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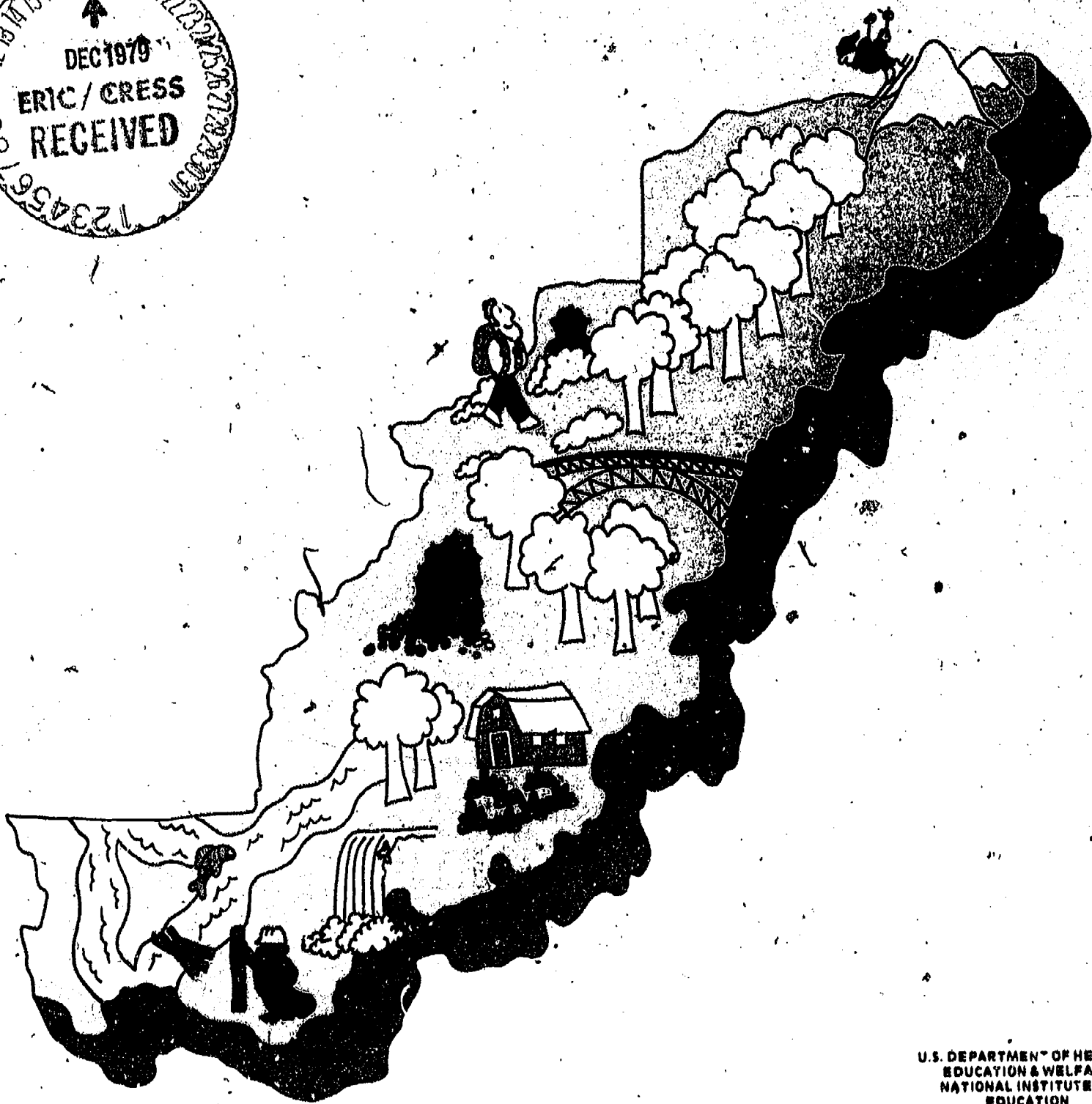
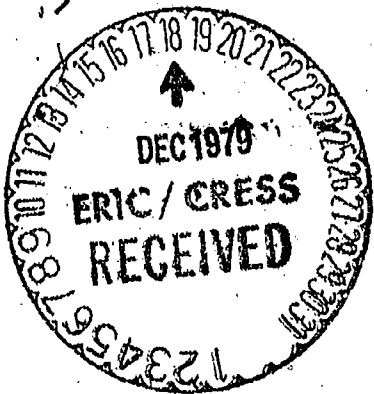
ABSTRACT

With a total area of 197,116 square miles, the Appalachian Region has an uneven distribution of population, income, wealth and natural resources. The Region's 19.3 million people live in 397 counties and 5 independent cities in Virginia. Under 50% of the population live in metropolitan counties while only 25% live in rural counties. In 1975 the Region's natural population growth rate was only about 70% of the nation's. As natural growth has diminished, migratory movements both into and from the Region and within it play a larger role in population changes of local areas. Economic productivity varies from one-sixth above the national average in Allegheny County, Pennsylvania, to less than one-fourth of the U.S. level in eastern Kentucky. Appalachia also varies in the population's age structure, racial and ethnic composition, educational attainment, labor force participation, poverty level, health conditions, and other facets of economic life and socioeconomic wellbeing. This reference book presents information on the Region's topography; population change, concentration and dispersal; population growth trends; population ethnicity; population 65 years of age and older; labor force, employment, and employment trends; employment by industry; personal income; poverty status; education attainment and school enrollment; nonfederal physicians, infant mortality trends; housing; coal production; mineral industry establishments; agriculture and farm land; and local governments. (Author/NEC)

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# Appalachia— A Reference Book



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## What Is ARC?

The Appalachian Regional Commission (ARC) is composed of the Governors of the 13 states that comprise Appalachia and a federal cochairman who is appointed by the President. A states' cochairman is elected from among the Governors; the position is rotated among the states. The Governors appoint a states' Washington representative who represents the interests of the states on a day-to-day basis within the Commission. The Commission's staff of about 110 persons is headed by an executive director.

For many years, Appalachia, despite its rich natural resources, has suffered from chronic economic and social distresses: isolation; a lack of transportation to counteract its inaccessibility; boom-and-bust cycles of prosperity and poverty; unemployment; inadequate public facilities; a lack of social services. The Commission was established by Congress in 1965 as a means of building a better economy and a better quality of life for Appalachia and its inhabitants.

ARC represents a unique experiment in cooperation and in American government. The Commission's development program is the largest and most diversified effort of its kind ever undertaken in the United States. And ARC itself is a unique partnership of federal, state and local government.

This partnership is the key to the way in which ARC does business for Appalachia. A development program or a specific project proposal can be brought before the Commission only by a state; no projects can be initiated at the federal level. All formal approvals of state investment programs require the affirmative vote of a majority of the Commission's member states and the federal cochairman.

A basic element in the ARC partnership is local participation in the Commission's development program. To assist local planning and to ensure that ARC funds are used to serve local communities, the Commission, through its member states, works with areawide planning and development agencies, known as local development districts (LDDs). Each LDD has a board, consisting of elected officials and public representatives of several counties, and a professional staff. The board and staff work with the local citizenry to assess local needs, to determine local priorities and to prepare local development plans based upon those needs and priorities.

The primary goals of the Appalachian program include:

- providing every person living in the Region with the health and skills needed to compete in everyday life wherever he or she chooses to live
- attracting new industry and manufacturing to the Region, thus providing more jobs and a more diversified economic base. To accomplish these aims, Appalachia must have an adequate transportation system, community facilities (sewers, water and solid waste disposal systems, housing and related amenities), schools and hospitals and must take advantage of its rich natural resources without harm to the environment.

## What Is Appalachia?

Appalachia, as defined in the legislation from which the Appalachian Regional Commission derives its authority, is a 195,000-square-mile region that follows the spine of the Appalachian Mountains from southern New York to northern Mississippi. It includes all of West Virginia and parts of twelve other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee and Virginia.

# **Appalachia— A Reference Book**

**Second Edition • February 1979**

**Appalachian Regional Commission  
1666 Connecticut Avenue, N.W.  
Washington, D.C. 20235**



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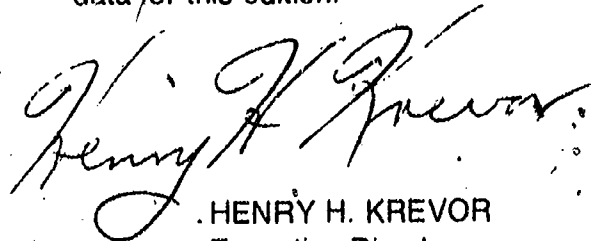
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## Foreword

This publication provides a factual overall perspective of important aspects of the Appalachian Region and recent trends. This, the second edition, has numerous additions, including several tables with local development district data. The Commission would appreciate receiving suggestions from users of this edition for additional types of data needed, sources of better or more recent information or any errors which need to be corrected.

The regional data summarized herein provide information for the Region, subregions, state parts and local development districts. The Commission data bank also has extensive data for county units. For subcounty units (places or subdivisions of counties) less extensive material is available. Generally this level of detail must be secured from states, districts or localities; from planning agencies; or from other specialized agencies which have developed detailed data files for their geographic or subject matter areas of concern. In preparing data for the entire Region, consistency of data source and definitions are important to provide uniformity of treatment for all included areas.

The Commission extends its appreciation to all sources who provided data for this edition.



HENRY H. KREVOR  
Executive Director



# Introduction The Appalachian Region

The Appalachian Region follows the spine of the Appalachian Mountains from the Catskill Mountains of New York to northeastern Mississippi. It includes all of West Virginia and parts of twelve other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee and Virginia. See map on page 7.

With a total area of 197,116 square miles (land, 194,871; water, 2,245), the Appalachian Region is one-fourth larger than California and extends over almost exactly the same span of latitude. The extremely uneven topography of Appalachia consists of old, rounded and rugged mountains culminating in Mount Mitchell (6,684 feet, or 2,089 meters), rough mountains and hill lands derived from deeply dissected plateaus, folded mountains forming long ridges enclosing valleys of varying width, high rolling plateaus (glaciated with lakes in the northern part of the Region) and valley lowlands and piedmont on the Region's margins.

The only ports in this landlocked region are on Lake Erie and a few of the major rivers. It is served by a rail network (concentrated to some extent in the coal-mining regions) and a varied network of highways, including portions of the Interstate system and segments of the Appalachian Development Highway System which are now open. Modern transportation and communications technology have greatly reduced the historic isolation of the Appalachian mountain and hill country, though many rural "pockets" remain. Educational oppor-

tunities are also greater than ever before for Appalachian youth.

The distribution of population, income, wealth and natural resources matches the unevenness of topography. The Region's 19.3 million people (1977) live in 397 counties and 5 independent cities in Virginia, which range in population size from 1.5 million (Allegheny County, Pennsylvania) to 2.6 thousand (Highland County, Virginia). In 1976 the average density was 99 persons per square mile compared to 181 per square mile for the rest of the eastern half of the United States. On the other hand, 50 percent of Appalachia's population live in metropolitan counties while only 25 percent live in rural counties. Immigration occurred in the 1970s in contrast to the overall outmigration of the 1960s. The northern subregion, however, continues to experience outmigration.

In 1975 the Appalachian Region reported its lowest level of birth rates (14 per 1,000 population), lower than the U.S. average (15), while its death rate of 10 per 1,000 was a full percentage point higher. As a result the Region's natural population growth rate was only about 70 percent of the nation's. As natural growth has diminished (especially in the northeastern portion of the Region), migratory movements both into and from the Region and within it, play a larger role in population changes of local areas.

Economic productivity, measured by per capita earnings at place of work, varies from one-sixth above the national average in Allegheny County, Pennsylvania, to less than one-fourth of the U.S. level in the poorest county in eastern Kentucky. Although the regional per capita income level gained on the nation between 1965 and 1976, it remains about 15 percent lower than the na-

tional average. No Appalachian state area equals the U.S. level of per capita income, and only seven counties in the Region did in 1976 (1975 money income). The most rapid gain in income was in the central subregion, the slowest gain in the northern subregion.

Manufacturing employment was more concentrated in Northern and Southern Appalachia than in the nation in 1975 but less so in Central Appalachia. Measured against population, the Region had one-fifth more manufacturing jobs than the nation and relative to FICA covered employment, one-third more. The five leading manufacturing industry groups in Appalachia were: primary metals, textiles, apparel and textile products, machinery, and electrical and electronic industries which accounted for 53 percent of the Region's manufacturing employment and nearly 15 percent of the nation's employment in these industries.

Huge reserves of good coal are found in some counties, while others are without economically significant mineral resources. Coal produced in Appalachia accounted for 61 percent of the total U.S. production in 1975. It is found chiefly in the northern and central subregions and has been mined primarily from underground seams. The share of surface mining has risen, reaching 44 percent in 1975.

Farm land and forests range from rich and valuable to poor and virtually worthless. A smaller proportion of land is devoted to farming in Appalachia than in the eastern United States. Farm land accounts for 32 percent of Appalachian land compared to 44 percent of non-Appalachian eastern U.S. land. The Appalachian farms are generally smaller and the value of land and buildings (\$64,400) was only one-half

that in the rest of the eastern United States (\$129,300) in 1974.

Everywhere in Appalachia variety and diversity are found—in the age structure of the population, its racial and ethnic composition, educational attainment, labor force participation, levels of poverty, health conditions and services and many other facets of economic life and socio-economic well-being.

