

University of New Hampshire

University of New Hampshire Scholars' Repository

NHAES Bulletin

New Hampshire Agricultural Experiment Station

6-1-1979

Migration and Its Impacts on the Northeast, Station Bulletin, no.511

Luloff, A. E.

Steahr, T. E.

New Hampshire Agricultural Experiment Station

Follow this and additional works at: <https://scholars.unh.edu/agbulletin>

Recommended Citation

Luloff, A. E.; Steahr, T. E.; and New Hampshire Agricultural Experiment Station, "Migration and Its Impacts on the Northeast, Station Bulletin, no.511" (1979). *NHAES Bulletin*. 472.

<https://scholars.unh.edu/agbulletin/472>

This Text is brought to you for free and open access by the New Hampshire Agricultural Experiment Station at University of New Hampshire Scholars' Repository. It has been accepted for inclusion in NHAES Bulletin by an authorized administrator of University of New Hampshire Scholars' Repository. For more information, please contact Scholarly.Communication@unh.edu.



University of
New Hampshire
Library

Migration and Its Impacts on the Northeast

by

A. E. Luloff and T. E. Steahr

NEW HAMPSHIRE
AGRICULTURAL EXPERIMENT STATION
UNIVERSITY OF NEW HAMPSHIRE
DURHAM, NEW HAMPSHIRE

in cooperation with

Storrs Agricultural Experiment Station
University of Connecticut
Storrs, Connecticut

ACKNOWLEDGEMENTS

This publication is a result of the research program of the Institute of Natural and Environmental Resources. The Institute is a multi-disciplinary group of scientists involved in a coordinated program of research, teaching and extension. The research effort encompasses investigation of: problems affecting the quality of the environment; economics of agriculture, forest and wildlife resources; the efficient use and conservation of water and soil and regional and community planning and development.

The authors wish to thank Jennifer Brown, Graduate Research Assistant, Department of Agricultural Economics and Rural Sociology, University of Connecticut, for assistance in data collection and organization. This report was prepared under Northeast Regional Research Project NE-119 and New Hampshire Agricultural Experiment Station Project Hatch 250.

Programs of the New Hampshire Agricultural Experiment Station are open to all persons without regard to race, color, national origin or sex. The University of New Hampshire is an Affirmative Action/Equal Opportunity Employer.

ABSTRACT

This report examines patterns of net migration by age and race to metropolitan and nonmetropolitan areas of the Northeast Region and individual states from 1960 to 1970. Recent net migration trends from 1970 to 1976 are also discussed and policy implications for the Region are presented. The differential consequences of net migration to nonmetropolitan areas adjacent and nonadjacent to SMSA's are evaluated in terms of the meaning of a new rural renaissance for this Region and the nation.

KEY WORDS: Population, Migration, Metropolitan, Nonmetropolitan, Demographic Characteristics

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Patterns of Migration (1960-1970)	1
Patterns of Migration (1970-1976)	8
Concluding Remarks	11
Policy Considerations	12
References	14

MIGRATION AND ITS IMPACTS ON THE NORTHEAST

by

A.E. Luloff and T.E. Steahr^{1/}

INTRODUCTION

The number of persons living in the Northeast Region and their demographic characteristics have a basic impact on all areas of planning. Changes in the structure, consumption patterns, and residential choices of a population define, in part, the problems facing the Region in technology, energy, food production and distribution, land use, and the general quality of life. A major way in which populations change over time is through the migration process. Individuals and families move into the Northeast while others decide to change their place of residence to outside the Region. It is this net interchange of people leaving and entering the Region which can fundamentally alter the structure and distribution of the Northeast's population. A major purpose of this report is to identify and describe selected patterns of net migration to the Northeast from 1960 to 1970 and from 1970 to 1976. The implications of these changes for policy and planning issues will then be discussed.

PATTERNS OF MIGRATION (1960-1970)

A brief view of the national context of which the Northeast is a part is provided in Table 1, showing net migration for each of the major regions for metropolitan and nonmetropolitan counties by color from 1960 to 1970. Nationally, the pattern of net outmigration from nonmetropolitan counties (more than 1.7 million more persons moved out than moved in) is a continuation of the historical trend of rapid growth in metropolitan areas. As the United States became increasingly urban each decade since 1900, metropolitan areas experienced a net immigration at the expense of a net outmigration of persons from nonmetropolitan areas. This was the case during the 1960's for both white and nonwhite persons.

During the 1960's on a regional basis, the Northeast was the only significant exception to this national pattern. From 1960 to 1970, nonmetropolitan areas reported a net immigration of 175,525 persons, which was larger than the net immigration to metropolitan areas of the Region. The largest proportion of the nonmetropolitan gain was white immigration. Interestingly, metropolitan areas in the Northeast experienced a net outmigration of white persons from 1960 to 1970 but this was offset by a heavy net immigration of nonwhites during the same period. Thus, population gains in the metropolitan Northeast due to net migration was a nonwhite phenomenon during the 1960's, not exceeded in magnitude by any other region in the nation.

^{1/} A.E. Luloff, Institute of Natural and Environmental Resources, University of New Hampshire, and T.E. Steahr, Department of Agricultural Economics and Rural Sociology, University of Connecticut.

