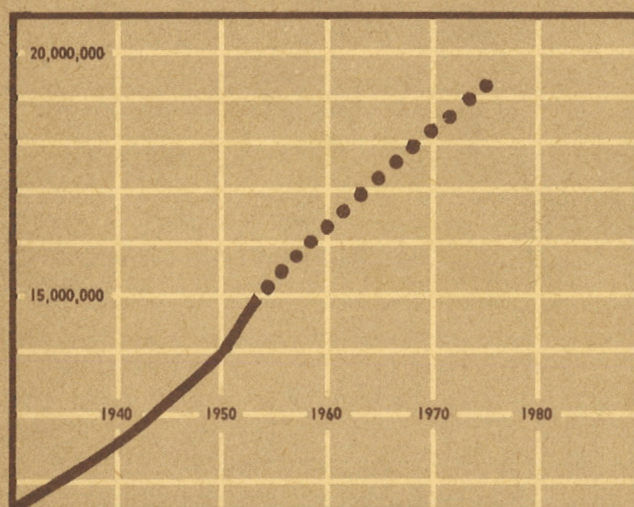


NEW YORK  
NEW JERSEY  
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# REGIONAL PLAN ASSOCIATION



## POPULATION, 1954-1975

in the

New Jersey-New York-Connecticut Metropolitan Region.

RPA BULLETIN

NUMBER 85

NOV. 1954



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# POPULATION, 1954—1975

in the

## New Jersey—New York—Connecticut Metropolitan Region

By 1975 the population of the New York metropolitan region will have risen from the present 15 million persons to more than 19 million; and the number will still be increasing rapidly. This is the central finding of the population forecast presented in the following pages.

Ever since the Great Depression of the 1930's and indeed as recently as the hearings before the Metropolitan Rapid Transit commissions of New Jersey and New York late in 1953, it was widely assumed that the growth of the New Jersey-New York-Connecticut Metropolitan Region would approach a standstill by about 1970 at a level of approximately 15.5 million persons. This viewpoint was in line with the predominant thinking about national population trends. It was commonly held that the national population was "leveling-off" and

that the birth rates of the Nineteen-Thirties would be characteristic of the U. S. population of the future.

The present Regional Plan Association forecasts in no sense represent merely a swing of the pendulum from pessimism to optimism. Indeed, the estimates assume (perhaps somewhat conservatively) that the current high birth rates will decline to the 1940 levels by 1975.

The impressive regional population gains contained in the new forecasts do embody the vision that this metropolitan area will continue into the foreseeable future to be a focal region in the affairs of the nation and the world and that its thriving and pre-eminent growth will strongly attract and hold people for many years to come.

### HIGHLIGHTS

The population of the region, 15,064,000 on January 1, 1954, is expected to increase to 19,200,000 in 1975 (p. 1).

#### Regional Population Changes

The regional population increased by 1,100,000 persons or 8% between April 1, 1950 and January 1, 1954 (p. 4).

The 4-year gain since 1950 was  $\frac{3}{4}$  as great as the increase between 1940 and 1950 (p. 4).

Since 1950 the region has been increasing more rapidly than the nation—8% and 6% respectively. With the exception of two decades the region has grown more rapidly than the nation ever since 1830 (p. 4).

In the last four years the New York region was the sixth fastest growing among the nation's 14 largest metropolitan areas and the first in numbers of persons added (p. 4).

Half the region's increase since 1950, 546,000 was due to migration from other places. The other half was due to the local excess of births over deaths (p. 5).

#### Central City and Environs

In the last four years New York City increased 215,000, while the remainder of the region increased 898,000. Thus 81% of the region's increase since 1950 occurred outside New York City furthering a trend of declining central city dominance in evidence for several decades. In 1900 the area outside New York City had only 39% of the regional total whereas by 1954 the same area had 46% (p. 5).

Since 1940 the number of people leaving New York City has exceeded the

sum of natural increase plus the number moving in from other places. The net migration out of the city since 1950 (the difference between the actual increase and natural increase) amounted to 65,000 (p. 5).

#### New Jersey, New York and Connecticut

Although more than twice as many persons were added in the region to the New York counties as to the New Jersey counties (711,000 against 346,000), the rate of increase was faster in New Jersey (9.7%) than in New York (7.2%) continuing a long-term trend. Connecticut's lone county in the region, Fairfield, increased by 59,000 or 11.3% (p. 6).

#### County Population Changes

Nassau, Queens, Suffolk and Bergen each increased by more than 100,000 persons. They jointly accounted for 650,000 or 53% of the regional increase. Nassau, the leader, added almost 300,000 persons—more than  $\frac{1}{4}$  of the regional gain (p. 6).

As the population of the region expanded over the last half century the older, more built-up counties—New York, Kings, Hudson, Essex and Passaic—declined in regional dominance. Nassau, Bergen, Union, Middlesex, Queens, Suffolk and Westchester have been growing in importance (p. 7).

All the counties of the region had increases as a result of more people moving in than out except New York, Kings and Hudson counties (p. 8).

#### Population Changes By Municipality

Eight municipalities have more than doubled their population since 1950 (p. 8).

Hempstead Town in Nassau County received the largest increase of any municipality in the environs—137,500 or 55% in less than four years (p. 8).

In this period 23 municipalities declined in population, many of them in Hudson County (p. 8).

#### City Versus Suburb

Decentralization is occurring within the environs themselves:  $\frac{3}{4}$  of the population increase in the environs since 1950 occurred outside the 20 cities of over 50,000. The 20 cities increased 274,000 while the remainder of the region increased 839,000 continuing a trend in evidence for some decades (p. 8).

Two zones or "double peaks" of intensive growth are evident: one is at the outer, suburban frontier where undeveloped land, farms and estates are being turned into one-family home development; the other is near the boundaries of the regional core area where multi-family development is occurring in places like Riverdale, Great Neck and Fort Lee (p. 10).

#### Forecasts

Census Bureau population projections to 1975 for the U. S. vary from 199.6 million to 221.0 million (p. 17).

A national figure of 205.6 million was selected by the RPA on the expectation that current high birth rates will decline to the 1940 level by 1975 (p. 16).

The RPA forecast of 19.2 million persons in the region in 1975 is based on the assumption that the region will



have 9.3% of the nation's population—slightly less than its present share (p.17).

The greatest population increase of any county in the region is anticipated in Nassau, 630,000 (p. 27).

Gains of over 300,000 are expected in Bergen, Middlesex, Richmond and Suffolk (p. 27).

Bronx, Kings and New York counties are expected to maintain their current population or to decline slightly by 1975 (p. 21).

#### Development Factors and Assumptions

The New York metropolitan region has had a slightly declining share of the nation's economic activity in the last ten years. In manufacturing jobs a long-term decline in relation to the nation has persisted (p. 18).

The area between New York and Philadelphia is the focal district of an emerging network of super-highways (p. 19).

The new U. S. Steel works at Morrisville, Pa., is expected to stimulate an

increase of 400,000 persons in the New York-Philadelphia area (p. 20).

82% of private, non-farm employment increases since 1946 occurred in the environs, outside New York City; yet the environs had only 34% of the regional employment in 1946 (p. 24).

56% of the regional job increases went to the New York State counties which had 73% of the region's employment in 1946; 39% went to New Jersey counties which had 23% of the total in 1946; and 5% went to Fairfield County, Connecticut, which had 4% of the total in 1946 (p. 24).

Nassau received 23% of the regional increase although its job share in 1946 was less than 2% of the regional total (p. 24).

Bergen, Union, Essex and Middlesex counties accounted for 4 out of every 5 new jobs in the nine-county New Jersey area. Their shares of the regional post-war job increase ranged from 12.6% to 5.5% (p. 25).

New York City's share of the region's manufacturing employment over the last half century dropped from 62%

to 48.1%. Most of the decline was due to the decreasing dominance of Manhattan (p. 25).

While Bergen, Union and Middlesex counties are notable for their substantial gains in regional importance, Essex, Hudson and Passaic counties declined in status (p. 26).

With the exception of Nassau which had a substantial improvement in its regional position, most of the suburban counties in New York State now have about the same share of the region's manufacturing as they had a half century ago (p. 26).

The future population level of the region's older cities will depend on their ability to replace extensive sub-standard areas. It is assumed that the redevelopment and public housing programs of New York City will be vigorous enough to maintain about the current levels of population in Bronx, Kings, and New York counties.

The population of Hudson County is expected to continue its decline even though more space there will be devoted to industrial uses and employment may rise (p. 27).

## POPULATION AND THE REGIONAL PLAN

### AN EDITORIAL

The New York metropolitan region is entering a new epoch in its long history. For the past quarter of a century the "Regional Plan of New York and Its Environs" provided a framework for guiding the pattern of new development. So much physical growth has occurred, however, that the areas covered by the proposals of the Regional Plan of 1928 are largely built-up and many of the region's new communities are about to be built in places beyond the limits of the plan.

The Regional Plan is a unified group of proposals covering all important aspects of land development. It contains four kinds of recommendations, all with the coordinated growth of the region as their common purpose: (1) principles and standards for land development and building; (2) procedures for realizing sound municipal planning policies in the development of local communities; (3) proposals as to the major uses of land throughout the region for residences, parks, airports, business and industry; (4) systems of re-

gional facilities such as highways, parkways, parks, railroads and rapid transit.

The bedrock of the Regional Plan was a comprehensive series of research studies, which embraced the region's physical, economic, social and governmental aspects. A pioneering effort in the realm of regional planning, the 1928 plan has left its imprint on the development of the region's lands and on the pathways that connect its parts and link it to the world beyond.

The Regional Plan grasped the significance of a new scale of community different from the city or the county or the state. It recognized the emergence of the *metropolitan region* as an entity of enormous future importance. It proposed that the region be developed with the guidance of a coordinated plan. It offered a practical plan for the great region surrounding the Port of New York.

Following publication of the plan, the Regional Plan Association was organized in 1929 to carry the plan forward: to support its recommendations,



to stimulate planning throughout the region and to keep the plan up-to-date in response to the inevitable changes in circumstances and in thinking that were to be expected.

Revisions have indeed been made from time to time. Up to the present these have represented modifications or additions basically within the framework of the 1928 plan. Now, however, with the portion of the region embraced by the plan nearly filled with development, the next ring in the region's fringe to which development soon will spread is without any physical plan whatsoever on a regional basis.

The Regional Plan was designed for the utilization for urban purposes of about 1100 square miles of the more than 5000 square mile regional total. The development proposals were intended to accommodate a population of about 21 million persons. Our present study indicates that over 1000 square miles already have been developed (approximately a decade sooner than expected). Population has risen to 15 million and today is still increasing steadily. Thus, while the 1928 forecast of population growth has proved realistic, the utilization of additional land has outstripped expectations.

The tendency for people to use more land had its roots in transportation trends. The use of the private motor vehicle exceeded even the generous assumptions contained in the plan, and the population added since 1928 has spread over the region much more thinly than was anticipated. Consequently, our present 15 million inhabitants and their areas of employment already occupy virtually the entire area allotted for the Regional Plan's 21 millions.

In this bulletin the RPA presents a revised population forecast covering the next two decades. The expected 1975 regional total is 19.2 million persons.

The forecast clearly establishes the urgent need for an extended physical plan encompassing an additional 600 to 1000 square miles of today's largely vacant countryside. Furthermore, it suggests that many areas already delineated in the Regional Plan must be reconsidered and revised for their added functions in the enlarged region.

This 85th Regional Plan Bulletin is published during the *25th Anniversary Celebration* of the Association. While the bulletin has opened with a look to the past and a recognition of the end of an era, it is essentially part of a new RPA effort which begun soon after World War II and faces toward the future.

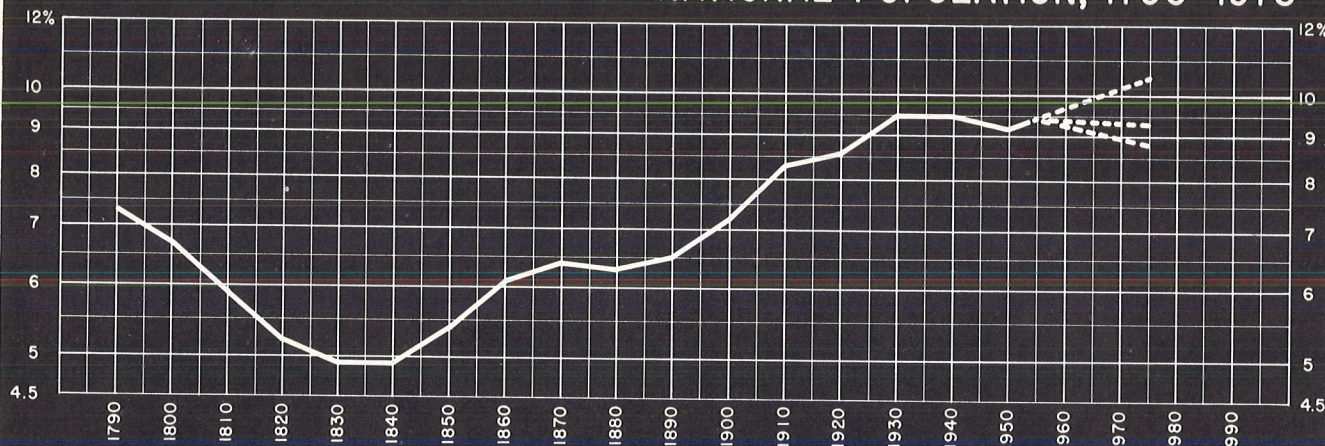
With limited resources the Association has not been able to attempt a comprehensive survey of current economic and physical development trends. Instead, it has made a series of "test borings" probing a number of significant aspects of the region. These have been reported in recent bulletins on new trends in commuting and in the locational distribution of department stores, industrial plants, population and employment.

While inadequate as a basis for final planning decisions in the region, the cumulative effect of these studies upon our understanding is three-fold: first, the certainty that the region is changing in vital respects; second, the conviction that a new full-scale regional study is urgently needed (a study similar in scope to the comprehensive survey that underlay the Regional Plan of 1928); third, the determination that an intensive and continuing new planning effort must be set in motion, an effort undertaken with the active support and participation of the major governmental units active in the region as well as the more important operating and regulating agencies that are regional in scope.



## POPULATION, PAST AND PRESENT

### NEW YORK REGION'S SHARE OF NATIONAL POPULATION, 1790-1975



Source: U.S. BUREAU OF THE CENSUS  
AND REGIONAL PLAN ASSOCIATION

REGIONAL PLAN ASSOCIATION, INC.  
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#### Regional Population Changes

The population of the New York metropolitan region increased by 1,100,000 persons or 8 percent between April 1, 1950 and January 1, 1954\* when the regional total reached the unprecedented figure of 15 million persons.

In this brief 3¾ year interval the region's population expanded ¾ as much as in the ten-year period 1940-50 and by more than 1¼ times the increase of the decade 1930-40. Underlying this huge population increase was an over-all employment increase of around 400,000 new jobs.

On an annual basis the average *absolute* increase since 1950 exceeded that of any year in the entire history of the region's growth (see Table 1).

However, the average annual *rate* of growth in the recent 4 years while highest since 1930 was less than occurred in 11 of the 16 decades of growth after 1790.

#### Compared with the Nation

From 1950 to 1954 the New York metropolitan region increased more rapidly in population than did the nation as a whole—8 percent as against

6 percent.<sup>3</sup> Indeed, as the chart above shows, ever since 1830 the region has continuously grown faster than the nation in every decade except 1870-80

and 1940-50. This fact is shown in the chart by the rising slope of the region's share of national population. (See Table II, for actual percentages.)

#### Compared with Other Metropolitan Areas

The New York metropolitan region has about 2½ times the population of the Chicago metropolitan area, second in the nation. Between 1950 and 1954 the New York region was the sixth fastest growing among the nation's 14 metropolitan areas with more than 1 million inhabitants each. (See Appendix Table A for detailed figures

going back to 1900.)

Since 1950 only 5 metropolitan areas—Los Angeles, Washington, D. C., San Francisco, Detroit and Baltimore—increased at a faster rate than the New York region. This contrasts with trends between 1940 and 1950 when 11 among the 14 areas exceeded the New York region in rate of growth.

TABLE I

AVERAGE ANNUAL POPULATION INCREASES, 1790-1954  
in the New York Metropolitan Region

	AVERAGE ANNUAL INCREASE*	
	Absolute	%
1790 - 1800	7,152	2.2
1800 - 1810	7,374	1.9
1810 - 1820	6,619	1.4
1820 - 1830	13,579	2.4
1830 - 1840	20,758	2.8
1840 - 1850	41,250	4.0
1850 - 1860	68,168	4.3
1860 - 1870	55,528	2.5
1870 - 1880	65,775	2.3
1880 - 1890	94,286	2.6
1890 - 1900	142,638	3.0
1900 - 1910	209,310	3.2
1910 - 1920	153,152	1.8
1920 - 1930	250,400	2.4
1930 - 1940	87,473	0.7
1940 - 1950	113,334	1.1
1950 - 1954	296,796	2.0

\* See Note 2 for method of calculating averages.

Sources: RPA and U. S. Bureau of Census

\*For explanation of sources and method used by the RPA in estimating *current* population see Note 1. All notes cited throughout this bulletin will be found in numerical order beginning on page 34.



TABLE II

THE NEW YORK REGION AS A PERCENT OF THE NATION, 1790-1954

	Region's Percent of Nation
1790	7.26
1800	6.72
1810	5.94
1820	5.15
1830	4.90
1840	4.91
1850	5.39
1860	6.14
1870	6.45
1880	6.27
1890	6.49
1900	7.26
1910	8.27
1920	8.64
1930	9.48
1940	9.51
1950	9.26
1954	9.42

Sources: RFA and U. S. Bureau of Census

Over the past half century only the Los Angeles, Detroit and San Francisco metropolitan areas had a consistently higher rate of growth than the New York region. Pittsburgh, Boston and neighboring Philadelphia (with the exception of 1940-50) have had consistently lower rates of growth.

Although between 1950 and 1954 the region was surpassed in *rate* of population increase by 5 metropolitan areas, it far outstripped all 14 in *absolute* increase. Because the New York region has so much more population than any other metropolitan area in the nation, a relatively smaller *per-*

*centage* increase here nevertheless results in a far greater additional *number* of persons.

Thus, in the 1950-54 period the absolute increase in the New York region (1,113,000) was about equal to the combined increases of the three areas next largest in absolute gain—the Los Angeles, Detroit and San Francisco metropolitan areas, which together grew by 1,195,000 persons. Moreover, the New York regional increase since 1950 exceeded the total population of the Buffalo standard metropolitan area as it existed in 1950.

#### Sources of Regional Population Change

The post-1950 rise in the rate of regional population growth resulted from a great upsurge in the numbers of people coming here from outside the region. *Natural increase* (the excess of births over deaths) accounted for 567,000 persons. The remaining 546,000 of the region's increase, roughly half, was due to the fact that many more persons came here from other places than left the region during the period.<sup>4</sup>

As Table III shows, the proportion of the regional population increase due

to *net migration* (more people moving in than out) was greater in the 1950-54 interval than in either of the two preceding decades. With respect to the recent newcomers, adequate information as to where they came from is non-existent. However, it is reported that 150,000 or 27 percent of the region's net in-migration came to New York City from Puerto Rico in the period April 1, 1950 to January 1, 1954. A substantial proportion is also said to have migrated from the South.

TABLE III

NATURAL INCREASE AND NET MIGRATION IN THE NEW YORK REGION, 1930-54

	1930-40	1940-50	1950-54
Natural Increase	476,300	1,039,800	566,700
Net Migration	399,300	396,300	545,900
Total Increase	874,600	1,436,100	1,112,600
Net Migration as a Percent of Total Increase	46	28	49

Sources: New York City departments of Planning and Health; New Jersey, New York and Connecticut state departments of Health; U. S. Bureau of Census

## Changes in the Regional Distribution of Population

### Central City and Environs

One of the most outstanding aspects of the region's population growth has been the declining dominance of the central city and the increasing importance of the environs.

Between 1890 and 1900 the area now covered by New York City obtained 65 percent of the region's population increase and the environs only 35 percent (see Table IV). In the following decades the environs gradually obtained an increasing share of the regional gain, surpassing the central city sometime during the 1940's. Finally for the 1940-50 decade as a whole, the relative shares of population growth were completely reversed, 30 percent of the region's increase now going to New York City and 70 percent to the environs.

Since 1950 the trend has been even more exaggerated. Only 19 percent, 215,000, of the region's increase occurred in New York City while 81 percent, 898,000, occurred in the environs!

Because New York City is so very large, these markedly different rates of growth have been slow to make their influence evident in the over-all pattern of population distribution. Nevertheless, their impact is at last being experienced and consciously expressed in the current emphasis on the importance of *suburbia* in the scheme of things. In 1890 the area outside New York City had only 39 percent of the regional total; by 1954 the same area had 46 percent. Within the next two decades, if the trend continues, the environs will have more than one-half the region's population.

Although the number of persons living in New York City increased in the four-year period, more people actually moved out of the city than into it. This is inferred from the fact that the natural population increase (excess of births over deaths) was greater than the actual gain in population. If New York City had retained all its natural increase, the population would have increased by 280,000; instead the city only increased by 215,000. This indicates a net exodus of at least 65,000 in the four-year period.



The recent net out-migration reaffirms a new phase of central city growth already noted by the New York City Planning Department in its 1951 Population Report.<sup>5</sup> Since 1940

the natural population increase and the level of in-migration have not been sufficient to offset a large-scale movement out of the city (see Table VI).

#### *New Jersey, New York and Connecticut*

Because of Long Island's enormous population growth more than twice as many persons were added in the region in New York State as in New Jersey. Connecticut's lone county in the region, Fairfield, accounted for 57,000 of the region's 1,113,000 gain. The counties in New York increased by 711,000; the New Jersey counties by 346,000 (see Table V).

Contrasting with the differences in absolute gain among the states the rate of growth in the New Jersey counties since 1950 slightly exceeded that of the New York counties (9.7 and 7.2 percent respectively); and Fairfield, Connecticut, increased 11.3 percent. The slower rate in New York State is attributable to the inclusion of the large and more stable population of New York City. For the counties of New York outside New York City, the 1950-54 gain was 25 percent

and amounted to 1/2 million added persons.

Ever since 1890 the New Jersey counties have grown at a slightly faster rate than the counties in New York except for the 1930's. Although certain suburban New York counties have undergone a substantial expansion—explosive in recent years in Nassau and Suffolk—the growth has not been large enough to offset New York City's declining share of the region. Consequently, in the past half century the two states have maintained an almost steady relationship as New Jersey's share of the region increased from 24.3 to 26.1 percent while New York's share declined from 72.4 to 70.2 percent. Connecticut's share also was nearly stable, shifting slightly from 3.3 to 3.7 percent of the regional population.

It will be shown in a later section, however, that these shifts will become more accentuated in the next period of years.

#### **County Population Changes**

As the highly accessible central areas become built up, it is obvious that most new dwelling construction must occur in outlying places. For the region as a whole, as was shown above, this has meant a gradual stabilization of population in New York City accompanied by tremendous growth in the environs.

A similar phenomenon is clearly evident within the boundaries of New York City as between the older, developed central areas of Manhattan and Brooklyn and the remainder of the city. Since 1950 Manhattan (New York County) and Brooklyn (Kings County) have remained at a stationary population level. About two-thirds of New York City's gain was in Queens which had an increase of 142,000 persons. The other third of the city's gain occurred in the Bronx and Richmond which increased 59,000 and 13,000 respectively (see Table VII).

Unable to find space for new dwellings at the regional center itself, the greater portion of residential construction energy was diverted to relatively open areas near at hand. Accordingly, four counties—Nassau, Queens, Suffolk, and Bergen—each experienced increases of more than 100,000 persons and had a total combined gain of almost 650,000 in the four-year period. Together they accounted for 58 percent of the regional increase. Nassau, the leader, added almost 300,000 persons—more than one-quarter of the region's gain.

Other counties having more than 4 percent of the regional increase in the four-year period were Fairfield in Connecticut, Middlesex and Union in New Jersey and the Bronx and Westchester in New York State.

Some further generalizations about the nature of metropolitan expansion may assist an understanding of how the counties have fared in relative growth or decline.

