623
30-34	77	294	49	38133	125	791	-3986	1892
35-39	-11	123	-143	34450	103	540	-1917	1534
40-44	26	52	-343	24786	227	191	-533	1094
45-49	25	96	-10	16930	207	101	-174	990
50-54	-30	45	37	12582	176	33	-79	636
55-59	-8	51	-8	10140	267	-8	-53	570
60-64	-20	-29	87	8637	158	-36	-63	566
65-69	-26	-59	-288	7749	182	-62	-187	626
70-74	-46	-262	-224	5563	44	-84	-101	377
75+	-95	-442	-337	5275	-187	-146	-251	-166
<i>Migration Rate</i>								
ALL AGES	-3.5	-3.1	-5.7	93.4	4.2	8.9	-2.8	17.1
0-4	3.7	-2.2	-1	35.5	5.1	15.3	-4.4	8.0
5-9	6.8	-9.5	-4.3	121.4	9.8	21.4	-14.6	28.2
10-14	.1	4.3	-5.7	136.7	5.6	12.0	-16.1	23.9
15-19	-8.2	-9.6	-14.4	80.0	5.2	-5.9	85.2	21.5
20-24	-31.4	-22.9	-28.1	81.5	-12.8	-15.1	163.8	15.9
25-29	-16.0	1.8	-11.9	194.8	-5.3	21.1	-17.7	27.8
30-34	10.2	17.8	.8	231.6	4.9	43.6	-50.9	30.3
35-39	-1.1	6.3	-2.2	172.9	3.7	26.6	-33.0	24.6
40-44	2.8	2.6	-5.3	121.7	8.3	9.9	-13.1	18.2
45-49	2.9	5.1	-1	83.7	7.4	5.3	-5.0	16.2
50-54	-3.6	2.7	.7	64.5	6.6	1.9	-2.5	10.6
55-59	-1.0	3.1	-1	56.3	11.1	-4	-1.9	10.3
60-64	-3.0	-1.8	1.9	52.7	7.3	-2.5	-2.7	11.3
65-69	-4.1	-4.0	-6.3	53.7	9.1	-4.6	-8.9	13.2
70-74	-8.6	-17.2	-6.3	50.3	2.5	-7.7	-6.0	10.0
75+	-12.0	-19.6	-7.4	41.4	-8.9	-9.0	-10.4	-3.2
<i>Migration Rate</i>								
Age 1960	Warren	Washington	Wayne	Westchester Net Migration	Wyoming	Yates		
ALL AGES	257	-3802	4039	108239	-1677	-622		
0-4	-15	76	164	5756	144	25		
5-9	-95	-148	846	14031	185	-39		
10-14	219	-285	1013	13483	-14	-16		
15-19	-416	-403	166	4683	-523	5		
20-24	-879	-537	-537	-130	-585	-323		
25-29	-11	-496	240	6764	176	-349		
30-34	319	-246	801	14125	188	-136		
35-39	125	-391	544	14937	-112	55		
40-44	134	-293	227	12483	-192	-59		
45-49	161	-243	311	10986	-229	28		
50-54	132	-269	181	7622	-177	72		
55-59	145	-69	178	3394	-133	32		
60-64	135	-126	85	746	-40	42		
65-69	175	1	-43	-502	-124	38		
70-74	66	-55	6	-612	-95	16		
75+	-141	-320	-144	476	-143	-19		
<i>Migration Rate</i>								
ALL AGES	.6	-7.2	6.3	15.4	-4.5	-3.1		
0-4	-2	1.4	2.4	7.9	4.0	1.3		
5-9	-1.9	-2.8	14.0	23.1	5.4	-1.9		
10-14	5.4	-5.8	18.3	23.8	-3	-8		
15-19	-12.8	-9.7	3.5	9.9	-18.7	.3		
20-24	-25.9	-15.8	-12.5	-2	-25.7	-26.9		
25-29	-4	-16.1	6.3	17.7	9.2	-27.7		
30-34	14.0	-7.9	22.8	33.9	8.9	-11.4		
35-39	4.7	-11.5	14.1	33.1	-4.4	5.2		
40-44	5.2	-9.0	5.6	27.4	-7.9	-5.1		
45-49	6.3	-8.0	7.6	22.6	-9.9	2.7		
50-54	5.1	-9.7	5.3	15.7	-8.9	7.5		
55-59	6.3	-2.7	6.0	7.6	-7.4	3.5		
60-64	6.8	-5.4	3.2	2.0	-2.5	5.1		
65-69	10.0	.0	-1.6	-1.6	-8.1	4.7		
70-74	4.6	-3.2	.3	-2.7	-7.5	2.3		
75+	-6.6	-12.8	-4.4	2.0	-8.0	-1.6		

Source:
Bowles and Tarver (1965).