Table 1: Net Migration by Regions and Color for Metropolitan and Nonmetropolitan Areas, 1960-1970.

	Net Migration			Migration Rate*		
	Total	White	Nonwhite	Total	White	Nonwhite
United States						
Metro	4,952,393	3,201,215	1,751,178	3.8	2.8	10.6
Nonmetro	-1,738,506	-395,250	-1,343,256	-2.5	-.7	-16.4
Regions						
Northeast	344,330	-402,857	747,187	.7	-.9	19.2
Metro	168,805	-566,853	735,658	.4	-1.5	19.8
Nonmetro	175,525	163,996	11,529	2.2	2.1	6.2
North Central	-763,710	-1,222,563	458,853	-1.3	-2.3	10.4
Metro	22,832	-434,113	456,945	.1	-1.3	11.4
Nonmetro	-786,542	-788,450	1,908	-3.8	-3.9	.5
South	740,364	2,009,809	-1,269,445	1.2	4.1	-9.3
Metro	1,964,373	1,894,506	69,867	6.3	7.7	1.1
Nonmetro	-1,224,009	115,303	-1,339,312	-4.0	.5	-18.9
West	2,892,903	2,421,576	471,327	9.1	8.3	16.6
Metro	2,796,383	2,307,675	488,708	11.9	10.9	20.9
Nonmetro	96,520	113,901	-17,381	1.1	1.4	-3.5

*The rate is net migration expressed as a percent of the 1970 expected survivors of the 1960 population plus births during the decade.

Source: Bowles, Gladys, and Calvin L. Beale, Net Migration of the Population, 1960-1970, by Age, Sex, and Color, Part 7, Economic Research Service, U.S. Department of Agriculture.

It should be clearly understood that of the 49,062,000 persons residing in the Northeast Region in 1970, accounting for 24.1 percent of the nation's population, the majority, 42,481,000 or 86.6 percent, lived within the boundaries of standard metropolitan statistical areas. While we are still an urban Region, net migration flows during the decade of the 1960's favored the nonmetropolitan areas. The Northeast led the rest of the nation in this regard by a full decade because the national pattern of net immigration to nonmetropolitan areas did not appear until after 1970.

Age structure is known to be associated with many other social and economic characteristics of a population and it is perhaps the most important single demographic characteristic we should analyze. Table 2 presents net migration estimates by age and color for this Region from 1960 to 1970. Several interesting patterns emerge from these data. There was a net loss of young adults 20-24 years of age, the age where marriage and family formation typically begins, and a net loss of the older population 50 years of age and over. These losses were due to substantial net outmigration of whites from the Northeast and would have been greater if they were not balanced by an equally substantial net immigration of nonwhites in those same age groups.

Net migration rates by age show the relative importance of gains or losses during the decade. For the white population 20-24 years of age, the net outmigration of 230,473 persons represented 6.5 percent of the 1970 population in this age group. For the nonwhite population 25-29 years of age, the net immigration of 148,657 persons represented 72.7

Table 2: Net Migration by Age and Color, Northeast, 1960-1970.

Age in 1970	Net Migration			Migration Rate*		
	Total	White	Nonwhite	Total	White	Nonwhite
Total	344,330	-402,857	747,187	.7	-.9	19.2
0- 4	56,906	37,052	19,854	1.4	1.1	4.1
5- 9	97,208	31,972	65,236	2.2	.8	13.6
10-14	102,432	11,124	91,308	2.2	.3	21.4
15-19	69,229	-16,229	85,458	1.6	-.4	24.4
20-24	-119,497	-230,473	110,976	-3.1	-6.5	41.6
25-29	199,670	51,013	148,657	6.7	1.8	72.7
30-34	226,810	141,114	85,696	9.2	6.3	37.4
35-39	90,336	40,225	50,111	3.5	1.7	20.8
40-44	42,618	11,603	31,015	1.4	.4	12.5
45-49	19,377	-2,152	21,529	.6	-.1	9.3
50-54	-5,086	-20,536	15,450	-.2	-.8	8.1
55-59	-28,437	-38,799	10,362	-1.1	-1.6	6.6
60-64	-75,412	-80,510	5,098	-3.2	-3.7	3.9
65-69	-112,219	-110,747	-1,473	-5.9	-6.1	-1.3
70-74	-107,092	-107,308	216	-6.9	-7.3	.3
75+	-112,513	-120,207	7,694	-5.5	-6.1	10.6

*The rate is net migration expressed as a percent of the 1970 expected survivors of the 1960 population plus births during the decade.

Source: Bowles, Gladys, and Calvin L. Beale, Net Migration of the Population, 1960-1970, by Age, Sex and Color, Part 7, Economic Research Service, U.S. Department of Agriculture.

percent of the 1970 population in this age group. In fact, the relative significance of net migration was much greater for nonwhites at all age levels up to 65 years of age. This means that changes in the age structure of the Northeast's nonwhites were primarily due to differential net immigration during the 1960's.