For reasons already suggested above, the zone of most intensive growth in a metropolitan region tends to describe a band roughly circular in shape continuously moving outward from the places of present intensive building

TABLE IV

TRENDS OF POPULATION DISTRIBUTION: NEW YORK CITY AND ENVIRONS, 1890-1954

	PERCENT OF REGIONAL INCREASE						
	1890-1900	1900-10	1910-20	1920-30	1930-40	1940-50	1950-54
NEW YORK CITY	65.2	63.5	55.7	52.3	60.0	30.5	19.3
ENVIRONS	34.8	36.5	44.3	47.7	40.0	69.5	80.7
	PERCENT OF REGION						
	1890	1900	1910	1920	1930	1940	1950
NEW YORK CITY	61.3	62.3	62.7	61.5	59.5	59.6	56.6
ENVIRONS	38.7	37.7	37.3	38.5	40.5	40.4	43.4

POPULATION CHANGES IN MAJOR PORTIONS OF THE REGION, 1890-1954

	PERCENT INCREASE						
	1890-1900	1900-10	1910-20	1920-30	1930-40	1940-50	1950-54
NEW JERSEY	38.0	39.5	25.8	29.0	2.8	15.0	9.7
NEW YORK	31.5	37.6	17.7	27.1	9.2	9.8	7.2
CONNECTICUT	22.7	33.2	30.8	20.5	8.2	20.5	11.2
	PERCENT OF REGION						
	1890	1900	1910	1920	1930	1940	1950
NEW JERSEY	23.7	24.3	24.5	25.7	26.0	24.9	25.7
NEW YORK	72.6	72.4	72.3	70.8	70.7	71.8	70.7
CONNECTICUT	3.7	3.3	3.2	3.5	3.3	3.3	3.6

Sources: RPA and U. S. Bureau of Census



TABLE V

## THE DISTRIBUTION OF POPULATION IN THE NEW YORK REGION BY COUNTY, 1900-1954

	1900		1910		1920		1930		1940		1950		1954	
	Population	% of Reg.	Population	% of Reg.	Population	% of Reg.	Population	% of Reg.	Population	% of Reg.	Population	% of Reg.	Population	% of Reg.
CONNECTICUT														
Fairfield	184,203	3.3	245,322	3.2	320,936	3.5	386,702	3.3	418,384	3.3	504,342	3.6	561,000	3.7
NEW JERSEY														
Bergen	78,441	1.4	138,002	1.8	210,703	2.3	364,977	3.1	409,646	3.3	539,139	3.9	641,000	4.3
Essex	359,053	6.5	512,886	6.7	652,089	7.1	833,513	7.2	837,340	6.7	905,949	6.5	947,000	6.3
Hudson	386,048	7.0	537,231	7.1	629,154	6.9	690,730	5.9	652,040	5.2	647,437	4.6	643,000	4.3
Middlesex	79,762	1.4	114,426	1.5	162,334	1.8	212,208	1.8	217,077	1.7	264,872	1.9	317,000	2.1
Monmouth	82,057	1.5	94,734	1.2	104,925	1.1	147,209	1.3	161,238	1.3	225,327	1.6	262,000	1.7
Morris	65,156	1.2	74,704	1.0	82,694	.9	110,445	.9	125,732	1.0	164,371	1.2	196,000	1.3
Passaic	155,202	2.8	215,902	2.8	259,174	2.8	302,129	2.6	309,353	2.5	337,093	2.4	362,000	2.4
Somerset	32,948	.6	38,820	.5	47,991	.5	65,132	.6	74,390	.6	99,052	.7	116,000	.8
Union	99,353	1.8	140,197	1.8	200,157	2.2	305,209	2.6	328,344	2.6	398,138	2.8	443,000	2.9
Total N. J. State	1,338,020	24.3	1,866,902	24.5	2,349,221	25.7	3,031,552	26.0	3,115,160	24.9	3,581,378	25.7	3,927,000	26.1
NEW YORK														
Bronx	200,507	3.6	430,980	5.7	732,016	8.0	1,265,258	10.9	1,394,711	11.1	1,451,277	10.4	1,510,000	10.0
Kings	1,166,582	21.2	1,634,351	21.5	2,018,356	22.1	2,560,401	22.0	2,698,285	21.6	2,738,175	19.6	2,738,000	18.2
New York	1,850,093	33.6	2,331,542	30.6	2,284,103	25.0	1,867,312	16.0	1,889,924	15.1	1,960,101	14.0	1,961,000	13.0
Queens	152,999	2.8	284,041	3.7	469,042	5.1	1,079,129	9.3	1,297,634	10.4	1,550,849	11.1	1,693,000	11.2
Richmond	67,021	1.2	85,969	1.1	116,531	1.3	158,346	1.4	174,441	1.4	191,555	1.4	205,000	1.4
Total N. Y. City	3,437,202	62.4	4,766,883	62.7	5,620,048	61.5	6,930,446	59.5	7,454,995	59.6	7,891,957	56.6	8,107,000	53.8
Dutchess	81,670	1.5	87,661	1.2	91,747	1.0	105,462	.9	120,542	1.0	136,781	1.0	154,000	1.0
Nassau	55,448	1.0	83,930	1.1	126,120	1.4	303,053	2.6	406,748	3.2	672,765	4.8	967,000	6.4
Orange	103,859	1.9	116,001	1.5	119,844	1.3	130,383	1.1	140,113	1.1	152,255	1.1	165,000	1.1
Putnam	13,787	.2	14,665	.2	10,802	.1	13,744	.1	16,555	.1	20,307	.1	22,000	.1
Rockland	38,298	.7	46,873	.6	45,548	.5	59,599	.5	74,261	.6	89,276	.6	98,000	.6
Suffolk	77,582	1.4	96,138	1.3	110,246	1.2	161,055	1.4	197,355	1.6	276,129	2.0	380,000	2.5
Westchester	184,257	3.3	283,055	3.7	344,436	3.8	520,947	4.5	573,558	4.6	625,816	4.5	683,000	4.5
Total N. Y. State	554,901	10.1	728,323	9.6	848,743	9.3	1,294,243	11.1	1,529,132	12.2	1,973,329	14.1	2,469,000	16.4
Excluding N. Y. C.	3,992,103	72.4	5,495,206	72.3	6,468,791	70.8	8,224,689	70.6	8,984,127	71.8	9,865,286	70.7	10,576,000	70.2
Total N. Y. State														
Total New York City	3,437,202	62.4	4,766,883	62.7	5,620,048	61.5	6,930,446	59.5	7,454,995	59.6	7,891,957	56.6	8,107,000	53.8
Total Environs	2,077,124	37.7	2,840,547	37.4	3,518,900	38.5	4,712,497	40.5	5,062,676	40.4	6,059,049	43.4	6,957,000	46.2
Total Region	5,514,326	100.0	7,607,430	100.0	9,138,948	100.0	11,642,943	100.0	12,517,671	100.0	13,951,006	100.0	15,064,000	100.0

Sources: RPA and U. S. Bureau of Census

activity into the adjoining undeveloped areas. Over a long period of years, the resulting process brings about a change in the relative population importance of the various parts of the region. Table V shows how this has operated to affect the relations among the counties of the New York metropolitan region.

The uneven distribution of topographical features radiating out from this region's center—the eccentricities of land and water, hills, flatlands and marshes—also affect the form of regional growth. Nevertheless, a rough sort of regularity can be discerned in the county statistics.

A half century ago the region's central economic area embraced not only New York County, but parts of Kings, Hudson, Essex, Passaic and even Fairfield as well. Each was readily accessible to the port by waterway and contained large urban centers.

Essex and Fairfield had extensive undeveloped land beyond their built-up cities. Hence, their tendency to-

ward a declining relative standing in the region by virtue of the maturity of their cities has been offset to one extent or another. Essex increased from 6.5 percent of the region in 1900 to 7.2 percent in 1930 before declining to 6.3 percent by 1954. Fairfield, on the other hand, experienced such an extensive suburban growth outside the older cities (Bridgeport, Danbury, Norwalk) that it advanced from having only 3.3 percent of the regional population in 1900 to 3.7 percent in 1954.

The four other older, urbanized counties declined in regional status, the extreme being New York County which dropped 21 percentage points between 1900 and 1954.

In addition to the extent of fully urbanized land, the population growth of the counties has been influenced also by their accessibility to new employment areas. As has been shown in previous RPA bulletins covering new factory construction and employment trends (Bulletins 80 and 84) Nassau, Bergen, Union, Essex and Middlesex

have gained greatly in job opportunities (see also page 25). With the already noted exception of Essex, these are among the counties in Table V which greatly improved their relative standing in the region over the past half century.

Largely perhaps by virtue of ready accessibility to adjoining counties with expanding employment Bronx, Queens, Suffolk and Westchester counties also rose notably in relative population importance.

Far beyond the band to which intensive growth has extended, Dutchess and Orange counties dropped in relative percentages of the region as their agricultural economies declined in the decades following 1900, and neither has yet reached the turning point.

Within two-tenths of a percentage point in either direction, the six remaining counties—Monmouth, Morris, Somerset, Richmond, Putnam and Rockland—retain approximately the same degree of importance in the region as they had in 1900.



## Sources of County Population Change

As Table VI shows, the counties that had the greatest numerical gains in population since 1950—Bergen, Queens, Nassau, and Suffolk—also had the greatest excess of newcomers over persons leaving. The net migration into each of these counties exceeded 70,000 and in each instance represented more than half the population increase. The total four-county increase due to net migration was 474,000—more than that of all the other counties combined.

Five other counties had net in-migrations of 25,000 or more since 1950: Fairfield, Middlesex, Monmouth, Union and Westchester.

Not all counties, however, had a net gain in terms of migration. While tens of thousands of persons came to New York in the period, for example, even more left the city. The net exodus from Manhattan and Kings since 1950 just about equalled the population growth produced by their excess of births over deaths: hence their virtually stable population.

In Hudson County a net out-migration exceeded the natural increase and caused a population loss of about 4,000. Indeed, ever since 1930 the numbers of persons moving out of Hudson and Kings counties have exceeded the incoming. In Hudson the

	1930-1940		1940-1950		1950-1954	
	Natural Increase	Net Migration	Natural Increase	Net Migration	Natural Increase	Net Migration
CONNECTICUT						
Fairfield	15,900	15,800	43,900	42,100	22,700	33,700
NEW JERSEY						
Bergen	16,000	28,700	41,000	68,000	29,900	71,800
Essex	31,000	-27,300	68,000	1,000	31,700	9,700
Hudson	25,200	-63,800	50,000	-55,000	22,500	-26,700
Middlesex	11,500	-6,600	25,000	23,000	16,100	36,300
Monmouth	800	13,200	13,100	51,000	10,000	26,400
Morris	3,800	11,500	12,000	27,000	8,000	23,600
Passaic	11,500	-4,300	25,000	3,000	13,400	11,000
Somerset	3,100	6,200	9,000	16,000	5,700	11,700
Union	12,400	10,700	38,000	32,000	19,600	25,000
Total N. J. State	115,400	-31,800	281,100	185,100	156,900	188,800
NEW YORK						
Bronx	78,000	51,400	120,000	-63,000	46,400	12,300
Kings	142,400	-4,500	249,000	-209,000	105,500	-105,700
New York	2,900	19,700	59,000	11,000	51,800	-50,900
Queens	62,300	156,200	136,000	117,000	70,000	72,200
Richmond	7,600	8,500	16,000	1,000	7,900	5,500
Total N. Y. City	293,200	231,300	580,000	-143,000	281,600	-66,600
Dutchess	1,700	13,400	4,600	11,600	3,700	13,900
Nassau	18,700	85,000	55,000	212,000	53,300	240,700
Orange	1,300	8,400	7,900	4,200	5,100	7,400
Putnam	100	2,700	300	3,400	500	1,700
Rockland	1,200	13,500	6,000	9,000	3,800	4,400
Suffolk	4,900	31,400	16,000	63,000	14,500	88,900
Westchester	23,900	28,700	45,000	8,000	24,600	33,000
Total New York State						
Excluding N. Y. C.	51,800	183,100	134,900	309,300	105,500	390,000
Total N. Y. State	345,000	414,400	714,900	168,200	387,100	323,400
Total New York City	293,200	231,300	580,000	-143,000	281,600	-66,600
Total Environs	183,100	168,000	459,800	539,300	285,100	612,500
Total Region	476,300	399,300	1,039,800	396,300	566,700	545,900

Sources: New York City departments of Planning and Health; New Jersey, New York and Connecticut state departments of Health; U. S. Bureau of Census

difference between these movements over the 24-year period has been larger than the local natural increase. Consequently, since 1930 Hudson has shown absolute losses in population amount-

ing to almost 50,000. In Kings, however, the rising net out-migration was not enough to offset natural increases until the period 1950-54.

## Population Changes by Municipality

While the broad outlines of the regional pattern of population change have emerged in the foregoing analysis of county data, it is necessary to "pin-point" the figures for cities, towns, boroughs and villages to gain a further understanding of what has been occurring. Table VI (pages 12-15) presents the RPA estimates of municipal population as of January 1, 1954 and the numerical and percentage changes since 1950 (see Note 1 for explanation of method used to obtain figures).

It is interesting to note some of the extremes of growth or decline. For example, eight municipalities more than doubled their population: in New Jersey, East Brunswick, Mountainside, New Milford, Paramus and Rockleigh; in New York, Hewlett Harbor, Massapequa Park and Oyster Bay. Massapequa Park increased 257 percent in ad-

ding 6,000 new residents in less than four years.

Outside New York City, Hempstead Town in Nassau County was most notable for the sheer numbers involved in its 137,500 population gain (55 percent).

Twenty-three municipalities declined despite the period of great general growth. All but two Hudson County municipalities lost population; Jersey City which had a drop of 3,800 (1 percent) represents the regional extreme.

### City Versus Suburb

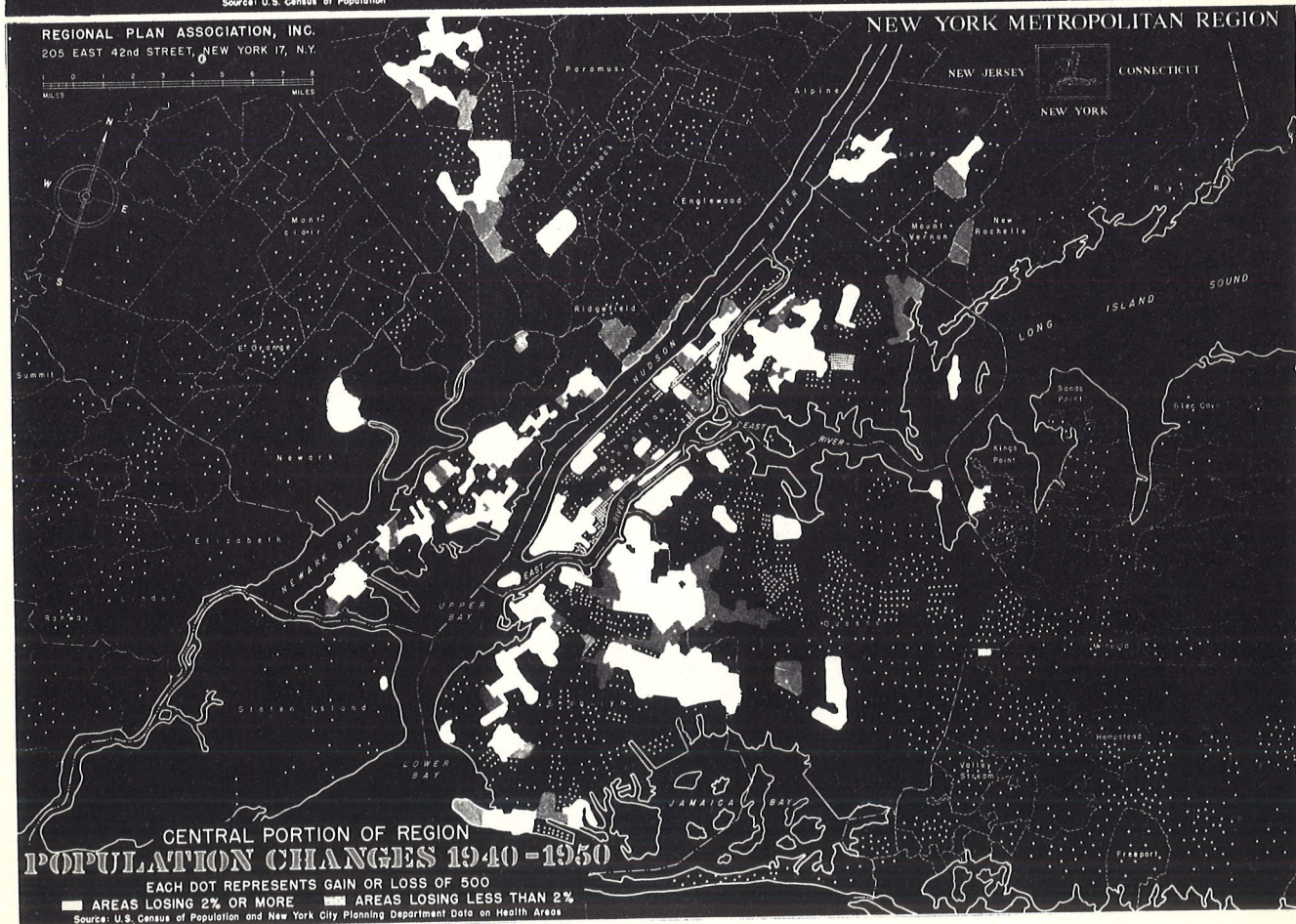
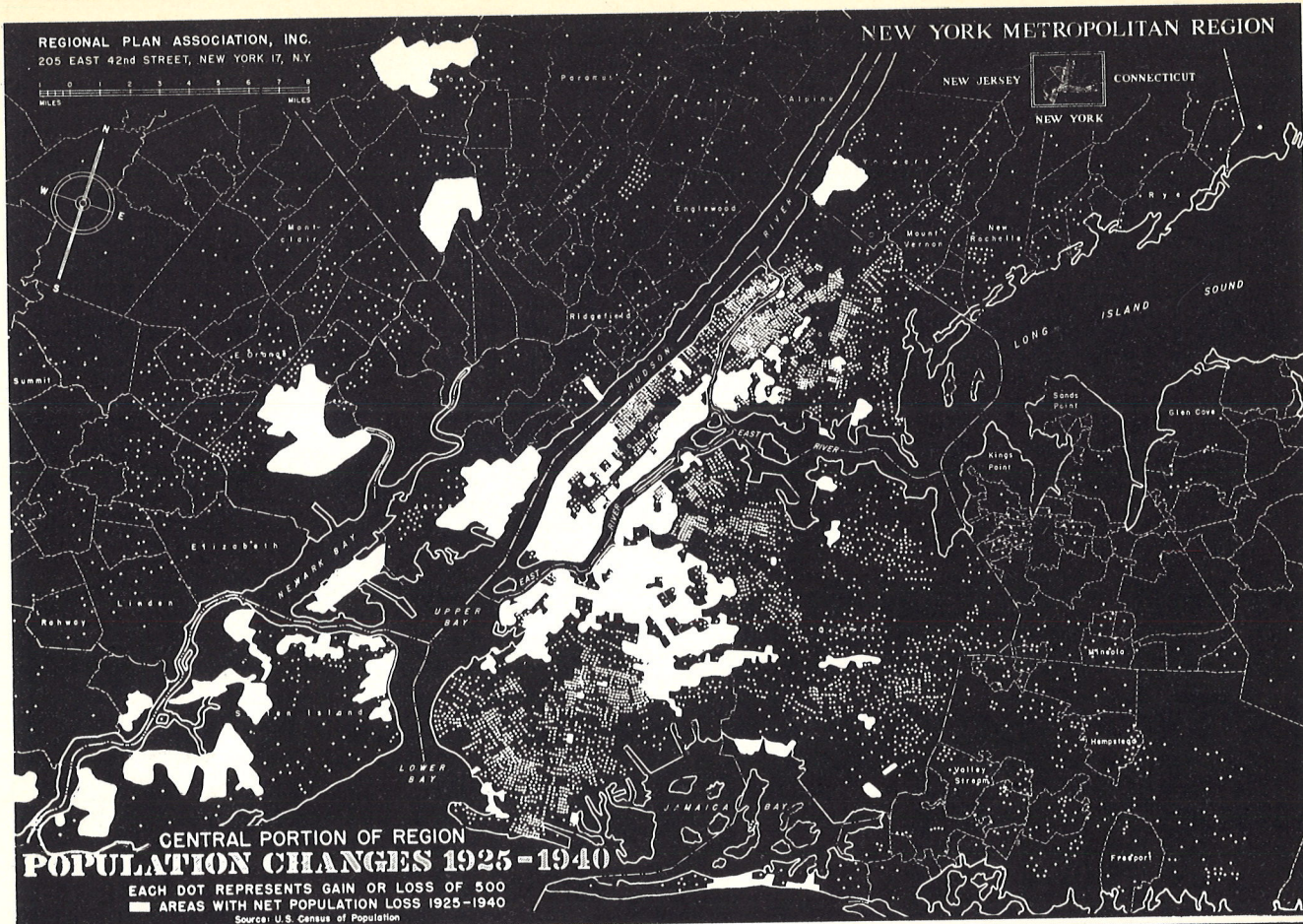
In a previous section it was shown that four-fifths of the population increase in the region occurred outside the central city, New York. With respect to the environs themselves, a similar phenomenon is occurring: three-quarters of the population in-

crease in the environs since 1950 occurred outside its 20 cities having a current population of over 50,000 each. These cities increased by 274,000 or 2.7 percent since 1950 while the remaining suburban portions of the region increased 839,000 or 21.2 percent (see Appendix Table B).

The accompanying two maps (see p. 9) showing the central portion of the region cover the periods 1925-40 and 1940-50. They demonstrate that the major cities have not merely reached a stage of maturity but have actually lost population in some of their older sections. It will be noted that the areas of loss in the 1940-50 decade are similar to those of the earlier period but by no means identical in all respects.

The older sections of Manhattan, Brooklyn, Queens, Bronx, Yonkers, Bayonne, Jersey City, Newark, Passaic,







and Paterson all contain declining neighborhoods. For the most part, the areas of decline in the recent period extend farther outward than in the earlier period.

Moreover, the areas outside the large cities have been obtaining a growing share of the region's population gain in recent years. They accounted for 37 percent of the region's increase in the 1920-30 decade, 42 percent in 1930-40, 62 percent in 1940-50, and finally 75 percent between 1950 and 1954. Thus, whereas the 20 large cities had 81 percent of the region's population in 1920, their share in 1954 was only 68 percent.

#### *Pattern of Most Significant and Intensive Growth*

For many purposes it is sufficient to study population growth in terms of total absolute and percentage changes by municipality. However, these data fail to express what might be termed *the pattern of significant growth* because they take no account of geographical size. Accordingly the accompanying two maps were prepared to depict growth throughout the region on a comparable footing irrespective

of municipal area. The various shadings represent population growth or decline per square mile between 1940 and 1950 and between 1950 and 1954.