Ten percent of the nation's local governments are found in Appalachia, but they spent only 6 percent of all funds spent by local governments in 1971-72. General local government revenue per capita is lower than the U.S. average (\$343 vs. \$510), and a greater proportion of it is provided by the state. Appalachian local governments also had lower per capita expenditures and a higher percentage of expenditures on education and highways than the national norm.

## The Appalachian Subregions

The three subregions of Appalachia contrast sharply (see map on page 7). **Northern Appalachia** has the largest population, is most urbanized, with the highest income levels, and is the most developed by most social and economic indicators. However, much of the northern subregion is below national average levels in favorable indicators, and its trends frequently lag the nation and are well behind the Region's rate of improvement in recent years, especially in Appalachian New York, Pennsylvania and Maryland.

**Central Appalachia**, on the other hand, has the smallest and least urbanized population, lowest levels of income and educational attainment, the poorest housing and by most social and economic measurements is

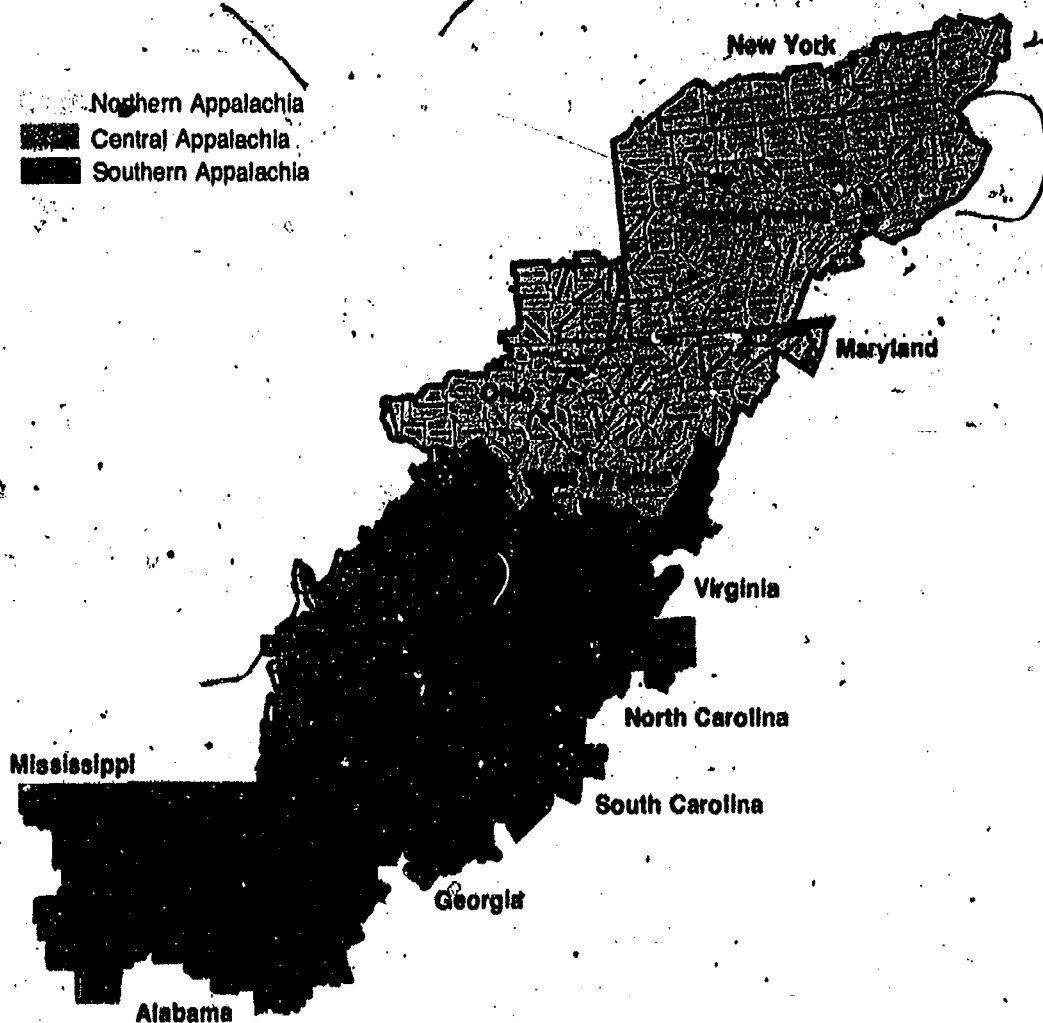
far behind regional and national averages. In recent years, however, many measures have improved rapidly, particularly levels of personal income.

**Southern Appalachia** is nearest the Region's average, with a developing economy. Its metropolitan and urban counties are rising toward national averages; in many instances the southern subregion has contrib-

uted the lion's share of regional gains.

Within all three subregions there exist relatively wide gaps between the principal metropolitan and urban counties and rural counties with smaller populations and markedly lower levels of living. The great diversity of conditions in the Appalachian Region is found at every geographic level.

## The Appalachian Region and the Three Subregions



# Topography





# Appalachian Topography

**G**eologically, the Appalachian Region of folded, faulted, old mountains of eastern North America extends from Newfoundland to Oklahoma; geographically the term is applied to the mountainous heart of this region, from the Gaspé Peninsula of Quebec to central Alabama. As defined by the Commission, the Appalachian Region lies entirely to the southwest of the Mohawk-Hudson Valley lowland, extending some 1,070 miles from the edge of the Catskill Mountains in New York to the coastal plain of north-central Mississippi, comprising an area of 195,000 square miles (24,000 square miles in the state of West Virginia and the rest in parts of 12 states). The highest summits in the entire Region are in Appalachian North Carolina.

The varied terrain of Appalachia

has been generalized into three types: mountains and high plateaus; hills and low plateaus; and plains and lowlands (see Table 1 on page 9). The mountain region, with its many included valleys, covers some 94,000 square miles (48 percent of the total). Of this the large valley region of east Tennessee comprises 6,000 square miles. Two types of mountain topography are found here: the rugged dissected massive mountains and the ridge and valley lands with their long linear ridges and parallel valleys.

Appalachian hill country (68,000 square miles; 35 percent of the total) is mostly highly dissected and quite rough terrain, though there are some low plateaus and open hill lands in these areas. The valleys are often narrow but not so deep as in the mountains.

Lowlands and plains in the Region tend to be rolling rather than flat, as they are fringing lowlands adjacent to the hills and mountains, excepting in the southwestern extremities of Appalachia. There the coastal plain

lowlands of Appalachian Mississippi and Alabama and the Middle Tennessee Valley of northern Alabama cover 20,000 square miles or two-thirds of the Region's 33,000 square miles of lowlands. The lowlands comprise 17 percent of the total land area of Appalachia.

In 1976 of the Region's 19.2 million people, the mountains had 8.0 million (42 percent), but 1.4 million of these were in the three large valley areas. Hill country with 8.1 million (42 percent) was more populous, but 3.8 million were in two great metropolitan concentrations (Pittsburgh region and Birmingham). Population density elsewhere in the hill country (74 per square mile) is almost the same as in the mountain areas (76 per square mile) outside the large valleys. The lowlands and plains with 3.1 million people in 1976 (16 percent of the Region) average higher in density (93 per square mile), but this varies widely. (See Table 2 on page 10 and the map on page 11.)

Table 1  
Terrain Types with Population Trends and Density  
Appalachian Region

Appalachian Region Terrain Types	Land Area 1970 (square miles)	Population		Population Change		Population Density 1976 (per square mile)
		1976* (thousands)	1970† (thousands)	1970-76 (thousands)	1970-76 (percent)	
Appalachian Region	194,871	19,194.4	18,217.1	977.3	5.4%	98
Mountains and High Plateaus	86,810	6,586.7	6,196.1	390.6	6.3%	76
Hills and Low Plateaus	74,979	9,539.9	9,204.9	335.1	3.6%	127
Pittsburgh Region and Birmingham	8,763	3,763.7	3,832.3	-68.7	-1.8%	429
Large Mountain Valleys	7,096	1,403.8	1,304.9	98.8	7.6%	198
Hill Country	59,120	4,372.5	4,067.6	304.9	7.5%	74
Plains and Lowlands	33,082	3,067.7	2,816.1	251.6	8.9%	93

Source: Based on land resource regions of the United States with data from computer file defined to county units and adapted to Appalachian Region by ARC staff. U.S. Department of Agriculture, *Land Resource Regions and Major Land Resource Areas of the United States*, Agriculture Handbook 296 (Washington, D.C.: U.S. Government Printing Office, 1965).

\* U.S. Bureau of Census provisional population estimates for July 1, 1976.

† U.S. Bureau of Census population statistics, including revised totals after 1970 final totals.



Table 2  
**Land Resource Regions with Population Trends and Density**  
**Appalachian Region**

Appalachian Land Resource Regions	Terrain Type*	Land Area 1970 (square miles)	Population		Population Change		Population Density 1976 (per square mile)
			1976† (thousands)	1970‡ (thousands)	1970-76 (thousands)	1970-76 (percent)	
<b>Appalachian Region</b>	<b>M,H,P</b>	<b>194,871</b>	<b>19,194.4</b>	<b>18,217.1</b>	<b>977.3</b>	<b>5.4%</b>	<b>98</b>
Cumberland Plateau and Mountains	M,H	24,677	1,664.1	1,521.8	142.3	9.4%	67
Mountains	M	9,786	632.8	564.7	68.1	12.1	65
Hill Country	H	14,891	1,031.3	957.1	74.3	7.8	69
Eastern Allegheny Plateau and Mountains	M	17,185	1,227.4	1,182.0	45.4	3.8%	71
Southern Appalachian Ridges and Valleys	M,H,P	30,236	3,065.0	2,849.8	215.2	7.6%	101
Mountains	M	20,264	1,371.1	1,255.8	115.3	9.2	68
East Tennessee Valley	H	5,782	1,196.2	1,113.9	82.3	7.4	207
Valley of Virginia	H	328	32.4	29.6	2.9	9.8	99
Middle Tennessee Valley	P	3,862	465.4	450.6	14.8	3.3	120
Blue Ridge	M	12,783	774.6	705.6	69.0	9.8%	61
Glaciated Allegheny Plateau, Mountain and High Plateau	M,H	21,498	2,266.5	2,193.7	72.8	3.3%	105
Hills and Plateau	M	17,962	1,798.1	1,729.6	68.5	4.0	100
Hills and Plateau	H	3,536	468.4	464.2	4.3	0.9	132
Northern Appalachian Ridges and Valleys	M,H	9,816	957.9	919.9	38.0	4.1%	98
Mountains	M	8,830	782.8	758.4	24.3	3.2	89
Great Valley — Shenandoah Valley	H	986	175.1	161.5	13.7	8.5	178
Highland Run	H	7,147	352.6	318.9	33.7	10.6%	49
Western Allegheny Plateau	H	5,204	391.0	368.2	22.8	6.2%	75
Central Allegheny Plateau	H	20,411	4,093.2	4,131.4	-38.1	-0.9%	201
Pittsburgh Region	H	7,648	3,111.0	3,187.4	-76.3	-2.4	407
Balance of Plateau	H	12,763	982.2	944.0	38.2	4.0	77
Sand Mountain	H	5,253	937.1	893.4	43.8	4.9%	178
Birmingham§	H	1,115	652.7	645.0	7.7	1.2	585
Balance of Sand Mountain	H	4,138	284.5	248.4	36.1	14.5	69
Southern Piedmont	H,P	17,778	2,012.5	1,778.9	233.6	13.1%	113
Hilly (Upper) Piedmont	H	11,441	862.5	766.9	95.6	12.5	75
Central Piedmont	P	6,337	1,150.0	1,012.1	137.9	13.6	181
Lake Erie Lowland**	P	407	272.7	262.7	10.0	3.8%	670
Ohio Till Plains**	P	2,608	257.8	235.2	22.6	9.6%	99
Kentucky Bluegrass	P	2,122	139.9	128.9	11.0	8.5%	66
Nashville Basin	P	646	21.5	20.6	0.9	4.3%	33
Southern Coastal Plain	P	15,537	694.3	644.1	50.2	7.8%	45
Alabama-Mississippi Blackland Prairies	P	1,563	66.1	61.9	4.2	6.8%	42

Source: Based on land resource regions of the United States with data from computer file defined to county units and adapted to Appalachian Region by ARC staff. U.S. Department of Agriculture, *Land Resource Regions and Major Land Resource Areas of the United States*, Agriculture Handbook 296, (Washington, D.C.: U.S. Government Printing Office, 1965).

\*M—mountains and high plateaus. H—hills and low plateaus. P—plains and lowlands.

