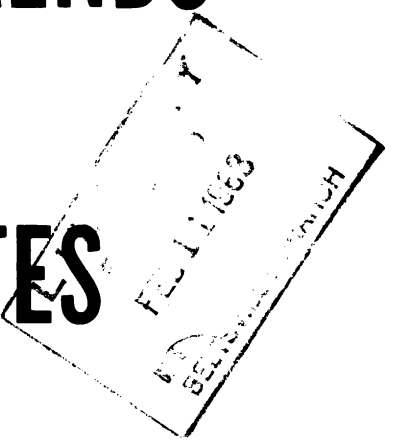
Agricultural Economic Report No. 23

Recent POPULATION TRENDS in the UNITED STATES with Emphasis on Rural Areas



UNITED STATES DEPARTMENT OF AGRICULTURE
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HIGHLIGHTS

The population of the United States has recently grown by 2.9 million persons per year. By September 1962 the total passed the 187 million mark, and unless a sharp downturn in birth rate occurs it will exceed 210 million by 1970.

The movement of people has been heavy to the Pacific Southwest, the Gulf of Mexico and Atlantic Coasts, and to metropolitan areas in general. Fifty metropolitan counties gained the equivalent of 50 percent of the total national increase from 1950 to 1960, while nearly half of the more than 3,000 counties declined. Rural population has declined rapidly in most agricultural areas, but other areas have absorbed an almost equivalent number of rural-nonfarm people.

A dramatic rural-to-urban shift, as well as a South-to-North (and West) shift, has been made by the Negro population.

Because of the large number of births in recent times, the average age of the U. S. population declined somewhat for the first time from 1950-1960. The median is 29.5 years. However, in hundreds of rural counties where population declined the average age rose because of the heavy outmigration of young adults.

The trend towards early marriage, which was so prominent in the 1950's, has leveled off. The median ages at first marriage for men (22.8 years) and women (20.3 years) were the same in 1960 as in 1950.

Substantial improvement was made in the average education of the population, with the median years of school completed of persons 25 years old and over rising from 9.3 years to 10.6. The median of the farm population rose from 8.4 to 8.8 years.

The modern increase in the birth rate results not only from the bearing of more children per woman, but also from a lowering of the average age of childbearing. The lowered age of mothers has shortened the length of a generation, thus speeding up the turnover of generations. Because of the number of children born since World War II, the number of women in the peak of the childbearing years will increase by 50 percent by 1975.

The median expectation of life at birth in the United States is now about 74 years, with the median for white women now 78 years.

Among the areas in the Nation that have shown particular growth are those with mild winters and those which are the sites of military activity. Among metropolitan areas, those which serve as diversified regional metropolises averaged better than 30 percent growth in the decade. By contrast, metropolitan areas which are specialized in manufacturing averaged a growth rate of 15 percent.

In rural United States, there have never before been so many areas declining in population at a time when most urban areas are growing rapidly. Never before have there been such disparities in the age distribution of farm and nonfarm populations as there are now, nor such differences in the directions in which the distributions are changing. Because of the heavy outmigration of young adults, in some rural areas births have declined to the point that they no longer exceed deaths. The revolution in agricultural life and technology that has fostered the loss of farm population has by no means been completed.

RECENT POPULATION TRENDS IN THE UNITED STATES WITH EMPHASIS ON RURAL AREAS

CONTENTS

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RECENT POPULATION TRENDS IN THE UNITED STATES WITH EMPHASIS ON RURAL AREAS 1/

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REVIEW OF POPULATION TRENDS

In the year 1961, the population of the United States increased in size by 2.9 million persons and grew at the rate of 1.61 percent for the year. This was only a typical year of the type experienced since World War II when the famed "baby boom" reversed the historic downward trend of the birth rate. Never before in the history of the Nation have so many human beings been added to the population by natural increase as in the last 10 years. By September 1962, we had passed the 187 million population mark. Unless some drastic and unexpected downturn in birth rate occurs soon, the Census of 1970 will exceed the 210 million mark.

Such phenomenal growth is forcing analysts in many fields to re-evaluate their expectations of future developments. Continued population increases of this magnitude will be certain to alter almost every phase of economic, social, and political life. They raise fundamental questions: For example, do they threaten to lower the real per capita income of the Nation, or are they a precondition of even higher levels of living? Is our supply of national resources adequate to withstand this development, or will we soon follow the course of many nations of Europe and incur a net domestic deficit of basic industrial materials? Such questions are now being studied more seriously than ever before.

Dramatic as it is, change in population size is only a part of a complex set of population trends. There are changes underway in population distribution and in population composition that are equally impressive and that have economic, social, and political implications equally as fundamental. It is the purpose of this report to review some of the most outstanding of these changes and to describe their underlying causes. Special attention is given to trends having particular significance for rural areas.

1/ A substantial part of the statistical work required for this report was supported from a grant to the Population Research and Training Center, University of Chicago, given by the Rockefeller Foundation. The report is a product of materials requested for discussion meetings of the Rural Sociological Society and the American Country Life Association.

A. Distributional Trends

Between 1950 and 1960, the population shifted significantly in its distributional pattern in the following ways:

1. There was a very strong interregional movement toward the Pacific Coast and the Gulf Coast (including the Atlantic side of Florida).

2. There was a heavy movement toward metropolitan areas, both intraregional and interregional.

3. The growth of metropolitan areas, however, was concentrated largely in suburban metropolitan "rings" outside the central cities, rather than within the central cities themselves.

4. In nonmetropolitan areas there was a very strong urbanization movement; cities in the more remote hinterland grew quite rapidly on the average.

5. Suburbanization assumed extreme dimensions, with suburban fringes springing up around the peripheries of small cities and even villages.

6. The rural population outside metropolitan areas, and especially the rural-farm population, suffered very substantial losses through outmigration.

7. The rural nonmetropolitan parts of the interior portions of the Nation suffered especially severe losses of population; the peripheries of the Nation facing the Atlantic, Pacific, and Gulf sections tended to have less severe drains or even gains in rural population.

8. The Negro population has made a dramatic rural-to-urban shift as well as a South-to-North (and West) shift. Moreover, it has begun what promises to be a major suburbanward movement.

Each of these distributional shifts is described and documented briefly in this section; an interpretation of their causes is undertaken in Section II. None of these shifts is new; each represents a continuation of changes underway since 1930 or even earlier. Their effect upon the national social life should be viewed in terms of the cumulative effect of several decades of change.

1. Regional Distribution. Between 1950 and 1960, there were very substantial regional differences in the intercensal rate of population growth. The system of Economic Regions delimits the regions of rapid growth from those of slow growth more effectively than do the traditional nine geographic divisions, and shows the changes noted in table 1 (1). 2/ Two regions grew at extraordinarily rapid rates in comparison with the national intercensal rate of 18.5 percent:

2/ Underscored figures in parentheses refer to items in Literature Cited, page 48.

Table 1.--Percent distribution of population by economic provinces and economic regions, 1950 and 1960; with measures of distributional change, 1950-1960

Province and region	Region number	Percent of total population		Percentage point change	Percent of population increase 1950-1960
		1960	1950		
Total		100.0	100.0	0.0	18.5
A. Atlantic Metropolitan Belt Province	....	20.3	20.5	-0.2	17.5
Atlantic Metropolitan Belt Region	I	20.3	20.5	-0.2	17.5
B. The Great Lakes and Northeastern Province	....	22.9	23.5	-0.6	15.7
Eastern Great Lakes and Northeastern Upland Region	II	5.6	6.1	-0.5	9.7
Lower Great Lakes Region	III	14.1	14.0	+0.1	18.6
Upper Great Lakes Region	IV	3.2	3.3	-0.1	14.5
C. The Midwestern Province	....	13.0	13.5	-0.5	13.6
North Center (Corn Belt) Region	V	9.6	10.1	-0.5	12.6
Central Plains Region	VI	3.4	3.4	0.0	16.4
D. The Southern Province	....	29.0	30.0	-1.0	14.7
Central and Eastern Upland Region	VII	8.3	9.4	-1.1	5.1
Southeast Coastal Plain Region	VIII	9.1	9.9	-0.8	9.6
Atlantic Flatwoods and Gulf Coast Region	IX	6.6	5.3	+1.3	48.1
South Center and Southwest Plains Region	X	5.0	5.5	-0.5	8.3
E. The Western Province	....	14.8	12.5	+2.3	39.6
Rocky Mountain and Intermountain Region	XI	2.6	2.4	+0.2	26.7
Pacific Northwest Region	XII	2.7	2.7	0.0	21.7
Pacific Southwest Region	XIII	9.5	7.5	+2.0	50.1

Bogue and Beale, Economic Areas of the United States, table A, (1).

Map 1


ECONOMIC REGIONS OF THE UNITED STATES
ECONOMIC REGIONS
I. Atlantic Metropolitan Belt
II. Eastern Great Lakes and Northeastern Upland
III. Lower Great Lakes
IV. Upper Great Lakes
V. North Center (Corn Belt)
VI. Central Plains
VII. Central and Eastern Upland
VIII. Southeast Coastal Plain and Piedmont
IX. Gulf Coast and Atlantic Flatwoods
X. South Center and Southwest Plains
XI. Rocky Mountain and Intermountain Region
XII. Pacific Northwest
XIII. Pacific Southwest
ECONOMIC REGION BOUNDARY.
STATE BOUNDARY WHERE NOT PART OF ECONOMIC REGION BOUNDARY.
U. S. DEPARTMENT OF AGRICULTURE
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	% increase
Region IX. Atlantic Flatwoods and Gulf Coast Region	48.1
Region XIII. Pacific Southwest Region	50.1

In contrast, four interior regions (three of them in the South) grew slowly:

Region II. Eastern Great Lakes and Northeastern Upland Region	9.7
Region VII. Central and Eastern Upland Region	5.1
Region VIII. Southeast Coastal Plain Region	9.6
Region X. South Center and Southwest Plains Region	8.3

The remaining six regions grew at nearly the national rate, except that Region XI, the Rocky Mountain and Intermountain Region, increased at the moderately-above-average rate of 26.7 percent.

Despite the substantial differences in rate of growth, the total redistributive effect for the single decade 1950-60 was not great. As table 1 makes clear, the rapid gains of Regions IX and XIII resulted in a net addition to their combined population of the equivalent of 3.3 percent of the national population, and the slow growth of Regions II, VII, VIII, and X caused all four combined to suffer a net redistributive loss equivalent only to 2.9 percent of the national population. However, the prolonged operation of these trends over several decades is building up a dense population along the southern and Pacific coastal fringes of the country and giving the interior sections of the South a slowly diminishing share of the national total.

Within each of the economic regions there are substantial growth variations which are revealed by the economic subregions and the individual state economic areas. Of the 121 economic subregions into which the economic regions are divided, 19 lost population, and an additional 38 increased by less than 10 percent. At the other extreme, five subregions increased by 50 percent or more, and an additional 17 increased by 25-49 percent. Map 2 shows the subregions of above-average and below-average growth. Table 2 lists the subregions of exceptional population gain and actual population loss.3/ The subregions where population declined are concentrated in the hilly or mountainous portion of the Appalachians and Ozark-Ouachita Highlands, depressed coal-mining areas, agricultural sections of the Old South Coastal Plain, rural sections of the Northern Central Plains, and marginal portions of the Corn Belt.

Thus despite a fairly rapid rate of national growth, much of this growth accrued only to a comparatively few subregions while a majority of regions and subregions grew moderately slowly, and some actually lost population.

3/ Rates of growth, 1950-1960 are reported for the total urban and rural portions of each economic region, economic subregion, and State economic area, separately for metropolitan and nonmetropolitan parts in table A of Bogue and Beale, Economic Areas of the United States (1).