To better understand the migration patterns described previously, Tables 3 and 4 show net migration by age and color for these two areas from 1960 to 1970. Data in Table 3 clearly shows that the white population residing in metropolitan areas of the Northeast experienced a net outmigration at all ages except for the 0-4 and 25-39 year olds. White persons 20-24 years of age in metropolitan areas had the largest net outmigration of any age group but the volume of net outmigration also increased with successive age intervals between the 40-44 and 65-69 year olds. In terms of net migration rates for metropolitan whites, the impact was relatively small, less than 10 percent for any age group.

Net migration of nonwhites to metropolitan areas in the Northeast had a pattern opposite that for whites. Nonwhites experienced a substantial volume and rate of net immigration at all age groups except the 65-69 year olds. The highest net gains for metropolitan nonwhites was in the 20-29 year old group which reported a net immigration of 252,149 persons. The magnitude of net migration of nonwhites to metropolitan areas in the Northeast may be seen by the fact that of the 747,187 net immigrants, 735,658 or 98.5 percent of the nonwhites moved to metropolitan areas during the 1960's.

Table 4 contains data for net migration by age and color for the Northeast nonmetropolitan areas and shows that the net gain was due primarily to white net immigration. Of the total net immigration

Table 3: Net Migration by Age and Color, Northeast Metropolitan Areas, 1960-1970.

Age in 1970	Net Migration			Migration Rate*		
	Total	White	Nonwhite	Total	White	Nonwhite
Total	168,805	-566,853	735,658	.4	-1.5	19.8
0- 4	29,032	8,380	20,652	.9	.3	4.5
5- 9	51,798	-13,006	64,804	1.4	-4	14.1
10-14	71,155	-18,777	89,932	1.8	-5	22.1
15-19	35,905	-45,140	81,045	1.0	-1.4	24.3
20-24	-63,447	-169,005	105,558	-2.0	-5.8	41.7
25-29	241,447	94,856	146,591	9.9	4.2	76.4
30-34	206,857	121,287	85,570	10.1	6.7	39.5
35-39	65,377	14,985	50,390	3.0	.8	22.0
40-44	23,665	-7,993	31,658	.9	-.3	13.4
45-49	7,294	-14,661	21,955	.3	-.6	9.9
50-54	-17,915	-33,431	15,516	-.7	-1.5	8.5
55-59	-42,115	-52,471	10,356	-1.9	-2.5	6.9
60-64	-94,022	-99,164	5,142	-4.8	-5.4	4.1
65-69	-131,431	-130,076	-1,355	-8.1	-8.6	-1.3
70-74	-115,819	-116,141	322	-8.9	-9.4	.5
75+	-98,976	-106,498	7,522	-5.9	-6.6	11.0

*The rate is net migration expressed as a percent of the 1970 expected survivors of the 1960 population plus births during the decade.

Source: Bowles, Gladys, and Calvin L. Beale, Net Migration of the Population, 1960-1970, by Age, Sex and Color, Part 7, Economic Research Service, U.S. Department of Agriculture.

Table 4: Net Migration by Age and Color, Northeast Nonmetropolitan Areas, 1960-1970.

Age in 1970	Net Migration			Migration Rate*		
	Total	White	Nonwhite	Total	White	Nonwhite
Total	175,525	163,996	11,529	2.2	2.1	6.2
0- 4	27,874	28,672	-798	4.2	4.5	-3.7
5- 9	45,410	44,978	432	6.0	6.1	1.9
10-14	31,177	29,901	1,376	3.9	3.9	6.6
15-19	33,324	28,911	4,413	4.5	4.0	26.2
20-24	-56,050	-61,468	5,418	-8.4	-9.4	40.9
25-29	-41,777	-43,843	2,066	-7.8	-8.3	16.3
30-34	19,953	19,827	126	4.8	4.9	1.0
35-39	24,959	25,238	-276	6.2	6.4	-2.3
40-44	18,953	19,596	-643	4.2	4.4	-5.6
45-49	12,083	12,509	-426	2.6	2.7	-4.4
50-54	12,829	12,895	-66	2.9	3.0	-.8
55-59	13,678	13,672	6	3.4	3.5	.1
60-64	18,610	18,654	-44	5.2	5.3	-.8
65-69	19,212	19,330	-118	6.6	6.7	-2.4
70-74	8,727	8,833	-106	3.6	3.7	-2.9
75+	-13,537	-13,709	172	-3.7	-3.8	3.9

*The rate is net migration expressed as a percent of the 1970 expected survivors of the 1960 population plus births during the decade.

Source: Bowles, Gladys, and Calvin L. Beale, Net Migration of the Population, 1960-1970, by Age, Sex and Color, Part 7, Economic Research Service, U.S. Department of Agriculture.

of 175,525 from 1960 to 1970, 163,996 or 93.4 percent was white net immigration. However, young whites 20-29 years of age continue to record net outmigration, a pattern for both metropolitan and nonmetropolitan areas. This net loss represented about 8.5 percent of whites in that age group living in the nonmetropolitan Northeast in 1970.

For a region as large and diverse as the Northeast, many important sub-regional migration trends may be masked by total aggregate data. Table 5 presents net migration by age for the nonmetropolitan areas in the Northern New England states of New Hampshire, Vermont and Maine. From 1960 to 1970, Maine was the only state in Northern New England not to experience a net immigration to nonmetropolitan areas. New Hampshire recorded a net gain of 44,287 persons or 9.4 percent of the 1970 population in nonmetropolitan areas. Vermont had a net immigration to nonmetropolitan areas of 15,428 persons but Maine recorded a net outmigration from nonmetropolitan areas of 58,373 persons which was spread across all age groups except 60-69 year olds.