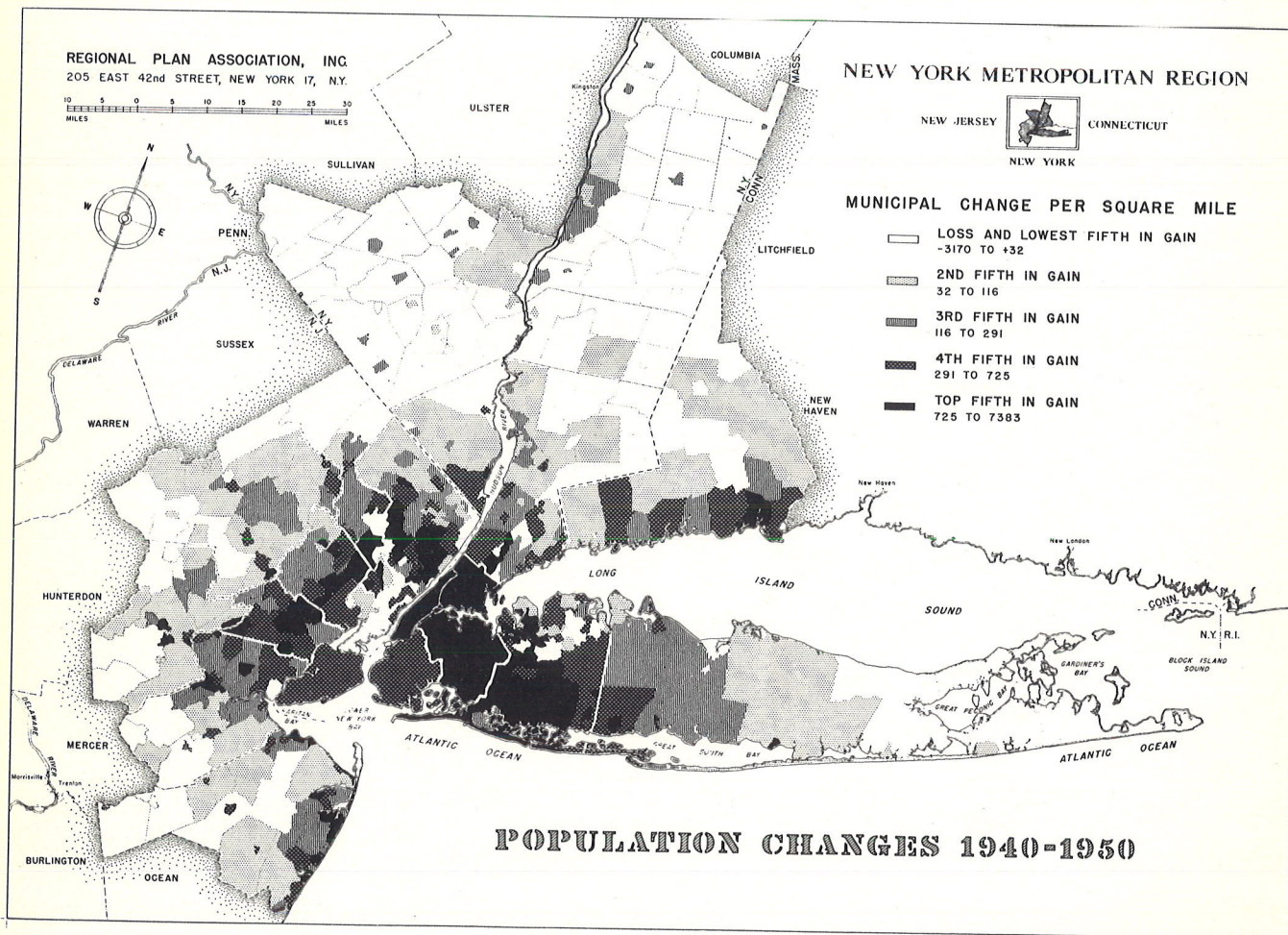
The band of intensive growth evident in both periods is somewhat similar in location on both maps. It swings through Queens County, the municipalities of Nassau County and the westerly extreme of Suffolk; it includes the Fairfield County shore communities; it continues through the Bronx and lower Westchester; and west of the Hudson it forms a 15 to 20 mile wide strip beginning at the George Washington Bridge and arching inland and southward through Bergen County, lower Passaic, central Essex and Union, and northerly Middlesex; then skipping around Lower New York Bay to include a narrow strip of Monmouth County adjoining the ocean.

Thus, the step from a county analysis to a municipal one enables a more sensitive description of recent population changes. In two instances, however, even the municipal unit is unsatisfactory. The shore communities in Fairfield County are quite large in comparison with many municipalities

elsewhere. Consequently, since their intensity of development is averaged over large rural sections, the maps fail to reveal the existence of a very high gain per square mile rimming Long Island Sound.

New York City is the other municipal unit that is so large as to present an imperfect picture. If the city were subdivided into geographical units comparable in size with municipalities in the environs, portions of every borough probably would be found to run the full range from highest in gain to loss.

A careful examination of the maps enables a further refinement in interpreting the band of most intensive regional growth. Two zones or "double peaks" of intensive growth appear within it. One is at the outer frontier where undeveloped land is being turned into one-family home development; the other lies along the inner rim of the band and represents the spread of multi-family developments into vacant tracts left over from an earlier era of home building, or actual replacement of scattered one and two family dwellings by apartments. The Riverdale section of the Bronx, areas





in Queens and Nassau near Great Neck and parts of Fort Lee and North Bergen Township in New Jersey are examples of the latter.

### Two Periods Compared

Although the pattern of significant growth in the region is fundamentally similar in the two periods mapped (1940-50 and 1950-54) some interesting differences are worthy of note.

To begin with, it is evident that the municipalities growing most intensively in the more recent period either are the same as those of the previous decade or are situated just beyond the latter (looking outward from the center of the region). Thus, for example an easterly shift from Nassau County into western Suffolk is discernible as well as a northerly shift in Westchester and outward extensions in Bergen, Passaic, Essex, Union and Middlesex counties.

Interesting differences between the maps also are to be noted toward the center from the band of most significant growth. New York County, among the top fifth in gain from 1940 to

1950, dropped off strikingly as the flow of in-migration slackened after 1950. Kings County shifted from rapid population growth to a status of stability. The township of North Bergen in Hudson County rose to the top-gain group after 1950, largely by virtue of intensive apartment construction activity. Since 1950 about 85 percent of the 1000 new dwelling units in the township were constructed in apartment buildings. Thus, North Bergen illustrates the inner rim of the "double peak" phenomenon described above in the preceding section.

### Sources of Municipal Population Changes

It has not been feasible within the limits of this bulletin to attempt for each municipality an analysis of its population changes as to births, deaths and migration. Some general observations can be made, however.

In the discussion of New York City the large in-migration from Puerto Rico and the South, already so well described in reports of the New York City Department of Planning, were mentioned. The city has also continued

to receive people from other places in America and from all over the world.

For at least a century families have been migrating from New York City to the suburbs. This trend not only has continued in the most recent period, but it has accelerated greatly in tempo and involved larger and larger sections of the great group of middle-income families.

In addition to the traditional movement from New York City to the suburbs, it is evident that considerable number of families, in coming to the region, now are moving directly to the environs without making the circuit from central city to suburb. To some extent, certain smaller suburban cities are serving as intermediate "waiting rooms" while the newly arrived families decide where to settle down. Rental agents in Westchester County, for example, report that the families of young executives transferred from other parts of the nation to head offices in New York tend to move temporarily into apartment accommodations in White Plains before buying homes in their ultimate residential communities.

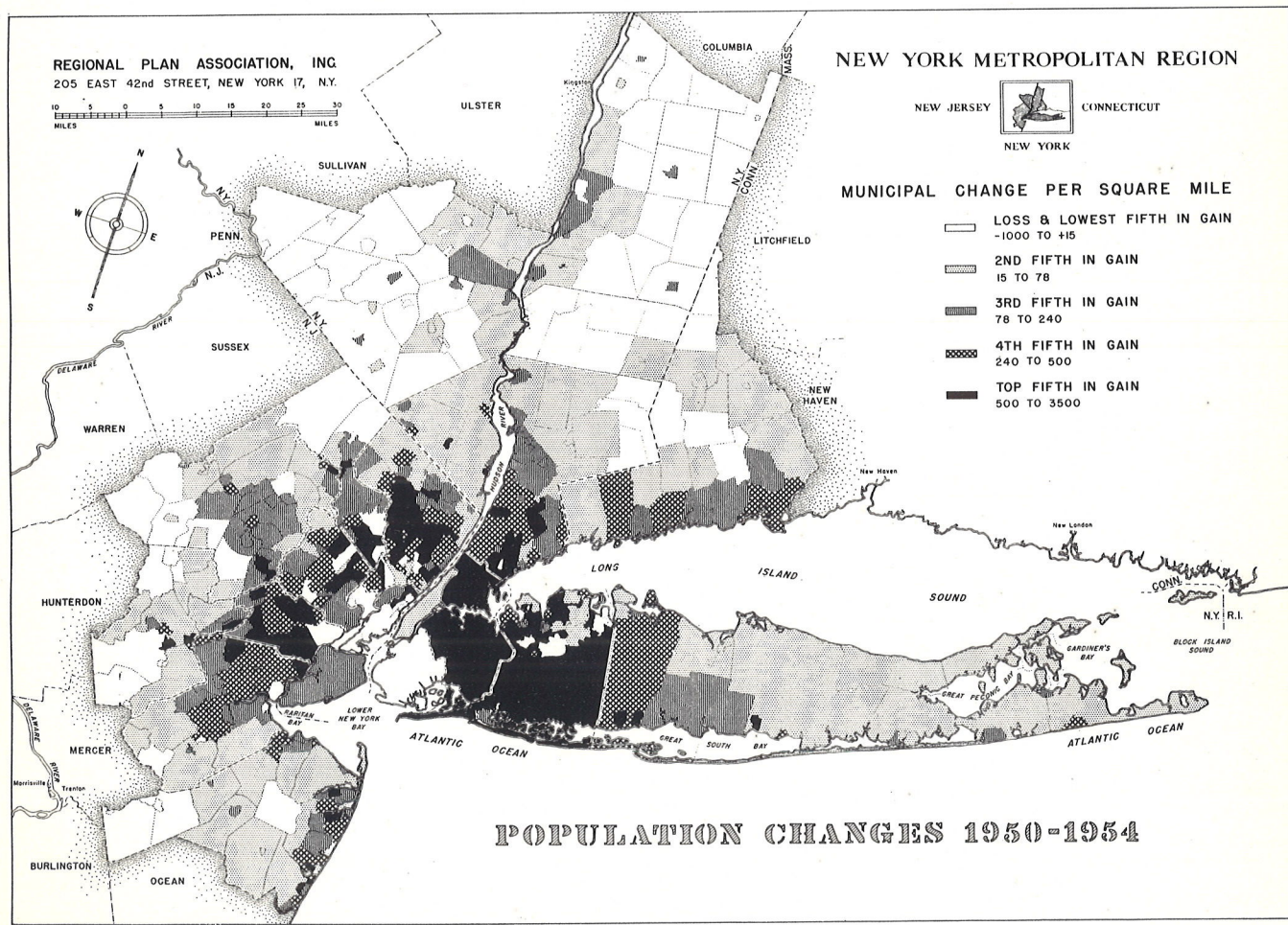




TABLE VII  
MUNICIPAL POPULATION ESTIMATES, 1954

	1954 Population	1950-54 Change			1954 Population	1950-54 Change	
		Absolute	%			Absolute	%
CONNECTICUT							
Fairfield				Bergen (contd.)			
Bethel	6,100	1,000	20	Palisades Park	11,700	2,100	22
Bridgeport	164,000	5,300	3	Paramus	13,300	7,000	111
Brookfield	2,200	500	29	Park Ridge	3,600	400	12
Danbury T	10,700	2,400	5	Ramsey	6,200	1,500	32
Danbury C	22,400	300	1	Ridgefield	9,200	900	11
Darien	14,300	2,500	21	Ridgefield Park	11,800	-200	-2
Easton	2,600	400	18	Ridgewood	21,700	4,200	24
Fairfield	37,500	7,000	23	River Edge	11,400	2,200	24
Greenwich	44,400	3,600	9	Rivervale	2,300	600	35
Monroe	3,300	400	14	Rochelle Park	4,900	400	9
New Canaan	9,000	1,000	12	Rockleigh	200	100	100
New Fairfield	1,400	200	17	Rutherford	19,500	2,100	12
Newtown T	7,900	1,200	18	Saddle River B	1,200	200	20
Newtown B	900	100	12	Saddle River Twp.	10,700	2,700	34
Norwalk	55,500	6,000	12	South Hackensack	1,700	200	13
Redding	2,100	100	5	Tenafly	37,900	4,100	12
Ridgefield	4,900	500	11	Teterboro	11,500	1,800	19
Shelton	13,400	700	6	Upper Saddle River	30	-	-
Sherman	600	100	20	Waldwick	1,100	400	57
Stamford	84,000	9,700	13	Wallington	6,600	2,600	65
Stratford	40,100	6,700	20	Washington	9,300	400	4
Trumbull	11,800	3,200	37	Westwood	2,000	800	67
Weston	2,300	300	15	Woodcliff Lake	7,100	300	4
Westport	13,700	2,000	17	Wood-Ridge	2,100	700	50
Wilton	5,600	1,000	22	Wyckoff	7,400	1,100	17
Total Fairfield County	560,700	56,400	11	Total Bergen County	640,800	101,700	19
NEW JERSEY							
Bergen				Essex			
Allendale	2,800	400	17	Belleville	36,200	4,200	13
Alpine	700	100	17	Bloomfield	52,300	3,000	6
Bergenfield	20,000	2,400	14	Caldwell B	6,800	500	8
Bogota	7,700	-	-	Caldwell Twp.	2,200	300	16
Carlstadt	5,700	100	2	Cedar Grove	11,800	3,900	48
Cliffside Park	17,200	100	1	East Orange	83,900	4,600	6
Closter	5,100	1,700	50	Essex Fells	1,900	300	19
Cresskill	5,800	2,300	66	Glen Ridge	7,700	100	1
Demarest	2,800	1,000	56	Irvington	60,600	1,400	2
Dumont	14,000	1,000	8	Livingston	13,100	3,200	32
East Paterson	16,900	1,500	10	Maplewood	25,200	-	-
East Rutherford	7,400	-	-	Millburn	17,000	2,400	16
Edgewater	4,100	100	2	Montclair	43,700	-200	-
Emerson	2,600	900	53	Newark	443,900	5,100	1
Englewood	24,900	1,800	8	North Caldwell	2,900	1,100	61
Englewood Cliffs	1,300	300	30	Nutley	28,700	1,700	6
Fair Lawn	29,600	5,700	24	Orange	38,600	600	2
Fairview	8,900	200	2	Roseland	2,200	200	10
Fort Lee	17,500	5,900	51	South Orange	16,000	800	5
Franklin Lakes	2,500	500	25	Verona	12,600	1,700	16
Garfield	28,700	1,100	4	West Caldwell	6,100	1,400	30
Glen Rock	10,800	3,700	52	West Orange	33,900	5,300	19
Hackensack	30,600	1,400	5	Total Essex County	947,300	41,400	5
Harrington Park	1,800	200	12	Hudson			
Hasbrouck Heights	10,900	1,700	18	Bayonne	76,400	-800	-1
Haworth	2,600	1,000	62	East Newark	2,100	-100	-5
Hillsdale	6,000	1,900	46	Guttenberg	5,500	-100	-2
Ho-Ho-Kus	3,700	1,400	61	Harrison	13,400	-100	-1
Leonia	7,700	300	4	Hoboken	50,500	-200	-
Little Ferry	5,100	100	2	Jersey City	295,200	-3,800	-1
Lodi	21,600	6,200	40	Kearny	39,300	-700	-2
Lyndhurst	21,200	1,200	6	North Bergen	44,500	2,900	7
Mahwah	5,800	900	18	Secaucus	10,700	900	9
Maywood	9,900	1,200	14	Union City	54,400	-1,100	-2
Midland Park	6,300	1,100	21	Weehawken	14,500	-300	-2
Montvale	2,000	100	5	West New York	36,700	-1,000	-3
Moonachie	2,600	800	44	Total Hudson County	643,200	-4,200	-1
New Milford	14,000	8,000	133	Middlesex			
North Arlington	16,900	900	6	Carteret	15,300	2,300	18
Northvale	1,600	100	7	Cranbury	1,900	100	6
Norwood	1,900	100	6	Dunellen	6,600	300	5
Oakland	3,400	1,600	89	East Brunswick	11,700	6,000	105
Old Tappan	1,400	600	75	Helmetta	600	-	-
Oradell	4,500	800	22	Highland Park	11,400	1,700	18
				Jamesburg	2,400	100	4



TABLE VII - Part 2

	1954 Population	1950-54 Change			1954 Population	1950-54 Change	
		Absolute	%			Absolute	%
Middlesex (contd.)				Morris (contd.)			
Madison	8,800	1,400	19	Chatham Twp.	4,000	1,200	43
Metuchen	11,000	1,100	11	Chester B	900	100	12
Middlesex	7,500	1,600	27	Chester Twp.	1,700	400	31
Milltown	4,300	500	13	Denville	7,800	1,700	28
Monroe	5,100	1,000	24	Dover	11,900	700	6
New Brunswick	39,300	500	1	East Hanover	2,700	500	23
North Brunswick	7,600	1,100	17	Florham Park	4,100	1,700	71
Perth Amboy	40,600	-700	-2	Hanover	6,000	2,200	58
Piscataway	12,700	2,500	24	Harding	2,200	200	10
Plainsboro	1,300	200	18	Jefferson	3,900	1,200	44
Raritan	28,100	11,800	72	Kinnelon	1,700	300	21
Sayreville	12,900	2,600	25	Lincoln Park	3,900	500	15
South Amboy	8,400	-	-	Madison	12,700	2,300	22
South Brunswick	4,600	600	15	Mendham B	2,000	300	18
South Plainfield	12,700	4,700	59	Mendham Twp.	1,600	200	14
South River	11,900	600	5	Mine Hill	2,200	200	10
Spotswood	3,100	800	35	Montville	4,700	500	12
Woodbridge	47,500	11,700	33	Morris	8,700	1,300	18
Total Middlesex County	317,300	52,400	20	Morris Plains	4,000	1,300	48
Monmouth				Morristown	17,400	300	2
Allenhurst	800	-	-	Mountain Lakes	3,200	400	14
Allentown	1,200	300	33	Mount Arlington	700	100	17
Asbury Park	17,700	600	4	Mount Olive	3,000	400	15
Atlantic	2,100	300	17	Netcong	2,400	100	4
Atlantic Highlands	3,300	200	6	Parsippany-Troy Hills	18,500	3,200	21
Avon-by-the-Sea	1,700	-	-	Passaic	4,000	600	18
Belmar	5,000	400	9	Pequannock	6,700	1,400	26
Bradley Beach	4,000	100	3	Randolph	6,000	1,700	40
Brielle	1,700	400	31	Riverdale	2,300	900	64
Deal	1,100	-	-	Rockaway B	4,200	400	11
Eatontown	4,400	1,400	47	Rockaway Twp.	5,800	1,400	32
Englishtown	1,100	100	10	Roxbury	6,500	800	14
Fair Haven	4,700	1,100	31	Washington	2,400	300	14
Farmingdale	800	-	-	Wharton	4,100	200	5
Freehold B	7,900	300	4	Total Morris County	196,000	31,600	19
Freehold Twp.	4,400	1,000	29	Passaic			
Highlands	3,200	200	7	Bloomington	3,500	200	6
Holmdel	1,700	300	21	Clifton	74,100	9,600	15
Howell	8,000	1,300	19	Haledon	6,400	200	3
Interlaken	900	100	12	Hawthorne	15,500	700	5
Keansburg	5,900	300	5	Little Falls	7,100	700	11
Keyport	6,400	500	8	North Haledon	4,100	500	14
Little Silver	3,700	1,100	42	Passaic	56,900	-800	-1
Long Branch	25,200	2,100	9	Paterson	139,300	-	-
Manalapan	3,700	600	19	Pompton Lakes	7,200	2,500	53
Manasquan	3,700	500	16	Prospect Park	5,100	-100	-2
Marlboro	7,300	900	14	Ringwood	1,900	100	6
Matawan Twp.	5,600	1,700	44	Totowa	7,400	1,400	23
Matawan B	4,300	600	16	Wanaque	6,000	1,800	43
Middletown	20,200	4,000	25	Wayne	17,200	5,400	46
Millstone	2,500	400	19	West Milford	4,400	700	19
Monmouth Beach	1,000	200	25	West Paterson	5,400	1,500	38
Neptune Twp.	16,200	2,600	19	Total Passaic County	361,500	24,400	7
Neptune City	3,700	600	19	Somerset			
New Shrewsbury	4,500	700	18	Bedminster	1,600	-	-
Ocean	7,800	1,100	16	Bernards	8,500	1,000	13
Oceanport	9,500	1,900	25	Bernardsville	4,400	400	10
Raritan	3,900	1,100	39	Bound Brook	10,100	1,700	20
Red Bank	12,900	200	2	Branchburg	2,500	500	25
Roosevelt	700	-	-	Bridgewater	10,500	2,300	28
Rumson	5,000	1,000	25	Far Hills	600	-	-
Sea Bright	1,100	100	10	Franklin	12,400	2,800	29
Seagirt	1,500	300	25	Green Brook	2,200	1,000	83
Shrewsbury B	2,700	1,100	69	Hillsboro	4,700	800	21
Shrewsbury Twp.	1,300	-	-	Manville	10,100	1,500	17
South Belmar	1,500	200	15	Millstone	300	-	-
Spring Lake	2,200	200	10	Montgomery	3,900	100	3
Spring Lake Heights	2,900	1,100	61	North Plainfield	15,000	2,200	17
Union Beach	4,000	400	11	Peapack-Gladstone	1,500	-	-
Upper Freehold	2,300	100	5	Raritan	5,500	400	8
Wall	9,200	1,800	24	Rocky Hill	500	-	-
West Long Branch	3,600	900	33	Somerville	12,500	900	8
Total Monmouth County	261,700	36,400	16	South Bound Brook	3,200	300	10
Morris				Warren	4,100	800	24
Boonton T	7,400	200	3	Watchung	2,400	600	33
Boonton Twp.	1,300	100	8	Total Somerset County	116,500	17,400	18
Butler	4,800	700	17				
Chatham B	8,600	1,200	16				



TABLE VII - Part 3

	1954 Population	1950-54 Change			1954 Population	1950-54 Change	
		Absolute	%			Absolute	%
Union				Nassau (contd.)			
Berkeley Heights	4,400	900	26	Farmingdale	5,800	1,300	29
Clark	7,800	3,400	77	Floral Park	17,600	3,000	21
Cranford	21,100	2,500	13	Flower Hill	3,100	1,200	63
Elizabeth	111,400	-1,400	-1	Freeport	28,400	3,700	15
Fanwood	4,400	1,200	38	Garden City	18,200	3,700	26
Garwood	4,900	300	7	Glen Cove	19,300	4,200	28
Hillside	21,700	700	3	Great Neck	9,700	1,900	24
Kenilworth	6,100	1,200	24	Great Neck Estates	2,800	300	12
Linden	36,300	5,700	19	Great Neck Plaza	4,700	500	12
Mountainside	4,000	2,000	100	Hempstead V	32,300	3,200	11
New Providence	5,800	2,400	71	Hempstead T	385,900	137,500	55
Plainfield	43,000	600	1	Hewlett Bay Park	500	-	-
Rahway	23,900	2,600	12	Hewlett Harbor	900	500	125
Roselle	20,100	2,400	14	Hewlett Neck	500	100	25
Roselle Park	12,100	600	5	Island Park	2,300	300	15
Scotch Plains	13,300	4,200	46	Kensington	1,100	100	10
Springfield	11,000	3,800	53	Kings Point	3,700	1,300	54
Summit	20,200	2,300	13	Lake Success	2,300	1,000	77
Union	44,300	6,300	17	Lattingtown	900	200	29
Westfield	24,100	2,900	14	Laurel Hollow	200	-	-
Winfield	2,800	100	4	Lawrence	5,600	900	19
Total Union County	442,700	44,600	11	Long Beach	18,000	2,400	15
NEW YORK				Lynbrook	18,600	1,300	8
New York City (1)				Malverne	9,400	1,300	16
Bronx	1,510,000	58,700	4	Manorhaven	2,300	500	28
Kings	2,738,000	-200	-	Massapequa Park	8,200	5,900	257
New York	1,961,000	900	-	Matinecock	700	200	40
Queens	1,693,000	142,200	9	Mill Neck	600	100	20
Richmond	205,000	13,400	7	Mineola	19,300	4,500	30
Total New York City	8,107,000	215,000	3	Munsey Park	2,200	200	10
Dutchess				Muttontown	500	100	25
Amenia	8,100	600	8	New Hyde Park	9,900	2,600	36
Beacon	14,700	700	5	North Hempstead	84,300	19,000	29
Beekman	2,000	300	18	North Hills	340	-	-
Clinton	1,400	200	17	Old Brookville	800	200	33
Dover	8,000	500	7	Old Westbury	1,300	100	8
East Fishkill	3,400	800	31	Oyster Bay	117,500	69,300	144
Fishkill T	4,600	1,600	53	Oyster Bay Cove	600	-	-
Fishkill V	1,000	200	25	Plandome	1,200	100	9
Hyde Park	8,700	2,600	43	Plandome Heights	900	-	-
La Grange	3,500	1,200	52	Plandome Manor	400	100	33
Milan	900	100	12	Port Washington North	650	-	-
Millbrook	1,700	100	6	Rockville Center	25,200	1,800	8
Millerton	1,000	-	-	Roslyn	2,400	800	50
Northeast	1,400	100	8	Roslyn Estates	900	300	50
Pawling T	1,600	100	7	Roslyn Harbor	600	200	50
Pawling V	1,500	100	7	Russel Gardens	1,000	100	11
Pine Plains	1,600	200	14	Saddle Rock	700	700	-
Pleasant Valley	3,200	400	14	Sands Point	1,200	300	33
Poughkeepsie C	40,800	-200	-	Sea Cliff	5,300	400	8
Poughkeepsie T	25,100	6,100	32	South Floral Park	700	100	17
Red Hook T	2,400	200	9	Stewart Manor	2,300	400	21
Red Hook V	1,300	100	8	Thomaston	2,400	400	20
Rhinebeck T	2,000	200	11	Upper Brookville	600	100	20
Rhinebeck V	2,000	100	5	Valley Stream	32,800	5,900	22
Stanford	1,700	200	13	Westbury	11,200	4,100	58
Tivoli	800	-	-	Williston Park	7,800	300	4
Union Vale	1,000	-	-	Woodsburgh	900	200	29
Wappinger	3,400	800	31	Total Nassau County	967,300	294,500	44
Wappinger Falls	3,600	100	3	Orange			
Washington	2,000	100	5	Blooming Grove	1,900	300	19
Total Dutchess County	154,400	17,600	13	Chester T	1,800	100	6
Nassau (2)				Chester V	1,200	-	-
Baxter Estates	900	-	-	Cornwall T	4,800	900	23
Bayville	2,600	600	30	Cornwall V	2,400	200	9
Bellerose	1,100	-	-	Crawford	2,500	100	4
Brookville	400	100	33	Deerpark	2,800	300	12
Cedarhurst	6,500	400	7	Florida	1,500	100	7
Center Island	300	100	50	Goshen T	2,800	300	12
Cove Neck	200	-	-	Goshen V	3,500	200	6
East Hills	4,500	2,000	80	Greenville	800	100	14
East Rockaway	8,900	900	11	Greenwood Lake	900	100	12
East Williston	2,400	700	41	Hamptonburg	1,500	200	15
				Harriman	700	-	-
				Highlands	7,000	500	8
				Highland Falls	4,400	500	13