Map 2

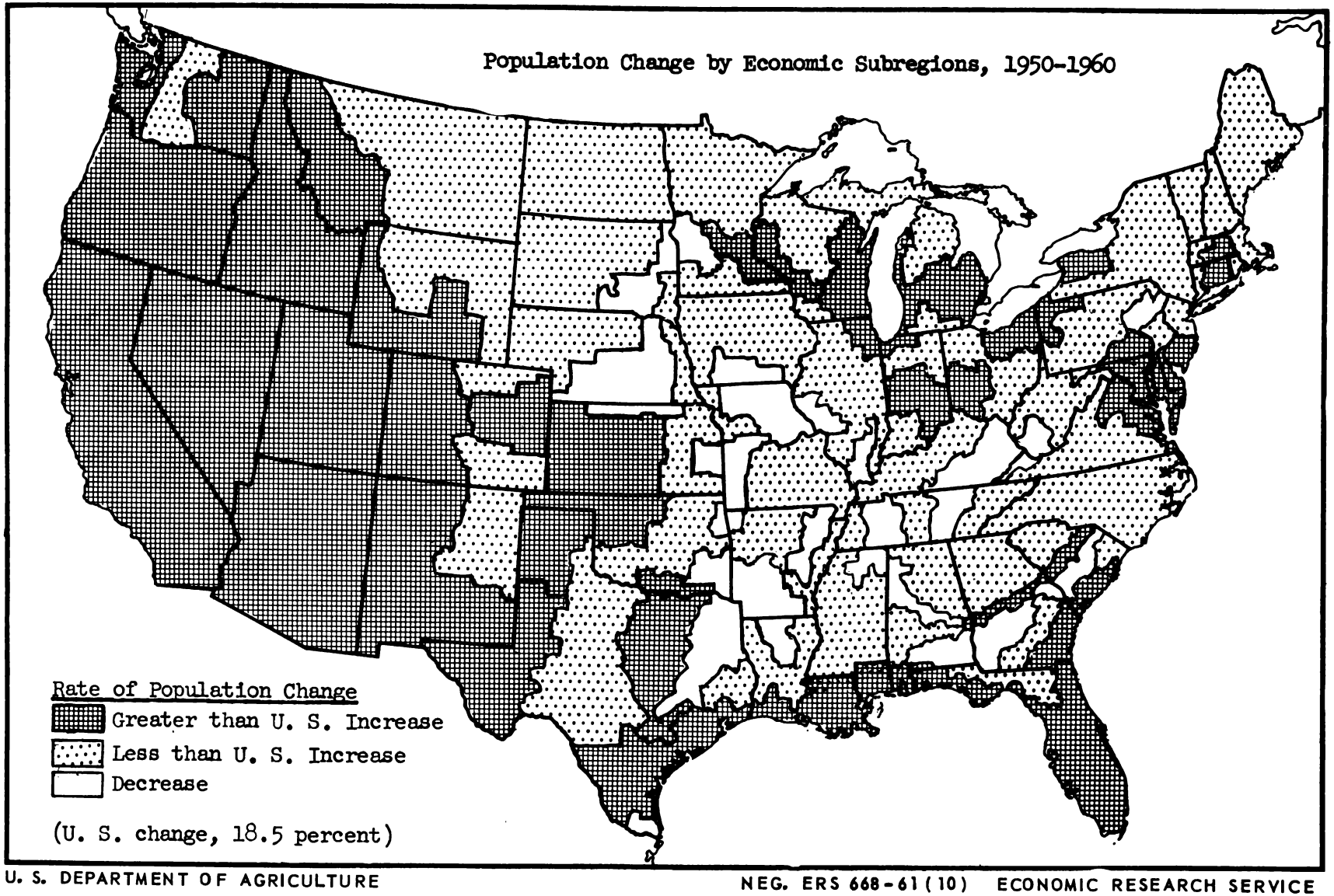

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Table 2.--Economic subregions that experienced an intercensal population growth of 25 percent or more, or a population loss, 1950-1960

Region	Subregion number	Name of economic subregion	Percent change 1950-1960
		Subregions increasing 25.0 percent or more, 1950-1960	
I	14	Philadelphia Subregion (Part in New Jersey)	42.2
I	15	South Jersey Coast, Delmarva and Virginia Peninsulas Subregion	29.3
I	19	Northern Piedmont Subregion	29.8
VIII	35	South Carolina-Georgia Fall Line Sand Hills Subregion	25.6
IX	39	Florida Peninsula Subregion	101.0
IX	40	Florida Flatwoods Subregion	46.3
V	47	West Central Ohio-Central Indiana Subregion	26.1
IX	58	Central Gulf Coast Subregion	29.6
IX	77	Louisiana Sugarcane Subregion	26.0
IX	78	Louisiana-Texas Coast Prairies Subregion	41.1
IX	98	Corpus Christi-San Antonio Subregion	26.8
X	102	Southern High Plains Subregion	55.4
VI	103	South Central Plains Subregion	31.7
XI	108	Trans Pecos and Southern New Mexico Subregion	45.0
XI	112	Snake River Valley, Wasatch Front, and Utah Valleys Subregion	26.3
XI	113	Western Desert, Semi-Desert, and Mountain Subregion	27.3
XIII	114	Southern Arizona Subregion	84.9
XIII	115	Southern California Subregion	59.7
XIII	116	California Central Valley Subregion	35.4
XIII	117	Central Pacific Coast and San Francisco Bay Subregion	36.5
XII	120	Alaska Subregion	150.3
XII	121	Hawaii Subregion	26.6
		Subregions losing population, 1950-1960	
II	11	Pennsylvania Anthracite Subregion	-9.3
VII	31	Southern Appalachian Coal Mining Subregion	-13.5
VIII	36	South Carolina-Georgia Upper Coastal Plain Subregion	-1.4
VIII	41	Georgia-Alabama Central Coastal Plain Subregion	-0.8
VII	44	Eastern and Western Highland Rim Subregion	-7.7
VIII	56	Alabama Upper Coastal Plain Subregion	-4.2
VIII	60	Tennessee-Mississippi Fall Line Slopes and Pine Hills Subregion	-9.5
VII	62	Southern Illinois Subregion	-10.3
V	71	Southern Iowa-Northern Missouri-West Central Illinois Subregion	-4.3
X	75	Crowley's Ridge and Arkansas Prairies Subregion	-14.6
X	80	Arkansas-Louisiana-Texas Coastal Plain Subregion	-6.6
VII	81	Ouchita Mountains Subregion	-11.7
VII	82	Springfield Upland Subregion	-1.4
V	84	Kansas-Missouri Corn Belt Border Subregion	-0.5
V	87	Minnesota-South Dakota Corn Belt Margin Subregion	-2.4
V	88	Minnesota Forest Margin Subregion	-0.9
VI	91	Black Prairies Subregion (Southern Part)	-2.5
V	92	Nebraska-South Dakota Corn Belt Margin Subregion	-3.1
V	93	Kansas-Nebraska Corn Belt Winter Wheat Transition Subregion	-9.4

1960 Census of Population, table 38 (10).

2. Metropolitan and nonmetropolitan distribution. Between 1950 and 1960, the long-term drift toward the metropolitan centers of the Nation continued unabated. The 1960 census recognized 212 "standard metropolitan statistical areas" (hereafter referred to as SMSA's).4/ Together, these major population clusters contained a total of 112-plus million persons, or 63 percent of the total population. Between 1950 and 1960, these areas grew by 26.4 percent and managed to capture 84 percent of the increase in the total population of the Nation during this decade. The vast nonmetropolitan territory grew only at the rate of 7.5 percent, or only about 28 percent as fast as the SMSA's. This was merely a replication of the 1940-1950 experience which saw about 80 percent of the total national increase absorbed by even fewer metropolitan areas and during which the nonmetropolitan areas grew only 27 percent as fast as the metropolitan areas.

Inasmuch as the Economic Areas system distinguishes between metropolitan and nonmetropolitan areas, it is possible to measure the extent of population concentration and comparative rates of growth in metropolitan and nonmetropolitan portions of each economic region. Table 3 presents this information. The extreme right-hand column of this table presents data which show the precent of each economic region's population that was residing in metropolitan areas in 1960.

Five of the regions are predominantly metropolitan, and eight are predominantly nonmetropolitan in composition. Region I (Atlantic Metropolitan Belt), Region XIII (Pacific Southwest), and Region III (Lower Great Lakes) are especially heavily metropolitanized. The eight least metropolitanized regions are:

	Population percent metropolitan, 1960
Region XI. Rocky Mountain and Intermountain Region	26.2
Region VIII. Southeast Coastal Plain Region	33.3
Region VI. Central Plains Region	34.7
Region IV. Upper Great Lakes Region	37.2
Region X. South Center and Southwest Plains Region	37.4
Region V. North Center (Corn Belt) Region	39.6
Region VII. Central and Eastern Upland Region	41.7
Region II. Eastern Great Lakes and Northeastern Upland Region	48.2

There is almost no correlation between degree of metropolitanization and rate of growth. While it is true that both of the fastest-growing economic regions are highly metropolitanized, two other highly metropolitanized regions (Regions I and III) grew only at an average rate. Moreover, the least metropolitanized region of all (Region XI) grew faster than all but two of the more metropolitanized regions. Thus, despite the

4/ Except in New England a standard metropolitan statistical area (SMSA) is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more or "twin cities" with a combined population of at least 50,000. In addition to the county or counties containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are essentially metropolitan in character and are socially and economically integrated with the central city.

Table 3.--Percentage change in total population of metropolitan and nonmetropolitan portions of economic regions, by urban-rural residence, 1950-60

Province and region	Region number	All areas			Metropolitan areas			Nonmetropolitan areas			Percent metropolitan, 1960
		Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	
Total	....	18.5	29.3	-0.8	26.4	30.6	1.8	7.5	24.9	-1.6	62.1
A. Atlantic Metropolitan Belt Province	....	17.5	18.6	10.8	16.2	17.5	4.8	32.1	44.9	22.7	90.6
Atlantic Metropolitan Belt Region	I	17.5	18.6	10.8	16.2	17.5	4.8	32.1	44.9	22.7	90.6
B. The Great Lakes and Northeastern Province	....	15.7	19.6	6.5	19.4	22.1	3.5	8.9	10.1	8.0	67.4
Eastern Great Lakes and Northeastern Upland Region	II	9.7	8.4	11.8	12.2	10.8	18.0	7.5	4.4	9.9	48.2
Lower Great Lakes Region	III	18.6	22.1	5.8	20.3	23.2	0.5	11.7	12.9	10.8	82.0
Upper Great Lakes Region	IV	14.5	27.9	-0.1	28.9	39.1	-15.1	7.4	16.0	2.2	37.2
C. The Midwestern Province	....	13.6	28.0	-2.0	30.1	35.6	4.4	5.2	19.3	-2.9	38.3
North Center (Corn Belt) Region	V	12.6	23.7	0.2	25.2	29.3	6.1	5.6	16.6	-0.7	39.6
Central Plains Region	VI	16.4	41.6	-8.1	49.5	59.5	-2.9	4.1	26.3	-8.6	34.7
D. The Southern Province	....	14.7	38.3	-6.3	35.0	43.5	1.6	2.7	29.4	-7.6	43.7
Central and Eastern Upland Region	VII	5.1	20.2	-6.6	18.2	22.2	1.7	-2.6	15.9	-7.8	41.7
Southeast Coastal Plain Region	VIII	9.6	32.3	-5.1	28.8	37.7	5.2	2.1	26.4	-6.6	33.3
Atlantic Flatwoods and Gulf Coast Region	IX	48.1	63.2	14.7	56.7	63.4	16.7	33.8	62.5	13.9	66.1
South Center and Southwest Plains Region	X	8.3	40.8	-19.9	37.8	55.2	-28.3	-3.8	26.6	-18.8	37.1
E. The Western Province	....	39.6	55.7	1.9	48.5	58.8	-7.0	21.4	42.9	6.6	71.4
Rocky Mountain and Intermountain Region	XI	26.7	54.2	0.3	60.2	79.4	-15.7	18.0	41.4	1.7	26.2
Pacific Northwest Region	XII	21.7	34.2	4.3	23.9	33.7	-5.7	19.2	35.1	9.0	54.7
Pacific Southwest Region	XIII	50.1	61.6	1.4	53.0	62.1	-6.5	30.8	54.3	13.2	88.4

Bogue and Beale, Economic Areas of the United States. Table A (1).

fact that metropolitan areas were growing much faster than nonmetropolitan areas, the overall regional rate of growth was only mildly influenced by the proportion of the population residing in metropolitan areas. This apparent inconsistency is explained by the fact that there are great regional differences in the rates of metropolitan growth. In three regions (Regions I, II, and VII), the metropolitan areas grew more slowly than the average growth rate for the Nation while in Regions VI, IX, XI, and XIII metropolitan growth was almost explosive. In other words, there is a genuine regional differential in metropolitan growth. In the more densely settled regions, nonmetropolitan areas tended to grow some as a result of the spill-over from metropolitan areas; Region I was especially noteworthy in this respect for the nonmetropolitan areas grew faster than the metropolitan areas.

Although metropolitan areas grew more rapidly than nonmetropolitan areas, there was wide variation in this. Perhaps the most extraordinary metropolitanization development occurred in Regions VI, X, and XI where metropolitan areas grew moderately rapidly despite the fact that the nonmetropolitan portions grew very slowly and even lost population over much of their territory.