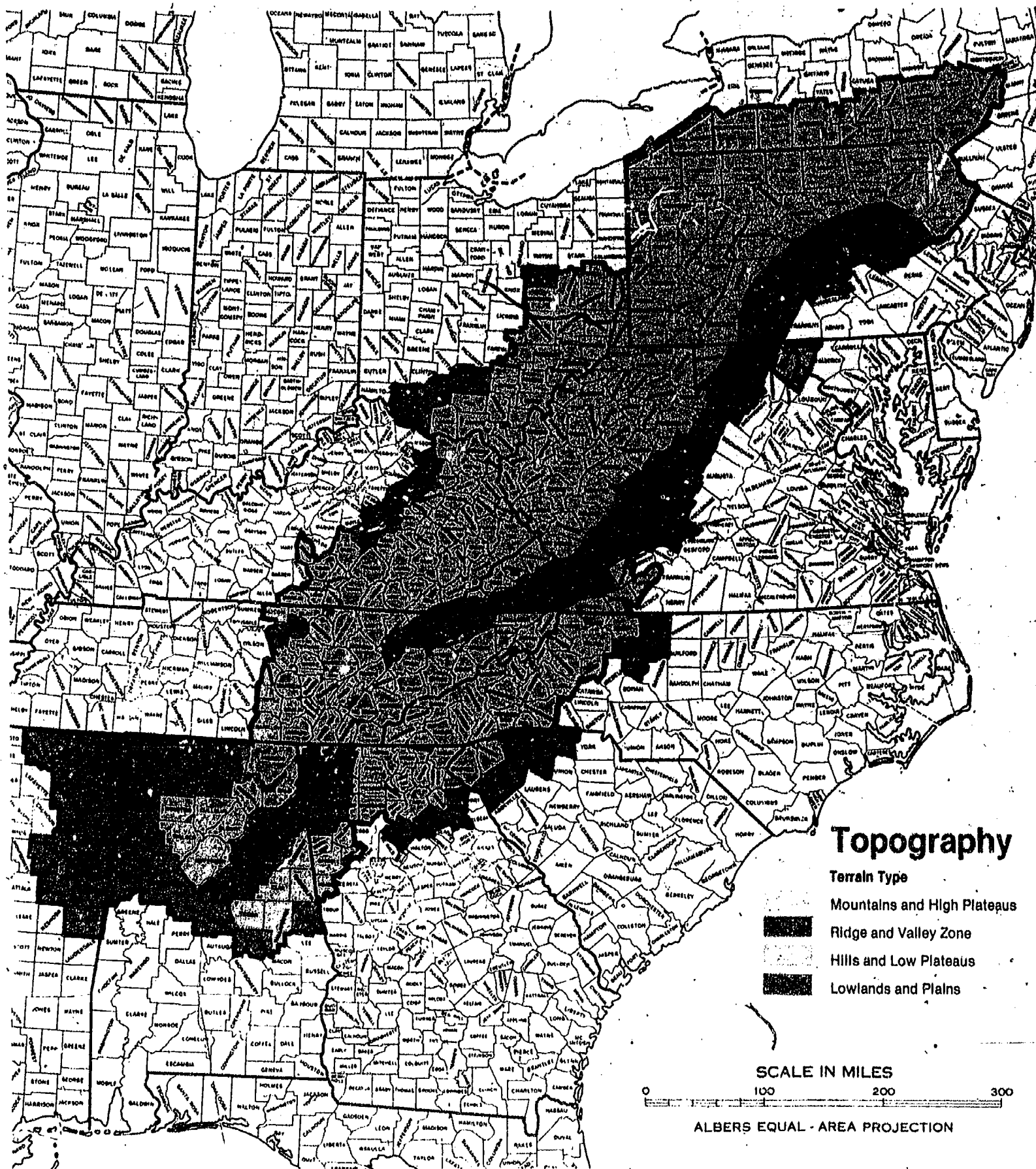
†U.S. Bureau of Census provisional population estimates for July 1, 1976.

‡U.S. Bureau of Census population statistics, including revised totals after 1970 final totals.

§High density area consists of Jefferson County, Alabama.





\*\*Consists of narrow lowland strip parts of Erie County, Pennsylvania and Chautauqua County, New York. Population split estimated for 1976 by the Appalachian Regional Commission.

\*\*Composed of small portions in Ohio of three larger land resource till areas.

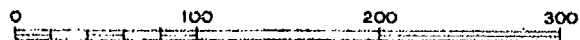


## Topography

### Terrain Type

-  Mountains and High Plateaus
-  Ridge and Valley Zone
-  Hills and Low Plateaus
-  Lowlands and Plains

SCALE IN MILES



ALBERS EQUAL-AREA PROJECTION

# Population





## Population Change in the Appalachian Region

The Appalachian population is estimated to have increased by 1.1 million from 1970 to 1977, a much larger growth than for the two decades (1950-1970) which experienced a gain of only 839,000. From 1970 to mid-1976 the Region gained 597,000 persons from natural increase (61 percent of growth) and 380,000 from net immigration (39 percent of growth). See Tables 3 and 4 on pages 14 and 15 and map on page 16. With 9 percent of the U.S. population, the Region had only 7 percent of the nation's natural increase; a higher rate of net immigration brought the regional population growth rate almost up to the national level.

Southern Appalachia contributed the lion's share of regional growth, with 62 percent of total population gain and the largest amount of immigration. Central Appalachia, with the most rapid rate of growth and of immigration, accounted for 20 percent of the regional population increase. Northern Appalachia had the smallest net gain of only 18 percent of Appalachia's total despite its having over one-half the Region's population. Only one-fifth of Appalachia's 397 counties had net outmigration in the 1970-76 period, and one-half of these counties were in Northern Appalachia.

The 1980 census is just over one year away. The Region continues to advance toward a 1980 projected population between 19.7 and 19.8 million, which would amount to an increase of over 8 percent for the decade of the 1970s or three times its growth rate for the 1960s (2.7 per-

cent). The nation, meanwhile, is projected to have a population growth rate only about two-thirds as high in the 1970s as in the 1960s (9 percent vs. 13.4 percent) See Tables 13 and 14 on pages 34 and 35.

Appalachian Pennsylvania continued to have outmigration in the 1970-76 period. If heavy outmigration from the Pittsburgh metropolitan area (120,400) is excluded, the balance of the Appalachian state part had a net immigration of 51,300 and Northern Appalachia had a net total of 91,200 immigrants. All other Appalachian state parts have had net immigration in the 1970s with the largest numbers in Georgia, Tennessee and Kentucky.

Northern Appalachia has experienced slow population growth despite net outmigration and is approaching a population of 10 million. Southern Appalachia has grown more rapidly than the national average since 1970 with a 1978 population of about seven and one-half million. Central Appalachia reached a peak population at the 1950 Census (2,173,000), then lost population steadily until 1970. It is not likely to recover its previous high in the present decade, though it has already surpassed its 1960 population, despite the lower rate of natural increase.

Natural increase in the 1970-76 period contrasts with the 1960-66 period a decade earlier. In the later period Appalachian births were only 79 percent of the previous number; deaths, 106 percent with natural increase in the later period only 52 percent of the 1960-66 level (597,000 vs. 1,143,000). But estimated net migration in the later period added 380,000, while the earlier period had a net loss of 765,000. Thus the reversal of net migration has accelerated the Region's population increase in spite of the lower natural increase.

## Population Trends in Appalachian Local Development Districts

Almost two-thirds of the Appalachian local development districts (LDDs) had population increases at rates faster than the national average (5.6 percent) in the 1970-76 period, and their gain of 832,000 in population was 85 percent of the total net regional growth (see Tables 5 and 6 on pages 18 and 20 and map on page 17). Only 6 of these 44 districts were in Northern Appalachia. In Central Appalachia 11 districts were in this growth group with an average growth rate of nearly 12 percent. Southern Appalachia accounted for 27 of the 44 districts with above-average or faster growth, but these had seven-tenths of the population total for the entire group.

Districts with below average and slow growth rates were concentrated in Northern Appalachia, which had three-fourths of the total number, with 85 percent of the regional population for this group. Only three districts with below average and slow growth rates were located in Central Appalachia and two in the southern subregion.

Population declines occurred in only four and one-half districts, but only one of these, Southwestern Pennsylvania, had a significant population loss in numbers (71,400). Overall, as the map on page 17 reveals, the principal zone of rapid growth within the Region extended from central eastern Kentucky southward to Atlanta; if the entire zone of above-average growth rates is considered, it extends from eastern West Virginia and southwestern Ohio (Ohio Valley LDD) southward to include nearly all of Central and Southern Appalachia.



Table 3

## Population and Estimated Components of Change Appalachian Region and United States

Geographical Division	Population			1970-1976 Estimated Components of Population Change				
	July 1, 1977* (thousands)	July 1, 1976† (thousands) <sup>a</sup>	April 1, 1970‡ (thousands)	Total Change§ (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)	Total Change (percent)
<b>United States</b>	<b>216,332</b>	<b>214,659</b>	<b>203,305</b>	<b>11,354</b>	<b>20,610</b>	<b>12,113</b>	<b>+2,857</b>	<b>+ 5.6%</b>
<b>Appalachian Region</b>	<b>19,327.3</b>	<b>19,194.4</b>	<b>18,217.1</b>	<b>977.3</b>	<b>1,793.5</b>	<b>1,196.6</b>	<b>+ 380.4</b>	<b>+ 5.4%</b>
<b>Subregions</b>								
<b>Northern</b>								
<b>Appalachia</b>	<b>9,907.0</b>	<b>9,911.3</b>	<b>9,734.0</b>	<b>177.3</b>	<b>873.0</b>	<b>666.5</b>	<b>- 29.2</b>	<b>+ 1.8%</b>
Maryland	215.1	217.4	209.3	8.1	18.1	13.7	+ 3.7	+ 3.9
New York	1,081.7	1,089.8	1,056.6	33.2	95.9	66.5	+ 3.9	+ 3.1
Ohio	1,198.8	1,190.2	1,129.9	60.4	116.4	78.5	+ 22.4	+ 5.3
Pennsylvania	5,924.6	5,955.5	5,930.5	25.0	503.0	409.0	69.1	+ 0.4
West Virginia	1,486.7	1,458.3	1,407.7	50.6	139.6	98.8	+ 9.9	+ 3.6
<b>Central</b>								
<b>Appalachia</b>	<b>1,982.6</b>	<b>1,939.4</b>	<b>1,744.9</b>	<b>194.5</b>	<b>198.5</b>	<b>119.7</b>	<b>+ 145.7</b>	<b>+11.1%</b>
Kentucky	996.5	980.4	876.5	103.9	101.7	59.3	+ 61.5	+11.8
Tennessee	380.8	372.4	334.6	37.8	33.8	22.0	+ 26.0	+11.3
Virginia	232.6	224.3	197.3	26.9	22.6	13.4	+ 17.6	+13.7
West Virginia	372.7	362.4	336.5	25.9	40.4	25.0	+ 10.5	+ 7.7
<b>Southern</b>								
<b>Appalachia</b>	<b>7,437.8</b>	<b>7,343.7</b>	<b>6,738.2</b>	<b>605.5</b>	<b>722.1</b>	<b>410.4</b>	<b>+ 293.8</b>	<b>+ 9.0%</b>
Alabama	2,285.0	2,273.2	2,137.4	135.8	226.2	131.6	+ 41.2	+ 6.4
Georgia	997.6	973.2	813.8	159.3	100.0	47.8	+ 107.1	+19.6
Mississippi	455.0	446.5	418.6	27.8	50.3	28.2	+ 5.8	+ 6.6
North Carolina	1,130.6	1,122.3	1,039.0	83.3	102.2	62.0	+ 43.1	+ 8.0
South Carolina	729.3	729.0	656.4	72.6	72.7	38.5	+ 38.4	+11.1
Tennessee	1,549.5	1,512.4	1,399.9	112.5	145.3	84.3	+ 51.6	+ 8.0
Virginia	290.8	287.1	273.0	14.1	25.4	18.0	+ 6.7	+ 5.2
<b>State Parts<sup>=</sup></b>								
Tennessee	1,930.2	1,884.8	1,734.5	150.3	179.0	106.3	+ 77.6	+ 8.7%
Virginia	523.4	511.3	470.3	41.0	48.1	31.4	+ 24.4	+ 8.7
West Virginia**	1,859.4	1,820.7	1,744.2	76.5	179.9	123.8	+ 20.4	+ 4.4

Source: 1977 estimates compiled by ARC staff from U.S. Bureau of Census county estimates published in *Population Estimates*, Series P-26, September 1978 to January 1979; 1976 estimates with components of change from U.S. Bureau of Census county estimates published in *Population Estimates*, Series P-26 and P-25, June 1977 to January 1978, individual state reports.

Note: All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

\*U.S. Bureau of Census provisional state estimates.

†U.S. Bureau of Census provisional population estimates for July 1, 1976.

‡Revised 1970 U.S. Bureau of Census population data.

§Change between April 1, 1970, and estimated July 1, 1976, population after post-census late corrections to 1970 population totals.

<sup>=</sup> Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

\*\*Entire state.