(1) Estimates for New York City developed by Consolidated Edison Company of New York, Inc.  
 (2) Long Island Lighting Company, Population Survey 1954 - Current Population Estimates  
 for Nassau and Suffolk Counties, Mineola, New York, 1954



TABLE VII - Part 4

	1954 Population	1950-54 Change			1954 Population	1950-54 Change	
		Absolute	%			Absolute	%
Orange (contd.)				Suffolk (contd.)			
Maybrook	1,300	-	-	Islip	93,700	24,700	36
Middletown	22,500	-100	-	Lindenhurst	13,900	5,300	62
Minisink	900	-	-	Lloyd Harbor	1,400	500	56
Monroe T	1,800	500	38	Nissequogue	300	100	50
Monroe V	1,900	100	6	North Haven	300	100	50
Montgomery T	3,500	600	21	Northport	4,500	600	15
Montgomery V	1,100	-	-	Ocean Beach	80	-	-
Mount Hope	1,500	100	7	Old Field	300	100	50
Newburgh C	32,100	100	-	Patchogue	8,800	1,400	19
Newburgh T	10,900	2,200	25	Poquott	180	-	-
New Windsor	8,000	2,900	57	Quogue	700	100	17
Otisville	900	-	-	Riverhead	12,400	2,400	24
Port Jervis	9,300	-100	-1	Sag Harbor	2,700	300	12
Tuxedo	4,500	200	9	Saltaire	30	-	-
Unionville	500	-	-	Shelter Island	1,200	100	9
Walden	4,500	-100	-2	Shoreham	110	-	-
Wallkill	6,700	800	14	Smithtown	23,700	3,400	17
Washingtonville	1,000	200	25	Southampton T	11,600	2,100	22
Warwick T	5,700	700	14	Southampton V	4,500	500	12
Warwick V	2,900	200	7	Southold	10,700	2,100	24
Wawayanda	2,600	200	8	Village of the Branch	160	-	-
Woodbury	2,200	100	5	Westhampton Beach	1,500	400	36
Total Orange County	164,800	12,500	8	Total Suffolk County	379,500	103,400	37
Putnam				Westchester			
Brewster	1,700	-100	-6	Ardsley	3,200	1,500	88
Carmel	6,000	500	9	Bedford	9,100	600	7
Cold Spring	1,800	-	-	Briarcliff Manor	3,300	800	32
Kent	2,400	300	14	Bronxville	7,000	200	3
Nelsonville	500	-	-	Buchanan	1,900	100	6
Patterson	2,300	200	10	Cortlandt	8,600	1,100	15
Phillipstown	2,600	600	30	Croton-on-Hudson	5,300	500	10
Putnam Valley	2,100	200	11	Dobbs Ferry	7,600	1,300	21
Southeast	3,100	500	19	Eastchester	16,900	2,500	17
Total Putnam County	22,500	2,200	11	Elmsford	3,300	200	6
Rockland				Greenburgh	21,600	5,300	33
Clarkstown	16,200	1,700	12	Harrison	15,700	2,100	15
Grandview-on-Hudson	300	-	-	Hastings-on-Hudson	8,500	900	12
Haverstraw T	4,800	700	17	Irvington	4,400	700	19
Haverstraw V	6,400	600	10	Larchmont	6,500	200	3
Hillburn	1,400	200	17	Lewisboro	2,700	300	12
Nyack	6,200	300	5	Mamaroneck T	10,300	400	4
Orangetown	24,000	600	3	Mamaroneck V	16,000	1,000	7
Piermont	2,000	100	5	Mount Kisco	6,100	200	3
Ramapo	10,100	1,300	15	Mount Pleasant	14,900	2,900	24
Sloatsburg	2,300	300	15	Mount Vernon	74,600	2,700	4
South Nyack	3,400	300	10	New Castle	6,700	1,400	26
Spring Valley	5,200	700	16	New Rochelle	67,100	7,400	12
Suffern	4,500	500	12	North Castle	4,600	700	18
Stony Point	6,200	700	13	North Pelham	5,000	-	-
Upper Nyack	1,400	200	17	North Salem	1,700	100	6
West Haverstraw	3,500	400	13	North Tarrytown	8,700	-	-
Total Rockland County	97,900	8,600	10	Ossining T	2,200	200	10
Suffolk (1)				Ossining V	16,500	400	2
Amityville	7,100	900	15	Peekskill	18,200	500	3
Asharoken	150	-	-	Pelham	1,800	-	-
Babylon V	7,800	1,800	30	Pelham Manor	6,000	700	13
Babylon T	47,200	22,500	91	Pleasantville	5,200	300	6
Belle Terre	130	-	-	Port Chester	24,800	800	3
Bellport	1,700	300	21	Pound Ridge	1,500	300	25
Brightwaters	2,700	400	17	Rye C	12,400	700	6
Brookhaven	47,500	12,400	35	Rye T	3,900	1,200	44
Dering Harbor	-	-	-	Scarsdale	15,000	1,800	14
East Hampton T	5,200	1,500	41	Somers	3,700	500	16
East Hampton V	2,900	1,200	71	Tarrytown	9,600	700	8
Greenport	3,100	100	3	Tuckahoe	6,200	200	3
Head of the Harbor	400	100	33	White Plains	50,600	7,100	16
Huntington	60,200	18,200	43	Yonkers	158,100	5,300	3
Huntington Bay	700	100	17	Yorktown	6,400	1,700	36
				Total Westchester County	683,400	57,600	9

(1) Long Island Lighting Company, Population Survey 1954 - Current Population Estimates for Nassau and Suffolk Counties, Mineola, New York, 1954



## FORECASTS

### Foreword

The population forecasts presented in this bulletin result from a careful weighing of the best available knowledge about past and emerging regional trends. It is axiomatic that the degree of reliability of a forecast hinges both on the adequacy of the available information and the validity of the method used. In order to make the forecasts offered below as useful as possible, the Regional Plan Association, therefore, is accompanying them with a description of the factual basis, method and assumptions. Assumptions were unavoidable, of course, because the state of knowledge about some important aspects of the region is incomplete. Chief among the still unknown factors are (1) the future volume and geographical distribution of productive establishments and employment and (2) the future birth rate.

The ability of a region to attract people from elsewhere and indeed even the capacity to hold its own people depends on its power to create income and employment opportunities. To a varying extent this is true also for the counties within a region.

What and how much economic activity in the next quarter century will fare better in the New York region than in the rest of the nation, how such activities will be distributed within the region are fundamental matters requiring intensive research—much more than has been possible in the present study. The important interaction of population growth and economic activity was recognized well in

advance of the preparation of this bulletin. The Association has taken initial steps toward the organization of a major and continuing economic study designed to utilize the most advanced techniques available for anticipating future economic developments. As will be evident, so far as this first factor is concerned, the current forecasts are based on an evaluation only of trends discernible from fairly general economic data.

As to that elusive matter, the future birth rate, it is reported that the U.S. Census Bureau plans an intensive historical study which will lead to a better grasp of future population potentialities. For present forecasting purposes the simple assumption has been made that the current high birth rate in each area will decline until it reaches the 1940 level around 1975.

### General Method

The best forecasting method for a given problem depends largely on the nature of the available data. The method employed in this study was a modified version of the *ratio* method employed by the Bureau of the Census in projecting the population of states. (The technical details of this process are set forth at length in Note 6.) In briefest outline, for the region as a whole the method consisted of the following steps:

(1) Selection of a reasonable projection series of *national* population for the years 1960 through 1975;

(2) Consideration of the positive and negative factors likely to affect the regional percentage of the nation in future years;

(3) Projection into the future of past ratios between the population of the New York metropolitan region and the nation;

(4) Derivation of a series of future regional population levels based on the three preceding steps.

Allocating the future regional population among the 22 component counties entailed the following steps:

(A) Projection into the future of past trends in the ratio of each county's population to the regional total;

(B) Preliminary projections of county population based on (4) and (A) above. These were mechanical projections expressing only *past* factors affecting county growth;

(C) Assembly of a wide array of data on developmental factors expected to accelerate or decelerate the future growth of the various counties in relation to each other and to the region as a whole;

(D) Readjustment of preliminary county projections (B) after weighing the probable net effects of the various developmental factors (C) in altering past county population trends. This final step yielded the RPA *county population forecasts* presented in this bulletin. These represent the first such forecasts to be published since the RPA estimates of 1941 (RPA Bulletin 55).

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### National Population Forecast

The projections of total U.S. population selected as the initial step in this study were those published in 1953 in a report by the U.S. Bureau of the Census entitled "Illustrative Projections of the Population of the United States, By Age and Sex: 1955 to 1975".<sup>7</sup> In this report four series of projections are given, each based on a different assumption as to future *fertility rates* (i.e. number of live births per thousand females annually).

Series A assumes that present fertility rates will remain constant through 1975; series B, that present rates will continue to 1965, then drop gradually

to the 1940 levels by 1975; series C, that present rates will decline continuously to the 1940 levels by 1975; series D, that present fertility rates will decline to the 1940 levels by 1960 and then remain constant to 1975.

These four different fertility assumptions yield the 1975 projections for the United States presented in line 1 of Table VIII. (These include armed forces overseas.)

#### Future Fertility

Significantly, the Bureau of Census report states, "It is felt that all of the projections shown are reasonably pos-

sible, and no series is selected at this time as most likely. Furthermore, the highest and lowest projections shown here are not intended to define the range of reasonable possibility."

Nevertheless, the assumption has been made in this bulletin that the two extremes in fertility do define a useful and reasonable range for predictive purposes pending more definitive fertility studies; and wherever calculations have been carried down to the county level, series C has been used as the basis. This assumes that future national economic conditions, which play a large part in determining



the birth rate, will be similar to the average of the past 14 years.

#### Adjustment for Armed Forces Overseas

According to the Census Bureau 1,372,000 persons, most of whom were in the U.S. armed forces, were over-

seas as of October 1, 1953, according to a recent report.<sup>8</sup> For forecasting purposes, the assumption was made in this bulletin that there will be approximately 1 million such persons during each future year. Hence, the projections for the U.S. were adjusted by this amount before being used as the

basis for deriving future regional population (see line 2, Table VIII). The resulting projections therefore comprise the civilian population and the armed forces stationed in each area, but exclude those in the armed forces overseas who normally reside in each area.

	1960			1965			1970				1975			
	A & B	C	D	A & B	C	D	A	B	C	D	A	B	C	D
United States Total (1)	177,426	176,126	173,847	189,916	186,146	180,927	204,222	202,359	196,269	189,110	220,982	213,568	206,615	198,632
United States Minus Armed Forces Overseas (2)	176,426	175,126	172,847	188,916	185,146	179,927	203,222	201,359	195,269	188,110	219,982	212,568	205,615	197,632
New York Region (3)	16,557	16,386	16,221	17,682	17,339	16,841	18,982	18,808	18,263	17,571	20,519	19,827	19,209	18,434

(1) U. S. Census Bureau Current Population Reports, Population Estimates, Series P-25, No. 78  
 (2) Armed forces overseas assumed to be 1,000,000  
 (3) Under the following assumptions regarding the region's share of the nation's population: A, B and D Series -- 1960 - 9.38, 1965 - 9.36, 1970 - 9.34, 1975 - 9.33; C Series -- Modification of the county mathematical projections yielded slightly different totals for the region and consequently changed the region's share of the nation -- 1960 - 9.30, 1965 - 9.31, 1970 - 9.31, 1975 - 9.30  
 \* Figures in thousands

#### Regional Forecast

##### The Future Relationship Between the Nation and the Region

The region's share of the nation's population, 9.4 percent in 1954, probably will decline to 9.3 percent by 1975 for reasons which will be explained below. Line 3 of Table VIII shows four sets of possible regional populations produced by applying the 9.3 percent-age ratio to national population under the four fertility assumptions. The figures for 1975 vary from 18.4 million to 20.5 million, a range of 2.1 million.

The C series regional figure of 19.2 million is considered by the Regional Plan Association to be a reasonable forecast, though perhaps on the "con-servative" side.

The region's share of the nation's future population is, of course, difficult to predict precisely. Both positive and negative factors are evident in the available information. Because the negative factors appear to have a slightly greater weight, a decline of about one tenth of one percentage point appears likely: hence, the forecast of a 9.3 ratio in 1975.

##### Negative Factors

As was seen in the chart on Page 4, the curve depicting the region's percentage of national population indicates a definite leveling tendency in the relationship since 1930, and a distinct drop for the region in the 1940-1950 decade (see also Table II, page 5). If the region's importance in the nation should decline in the future at the same rate as it did between 1940 and 1950, the region would contain only 8.8 percent of the nation's population in 1975. Under the C fertility assumption this would yield about 18.1

	% of Nation			% of Nation			% of Nation	
	1939	1953		1939	1953		1939	1953
New England	8.52	7.16	West North Central (Contd)			West South Central	6.54	7.66
Connecticut	1.84	1.77	Minnesota	1.78	1.74	Arkansas	.65	.64
Maine	.70	.55	Missouri	2.71	2.59	Louisiana	1.30	1.41
Massachusetts	4.46	3.67	Nebraska	.72	.70	Oklahoma	1.07	1.08
New Hampshire	.48	.35	North Dakota	.24	.22	Texas	3.53	4.53
Rhode Island	.80	.61	South Dakota	.28	.24			
Vermont	.25	.21				Mountain	2.62	2.93
Middle Atlantic	26.71	23.54	South Atlantic	11.89	12.42	Arizona	.31	.41
New Jersey	4.10	3.70	Delaware	.25	.28	Colorado	.75	.83
New York	13.78	12.04	District of Columbia	1.08	1.02	Idaho	.28	.27
Pennsylvania	8.82	7.80	Florida	1.27	1.69	Montana	.36	.31
East North Central	22.65	23.12	Georgia	1.69	1.83	Nevada	.11	.14
Illinois	7.52	6.92	Maryland	1.61	1.63	New Mexico	.26	.36
Indiana	2.68	2.88	North Carolina	2.02	2.04	Utah	.36	.44
Michigan	4.45	4.96	South Carolina	1.00	1.08	Wyoming	.18	.17
Ohio	5.80	6.17	Virginia	1.76	1.81			
Wisconsin	2.20	2.21	West Virginia	1.22	1.02	Pacific	8.23	10.30
West North Central	8.10	7.90	East South Central	4.74	4.97	California	5.98	7.87
Iowa	1.41	1.28	Alabama	1.31	1.37	Oregon	.85	.94
Kansas	.97	1.10	Kentucky	1.24	1.25	Washington	1.40	1.49
			Mississippi	.66	.67			
			Tennessee	1.53	1.68	United States	100.00	100.00

Source: U. S. Bureau of Labor Statistics



TABLE X

THE PERCENTAGE DISTRIBUTION OF EMPLOYMENT BY MAJOR INDUSTRY GROUP AND GEOGRAPHIC DIVISION, 1939-1953

	Construction (1)		Manufacturing		Transportation, Communications and Utilities		Wholesale and Retail Trade		Finance, Real Estate and Insurance (2)		Services (3)	
	1939	1953	1939	1953	1939	1953	1939	1953	1939	1953	1939	1953
New England	7.03	5.54	11.48	9.16	6.01	5.12	7.50	6.31	7.19	7.46	7.89	7.16
Middle Atlantic	23.24	19.25	29.25	26.05	26.48	23.46	24.81	21.75	38.29	29.68	26.46	25.04
East North Central	17.97	19.78	27.56	29.72	20.52	20.66	22.20	21.30	21.00	19.57	20.47	19.67
West North Central	8.82	7.89	5.11	5.98	9.64	10.02	10.06	9.48	7.85	8.45	8.89	8.40
South Atlantic	15.42	14.96	11.84	10.77	11.26	11.74	10.74	12.58	8.04	10.78	11.32	11.72
East South Central	5.49	5.83	4.40	4.55	4.76	4.72	4.24	5.05	2.51	3.66	4.24	4.45
West South Central	9.24	10.54	3.61	4.46	8.36	9.41	7.52	9.13	4.90	7.27	7.44	8.12
Mountain	3.41	3.80	.92	1.15	3.74	4.13	2.89	3.38	1.46	2.45	2.92	3.51
Pacific	9.36	12.42	5.82	8.15	9.24	10.74	10.03	11.02	8.76	10.67	10.42	11.93

(1) Mining combined with construction in Connecticut (N.E.).

(2) Vermont (N.E.) does not conform with definition used for national series.

(3) Mining combined with services in Massachusetts and Rhode Island (N.E.) - Delaware and District of Columbia (S.A.).

Source: U. S. Bureau of Labor Statistics

million persons—1.1 million less than the forecast figure, 19.2 million. Under the D series and a conceivable 1975 ratio of 8.8 percent, the resulting regional total of 16.2 million would be 3 million less than the forecast. This extreme condition could be induced, however, only by a major unforeseen event such as a global war or a prolonged world depression.

#### National Employment Pattern

Newly published data on changes in the location of economic activity in the United States do suggest some degree of declining national importance for the New York metropolitan region. Since 1939 the *New England* and *Middle Atlantic* states, of which the New York region is a part, had the smallest rates of increase in nonfarm employment of any of the major geographic divisions—37.4 and 44.0 percent respectively; every one of the nine states in these two divisions had increases below the national rise of 63.3 percent.

While the *Middle Atlantic* and *New England* states began with 26.7 and

8.5 percent respectively of the nation's nonfarm employment in 1939, by 1953 their shares had declined to 23.5 and 7.2 percent respectively. The states bordering the Pacific Ocean, Gulf of Mexico and southerly Atlantic had the fastest rates of increase in this period. Table IX reflects the changes between 1939 and 1953 by comparing the percentage shares each area had of the nation's employment in the two terminal years. It is noteworthy that the 14-year period advanced the *East North Central* (Great Lakes) states to within less than one-half of 1 percentage point of surpassing the long-time industrial leadership of the *Middle Atlantic* states.

The relative decline of the *Middle Atlantic* states affected all six major industries for which data are available. At the beginning of the 1939-53 period these states had the greatest share of nonfarm employment in every one of the six major industry divisions. By 1953, however, the area lost its leadership in *manufacturing* and *construction*. During World War II the

Great Lakes area (*East North Central*) assumed the leadership of the nation's *manufacturing* activity (see Table X).

Employment data for the years since 1943, the peak of the war effort, indicate that the New York metropolitan region along with its larger area, the *Middle Atlantic* states, has been affected by the slow westward shift of national economic activity.

Table XI shows the ten-year behavior of the region's share of the nation's private, nonfarm employment. Although the regional percentage has fluctuated somewhat, a declining trend is clearly perceptible—a drop from 11.80 in 1943 to 11.32 in 1953.

In the ten-year period the region experienced a sharp drop in its share of the nation's *finance, real estate, and insurance*; moderate declines in *manufacturing*, in *wholesale and retail trade*, and in *services*; but marked increases in *mining* (the figure includes the industry's head office employment), *construction*, and *transportation*.

TABLE XI

EMPLOYMENT IN THE REGION AS A PERCENT OF NATION BY MAJOR INDUSTRY GROUP, 1943-1953

	Total Private Non-Farm Employment				Transportation, Communications and Utilities	Wholesale and Retail Trade	Finance, Real Estate and Insurance	Services
		Mining	Construction	Manufacturing				
1943	11.80	.52	7.72	12.45	8.04	12.16	25.56	10.94
1944	11.80	.49	8.92	12.40	7.87	12.08	25.12	11.20
1946	11.93	.56	9.65	12.84	8.23	12.22	23.70	10.72
1947	11.86	.53	9.32	12.14	10.39	12.30	23.45	10.57
1948	11.82	.52	9.74	12.12	10.15	12.29	23.12	10.63
1949	11.95	.59	9.70	12.48	10.43	12.29	22.65	10.34
1950	11.70	.61	9.70	12.18	9.55	12.10	22.23	10.38
1951	11.56	.69	9.29	11.88	10.07	11.89	21.63	10.55
1952	11.55	.76	8.76	12.03	10.00	11.79	20.82	10.55
1953	11.32	.80	8.45	11.66	10.15	11.53	20.48	10.30

Sources: National data from U. S. Bureau of Labor Statistics.

New York regional data developed by Nathan Bloom, Economist, in association with the Bureau of Applied Social Research, Columbia University and in cooperation with the Regional Plan Association.



Table XII shows that in manufacturing (the only category for which long-term regional data are available) the region's share of the nation's jobs has been declining consistently over the past half century.

	U. S.	Region	Region's % of Nation
1899	4,501,919	623,900	13.86
1919	8,464,916	1,158,605	13.69
1929	8,369,705	994,012	11.88
1939	7,808,205	950,494	12.17
1947	11,916,188	1,398,134	11.73

Sources: U. S. - Census of Manufactures  
Region - RPA (1899, 1919, 1929)  
Census of Manufactures (1939, 1947)

*St. Lawrence Seaway.* The impact of the St. Lawrence Seaway on the port and its associated activities in the New York region undoubtedly will play an important role in determining future regional trends. Walter P. Hedden, now Consultant to the Port of New York Authority, has estimated that a potential of from 3 million to 4 million tons or 1/6 of the grain and general dry cargo in foreign trade in the Port of New York may be diverted to the new Seaway. Hedden estimates that about 200,000 jobs may be adversely affected.<sup>9</sup> On the other hand, at least a portion of this potential decrease in port-connected employment may be offset by increases in management and administration activities brought about in the New York metropolitan region in response to the development of new manufacturing activities along the Seaway and the Great Lakes. In this unique respect the New York region benefits from industrial expansion in many other places.

#### Positive Factors

Other evidence suggests that the region's importance in the nation may be improved or at the very least stabilized. The shifts in the location of economic activity that have occurred in the last 14 years have not been substantial enough to affect fundamentally the distribution pattern of the nation's industry.