Table 6 reveals the somewhat surprising fact that the size of the SMSA had almost nothing to do with its rate of growth. SMSA's of one million or more grew at nearly the same rate as SMSA's of less than 100,000. The variations in growth between places of different size are associated primarily with regional location of such places rather than with size as such.

3. Rural-urban. In considering changes in the population by urban-rural status, one must distinguish clearly between changes in comparable areas over time and changes that reflect reclassification of the status of areas as a result of the trends occurring within them. The census results show only the latter type of data. On this basis the urban population of the Nation gained by 29.3 percent from 1950-1960 while the rural population declined by 0.8 percent. On current boundaries, urban people numbered 125,269,000 in 1960, or nearly 70 percent of the total population, whereas rural people numbered 54,054,000. The fact that in 1960 the Current Population Survey of the Bureau of the Census was still being conducted on the urban-rural boundaries of 1950 enables us to estimate how many persons live in territory that was rural in 1950 but that was reclassified as urban in 1960. The CPS for April, 1960, showed 69,964,000 rural people, or nearly 16,000,000 more than the decennial census. Some of this difference could be attributed to sampling variation in the CPS. Some of it stems from the fact that the concept of urban residence was broadened somewhat from previous usage by changes introduced into the 1960 Census. But, the overwhelming part of the 16,000,000 reclassified population results from growth of suburban districts or former small towns that changed the character of the areas concerned from rural to urban.

The total territory of the Nation that was rural in 1950 experienced a net inmovement of population in the decade, despite the heavy losses from the farm population. This net inmovement was probably on the order of 10 percent of the 1950 base population. (The amount cannot be measured precisely.) However, if one considers the rural population as currently defined in each decade, then rural people remained almost stationary

in numbers and lost an amount equivalent to their natural increase from outmovement and the change in the character of communities from rural to urban.

One phenomenon which may not be widely appreciated is that within the slow-growing nonmetropolitan territory of the Nation, the urban population is growing at an above-average rate. In fact, its 25 percent rate of increase from 1950-1960 almost equals the rate of growth of all SMSA's. Even in regions where the rural parts of nonmetropolitan areas were declining, the urban population increased substantially. Most of this growth is real, rather than merely being the fruit of ambitious annexation policies.

Of the 13 economic regions, in only two did rural people still comprise a majority of the population in 1960 (see table 4). These were the Central and Eastern Upland (which includes the Appalachians), and the Southeast Coastal Plains and Piedmont. The rural proportions in these most heavily rural regions were 50.1 and 52.5, and will surely decline below 50.0 in the very near future. The most urban region is no longer the Atlantic Metropolitan Belt which has been regarded as the exemplification of urbanism for so long. As a result of the tremendous growth of the Pacific Southwest since 1950--plus the existence of rather liberal annexation policies--that region has become the most urban (87.1 percent). With the notable exception of the Pacific Southwest where the rural population was nearly stationary, one finds that the rural population has grown where the urban population is relatively most numerous, but has declined in the least urban areas. The existence of a large, dense, and growing urban population in a region tends to create conditions of population growth in rural counties of the same region. This is true not only because an ever-larger number of the rural counties are within commuting range of urban centers, but also because more distant counties are affected by the accession of businesses or residents who do not need frequent commutation to the city but whose work or choice of residence is related to the city--especially the large metropolitan city. These are counties beyond "exurbia" which the geographer Wilbur Zelinsky has referred to as the "urban penumbra."

4. Farm-Nonfarm. The rural-farm population, as counted in the 1960 Census, numbered 13,445,000, or just 7.5 percent of the total population. The count in 1950 was 23,048,000. A heavy decline in farm population has assuredly occurred, but unfortunately, a major change in definition makes direct comparison of the 1950 and 1960 figures impossible. (16) The authors estimate that roughly 2/5 of the change shown between the two censuses is caused by use of a more restrictive definition of farm residence in 1960. (The Current Population Survey showed a higher count of farm people than did the decennial census in both 1960 and 1950, but the absolute amount of change over the 10 years was about the same as in the census.)

The South and the Northeast show the greatest rates of farm population loss. Heavy declines in the South have stemmed especially from (1) the wide-spread adandonment of tenant farming in cotton and tobacco areas and the consolidation of land by landlords into larger operating units, (2) the rapid conversion of certain upland areas to forestry, and (3) the reclassification as nonfarm of many residential-type operations, especially in the Appalachian areas. In the overwhelmingly nonagricultural Northeast,

Table 4.--Population by economic provinces and regions, by urban-rural residence, 1960

Name of Region	Region number	Population, 1960			Percent urban	Percent rural
		Total	Urban	Rural		
Total		179,323,175	125,270,616	54,052,559	69.9	30.1
A. Atlantic Metropolitan Belt Province		36,500,804	31,603,170	4,897,634	86.6	13.4
Atlantic Metropolitan Belt Region	I	36,500,804	31,603,170	4,897,634	86.6	13.4
B. The Great Lakes and Northeastern Province		41,079,517	29,798,281	11,281,236	72.5	27.5
Eastern Great Lakes and Northeastern Upland Region	II	10,116,810	6,087,691	4,029,119	60.2	39.8
Lower Great Lakes Region	III	25,212,494	20,358,868	4,853,626	80.7	19.3
Upper Great Lakes Region	IV	5,750,213	3,351,722	2,398,491	58.3	41.7
C. The Midwestern Province		23,183,783	13,550,952	9,632,831	58.5	41.5
North Center (Corn Belt) Region	V	17,169,930	9,942,641	7,227,289	57.9	42.1
Central Plains Region	VI	6,013,853	3,608,311	2,405,542	60.0	40.0
D. The Southern Province		52,079,103	29,616,166	22,462,937	56.9	43.1
Central and Eastern Upland Region	VII	14,882,135	7,421,755	7,460,380	49.9	50.1
Southeast Coastal Plain Region	VIII	16,391,896	7,788,643	8,603,253	47.5	52.5
Atlantic Flatwoods and Gulf Coast Region	IX	11,812,018	8,971,391	2,840,627	76.0	24.0
South Center and Southwest Plains Region	X	8,993,054	5,434,377	3,558,677	60.4	39.6
E. The Western Province		26,479,968	20,702,047	5,777,921	78.2	21.8
Rocky Mountain and Intermountain Region	XI	4,568,878	2,727,282	1,841,596	59.7	40.3
Pacific Northwest Region	XII	4,918,314	3,169,316	1,748,998	64.4	35.6
Pacific Southwest Region	XIII	16,992,776	14,805,449	2,187,327	87.1	12.9

Bogue and Beale, table A (1).

the increased conversion of farmland to urban and other nonfarm uses and the reclassification in the census of many areas from rural to urban have added to the long-time decline of agriculture in that region to produce large farm population losses.

There are some scattered areas where farm population increased, but only in Texas can one find a sizeable number of them. Texas had 16 counties showing such increases. Irrigation developments--mostly in the High Plains--were generallyresponsible for these exceptions to the overall pattern.

There has been a tendency for an increasing proportion of farm operators to live off-farm, but in absolute terms the number of farmers doing so has not increased since 1950. The group still accounts for only 7.6 percent of all farmers, according to the Census of Agriculture. Thus, although one finds this trend commented upon in various parts of the country, it has not as yet resulted in any general relocation of farm operators in towns.

5. Size-of-place distribution. The growth of population settlements induced the incorporation of nearly 1,000 additional communities in the 1950's, raising the total number of incorporated places to 18,088. Three-fourths of the new incorporations are found in urbanized areas, for there, after all, is where much of the creation of new communities in the form of suburbs has taken place. The most notable trend in the distribution of population by size of place was the declining population within the limits of the largest cities. In 1950, there were 18 cities in the country of 500,000 or more residents and every one of them had grown during the 1940's. In a marked reversal of trend, 14 of these 18 cities declined in population during the 1950's--some rather sharply--and the four that grew did so only through huge annexations of territory or by having an abnormally large land area at the beginning of the decade. In every instance the declining size of the largest cities reflects only a redistribution of population within the metropolitan area rather than a moribund state in the metropolitan area as a whole.

Three size classes of cities have absorbed most of the growth of population (table 5). They are the groups 10,000 to 25,000, 25,000 to 50,000, and 50,000 to 100,000. In each of these classes, most of the places already in the group in 1950 grew, additional cities were added as a result of the growth of smaller places, and completely new cities--usually suburban--were created by incorporation. Together, these size classes contained 19.5 percent of the Nation's population in 1950, but had 25.8 percent by 1960. Towns of 5,000 to 10,000 size held their own in retaining their share of the total population during the decade. Towns of 2,000 to 5,000 people experienced some absolute growth of population as a group but declined relatively. The population in places of less than 2,000 population dropped slightly (even when urban suburbs are included) and the proportionate importance of such communities fell sharply. Thus, the Nation has had a rapid development of its medium size municipalities, a rather average growth of places just above or below medium size, and a stationary condition or decline of population in the largest and smallest places. A decline in the number and population of small places had been evident since 1950. However, although the loss of population in the large cities was not surprising to demographers who had followed the trends in

Table 5.--Population in groups of places classified according to size: 1960 and 1950

Size of place	Population		Percentage distribution		Percent change in population
	1960	1950	1960	1950	1950-1960
Total U. S. population	179,323,175	151,325,798	100.0	100.0	18.5
Total, all places	125,802,087	100,049,413	70.2	66.1	25.7
1,000,000 or more	17,484,059	17,404,450	9.8	11.5	0.5
100,000-1,000,000	33,529,298	27,155,201	18.7	17.9	23.5
50,000-100,000	13,835,902	8,930,823	7.7	5.9	54.9
25,000-50,000	14,950,612	8,834,919	8.3	5.8	69.2
10,000-25,000	17,568,286	11,877,759	9.8	7.8	47.9
5,000-10,000	9,779,714	8,192,636	5.5	5.4	19.4
2,000-5,000	9,577,903	8,403,563	5.3	5.6	14.0
Under 2,000	9,076,313	9,250,062	5.1	6.1	-1.9

1960 Census of Population, tables 5, 7 and 8 (10).

demolition of housing units in cities and in changing size of urban households, it came as a shock to incredulous mayors and chambers of commerce to whom population growth was the sine qua non of civic pride.

6. County distribution by population size. Of the 3,134 counties and county equivalents in the United States, 361 are entirely or partly included in metropolitan areas. The metropolitan counties number less than 12 percent of all counties, yet 84 percent of the Nation's total population growth in the 1950's occurred within them. In view of this concentration of growth it is not surprising to note that almost half of all counties (49 percent) actually declined in population. The same type of phenomenon took place in the 1940's, but since the over-all amount of population growth was much lower in that decade the anomaly between the rapid growth of metropolitan areas and the decline or near-stationary trend of most other counties was more impressive in the 1950's.

For many years the modal-sized counties have been those having between 10,000 to 50,000 people. However, in contrast to so many other aspects of American life in which the tendency has been towards an increased clustering trend around the mode or average and a reduction of extremes, the modal-sized county has been declining in frequency.

Distribution of counties by population size, 1940, 1950, 1960
(includes independent cities and other county equivalents)

Population size of county	Number			Percent distribution			Percent change in number of counties since 1940
	1960	1950	1940	1960	1950	1940	
Total	3,134	3,112	3,100	100.0	100.0	100.0	1.1
50,000 or more	596	501	442	19.0	16.1	14.3	34.8
10,000 to 50,000	1,683	1,833	1,940	53.7	58.9	62.6	-13.2
Under 10,000	855	778	718	27.3	25.0	23.2	19.1

1960 Census of Population, table H (10), and 1950 Census of Population, table H (6).

It can be seen from the table above that there were 257 fewer counties having between 10,000 and 50,000 people in 1960 than there were in 1940, and that such counties now comprise barely more than one-half of all counties. By contrast, both extremes--the very populous counties and the very small counties--became more numerous. It is obvious from these data that the Nation is experiencing an increasing divergence in the density of land settlement in its basic political unit--the county.

Of the counties that have been losing population or that have less than 10,000 people, the great majority are agricultural. It is not the purpose of this report to deal with the implications of current trends, but it is obvious that declining population and the accompanying problems of very low density of settlement and low absolute population levels per county are exceptionally widespread in rural areas. It would be unfortunate if the attention being focused on the rapid growth of metropolitan areas and suburbs were to obscure the antithetical trend which affects so much of the rest of the Nation.