Table 2. Net migration of the population of New York counties, 1960-70, by age

Age 1970	Albany	Allegany	Bronx	Broome	Cattaraugus	Cayuga	Chautauqua	Chemung
	<i>Net Migration</i>							
ALL AGES	-7,330	-743	-91,065	-14,147	-5,234	-2,091	-7,407	-6,248
0-4	-1,075	162	-2,696	-469	114	182	147	-183
5-9	-1,954	237	-8,243	-1,880	-24	328	-57	11
10-14	-3,804	17	-3,688	-1,970	-73	210	-504	-460
15-19	1,044	2,052	8,270	-1,350	-285	-203	-534	-329
20-24	1,398	-83	2,240	-3,049	-1,850	-1,327	-2,900	-1,752
25-29	-53	-2,068	12,774	443	-1,246	-553	-1,381	-986
30-34	4	-690	4,074	657	-395	363	246	-267
35-39	-555	-108	-13,261	-830	-158	93	-129	-195
40-44	-461	-32	-13,210	-873	-94	-221	-56	-71
45-49	-8	-27	-6,809	-899	-62	-117	-261	-356
50-54	-180	-34	-9,173	-360	-207	-95	-181	-162
55-59	-177	13	-11,729	-671	-114	-124	-300	-206
60-64	-744	33	-14,362	-784	-212	-60	-302	-284
65-69	-975	-48	-13,154	-975	-79	-123	-341	-337
70-74	-915	-43	-13,236	-856	-112	-151	-298	-284
75 AND OVER	-875	-184	-11,040	-472	-438	-293	-576	-387
	<i>Migration Rate</i>							
ALL AGES	-2.5	-1.6	-5.8	-6.0	-6.0	-2.6	-4.8	-5.8
0-4	-4.7	4.5	-2.0	-2.4	1.6	2.8	1.4	-2.1
5-9	-7.2	5.6	-5.7	-7.2	-3	4.4	-4	.1
10-14	-6.4	.4	-2.9	-8.2	-8	2.6	-3.3	-4.1
15-19	4.1	46.8	7.5	-6.3	-3.4	-2.7	-3.7	-3.2
20-24	0.1	-2.0	14.2	-15.9	-24.3	-19.5	-22.2	-19.4
25-29	-3	-45.3	13.3	3.3	-21.6	-10.7	-14.3	-14.1
30-34		-23.7	-4.4	5.7	-9.2	10.1	3.5	-4.9
35-39	-3.7	-4.7	-14.1	-8.6	-3.6	2.5	-1.7	-3.6
40-44	-2.7	-1.4	-14.1	-6.1	-2.0	-4.9	-4	-1.2
45-49		-1.2	-12.1	-6.2	-1.3	-2.5	-2.9	-5.5
50-54	-1.0	-1.5	-10.9	-2.7	-4.4	-2.1	-2.0	-2.7
55-59	-1.1	.6	-12.0	-5.5	-2.7	-3.0	-3.6	-4.0
60-64	-4.9	1.6	-16.2	-7.2	-5.4	-1.7	-4.0	-6.2
65-69	-7.8	-2.9	-17.1	-11.1	-2.5	-4.5	-5.5	-8.1
70-74	-9.1	-3.2	-11.0	-11.7	-4.2	-6.2	-5.8	-8.1
75 AND OVER	-6.5	-7.8	-10.7	-4.9	-10.3	-7.2	-7.1	-8.1