Seymour Wolfbein in a review of the recent changes noted above said, "...the basic geographical structure of American industry, strongly tempered as it has been by the developments summarized so far, is still very much like it was a dozen odd years ago. The

concentration of industry and commerce, the concentration of job opportunities, the concentration of manpower requirements and labor supply remain to a significant extent in the regions and states where they had been more than a decade ago".<sup>10</sup>

*Historical Population Trends.* Viewed from the perspective of the last full century, the 1975 regional forecast of 9.3 percent of the nation seems somewhat conservative. With the exceptions of the 1870-80 and 1940-50 decades the region's percent of the nation's population has been increasing steadily since 1840 (see Chart on Page 4 and Table II, page 5). If the regional share were to increase at the same rate between now and 1975 as it did between 1850 and 1950, the region would have about 10.5 percent of the nation's population in 1975. Within the C series fertility assumption discussed above, this would yield a regional population of 21.6 million in 1975—2.4 million more than the 19.2 million forecast by the Association.

By combining the foregoing maximum regional share percentage, 10.5, with the maximum national population projection, 221 million in 1975 (series A), an upper extreme figure for the New York metropolitan region is obtained—23.2 million persons in 1975. This represents 4 million more than is anticipated in the RPA forecast.

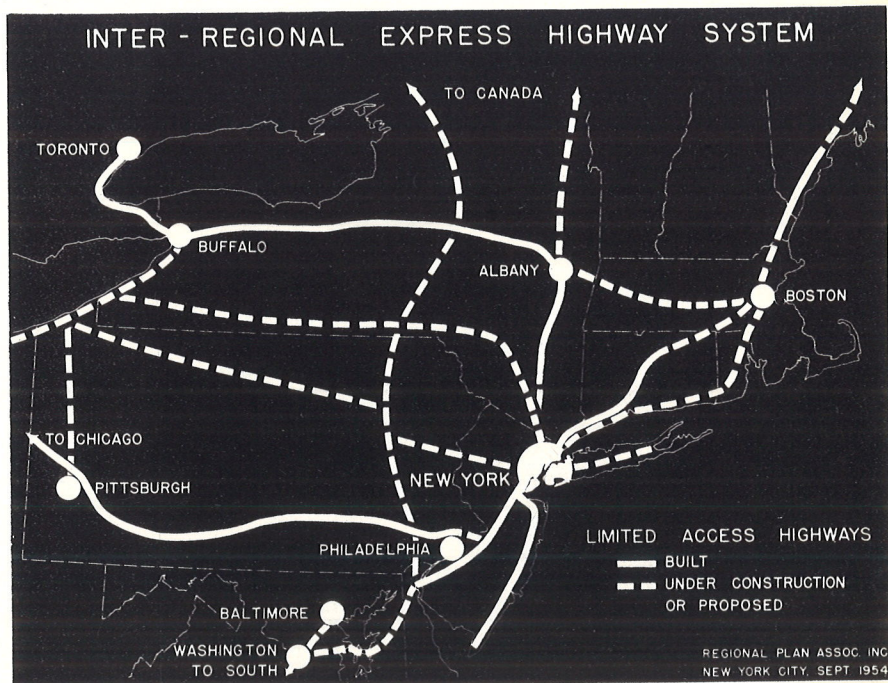
*Super-Highway Network.* Another positive factor affecting the region's

relative importance in the nation is its strategic location with respect to an emerging web of super-highways.

This is well illustrated in the accompanying map. At the center is the New York metropolitan region. Extending southward are the *Garden State Parkway* and the *New Jersey Turnpike*. The former connects north-eastern New Jersey with Cape May at the southern tip. The latter soon will extend all the way from a connection with the *New York State Thruway* on the north to below Philadelphia on the Delaware River. An extended route connecting it with Washington, D. C., is planned.

In addition to the *Pennsylvania Turnpike* now being linked with the New Jersey Turnpike, six new super-highways toward the west are in the offing: the *Illinois, Indiana, Ohio, East-West* (Newark to Morristown), *Northeast Extension* (Morristown to vicinity of Scranton) and the *Scranton-Erie* turnpikes. The Ohio, Indiana and Northeast Extension turnpikes already are under construction; the Illinois, East-West and Scranton-Erie arteries are in the design stage.

Running northward from New York to Albany and westward to Buffalo and the Great Lakes is the New York State Thruway, now close to completion. Three other important routes are under active study in New York State: one paralleling the Thruway along the southern tier of counties and connecting with the Thruway in Orange County; a second extending from Al-





bany to the northern boundary of the state near Montreal; the third running south from Utica to Binghamton to connect with the northern extension of the Pennsylvania Turnpike.

Toward the northeast and tapping New England are the *Merritt Parkway*, the *New England Thruway* (partially under construction), the *Massachusetts, New Hampshire* and *Maine* turnpikes.

It is evident that land in the neighborhood of the New Jersey Turnpike between Philadelphia and New York comprises the focal area of the en-

tire network. Hence this belt appears destined to augment its already eminent status as an industrial district of major national importance.

New super-highways connecting the Great Lakes area with the South, however, are being actively considered. To some extent, therefore, the special advantages which will be derived from the network leading to the New York-Philadelphia area may be lessened late in the forecast period.

*U. S. Steel at Morrisville, Pa.* The new steel plant at Morrisville, Pa., is still another factor tending to increase

the national importance of the New York metropolitan region. The estimated 3 million tons of new steel capacity undoubtedly will have a significant and favorable effect on the economy of a large area northward as well as south of the plant. It has been estimated that by about 1964 the works, operating at capacity, directly or indirectly, will cause new employment in all types of industry amounting to more than 180,000 jobs and a consequent increment in population of more than 400,000 persons in the combined New York-Philadelphia region.<sup>11</sup>

### County Forecasts

The RPA forecasts of population for each of the region's 22 counties covering the years 1960 through 1975 by five-year intervals are presented in Table XI. These represent the anticipated distribution among the counties of the population series forecast for the region as a whole leading to a region-wide total in 1975 of 19.2 million persons.

The accompanying map shows graphically how the counties will compare with each other in population in 1975, as well as the changes which will occur in the intervening period. Here, the general future trends already discussed above are further pinpointed and illustrated.

For example, the map shows how in 1975 Kings County will maintain its

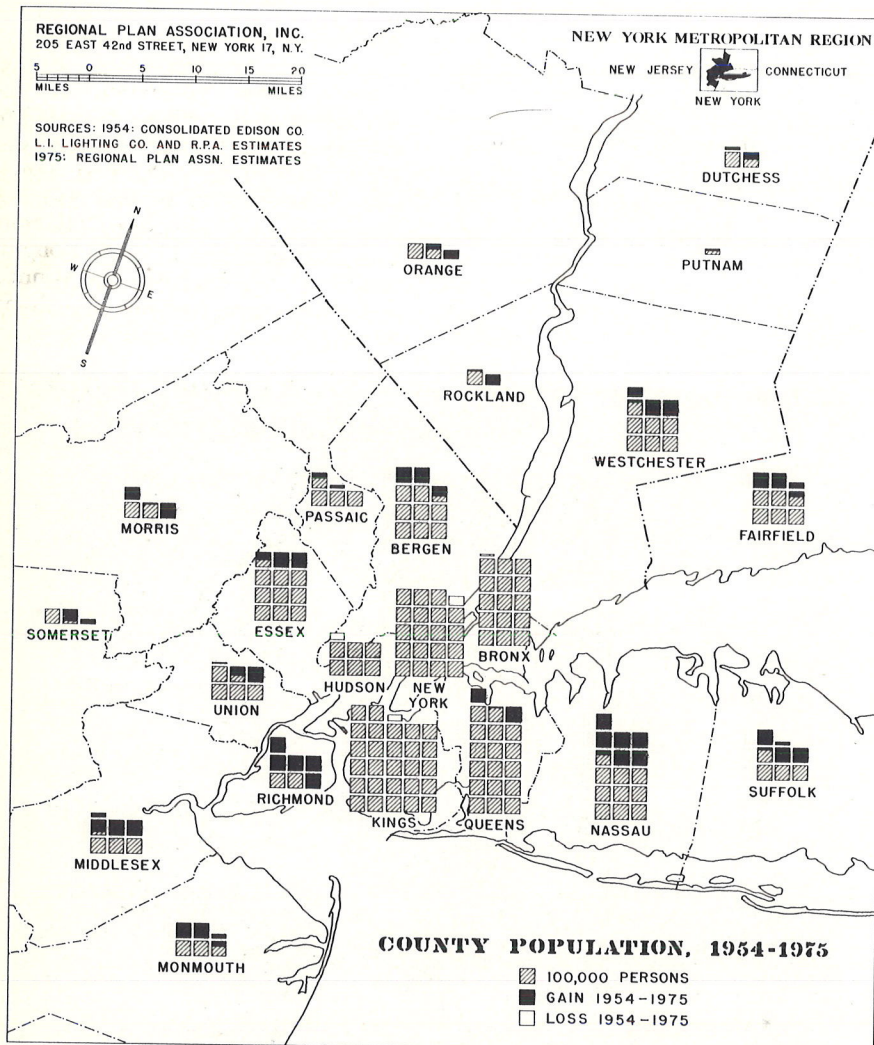
leading position among the counties even though losing ground in the intervening period. Nassau on the other hand will make a notable climb in status, rising from an intermediate level now shared with Essex and Bergen to a major position larger than the Bronx.

It is noteworthy also that all three counties bounding the central Port—New York, Kings and Hudson—are expected to decline slightly in population by 1975. In contrast, gains of approximately 300,000 are anticipated in each of seven outlying counties.

The area of greatest growth indicated by the map is irregular in shape. But it does follow a pattern corresponding approximately with an outward extension of the ring of most intensive growth noted above as characteristic of recent population changes (see page 11). The forecast emphasizes (1) expansion in the *outer* portions of counties which surround the old hub of central core counties and (2) expansion in the *inner* portions of the next adjoining ring of counties. Thus, for example, eastern Nassau and western Suffolk; northern Bergen and southern Rockland; outer Essex and inner Morris.

*Developmental Factors and Assumptions.* It was indicated above in the section describing the general forecasting method that "step C" involved the examination of an array of factors and assumptions which may be expected to affect the future development of the various counties (see page 16).

These will now be presented under the following headings: (1) *Topography*; (2) *Land Suitable for Residential Expansion*; (3) *The Transportation System*; (4) *Trends in the Loca-*





tion of Commerce and Industry; (5) Land Development Policy and Controls; (6) Public Housing and Redevelopment. Some of the factors are also depicted on the accompanying map entitled "Factors Affecting Future Population Distribution" (See page 22).

Given the limits of available research resources, this study has focussed its investigation on the most important and predictable factors affecting the distribution of population. Other factors which might profitably have been studied if time had permitted include water supply and the disposal of sewage. Certain factors must be classified as imponderables: for example, the locations of mammoth developments like Levittown, Parkchester or a new town planned at Sterling Forest in Orange County. Such major urban projects may be constructed at any time in scores of places within commuting range of the region's major employment districts.

### Topography

The areas colored solid black on the map show the location of land which exceeds 10 percent in slope. Some development does take place on the steeper hillsides, particularly to take advantage of distant views or of lake frontages. For the most part, however, the areas in white are likely to receive the earlier and more intensive development.

What are some of the outstanding topographical features of the region? The Port at its heart is of course the most obvious and the most important.

To the west just beyond the Palisades are the New Jersey meadows, tracts of salt marshland some four miles wide and ten miles long. These are now impassable on foot and non-productive except for the embankments of railroads and highways; the support of wildlife; and where filled, the sites of industrial activities. Together with certain large undeveloped water frontages in Hudson County they constitute the only substantial amount of vacant land immediately west of New York City between the Hudson River and the Watchung Mountains. It is assumed in this report that large portions will be developed during the forecast period for truck terminals, warehouses and industrial plants on filled land.

The Watchung Mountains form generally the beginning of the great mass of hills and mountainous land to the west. Running in two parallel ridges the chain begins northwest of

Paterson, extends southwesterly through the western portions of Essex and Union counties to the vicinity of the Raritan River in the middle of Somerset County, and thence ends after a sharp swing to the northwest. The only major breaks in the ridge are at Great Notch near Paterson and at Short Hills. The chain rises for most of its length to over 500 feet and thus far has impeded intensive urban development. West of the Watchungs are the upper coils of the Passaic River and its low and marshy drainage area. The Ramapo Mountains rise still farther to the west. And they run obliquely from southwest to northeast traversing Morris, Passaic, Bergen and Rockland counties before they reach the Hudson River at Bear Mountain. This rugged territory is marked by irregular ridge lines and many isolated hills ranging in height from 800 to 1400 feet.

Thus, as the map shows, the configuration of the New Jersey hills and mountains defines a continuous and narrow belt of flat land east of the Watchungs. This affords a natural transportation corridor serving a string of counties parallel with the Hudson River—Rockland, Bergen, lower Passaic, Essex, Union and Middlesex. Through this corridor run the major railroads and highways from the New York region to Philadelphia and to points beyond. Hudson County, where the Palisades decline, provides the main industrial gateway to the Port and to Manhattan.

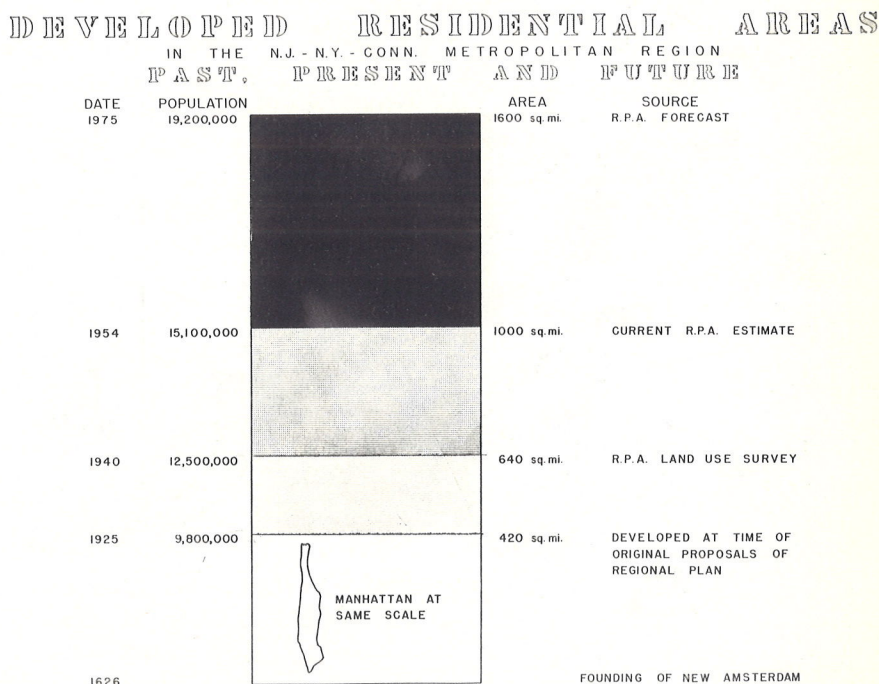
Orange County land ranges from gently rolling to hilly and mountainous

in character. Just west of Newburgh the topography is less rugged than any other northerly part of the region, having broad valleys and slopes suitable for residential development. Across the Hudson, portions of Westchester, Fairfield and Dutchess are favorable for building. Most of Putnam and much of the other three counties, however, are too steep for extensive urbanization.

Thus, by far the greatest developable masses of flat land in the region are in eastern and southern New Jersey, Long Island, Staten Island and southern Fairfield County. To date the region's growth has been predominantly on the flatter land. The major industrial concentrations in the future probably will continue to emphasize these areas. The other counties with predominant portions over 10 percent in slope, while continuing to receive small clusters of industrial plants and offices, probably will serve chiefly as choice residential places for the major employment districts on flat lands elsewhere.

### Land Suitable for Residential Expansion

An important consideration in forecasting county population is the amount of land available for residential expansion. The most recent survey of land in the New York region was made in 1945 by the Regional Plan Association. This study (see Bulletin 66) indicated that almost 1500 square miles of land were suitable for urban expansion within commuting

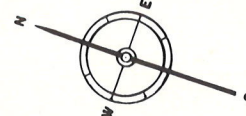




# NEW YORK METROPOLITAN REGION

REGIONAL PLAN ASSOCIATION, INC.  
205 EAST 42nd STREET, NEW YORK 17, NY

SEPT. 1954



0 5 10 15 20 25 30  
MILES



- LAND NOT AVAILABLE OR SUITABLE FOR INTENSIVE DEVELOPMENT
- LIMIT OF PRESENT INTENSIVE DEVELOPMENT
- FUTURE MAJOR EMPLOYMENT AREA
- MAJOR BUSINESS CENTER
- EXPRESSWAY
- PARKWAY
- RAILWAY

## FACTORS AFFECTING FUTURE POPULATION DISTRIBUTION

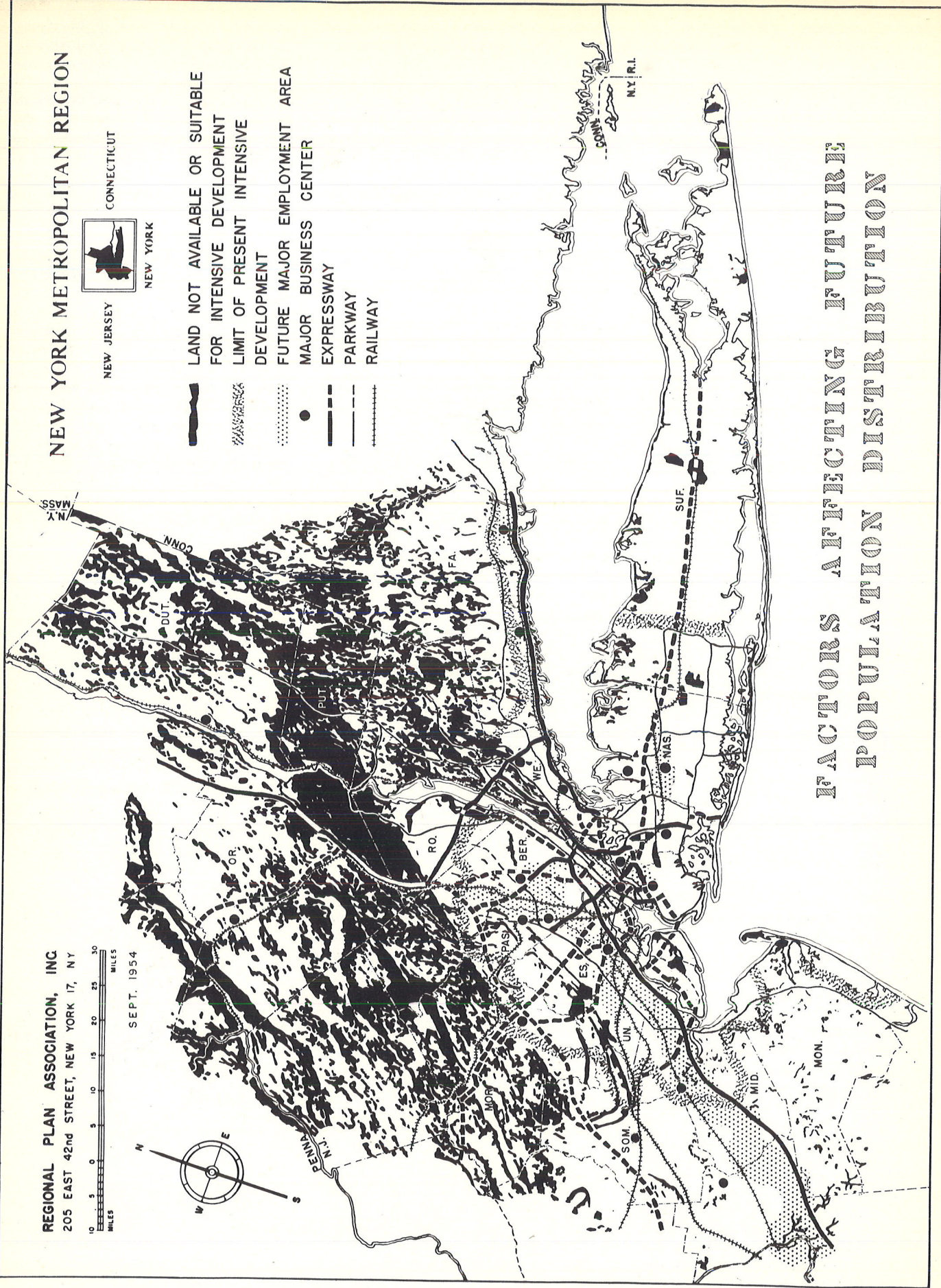




TABLE XIII  
ESTIMATED DENSITIES AND DEVELOPED RESIDENTIAL AREAS

	1954			1975		1954-1975
	Density Persons Per Gross Residential Acre	Developed Residential Area Square Miles	Vacant Land Suitable For Development	Density Persons Per Gross Residential Acre	Total Developed Residential Area Square Miles	Increase In Developed Residential Area Square Miles
CONNECTICUT						
Fairfield	13	68	74*	12	109	41
NEW JERSEY						
Bergen	11	91	97	10	172	81
Essex	23	64	29	22	85	21
Hudson	54	18	2	51	18	-
Middlesex	14	35	112*	13	76	41
Monmouth	7	59	63*	7	119	60
Morris	10	31	104*	9	66	35
Passaic	22	26	36*	21	31	5
Somerset	7	26	28*	7	51	25
Union	13	53	28	12	79	26
NEW YORK						
Bronx	94	25	2	88	27	2
Kings	81	53	2	76	55	2
New York	250	12	-	250	12	-
Queens	43	62	20	40	74	12
Richmond	14	23	17	28	40	17
Dutchess	7	34	-	7	49	15
Nassau	12	126	124	11	227	101
Orange	5	52	-	5	61	29
Putnam	5	7	-	5	12	5
Rockland	10	15	89	9	30	15
Suffolk	9	66	144*	8	141	75
Westchester	18	59	172	17	88	29
Total Region	24	1,005	1,143*	19	1,642	637

\* Within Commuter Area Only (See Bulletins 63 and 66)

distance of central New York City. The amount of potential residential land in the whole region probably is considerably larger because the commuter area is only about half the total. Obviously, the region contains ample land to accommodate its anticipated residents for many years to come.

The accompanying chart illustrates the interesting relation of developed residential areas to population. In the 300 years between the founding of New Amsterdam and 1925, the New York metropolitan region grew in population to nearly 10 million, and its closely occupied residential land grew to about 420 square miles—making an over-all average of 36 persons per gross residential acre. (In the RPA estimates, residential land is considered "developed" if it contains five or more houses per block or the equivalent density where there is no street system.)

Between 1925 and 1954 when population topped 15 million, about 580 additional square miles were developed; and the average density fell to 24 persons per gross residential acre.

It is estimated that by 1975 the

forecast population of about 19 million persons will occupy at least 1600 square miles and that the density will decline to 19 persons per gross residential acre. This expectation is based on an analysis of trends in the density of families, the growth of population and the decline in family size.

Table XIII shows the estimated densities and developed residential areas on a county basis. For the most part there is a comfortable margin of suitable residential land in each county to accommodate the forecasted county population at anticipated densities.

In the region's inner core area (Hudson, Bronx, Kings and New York counties), however, little vacant land remains that is suitable for residential purposes. This fact is expected to operate as a powerful deterrent to population growth in these counties and to stimulate the development of the areas immediately adjacent.

Within the next twenty years the vacant reserves in Essex, Union and Queens are expected to be almost depleted. Although a great deal of land is still available in Nassau and Bergen, their anticipated population growth in the next twenty years is

expected to fill the most desirable sites near main transportation routes and to bring both counties close to the stage of saturated development.

### *The Transportation System*

For about three-quarters of a century before 1925 the railroads were the dominant force shaping the region's urban development. They spurred the growth of population in the central port areas and gave impetus to a bead-like sort of development along the rail lines which ran outward from the center. Compact communities formed close by the stations. With the advent of the automobile and truck, the pattern began to change; urban development now occurred in the interstices between the rail lines.

Recent construction of limited-access highways appears curiously to be encouraging a form of radial development once again, reminiscent of the pattern created by the rail lines. The infrequent points of interchange with local arteries are tending to attract intensive development, including industrial, commercial and residential uses. The present combination of rail facil-



ities and super-highways which comprise the regional transportation network, however, is bringing about a regional development pattern different in an important way from the past. The new system is less clearly focussed on central Manhattan; and by inter-connecting sub-centers in the environs it tends to give them a considerable degree of independent importance. Thus, the motor vehicle has both intensified the outward movement of population and industry and has spread development over a larger area of the region.