7. Type-of-place distribution. As yet the authors have made only a few tentative analyses of population trends with communities classified according to type. Exploratory work indicates that on a nationwide basis a community's regional or subregional location is more significant than its economic type in influencing its growth rate. Some significant exceptions to this are (1) the educational centers, (2) the medical centers, and (3) the recreational centers; these tend to be growing more rapidly than the communities of corresponding size in the region in which they are located. We also hypothesized that Governmental centers (such as county seats) would grow more rapidly than other nearby towns, but exploratory tabulations did not support the idea very consistently.

SMSA's of a type where manufacturing is a dominating element of the basic economy grew more slowly, on the average, than other types of SMSA's. This may be demonstrated by classifying SMSA's according to the classification of metropolitan areas of 300,000 or more recently developed by 0. Dudley Duncan and his associates (3). Growth rates between 1950 and 1960 for each of the seven categories in this classification are as follows:

Type of metropolis	Average of percent change for individual places, 1950 - 1960		
	Total	Central cities	Metropolitan rings
1. National metropolis (5 largest)	25.9	2.2	70.9
2. Diversified manufacturing with metropolitan functions	16.2	-8.2	41.4
3. Diversified manufacturing with few metropolitan functions	20.9	0.4	49.4
4. Specialized manufacturing	15.5	2.1	34.4
5. Regional metropolis	33.2	17.0	62.0
6. Regional capital submetropolitan	31.7	16.4	68.5
7. Special cases	51.6	62.5	49.5

This slower growth of manufacturing SMSA's was also characteristic both of their central cities and their metropolitan rings. It is not clear, however, whether this is due uniquely to their economic classification or to the fact that all are located in regions where overall growth was low. The very rapidly growing "special cases" are primarily developing centers along the southern border of the Nation, which many persons

still mistakenly regard merely as winter vacation spas or retirement communities (Miami, Tampa, San Diego, San Antonio, Phoenix, etc.)

8. Central City--suburbs in metropolitan areas. In each decade since 1920, the "metropolitan ring", or the part of the SMSA lying outside the central city, has grown more rapidly than the central city itself, and the 1950-1960 decade continued this trend. Whereas the central cities had an average growth of only 10.7 percent between 1950 and 1960, the metropolitan rings increased at a rate of 48.6 percent. This large differential between central cities and suburbs was characteristic of all regions (see table 6). In fact, almost all of the modest net increases in the population of central cities were due to annexation. Table 6 shows population growth rates for the central cities and metropolitan rings according to their 1950 boundaries. With population gain from annexation thus controlled, the central city growth was almost zero (1.5 percent) while the suburban growth was 61.7 percent. Thus, as a group, central cities were among the demographically stagnant parts of the Nation. Since their birth rates were well above replacement, this could only mean that they were losing population in substantial amounts through outmigration.

Table 6.--Percent increase in population within central cities and metropolitan rings of standard metropolitan statistical areas, holding city boundaries constant: 1950-60

Census Region and size of SMSA in 1960	SMSA total	Central cities	Metropolitan rings
United States, total	26.4	1.5	61.7
Regions:			
Northeast	13.0	-3.3	35.0
North Central	23.5	-1.6	66.5
South	36.2	5.3	83.3
West	48.5	14.5	84.1
SMSA population in 1960:			
3,000,000 or more	23.2	0.6	72.2
1,000,000 to 3,000,000	25.0	-2.2	52.7
500,000 to 1,000,000	36.0	4.8	81.1
250,000 to 500,000	25.6	2.2	51.9
100,000 to 250,000	25.8	4.6	54.5
Under 100,000	24.4	8.6	69.9

1960 Census of Population (11).

Table 7 shows that this tendency toward slow central city growth and rapid suburban growth was characterisitic of both small and large SMSA's. This suggests that most central cities in the Nation, irrespective of size, have largely filled up their space with settlement, and that henceforth they can grow only by annexation or by increasing average density.

9. Urbanization and suburbanization of Negroes. In 1960, 73.2 percent of the Negro population was residing in urban areas. Consequently, it was somewhat more urban than the white population. Only two decades ago, less than 1/2 of the Negro population was living in urban areas and Negroes were considerably more rural in their distribution than were whites. This change represents the climax of a process that has been underway for more than a century; since 1850, the Negro population has been urbanizing at an accelerating pace. Inasmuch as the remaining rural Negro population still has many landless tenant farmers and farm laborers, it may be expected that the urbanward movement of Negroes will continue. This flow is not only toward Northern industrial centers, but toward cities in the South and West as well.

Until World War II, Negroes migrating to the city usually settled in deteriorating areas adjoining central business districts. As a result, they tended to be almost entirely central city residents. During the 1940-50 decade, small evidences of a suburbanward movement of Negroes appeared. During the 1950-60 decade this movement became a noticeable flow. Since the pattern of entrance into a new neighborhood by any ethnic group is typically one of rapid acceleration after an initial penetration, it may be expected that during the 1960-70 decade this comparatively new development will become a trend and pick up speed.

Evidence of this new trend may be seen by noting the following statistics of Negro growth in the central cities and metropolitan rings of the five largest SMSA's.

SMSA	Increase 1950-60 (number)		Percent increase 1950-60	
	Central cities	Metropolitan rings	Central cities	Metropolitan rings
New York	340,323	67,075	45.5	92.4
Chicago	320,372	33,867	65.0	77.6
Los Angeles	168,971	76,976	96.3	177.8
Philadelphia	153,199	38,030	40.7	36.6
Detroit	181,717	19,353	60.5	33.8

Table 7.--Metropolitan central cities that lost population from 1950 to 1960
(Boundaries not held constant where annexations occurred)

City and State	Percent change, 1950-1960	
	SMSA	Central city
Albany-Schenectady-Troy, N.Y.	11.6	- 6.8
Altoona, Pa.	- 1.6	-10.1
Atlantic City, N.J.	21.5	- 3.4
Augusta, Ga. *	33.7	- 1.2
Baltimore, Md.	22.9	- 1.1
Binghamton, N.Y.	15.1	- 5.9
Boston, Mass.	7.4	-13.0
Bridgeport, Conn.	22.2	- 1.2
Buffalo, N.Y.	20.0	- 8.2
Canton, Ohio	20.2	- 2.8
Charleston, S.C.	31.3	- 6.1
Chattanooga, Tenn.-Ga. *	14.9	- 0.8
Chicago, Ill. *	20.1	- 1.9
Cincinnati, Ohio-Ky. *	18.5	- 0.3
Cleveland, Ohio	22.6	- 4.2
Detroit, Mich.	24.7	- 9.7
Fall River, Mass.-Rhode Island	0.6	-10.7
Harrisburg, Pa.	18.1	-11.0
Hartford, Conn.	29.2	- 8.6
Huntington-Ashland, W.Va.-Ky.	3.7	- 2.2
Jackson, Mich.	22.3	- 0.7
Jacksonville, Fla.	49.8	- 1.7
Jersey City, N.J.	- 5.7	- 7.7
Johnstown, Pa.	- 3.6	-14.7
Knoxville, Tenn.	9.2	-10.4
Lancaster, Pa. *	18.6	- 4.3
Lawrence-Haverhill, Mass.-N.H.	2.8	- 8.2
Lowell, Mass.	16.2	- 5.3
Macon, Ga. *	33.6	- 0.7
Minneapolis-St. Paul, Minn.	28.8	- 4.4
Muskegon-Muskegon Heights, Mich.	23.4	- 1.8
Nashville, Tenn. *	24.2	- 2.0
New Bedford, Mass.	0.8	- 6.1
New Haven, Conn.	15.6	- 7.5
New York, N.Y.	11.9	- 1.4
Newark, N.J.	15.0	- 7.6
Peoria, Ill. *	15.3	- 7.8
Philadelphia, Pa.-N.J.	18.3	- 3.3
Pittsburgh, Pa.	8.7	-10.7
Portland, Me.	0.6	- 6.5
Portland, Oreg.-Wash.	16.6	- 0.3
Providence-Pawtucket, R.I.-Mass.	7.4	-12.6
Reading, Pa.	7.7	-10.2
Richmond, Va.	24.5	- 4.5
Rochester, N.Y.	20.3	- 4.2
St. Louis, Mo.-Ill.	19.8	-17.4
San Francisco-Oakland, Calif.	24.2	- 4.5
Scranton, Pa.	- 8.9	-11.2
Syracuse, N.Y.	21.2	- 2.1
Trenton, N.J.	15.9	-10.8
Washington, D.C.	36.7	- 4.8
Wheeling, W. Va.	- 3.0	- 9.3
Wilkes Barre-Hazelton, Pa.	-11.5	-14.9
Wilmington, Del.	36.4	-13.2
Worcester, Mass.	6.7	- 8.3
York, Pa. *	17.6	- 9.1

*Denotes central cities declining in total population despite annexation of at least 1,000 people during the decade.

1960 Census of Population (9).

A ten-year flow of 20,000 to 75,000 Negroes into the suburbs for each of the five largest SMSA's is indeed a new development. That this is not just an isolated event of these very largest places may be seen from the following summary which reports the number of Negroes living in metropolitan rings of the 15 largest SMSA's and the percent of the ring population which now is Negro. In 11 of the 15 the number exceeds 50,000, but the proportion Negro is still low, not exceeding 7 percent.

SMSA	Metropolitan ring Negro population 1960	Percent Negro 1960
New York, N. Y.	139,694	4.8
Los Angeles-Long Beach, Calif.	120,270	3.1
Chicago, Ill.	77,517	2.9
Philadelphia, Pa.	142,064	6.1
Detroit, Mich.	76,647	3.7
San Francisco-Oakland, Calif.	80,753	4.8
Boston, Mass.	14,616	0.8
Pittsburgh, Pa.	60,807	3.4
St. Louis, Mo.-Ill.	80,496	6.1
Washington, D. C.-Md.-Va.	75,446	6.1
Cleveland, Ohio	6,455	0.7
Baltimore, Md.	51,986	6.6
Newark, N. J.	86,049	6.7
Minneapolis-St. Paul, Minn.	677	0.1
Buffalo, N.Y.	12,006	1.6

1960 Census of Population (12).

B. Composition Trends

In addition to distributional shifts, the population experienced significant composition changes between 1950 and 1960. As with distribution, most of these changes were continuations of trends already underway in the 1940-1950 decade or earlier.

1. Age Composition. The age composition of a population is closely tied to its fertility rate. Low fertility brings an older age composition while high fertility brings a younger age composition. During the long decline in fertility from 1820 to 1940, the median age of the population rose steadily from census to census until, in 1950, it attained 30.2 years. Because of the cumulative effect of the baby boom, this trend was reversed during the 1950-1960 decade, and for the first time the median age declined, to 29.5 in 1960.

The effect upon the age structure of this fertility upsurge is summarized in the following table:

Stage of the life cycle	Percentage distribution of population		
	1960	1950	1880
Childhood (0-8 years)	19.9	18.0	24.4
Youth (9-17 years)	16.4	13.2	19.4
Adulthood (18-64 years)	55.0	60.6	52.8
Old age (65 and older)	8.7	8.2	3.4

Between 1950 and 1960, the proportion of elderly persons increased, mostly as a result of the aging of population associated with fertility decline before 1940. Thus, between 1950 and 1960, there was a simultaneous increase in the proportion of youngsters and oldsters, with a compensating decline in the proportion of adults.

As noted in the discussion of distributional trends, the population of nearly half the counties in the country dropped both in the 1950's and the 1940's. These losses of population have been produced by heavy outmigration of people. Such migration is selective of age groups and where it has been sudden or prolonged has resulted in severe distortion of the age structure of many affected counties. The highest rates of outmigration occur among people between 18 and 30 years of age. If a county is exposed to such outmigration over a period of time it becomes heavily weighted with middle-aged or elderly persons. The median age of the population rises and, with the departure of so many young parents and potential parents, the number of very young children declines. This phenomenon has occurred in hundreds of small and medium-sized counties. No summary data have yet been compiled on the subject but an example will illustrate the point.

In Mills County, Texas, a completely agricultural county, the median age of the population in 1940 was lower than the median for the United States as a whole (27.7 years compared with 29.0). Between 1940 and 1960 the population of Mills County declined by 44 percent as the result of heavy outmigration stemming from extensive adjustments in the organization of farming. In consequence, the median age in the county soared to 44.6 years by 1960 and was 15 years higher than the U. S. average, which rose only to 29.5 years. The number of young adults in the county who are 20-29 years old is now less than half as large as the number of persons 50-59 years and is even considerably smaller than the number of elderly people 70-79 years old. Needless to say, such a relationship in the size of the different age groups of the population is strikingly different from that which prevails in almost any urban or growing area. With the loss of potential or actual young parents, the number of children under 5 years old in

Mills County is now smaller than the group 5-9 years old which in turn is smaller than the number 10-14. This is a new situation for this county and for the many similar counties that exist.