Age 1970	Chenango	Clinton	Columbia	Cortland	Delaware	Dutchess	Erie	Essex
	<i>Net Migration</i>							
ALL AGES	-1,201	-13,013	2,100	419	-1,589	25,741	-51,522	-3,367
0-4	21	-546	421	-44	48	1,404	929	-8
5-9	319	-2,991	527	-126	7	3,649	-1,170	-195
10-14	306	-2,029	661	-133	41	3,255	-5,996	-164
15-19	-550	65	105	1,169	353	2,458	-6,428	-661
20-24	-1,697	872	-1,176	1,051	-1,408	2,437	-9,611	-1,482
25-29	-289	-609	-324	-875	-571	5,143	-1,856	-530
30-34	518	-1,900	521	-421	56	4,828	1,480	194
35-39	208	-1,327	293	100	136	2,324	-2,066	-5
40-44	84	-1,217	191	46	-20	923	-3,273	-29
45-49	42	-1,147	180	-25	52	363	-2,951	-98
50-54	44	-684	168	21	36	104	-2,728	-101
55-59	-45	-437	140	-15	37	99	-2,280	-89
60-64	-20	-299	211	-48	79	-107	-3,604	44
65-69	31	-280	313	-59	62	9	-4,175	-26
70-74	-17	-204	87	-69	35	-248	-3,860	-36
75 AND OVER	-156	-280	-218	-153	-112	-920	-3,073	-181
	<i>Migration Rate</i>							
ALL AGES	-2.5	-15.1	4.2	.9	-3.4	13.1	-4.4	-8.9
0-4	.5	-7.7	11.3	-1.1	1.4	7.9	1.0	-.3
5-9	6.7	-26.6	12.1	-2.7	.2	18.8	-1.1	-5.1
10-14	6.2	-19.9	14.9	-3.0	.9	17.4	-4.9	-4.2
15-19	-12.0	.9	2.4	29.1	8.2	15.6	-5.9	-17.7
20-24	-38.5	13.5	-27.7	20.7	-34.2	18.7	-10.8	-43.8
25-29	-9.5	-11.0	-9.8	-13.6	-28.8	46.5	-2.7	-21.7
30-34	20.1	-29.3	25.2	-14.0	4.7	48.6	2.7	12.1
35-39	9.6	-23.0	12.7	4.7	6.4	19.8	-4.3	-.3
40-44	3.3	-23.7	7.2	2.0	-.8	7.3	-4.5	-1.5
45-49	1.6	-25.1	6.5	-1.0	2.0	3.2	-3.9	-4.7
50-54	1.7	-18.4	5.9	.9	1.4	1.0	-3.9	-4.8
55-59	-1.9	-13.3	5.1	-.7	1.6	1.0	-3.7	-4.6
60-64	-1.0	-11.1	8.2	-2.6	3.5	-1.1	-7.0	2.5
65-69	1.9	-12.8	14.1	-3.8	3.4	1.1	-9.7	-1.7
70-74	-1.3	-12.3	4.8	-5.2	2.2	-3.8	-10.9	-3.1
75 AND OVER	-6.5	-12.0	-7.3	-7.5	-4.7	-9.9	-6.9	-9.1