Table 5: Net Migration for Nonmetropolitan Areas in New Hampshire, Vermont, and Maine, 1960-1970.

Age in 1970	New Hampshire		Vermont		Maine	
	Net Migration	Rate*	Net Migration	Rate*	Net Migration	Rate*
	Total	Rate*	Total	Rate*	Total	Rate*
Total	44,287	9.4	15,428	3.6	-58,373	-7.6
0- 4	2,999	7.3	2,182	5.8	-1,051	-1.7
5- 9	5,815	12.8	3,403	8.0	-5,934	-7.7
10-14	4,923	10.6	2,001	4.6	-6,607	-8.2
15-19	5,764	13.7	3,781	9.3	-5,452	-7.5
20-24	2,776	7.1	-1,215	-3.3	-12,521	-18.7
25-29	1,606	5.1	-1,962	-6.3	-11,224	-21.2
30-34	2,842	11.3	1,696	7.7	-5,707	-13.5
35-39	3,439	14.1	2,053	9.9	-3,040	-7.5
40-44	3,197	12.5	1,614	7.2	-1,977	-4.7
45-49	2,462	9.3	976	4.3	-1,867	-4.5
50-54	2,340	9.4	655	3.0	-984	-2.6
55-59	2,026	8.8	391	1.9	-222	-0.6
60-64	2,075	10.0	405	2.2	351	1.1
65-69	1,473	8.6	292	1.9	229	.9
70-74	791	5.5	196	1.6	-296	-1.3
75+	-241	-1.1	-1,040	-5.2	-2,066	-6.0

*The rate is net migration expressed as a percent of the 1970 expected survivors of the 1960 population plus births during the decade.

Source: Bowles, Gladys and Calvin L. Beale, Net Migration of the Population, 1960-1970, by Age, Sex, and Color, Part 7, Economic Research Service, U.S. Department of Agriculture.

Table 6 presents net migration to nonmetropolitan areas to the Southern New England states of Connecticut, Massachusetts and Rhode Island. Both Connecticut and Massachusetts had a net immigration to nonmetropolitan areas which amounted to 12.7 and 17.1 percent of the 1970 nonmetropolitan population, respectively. However, both of these states reported a net outmigration of 20-24 year olds from their nonmetropolitan areas, the only age group where losses occurred. Rhode Island, in contrast, had a slight net loss of persons from 1960 to 1970 in nonmetropolitan areas but reported wide variations in net migration by age groups. For example, persons 30-34 years of age recorded a net outmigration from nonmetropolitan areas of 4,985 or 47.2 percent of the 1970 population of that age. Persons 20-24 years of age in nonmetropolitan areas had a net immigration of 10,733 which represented 165.3 percent of the 1970 expected population. The reasons for this heavy net immigration of 20-24 year olds in Rhode Island are unclear, but it is a pattern not typical of nonmetropolitan areas in most of the states in the Northeast Region.

Table 6: Net Migration for Nonmetropolitan Areas in Connecticut, Massachusetts, and Rhode Island, 1960-1970.

Age in 1970	Connecticut		Massachusetts		Rhode Island	
	Net Migration		Net Migration		Net Migration	
	Total	Rate*	Total	Rate*	Total	Rate*
Total	38,709	12.7	24,164	17.1	-108	-1
0- 4	2,666	10.0	922	8.2	-556	-6.6
5- 9	5,351	18.6	2,781	23.1	-1,107	-11.5
10-14	4,744	16.0	1,297	8.7	-1,188	-12.8
15-19	1,856	6.8	392	3.0	1,127	14.9
20-24	-840	-3.4	-454	-3.9	10,733	165.3
25-29	4,594	24.7	1,449	17.7	-1,678	-19.2
30-34	5,696	41.9	605	8.3	-4,985	-47.2
35-39	2,992	19.7	555	7.3	-214	-4.1
40-44	2,555	14.6	1,194	14.9	-1,031	-18.0
45-49	2,281	12.1	1,095	12.9	-1,147	-21.2
50-54	1,722	9.1	1,726	22.0	-270	-6.4
55-59	1,571	9.4	1,885	27.1	93	2.8
60-64	1,168	8.2	3,032	48.7	194	6.9
65-69	1,169	10.5	3,715	72.4	60	2.6
70-74	590	6.5	2,498	52.6	-26	-1.4
75+	594	4.2	1,472	18.2	-113	-4.3

*The rate is net migration expressed as a percent of the 1970 expected survivors of the 1960 population plus births during the decade.

Source: Bowles, Gladys and Calvin L. Beale, Net Migration of the Population, 1960-1970, by Age, Sex, and Color, Part 7, Economic Research Service, U.S. Department of Agriculture.