In the most advanced cases of prolonged or severe outmigration, the distortion of the age structure has increased the proportion of older persons and decreased the proportion of young married couples to the point where deaths now exceed births. A sprinkling of such counties began to appear in the mid and late 1950's in States like Missouri, Kansas, Kentucky, Oklahoma, and Texas. That the abnormal excess of deaths over births is caused by the odd age structure of the counties rather than by low fertility or high mortality can readily be demonstrated by applying the age-by-age birth and death rates of the United States to the population of such a county. In 1959, in the Nation as a whole, the crude birth rate per 1,000 total population was 24.1 and the crude death rate 9.4. Thus there were more than 2 and 1/2 times more births than deaths nationally. However, in Daviess County, Missouri, which is a Corn Belt area with a long history of outmovement, the same age-by-age birth and death rates applied to the 1960 county population would produce a crude birth rate of only 16.6 and a crude death rate of 18.6. Deaths would exceed births by about 1/8 even though family size and health conditions were normal. Under these conditions it is not surprising that there actually are more deaths now in this county than there are births.

It should be emphasized that the great majority of counties that declined in population in the 1950's are rural and predominantly agricultural. The rapid agricultural adjustments that are taking place are by no means finished. The number of counties losing some population through outmigration because of agricultural changes is not likely to increase much, if any, over the present high levels. But, counties in which outmigration becomes so pronounced as to create a condition producing more deaths than births are likely to increase substantially in the coming decade.

2. Color Composition. Between 1950 and 1960, the Negro population increased from 15.0 to 18.9 million, a gain of 25 percent compared with an increase of 18 percent for the entire population. The larger rate of Negro growth resulted from a marked decrease in Negro death rates accompanied by continued high birth rates.

Migration as well as rapid natural increase caused particular parts of the Nation to gain large increments of Negro population, especially industrial centers in the Northeast, Midwest, and California. For example, the increase in Negro population in selected States was as follows:

State	Amount of negro population increase	Percent increase 1950-1960
New York	499,320	54
California	421,689	91
Illinois	391,490	61
Michigan	275,285	62
Ohio	273,025	53
Pennsylvania	214,265	34
New Jersey	196,310	62
Indiana	95,107	55

1960 Census of Population (12).

Table 8.--Negro population and percent Negro, 1960 and percent change in Negro population, 1950-1960

Geographic division and State	Negro population 1960	Percent negro	Percent change 1950-1960
U. S. total	18,871,831	10.5	25.5
New England	243,363	2.3	70.3
Middle Atlantic	2,785,136	8.2	48.5
New York	1,417,511	8.4	54.4
New Jersey	514,875	8.5	61.6
Pennsylvania	852,750	7.5	33.6
East North Central	2,884,969	8.0	59.9
Ohio	786,097	8.1	53.2
Indiana	269,275	5.8	54.6
Illinois	1,037,470	10.3	60.6
Michigan	717,581	9.2	62.2
Wisconsin	74,546	1.9	164.5
West North Central	561,068	3.6	32.2
South Atlantic	5,844,565	22.5	14.7
Delaware	60,688	13.6	39.2
Maryland	518,410	16.7	34.3
District of Columbia	411,737	53.9	46.6
Virginia	816,258	20.6	11.2
West Virginia	89,378	4.8	-22.2
North Carolina	1,116,021	24.5	6.6
South Carolina	829,291	34.8	0.9
Georgia	1,122,596	28.5	5.6
Florida	880,186	17.8	45.9
East South Central	2,698,839	22.4	.01
Kentucky	215,949	7.1	6.9
Tennessee	586,876	16.5	10.6
Alabama	980,271	30.0	0.1
Mississippi	915,743	42.0	-7.2
West South Central	2,768,203	16.3	13.8
Arkansas	388,787	21.8	-8.9
Louisiana	1,039,207	31.9	17.8
Oklahoma	153,084	6.6	5.2
Texas	1,187,125	12.4	21.5
Mountain	123,242	1.8	85.5
Pacific	962,446	4.5	1/88.5
Washington	48,738	1.7	58.8
Oregon	18,133	1.0	57.3
California	883,861	5.6	91.2
Alaska	6,771	3.0	(NA)
Hawaii	4,943	0.8	(NA)

1/ Excluding Alaska and Hawaii.

1960 Census of Population (12).

In sharp contrast, three States in the South experienced substantial Negro population decline, and most of the others had slow rates of growth (table 8). Florida, Texas, and Louisiana, where substantial metropolitanization of Negroes occured, are exceptions, as were Delaware and Maryland, which are as much northern as southern in character.

Most of the growth of Negro population in metropolitan areas accrued to the central cities. Since central cities were almost stationary in their total growth, this meant that there was a very sharp rise in the proportion of the population of these central cities that is nonwhite. For example, the following central cities had more than 20 percent of their population nonwhite in 1960:

	Percent nonwhite 1960
Washington	53.9
Atlanta	38.3
New Orleans	37.2
Memphis	37.0
Baltimore	34.8
Detroit	28.9
Cleveland	28.6
St. Louis	28.6
Philadelphia	26.4
Chicago	22.9
Houston	22.9
Cincinnati	21.6

1960 Census of Population (12).

It is not unlikely that, within 15 years the nonwhite population will be in a majority in many of these cities, unless there is a substantial change (1) in the differential rates of reproduction of white and nonwhite populations, (2) in the tendency for nonwhite population to be segregated within the central city, or (3) in the city boundaries.

Nonwhite groups in the United States other than Negroes are as yet a small fraction of the total population--less than one percent--but are increasing at very high rates.

Group*	1960	1950	Percent change
Indian	508,675	370,788	37.2
Japanese	260,059	141,768	83.4
Chinese	198,958	117,629	69.1
Filipino	106,426	61,636	72.7
All other	75,045	21,226	253.6

*48 States only. 1950 data for Indian and "All Other" adjusted to be comparable with 1960.

The American Indian population now numbers more than one-half million, the highest number ever counted. It is thought that the identification of Indians in the 1960 Census was improved by the self-enumeration features of that census. The Japanese and Chinese groups have grown in part from the immigration of brides, many of them married to American soldiers. Data for Hawaii are not shown here, but Hawaii ranks as the only State in which the white population is a minority group.

3. Sex Composition. Between 1950 and 1960 the sex ratio (males per 100 females) declined from 98.6 to 97.1 or by 1.5 ratio points. This is the second decade during which women have outnumbered men; all censuses before 1950 had shown a predominance of males. This change is associated principally with differential mortality. At all ages women enjoy lower mortality rates than men. Other factors are a declining sex ratio in the composition of immigrants, an increase in the proportion of the population at older ages, and the dying out of older generations of foreign born in which males were a substantial majority. The trend toward lower sex ratios has been underway since 1910. If the current level of fertility persists, the sex ratio decline will tend to level off in the next 10-20 years unless the sex differential in mortality widens. However, a decline in the birth rate could depress the sex ratio further, because of the greater number of males than females among newborn infants.

Until recently, the predominance of females in the population was an urban phenomenon confined largely to the more industrial and commercial regions of the Nation. By 1960, however, it had spread to such an extent that now only a few western and plains States with large ranching, mining, Indian, or military population have a majority of males. These States are:

State	Sex ratio, 1960
Alaska	132.3
Hawaii	114.8
Nevada	107.1
Wyoming	104.9
North Dakota	104.5
Montana	103.8
Idaho	102.9
South Dakota	102.4
New Mexico	101.8
Arizona	101.2
Washington	101.2

4. Marital Status. Between 1950 and 1960 there was a leveling off of the tendency toward earlier marriage, which was such a dramatic change between 1940 and 1950. Although the median age at marriage drifted downward slightly after 1950, the change was not great and toward the end of the decade appeared to be reversing itself and rising a little. The "marriage boom" appeared to have reached its peak about 1955-57, and since that date the further tendency toward teen-age marriage has been halted. As

a result, the percentage increase in the number of married couples was almost identical with the percentage increase in the population 14 years and over.

	Median age at first marriage	
	Male	Female
1960	22.8	20.3
1955	22.6	20.2
1950	22.8	20.3
1940	24.3	21.5

Current Population Reports, table D (9).

However, there has been a continuation of the tendency for widowed, divorced, and single older persons to marry. For example, the proportion of males 45-64 years of age who are married increased from 1950 to 1960 by a greater number of points than during the 60 years from 1890 to 1950.

The tendency for a higher proportion of the Negro population to have broken marriages by separation or divorce persists, but the differential seems to have diminished by a significant amount since 1950.

5. Education. The already favorable rates of school attendance among the population under 25 years of age improved substantially in the last decade. Between ages 6 and 15 school attendance now is almost 100 percent. Most of the gain came in attendance rates for ages 16 to 21, and reflects a greatly heightened interest in completing high school and attending college. The following summary of attendance rates for the older age groups shows the change that has taken place:

	Percent enrolled		
Age	1957-59	1950-52	Percentage-point change
16 years	88.4	80.6	7.8
17 years	73.5	65.2	8.3
18 years	42.8	35.8	7.0
19 years	29.3	20.6	8.7
20 years	23.0	16.8	6.2
21 years	16.6	12.1	4.5
22 years	10.5	7.4	3.1
23 years	8.4	6.4	2.0
24 years	7.6	4.7	2.9

Current Population Reports, table A (8).

Despite the fact that there have been substantial improvements in the school attendance rates of the nonwhite population, the proportion of nonwhite children and youth attending high school and college still is below that for the white population. This color differential has shrunk most dramatically during the past decade, especially for ages 14-19 years. It is still large for the years of college enrollment.

Age	Percent enrolled in school, 1957-59	
	Nonwhite	White
14-15 years	93.9	97.9
16-17 years	76.3	83.8
18-19 years	33.6	37.3
20-21 years	11.6	19.9

Current Population Reports, table 3 (8).

As a result of improved school attendance over many decades, the general level of education of the adult population is rising steadily. The median years of school completed by persons 25 years of age or over for the last three decades is as follows:

1960 ..... 10.6 1950 ..... 9.3 1940 ..... 8.6

It is expected that by 1970 the median will be 12.0 years of education. The proportion of adults with a 4-year college education now is about 8 percent. The Nation is passing an educational landmark, in that persons who hold the bachelor's degree (8 percent) now (1962) slightly outnumber the "functional illiterates" (persons with 0-4 years of schooling).

The regional difference in educational attainment between the South and the rest of the Nation has not been narrowed. Data from the 1960 Census indicate that the median years of school completed by adults in the South had risen only 1.0 years since 1950, whereas the median of the Nation as a whole rose 1.3 years. The North Central Region in particular, and the Northeastern Region, moved up closer to the level of the Western Region, where educational attainment is highest, but in the process they pulled further away from similarity with the South. Attainment levels in the South have failed to keep pace with the Nation as a whole despite the heavy movement of Negroes of low average education out of the South and into the North and West. Because these statistics represent the entire adult population of 25 years or over, they still partly reflect old differences in educational opportunities and attitudes.

Area	Median years of school completed -- persons 25 and over		
	1960	1950	Increase
United States	10.6	9.3	1.3
Northeast	10.7	9.6	1.1
North Central	10.7	9.4	1.3
South	9.6	8.6	1.0
West	12.0	11.3	.7

1960 Census of Population, table 105 (15), and 1950 Census of Population, table 67 (7).

Among the major residence groups, urban people are the best educated. This is a traditional and widely-observed fact. Urban adults averaged 11.1 years of school in 1960 compared with 9.5 for rural nonfarm and 8.8 for rural farm. Less widely appreciated, however, is the fact that the lead of urban people over rural people in average educational attainment has widened rather than narrowed. The median years of school completed by urban adults (25 years old and over) was .9 year higher in 1960 than in 1950, whereas the median for the rural-nonfarm population rose by .7 year and that of rural-farm people by only .4 year. The rate of improvement in the farm population has lagged despite the large-scale exodus of Negroes from the farms to nonfarm areas. Negro farm people average three years less schooling than white farm people. Therefore, other things being equal, their heavy outmigration should have raised the average of education among farm people and retarded it among nonfarm people.