Table 4

**Population Trends and Annual Rates of Change  
Appalachian Region and United States  
1960-1976**

Geographical Division	Population				Annual Rate of Change		
	July 1, 1976* (thousands)	April 1, 1970† (thousands)	July 1, 1966 (thousands)	April 1, 1960 (thousands)	1970-76 (percent)	1966-70 (percent)	1960-66 (percent)
United States	214,659	203,305	195,531	179,311	0.87%	1.0 %	1.4 %
Appalachian Region	19,194.4	18,217.1	18,105.5	17,726.6	0.84%	0.16%	0.34%
<b>Subregions</b>							
<b>Northern Appalachia</b>	<b>9,911.3</b>	<b>9,734.0</b>	<b>9,737.8</b>	<b>9,705.6</b>	<b>0.3%</b>	<b>-0.01%</b>	<b>0.05%</b>
Maryland	217.4	209.3	209.7	195.8	0.6	-0.05	1.1
New York	1,089.8	1,056.6	1,060.1	1,000.1	0.5	-0.1	0.9
Ohio	1,190.2	1,129.9	1,150.9	1,119.6	0.8	-0.5	0.4
Pennsylvania	5,955.5	5,930.5	5,896.8	5,930.8	0.07	0.15	-0.1
West Virginia	1,458.3	1,407.7	1,420.0	1,459.4	0.6	-0.2	-0.4
<b>Central Appalachia</b>	<b>1,939.4</b>	<b>1,744.9</b>	<b>1,816.6</b>	<b>1,879.1</b>	<b>1.7%</b>	<b>-1.1 %</b>	<b>-0.5 %</b>
Kentucky	980.4	876.5	912.6	922.2	1.8	-1.1	-0.2
Tennessee	372.4	334.6	338.2	327.7	1.7	-0.3	0.5
Virginia	224.3	197.3	210.8	228.2	2.1	-1.8	-1.3
West Virginia	362.4	336.5	354.9	401.0	1.2	-1.4	-1.9
<b>Southern Appalachia</b>	<b>7,343.7</b>	<b>6,738.2</b>	<b>6,551.3</b>	<b>6,141.8</b>	<b>1.4%</b>	<b>0.75%</b>	<b>1.0 %</b>
Alabama	2,273.2	2,137.4	2,132.0	1,982.3	1.0	0.07	1.2
Georgia	973.2	813.8	746.1	675.0	2.9	2.3	1.6
Mississippi	446.5	418.6	415.6	406.2	1.0	1.9	0.4
North Carolina	1,122.3	1,039.0	1,013.2	939.7	1.2	0.7	1.2
South Carolina	729.0	656.4	610.2	586.5	1.7	2.0	0.6
Tennessee	1,512.4	1,399.9	1,358.2	1,280.0	1.2	0.8	0.95
Virginia	287.1	273.0	276.0	272.1	0.8	-0.3	0.2
<b>State Parts‡</b>							
Tennessee	1,884.8	1,734.5	1,696.4	1,607.1	1.3%	0.6%	0.9 %
Virginia	511.3	470.3	486.8	500.3	1.3	-0.9	-0.4
West Virginia§	1,820.7	1,744.2	1,774.9	1,860.4	0.7	-0.5	-0.75

Source: Compiled by ARC from U.S. Bureau of the Census, 1976 county population estimates, 1970 Census of Population (revised data) and 1960 Census of Population. 1966 population estimates based on census county population estimates for July 1, 1966, revised and adjusted by ARC to new state total estimates developed by U.S. Bureau of the Census (data published in Series P-25, no. 460, Table 1) in 1971.

Note: All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

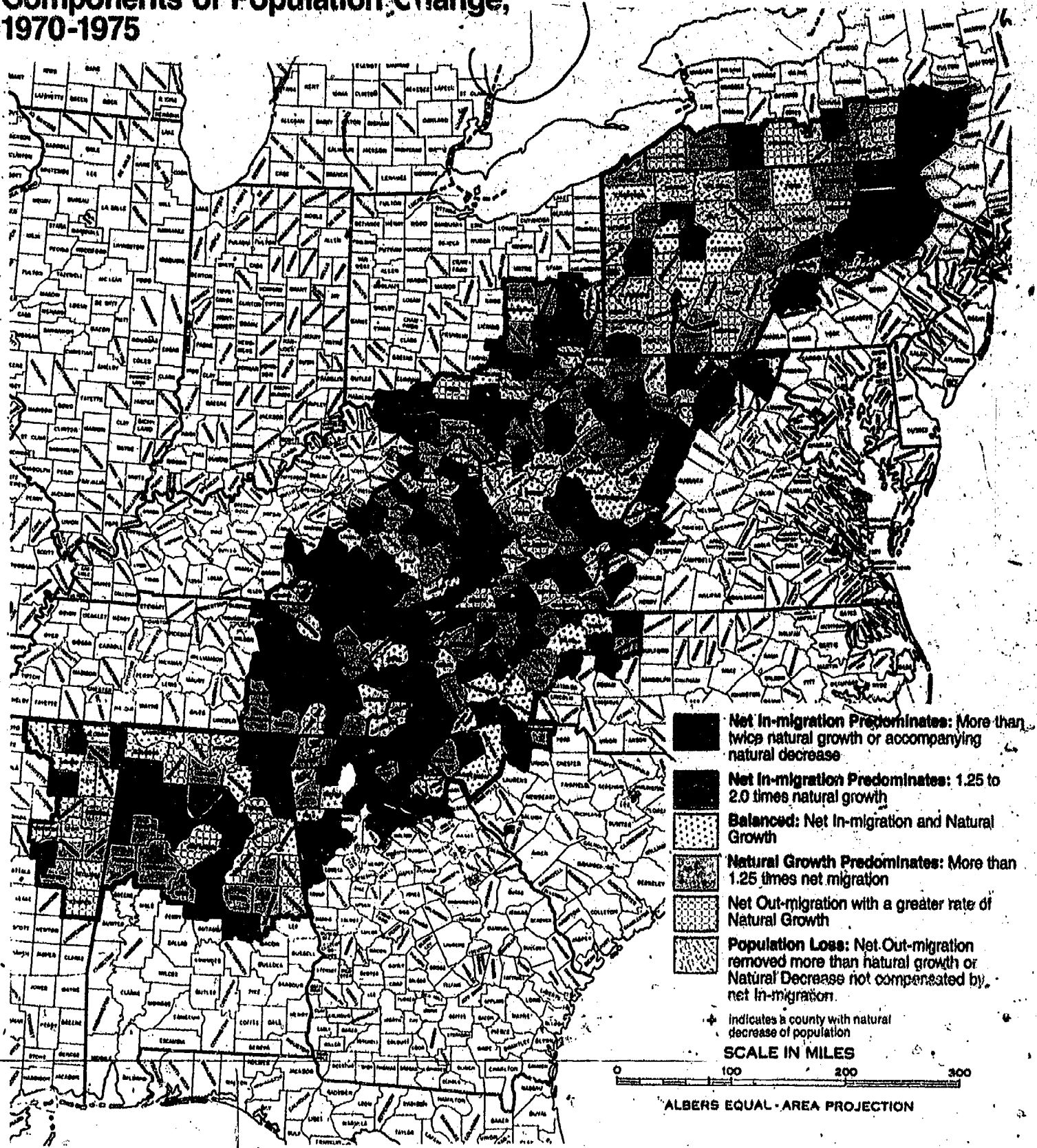
\*U.S. Bureau of Census provisional population estimates for July 1, 1976.

†Revised 1970 U.S. Bureau of Census population data.

‡Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

§Entire state.

# Components of Population Change, 1970-1975





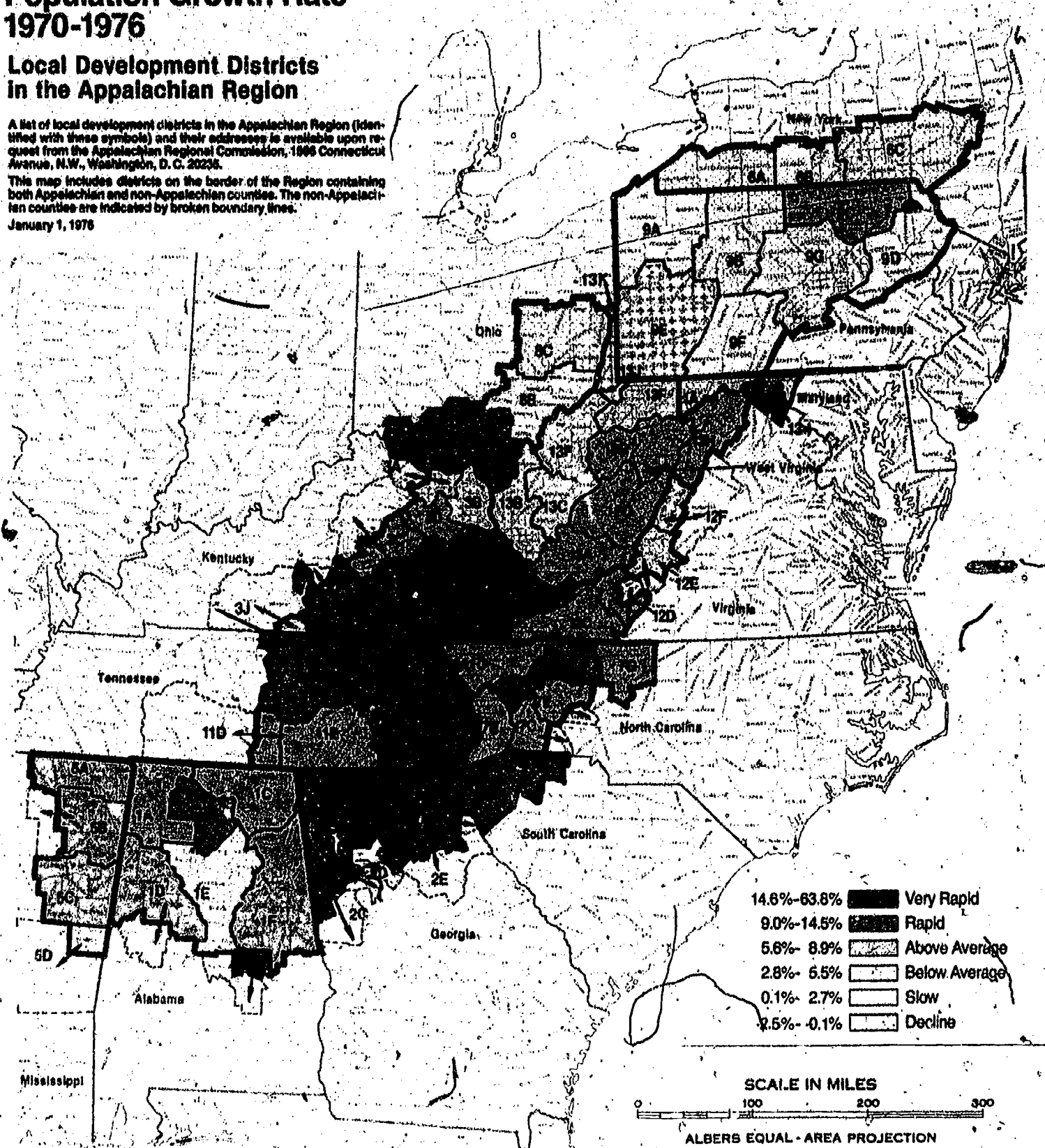
# Population Growth Rate 1970-1976

## Local Development Districts in the Appalachian Region

A list of local development districts in the Appalachian Region (identified with these symbols) and their addresses is available upon request from the Appalachian Regional Commission, 1906 Connecticut Avenue, N.W., Washington, D. C. 20238.

This map includes districts on the border of the Region containing both Appalachian and non-Appalachian counties. The non-Appalachian counties are indicated by broken boundary lines.

January 1, 1976



14.6%-63.8% Very Rapid  
 9.0%-14.5% Rapid  
 5.6%- 8.9% Above Average  
 2.8%- 6.5% Below Average  
 0.1%- 2.7% Slow  
 -2.5%- -0.1% Decline

SCALE IN MILES  
 0 100 200 300  
 ALBERS EQUAL-AREA PROJECTION



Table 5

**Population and Estimated Components of Change  
Appalachian Region and Local Development Districts  
April 1970-July 1976**