Table 2. Continued

Age 1970	Franklin	Fulton	Genesee	Greene	Hamilton	Herkimer	Jefferson	Kings
<i>Net Migration</i>								
ALL AGES	-4,689	-738	-1,298	1,069	234	-2,935	-7,408	-283,434
0-4	168	113	153	125	-15	484	-211	-17,877
5-9	-227	288	174	177	37	51	-669	-39,804
10-14	-319	180	156	214	89	-247	-373	-26,342
15-19	-194	-257	-571	174	-40	-678	-938	-40,337
20-24	-1,463	-1,147	-1,476	-577	-169	-1,772	-2,420	8,805
25-29	-1,074	-387	17	-589	-51	-535	-1,103	13,375
30-34	-261	303	454	185	56	246	-29	-17,331
35-39	-92	142	162	269	142	-99	-33	-30,186
40-44	-66	117	-67	249	34	-12	-208	-29,061
45-49	-187	92	51	140	28	-57	-98	-20,694
50-54	-182	133	51	142	35	36	-131	-27,763
55-59	-100	39	-32	177	57	26	-129	-17,683
60-64	-179	-9	-29	281	45		-62	-20,858
65-69	-28	9	-40	196	84	-98	-217	-20,972
70-74	-122	-48	-31	84	22	-116	-127	-20,237
75 AND OVER	-323	-266	-270	-188	-28	-164	-460	-22,769
<i>Migration Rate</i>								
ALL AGES	-9.6	-1.4	-2.2	3.3	5.2	-4.2	-7.5	-9.8
0-4	4.4	2.7	2.8	5.7	-4.1	9.3	-2.0	-7.3
5-9	-0.4	6.4	2.9	0.4	8.9	.8	-0.8	-14.6
10-14	-0.0	3.7	2.5	7.5	17.6	-3.6	-3.8	-10.4
15-19	-4.0	-6.2	-9.5	6.3	-9.8	-10.3	-10.4	-1.9
20-24	-24.0	-25.7	-27.8	-22.4	-42.6	-28.8	-29.5	4.3
25-29	-31.7	-11.7	.5	-24.1	-17.2	-12.4	-18.1	7.8
30-34	-9.1	14.1	16.9	13.0	33.3	7.9	-7	-10.4
35-39	-4.2	6.2	5.6	10.7	24.6	-3.1	-8	-17.7
40-44	-2.7	4.1	-1.9	10.0	16.2	-3	-4.1	-16.4
45-49	-7.3	2.9	1.5	8.1	11.6	-1.3	-1.9	-2.0
50-54	-7.5	4.0	1.6	8.0	12.4	.8	-2.6	-10.8
55-59	-4.5	1.2	-1.1	4.7	22.7	.7	-2.8	-10.7
60-64	-8.5	-3	-1.2	10.5	26.1		-1.5	-13.6
65-69	-1.5	4	-2.0	10.4	40.8	-3.8	-6.1	-16.1
70-74	-7.7	-2.5	-1.9	6.3	12.6	-4.8	-3.9	-19.6
75 AND OVER	-14.5	-8.3	-10.2	-9.0	-11.1	-4.3	-9.3	-19.3

Age 1970	Lewis	Livingston	Madison	Monroe	Montgomery	Nassau	New York	Niagara
<i>Net Migration</i>								
ALL AGES	-2,242	5,375	1,526	93,567	-2,588	19,641	-202,640	-32,549
0-4	64	199	341	1,970	69	8,530	-25,006	-269
5-9	-54	746	190	6,665	113	25,240	-46,400	-1,433
10-14	-106	755	195	3,643	-9	18,753	-33,965	-3,870
15-19	-422	1,307	1,756	4,099	-518	-13,044	-12,713	-4,098
20-24	-1,015	1,158	117	7,700	-1,320	-49,938	30,521	-6,173
25-29	-384	-193	-1,007	13,710	-429	-13,029	29,152	-2,049
30-34	41	253	-275	9,290	101	20,917	1,394	-1,735
35-39	-55	370	462	3,965	30	22,516	-21,415	-2,376
40-44	-2	264	219	2,698	-127	12,136	-24,367	-2,180
45-49	-31	186	160	4,130	-34	1,127	-22,841	-1,957
50-54	-1	168	74	1,279	-96	-3,444	-17,836	-1,350
55-59	-33	138	15	456	-56	-3,594	-17,220	-1,256
60-64	-35	167	-38	-667	-63	-4,836	-16,930	-1,105
65-69	-18	14	-27	-2,375	-20	-4,613	-19,624	-1,166
70-74	-19	-49	-94	-1,472	-50	-1,413	-19,139	-712
75 AND OVER	-112	-108	-436	-4,222	-139	4,333	-21,919	-220
<i>Migration Rate</i>								
ALL AGES	-8.7	11.0	2.5	8.1	-4.4	4.4	-11.6	-12.1
0-4	3.0	4.5	6.0	3.1	1.7	9.5	-21.0	-1.3
5-9	-1.9	15.7	3.0	10.4	2.5	22.5	-24.3	-5.7
10-14	-3.5	16.3	3.0	7.7	-2	13.0	-20.6	-13.0
15-19	-15.2	29.8	30.7	7.0	-9.8	-8.2	-14.7	-15.7
20-24	-44.3	29.0	2.3	15.1	-26.9	-35.9	39.6	-27.3
25-29	-22.8	-5.3	-24.9	36.3	-12.9	-16.1	71.1	-16.3
30-34	3.7	9.6	-7.8	29.7	4.5	44.1	1.3	-2.5
35-39	-4.4	14.7	5.7	11.5	1.2	36.5	-17.0	-15.8
40-44	-2	10.4	6.9	7.5	-3.8	12.2	-19.8	-13.1
45-49	-2.5	6.9	5.0	5.3	-4.9	1.0	-19.3	-11.3
50-54	-1	6.5	4.4	3.3	-2.4	-3.3	-10.6	-8.4
55-59	-2.9	5.5	1.6	1.4	-2.5	-4.5	-20.1	-9.0
60-64	-3.4	8.4	-1.5	-3.0	-2.0	-8.0	-15.7	-9.9
65-69	-2.2	8	-1.4	-8.6	-8	-10.0	-19.9	-13.5
70-74	-2.8	-3.5	-5.2	-7.3	-2.2	-4.3	-23.8	-10.7
75 AND OVER	-9.2	-4.9	-9.4	-4.2	-3.8	11.7	-23.2	-2.5