Table 7 contains net migration to the nonmetropolitan areas of the Middle Atlantic states of New York, New Jersey and Pennsylvania. Both New York and New Jersey reported a net immigration from 1960 to 1970 in nonmetropolitan areas but New York had a net loss of 20 year olds and elderly persons 65 years and over. New Jersey had substantial net migration gains to nonmetropolitan areas across all age groups, with 60.4 percent of the 30-34 year olds in 1970 due to net immigration. Pennsylvania shows net outmigration from nonmetropolitan areas for all age groups except persons under 10 years of age. The largest volume and rate of net outmigration was for persons 20-29 years of age.

Table 7: Net Migration for Nonmetropolitan Areas in New York, New Jersey, and Pennsylvania, 1960-1970.

Age in 1970	New York		New Jersey		Pennsylvania	
	Net Migration		Net Migration		Net Migration	
	Total	Rate*	Total	Rate*	Total	Rate*
Total	23,401	1.0	219,024	28.1	-131,007	-5.1
0- 4	7,269	3.6	9,889	12.8	3,554	1.0
5- 9	10,990	4.6	24,058	29.9	53	.0
10-14	8,900	3.7	24,387	31.5	-7,180	-2.9
15-19	15,461	6.9	12,629	18.2	-2,234	-.9
20-24	-17,152	-8.5	4,390	7.2	-41,767	-19.0
25-29	-11,996	-7.4	17,733	39.2	-40,299	-22.4
30-34	7,608	6.1	21,434	60.4	-9,236	-6.9
35-39	6,494	5.3	17,004	43.0	-4,324	-3.4
40-44	3,390	2.5	13,436	28.9	-3,425	-2.3
45-49	896	.6	11,091	23.4	-3,704	-2.4
50-54	838	.6	9,857	22.4	-3,050	-2.0
55-59	395	.3	10,094	26.4	-2,555	-1.9
60-64	1,061	1.0	12,421	38.2	-2,097	-1.8
65-69	-49	-.1	14,726	54.2	-2,403	-2.5
70-74	-1,821	-2.4	9,678	41.3	-2,884	-3.7
75+	-8,883	-7.5	6,197	18.0	-9,457	-8.2

*The rate is net migration expressed as a percent of the 1970 expected survivors of the 1960 population plus births during the decade.

Source: Bowles, Gladys and Calvin L. Beale, Net Migration of the Population, 1960-1970, by Age, Sex, and Color, Part 7, Economic Research Service, U.S. Department of Agriculture.

On the basis of the preceding analysis, the following generalizations may be made about the Northeast Region from 1960 to 1970:

- 1) Both metropolitan and nonmetropolitan areas had a net immigration and nonmetropolitan net immigration in the Northeast was the largest in the nation.
- 2) Metropolitan net immigration was due primarily to nonwhite movement in these areas.
- 3) Nonmetropolitan net immigration was due primarily to white movement in these areas.
- 4) There was a substantial net outmigration from metropolitan areas of white persons 20-24 years of age and a net immigration of nonwhites in this age group.
- 5) There was a substantial net immigration to nonmetropolitan areas of white persons of all ages except the 20 years olds, which had a net outmigration.
- 6) For nonmetropolitan areas in Northern New England, only Maine reported a net outmigration.
- 7) For nonmetropolitan areas in Southern New England, only Rhode Island reported a net outmigration.
- 8) For nonmetropolitan areas in the Middle Atlantic, only Pennsylvania reported a net outmigration.
- 9) For nonmetropolitan areas, only New Hampshire, Rhode Island, and New Jersey reported a net immigration of young persons 20-24 years of age.

PATTERNS OF MIGRATION (1970-1976)

While these patterns are useful in understanding net migration patterns in the Northeast during the 1960's, additional data are required to determine if recent trends during the 1970's have remained the same or have changed. Unfortunately, the detailed data on age and race by residential status for the Northeast Region and individual states are not available for noncensal years. There are, however, recent estimates of the population of states by metropolitan residence, and these data have been analyzed by Calvin L. Beale, Population Studies Program, of the Economics, Statistics, and Cooperatives Service, United States Department of Agriculture. The following analysis of recent net migration patterns in the Northeast draws heavily on this previous work by Beale.

Table 8 presents total population change and net migration to metropolitan and nonmetropolitan areas in the Northeast from 1970 to 1976. At the national level during this period, nonmetropolitan areas grew in population at almost twice the rate (8.0 percent) as the metropolitan population (4.7 percent). The United States is still predominantly metropolitan but from 1970 to 1976 the net migration flows are predominantly toward nonmetropolitan areas, with 2,255,000 more persons moving into those areas than moving out. It may be recalled that during the decade of the 1960's, nonmetropolitan areas in the United States experienced a net out-migration of over 1.7 million persons and therefore the reversal of net migration flows into nonmetropolitan areas since 1970 represents a major

Table 8: Population Change and Net Migration by Metropolitan Residence, States in the Northeast, 1970-1976.