Median years of school completed -- persons 25 and over

Residence	1960	1950	Increase
Urban	11.1	10.2	.9
Rural nonfarm	9.5	8.8	.7
Rural farm	8.8	8.4	.4

However, the continued low level of formal education among farm adults is partly the result of the heavy outmigration of young people from the farm population--both white and nonwhite alike--and of the unique age distribution that the outmigration has produced. Figures on school enrollment show that at the typical high school ages of 16 and 17 years, the proportion of farm children in school (81.8 percent) is now actually just as high as the proportion of urban children enrolled (82.0 percent). The difficulty is that the majority of well-educated farm youth leave the farm by the time they are 20 years old. Thus, the adult farm population is heavily weighted with middle-aged and older people who in their day received less education than does the younger generation. This partly accounts for the depressed average level of education of the farm population as compared with that of urban people. Furthermore, during the 1950's the rate of early outmigration by farm youth increased. This had the effect of raising the already high average age of the adult farm population and partly explains the pronounced lag in improvement of the average level of education of farm people at a time when enrollment rates of high-school age farm children have caught up with the rest of the country.

6. Family and household. At the 1960 Census the comparability of family and household statistics with those of previous years was impaired by changing the unit of study from the "dwelling unit" to the "housing unit," but in general it can be said that the number of households and families is now rising moderately rapidly because of renewed population growth. Even larger increases are in prospect due to the fact that the children born during the first years of the "baby boom" are now beginning to marry in substantial numbers. Soon the pace of family formation will reach unprecendented dimensions. High levels of prosperity and the large volume of new home

construction have had the effect of causing fewer families to live in shared quarters, or to be cramped into inadequate space. Greater security in older age is permitting a larger share of elderly couples to retain their households, and widows or widowers commonly occupy an apartment alone rather than living with a child.

The average size of family in 1960 (3.68 persons) was slightly higher than in 1950 (3.54). This resulted from continued high fertility levels, which offset the growth of single, widowed, or divorced persons who live alone or with friends, rather than with relatives.

7. Economic characteristics. Since 1950 there has been a slight lowering of the labor force participation rate for males 14 years of age and over (from 78.7 percent to 77.4) due primarily to greater college attendance and earlier retirement. This has been offset by a greater participation rate for females (from 28.9 to 34.5), so that the rate for both sexes combined did not change much between 1950 and 1960. Increased employment by women is not usually related to hardship. It is more a general trend, with an emphasis on women returning to work in early middle age after bearing children and rearing them to a responsible age.

During the past decade a series of economic recessions has gradually accumulated a sizable body of unemployed persons. This has been aggravated since 1959 by the annual entry of an unusually large number of young people into the labor force from school. Between April 1959 and April 1962, the number of youth 18 and 19 years old in the labor force grew by half a million. Hereafter, nearly each passing June will witness an ever-increasing number of new entrants. The extent to which these will be absorbed is one of the major questions which the events of the next two decades will answer.

During the last 10 years the occupational compostion has shifted steadily in the direction of reducing unskilled labor to a minor part of the work force, and enlarging white collar work--especially professional and clerical employment. The percentage of workers doing white collar work rose from 37 percent in 1950 to 45 percent in 1962. One of the most dramatic changes has been the great improvement of the occupational position of Negroes. Between 1950 and 1962 the number of Negro men employed in all white collar occupations doubled and the number of Negro women working in clerical and sales jobs tripled. Simultaneously, the number of Negroes working as laborers declined.

Average family income levels rose by 84 percent overall between 1949 and 1959, and by about 50 percent taking into account the changing purchasing power of the dollar. There has been a substantial shrinkage in the proportion of families that live at the poverty line or below, and an increase in "middle class" families that can live comfortably. For example, in 1949, 29 percent of all families had less than $2,000 of money income and only 17 percent received from $5,000 to $10,000. By 1959, these percentages were more than reversed as only 13 percent of the families had income of less than $2,000 and 43 percent received from $5,000 to $10,000. Income gains have been made by all population groups but families receiving low incomes are still heavily concentrated among farm families and nonwhite families. Families headed by farm operators or

farm laborers made up only 8 percent of all families having employed heads in 1960, but such farm-employed families comprise 39 percent of the families with employed heads in which total income is less than $2,000. Only 9 percent of all families are nonwhite, yet these families make up 25 percent of all families receiving less than $2,000 income. There is some overlap between the two groups mentioned in that some families are both farm employed and nonwhite. However, it can be said with confidence that farm employed and/or nonwhite families, which together make up not more than 15 percent of all families, comprise at least one-half of the families whose income is less than $2,000 annually.

The median income of all families in 1959 was $5,660. In terms of constant (1959) dollars, this represented an increase of $1,899 in the decade. Because of fluctuations in business conditions, the trend has been irregularly upward, with most of the improvement coming in the early and late years of the decade. The nonwhite population gained in income at about the same rate as the white and at the end of the decade median nonwhite family income was still little more than half that for white families (13).

Comparison of 1959 regional income data with those of 1949 provides an interesting contrast with regional trends for education. In both characteristics--income and education--the West is the highest and the South lowest. However, whereas the non-West as a whole was narrowing its education differential with the West during the decade, this was not true of income. The skilled nature of typical jobs in the West, coupled with high wage and salary levels, has provided an economic climate in which absolute dollar gains in family income continue to outstrip the rest of the country.

Median family income (dollars)

Area	1959	1949	Increase	Percent change
United States	5,660	3,073	2,587	84
Northeast	6,191	3,365	2,826	84
North Central	5,892	3,277	2,615	80
South	4,465	2,248	2,217	99
West	6,348	3,430	2,918	85

1960 Census of Population, table 106 (15), and 1950 Census of Population, table 85 (7).

Furthermore, the percentage increases in median family income in the West have also exceeded those in the North. In the South, the relative growth of family incomes has been somewhat faster (99 percent from 1949-1959 compared with 85 percent in the West). However, average money income levels in the South were so far behind in 1949 that absolute gains from Southern families remain behind those for other regions.

II

CAUSES OF BASIC POPULATION TRENDS

A. Natality and Mortality

In November of 1945, a group of competent, well-known demographers gathered in Washington to forecast the number of births that would occur in the United States in postwar years. After a discussion of all the evidence and speculation available relating to age groups, marriage rates, the current distribution of women by number of children, and other factors affecting birth rates, it was agreed that not even under the highest fertility assumptions would the number of births in the postwar period reach 3,000,000 in any year. Fortunately for the reputations of the committee members the forecasts were not published, for in no year since World War II has the number of births proven to be as low as 3,000,000. This story illustrates how completely unexpected, indeed astonishing, was the postwar baby boom which continues unabated today.

Nearly 41,000,000 children have been born during the 1950's. This is about 8,750,000 more children than were born in the 1940's. By contrast, the number of deaths in the 1950's (15,650,000) was only 1,000,000 higher than the number in the 1940's. The absolute increase in the population has been so great from the combination of increased birth rate and decreasing death rate that one can safely say that at least 40 percent of all the people who have ever lived in the United States since its colonial settlement are alive today.

Until recently the tendency of many demographers has been to attribute the increase of births to a making up of births deferred during past years, to an increase in the proportion of the population that marries, to a decrease in age of marriage, and to a borrowing of births from the future. There seemed to be a reluctance to admit the possibility that an increase in the average completed size of family might be occurring. All of the factors mentioned above that were used to explain away the increase in births without an increase in family size are valid to some extent. But the birth boom has now continued so long - 20 years - that we need no longer speculate about whether an increase in completed fertility of women will result. The data are available and they show clearly that the cohorts of women now approaching the end of the childbearing years have borne substantially more children than those who completed their childbearing 5 to 10 years ago (14). The principal mechanism of this change has been a marked rise in the proportion of women having three and four children and a striking decline of the number having none or one. But there is also evidence that the women passing through the peak of their childbearing period during the 1950's will show a rise in the proportion having 5,6,7, or more children, as compared with those who bore children in the 1930's and 1940's. To this extent, a partial return to the large family system has occurred--and voluntarily, considering the widespread knowledge of family limitation practices.

The decrease in age at marriage has been accompanied by a shortened length of generation which has served to stimulate population growth. It is not simply the completed size of family that determines ultimate population growth but rather at what

age parents bear their children. Thus, for example, a society in which mothers averaged bearing their children at age 25 would produce four generations in a century whereas one in which children were born at an average maternal age of 30 would produce only three and one-third generations per century. Among white women born between 1930 and 1934, the average age at which they bore their third child (including a liberal allowance for those yet to be born) was about 26.0 years. By contrast, women born between 1910 and 1919 who had three or more children bore their third child at an average age of 29.8 years. Thus the three-child family of today, while regarded as a modest-sized family, has a measurably greater impact on population growth than did the average three-child family of 20 to 30 years ago. The reduction in the median age of mothers at births of all children (regardless of birth order) is less than that for third or other order children because of the fact that the average number of children born per mother has been increasing. However, women born from 1930 to 1934 will show a median age at birth of all children nearly two years younger than that observed among women born from 1910 to 1919, even if the 1930-34 cohort bears 50 percent more children per woman than did the 1910-19 cohort.

As has been noted often, the increased childbearing has been most marked among urban couples, where it had been very low in the prewar years. The narrowing of urban and farm fertility differentials continued during the 1950's, but the gap between them has by no means been closed. In August 1959, the number of children ever born per 1,000 women then in the childbearing period (aged 15 to 44 years) was 1,629 for urban women and 2,298 for rural-farm women. 6/ This represented an increase of 36 percent since 1950 in the rate for urban women but only 11 percent for rural-farm women (see table 9).

The role that health factors have played in the birth boom is not unimportant. In particular, the reduction by half of the formerly high rate of childless marriage is thought to be due principally to reduction of involuntary sterility rather than reduction of voluntary childlessness. But for the basic causes of the birth boom one must look to sociological answers. Much research has been undertaken, but the answers thus far tend not to be much different from those based on common sense reasoning. It has been verified that a complex of factors is operating, involving both a major change to an economic climate permissive of childbearing and a reorientation of cultural values which has encouraged it. The increase has taken place despite the concurrent presence of three trends thought to be clearly inimical to fertility, namely, the rise in educational attainment, the large-scale entry of married women into the labor force, and the increase in urbanization.

Changes in mortality levels have been less unexpected or newsworthy than those in natality. Nonetheless, they have been important. In general, overall mortality rates have decreased steadily except for the interruption caused by the effects of the so-called "Asian flu" epidemics in the late 1950's, and improvements have been observed in all age groups. If the age-specific death rates of 1950 had prevailed all through the following decade, approximately 1,000,000 more deaths would have occurred in the period than actually took place.

6/ Standardized for age.

Between 1950 and 1959 the average expectation of life at birth rose from 68.4 years to 69.7. Typically, mortality rates have improved most among classes of the population where they were worst; for example, the expectation of life for nonwhite population groups has been rising more rapidly than that of the white population. However, a notable and somewhat perplexing exception to this trend is the widening difference in the expectation of life for males and females. Under 1940 conditions, expectation of life at birth for females was 4.4 years longer than for males (65.2 years vs. 60.8), but by 1959 this difference had grown to 6.5 years (73.0 years vs. 66.5). The principal cause of this effect is the worsening position of males to females in respect to heart disease and cancer.

Although it is seldom used, the median expectation of life at birth is probably superior to the traditional mean expectation as an expression of the life probabilities inherent in current mortality conditions. Because the age at which a person dies is weighted in the mean calculation, the high mortality for infants greatly affects the mean, causing it to be lower than the median. Under 1959 mortality rates, the mean expectation of life in the United States at birth was 69.7 years, but the median expectation - to which half of the children born might expect to live - was about 74 years, or four years longer than the mean. For white females the median was 78 years. At the pace at which mortality rates are declining it seems eminently safe to say that there are already cohorts of white women of adult age in which half of the original cohort will survive to 80 years of age.

B. Immigration and Migration

Immigration in the United States has never reassumed the magnitude - either proportionate or absolute - that it had in the pre-World War I era. Its importance is still substantial, however, and should not be overlooked in evaluating the sources of growth of the Nation. From July 1, 1950, to July 1, 1960, a net of 3,000,000 civilians entered the country. They accounted directly for about 10 percent of the Nation's population increase. However, their impact on population growth does not cease with their immigration, for the great majority of immigrants are young adults or children who contribute to further growth by bearing children in later years. Net immigration in the 1950's was nearly 50 percent greater than the figure of 2,020,000 during the previous decade. The war years of the 1940's cut greatly into the levels of immigration during that decade but created the conditions for a steady flow of refugees and military brides to augment the more normal flow of immigrants in the 1950's. The rise of net immigration in the 1950's was just as important a source of increase in national population growth as was the decline in mortality rates. Net immigration tends to vary more from year to year than do births and deaths because of changes in legislation or in the state of world affairs (such as the Hungarian and Cuban Revolutions). On the average, it is likely to retain its relative importance among the components of U. S. population changes in the present decade.