LDD Code	State and Local Development District	Population		1970-76 Estimated Components of Population Change					
		July 1, 1976* (thousands)	April 1, 1970* (thousands)	Total Change* (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)	Change (percent)	Net Migration (percent)
	<b>Appalachian Region</b>	<b>19,194.4</b>	<b>18,217.1</b>	<b>977.3</b>	<b>1,793.5</b>	<b>1,196.6</b>	<b>380.4</b>	<b>5.4%</b>	<b>2.1%</b>
	<b>Alabama:</b>								
1A	NW Alabama	196.8	182.1	14.7	18.7	11.6	7.5	8.1%	4.1%
1B	North Central Alabama	172.3	157.0	15.2	17.2	8.9	6.9	9.7	4.4
1C	Top of Alabama	384.2	363.6	20.6	38.3	18.3	0.6	5.7	0.2
1D	West Alabama <sup>§</sup>	192.6	180.8	11.9	19.5	10.9	3.3	6.6	1.8
1E	Birmingham Regional	863.7	819.3	44.4	83.5	53.2	14.2	5.4	1.7
1F	East Alabama	423.7	400.9	22.7	44.7	26.3	4.3	5.7	1.1
1H	Central Alabama <sup>§</sup>	39.9	33.7	6.2	4.2	2.3	4.4	18.5	12.9
	<b>Georgia:</b>								
2A	Coosa Valley	334.6	302.7	31.9	34.9	18.8	15.7	10.5%	5.2%
2B	Georgia Mountains	202.5	176.8	25.7	19.5	10.3	16.6	14.5	9.4
2C	Chattahoochee-Flint <sup>§</sup>	60.0	50.8	9.2	6.5	3.2	5.9	18.1	11.6
2D	Atlanta Regional <sup>§</sup>	165.5	101.0	64.5	16.8	4.9	52.6	63.8	52.1
2E	NE Georgia <sup>§</sup>	58.7	51.5	7.3	5.9	3.3	4.6	14.1	9.0
2F	North Georgia	151.9	131.1	20.8	16.4	7.2	11.6	15.9	8.9
	<b>Kentucky:</b>								
3A	Buffalo Trace <sup>§</sup>	24.8	23.7	1.1	2.5	1.7	0.3	4.6%	1.3%
3B	FIVCO	128.8	122.1	6.8	12.7	7.8	1.9	5.5	1.6
3C	Bluegrass <sup>§</sup>	123.2	113.4	9.8	12.0	7.0	4.7	8.7	4.2
3D	Gateway	59.4	55.7	3.8	6.2	3.6	1.1	6.8	2.0
3E	Big Sandy	159.3	134.3	25.0	17.4	8.7	16.2	18.6	12.1
3F	Lake Cumberland <sup>§</sup>	139.7	123.9	15.8	12.8	9.1	12.2	12.8	9.8
3H	Cumberland Valley	209.7	184.5	25.1	22.8	13.5	15.8	13.6	8.6
3I	Kentucky River	123.5	107.2	16.2	14.1	7.0	9.2	15.1	8.5
3J	Barren River <sup>§</sup>	11.9	11.6	0.2	1.1	0.9	0.0	2.0	0.4
	<b>Maryland:</b>								
4A	Tri-County	217.4	209.3	8.1	18.1	13.7	3.7	3.9%	1.8%
	<b>Mississippi:</b>								
5A	NE Mississippi	118.4	109.6	8.8	12.5	7.7	3.9	8.0%	3.6%
5B	Three Rivers <sup>§</sup>	160.4	150.3	10.1	17.9	10.6	2.7	6.7	1.8
5C	Golden Triangle	157.6	148.5	9.2	18.6	9.2	0.2	6.2	0.1
5D	East Central Mississippi <sup>§</sup>	10.1	10.2	- 0.2	1.2	0.7	- 0.6	- 1.6	- 6.1
	<b>New York:</b>								
6A	Southern Tier West	284.4	275.4	9.0	26.2	18.8	1.6	3.3%	0.6%
6B	Southern Tier Central	218.8	217.8	0.9	20.2	14.1	5.1	0.4	2.4
6C	Southern Tier East	586.6	563.3	23.3	49.5	33.7	7.4	4.1	1.3
	<b>North Carolina:</b>								
7A	SW North Carolina	126.5	116.0	10.5	10.9	7.2	6.8	9.0%	5.8%
7B	Land-of-Sky	238.9	223.6	15.3	20.3	14.9	9.9	6.9	4.4
7C	Isothermal <sup>§</sup>	98.8	89.7	7.1	9.4	5.8	3.6	7.9	4.0
7D	Region D	154.1	139.4	14.7	13.6	8.3	9.3	10.5	6.7
7E	Western Piedmont <sup>§</sup>	147.1	136.5	10.5	15.0	7.0	2.5	7.7	1.8
7G	NW North Carolina	359.0	333.8	25.2	33.6	18.7	10.9	7.6	3.3
	<b>Ohio:</b>								
8A	Ohio Valley	487.1	445.9	41.2	48.6	29.9	22.6	9.2%	5.1%
8B	Buckeye Hills-Hocking Valley	222.9	219.0	3.9	71.2	14.7	2.5	1.8	1.2
8C	Ohio Mid-Eastern	480.2	464.9	15.3	46.6	33.8	2.4	3.3	0.5
	<b>Pennsylvania</b>								
9A	NW Pennsylvania	752.3	733.0	19.3	70.1	48.1	- 2.7	2.6%	- 0.4%

LDD Code	State and Local Development District	Population		1970-76 Estimated Components of Population Change					
		July 1, 1976* (thousands)	April 1, 1970† (thousands)	Total Change‡ (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)	Change (percent)	Net Migration (percent)
9B	North Central Pennsylvania	237.9	231.5	6.4	22.7	17.0	0.7	2.8	0.3
9C	Northern Tier	170.7	157.0	13.6	16.7	10.5	7.4	8.7	4.7
9D	NE Pennsylvania	896.2	873.9	22.2	69.0	72.1	25.4	2.5	2.9
9E	SW Pennsylvania	2,803.7	2,875.1	-71.4	226.1	189.7	-107.8	2.5	-3.8
9F	Southern Alleghenies	497.3	490.4	6.8	45.5	35.0	3.6	1.4	-0.7
9G	SEDA-COG	597.5	569.6	27.9	52.9	36.6	11.6	4.9	2.0
10A	South Carolina: SCACOG	729.0	656.4	72.6	72.7	38.5	38.4	11.1%	5.9%
	Tennessee:								
11A*	Upper Cumberland	216.9	193.7	23.2	49.1	13.3	17.4	12.0%	9.0%
11B	East Tennessee	767.6	701.0	66.6	69.9	42.1	38.8	9.5	5.5
11C	First Tennessee-Virginia	384.4	359.4	24.9	36.8	20.9	9.0	6.9	2.5
11D	South Central Tennessee§	63.9	59.9	4.0	6.0	3.7	1.7	6.7	2.9
11E	SE Tennessee	452.1	420.5	31.6	47.3	26.4	10.7	7.5	2.5
	Virginia:								
12A	LENOWISCO	98.1	84.8	13.2	9.3	6.3	10.3	15.6%	12.1%
12B	Cumberland Plateau	126.2	112.5	13.7	13.4	7.0	7.4	12.2	6.5
12C	Mount Rogers	168.8	159.4	9.4	14.7	10.3	5.1	5.9	3.2
12D	New River Valley§	59.4	56.1	3.3	5.9	3.8	1.2	5.9	2.2
12E	Fifth District§	51.2	49.7	1.4	4.4	3.3	0.3	2.9	0.7
12F	Central Shenandoah§	7.7	7.7	0.0	0.6	0.6	0.1	0.5	0.8
	West Virginia:								
13A	Region 1	257.9	238.5	19.3	27.8	17.9	9.4	8.1%	3.9%
13B	Region 2	274.8	266.8	8.0	29.5	18.5	3.0	3.0	-1.1
13C	B-C-K-P (Region 3)	293.5	291.6	1.9	28.9	18.8	8.2	0.6	-2.8
13D	Gauley	132.4	122.7	9.7	12.8	10.1	7.0	7.9	5.7
13E	Mid-Ohio Valley	166.5	160.4	6.1	15.7	10.6	1.0	3.8	0.6
13F	Region 6	256.2	243.8	12.4	23.9	17.8	6.3	5.1	2.6
13G	Region 7	111.3	103.5	7.9	10.0	8.0	5.8	7.6	5.6
13H	Region 8	64.3	59.3	5.0	6.1	4.2	3.2	8.5	5.3
13I	Eastern Panhandle	73.9	66.2	7.7	6.9	4.8	5.6	11.7	8.5
13J	Bel-O-Mar	119.8	121.4	-1.6	11.7	9.1	4.2	1.3	-3.5
13K	B-H-J (Region 11)	70.2	70.2	0.0	6.5	4.0	2.5	0.1	-3.5

Source: 1976 provisional population estimates with components of change compiled and tabulated by ARC staff from U.S. Bureau of Census county estimates published in *Population Estimates*, Series P-26 and P-25, July 1977 to January 1978, individual state reports.

Note: All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

\*U.S. Bureau of Census provisional population estimates for July 1, 1976.

†Revised 1970 U.S. Bureau of Census population data.

‡Change between April 1, 1970, and estimated July 1, 1976, population after post-census late corrections to 1970 population totals.

§Data are only for that portion of the local development district in the Appalachian Region.

¶Includes Perry County, Pennsylvania.

Table 6

### Summary of Local Development District Population Trends Appalachian Region 1970-1976

Subregion or Item	Population Growth Rate				
	Rapid/Very Rapid	Above Average	Below Average	Slow	Decline
<b>Appalachian Region</b> (with 69 LDDs)	21	23	12	8½	4½
Northern Appalachia (23½ LDDs)	2	4	8	7½	2
Central Appalachia (14½ LDDs)	7½	3½	2	1	½
Southern Appalachia (31 LDDs)	11½	15½	2	0	2
Percent of Districts (in the Appalachian Region)	30½%	33½%	17½%	12½%	6%
1970 Population (in thousands)	4,070	4,316	3,733	3,076	3,021
Percent of Population (in the Appalachian Region)	22½%	23½%	20½%	17%	16½%
1970-76 Population Change (in thousands)	526	305	162	57	-73
Percent of Population Change (in the Appalachian Region)	54%	31%	16½%	6%	-7½%
1970-76 Average Growth Rate	12.9%	7.1%	4.3%	1.8%	-2.4%

Source: Tabulations of data presented in Table 5.

Note: Three local development districts are split by subregional boundaries. Each part is counted as one-half.



## Population Concentration and Dispersal in the Appalachian Region

In 1976 population density in the Appalachian Region was 99 per square mile. This was higher than the overall U.S. average (72 per square mile, excluding Alaska and Hawaii) but little more than one-half the density (181 per square mile) of the non-Appalachian United States east of the Mississippi River. Density within the Region varies widely from over 2,000 in Allegheny County, Pennsylvania, to 6 in Highland County, Virginia.

One-fifth of the Region's population lives in the single great concentration surrounding Pittsburgh and extending into northern West Virginia and eastern Ohio—the 21 counties in the high-density region covered 5.7 percent of regional land area and had an average 1976 population density of 352 per square mile. This area has lost an estimated 68,000 population since 1970. Elsewhere in Appalachia, population has generally increased (see map on page 16). No other concentration has more than 6 percent of the Region's population.

At the state-part level, in addition to Appalachian Pennsylvania, only South Carolina, Maryland and southern Appalachian Tennessee had 1976 densities averaging over 100 per square mile or higher than the regional average.

Dispersed population is population not clustered in communities of 1,000 or more inhabitants. In the Appalachian Region 45 percent of the total 1970 population was dispersed in small communities or scattered, contrasting with only about 20 per-

cent of the total population in surrounding areas of the eastern United States. The northern subregion has the least dispersal (38 percent), followed by the southern (49 percent) and central (71 percent) subregions. Within state areas the dispersed population varied from 31 percent of the total in Appalachian Pennsylvania to 77 percent in central Appalachian Virginia (see Table 7 on page 22).

## Population Growth Trends by County Groups in the Appalachian Region

In 1976 one-half of the Appalachian population lived in metropolitan counties (42 percent in major metropolitan and 8 percent in peripheral metropolitan), one-quarter lived in urban counties and one-quarter in rural counties. This compares with U.S. proportions of 73 percent metropolitan and 27 percent nonmetropolitan. Thus, Appalachian population in nonmetropolitan counties is almost twice the U.S. proportion.

Since 1970 nonmetropolitan areas have grown much more rapidly than metropolitan areas both in the Region (7.65 percent vs. 3.1 percent) and in the nation (7.8 percent vs. 4.8 percent). Natural change for the Region's metropolitan areas in the 1970-76 period was quite low (2.9 percent) compared with the U.S. rate (4.4 percent). This was primarily due to the extremely low rate of natural population growth in Northern Appalachia (1.7 percent), which contained 58 percent of the Region's metropolitan population in 1970 and 56 percent in 1976. Natural growth in nonmetropolitan counties in Appalachia (3.6 percent) was less than

that in the United States (3.8 percent). Net migration rates for the six-year period in the Region were lower than for the nation (0.2 percent vs. 0.5 percent) for metropolitan counties but the same (4.0 percent) for nonmetropolitan counties. But, because of the Region's greater mix of the latter, the total net migration rate (2.1 percent) for the Region exceeded the national rate (1.4 percent).

The subregions differ sharply in growth trends and components. Northern Appalachian rates are well below the regional average in every group, reflecting an overall sluggish growth performance. In Central Appalachia the metropolitan counties resemble their northern counterparts, while urban counties and rural counties increased at rates faster than in Southern Appalachia. Southern Appalachian growth rates were consistently above national averages. Major metropolitan counties had a low rate of net immigration in contrast to a phenomenal rate of immigration to peripheral metropolitan counties, which resulted in an overall southern metropolitan immigration of 4.1 percent. See the map on page 23 and Table 8 on page 24.