Item (in 1000's)	U.S.	North- east	Maine	N.H.	Vermont	Mass.	R.I.	Conn.	N.Y.	N.J.	Penn.
Total											
1976	214,658	49,563	1,070	822	476	5,809	927	3,117	18,084	7,336	11,862
1970	203,304	49,062	994	738	445	5,689	950	3,032	18,242	7,171	11,801
% Change	5.6	1.0	7.7	11.5	7.1	2.1	-2.4	2.8	-9	2.3	.5
Metro											
1976	155,901	42,371	324	412	—	5,595	867	2,869	16,006	6,771	9,547
1970	148,881	42,481	307	363	—	5,523	855	2,804	16,291	6,756	9,582
% Change	4.7	-3	5.5	13.5	—	1.3	-1.0	2.3	-1.7	.2	-.4
Nonmetro											
1976	58,757	7,132	746	410	476	214	80	248	2,078	565	2,315
1970	54,424	6,580	686	375	445	166	94	229	1,951	415	2,219
% Change	8.0	8.4	8.7	9.4	7.1	29.2	-14.8	8.5	6.5	36.1	4.3
Net Migration											
1970-1976											
Total	2,800	-806	42	56	14	-8	-45	-3	-644	-42	-176
Metro	545	-1,176	6	31	—	-56	-26	-17	-715	-181	-218
Nonmetro	2,255	370	36	25	14	48	-19	14	71	139	42

Source: U.S. Bureau of the Census, Current Population Reports, Series P-25 and P-26, as summarized by Calvin L. Beale, Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture.

migration turnaround for the nation. In fact, the volume of net immigration to nonmetropolitan areas from 1970-1976 is already greater than the volume of net outmigration from 1960-1970. Likely reasons for this national net flow into nonmetropolitan areas are discussed later and some implications for the receiving areas are presented.

In terms of total population change, the Northeast Region was stable from 1970-1976 with only a 1.0 percent increase relative to a national growth of 5.6 percent. Metropolitan population in the Northeast declined by .3 percent during this recent period, a pattern opposite that of metropolitan growth for the nation as a whole. The population residing in nonmetropolitan areas of the Northeast increased from 6,580,000 in 1970 to 7,132,000 in 1976, an 8.4 percent growth. Nonmetropolitan areas continued the trend of the 1960's with a net gain of 370,000 people from 1970-1976. Net migration data reveal that metropolitan areas in the Region experienced a net outmigration of 1,176,000 persons.

It is important to compare the magnitude of the volume of net movements from 1970-1976 with the previous ten year period of the 1960's. During the shorter time period of the early 1970's, the Northeast experienced a net migration reversal of -806,000 people compared to the net gain of 344,000 from 1960-1970. This major shift in net migration flows is the result of heavy net outmigration from metropolitan areas. The Region would have declined in total population from 1970-1976 if natural increase had not exceeded the losses due to net outmigration.

On a state basis within the Northeast, all states except Rhode Island and New York increased in population size from 1970 to 1976, with the most rapidly growing populations located in the Northern New England states. Growth patterns of metropolitan populations of the states are mixed, with the most populous states of New York and Pennsylvania reporting declines which are responsible for the total Regional decline. However, the remaining five states experienced metropolitan population increase, with New Hampshire growing most rapidly at 13.5 percent from 1970 to 1976.

The nonmetropolitan population increased in all states in the Northeast Region except Rhode Island and the volume and percentage of this growth was substantial. New Jersey, for example, increased from 415,000 persons in nonmetropolitan areas in 1970 to 565,000 by 1976 for a 36.1 percent increase. All of the Northern New England states increased their non-metropolitan population and Massachusetts recorded a 29.2 percent growth in this residential category.

The data for net migration during the early 1970's reveal that all the Northeastern states except Rhode Island experienced a net immigration to their nonmetropolitan areas. This pattern represents a major net migration turnaround for Maine and Pennsylvania, who had net outmigration from these residential areas during the 1960's. The volume of net immigration in Massachusetts, a net gain of 48,000 persons, is almost twice the volume recorded for the decade of the 1960's.

In summary, these data clearly show that nonmetropolitan population growth and net immigration to these areas has continued during the 1970 to 1976 period for the Northeast Region. Unlike the rest of the United States, this pattern of growth and net flows to nonmetropolitan areas spans a period from at least 1960 and will likely continue throughout the rest of this decade. A basic implication is that the Northeast Region does not face a problem of total population growth but rather a differential problem of metropolitan population stability concomitant with rapid growth of the nonmetropolitan population. If the volume of births in the metropolitan Northeast continues to decline while deaths remain stable, the Region may not be able to offset the large volume of net outmigration and experience a decline in metropolitan populations by 1980.

The reasons for the fundamental changes in migration patterns, both nationally and regionally, are not fully understood. Calvin Beale has suggested that rapid growth of new sources of employment in nonmetropolitan areas (in trade, services and other nongoods-producing activities), upper income people retiring in nonmetropolitan areas, and an increase in the importance of noneconomic factors in the choice of residential location may be some basic reasons for the recent net migration turnaround. Recent published research by Beale presents national data supporting the suggestion that nonmetropolitan employment growth depends on nonagricultural industries because persons moving into these areas since 1970 were more likely to be employed in professional services, wholesale and retail trade, finance, insurance, and real estate than persons who lived in nonmetropolitan areas beyond 1970. The longer term residents were more likely employed in agricultural and manufacturing industries. The basic point of this analysis is that nonmetropolitan employment and industrial structure have become increasingly diversified and less concentrated in agriculture.