All but a minor fraction of the distributional changes noted above are created by migration streams. Fertility and mortality rates determine the overall growth, but interregional differences in rates of natural increase have now shrunk to a fraction

of their former size. For this reason, they could not possibly account for the shifts of population toward the West, the Gulf Coast, the metropolitan centers, the nonmetropolitan urban places, the suburbs, and into communities of particular types. Moreover, birth rates in these rapidly-growing places sometimes are no higher than in the areas where population growth is slow (farm areas, rural South, etc.). Hence, if any two communities, A and B, are growing at differential rates, the researcher should look first for a migration differential rather than a natural increase differential, between them. In interpreting the trends of Section I, therefore, it should be presupposed that there is a net flow of outmigration from most places that did not grow at the rate of 18.5 percent or more between 1950 and 1960 and a net flow of inmigration to most places that grew faster than 18.5 percent. The extent of deviation from the average rate of growth may be taken as a crude indication of the probable extent of net inmigration or outmigration.

C. Patterns of Regional Economic Growth

The population flows that have been described above are not arbitrary movements without relation to trends in economic growth. All regions and metropolises where growth has been extraordinarily rapid have simultaneously undergone industrial and commercial expansion. The Gulf Coast, Florida, southern Arizona, and California's coast and valley are outstanding examples. Areas of shrinking economy have been areas of population stagnation or decline. The decline in employment in the coal industry, the mechanization of farms, the elimination of submarginal farms, and the shift of industries out of old industrial centers (such as the southward movement of the textile and paper industries) are examples. The process is more than a simple cause-and-effect one, however, because the loss of units of "basic" industry has a disproportionate effect due to the lowered demand for local services, and because some new industries and new commercial activities are entering the same communites where old ones are dying or moving. Population growth brings with it demands for additional service, and this stimulates economic growth. Hence, although it is difficult to disentangle the "cause-or-effect" aspect of population and economic trends, there is a high and persistent correlation between them, both spatially and temporally.

To support this general assertion, the rate of change in manufacturing employment, 1954-58, was correlated with the rate of population change, 1950-60, for those SMSA's for which data are available, by economic regions. This was done in two ways, once as a simple correlation between percent change in population 1950-60 (variable x) and percent change in manufacturing employment (variable y), and once as a "partial" correlation, holding constant the degree of industrialization already attained, expressed as percent of the labor force employed in manufacturing in 1950 (variable z). The results are as shown in the text table following on the next page. In the United States as a whole, there was a moderately close relationship between the rate of industrial employment and the rate of population change. In the faster growing regions the tendency for the places that experienced a substantial growth in manufacturing employment to experience a rapid population growth also was especially strong. In all regions except three, the correlation is high and positive. Only in the heavily industrialized areas of the Lower Great

Lakes and the interior Northeast (Regions II and III), and in the Old South (where all SMSA's grew rapidly regardless of character) was the correlation negative or low.

	r_{xy}	$r_{xy.2}$
Total 135 SMSA's	.70	.63
Region I	.64	.29
Region II	-.38	-.58
Region III	-.60	-.18
Region V	.47	.49
Region VII	.60	.63
Region VIII	.13	.08
Region IX	.89	.86
Region X, XI, XII	.60	.47
Region XIII	.85	.86

D. Patterns of Urban-Rural Economic Equilibrium

In addition to the specific decline in the number of farms and farm people, there have been other economic changes that have affected the balance between urban and rural settlement. One that is visibly obvious in many sections of the country is the decline in the vitality of small rural trading centers. This has been undoubtedly fostered by the decline in retail business from farmers and by the growing concentration of processing, marketing, and service facilities for agriculture in larger centers of urban size. 7/ The rural-urban balance has also been affected by the fact that both mining and lumber operations - the two principal rural industries other than farming - have been declining in overall manpower needs. Changes in these activities are often sudden and produce some of the most vivid examples of stranded communities.

On the other side of the coin, certain industries of a more traditionally urban character have been decentralizing into rural areas or into small cities accessible to rural people. For example, the wearing apparel industry has migrated to a substantial degree from the larger cities of the North to more rural districts of the South. Rural areas have also furnished the sites for many military installations (discussed separately below) and research facilities, both of which are increasingly prominent features of our economy. Some of these facilities require rural, thinly settled surroundings because of noxious, dangerous, or secretive aspects of their work.

Recreation industries are also steadily altering the character of the rural economy. One particular feature of the current great expansion in businesses based on use of leisure time is the rapid increase in, and dispersion of, dams. Dams are usually built for an avowed purpose other than recreation - such as flood control, reclamation, navigation, or power - but almost without exception they soon become important as recreational centers. Some of the most traditionally landlocked States now have large

7/ Two large-scale studies of factors associated with population change in small population centers are now being undertaken by rural sociologists (James Tarver of Oklahoma and Gleen Fuguitt of Wisconsin).

expanses of reservoir water surface and an ardent clientele of water sportsmen and vacationists. Dams, State parks, and other recreational facilities provide many new opportunities for employment, and especially for the founding of small trade and service businesses. They tend to attract urban people to rural areas to run such businesses and thus diversify both the rural economy and the rural population. Such areas, if sufficiently large and attractive, also become centers for retirement of older people. Perhaps the best example of the transformation of an interior rural county through the building of a dam is Camden County, Missouri, where the population grew by 16 percent during the 1950's as the result of businesses and retirement homes fostered by the Bagnell Dam and its reservoir, the Lake of the Ozarks. The rural economy and population had declined in this county for 50 years before the recent reversal.

In summary, the rural population has fallen as a proportion of the total population, due to the overriding effects of the decline in agriculture employment and, to a lesser extent, mining and lumbering. However, other activities of a nonagricultural nature are on the increase in many rural districts and tend either to increase the similarity to urban activities of the work performed by rural people or to draw urban people into rural communities.

E. Metropolitan Decentralization

From studies of the 1940-1950 decade, we know that metropolitan growth patterns included a dramatic flowing into the suburban ring of economic activities of a great variety (shopping centers, factories, service establishments, and even administrative, research, and record-keeping activities). The census data are too new to have been analyzed yet, but one takes no great risk in stating that this peripheral drift of economic activitiy has been accelerated during the 1950-60 decade. Also, although the data are not yet at hand to test the proposition, it seems quite plausible from the 1940-50 trends to expect that the characteristics of the suburban population are more nearly like the national average for all urban population than previously. One should expect the suburbs of today to have a larger proportion of lower and lower-middle socio-economic groups, more Negroes, and more blue collar workers than previously. This arises from the diversification of the economic base of suburbs and from the transition of suburbanization from an esoteric to a mass residential adjustment. Nevertheless, in comparison with suburbs, many central cities will look like major "social problem" population or "depressed areas" in the Nation. In addition to being demographically stagnant, they have a disproportionate concentration of poor, less educated, lower-occupation people, because they are ports of entry for low income migrants. Because of their near-zero growth, they have lost and are losing better educated and higher income citizens through flight to the suburbs. Many a central city tends to see its inflowing population as an increased burden on its welfare, police, educational and judicial systems, and its outflowing population as a large net financial loss in tax-paying power.

F. Military Installations and Defense Activity

Among the forces producing widespread change in the distribution of the American population, one that is sometimes overlooked or else underrated is the tremendous growth in the number and size of military installations. The reference is to military

bases per se rather than to private manufacturing and research complexes working on military projects. Military population growth is especially important in any consideration of rural growth because of the tendency for military populations to be located disproportionately in rural territory. Furthermore, because military bases often require substantial amounts of land, they are frequently located on land that was not previously thickly settled. The introduction of military personnel and associated civilian employees greatly increases population density, and military bases are thus commonly associated with the most spectacular examples of rapid population growth.

Between 1950 and 1960 the number of military personnel stationed within the United States rose by more than 750,000, or by 76 percent. Of the Armed Forces, the proportion living in rural territory was 44 percent compared with only 30 percent of the civilian population. Under current practices many military personnel have wives and children who follow them about. This amplifies the demographic effect of a military base on a locality, especially where large numbers of the families must live off base.

In addition to the Armed Forces themselves, many military installations employ large numbers of civilians, and this is particularly true of certain installations common to rural areas, such as storage and maintenance depots, and testing grounds. Military bases typically induce commuting from long distances, perhaps because of publicity, good wages, the number of jobs often available, and relative lack of discriminatory practices. As a result, some of them form the major payroll for sizeable numbers of surrounding rural counties. The number of civilians employed directly by the Department of Defense in the United States increased by more than 300,000 or by 40 percent, from 1950 to 1960. During the 1950-60 decade there were about 60 nonmetropolitan rural counties in the Nation that experienced high rates of population increase due substantially, or even entirely, to military developments. (All data derived from published sources.)

Military bases have varied effects on the areas in which they are located. Those employing numbers of highly trained professional people, civilian or military, may greatly upgrade the level of services and the general attractiveness of an area. Some, such as ammunition depots, employ relatively few military or professional level civilians and thus simply provide more unskilled and semi-skilled jobs for local residents. Other types of bases and camps having large numbers of young, unmarried, transient personnel may create many social problems for the community.

The action taken by the government in the Fall of 1961 to enlarge the military establishment indicates that over the intermediate future, military location decisions will continue to have significant effects on population distribution.

G. The Continuing Agricultural Revolution 8/

The decline in the number of farms and the number of farm people has received much publicity in recent years, particularly during periods when agricultural policy

8/ For a fuller discussion of recent adjustments in the farm and other rural population see Chapter 10 of Smith, Adjustments in Agriculture (5).

has been a prominent political issue. Behind the rapid decline in the number of people engaged directly in farming looms the effect of the tremendous revolution in the methods and economics of agriculture--a revolution that has by no means been completed. The following list summarizes those aspects of recent trends within and outside of agriculture, that have resulted in a loss of farm population.

1. The difficulties faced by young men in getting started in farming today, in view of the decline in number of farms available because of consolidation trends, and in the light of the high capital resources required for an adequate acreage and equipment to operate it.

2. The low income received from many farm units, especially in comparison with the wages and salaries available from nonfarm jobs.

3. The attraction of city life and nonfarm occupations to younger farm people, associated with higher educational attainment, compulsory military service, short work hours, increased exposure to nonfarm life, and the aspirations of minority racial groups for a better life.

4. A decline in the amount of manpower needed in farming caused by mechanization and by withdrawal of land from production through participation in various Government programs.

5. A decline in the specific need for tenant farmers and fulltime resident hired hands brought about by changing technology and other factors.

6. The take-over or use-conversion of farm land by suburbanization, highways, reservoirs, industrial facilities, military bases, recreational facilities, sustained-yield forestry, and other nonfarm uses.

7. Discouragement of older or small-to-medium scale farmers from inability to obtain labor of the number and kind desired or at feasible wages.

8. The increasing burden of real estate taxation.

9. Persistence in some areas of such older rural disadvantages as the lack of good roads, adequate schools, and other community facilities.

The effect of this imposing combination of negative factors is so strong that only in a few scattered areas has the farm population increased or remained stationary. Where reclamation projects or well-water irrigation have permitted a rapid intensification of land use--as in the Columbia Basin of Washington or the High Plains of Texas--there has been no shortage of aspiring younger farmers to compete for the land. This would seem to indicate that although farming has lost prestige for some as an occupation, there are still many people who would like to go into it where the conditions are promising.

One of the most dramatic changes in the farm population for which some form of measure is already available is the change by race. Using the data on color of farm operators obtained in the 1959 Census of Agriculture, one finds that the number of nonwhite farmers (97 percent of whom are Negroes) fell from 581,000 in 1950 to 315,000 in 1959, a drop of nearly one-half. 9/ The pace of this loss accelerated during the course of the decade, with the rate of decline rising from 18 percent in the years 1950-54 to 35 percent in the years 1955 to 1959. The rate and amount of loss were especially severe in the intensive tenant-organized farming of the Mississippi Delta. Here, in the counties comprising Subregion 76, Negro farmers dropped from 73,000 to 31,000 just in the five years from the Autumn of 1954 to the Autumn of 1959. In this area, the loss of Negro farmers in inseparably linked with the fact that the overwhelming majority of them have been cotton share tenants. The rapid shift to completely mechanized cotton operations has permitted the abandonment by landlords of the tenant system in favor of a unified operation employing hired farm workers. This is corroborated by the rapid increase in regular hired workers shown in the 1959 Census (employed at least 150 days). In Subregion 76 they rose from 26,000 in 1954 to 41,000 in 1959. Many of these workers are undoubtedly the former tenants in a new job relationship to the landlords. However, the increased labor efficiency of the new system is so great that for every three or four tenant farmers dropped in the subregion as a whole, only one additional wage worker has been hired. Some of the wage workers continue to live on the plantation and continue to be counted as farm residents, but many others are reported to have severed their housing relationships with employers and to be commuting to work from town or other nonfarm places.