Table 2. Continued

Age 1970	Oneida	Onondaga	Ontario	Orange	Orleans	Oswego	Otsego	Putnam
<i>Net Migration</i>								
ALL AGES	-18,559	-4,604	3,886	19,971	-358	4,448	2,287	20,621
0-4	-42	-140	647	1,359	127	323	311	1,705
5-9	-1,982	-1,173	922	3,265	136	806	268	3,477
10-14	-1,934	-1,911	686	2,905	267	791	192	2,611
15-19	-1,908	769	325	3,062	-191	1,375	1,836	1,028
20-24	-3,560	2,941	-421	872	-738	181	1,109	-102
25-29	-892	2,847	171	1,392	-119	-635	-1,480	2,117
30-34	-139	436	565	1,705	198	545	-258	2,798
35-39	-1,284	-1,093	467	1,845	162	383	147	1,986
40-44	-1,498	-1,187	287	1,267	77	286	94	1,478
45-49	-1,229	-733	101	749	-24	303	124	868
50-54	-771	-750	155	535	43	248	71	595
55-59	-491	-280	81	653	13	238	39	506
60-64	-826	-900	96	554	-66	60	99	485
65-69	-817	-1,078	103	226	-47	40	77	404
70-74	-469	-1,088	-127	27	-29	-119	-64	409
75 AND OVER	-717	-1,264	-172	-485	-167	-377	-278	196
<i>Migration Rate</i>								
ALL AGES	-0.4	-1.0	5.2	9.9	-1.0	4.6	4.2	57.2
0-4	-.2	-.3	10.3	7.5	3.8	3.5	8.4	41.9
5-9	-0.8	-2.4	12.2	10.7	3.5	8.0	5.9	55.7
10-14	-0.5	-3.8	9.0	15.1	7.3	7.8	4.0	79.7
15-19	-7.2	1.7	4.6	18.1	-7.5	14.9	37.8	31.4
20-24	-14.9	8.0	-0.7	5.6	-23.0	2.2	22.6	-3.5
25-29	-7.1	10.1	3.6	10.8	-4.9	-9.2	-33.2	111.4
30-34	-1.0	1.7	15.1	15.3	11.0	11.6	-9.4	211.0
35-39	-0.5	-4.1	13.0	17.7	8.9	8.5	6.3	117.5
40-44	-0.9	-4.1	6.8	11.0	3.8	5.8	3.4	76.1
45-49	-0.7	-2.5	2.3	0.4	-1.1	5.8	4.1	41.7
50-54	-4.5	-2.8	3.8	4.8	2.1	4.9	2.4	30.0
55-59	-3.3	-1.3	2.2	6.8	.7	5.3	1.4	27.6
60-64	-0.6	-4.6	3.0	5.9	-4.3	1.6	3.7	26.4
65-69	-0.1	-0.9	4.1	2.8	-3.6	1.3	3.4	27.4
70-74	-2.3	-8.2	-5.6	.4	-2.7	-4.5	-3.3	23.3
75 AND OVER	-5.4	-6.9	-4.6	-5.1	-8.9	-8.9	-8.6	13.8