Beale's analysis of the Northeast Region, more broadly defined to include the states of Delaware, Maryland, West Virginia and the District of Columbia, shows that from 1970 to 1976 nonmetropolitan counties adjacent to the boundaries of Standard Metropolitan Statistical Areas increased in population more rapidly than nonadjacent nonmetropolitan counties. This is a continuation of the trend during the 1960's and may be viewed as a kind of metropolitan expansion into the adjacent areas. However, from 1970 to 1976 nonadjacent nonmetropolitan counties also increased rapidly in population and reported a net immigration during that period, a reversal of the pattern of net outmigration in this category of counties from 1960 to 1970. This means that recent nonmetropolitan expansion in the Northeast Region is not simply the result of metropolitan expansion but also represents a basically new pattern of residential choices (Swanson, 1978).

To document this observation, Beale demonstrated that the rate of nonmetropolitan growth in the early 1970's was highest in those counties where the largest town was less than 2,500 persons and lowest in counties where the largest town was 25,000 or more persons, a complete reversal of the 1960-1970 Regional pattern. In addition, the volume and rate of net immigration from 1970 to 1976 to nonmetropolitan counties increased with decreasing percentages of persons employed in manufacturing industries. This was a reversal of the net migration pattern from 1960 to 1970. These and other complex changes in nonmetropolitan population growth in the Northeast require additional research before a more complete understanding is achieved. Certainly, however, these changes underscore the fact that the nonmetropolitan Northeast is not simply a microcosm of its metropolitan counterpart. Policies treating it as such underestimate its uniqueness and potential to basically alter the composition of the Northeast population.

CONCLUDING REMARKS

While nonmetropolitan areas have experienced population growth, the factors influencing this growth appear to be different for nonmetropolitan counties adjacent and nonadjacent to the boundaries of Standard Metropolitan Statistical Areas (SMSA's). Since 1970, five-eighths of nonmetropolitan growth has been attributed to residential mobility from metropolitan areas into adjacent nonmetropolitan counties (Beale, 1975). To this extent, the population redistribution does not necessarily reflect increments in nonmetropolitan opportunity structures because adjacent counties are within commuting distance of the opportunity structure of metropolitan areas. Most observers expect these adjacent nonmetropolitan areas to continue growing but the consequences and implications of this growth are different

than population growth in nonmetropolitan areas removed from the immediate proximity of SMSA's.

A final point involves the notion that nonmetropolitan population growth may be viewed as a unidimensional phenomenon indicating a national pattern of rural renaissance. This is clearly unwarranted in the case of suburbanization of nonmetropolitan areas adjacent to SMSA's. It is also an overstatement in the case of nonmetropolitan areas not adjacent to SMSA's if rural renaissance means a return to farming activities. Our previous analysis has shown that nonfarm employment activities predominate among new migrants to remote nonmetropolitan areas. A revival of the traditional rural farm way of life does not appear to be a major force behind the recent migration turnaround, but rather the emergence of a new, nonfarm definition of nonmetropolitan lifestyles is responsible for fundamental changes in the residential location of our nation's people.

POLICY CONSIDERATIONS

In order to ensure that the population reversal does not have major deleterious effects on the stability and integrity of local nonmetropolitan governments, efforts must be made to strengthen and diversify the rural economy of the region. Great strides must be made in attempting to increase the opportunity structures in this area (so as to better utilize the existent manpower as well as future labor force potentials) by attracting large scale private investment. Similarly, governmental (local, state, and federal) expenditures which have long term economic development potential must be encouraged.

Every effort must be made to monitor investment and regulatory policies to prevent adverse effects on rural areas. One way to accomplish this is to engage in multi-purpose planning. For example, state and local governments should be encouraged to focus efforts on placing labor intensive industries in unemployment areas. At the same time, improvements in the existent labor force must be made by expanding programs which provide appropriate education and job training skills. Attention must be given to all segments of the local population, providing rural residents maximum choice and opportunity for human development. Strict enactment of statutes which call for equal opportunity and affirmative action are necessary if true increments in nonmetropolitan opportunity structures are to come about. Programs which affect the handicapped, the low income, the elderly and the underemployed, as well as the unemployed, must be incorporated into major resource allocation decisions. Every effort must be made to ensure that all nonmetropolitan residents share and benefit in future economic opportunity policies. By expanding programs which provide education and job training skills in areas of poverty, the ability of nonmetropolitan residents to secure a better and more fulfilling lifestyle should be vastly improved.

Efforts must be made to provide adequate housing for all by encouraging efforts to expand opportunities for home ownership as well as equal opportunity for housing. Attention must be given to establishing programs which subsidize or reduce the cost of housing, making it available for all nonmetropolitan residents.

The nonmetropolitan Northeast is marked by the preponderance of small localities and the absence of available transportation linkages between them. Mass public transportation is needed so as to interconnect these communities and their concomitant services. Further, such transportation facilities would encourage the elderly, handicapped and low income people

to engage in activities which, while perhaps available, were previously inaccessible.