## The Metropolitan-Urban-Rural System of County Classification

With the continuing spread of population settlement into "rural" areas surrounding large metropolitan and urban centers, and even smaller urban centers, the usual separation of urban and rural population has become less useful. Large numbers of "urban noncity" people are living in "rural" areas purely for residential purposes. One result of this diffused city development is that the county has become more significant as a



Table 7  
**Population Concentration**  
**Appalachian Region and United States**  
**1970-1976**

Geographical Division	Land Area 1970 (square miles)	Population July 1, 1976* (thousands)	Density 1976† (per square mile)	Population April 1, 1970‡ (thousands)	Clustered Population§ 1970 (thousands)	Clustered Population 1970 (percent)	Dispersed Population 1970 (percent)
<b>United States</b> (48 states and Washington, D.C.)	2,963,998	213,391	72.0	203,304	—	78. %	22. %
<b>Appalachian Region</b>	194,871	19,194.4	98.5†	18,217.1	10,031.0	55.1%	44.9%
<b>Subregions</b>							
<b>Northern Appalachia</b>	83,581	9,911.3	118.6†	9,734.0	6,057.6	62.2%	37.8%
Maryland	1,546	217.4	140.6	209.3	110.6	52.8	47.2
New York	11,806	1,089.8	92.3	1,056.6	600.9	56.9	43.1
Ohio	13,732	1,190.2	86.7	1,129.9	530.8	47.0	53.0
Pennsylvania	36,626	5,955.5	162.7†	5,930.5	4,094.6	69.0	31.0
West Virginia	19,871	1,458.3	73.4	1,407.7	720.7	51.2	48.8
<b>Central Appalachia</b>	31,906	1,939.4	60.8	1,744.9	507.2	29.1%	70.9%
Kentucky	16,942	980.4	57.9	876.5	240.8	27.5	72.5
Tennessee	7,528	372.4	49.5	334.6	113.3	33.9	66.1
Virginia	3,237	224.3	69.3	197.3	45.7	23.1	76.9
West Virginia	4,199	362.4	86.3	336.5	107.4	31.9	68.1
<b>Southern Appalachia</b>	79,384	7,343.7	92.5	6,738.2	3,466.2	51.4%	48.6%
Alabama	24,600	2,273.2	92.4	2,137.4	1,351.6	63.2	36.8
Georgia	10,804	973.2	90.1	813.8	280.5	34.5	65.5
Mississippi	10,313	446.5	43.3	418.6	157.6	37.6	62.4
North Carolina	11,884	1,122.3	94.4	1,039.0	405.9	39.1	60.9
South Carolina	3,912	729.0	186.4	656.4	400.0	60.9	39.1
Tennessee	11,710	1,512.4	129.2	1,399.9	779.9	55.7	44.3
Virginia	6,161	287.1	46.6	273.0	90.8	33.3	66.7
<b>State Parts=</b>							
Tennessee	19,238	1,884.8	98.0	1,734.5	893.2	51.5%	48.5%
Virginia	9,398	511.3	54.4	470.3	136.5	29.0	71.0
West Virginia**	24,070	1,820.7	75.6	1,744.2	828.1	47.5	52.5
<b>Non-Appalachian, States East of Mississippi River</b>	658,451	118,884	180.6	114,596.1	—	79.5%	20.5%

Source: 1970 Census of Population, published and unpublished data, tabulated by ARC staff.

Note: The Clustered Population percentages for the United States and the Non-Appalachian States East of Mississippi River were estimated from available data.

\*U.S. Bureau of Census provisional population estimates for July 1, 1976.

†1976 density adjusted for new Raytown Reservoir in Pennsylvania (11 square miles), but all data otherwise pertain to 1970 land areas.

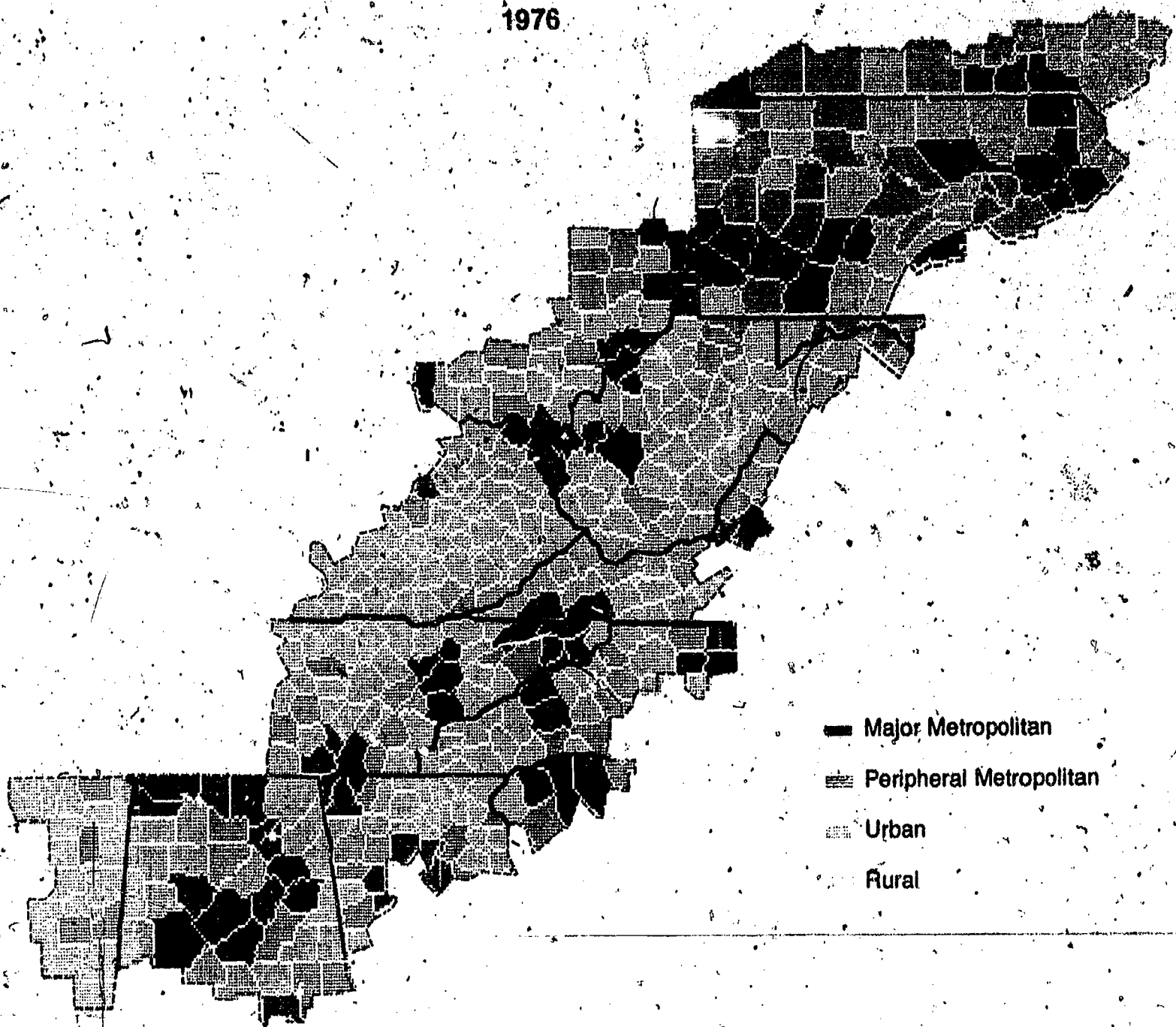
‡Revised U.S. Bureau of Census population data.

§Clustered population: population living in communities of 1,000 or more inhabitants. 1970 data is most recent available.

= Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

\*\*Entire state.

**Metropolitan, Urban and Rural Counties  
Appalachian Region  
1976**



- Major Metropolitan
- ▨ Peripheral Metropolitan
- ▤ Urban
- ▦ Rural

Source: Map produced by composite mapping system developed by the U.S. Department of Commerce, Economic Development Administration and furnished to the Appalachian Regional Commission.

Table 8

**Population Trend and Estimated Components of Change  
Appalachian Region, Subregions and County Group (metro, urban, rural)  
April 1970-July 1976**

Geographical Division	Population		1970-76 Estimated Components of Population Change					
	July 1, 1976* (thousands)	April 1, 1970† (thousands)	Total Change‡ (thousands)	Natural Change (thousands)	Net Migration (thousands)	Total Change (percent)	Natural Change (percent)	Net Migration (percent)
<b>Appalachian Region</b>	<b>19,194.4</b>	<b>18,217.1</b>	<b>977.3</b>	<b>597.0</b>	<b>380.3</b>	<b>5.4%</b>	<b>3.3%</b>	<b>2.1%</b>
Metropolitan Counties	9,506.5	9,217.8	288.7	269.4	19.3	3.1	2.9	0.2
Major Metropolitan	7,995.6	7,920.9	74.7	203.7	-129.0	0.9	2.6	-1.6
Peripheral Metropolitan	1,510.9	1,296.9	214.1	65.7	148.4	16.5	5.1	11.4
Urban Counties	4,845.5	4,580.2	265.4	156.4	109.0	5.8	3.4	2.4
Rural Counties	4,842.3	4,419.1	423.2	171.1	252.1	9.6	3.9	5.7
<b>Subregions</b>								
<b>Northern Appalachia</b>	<b>9,911.3</b>	<b>9,734.0</b>	<b>177.3</b>	<b>206.5</b>	<b>-29.2</b>	<b>1.8%</b>	<b>2.1%</b>	<b>-0.3%</b>
Metropolitan Counties	5,316.5	5,353.7	-37.2	93.5	-130.7	-0.7	1.7	-2.4
Major Metropolitan	4,900.9	4,974.7	-73.7	79.9	-153.6	-1.5	1.6	-3.1
Peripheral Metropolitan	415.6	379.0	36.5	13.7	22.9	9.6	3.6	6.0
Urban Counties	2,862.0	2,770.3	91.8	65.4	26.4	3.3	2.4	1.0
Rural Counties	1,732.8	1,610.1	122.7	47.6	75.1	7.6	3.0	4.7
<b>Central Appalachia</b>	<b>1,939.4</b>	<b>1,744.9</b>	<b>194.5</b>	<b>78.8</b>	<b>115.7</b>	<b>11.1%</b>	<b>4.5%</b>	<b>6.6%</b>
Metropolitan Counties	201.1	194.3	6.7	7.4	-0.8	3.5	3.8	-0.4
Major Metropolitan	115.1	112.7	2.4	4.0	-1.7	2.1	3.6	-1.5
Peripheral Metropolitan	86.0	81.7	4.4	3.4	1.0	5.3	4.2	1.2
Urban Counties	344.6	309.4	35.2	12.4	22.8	11.4	4.0	7.4
Rural Counties	1,393.7	1,241.1	152.6	59.0	93.6	12.3	4.8	7.5
<b>Southern Appalachia</b>	<b>7,343.7</b>	<b>6,738.2</b>	<b>605.5</b>	<b>311.7</b>	<b>293.8</b>	<b>9.0%</b>	<b>4.6%</b>	<b>4.4%</b>
Metropolitan Counties	3,989.0	3,669.8	319.2	168.5	150.7	8.7	4.6	4.1
Major Metropolitan	2,979.6	2,833.6	146.0	119.8	26.2	5.2	4.2	0.9
Peripheral Metropolitan	1,009.4	836.2	173.2	48.7	124.5	20.7	5.8	14.9
Urban Counties	1,638.9	1,500.5	138.4	78.7	59.7	9.2	5.2	4.0
Rural Counties	1,715.8	1,567.9	147.9	64.5	83.4	9.4	4.1	5.3

Source: Compiled by ARC from U.S. Bureau of Census "Estimates of the Population of (name of state), Counties and Metropolitan Areas: July 1, 1975, Revised and 1976 Provisional (also contains corrected 1970 census data), *Current Population Reports*, Series P-26 and Series P-25, Washington, 1977-78. 13 reports for Appalachian states. Unpublished data tabulations processed by ARC data systems staff.

Note: All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

\*U.S. Bureau of Census provisional population estimates for July 1, 1976.

†Revised 1970 U.S. Bureau of Census population data.

‡Change between April 1, 1970, and estimated July 1, 1976, population after post-census late corrections to 1970 population totals.



statistical unit. The typical county in the eastern half of the United States has a land area of 400 to 600 square miles (about 20 to 25 miles square). With widespread automobile ownership this may constitute a "commuting" community or a geographic market area. Thus whole counties may be classified according to their population settlement character, using population density, size of the urban places or areas and proportion of population classified as urban (i.e., in urban places or fringes at densities of 1,000 per square mile or more).

Three categories have been distinguished in the system used for our regional study:

(1) **Metropolitan County.** Centered around an urban area of at least 50,000 population and with a total county population of at least 75,000, this group includes not only the central county but adjoining commuting counties meeting certain criteria established by the U.S. Office of Management and Budget (OMB).

(a) **Major Metropolitan.** In addition to meeting OMB criteria for a metropolitan county, a major metropolitan county must have (1) population density (1970) of 100 per square mile or higher, (2) at least 50 percent of its total population classified as urban, or (3) total urban population is 25,000 or more and largest urban place, cluster or urbanized area fringe has 15,000 or more population. The county must meet two of these three criteria.

(b) **Peripheral Metropolitan.** All other metropolitan counties with lesser densities or urbanization which would qualify otherwise as either urban or rural counties.

(2) **Urban County.** Any county (other than metropolitan) which meets two of these three criteria:

(a) Population density is at least 70 per square mile.

(b) Urban population is at least one-third of county total.

(c) County urban population is at least 15,000 OR largest urban place or urban cluster (group of contiguous places) has 10,000 or more population. (under (c) for places split by county lines, at least one-half must be in the county)

3. **Rural County.** Any county not meeting criteria for either metropolitan or urban classification; in general, counties with small towns or no urban places at all.

## Population Ethnicity in the Appalachian Region

The percentage of white population in the Appalachian Region in 1970 was 93 percent compared to 88 percent in the United States. Blacks composed 7 percent of the Region's population (11 percent nationally), while American Indians and other races (chiefly Asiatic) numbered only 0.2 percent of the Region's people (see Table 9 on page 26). There is great diversity within the Region, however. Black population varied from 29 percent of the total in Appalachian Mississippi to 1 percent in Appalachian New York. Asiatic population was widely scattered, but 35 percent of the Region's American Indians were found in four counties: three in North Carolina (Swain, Jackson and Graham) with 3,174 Indians; and Cattaraugus County, New York, with 1,318 Indians. Two rural counties in the Region, Kemper, Mississippi, and Bledsoe, Tennessee, had over 1 percent Indian population in 1970; the remaining Indians were widely scattered. Black population in Northern Appalachia was concentrated in the metropolitan and urban counties,

while in parts of Central and Southern Appalachia significant black population was found in rural counties.