On the map "Factors Affecting Future Population Distribution" (see page 22) are shown the major trunk railways, expressways and parkways expected to shape the future development in the region. The broken lines indicate routes not yet in existence which, it is assumed, will be built during the forecast period.

Construction of the New Jersey Turnpike and part of the Garden State Parkway already has given impetus to residential and industrial development along the north-south corridor in Bergen, Essex, Union and Middlesex counties. With the completion of the Parkway to Cape May and its northerly extension into Rockland County, to link with the New York State Thruway, the dispersion of residential development throughout Monmouth and Middlesex in the south and Bergen in the north may be expected to increase. Route S-101. (a new link connecting the Parkway, Routes 4 and 46 and the Palisades Interstate Parkway) will hasten this trend in Bergen. Although no expressway connection between the New York State Thruway and New Jersey Turnpike has been announced, it is assumed that the volume of truck traffic from upper New York State and New England will require such a link early in the next twenty years.

The rate of development of the outer counties, Morris and Somerset, no doubt will increase appreciably when the proposed fully relocated north-south Route 202 is built. In addition, it is likely that within ten years Morris County will be linked to highly industrialized Newark and Elizabeth by a proposed east-west limited-access highway near Route 10 and a relocation of Route 24 designed to carry both trucks and passenger cars. The Middlesex Freeway is proposed to connect Route 22 with the rapidly developing part of Middlesex County and with the Outerbridge Crossing to

Staten Island. This will improve the accessibility of Somerset also.

The proposed Brooklyn-Riverhead Expressway traversing Long Island will greatly increase the accessibility of Nassau and Suffolk counties. Since this will be the first limited-access highway open to commercial vehicles traversing these two counties, truck supplied industries may be expected to locate farther out on the island than they have heretofore.

Further improvement in the relative accessibility of Long Island may be expected with the construction of new routes designed to by-pass congested Manhattan. Such routes are presently under study by the Port of New York and Triborough Bridge and Tunnel authorities. They include a second level of the George Washington Bridge, a possible new bridge in the vicinity of 125th Street with a connection to the Triborough, two crosstown expressways in lower and midtown Manhattan, and a Narrows Bridge and expressway on Staten Island connecting Long Island and New Jersey. With the construction of the Narrows crossing, the new West Shore and Clove Lakes expressways, and the Richmond and Willowbrook parkways, Staten Island, long by-passed by the outward movement of population, will have an unusual potential for growth.

In the northern part of the region the New York-Buffalo Thruway will be fully open in 1955; and an expressway to Binghamton traversing the "southern tier" of New York counties is under study. Both will tend to encourage population and industry in Orange and Rockland.

In Westchester an expressway is planned to traverse the county laterally through White Plains, connecting the Hutchinson River Parkway and New England Thruway to the New York Thruway.

North-south accessibility will be improved in Westchester not only by the New York State Thruway, but also by the construction of the Sprainbrook Parkway and planned improvements of the Saw Mill River, Bronx River and Hutchinson River parkways, and the Boston Post Road. These in turn will have connections with the major existing and planned arterials in the Bronx including the Major Deegan, Sheridan, and Cross Bronx expressways, Bruckner Boulevard, Mosholu and Pelham parkways and Throggs

Neck and Harlem River 181st Street bridges.

The New England Thruway, which eventually will have connections as far to the northeast as Maine, will also help to improve the accessibility of Fairfield County.

#### *Trends in the Location of Commerce and Industry*

Any long-term analysis of changes in the location patterns of economic activity in the region is limited by the serious lack of comprehensive data. However, for the most recent years a greatly expanded fund of information has become available; and at least one important segment of the region's economy, manufacturing, has been recorded statistically over a fairly long period. From these partial indicators fairly definite trends are discernible.

*Post World War II Changes.* Private, non-farm employment in the New York region increased by more than one-half million jobs or about 12 percent since World War II. A comparison of how this increase was distributed among the counties of the region in contrast with the distribution as it existed in 1946 provides a partial indication of where future economic expansion will take place. This indication of future job locations will in turn be helpful in forecasting the location of future population expansion.

As Table XIV shows, 82 percent of the regional employment increase occurred outside New York City. Yet, the environs contained only 34 percent of total regional employment in 1946 at the beginning of the period. It is significant that the population added in the region in recent years corresponds roughly in geographical distribution with the distribution of new jobs as between the central city and the environs.

By states, 56 percent of the regional job increase went to the New York counties which had 73 percent of the region's employment in 1946; 39 percent went to the New Jersey counties which had 23 percent of the regional total in 1946; and 5 percent went to Fairfield County, Connecticut, which had 4 percent of the total in 1946.

The New York counties in the region outside New York City obtained 38 percent of the region's increase but had only 7 percent of the total in 1946. The most outstanding county in economic expansion in the entire region was Nassau; it received 23 percent of the regional increase though its share



in 1946 was less than 2 percent of the regional total. Every other New York county outside New York City obtained a larger share of the region's increase than its 1946 share of the region's employment. Of New York State's suburban counties, Westchester obtained the second largest share of the region's increase, 6 percent of the total. Its share of the total in 1946 was only 2.6 percent.

In New Jersey the largest shares of the regional increase went to Bergen, Union, Essex and Middlesex counties which ranged from 12.7 to 5.5 percent. These four counties accounted for 4 out of every 5 new jobs in the nine-county New Jersey area. Bergen County's share of new employment was over six times its 1946 share of the region's jobs. Although the increase in Essex was substantial, it was slightly

less than its percentage share of the region's employment at the beginning of the period. All other New Jersey counties increased their share during the period with the exception of Hudson County which experienced an absolute decline of about 10,000 jobs. (See county map below for absolute and percentage employment changes since 1950).

*Trends in the Distribution of Manufacturing Employment, 1899-1953.* Manufacturing is the only segment of the economy for which basic data have been recorded for as much as a half century. Because manufacturing is a substantial element in the national and regional economy, however, its trends give a reasonable clue to general urban economic trends. Data published by the U. S. Census Bureau and recent information collected from the state labor departments show the trends of manufacturing in each of the region's counties over the past half century. These are summarized in Table XV which shows the changing shares of the region's manufacturing employment in each county from 1899 to 1953. (See Appendix Table C for absolute figures).

At the turn of the century about 62 percent of the region's manufacturing employment was located in the five boroughs of New York City and about 38 percent in the environs. In the following years the relative importance of these two parts of the region changed, so that by 1953 the distribution of manufacturing activity between the central city and the environs was nearly even, 48.1 percent and 51.9 percent respectively.

In the intervening years, however, their relative importance has been subject to marked fluctuations. Thus, from 1899 to 1943 New York City's share of the region dropped by about 13 percentage points; then increased by about 6 percentage points to 1949; and declined thereafter to a little below the 1943 level. Nevertheless, the long-term declining past trend in manufacturing importance for the central city is clearly evident, and there is every indication that it will persist.

Since 1899 the distribution of manufacturing employment among the portions of the three states in the region has changed as well. These changes have not been consistent, however, either in tempo or in direction.

Between 1899 and 1942 New Jersey's share of the region's manufactur-

TABLE XIV  
TOTAL EMPLOYMENT TRENDS IN THE REGION BY COUNTY, 1946-1953

	1946		1953		1946-1953 Change		
	Employment*	% of Region	Employment*	% of Region	Absolute	Percent	% of Regional Change
CONNECTICUT							
Fairfield	175.8	4.0	200.7	4.1	24.9	14.2	4.9
NEW JERSEY							
Bergen	87.7	2.0	152.0	3.1	64.3	73.3	12.7
Essex	310.0	7.0	343.3	7.0	33.3	10.7	6.6
Hudson	252.4	5.7	242.2	4.9	-10.2	-4.0	-2.0
Middlesex	77.0	1.7	104.9	2.1	27.9	36.2	5.5
Monmouth	37.6	.8	50.2	1.0	12.6	33.5	2.5
Morris	24.9	.6	40.3	.8	15.4	61.8	3.0
Passaic	115.9	2.6	131.4	2.7	15.5	13.4	3.0
Somerset	22.3	.5	27.3	.6	5.0	22.4	1.0
Union	110.1	2.5	147.0	3.0	36.9	33.5	7.3
Total N. J. State	1,037.9	23.4	1,238.6	25.1	200.7	19.3	39.5
NEW YORK							
New York City	2,908.7	65.7	2,998.7	60.7	90.0	3.1	17.7
Dutchess-Putnam	29.6	.7	41.4	.8	11.8	39.9	2.3
Nassau	85.0	1.9	202.5	4.1	117.5	138.2	23.1
Orange	28.8	.7	36.0	.7	7.2	25.0	1.4
Rockland	14.6	.3	19.8	.4	5.2	35.6	1.0
Suffolk	34.9	.8	54.7	1.1	19.8	56.7	3.9
Westchester	113.8	2.6	144.5	2.9	30.7	27.0	6.0
Total N. Y. State	3,215.4	72.6	3,497.6	70.8	282.2	8.8	55.6
Excluding N. Y. C.	306.7	6.9	498.9	10.1	192.2	62.7	37.8
Total N. Y. State	3,215.4	72.6	3,497.6	70.8	282.2	8.8	55.6
Total New York City	2,908.7	65.7	2,998.7	60.7	90.0	3.1	17.7
Total Environs	1,520.4	34.3	1,938.2	39.3	417.8	27.5	82.3
Total Region	4,429.1	100.0	4,936.9	100.0	507.8	11.5	100.0

\* September employment figures (in thousands).

Source: Basic data developed by Nathan Bloom, Economist, in association with the Bureau of Applied Social Research, Columbia University, and in cooperation with the Regional Plan Association

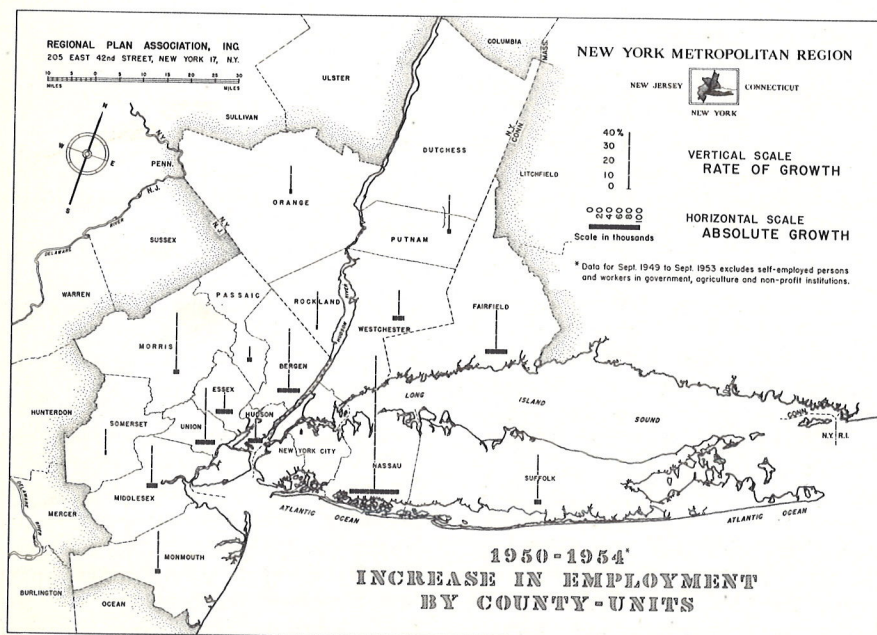




TABLE XV  
THE PERCENTAGE DISTRIBUTION OF MANUFACTURING EMPLOYMENT BY COUNTY, 1899-1953

	1899	1919	1929	1937	1939	1942	1943	1944	1946	1947	1948	1949	1950	1951	1952	1953
CONNECTICUT																
Fairfield	5.2	6.0	5.8	7.0	6.2	6.9	6.6	6.2	6.2	6.4	6.0	5.1	5.5	5.8	6.1	6.1
NEW JERSEY																
Bergen	.7	1.9	2.3	2.8	2.7	2.5	3.3	3.5	2.7	3.0	3.2	3.4	3.5	4.0	4.3	4.5
Essex	8.1	9.4	9.0	8.3	8.2	8.4	9.2	8.8	8.1	8.2	8.0	7.9	8.1	8.5	8.1	8.2
Hudson	6.2	9.7	8.8	9.0	9.0	11.0	10.5	10.5	9.1	8.1	8.1	7.3	7.4	7.7	7.7	7.4
Middlesex	1.7	2.8	3.5	3.6	3.8	3.4	3.0	3.0	3.2	3.5	3.5	3.6	3.8	3.8	3.7	3.9
Monmouth	.5	.4	.6	.6	.7	.6	.5	.6	.7	.7	.7	.8	.8	.8	.8	.8
Morris	.8	.6	.6	.7	.7	.6	.8	.6	.7	.8	.8	.8	.8	.9	1.0	1.0
Passaic	5.9	5.4	5.7	5.4	6.0	6.0	4.7	4.5	4.7	4.8	5.0	4.8	4.9	4.6	3.5	4.4
Somerset	.4	.4	.5	.8	.7	.6	.6	.6	.7	.8	.8	.7	.7	.7	.7	.6
Union	2.1	2.6	2.8	3.7	3.4	3.8	3.8	4.1	3.7	3.9	3.9	3.5	4.2	4.0	4.3	4.4
Total N. J. State	26.4	33.3	33.9	34.9	35.2	36.9	36.5	36.2	33.5	33.8	34.0	32.8	34.1	35.0	34.1	35.3
NEW YORK																
Bronx	(1)	1.7	2.4	2.1	1.8	(2)	(2)	(2)	(2)	2.4	(2)	(2)	(2)	(2)	(2)	(2)
Kings	14.0	14.4	14.4	14.1	14.1	(2)	(2)	(2)	(2)	13.9	(2)	(2)	(2)	(2)	(2)	(2)
New York	45.7	33.4	32.2	30.4	31.5	(2)	(2)	(2)	(2)	30.4	(2)	(2)	(2)	(2)	(2)	(2)
Queens	1.7	4.1	5.4	5.4	5.4	(2)	(2)	(2)	(2)	5.7	(2)	(2)	(2)	(2)	(2)	(2)
Richmond	.8	1.5	.8	.8	.6	(2)	(2)	(2)	(2)	.6	(2)	(2)	(2)	(2)	(2)	(2)
Total New York City	62.3	55.1	55.0	52.7	53.4	48.9	48.7	49.0	53.6	53.0	53.0	54.6	52.9	50.3	50.0	48.1
Dutchess	1.0	.8	.7	.7	.8	.8	.8	.8	.9	.9	.9	.9	.9	1.0	1.1	1.2
Nassau	.2	.3	.4	.3	.5	1.9	2.5	2.8	1.4	1.2	1.3	1.6	2.0	3.0	3.6	4.2
Orange	1.3	1.4	1.0	1.1	.9	.6	.6	.6	.8	.9	.9	.9	.9	.8	.9	.9
Putnam	.1	-	-	-	-	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Rockland	.7	.4	.4	.4	.5	.4	.3	.4	.4	.4	.4	.5	.5	.5	.5	.5
Suffolk	.4	.2	.3	.4	.3	1.1	1.3	1.0	.9	.8	.9	.4	.7	.8	.8	.9
Westchester	2.3	2.4	2.6	2.4	2.2	2.4	2.6	2.8	2.4	2.6	2.7	2.7	2.7	2.7	2.8	2.9
Total N. Y. State																
Excluding N. Y. C.	6.1	5.5	5.3	5.4	5.2	7.2	8.1	8.6	6.8	6.8	7.0	7.4	7.5	8.9	9.9	10.5
Total N. Y. State	68.4	60.7	60.4	58.1	58.6	56.1	56.8	57.6	60.4	59.8	60.0	62.1	60.4	59.2	59.8	58.6
Total New York City	62.3	55.1	55.0	52.7	53.4	48.9	48.7	49.0	53.6	53.0	53.0	54.6	52.9	50.3	50.0	48.1
Total Environs	37.7	44.9	45.0	47.3	46.6	51.1	51.3	51.0	46.4	47.0	47.0	45.4	47.1	49.7	50.0	51.9
Total Region	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: 1899-1939, U. S. Census of Manufactures; 1942-1953 estimates made by RPA on the basis of data developed by Nathan Bloom, Economist, in association with the Bureau of Applied Social Research, Columbia University, and in cooperation with the Regional Plan Association

- (1) Included in New York County  
(2) No breakdown for New York City  
(3) Included in Dutchess County

ing jobs increased from 26.4 percent to 36.9 percent. In the following years, as New York City and Long Island expanded, a decline in New Jersey's regional status set in; this reached a low point in 1949. From 1949 to 1953 the New Jersey area returned to its earlier upward trend in regional importance while New York State declined.

Although the regional status of the various New Jersey counties fluctuated over the past half century Bergen, Union and Middlesex are notable for their more consistent and substantial gains. On the other hand the older manufacturing counties — Essex and particularly Hudson and Passaic—have suffered a definite declining regional status.

The pattern of these changes has been conditioned in large part by the location of the older cities and by several major topographic features. It will be noted that Bergen, Union, and Middlesex, the counties with the greatest

gains, are adjacent to the older urban counties, Passaic, Essex and Hudson; and they are within the transportation corridor described above.

While the portion of New Jersey within the region was gaining in regional manufacturing importance between 1899 and 1942, the New York sector was declining. Almost all of the decline, however, was due to a drop of about 9 percentage points in New York City's (particularly Manhattan's) share of regional manufacturing activity.

It is significant that New York State's suburban counties also declined in status between 1899 and 1939. Their era of rapid expansion occurred after 1939 and was primarily due to the growth of Nassau County. Because of Nassau's nearness to New York City and its large amounts of vacant and inexpensive land, the county's share of the region's manufacturing employ-

ment increased by 5.3 percentage points between 1939 and 1953.

With the exception of Nassau, the other suburban counties in New York State are distinguished by their stability over the 55-year period; each of their shares of the region's manufacturing jobs in 1953 was within six-tenths of a percentage point of its position in 1899.

The major expansion of manufacturing in New York State is to be expected in Long Island and perhaps in Richmond. Signs of increase in recent years also are perceptible, however, in Westchester and Dutchess counties. Highway improvements described above may further stimulate this trend.

Although in Connecticut the manufacturing status of Fairfield County fluctuated considerably in relation to the whole region, the over-all trend has been upward. From 1899 to 1953 the county's share of manufacturing jobs increased from 5.2 percent of the regional total to 6.1 percent.



## Land Development Policy and Controls

The outward movement of population in the region has been accompanied by the establishment of local regulations governing the type and intensity of land use. Conceived and administered as a reaction against the congestion of central cities, the common objective of most of these controls has been to preserve open space by limiting population densities. Especially in such areas as Westchester and southerly Fairfield, northern Nassau and parts of Bergen, Passaic, Essex, Morris and Union, communities have severely limited apartments and small house and lot development.

The over-all effect of such restrictions has tended to distribute population more thinly and widely. It may be expected that similar controls will be put into effect in many more municipalities and that many present regulations will be made even more stringent than heretofore. Hence, population pressures in the fringe counties on the region's periphery probably will be intensified.

One result of an increased introduction of controls where now there are none will be a relative lessening of "protection" in such counties as Westchester and Essex where strong regulations in the past tended to shunt development pressures to the numerous less restrictive places.

### Public Housing and Redevelopment

The future levels of population in the region's older cities will depend in large part on their ability to replace extensive substandard areas with adequate and attractive neighborhoods of sound housing. Through the years it has generally been found that the areas of greatest population loss were those

	1954	1960	1965	1970	1975	1954-75 Change	
						Absolute	Percent
CONNECTICUT							
Fairfield	561	640	700	770	840	279	49.73
NEW JERSEY							
Bergen	641	790	890	1,000	1,100	459	71.61
Essex	947	1,050	1,100	1,150	1,200	253	26.72
Hudson	643	640	630	620	600	-43	-6.69
Middlesex	317	390	450	530	630	313	98.74
Monmouth	262	330	390	450	530	268	102.29
Morris	196	240	270	320	380	184	93.88
Passaic	362	380	390	400	420	58	16.02
Somerset	116	140	160	190	230	114	98.28
Union	443	520	570	600	610	167	37.70
Total N. J. State	3,927	4,480	4,850	5,260	5,700	1,773	45.15
NEW YORK							
New York City							
Bronx	1,510	1,500	1,500	1,500	1,500	-10	-.66
Kings	2,738	2,700	2,700	2,700	2,700	-38	-1.39
New York	1,961	2,000	2,000	1,950	1,900	-61	-3.11
Queens	1,693	1,750	1,800	1,850	1,900	207	12.23
Richmond	205	270	400	560	700	495	241.46
Total New York City	8,107	8,220	8,400	8,560	8,700	593	7.31
Dutchess	154	170	180	200	220	66	42.86
Nassau	967	1,250	1,400	1,500	1,600	633	65.46
Orange	165	190	210	230	260	95	57.58
Putnam	22	26	29	33	39	17	77.27
Rockland	98	130	150	160	170	72	73.47
Suffolk	380	510	580	650	720	340	89.47
Westchester	683	770	840	900	960	277	40.56
Total N. Y. State							
Excluding N. Y. City	2,469	3,046	3,389	3,673	3,969	1,500	60.75
Total N. Y. State	10,576	11,266	11,789	12,233	12,669	2,093	19.79
Total New York City	8,107	8,220	8,400	8,560	8,700	593	7.31
Total Environs	6,957	8,166	8,939	9,703	10,509	3,552	51.06
Total Region	15,064	16,386	17,339	18,263	19,209	4,145	27.52

Source: Regional Plan Association

predominantly composed of substandard dwellings. It has been assumed in the current forecasts that the older cities of the region will carry out renewal programs sufficient at best only to keep pace with their rapid rates of neighborhood obsolescence.

Thus, it is assumed that New York City will maintain the present population level of the Bronx, Kings and New York counties through a vigorous redevelopment and public hous-

ing program, but that these counties cannot greatly increase their over-all numbers. As will be explained below, however, it is expected that forceful municipal efforts will be focussed on developing Richmond County for New York City's population expansion, along with Queens.

The loss of population in Hudson County, on the other hand, may be expected to continue while more space there is devoted to industrial uses.

## County by County Summary of Major Developmental Factors and Assumptions

As has already been explained, the final county population forecasts were arrived at by first projecting past trends in population mathematically and then adjusting the figures upward or downward in response to a judgment of the probable effect of certain changing factors.

In this final section of the bulletin, a summary is presented for each county of the main factors that entered into the reasoning. These factors were discussed broadly in the preceding section

and shown on the map of "Factors Affecting Future Population Distribution" on page 22. The county forecasts and the estimated amounts and rates of change are shown in Table XVI, above, and the chart on page 29.

### CONNECTICUT Fairfield County

The Fairfield forecast is based on the expectation that the county will continue to have gradually increasing

volumes of both local employment and of commuters to New York City and to adjoining parts of Westchester and New Haven counties.

Most of the flat land along main rail lines and major highways is located in a strip along the southern border of Fairfield, with a minor north-south leg along Route 7. The western half of the strip along the Long Island Sound is within an hour and a quarter of midtown New York City and has proved itself an attractive residential area for



about 10,000 commuters. Rail traffic trends in the post-war period and the advantages of excellent bathing and boating facilities on the Sound promise substantial commuter increases.

Local industry, however, has been the major economic support of Fairfield's population in the past, and probably will be the primary determinant of future increases. From 1899 to 1939 the rate of industrial expansion in Fairfield was considerably faster than in the region as a whole, 83 percent against 52 percent. Trends since 1939 show that the county has continued to increase its employment at a good rate, but not as fast as the region (55 percent and 71 percent respectively).

The forecast assumes that the county will continue to increase at nearly the same rate as the region as a whole, if not slightly faster because of: (1) the strategic location of the county astride major land routes to New England and fronting on the navigable Long Island Sound; (2) an additional transportation advantage which will accrue from the completion of the New England Thruway; (3) a long-term shift in the "center of gravity" of New England's industrial activities toward the New York-Philadelphia area; (4) a probable revision in negative community attitudes toward industrial location (especially of the light manufacturing type) as a means of meeting the rising cost of municipal services; and (5) improved accessibility to the sparsely developed northerly parts of the county during the 1965-75 decade.