Age 1970	Queens	Rensselaer	Richmond	Rockland	St. Lawrence	Saratoga	Schenectady	Schoharie
<i>Net Migration</i>								
ALL AGES	31,735	-562	48,121	71,297	-9,878	22,345	-2,117	1,141
0-4	-15,596	-112	3,281	4,338	84	2,143	375	112
5-9	-30,199	59	7,408	12,281	-768	4,261	438	355
10-14	-9,003	19	6,527	11,523	-997	2,857	-209	222
15-19	7,536	1,860	2,450	3,985	1,886	1,403	-1,112	907
20-24	16,490	151	1,364	-270	-1,008	627	-1,363	-426
25-29	27,787	-1,199	6,362	9,214	-3,990	2,499	847	-501
30-34	10,098	-428	6,046	9,227	-1,605	2,809	1,207	43
35-39	-2,980	127	4,896	8,801	-633	2,060	69	102
40-44	2,981	-60	3,397	6,181	-359	1,346	-174	94
45-49	10,051	-114	2,316	3,706	-380	988	-348	128
50-54	10,262	-15	1,090	1,682	-368	756	-158	20
55-59	8,853	-222	1,284	1,149	-392	614	-270	4
60-64	1,690	-250	519	726	-278	213	-365	52
65-69	-3,397	-183	-269	523	-338	78	-515	60
70-74	-3,318	-187	-205	445	-276	5	-208	39
75 AND OVER	1,480	-408	395	786	-456	-114	-231	-70
<i>Migration Rate</i>								
ALL AGES	1.6	-.6	19.5	45.0	-8.1	22.5	-1.3	4.8
0-4	-10.1	-.9	13.8	25.4	.9	21.5	3.0	6.1
5-9	-17.7	.4	32.1	78.1	-6.3	45.5	3.1	18.0
10-14	-5.7	.1	28.9	70.4	-7.5	28.3	-1.8	9.9
15-19	5.3	13.8	16.8	26.3	15.4	15.3	-7.6	42.0
20-24	11.8	1.2	0.5	-2.1	-9.3	7.6	-11.0	-19.7
25-29	25.0	-11.8	42.0	78.7	-40.4	36.2	9.0	-28.0
30-34	10.0	-5.4	38.2	143.9	-22.8	65.7	18.4	3.9
35-39	-3.6	1.7	39.5	163.2	-10.3	43.6	.8	9.2
40-44	2.5	-.7	22.0	55.2	-5.6	22.9	-1.7	7.7
45-49	7.9	-1.3	14.7	35.6	-5.9	16.6	-3.4	9.9
50-54	8.2	-.2	11.4	18.9	-6.2	13.5	-1.5	1.6
55-59	7.1	-2.9	9.9	15.3	-7.3	12.5	-2.8	.3
60-64	1.4	-3.4	4.6	11.5	-5.7	5.0	-4.4	4.2
65-69	-3.5	-3.0	-2.3	10.4	-8.3	2.2	-7.8	5.1
70-74	-4.4	-3.7	-2.8	11.1	-8.8	.2	-3.8	4.1
75 AND OVER	1.9	-5.5	4.3	15.1	-9.4	-2.7	-2.9	-5.2