Also, attention needs to be given to the natural resources of this area. Every effort must be made to identify, preserve and protect critical environmental areas of this region. The public must be encouraged to push for the maintenance of places of regional, state and local historical significance. Further efforts are needed in the scientific forest management of forestland. When addressing housing shortages, efforts need to be taken which support housing development that accommodates environmental limitations. Policies need to be formulated which discourage random housing development so that the preservation of open space becomes a reality. All new residential construction should be encouraged to be energy efficient. Because the nonmetropolitan Northeast's environment is apparently an important reason for its population growth, efforts must be made to provide a variety of outdoor recreation opportunities. The region's shoreline land must be increased and preserved for use by the public. At the same time, the availability of adequate outdoor campsites and facilities must also be encouraged. Attention needs to be given to preserving the Northeast's agricultural heritage and the artifacts of the colonial artisans -- covered bridges, historical buildings and the like.

It is recognized that the above suggestions are directed toward issues relevant to nonmetropolitan areas in a predominantly metropolitan Northeast Region of the nation. However, this Region has led the nation by a full decade in its dynamic growth of nonmetropolitan areas and has the potential to continue to lead this nation in the development of policies tailored to the unique needs of its rural nonfarm population. Recognizing that there are different policy implications within nonmetropolitan areas of each state and between nonmetropolitan areas adjacent and not adjacent to SMSA boundaries, the above suggestions are by no means exhaustive. Nor, for that matter, are they presented in a rank order from the most to least important. On the contrary, what is suggested is the interdependency of these various components (people, job opportunities, educational training, transportation, housing and environment) and the necessity for policy makers to maintain "a big picture" of the nonmetropolitan Northeast. Further, it is strongly suggested that coordination of efforts between and among local, state and federal agencies be encouraged. The nonmetropolitan Northeast is a vital part of this country's heritage. Its future should not depend solely on administrative decisions made in another area of the region or country. Through efforts such as the Northeast Agricultural Leadership Assembly, government officials, businessmen, University research and extension personnel, and concerned local citizens can gather, listen and discuss their mutual concerns over the fate of this area. Whether or not these efforts bear fruit will depend largely on the ability to move beyond the mere recognition of problems to active decision making and implementation.

- Beale, Calvin L. 1975. The revival of population growth in nonmetropolitan America. U.S.D.A. Economic Research Service, ERS 605.
- Beale, Calvin L. 1978. Population trends in the Northeast. Paper presented at the Annual Meetings of the Northeast Agricultural Economics Council, June, Durham, NH.
- Bowles, Gladys K., Calvin L. Beale, and Everett S. Lee. 1977. Net migration of the population, 1960-1970, by age, sex, and color. Volume 7. Analytical groupings of counties. U.S. Dept. Agri. Econ. Res. Serv. Univ. Ga. Inst. Behav. Res. and Nat'l Sci. Foundation, Res. Appld. Nat'l Needs, cooperating.
- Dillman, Don A. and Russell P. Dobash. 1972. Preferences for community living and their implications for population redistribution. College of Agriculture Research Center Bulletin 764, Washington State University.
- Ryan, Vernon, Brian Blake, Ralph Brooks, John Gordon. 1974. Community size preference patterns among Indiana residents. Agricultural Experiment Station Bulletin 44, Purdue University.
- Swanson, Louis E. 1978. Personal communication.
- Washington State University. 1978. The social and economic significance of human migration in the western region. College of Agriculture Research Center, Bulletin 859.
- For Related Discussions of the Nonmetropolitan Turnaround See:
- Beale, Calvin L. 1976. A further look at nonmetropolitan population growth since 1970. American Journal of Agricultural Economics 58 (December):953-958.
- Carpenter, Edwin H. 1977. The potential for population dispersal: A closer look at residential location preferences. Rural Sociology 42 (Fall):352-370.
- DeJong, Gordon. 1977. Residential preferences and migration. Demography 14 (May):169-178.
- Frisbie, W. Parker and Dudley L. Posten, Jr. 1976. The structure of sustenance organization and population change in nonmetropolitan America. Rural Sociology 41 (Fall):354-370.
- Fuguitt, Glenn V. and Calvin L. Beale. 1976. Population change in nonmetropolitan cities and towns. U.S.D.A. Economic Research Service, AER-323.
- Fuguitt, Glenn V. and James J. Zuiches. 1975. Residential preferences and population distribution. Demography 12 (August):491-504.
- Goldstein, Sidney. 1976. Facets of redistribution: Research challenges and opportunities. Demography 13 (November):432-434.
- Morrison, Peter A., with Judith P. Wheeler. 1976. Rural renaissance in America? The revival of population growth in remote areas. Population Bulletin, Vol. 31, No. 3, Population Reference Bureau, Inc., Washington, DC.

- Tucker, C. Jack. 1976. Changing patterns of migration between metropolitan areas in the United States: Recent evidence. Demography 13 (November):435-443.
- Wardwell, John M. 1977. Equilibrium and change in nonmetropolitan growth. Rural Sociology 42 (Summer):156-179.
- Zelinsky, Wilbur. 1978. Is nonmetropolitan America being repopulated? The evidence from Pennsylvania's minor civil division. Demography 15 (December):13-39.
- Zuiches, James J., and Glenn V. Fuguitt. 1976. Public attitudes on population distribution policies. Growth and Change 7 (April):28-33.

AUG 13 2004

BioSci

~~630.72~~

~~N532~~

~~no. 501-516~~