Relatively rugged topography and the lack of an adequate road system have limited intensive urbanization in much of Fairfield. There are, however, many places having slopes attractive for residential development and smaller flat areas suitable for manufacturing activity, such as the area around Danbury. It is assumed that up-to-date north-south routes will be built late in the forecast period, and that these will stimulate urbanization further inland.

## NEW JERSEY

### *Bergen County*

Bergen has been outstanding in recent years for its substantial increases both in population and in industry. This was the result of the county's po-

sition just across the George Washington Bridge from teeming Manhattan; its location at the head of the New Jersey "transportation corridor;" its proximity to New Jersey's congested central city areas in Hudson, Essex and Passaic counties; and its vast amount of unurbanized and relatively flat land.

An expected continuation of these factors and the future effect of several new transportation improvements form the basis for the large population increases expected in the county in the future. Economic and population growth in the more open northerly portions of the county will be aided by the planned extension of the Garden State Parkway, an extension of the New Jersey Turnpike to the New York State Thruway and the construction of a second deck on the George Washington Bridge or a parallel bridge near 125th Street in Manhattan. An adequate east-west expressway in Bergen, essential for its growing traffic, is also assumed in the forecast.

As the map on page 22 shows, the railroads and the planned extension of Route 4 to connect with an expressway-type relocation of Route 202 will aid northern Bergen's industrial development and consequently the population expansion of the northwestern part of the county. The industrial future of this area is presaged by the numerous new factories already built northeast of Paterson and the huge new Ford plant in Mahwah.

The explosive development of Bergen County in the vicinity of Route 4 and southward was accomplished at fairly high population densities under conditions of lax municipal land controls. In the coming years, however, particularly in the areas still open for development, a tightening of regulations is expected. This undoubtedly will tend to slow down the recent tempo of population growth. After 1960 the gradual exhaustion of the best vacant land through development will tend to further depress the rate of population increase.

### *Essex County*

The rate of population growth anticipated in Essex in the remainder of this decade is slightly faster than the 1940-54 rate. From 1960 to 1975, however, a return to the slower growth is expected.

Manufacturing employment data for the past half-century show several fluc-

tuations in Essex but a generally rising trend. Like most of the other counties Essex had a large World War II job expansion and a sharp post-war decline. The latter brought the volume of local employment to a 1953 level about 46,000 jobs above that of 1939. Essex County's continued industrial potential is indicated by the fact that about 18,000 jobs have been added since 1949.

Construction progress on the east-west expressway with connections eventually all the way from Pennsylvania to Newark and Manhattan will greatly facilitate the development of the vacant land in westerly Essex.

Since the more easily developed tracts of such land will tend to become fully utilized within the next decade, however, the rate of growth is expected to decline somewhat after 1960.

### *Hudson County*

The Hudson forecast represents a continuation of the declining trend that began in the county after a peak population of 690,730 was reached in 1930. Since then the total loss has amounted to nearly 50,000 people; and a further drop of 43,000 is expected by 1975.

Hudson County epitomizes many of the factors that tend to discourage increases in population. It is already developed over-intensively with large areas of obsolete housing. It has a total lack of technically-staffed county or municipal planning boards seeking tested means for improving the residential environment of the county. Its industrial advantages, through lack of adequate controls, depress its residential values.

It is expected that the deep-water harbor facilities and the excellent rail and highway system already partially developed will be more fully exploited in the forecast period. But most of the added employees probably will live outside the county.

### *Middlesex County*

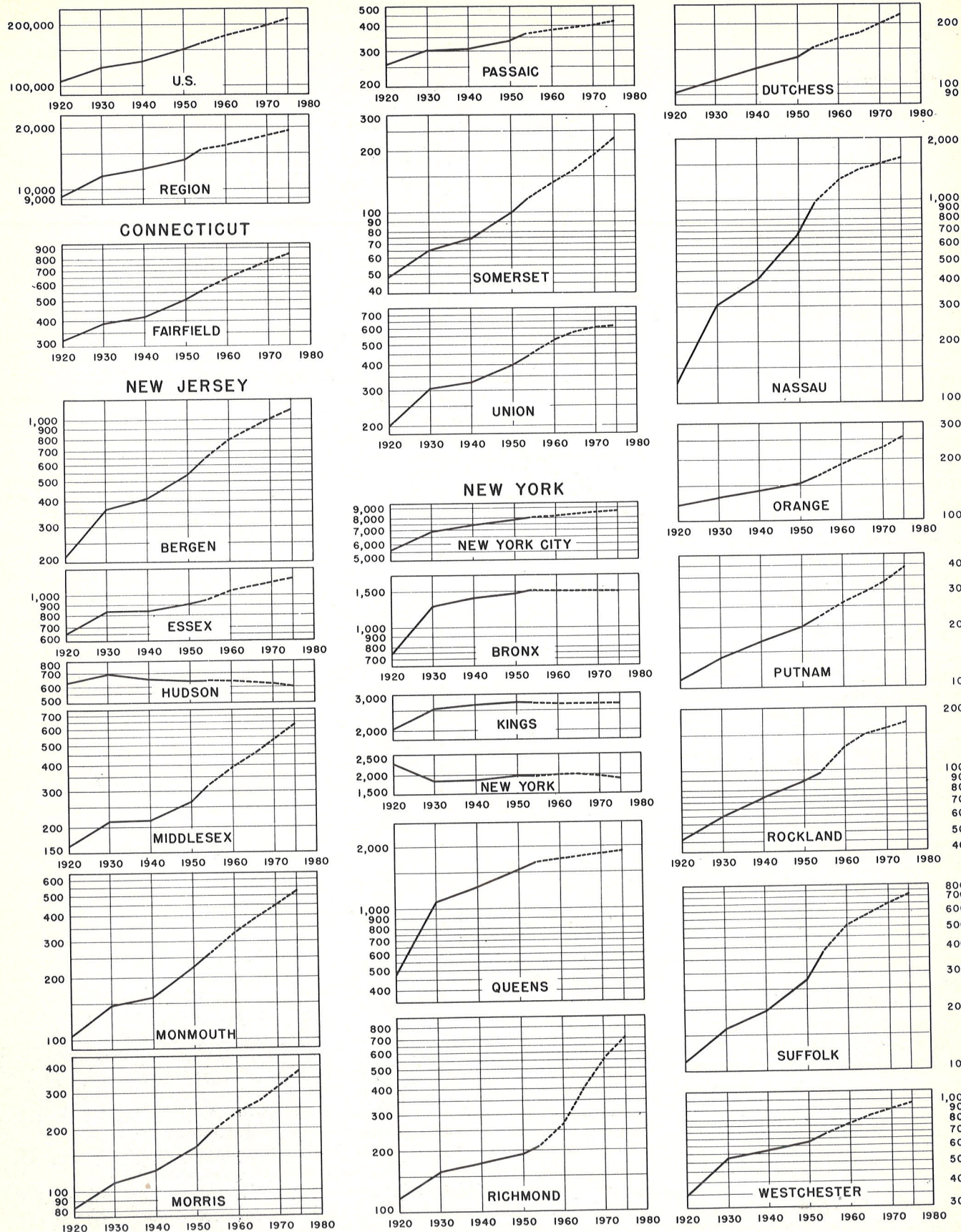
The Middlesex forecast of extensive future population growth is based on the probability that the county will undergo further extensive industrialization because of (1) the availability of water and rail transportation; (2) the county's favorable location with respect to several major existing and proposed highways; (3) its proximity



# COUNTY POPULATION, 1920-1975

## IN THE NEW JERSEY-NEW YORK-CONNECTICUT METROPOLITAN REGION

(IN THOUSANDS)



Source: 1920-1950 data from U.S. Bureau of the Census  
 1954-1975 estimates by Regional Plan Association Inc., 205 East 42nd Street, New York 17, N.Y.



to the more densely built-up parts of the region; and (4) its relatively favorable topography for building.

The combined operation of these factors has produced a gradually expanding volume of manufacturing activity over the past decades. Since 1900, about 49,000 new jobs have been added to the Middlesex economy. Almost half this expansion occurred after 1939.

The increasing importance of the county is shown also by the post-war trends in total private, non-agricultural employment. In 1946 Middlesex had only 1.7 percent of the region's total employment; yet it received 5.5 percent of the region's job increases between 1946 and 1953. The new basic steel works at Morrisville, Pa. will further tend to draw New York metropolitan industrial development southward into Middlesex County.

The New Jersey Turnpike will aid substantially in the continuation of these trends. With the construction of the Narrows Crossing (connecting the mainland with Long Island) and the Middlesex Freeway, which will tie the county laterally, industrial location on the relatively large expanses of flat land in Middlesex will become even more strategic than heretofore.

Another stimulant to population growth will occur after about 1965 as a result of the gradual filling up of the county's residential neighbors in the north, Essex and Union. Because of the "barrier effect" of the Watchung Mountains it is expected that a considerable diversion of residential construction will occur southward and northward. Moreover, much of the northern half of Middlesex is within reasonable commuting time of Manhattan.

#### *Monmouth County*

The rate of growth in Monmouth is expected to be fairly rapid and uniform. The forecast is based on the assumption that the county has limited industrial prospects but a large potential for attracting population that will work in other areas.

Although 50 percent of the county's growth in manufacturing employment over the past half-century occurred after 1939, the overall increase since 1899 amounts to only 9,000 jobs. This slow industrialization is accounted for

by Monmouth's remoteness from main port facilities and industrial concentrations and by its lack of express highways and high-speed rail service.

With its attractive rolling land and the excellent ocean beaches soon to be expanded, Monmouth will exert a strong pull on families supported by employment in the New Jersey industrial corridor. Although a small area in the north now within the commuting zone of Manhattan may be expected to be enlarged when a better rail connection across the Hudson River is achieved, the greatest part of the county will remain outside reasonable commuting distance from the central city.

On the other hand auto commutation via the Garden State Parkway to the major industrial areas of northeastern New Jersey will bring about a substantial residential increase in Monmouth as a result of the industrial expansion of Middlesex, Union and Essex and the gradual depletion of vacant land reserves in the latter.

#### *Morris County*

Morris County probably will experience further modest industrial expansion and will continue to attract families with breadwinners working in other counties.

The volume of its manufacturing employment did not change very much between 1900 and 1940. More than half the 16,000 manufacturing jobs in 1953 were accounted for by expansion since 1939 and over one-third by increases after 1949.

Recent trends in other industry groups are similar. In 1946 Morris had less than 1 percent of the region's private, non-agricultural employment; yet the county received 3 percent of the region's increase in the following 7 years. (Its 15,400 added jobs matched the increase in the major industrial county, Passaic.) Unlike similarly under-developed areas in Passaic and Somerset counties, Morris is centrally and conveniently located with respect to the emerging industrial concentrations in New Jersey. The proposed east-west expressway, the new north-south expressway relocating Route 202 and the anticipated exhaustion of vacant residential land in the neighboring counties to the east—Hudson, Essex, and Union—are expected to

give impetus to further industrial development and population growth in Morris.

Although much of the land is mountainous or hilly in aspect, Morris has a great deal of land less than 10 percent in slope. Most of the eastern part of the county is of the latter character, but large amounts are also to be found interspersed throughout the remainder. Indeed the topography of Morris is one of its great advantages. The natural beauty of the rolling countryside, the many lakes, and the planned highway improvements into the central districts of the region will attract a substantial increase in the county's population.

#### *Passaic County*

Over the past half century the volume of manufacturing employment in Passaic County increased by about 30,000 jobs to bring the 1953 total to about 66,000. Much of this expansion, however, occurred during the first twenty years: 36,800 jobs in 1899 grew to 62,600 in 1919.

In the next twenty years Passaic, like the other principal industrial counties in the region, experienced a decline; from 1919 to 1939 the number of manufacturing jobs dropped by about 6,000. Following a temporary expansion during World War II, production cut-backs in 1946 brought the volume of factory jobs in the county to about 10,000 more than in 1939. This level persisted through 1953 with moderate fluctuations in the intervening years.

Thus, it is clear that ever since 1920 manufacturing employment in Passaic has failed to increase by a significant amount. The years since World War II have been marked by relative stability.

In total private, non-farm employment Passaic County increased by about 15,000 jobs between 1946 and 1953. In 1946 the county had 2.6 percent of the region's employment; it received 3.0 percent of the region's 7-year increase. Most of Passaic's increase occurred in retail and service types of employment, a result more of population growth than of a strengthened industrial economy.

Nearly all the urban development in the county to date has occurred in the southeastern portion. Northwest Pas-



saic, representing more than half the county's total land area, is mountainous and largely unsettled. Because this latter area is not as accessible to the major employment centers of the region as are other large vacant areas in nearby counties, it will probably remain unintensively developed in the next twenty years.

There is, however, a considerable amount of vacant land in the central part of the county. Additional population will be attracted to this area following the relocation of Route 23 and construction of the relocated Route 202 expressway extending from the New York State Thruway southward through Bergen, central Passaic, Morris and Somerset counties. The completion of Route 202, however, is not expected until the second decade of the forecast period.

#### *Somerset County*

Since 1899 the number of manufacturing jobs in Somerset County has increased by only about 8,000. The expansion in the first forty years was gradual. Thereafter the rate of growth was more rapid; 43 percent of the job increases over the whole period, 1899-1953, occurred since 1939.

The slow industrialization of the county has been determined in part by its remoteness from the port, and in part by the configuration of the Watchung Mountains. The mountain chain runs southwestward along the county's eastern boundary to a point near the Raritan River where it swings sharply to the northwest. The barrier thus formed has served to limit intensive urbanization in the northern half of the county.

Most development to date has occurred at the southern foot of the chain which forms a funnel for transportation lines. Several rail lines and highways connect this area with the central port, business and industrial districts of the region. Consequently it has attracted a number of new factories recently; and it is likely to attract more in the future as a result of the general expansion of industry southward toward Philadelphia and the steel plant at Morrisville, Pa.

In addition to employees in its own expanded industries, Somerset can expect to attract some of the people working in the growing industrial counties of Middlesex, Essex and

Union. The attractive power of the county as a convenient and pleasant residential area for people working elsewhere will be strengthened in the second half of the forecast period with the gradual exhaustion of vacant land in Essex and Union counties and the completion of the Middlesex Expressway extending from Perth Amboy to Plainfield.

Further support will be given to a faster rate of population growth in the latter part of the forecast period when the new expressway replacing Route 202 is completed. Moreover, Somerset County has easy rail and highway access to the rapidly expanding industrial area along the Delaware in the vicinity of Morrisville and Trenton.

#### *Union County*

Union County's position in the region with respect to the port and rail system, the older industrial concentrations in Essex and Hudson and the region's major expressway routes is exceptional. Many industries that require large amounts of space for sprawling plants have found Union ideal. Over the past half century its volume of manufacturing employment has increased consistently. Between 1899 and 1953 the county added 55,000 jobs making the 1953 total about 68,000. Nearly two-thirds the increase occurred after 1939.

Data on private, nonfarm employment show that since the end of World War II Union County has advanced its share of the region's jobs. Thus, whereas in 1946 the county had only 2.5 percent of the region's employment, it received 7.3 percent of the region's job increases between 1946 and 1953.

The New Jersey Turnpike will aid enormously in reinforcing these trends. Owing to its recent completion, the full impact of the Turnpike is still to be felt. However, the many new plants near the highway's access points already provide ample evidence of the Turnpike's power to attract industry.

Union's "crossroads" status will be greatly enhanced with the next 10 years when the Narrows Crossing, now under consideration, is built. Its extension across Staten Island to the mainland will intersect the New Jersey Turnpike in Elizabeth, Union County's leading city.

## NEW YORK STATE

### *New York City*

*Bronx County.* The forecast of a stable population level in the Bronx is based primarily on the small amount of remaining vacant land suitable for residential expansion.

There will be great pressures toward population expansion, but little means of accommodating them. Manufacturing activities are likely to increase in the Bronx, for it soon will be a secondary hub in the regional transportation network, linking Long Island, New England and upstate New York.

The greatest population increases in the county occurred before 1930. Gains since then have been much slower as vacant land near transportation lines became increasingly scarce. In the built-up sections of the Bronx, the existing housing supply probably will serve fewer persons in future years, for there is a perceptible trend toward fewer persons per household unit. It is expected that this decline will be just about balanced by the new dwelling units that will be constructed.

*Kings County.* Available data on births, deaths and the number of inhabitants since 1930 indicate that Kings County (the borough of Brooklyn) has been losing an increasing amount of population through migration. Between 1930 and 1940 the population increased by 137,900. Since natural increase (the excess of births over deaths) amounted to about 142,400, the net migration out of Kings was about 4,500—an average of 450 per year.

Data for the 1940-50 decade show a population increase of only 39,900. Natural increase amounted to 249,000; consequently the net out-migration was about 209,000—an average of 20,900 per year.

Statistics for the years since 1950 show virtually no change in the county's population. The volume of net migration averaged 28,200 per year and was about equal to the natural increase. It is assumed that this balance will be maintained in the forecast period. As in the Bronx, it is expected that the loss of population in existing residential areas due to the declining household size will be balanced by the added residents of a modest amount of new construction.



*New York County.* The population of New York County (Manhattan) is expected to increase by about 39,000 in the remainder of the present decade. Between 1960 and 1965 the excess of births over deaths and immigration from Puerto Rico and other parts of the nation are expected to balance a continued migration out of the county. In the following ten years, 1965-1975, the population is expected to decline by about 100,000 as immigration pressures become more widely dispersed over the entire metropolitan region.

This forecast assures a gradual raising of housing standards and family income in future years. Hence, it is expected that families with children will increasingly move away from crowded central areas; but many of the older or very new households will continue to want the convenience and urbanity of Manhattan living.

*Queens County.* Local industrial development; proximity to major employment centers in Brooklyn, Manhattan and Nassau; rapid transit service; the availability of some large tracts of vacant land; and the probable replacement of scattered one-family units with multiple dwellings are the factors underlying the population forecast for Queens County.

The slower rate of growth anticipated as compared with the past two decades is based primarily upon the gradual depletion of vacant land tracts suitable for residential development and easily accessible to rapid transit lines. It has been estimated that major undeveloped lands in Queens will no longer exist at the close of the present decade.

*Richmond County.* The forecast population of Richmond County (Staten Island) anticipates an increase of a half million persons in the next twenty years. The future rates of increase expected mark a radical departure from the past. They are based on the following assumptions: (1) great expansion of industry in Essex, Union and Middlesex counties, and the gradual depletion of vacant land reserves suitable for residential development in Hudson, Essex and Union; (2) expansion of port and manufacturing activity in Hudson County; (3) a substantial increase in the volume of employment in westerly Richmond, par-

ticularly along the Arthur Kill; (4) renovation and construction of parks and of beaches on Richmond along the Lower Bay accompanied by strong measures of pollution control; (5) construction of a Narrows Crossing during the latter part of the next decade to facilitate the growing flow of traffic between New Jersey and Long Island; and (6) a determined and comprehensive development policy on the part of the city government aimed at making the most of the *potential* inherent in the foregoing factors.

More perhaps than in the case of any other county, the Richmond forecast depends on a systematic promotion of the local employment opportunities and a carefully planned program to create an attractive residential environment. Given such a program, Richmond will attract large numbers of the region's people who will become fully aware of its advantages for the first time as they traverse the Narrows Crossing within the next decade.

#### *Dutchess County.*

The rate of population increase in Dutchess County is expected to continue the 1920-50 rate through 1965. Thereafter the increasing influence of the New York State Thruway and a projected east-west expressway from Albany to Boston probably will cause an accelerated development of industry in the county. Most of Dutchess is too remote from the Port, however, to suggest large-scale urbanization in the next 20 years.

#### *Nassau County.*

Chief among the considerations basic to Nassau County's forecast were: (1) the rate of industrialization; (2) the growth of commuting to New York City; (3) proximity to New York City's population pressures; (4) the availability of vacant land; (5) the expected completion of a new 6-lane, all purpose, limited-access highway traversing Long Island; and (6) improved connections with the mainland via new bridges across the East River, the Hudson and the Narrows.

Since 1939 Nassau's manufacturing employment has been expanding on the average of about 4200 production jobs annually—the greatest increase of any county outside New York City. Roughly 34 percent of the manufacturing expansion since 1942 was due to the growth of the *transportation*

*equipment* industry (primarily aircraft). While there is no reason to expect as spectacular an expansion of aircraft in future years, the proximity of the county to New York City, the projected Long Island Expressway, the possibility of some additional port facilities being built in easterly Long Island, the continued availability of vacant land and the enormous local labor market make it probable that other industries will seek to locate in Nassau in large numbers.

The second largest industry in the county, *instruments*, has experienced a large increase in production and is likely to continue to grow. Although many instrument factories now serve the aircraft plants, their operations can be widened to satisfy the growing demand for instruments in the "automation" process now in full swing throughout industry.

Despite the tremendous population pressures on Nassau which will continue unabated, the rate of population increase is expected to level off somewhat. Already in the less developed northeasterly section of the county, stiffer land controls are slowing the pace of new projects and spreading the dwellings more thinly over the land. To be sure, the inner wave of multi-family apartment projects is entering Nassau in the Great Neck vicinity even before all the outer tracts to the east are saturated. Nevertheless, looking ten years ahead, the coming pinch for economical land to develop is clearly discernible; hence the forecast of a less rapid rate of growth.

#### *Orange County*

In Orange County it is expected that the future rate of growth will be similar to the 1950-54 rate which is much faster than that of the previous period, 1920 to 1950.

The forecast is based on two major considerations: (1) the improved accessibility of the county to the region's major industrial and labor concentrations soon to be brought about by the completion of the New York State Thruway; and (2) the availability of large amounts of land in Orange County suitable for urban settlement—both industrial and residential.

Orange County as yet has few development controls. It is anticipated that a reasonable amount of industry



will find its way into the county before long—both along the New York State Thruway and the expressway branch connecting the Thruway with Binghamton and the "southern tier" counties. With the industry will come low and medium priced houses and the added population expected in the forecast.

Sterling Forest, a new town proposed to be built near Greenwood Lake under the auspices of a single development company, may accommodate a considerable portion of Orange County's increase during the next two decades. Indeed, a successful venture of this magnitude would itself introduce a new factor, enlarging Orange County's development potentialities.

#### *Putnam County*

The population increase forecast in Putnam County represents a rate of growth only slightly faster than the county experienced in the last 34 years. This small acceleration is expected by virtue of a wider distribution of population in the region generally. No large-scale urbanization is likely in Putnam, however, because of the county's mountainous terrain as well as its distance from major industrial concentrations.

The rugged topography of the county; the fact that much of its land has been preempted for watershed purposes; and the lack of expressway accessibility will operate to keep the total population of Putnam relatively insignificant in the region.

#### *Rockland County*

Rockland County has available a large amount of continuous and relatively flat land suitable for residential and industrial development. The county's accessibility to the region's other major industrial concentrations and to large labor forces in New York and New Jersey will be improved considerably by the early completion of the New York State Thruway, and by extensions of the Garden State and Palisades Interstate parkways and the New Jersey Turnpike. Indeed, in due time Rockland will occupy a minor "hub" position in the whole inter-regional expressway network.

These factors are likely to have their greatest effect on the rate of population growth between now and 1960.

Thereafter, the rate is expected to decline somewhat with the occupation of most of the best sites in the southern part of the county and the tightening of land use controls in the remainder.

#### *Suffolk County*

Much of the 340 thousand population increase forecast for Suffolk County is based on the assumption that as vacant land in Nassau becomes built-up, great development pressures in Suffolk are inescapable. The spillover is already in evidence in the towns of Huntington and Babylon near the Suffolk-Nassau border. These towns accounted for 39.4 percent of Suffolk's population increase since 1950.

It is significant also that there are more aircraft jobs in Suffolk than workers living in the county with the needed skills. Supplying homes for incoming workers is expected to maintain the growth rate of the recent past until at least 1960. In the 1960-75 period, however, the necessity of building at greater distances from the regional center together with the anticipated strong shift in emphasis to the New Jersey industrial belt probably will reduce the rate of growth in Suffolk.