H. The Structure of Business

The structure of American business has been shifting rapidly during the past decade, with strong emphasis upon mergers and centralization of business control into fewer but larger and more complex units. There is no evidence that this trend will not continue in the near future. It is too early yet to undertake the research necessary to study the effect this has had upon population trends; all of the data are not available. However, it appears to be a plausible hypothesis that American business is focused more and more on the metropolitan centers, with the result that opportunities and growth are channelled there. Many corporations are known to advertise only in the newspapers of cities recognized as metropolitan by the Bureau of Budget and to concentrate their purchasing in such places.

I. Expansion of Higher Education

The provision of college and professional postgraduate training to the oncoming waves of youth is causing a rapid expansion in the physical plant and staff size in colleges and universities all over the Nation. In 1950 an estimated 2.2 million persons were enrolled in colleges and professional schools. By 1960 this had risen to 3.6 million. An increase of 65 percent in 10 years is a most substantial gain. It can only have the effect

9/ Number on old, comparable definition. There were 286,000 nonwhite farmers in 1959 on the new definition.

of causing "college towns" and the college community in large cities to grow rapidly. But the end is not yet in sight. A revised set of projections released by the U. S. Census Bureau shows another doubling within the 1960-70 decade, so that there will be a grand total of 7.1 million college and professional students at the time the 1970 Census is taken. For a decade or so thereafter, however, the rate of growth will be much slower because the period of most rapid increase in the birthrate will already have been reflected during the 1960's.

J. Drift toward Warmer Climates

With few exceptions, those portions of the Nation which have severe winters are experiencing below-average growth, and almost the entire zone of the country that is blessed with mild winters is growing rapidly. For example, those economic subregions which have an average January minimum temperature of less than 10 degrees showed an over-all population increase of 10 percent from 1950-1960, whereas the subregions having an average January minimum of 40 degrees or more had a population growth of 45 percent. In part, this development is being created by the building of "retirement colonies" by elderly people moving to Florida, the entire Gulf of Mexico coast, and into Arizona and California. Social Security first made a mass move of this type possible two decades ago, and steadily it is swelling into a major social movement. Canadians as well as U. S. citizens join in it. Probably the movement will double and redouble in volume in the next two decades. Even inland places, such as the Sandhills of Carolina and Georgia (which are dry as well as mild), the Ozarks, and the Appalachian Uplands are attracting folks entering retirement and desiring or needing a change of climate.

But this drift toward warmer climates appears to be more than just a retirement phenomenon. Winter brings hazards and inconveniences which many people of all ages now seek to avoid, and which the heightened national prosperity makes it possible to avoid. Whether the population is leading business or following it is not certain. Yet it is clear that much light industry, such as electronics, missiles, research, and appliance fabrication and assembly is moving into these southern zones also. Air conditioning is making it easier for the newcomers to have the equivalent of a cool summer and a warm winter. Also, certain costs of living are lower. As employers become more congestion-conscious and more aware of the desires and values of their employees, it may be expected that more industry than ever before will be located with climate as one of the variables given serious consideration.

K. Mining

One of the most common economic causes of population change, especially of decrease, is change in mining activity. Considerable attention has been focused on the problems of eastern areas suffering from unemployment and partial depopulation due to declines in coal mining. However, it other parts of the Nation, especially the Great Plains and the West, developments in mineral industry are often associated with rapid population growth rather than decline. One may generalize that developments in mining, as with military activities, are likely to be rather sudden and far-reaching whether they produce population growth or decline.

In the Eastern States alone, about 80 counties suffered absolute losses of population from 1940-1950 stemming primarily from the decline in coal mining employment. This has resulted both from mechanization of mines and from falling production caused by competition of other fuels or exhaustion of workable reserves. These absolute population losses frequently amounted to 15 to 20 percent, despite the high rates of natural increase traditional among coal miners. The bulk of such counties are concentrated in a belt extending southwestward from west central Pennsylvania to northeastern Tennessee. Elsewhere east of the Mississippi, about 30 other counties declined in population size from difficulties affecting other mineral industries, especially metals and oil and gas.

Declines in mining activity contributed greatly to population loss in about 45 counties west of the Mississippi. On the other hand, in the Great Plains and Mountain States, there were about 60 counties that experienced net immigration of people because of discoveries or development of mineral resources. Oil and uranium account for a majority of these cases. Such counties are often not far distant from those where mining is in decline, and there are no large blocks of counties suffering unrelieved distress from mining unemployment such as that of the East. The demographic effects of mining trends are of particular reference to rural interests because mining is the most rural of all nonagricultural industries, aside from the logging and milling of wood. (At the 1950 Census, 64 percent of all mining workers were rural residents.) Thus it is rural communities that are most typically affected by the volatile conditions of both growth and decline that currently prevail in mineral industries.

L. Styles and Levels of Living

In a discussion of the causes of population trends there would seem to be a legitimate place for a paragraph on styles and levels of living. Styles may be partially subject to manipulation and levels may to a great extent be dependent on the economy, but they appear also to exert an independent influence of their own.

Living in the suburbs is unquestionably a necessity for many young metropolitan families simply because of the lack of sufficient older housing or space for housing within the city. But the flight to the suburbs probably has in it a component of style or desire not related solely to need. The post-World War II marriage and birth boom came after more than 15 years of low volume of housing construction. Millions of people were living in houses or apartments which were far behind the newest buildings in style, variety, setting, and modernity of equipment. Surely this factor alone, combined with a high level of earning, stimulated in part the exodus from the city proper.

The greatly increased prevalence of retirement plans and the increased adequacy of such plans, coupled with the rapidly growing number of elderly people, has caused the movement of hundreds of thousands of persons to new homes. In Florida, the most notable example of growth from retirement, there were roughly 300,000 more persons aged 65 and over in 1960 than would have been expected from the population 55 and over in 1950, making allowance for death. The movement of older persons is often related to the drift to warmer climates, but it is the rising, assured income of such persons that makes the move possible.

In addition to improved ability to retire, there has been a general improvement in the amount of vacation time available to the labor force and a decline in the proportion of jobs at which a long work week is required. Those circumstances, reinforced by the generally high level of wages and employment have provided the means for the great expansion of recreation businesses everywhere and of specialized resort areas. Many counties can be identified in which recreation businesses have been a major source of population growth. Recreation and retirement areas often develop in the same locations and both show the demographic consequences of rising levels of living.

Another type of population movement that is partially rooted in changes in style and levels of living is the movement of young people from rural areas. Quite aside from considerations of economic necessity, there are large numbers of rural youth who have a preference to live in urban environment. This seems to be especially true of girls and of village residents. For example, a study recently conducted by Michigan State University and the U. S. Department of Agriculture showed that 40 percent of the girl high school seniors in four rural counties preferred an urban place to live, and that 63 percent of the village girls had such a preference. Corresponding figures for boys were 27 percent and 50 percent (2).

M. Changes in the Social and Economic Status of Negroes

The public notice that has attended the efforts of the Negro population towards improved social and economic status has been so widespread and of such central political importance that there is no need to elaborate this point. Demographically, these efforts have resulted in a heavy migration of Negroes to cities in all regions, and a migration into the Northern and Western States. Within the Census South region, the Negro population increased by only 11 percent, with much of the increase taking place in peripheral areas of only a quasi-Southern character, such as the District of Columbia, the Florida Peninsula, Maryland, and Delaware. (See table 8.) In strong contrast, the Negro population in the rest of the United States grew by 55 percent. The non-Southern portion of the Negro population now amounts to 40 percent of the whole, as compared to 32 percent in 1950. The heavy migration has produced some extraordinarily distorted age distributions in the sending and receiving populations. The areas of outmigration show very small proportions of Negroes in the ages 20 to 39, except in the cities, but the very high fertility of the population has maintained a disproportionately large number of young children in the population. Movement out of rural areas to cities has been so great that in hardly more than a generation the Negro population has been transformed from the most agricultural group in the American population to one of the most urban.

Aside from factors affecting the residential distribution of Negroes, the efforts being made to raise the educational and occupational levels and opportunities of this part of the population are being reflected in rapidly changing educational, occupational, and income characteristics of the group.

III

CONCLUSION

To the person concerned with metropolitan developments, the most important trend may be the rapid concentration of the majority of the Nation's people into the metropolitan areas. In the decade of the 1950's, the percentage of people living in metropolitan territory rose from 56 to 63, as 84 percent of all population growth took place in the less than 9 percent of our land area that lies within the standard metropolitan areas. Ample national physical space and the existence of strategic and moral imperatives which assert the desirability of decentralization have not been sufficient factors to overcome other economic and social forces that foster metropolitan concentration.

On the other hand, within the metropolitan areas a substantial dispersal or decentralization of settlement has been the salient feature to students of urban society. The growth of suburbs has not only been rapid, it has usually been accomplished in part at the expense of the central city. Few metropolitan central cities have been able to increase or even retain their population size without annexations of territory. (Indeed, this is also true of scores of nonmetropolitan places.) Despite the huge growth of suburban population, the density of settlement per square mile in the urban fringes of metropolitan cities decreased, because the new suburbs have been built at a lower density than the old ones. Of equal importance to the redistribution of population within the metropolitan areas has been the continued rapid increase of the Negro population within large central cities. This increase, when accompanied by a loss to the suburbs of white population, has substantially altered the income, educational, and occupational structure of the population of numerous central cities.

To the person with rural interests, the greatest impression from current trends may be the conclusion that demographic changes in rural communities have never been more radically different from those in urban communities--metropolitan or nonmetropolitan--than they are today. This is not to contradict the fact that in many material aspects of life rural and urban communities are more similar than they were a decade ago. For example, rural areas are closing the gap in availability or possession of electricity and electrical appliances, telephones, indoor water and bathroom facilities, automobiles, and hard-surfaced roads. However, never before have there been so many rural areas declining in population at a time when most urban areas are growing so rapidly. Never before have there been such differences in the age distribution of farm and nonfarm population as there are now, nor such disparities in the directions in which the age distributions are changing. Never has the number of deaths approached or exceeded the number of births in rural counties as it is beginning to do in some areas today, in contrast to the large natural increase of population being recorded in the cities. The difference between rural and urban population trends is such that in many rural areas the problem is to find economic uses for land that will retard depopulation, whereas in urban areas the problem is often how to choose between competing demands for land use, caused by high population growth.

If one's interest is focused on national growth or on manpower potentials, the most significant trend of recent years may be the maintenance of a relatively high fertility rate which has been the principal source of rapid population growth. About 73,000,000 children were born from 1940 to 1960. As these children, themselves, grow up, the number of potential parents will increase to the point that in 1975 there should be about 50 percent more women in the peak of the childbearing years than there are today. Thus, unless the rate of fertility should soon decline substantially, the number of children to be born in the late 1960's and the 1970's, and the amount of further population increase resulting will greatly overshadow the births and increase of the last two decades.

In addition to the trends in distribution, composition, and growth of population summarized above, changes are evident in the characteristics of population such as education, income, and occupation. In some instances they have operated to homogenize the population and lessen the social and economic disparities between groups. In others they have served to widen differences. In either case, the changes in the basic demography of the population have been and continue to be exceptionally rapid. Their implications are far reaching, and not to be ignored.

Table 9.--Women by number of children ever born, United States, 1959 and 1950

Year and age of women	Women ever married								Children ever born per 1,000 women
	Percent by number of children ever born								
	Total	None	1	2	3	4	5 and 6	7 or more	
1959									
15-44 years	100.0	14.8	19.7	27.0	18.8	9.9	7.0	2.7	1,762
30-34 years	100.0	9.8	14.6	28.6	22.7	12.9	8.6	2.9	2,447
45-49 years	100.0	18.1	20.6	24.5	15.9	8.9	6.9	5.2	2,214
1950									
15-44 years	100.0	22.8	26.6	24.7	12.5	6.1	4.7	2.7	1,395
30-34 years	100.0	17.3	23.4	28.6	15.5	7.4	5.4	2.4	1,871
45-49 years	100.0	20.4	19.8	21.7	13.8	8.7	8.4	7.2	2,292

Current Population Reports, table 1 (14).

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