Table 2. Continued

Age 1970	Schuyler	Seneca	Steuben	Suffolk	Sullivan	Tioga	Tompkins	Ulster
				Net Migration				
ALL AGES	404	396	-6,779	336,868	5,647	2,818	2,284	12,460
0-4	131	121	-292	21,795	213	300	-383	643
5-9	258	77	-404	50,121	571	875	-1,188	1,640
10-14	209	92	-381	43,317	744	645	-838	1,220
15-19	-51	-82	-946	18,540	617	-425	4,919	1,479
20-24	-489	-706	-2,990	6,056	-386	-1,155	7,993	1,148
25-29	-217	26	-819	38,661	-56	586	-1,279	1,507
30-34	137	260	470	45,195	800	1,179	-4,105	1,580
35-39	128	151	17	33,098	448	655	-1,253	654
40-44	59	130	-167	22,547	546	288	-310	522
45-49	107	130	-73	14,686	556	39	-210	160
50-54	33	108	-13	9,927	351	83	-131	531
55-59	59	156	-39	8,102	300	13	-144	173
60-64	69	133	-79	7,303	526	41	-133	455
65-69	43	-21	-246	7,176	351	1	-278	543
70-74	-16	17	-260	5,190	208	-14	-189	274
75 AND OVER	-56	-196	-557	5,094	-172	-213	-187	-69
				Migration Rate				
ALL AGES	2.5	1.1	-6.4	42.6	12.0	6.4	3.1	9.7
0-4	9.6	4.5	-3.3	24.1	5.7	6.8	-6.0	5.8
5-9	16.7	2.4	-3.8	56.5	13.9	17.8	-16.5	13.3
10-14	12.4	2.7	-3.4	44.3	18.9	13.0	-12.3	9.5
15-19	-3.3	-2.6	-9.1	24.0	15.3	-9.7	85.5	13.2
20-24	-32.5	-23.6	-31.9	10.1	-9.7	-30.4	153.1	11.6
25-29	-17.9	1.2	-12.3	105.8	-2.1	23.4	-16.5	19.8
30-34	18.2	16.9	10.1	161.7	41.0	64.0	-50.6	24.7
35-39	16.8	8.9	.3	77.3	20.5	26.9	-26.9	8.9
40-44	7.2	6.7	-2.9	42.2	21.4	8.2	-8.3	6.6
45-49	12.3	6.5	-1.2	28.3	20.5	1.6	-5.7	2.2
50-54	3.6	5.5	-2	23.2	12.7	4.1	-3.9	7.9
55-59	7.4	8.4	-8	24.0	11.1	.7	-4.9	2.7
60-64	9.9	8.4	-1.7	25.8	21.3	2.6	-4.9	7.7
65-69	7.6	-1.5	-6.5	32.0	10.4	.1	-12.9	10.9
70-74	-3.4	1.5	-7.5	27.3	12.0	-1.4	-11.5	6.5
75 AND OVER	-7.0	-9.5	-10.7	19.7	-6.6	-12.6	-7.3	-1.1
Age 1970	Warren	Washington	Wayne	Westchester	Wyoming	Yates		
				Net Migration				
ALL AGES	911	-240	4,189	19,640	53	330		
0-4	-259	251	592	1,999	286	126		
5-9	157	375	1,306	5,445	433	128		
10-14	361	279	1,420	6,723	227	169		
15-19	-186	-104	-136	-802	-329	266		
20-24	-635	-705	-1,298	-13,132	-817	-307		
25-29	180	-432	609	3,402	390	-366		
30-34	600	-83	1,175	10,560	604	34		
35-39	427	195	443	8,043	16	91		
40-44	296	77	179	6,070	-107	47		
45-49	465	6	102	3,586	-184	4		
50-54	89	70	158	1,242	-111	43		
55-59	72	44	1	-927	-57	58		
60-64	-19	94	55	-3,823	-43	46		
65-69	-20	-82	-103	-5,391	-38	79		
70-74	-41	10	-89	-3,380	-76	15		
75 AND OVER	-218	-235	-227	-15	-141	-103		
				Migration Rate				
ALL AGES	1.9	-.5	5.6	2.2	.1	1.7		
0-4	-5.3	5.3	8.6	3.1	9.5	8.7		
5-9	3.1	7.0	17.7	7.3	12.5	7.1		
10-14	0.0	5.1	20.0	8.5	6.0	8.9		
15-19	-7.1	-2.1	-2.0	-1.1	-9.0	14.0		
20-24	-22.2	-16.2	-21.0	-16.6	-24.4	-17.7		
25-29	6.6	-12.0	12.7	6.6	17.5	-26.4		
30-34	30.3	-3.0	32.0	27.2	36.0	4.0		
35-39	20.3	7.8	11.1	17.8	.8	10.2		
40-44	11.9	2.8	4.2	11.0	-4.7	4.6		
45-49	10.9	.2	2.4	6.2	-8.1	.4		
50-54	3.5	2.5	3.9	2.3	-5.3	4.2		
55-59	2.9	1.8	.1	-1.7	-3.0	6.1		
60-64	-1.8	4.3	1.7	-7.6	-2.7	5.0		
65-69	-1.6	-4.2	-4.0	-13.6	-2.8	10.3		
70-74	-2.5	.6	-4.3	-11.6	-6.9	2.3		
75 AND OVER	-9.6	-8.9	-8.4		-7.4	-8.6		

Source: Bowles et al. (1975).

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