Nevertheless, the general trend for a dispersion of industry and population, encouraged by the Long Island Expressway and possible port development along the Suffolk waterfront, should help to maintain a fairly high level of population growth in Suffolk for many years to come.

#### *Westchester County*

The rate of industrialization in Westchester County in recent years indicates the likelihood of an accelerated population growth in the coming period. From 1899 to 1939 the number of manufacturing production workers in Westchester increased by 6,600 or 45 percent. Since 1939 there has been an additional increase of 23,100 or 109 percent. In the earlier period an average of 164 production workers were added annually to the county's economy; after 1939 the annual increment averaged 1,652.

This trend toward a greater expansion of basic employment in Westchester will be strengthened well within the next 10 years by the completion

of several new expressways: the New York State Thruway, the New England Thruway and the Central Westchester Expressway connecting these via White Plains.

Commutation to Manhattan, Bronx and Fairfield and more recently to Long Island has been a major factor in Westchester's growth for more than a century. A 1951 study by the Regional Plan Association indicated that Westchester had the second largest number of railroad commuters to Manhattan of all the counties outside New York City. The number in 1949 totalled about 53,000—a figure 11,000 larger than the number of manufacturing production workers in the county in the same year. According to available data Westchester rail commuters were increasing by an average of about 2,000 per year between 1940 and 1949.

In addition to the railroad commuters, some 40,000 workers had jobs in places outside the county in 1950 according to estimates. While no trend data are available for this latter group of commuters, it is reasonable to assume on the basis of the emerging configuration of highways and industrial development in nearby parts of the region that commutation to other counties, particularly to New York City and Nassau will continue to increase strongly in the future.

In addition to these considerations, moreover, other factors such as the large quantities of land in the county primarily suitable for residence, the coming exhaustion of the best vacant land in Nassau, and the unavoidable out-migration of families from the most congested boroughs of New York City will operate to increase Westchester's future rate of population growth. Furthermore, there probably will be a striking decline in Westchester's relative resistance to population pressures derived from the county's historic leadership in strong municipal development controls. For, as the rest of the region gradually brings its regulations up to better standards, the present differential cushioning Westchester will diminish.

No development "explosion", however, such as that experienced in Nassau in recent years should be expected in Westchester. The rockiness of its land and the orderliness of its development control procedures preclude this possibility.



## APPENDIX

### NOTE 1

#### *Method Used In Estimating Current Population*

The method used to estimate current municipal population consisted of selecting one of several different estimates made by the RPA or by other agencies. This was done after thorough consultation with persons familiar with the various municipalities—representatives of electric power companies and municipal and county planning officials or consultants. The initial estimates (which varied from one to six depending on the extent of available information) were derived as follows:

*Electric Meters.* This population estimate was arrived at by multiplying the number of active residential electric meters in a municipality on January 1, 1954 by the estimated number of persons per meter. The latter was calculated from the ratio of the April 1, 1950 population (census count) to the concurrent number of active residential electric meters adjusted, finally, to reflect the change in average household size between 1950 and 1954. The household factor was determined by making a straight-line projection to 1954 of the trend in the average household size between 1940 and 1950.

In some cases where active residential meter data were not available, the total number of electric meters in operation was substituted. It is believed that no significant inaccuracies resulted from this substitution because the ratio of non-residential to residential meters is small and because the relationship between the former and total population generally does not change significantly in just a few years. In order to avoid misleading figures in estimating the population of resort municipalities (where summer residence is a major factor) care was taken to obtain the number of electric meters in operation on a year-round basis. Other factors such as large institutional population and large apartment buildings having a single meter were also considered.

*Electric Power Company Estimates.* Estimates for each of the counties of New York City were supplied by the Consolidated Edison Company of New York, Inc. Municipal estimates for Nassau and Suffolk counties were developed by the Long Island Lighting Company. These estimates were used without revision for all seven counties.

*Dwelling Unit Permits.* Another

population figure was obtained by estimating the probable increase in population since the 1950 census as indicated by the number of dwelling-unit permits issued by local building departments, with a household size adjustment as explained above. Account was also taken of reported building demolitions.

Large numbers of permits issued in the latter part of 1953 were not included in the 1950-54 total since there was little likelihood that these units had been completed and occupied by the end of the year. On the other hand, large numbers of permits issued in the latter part of 1949 and the first three months of 1950 were included.

*Projections of 1940-50 Population Data.* Another population figure was obtained by extrapolating to 1954 the trend of population between 1940 and 1950. An alternative estimate was also made by a modification of the latter procedure. The growth in the 1940-50 decade was assumed to have occurred predominantly between 1946 and 1950 and the 1954 population was extrapolated accordingly.

*Department of Health Estimates.* The current population figures for selected municipalities developed by the New York, New Jersey and Connecticut state departments of health were also considered.

*Estimates of Planning Agencies and Consultants.* Population estimates of some municipalities have been made by municipal planning officials and consultants. Where such estimates cover January 1, 1954 they generally were used without revision. Estimates for other nearby dates were given considerable weight.

### NOTE 2

The average annual numerical increase in population was calculated by dividing the total numerical increase of the period by the number of years. The average annual percentage increase was determined by dividing the average annual numerical increase by the average population of the period (the sum of the populations of the terminal years divided by 2).

### NOTE 3

The national population figure for January 1, 1954 (excluding armed forces overseas) is from U. S. Census Bureau, Current Population Reports, Population Estimates, Series P-25, No. 99.

### NOTE 4

546,000 represents only net migra-

tion. Gross in-migration, the total number of persons coming into the region, undoubtedly was much larger. Because no existing census covers migration within the U. S., it is only possible to obtain the net result of movements into or out of the region.

### NOTE 5

New York City, A Study of Its Population Changes, Population Report 1. City Planning Commission, The City of New York. July 1, 1951.

### NOTE 6

#### *The Ratio Method of Forecasting Population*

*General Method.* The method utilized was a modified version of a ratio method employed by the Bureau of the Census in projecting the population of states. (This is reported in "Current Population Reports, Population Estimates, Series P-25, No. 56, January 27, 1952".) It consists essentially first, of extrapolating the past ratios of smaller areas to a larger area for which acceptable population projections are already available; and second, of applying the extrapolated ratios to the population projections for the larger area to obtain projections for the smaller areas.

Accordingly, in the present RPA study the past ratios to the United States of the larger national geographic divisions that contain the New York metropolitan region—the Middle Atlantic and New England states—were extrapolated and applied to the projections of total United States population. Then, past ratios to these major geographic divisions of the three states involved—New Jersey, New York and Connecticut—were extrapolated and applied to projections of the major geographical division totals. Next, the past ratios of the New York region to the three states were extrapolated and applied to the projections of the three states.

As an alternative to the above process, ratios of the region directly to the nation also were plotted, extrapolated and applied to U. S. projections. This procedure yielded approximately the same results as the more indirect method (varying within about one-half of 1 percent).

The past ratios of each of the region's 22 counties were now extrapolated and applied to the latter projections of the region. Finally, these projections for the counties were considerably modified in accordance with a judgment as to the probable impact of



a number of developmental factors described in the main body of this report.

**Sources for Projections.** The ratio of the population of each area to the total population of the larger area of which it is a part was calculated for each census year from 1920 to 1950 and for 1954. Data from 1920 to 1950 were obtained from the decennial census counts of the Bureau of the Census. The January 1, 1954 figures are estimates partly made by the U. S. Bureau of Census and partly by the Regional Plan Association. The January 1, 1954 estimate for the United States is published in a Census Bureau report entitled "Provisional Estimates of the Population of the United States", Current Population Reports, Series P-25, No. 92, April 7, 1954. July 1, 1953 estimates for geographic divisions and states are available from the same source in a publication entitled "Provisional Estimates of the Population of States: July 1, 1953", Current Population Reports, Series P-25, No. 89, January 25, 1954. January 1, 1954 estimates for divisions and states were made by the Association on the basis of trends from April 1, 1950 to July 1, 1953. The Association's estimates for 1954 were used for the region as a whole and its component counties.

**Assumptions and Procedures.** The population ratio relationships among the various geographical areas fell into four major groups for purposes of ratio projection:

Group 1. Areas for which the ratios showed a consistent direction of increase or decrease from 1920 to 1954.

Group 2. Areas for which the ratios showed a consistent direction of in-

crease or decrease from 1930 to 1954 different from 1920 to 1930.

Group 3. Areas for which the ratios showed a consistent direction of increase or decrease from 1940 to 1954 different from 1930 to 1940.

Group 4. Areas for which the direction of change in the ratio from 1950 to 1954 was different from that of 1940 to 1950. This group was divided into two sub-groups. (a) Areas for which the direction of change in the ratio from 1950 to 1954 was the same as that from 1930 to 1940 but different from that from 1940 to 1950. (b) Areas for which the direction of change from 1950 to 1954 was different from that of both 1930 to 1940 and 1940 to 1950.

To determine the initial (1954-1955) rate of change in the ratio the following assumptions were made as to the initial rate of change:

Group 1. The same as the average annual rate of change in the ratio for 1920-54, 1930-54, or 1940-54, whichever was the least in absolute value (closest to zero).

Group 2. The same as the average annual rate for 1930-54 or 1940-54, whichever was the lesser.

Group 3. The same as the average rate of change 1940-54.

Group 4. (a) One-half the average annual rate from 1940-54. (b) The same as the average rate from 1940-54.

It was then assumed that the initial annual rates of change would decrease linearly to zero in 50 years (by the year 2004-2005). Preliminary values of the county ratios for the forecast years, 1960, 1965, 1970 and 1975, were computed by multiplying the

ratios for January 1, 1954 by one plus the rate of change assumed for 1954-55, multiplying the product by one plus the rate assumed for 1955-56, and so on. The preliminary values for the counties were then adjusted to sum to exactly 100 percent.

#### NOTE 7

Current Population Reports, Population Estimates, Series P-25, No. 78, Washington, D. C., August 21, 1953.

#### NOTE 8

U. S. Bureau of Census, Current Population Reports, Population Estimates, Series P-25, No. 92, Washington, D. C., April 7, 1954.

#### NOTE 9

Statement of Walter P. Hedden in "Opposition to the Navigational Features of the St. Lawrence Seaway" before the Public Works Committee of the House of Representatives, April 24, 1951. The Port of New York Authority, May 21, 1951.

#### NOTE 10

"The Changing Geography of American Industry" by Seymour Wolfbein, Chief, Division of Manpower and Employment Statistics, U. S. Bureau of Labor Statistics. Paper delivered at conference on Mobility of Industry and Labor. U. S. Industrial Relations Research Association, December 29, 1953.

#### NOTE 11

Walter Isard and Robert E. Kuenne, "The Impact of Steel Upon the Greater New York-Philadelphia Industrial Region: A Study in Agglomeration Projection", The Review of Economics and Statistics, (XXV, 4), November 1953.

TABLE A

POPULATION CHANGES IN THE REGION COMPARED WITH STANDARD METROPOLITAN AREAS OF OVER 1 MILLION INHABITANTS AND THE UNITED STATES, 1900-1954

	January 1, 1954 Population	1900-1910 Change		1910-1920 Change		1920-1930 Change		1930-1940 Change		1940-1950 Change		1950-1954 Change		1900-1954 Change	
		Absolute	%	Absolute	%	Absolute	%	Absolute	%	Absolute	%	Absolute	%	Absolute	%
New York Region	15,064.0	2,093.1	38.0	1,531.5	20.1	2,504.0	27.4	874.7	7.5	1,433.3	11.4	1,113.0	8.0	9,549.7	173.2
Chicago	5,760.3	659.0	31.5	769.0	27.9	1,154.1	32.8	149.6	3.2	669.9	13.9	264.9	4.8	3,667.4	175.2
Los Angeles	4,990.8	348.6	183.5	459.2	85.3	1,329.4	133.2	589.2	25.3	1,451.5	49.8	622.9	14.3	4,800.8	2526.7
Philadelphia	3,909.0	376.1	19.9	446.1	19.7	422.7	15.6	62.6	2.0	471.4	14.7	238.0	6.5	2,016.9	106.6
Detroit	3,336.1	187.0	43.8	692.0	112.7	871.5	66.7	200.0	9.2	638.9	26.9	319.9	10.6	2,909.3	681.6
Boston	2,968.7	339.6	20.1	289.8	14.3	296.8	12.8	44.2	1.7	219.8	8.3	92.8	3.2	1,283.0	76.1
San Francisco	2,493.0	231.0	42.5	235.5	30.4	338.3	33.5	114.0	8.5	779.0	53.3	252.2	11.2	1,950.0	359.1
Pittsburgh	2,249.5	388.0	35.8	288.2	19.6	263.3	15.0	59.3	2.9	130.6	6.3	36.3	1.6	1,165.7	107.6
St. Louis	1,795.3	202.8	25.3	136.0	13.5	259.6	19.3	32.6	5.3	249.2	17.4	114.0	6.8	994.2	124.1
Washington	1,655.6	66.8	17.6	126.5	28.4	100.3	17.5	295.8	44.0	496.1	51.3	191.5	13.1	1,277.0	337.3
Cleveland	1,534.2	199.6	43.3	311.8	47.2	270.9	27.9	24.2	1.9	198.2	15.6	68.7	4.7	1,073.4	232.9
Baltimore	1,455.4	81.1	12.7	131.7	18.3	132.5	15.6	98.7	10.0	254.1	23.5	118.0	8.8	816.1	127.6
Minnea.-St. Paul	1,182.0	162.9	37.7	109.8	18.5	152.9	21.7	83.4	9.7	175.6	18.7	65.5	5.9	750.1	173.7
Buffalo	1,155.2	112.4	22.1	132.4	21.3	158.3	21.0	46.8	5.1	130.7	13.6	66.0	6.0	646.6	127.1
United States	160,000.0	15,977.7	21.0	13,738.4	14.9	17,064.4	16.1	8,894.2	7.2	19,028.1	14.5	9,302.6	6.2	84,005.4	110.5

\* Absolute figures in thousands.

Sources: N. Y. Region - 1954 estimates made by Regional Plan Association; 1900-1950 from U. S. Bureau of Census. Standard Metropolitan Areas - Current figures, Copyright 1954, Sales Management Survey of Buying Power, further reproduction not licensed; 1900-1950 from Donald J. Bogue, Population Growth in Standard Metropolitan Areas 1900-1950, Housing and Home Finance Agency (U. S. Govt. Printing Office, Washington, D. C.), December 1953. United States Data - U. S. Bureau of Census.



TABLE B  
POPULATION CHANGES IN MUNICIPALITIES OF OVER 50,000 IN THE NEW YORK REGION, 1920-1954

Large Cities	1920	1920-30 Change		1930	1930-40 Change		1940	1940-50 Change		1950	1950-54 Change		1954
	Population	Absolute	%	Population	Absolute	%	Population	Absolute	%	Population	Absolute	%	Population
Bayonne	76,754	12,225	15.9	88,979	-9,781	-11.0	79,198	-1,995	-2.5	77,203	-800	-1.0	76,400
Bloomfield	22,019	16,056	72.9	38,077	3,546	9.3	41,623	7,684	18.5	49,307	3,000	6.1	52,300
Bridgeport	143,555	3,161	2.2	146,716	405	0.3	147,121	11,588	7.9	158,709	5,300	3.3	164,000
Clifton	26,470	20,405	77.1	46,875	1,952	4.2	48,827	15,684	32.1	64,511	9,600	14.9	74,100
East Orange	50,710	17,310	34.1	68,020	925	1.4	68,945	10,395	15.1	79,340	4,600	5.8	83,900
Elizabeth	95,783	18,806	19.6	114,589	-4,677	-4.1	109,912	2,905	2.6	112,817	-1,400	-1.2	111,400
Hoboken	68,166	-8,905	-13.1	59,261	-9,146	-15.4	50,115	561	1.1	50,676	-200	-0.4	50,500
Irvington	25,480	31,253	122.7	56,733	-1,405	-2.5	55,328	3,873	7.0	59,201	1,400	2.4	60,600
Jersey City	298,103	18,612	6.2	316,715	-15,542	-4.9	301,173	-2,156	-0.7	299,017	-3,800	-1.3	295,200
Mount Vernon	42,726	18,773	43.9	61,499	5,863	9.5	67,362	4,537	6.7	71,899	2,700	3.8	74,600
Newark	414,524	27,813	6.7	442,337	-12,577	-2.8	429,760	9,016	2.1	438,776	5,100	1.2	443,900
New Rochelle	36,213	17,787	49.1	54,000	4,408	8.2	58,408	1,317	2.3	59,725	7,400	12.4	67,100
New York City	5,620,048	1,310,398	23.3	6,930,446	524,549	7.6	7,454,995	436,962	5.9	7,891,957	215,000	2.7	8,107,000
Norwalk	27,743	8,276	29.8	36,019	3,830	10.6	39,849	9,611	24.1	49,460	6,000	12.1	55,500
Passaic	63,841	-882	-1.4	62,959	-1,565	-2.5	61,394	-3,692	-6.0	57,702	-800	-1.4	56,900
Paterson	135,875	2,638	1.9	138,513	1,143	0.8	139,656	-320	-0.2	139,336	-	-	139,300
Stamford	35,096	11,250	32.1	46,346	1,592	3.4	47,938	26,355	55.0	74,293	9,700	13.0	84,000
Union City	60,725	-2,066	-3.4	58,659	-2,486	-4.2	56,173	-636	-1.1	55,537	-1,100	-2.0	54,400
White Plains	21,031	14,799	70.4	35,830	4,497	12.6	40,327	3,139	7.8	43,466	7,100	16.3	50,600
Yonkers	100,176	34,470	34.4	134,646	7,952	5.9	142,598	10,200	7.2	152,798	5,300	3.5	158,100
Total	7,365,038	1,572,181	21.3	8,937,219	503,483	5.6	9,440,702	545,028	5.8	9,985,730	274,100	2.7	10,259,800
Balance of Region	1,773,910	931,814	52.5	2,705,724	371,245	13.7	3,076,969	888,307	28.9	3,965,276	838,900	21.2	4,804,200
Total Region	9,138,948	2,503,995	27.4	11,642,943	874,728	7.5	12,517,671	1,433,335	11.4	13,951,006	1,113,000	8.0	15,064,000

	% of Region	% of Regional Increase	% of Region	% of Regional Increase	% of Region	% of Regional Increase	% of Region	% of Regional Increase	% of Region
Large Cities	80.6	62.8	76.8	57.6	75.4	38.0	71.6	24.6	68.1
Balance of Region	19.4	37.2	23.2	42.4	24.6	62.0	28.4	75.4	31.9

Sources: U. S. Bureau of Census and Regional Plan Association

TABLE C  
MANUFACTURING EMPLOYMENT\* BY COUNTY, 1899-1953

	1899	1919	1929	1937	1939	1942	1943	1944	1946	1947	1948	1949	1950	1951	1952	1953
CONNECTICUT																
Fairfield	32.5	69.7	58.8	69.3	59.5	101.6	109.1	96.7	89.4	89.3	84.1	68.0	79.0	82.6	90.9	92.5
NEW JERSEY																
Bergen	4.6	22.3	23.6	27.7	25.8	36.5	54.5	54.0	39.7	42.4	45.3	44.8	50.0	57.2	63.7	68.7
Essex	50.3	108.9	92.1	83.1	77.6	122.7	150.7	137.0	117.4	114.2	112.3	105.7	116.5	121.1	121.4	124.1
Hudson	39.0	112.7	90.4	89.3	85.6	160.5	172.4	163.1	131.7	113.2	115.0	97.4	105.3	110.2	114.5	113.2
Middlesex	10.6	32.0	35.9	36.0	36.0	49.1	50.0	47.6	46.0	49.0	49.9	47.4	54.0	54.4	55.4	59.2
Monmouth	2.9	5.2	6.1	6.5	7.1	9.1	8.7	8.9	10.0	10.0	9.9	10.5	11.0	11.3	12.1	12.1
Morris	5.1	6.9	6.2	6.8	6.3	9.0	13.0	9.9	9.9	10.5	11.5	10.4	11.7	12.9	14.7	16.0
Passaic	36.8	62.6	57.8	53.9	56.7	87.3	76.7	70.5	68.1	66.9	70.0	64.3	70.1	65.3	52.7	66.3
Somerset	2.4	4.8	4.8	7.7	6.7	8.9	10.5	10.1	9.6	11.7	11.4	9.9	9.6	10.1	10.1	10.0
Union	13.1	30.6	28.5	37.2	32.2	55.8	62.9	63.5	53.7	54.2	54.9	46.6	59.9	56.5	64.4	67.7
Total N. J.	164.8	386.0	345.6	348.2	334.2	538.9	599.4	564.6	486.1	472.1	480.2	437.0	488.1	499.0	509.0	537.3
NEW YORK																
Bronx	(1)	20.0	25.0	21.2	17.2	(2)	(2)	(2)	(2)	34.0	(2)	(2)	(2)	(2)	(2)	(2)
Kings	87.4	166.7	146.6	140.9	133.7	(2)	(2)	(2)	(2)	194.3	(2)	(2)	(2)	(2)	(2)	(2)
New York	285.3	386.9	328.2	302.6	299.2	(2)	(2)	(2)	(2)	424.5	(2)	(2)	(2)	(2)	(2)	(2)
Queens	10.7	47.2	55.2	53.6	51.7	(2)	(2)	(2)	(2)	79.6	(2)	(2)	(2)	(2)	(2)	(2)
Richmond	5.2	17.9	8.2	7.6	6.0	(2)	(2)	(2)	(2)	8.8	(2)	(2)	(2)	(2)	(2)	(2)
Total N. Y. C.	388.6	638.8	561.6	525.9	507.7	713.5	799.7	763.8	777.9	741.2	749.0	727.7	757.4	718.2	745.8	732.6
Dutchess	6.0	9.8	7.4	7.3	7.1	12.2	12.8	12.2	11.8	12.4	12.6	12.6	13.6	15.0	17.0	17.9
Nassau	1.5	3.1	3.6	3.4	4.2	27.2	41.0	44.4	21.0	16.6	18.3	20.8	28.5	43.6	54.5	63.4
Orange	8.4	16.0	10.6	10.7	8.8	9.6	10.4	10.0	12.1	12.1	12.3	12.1	13.3	12.2	13.4	13.5
Putnam	.7	.2	.2	.1	-	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Rockland	4.2	4.4	3.7	4.5	4.6	5.7	5.6	5.7	6.2	6.4	6.0	6.3	7.2	7.8	7.3	7.7
Suffolk	2.6	2.6	2.8	3.9	3.1	15.7	21.0	16.5	13.0	10.8	11.7	11.7	6.4	9.5	12.4	13.4
Westchester	14.6	28.0	26.1	23.7	21.2	34.9	42.4	44.5	34.9	37.0	38.1	35.6	38.3	38.7	42.6	44.3
Total N. Y. S.	38.0	64.2	54.4	53.6	49.1	105.3	133.2	133.3	99.0	95.3	99.0	99.1	107.3	126.8	147.2	160.2
Excl. N. Y. C.	426.6	703.0	616.0	579.5	556.9	818.8	932.9	897.1	876.9	836.5	848.0	826.8	864.7	845.0	893.0	892.8
Total N. Y. C.	388.6	638.8	561.6	525.9	507.7	713.5	799.7	763.8	777.9	741.2	749.0	727.7	757.4	718.2	745.8	732.6
Total Environs	235.3	519.8	458.8	471.1	442.8	745.8	841.7	794.6	674.5	656.7	663.3	604.1	674.4	708.4	747.1	790.0
Total Region	623.9	1,158.6	1,020.4	997.1	950.5	1,459.3	1,641.4	1,558.4	1,452.4	1,397.9	1,412.3	1,331.8	1,431.8	1,426.6	1,492.9	1,522.6

\* Figures in Thousands

Sources: 1899-1939, U. S. Census of Manufactures; 1942-1953 estimates made by RPA on the basis of data developed by Nathan Bloom, Economist, in association with the Bureau of Applied Social Research, Columbia University, and in cooperation with the Regional Plan Association

- (1) Included in New York County
- (2) No breakdown for New York City
- (3) Included in Dutchess County



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205 East 42nd St., New York 17, N. Y.

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This study, prepared under the supervision of Henry Fagin, Planning Director, was made by Max E. Anderson, Associate Planner, assisted by Ansel Garfin, George A. Schiller and Roy E. Miller.

Printed in USA by The Michael Press, N. Y. C.