Population of foreign birth in the Region numbered 1,521,000 in 1970, or 8.35 percent of the regional population; the U.S. proportion was 16.5 percent. This population was concentrated in Northern Appalachia. National origin data show that Italy was the leading source (20 percent), followed by Poland (12.5 percent), Germany (10.5 percent), the United Kingdom (10 percent), Czechoslovakia and Austria (each just under 8 percent). Western Hemisphere immigrants, including Mexicans, were very small in number compared with some other sections of the nation, as were persons of Asian and African origin.

## Elderly Population, 65 years and older, in the Appalachian Region

The Appalachian Region has had a higher proportion of elderly population than the nation since 1960. The gap widened in the 1960s, while since 1970 the Region has remained consistently higher, increasing at about the same rate as the nation.

### Proportion of Elderly to Total Population

	1960	1970	1976
United States	9.2%	9.8%	10.7%
Appalachian Region	3.4%	10.5%	11.4%

Appalachian elderly population numbered 2.2 million persons in 1976, increasing by one-seventh above the 1970 number (1.9 million).

Table 9

**Population by Major Racial Group  
Appalachian Region and United States  
1970**

Geographical Division	1970 Population*						
	Total (thousands)	White (thousands)	Black (thousands)	American Indian (thousands)	Other Races† (thousands)	White (percent)	Black (percent)
<b>United States</b> (48 states and Washington, D.C.)	<b>203,211,926</b>	<b>177,748,975</b>	<b>22,580,289</b>	<b>792,730</b>	<b>2,089,932</b>	<b>87.5%</b>	<b>11.1%</b>
<b>Appalachian Region</b>	<b>18,212,232</b>	<b>16,889,364</b>	<b>1,284,405</b>	<b>12,760</b>	<b>25,703</b>	<b>92.7%</b>	<b>7.1%</b>
<b>Subregions</b>							
<b>Northern Appalachia</b>	<b>9,733,113</b>	<b>9,417,145</b>	<b>293,544</b>	<b>5,230</b>	<b>17,194</b>	<b>96.8%</b>	<b>3.0%</b>
Maryland	209,349	204,515	4,460	80	294	97.7	2.1
New York	1,056,367	1,039,033	11,889	2,102	3,343	98.4	1.1
Ohio	1,129,350	1,102,055	25,270	561	1,464	97.6	2.2
Pennsylvania	5,930,303	5,706,975	211,497	1,873	9,958	96.2	3.6
West Virginia	1,407,744	1,364,567	40,428	614	2,135	96.9	2.9
<b>Central Appalachia</b>	<b>1,744,900</b>	<b>1,687,469</b>	<b>54,928</b>	<b>700</b>	<b>1,803</b>	<b>96.7%</b>	<b>3.1%</b>
Kentucky	875,922	856,040	18,777	352	747	97.7	2.1
Tennessee	335,343	328,552	6,216	159	416	98.0	1.9
Virginia	197,142	193,958	3,021	52	111	98.4	1.5
West Virginia	336,493	308,913	26,914	137	529	91.8	8.0
<b>Southern Appalachia</b>	<b>6,734,219</b>	<b>5,784,750</b>	<b>935,933</b>	<b>6,830</b>	<b>6,706</b>	<b>85.9%</b>	<b>13.9%</b>
Alabama	2,137,278	1,700,657	433,327	943	2,346	79.6	20.3
Georgia	813,596	747,480	65,222	315	579	91.9	9.0
Mississippi	418,644	295,704	122,103	432	405	70.6	29.2
North Carolina	1,037,212	937,239	96,135	3,935	903	90.4	9.2
South Carolina	656,219	543,247	112,043	280	649	82.8	17.1
Tennessee	1,398,318	1,299,223	95,613	837	1,645	92.9	6.9
Virginia	272,952	261,200	11,490	83	179	95.7	4.2
<b>State Parts‡</b>							
Tennessee	1,733,661	1,627,775	102,829	996	2,061	93.9	5.9
Virginia	470,094	455,158	14,511	135	290	96.8	3.1
West Virginia§	1,744,237	1,673,480	67,342	751	2,664	95.9	3.9

Source: 1970 Census of Population, first count computer file data, corrected and edited by ARC staff from PC(1)-B series of state reports, Table 34 for each of 13 Appalachian states.

\*Census totals are uncorrected final count data published in 1970 Census of Population, -B volumes. Data (in thousands) adjusted to official census total (203,235): white (178,098); black (22,581); other (2,556) including American Indians and other races.

†Other races consists chiefly of persons of Asiatic origin.

‡Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

§Entire state.

With 8.95 percent of the national population, the Appalachian Region accounted for 8.6 percent of the increase in total population but 9.3 percent of the national increase in elderly population during the 1970-76 period. See Table 10 on page 28.

Northern Appalachia remains well above national and regional averages in the share of elderly population and continues to parallel the aging trends of the Region and nation since 1970. Central Appalachia has experienced very little increase in proportion of its elderly population since 1970, and in Appalachian Kentucky the ratio has actually dropped slightly. This is probably due to a relatively large immigration of younger population. Southern Appalachia still has the lowest proportion of older population in the Region but it has increased much more rapidly than elsewhere in the Region, and if present trends are followed, it will approximate the national average by 1980.

This more rapid increase may be partly due to the attraction of older retirees, which appears to be a factor in certain Southern Appalachian areas and in the Lake Cumberland area of Kentucky. Both migration and aging can affect the proportion of elderly population in any given area. Outmigration of younger people will increase this proportion, as well as the immigration of older persons. In addition the fall in birth rate has reduced the numbers of the youngest age groups, while the historic increase in longevity in the U.S. and in Appalachia has tended to increase the proportion of older persons. The most recent projections of elderly population 65 years and older for the United States are: 1980, 11.3 percent; 1985, 11.8 percent; 1990, 12.3 percent; and 2000, 12.3 percent. These data are based on Series II estimates in *Population Estimates*

and *Projections* (Series P-25, No. 704), "Projections of the Population of the United States: 1977 to 2050," published by the Bureau of the Census in July 1977.

The map of elderly population by local development district (see map on page 29) reveals a large area of Northern Appalachia extending from Western New York and eastern Ohio to central West Virginia with a concentration of older population. In addition Northeastern Pennsylvania which has experienced decades of outmigration from anthracite mining areas has a high relative concentration. In Central and Southern Appalachia, the elderly are concentrated in selected districts in five of the eight states. Low proportions of older population are found in Appalachian Georgia (the lowest average level), South Carolina, two Central Appalachian coalfield districts and two other Southern Appalachian districts.

At the county level of detail, the Region appears even more diversified. Counties with above average levels of elderly population tend to be rural plateau or mountain counties, rural southern counties or urban and metropolitan counties which have experienced decades of relative economic stagnation and outmigration. Some of them are retirement counties which have attracted older immigrants. At the opposite extreme are the counties with few older people, which include counties with large proportions of college population, suburban immigration or counties with recent economic growth and immigration. A few of these "more youthful" areas have relatively high fertility rates as a factor.

## Appalachian Migration—A Dramatic Shift in Flows

Between 1965 and 1970 about 1,250,000 interregional migrants moved into the Appalachian Region and 1,650,000 departed, leaving a net migration loss of 400,000 persons. During this period the Region's population increased from 18,065,000 to 18,217,000, a gain of only 0.8 percent.

In the 1970-75 period the Appalachian Region experienced a net migration inflow of 300,000, with an estimated 1.7 million regional immigrants, and outmigration of 1.4 million. In contrast to the preceding period, immigration increased by about 40 percent in volume, while outmigration dropped by approximately one-eighth. The Region as a whole grew by 4.5 percent in population, surpassing 19 million in 1975.

Central Appalachia had by far the greatest shift in net migration rates, while Northern Appalachia retained a small net outmigration and Southern Appalachia shifted to net immigration. However, net migration in all three subregions shifted in a positive direction. See Table 11 on page 30 and map on page 31.

Table 12 on page 32 provides detailed data for gross migration flows in the 1965-70 period between Appalachia and the non-Appalachian United States, subdivided into six regional origin and destination areas. There was net outmigration to all of these regions from Appalachia, with the largest outflow to the North Central region and the smallest to the South Central. White migrants made up 95 percent of all immigrants to the Region but only 92 percent of the outmigrants, Blacks and other races



Table 10

## Elderly Population 65 Years of Age and Older Appalachian Region and United States 1970-1976

Geographical Division	Population July 1, 1976*			Population April 1, 1970†		Population Change 1970-1976‡		
	Total (thousands)	Elderly (thousands)	Elderly as Percent of Total	Elderly (thousands)	Elderly as Percent of Total	Total (percent)	Elderly (percent)	Elderly (thousands)
<b>United States</b>	<b>214,659</b>	<b>22,934.4</b>	<b>10.7%</b>	<b>19,978.6</b>	<b>9.8%</b>	<b>5.6%</b>	<b>14.8%</b>	<b>2,955.8</b>
<b>Appalachian Region</b>	<b>19,194.4</b>	<b>2,181.8</b>	<b>11.4%</b>	<b>1,906.8</b>	<b>10.5%</b>	<b>5.4%</b>	<b>14.4</b>	<b>274.9</b>
<b>Subregions</b>								
<b>Northern Appalachia</b>	<b>9,911.3</b>	<b>1,196.8</b>	<b>12.1%</b>	<b>1,085.3</b>	<b>11.2%</b>	<b>1.8%</b>	<b>10.3%</b>	<b>111.5</b>
Maryland	217.4	26.2	12.0	22.7	10.8	3.9	15.4	3.5
New York	1,089.8	126.1	11.6	115.7	10.9	3.1	9.0	10.4
Ohio	1,190.2	137.3	11.5	127.6	11.3	5.3	7.6	9.7
Pennsylvania	5,955.5	731.0	12.3	660.5	11.1	0.4	10.7	70.5
West Virginia	1,458.3	176.3	12.1	158.9	11.3	3.6	11.0	17.4
<b>Central Appalachia</b>	<b>1,939.4</b>	<b>210.5</b>	<b>10.9%</b>	<b>186.8</b>	<b>10.7%</b>	<b>11.1%</b>	<b>12.7%</b>	<b>23.7</b>
Kentucky	980.4	106.3	10.8	96.5	11.0	11.8	10.1	9.8
Tennessee	372.4	44.1	11.8	36.4	10.9	11.3	21.2	7.7
Virginia	224.3	22.1	9.9	19.1	9.7	13.7	15.7	3.0
West Virginia	362.4	38.1	10.5	34.8	10.4	7.7	9.2	3.2
<b>Southern Appalachia</b>	<b>7,343.7</b>	<b>774.4</b>	<b>10.5%</b>	<b>634.7</b>	<b>9.4%</b>	<b>9.0%</b>	<b>22.0%</b>	<b>139.7</b>
Alabama	2,273.2	243.5	10.7	202.8	9.5	6.4	20.1	40.8
Georgia	973.2	87.9	9.0	70.0	8.6	19.6	25.5	17.9
Mississippi	446.5	53.1	11.9	45.7	10.9	6.6	16.2	7.4
North Carolina	1,122.3	126.7	11.3	102.4	9.9	8.0	23.7	24.3
South Carolina	729.0	68.1	9.3	52.7	8.0	11.1	29.2	15.4
Tennessee	1,512.4	159.9	10.6	131.3	9.4	8.0	21.8	28.6
Virginia	287.1	35.1	12.2	29.7	10.9	5.2	18.3	5.4
<b>State Parts‡</b>								
Tennessee	1,884.8	204.0	10.8%	167.7	9.7%	8.7%	21.6%	36.3
Virginia	511.3	57.2	11.2	48.8	10.4	8.7	17.3	8.4
West Virginia=	1,820.7	214.4	11.8	193.7	11.1	4.4	10.7	20.6

Source: Estimates for 1976 and revised data for 1970 are U.S. Bureau of Census data provided and published by the Administration on Aging, U.S. Department of Health, Education and Welfare, Washington, D.C. 20201.

Note: All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

\*U.S. Bureau of Census provisional population estimates for July 1, 1976.

†Revised 1970 U.S. Bureau of Census population data.

‡Change between April 1, 1970, and estimated July 1, 1976, population after post-census late corrections to 1970 population totals.

§Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

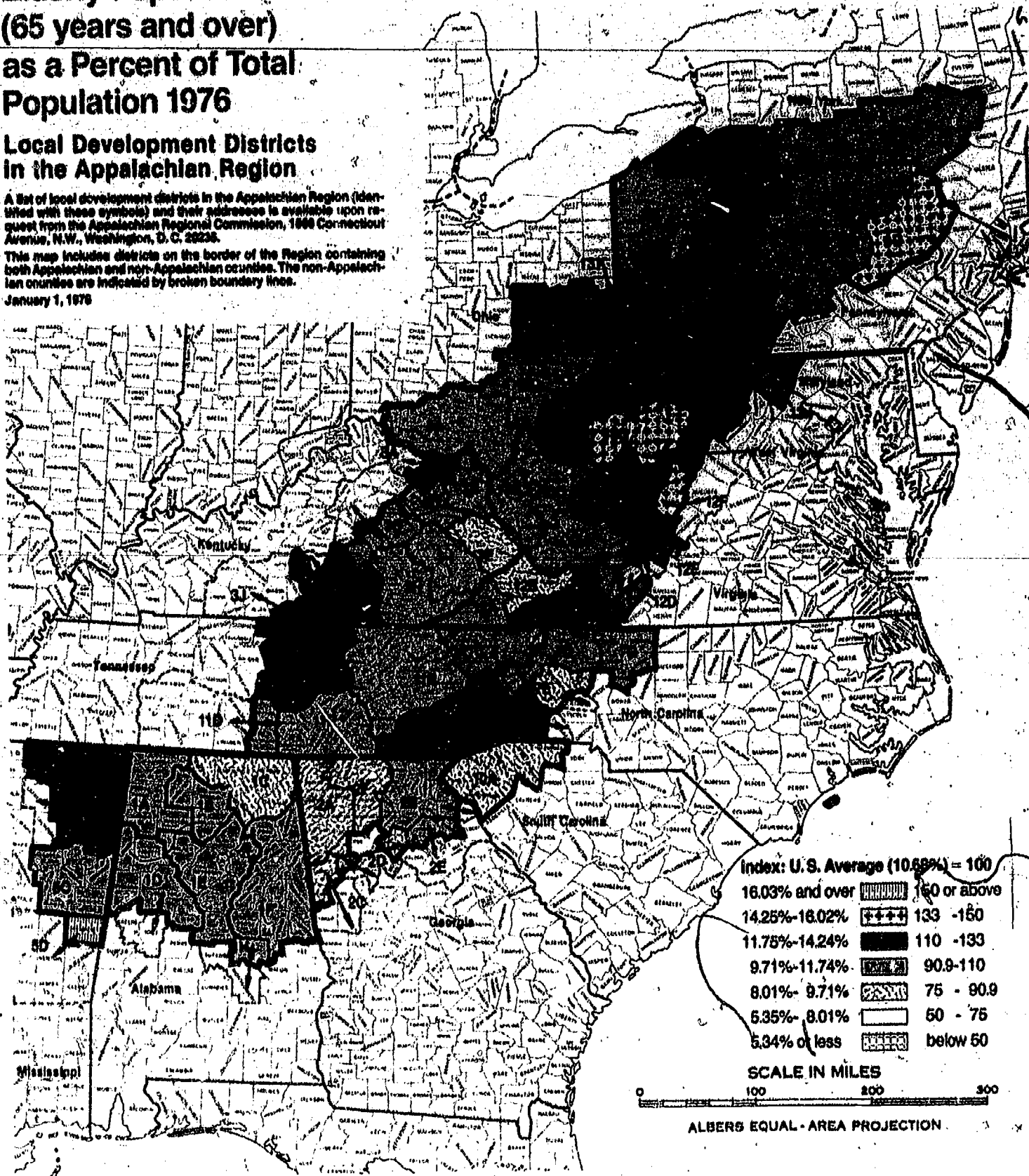
== Entire state.

# Elderly Population (65 years and over) as a Percent of Total Population 1976

## Local Development Districts in the Appalachian Region

A list of local development districts in the Appalachian Region (identified with these symbols) and their addresses is available upon request from the Appalachian Regional Commission, 1666 Connecticut Avenue, N.W., Washington, D. C. 20236.

This map includes districts on the border of the Region containing both Appalachian and non-Appalachian counties. The non-Appalachian counties are indicated by broken boundary lines.  
January 1, 1976



Index: U.S. Average (10.69%) = 100

16.03% and over	[Pattern]	150 or above
14.25%-16.02%	[Pattern]	133 -150
11.75%-14.24%	[Pattern]	110 -133
9.71%-11.74%	[Pattern]	90.9-110
8.01%- 9.71%	[Pattern]	75 - 90.9
5.35%- 8.01%	[Pattern]	50 - 75
5.34% or less	[Pattern]	below 50

SCALE IN MILES  
0 100 200 300

ALBERS EQUAL - AREA PROJECTION

Table 11

**Estimated Domestic Interregional Migration  
Population Aged 5 Years and Over in Later Year  
Appalachian Subregions  
1965-1970 and 1970-1975**

1965-1970 Period (April 1) Census, adjusted for underreporting  
Data in Thousands

Geographical Region	Northern Appalachia Migration			Central Appalachia Migration			Southern Appalachia Migration		
	To	From	Net Migration	To	From	Net Migration	To	From	Net Migration
Northern Appalachia	—	—	—	17	13	-4	8	10	3
Central Appalachia	13	17	4	—	—	—	11	20	9
Southern Appalachia	10	8	3	20	11	-9	—	—	—
Northeast	332	275	-57	14	11	-4	55	52	-3
North Central	236	161	-75	86	47	-39	70	68	-2
Southeast	59	31	-28	20	8	-12	214	198	-16
South Central	16	10	-6	41	24	-17	90	94	5
Florida	68	20	-48	10	4	-5	52	45	-7
Western United States	136	82	-54	17	10	-7	102	86	-16
United States Total	870	604	-266	226	129	-96	602	574	-28

1970-1975 Period (April 1) Estimated  
Data in Thousands

Geographical Region	Northern Appalachia Migration			Central Appalachia Migration			Southern Appalachia Migration		
	To	From	Net Migration	To	From	Net Migration	To	From	Net Migration
Northern Appalachia	—	—	—	17	12	-5	7	8	-1
Central Appalachia	12	17	5	—	—	—	20	14	-6
Southern Appalachia	8	7	-1	14	20	6	—	—	—
Northeast	245	293	48	5	18	13	35	62	27
North Central	175	205	30	28	83	55	53	80	27
Southeast	79	33	-46	17	24	7	201	287	86
South Central	16	13	-3	30	40	10	103	113	10
Florida	84	38	-46	7	8	1	49	57	8
Western United States	169	84	-85	16	15	-1	104	126	22
United States Total	788	690	-98	134	220	86	572	747	175

Source: 1965-1970: special tabulation of migration data from U.S. Bureau of Census, adjusted by ARC staff for nonreporting of 1965 residence. 1970-1975: based on linkage of data for first period to continuous work history sample data and expansion to estimate total migrants in 1970-75 period.

Note: Lincoln County, West Virginia included with Northern Appalachia and Anderson County, Tennessee included with Southern Appalachia because of commuting linkages. This reduces the number of counties in Central Appalachia for migration study purposes to 83.

Net return of Armed Forces to civilian status in the Region is estimated at about 100,000 for the period 1970-1975. These are not included in the data. If added to the net U.S. total, the aggregate net migration estimated for 1970-1975 would be as follows: Northern Appalachia -38,000; Central Appalachia 96,000; and Southern Appalachia 208,000.



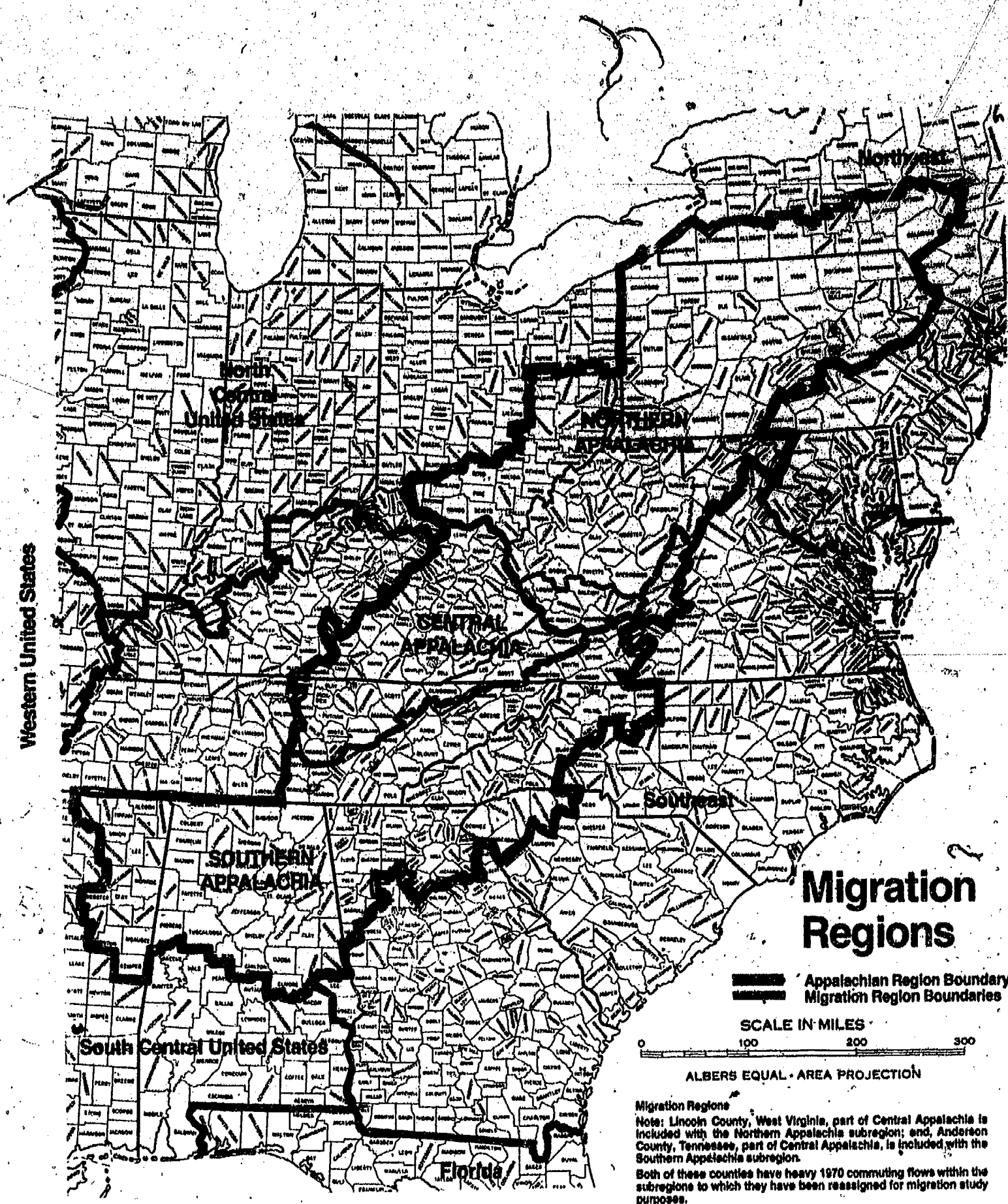


Table 12

## Appalachian Interregional Migration 1965-1970

Region of Source and Destination for Appalachian Migrants	Appalachian Subregions							
	Appalachian Region		Northern Appalachia		Central Appalachia		Southern Appalachia	
	Total (thousands)	Black and Other Races (percent)	Total (thousands)	Black and Other Races (percent)	Total (thousands)	Black and Other Races (percent)	Total (thousands)	Black and Other Races (percent)
<b>Total 1970 Population (5+ years old and over)</b>	16,731	7.1%	8,986	3.1%	1,525	3.2%	6,220	13.7%
Nonmigrants (Zonal)	14,857	7.4%	8,061	3.1%	1,367	3.4%	5,429	14.7%
Migrants within Region*	565	2.9%	272	2%	25	1%	188	5½%
<b>Interregional Migrants</b>								
<b>United States</b>								
<b>Total Non-Appalachian</b>								
Inmigrants	1,228	4.8%	580	3½%	104	2%	544	7%
Outmigrants	-1,618	8.1	-847	4	-188	4½	-583	15
Net Migration	-390	18.3	-267	5	-84	7½	-39	132†
<b>Northeast Region</b>								
Inmigrants	337	5%	275	3½%	10	6%	52	11%
Outmigrants	-401	8	-332	4	-14	13	-55	28
Net Migration	-64	24	-57	7	-4	33	-3	313†
<b>North Central Region</b>								
Inmigrants	276	3%	161	2½%	47	1%	68	6½%
Outmigrants	-392	10	-236	4½	-86	4	-70	37
Net Migration	-116	27	-75	8½	-39	7	-2	1,100†
<b>Southeast Region</b>								
Inmigrants	238	6%	31	8%	8	4%	198	6%
Outmigrants	-293	7	-59	3	-20	5½	-214	7½
Net Migration	-55	9	-28	(+)2	-12	7	-16	29
<b>South Central Region</b>								
Inmigrants	128	9%	10	9%	24	3%	94	11%
Outmigrants	-146	10	-16	5	-41	4½	-89	13
Net Migration	-18	13	-6	(+)2½	-17	7	+5	(-)28†
<b>Florida</b>								
Inmigrants	70	2%	20	2%	5	½%	45	2½%
Outmigrants	-130	2	-68	½	-10	1	-52	4
Net Migration	-60	1	-48	(+)0	-5	1	-7	11
<b>Western United States</b>								
Inmigrants	178	4%	82	3%	10	2%	86	5%
Outmigrants	-255	9½	-136	4	-17	2½	-102	17
Net Migration	-77	23	-54	6	-7	3½	-16	85

Source: Special tabulations of 1970 census of population source data on 1965-70 migration prepared by U.S. Bureau of Census for ARC and summarized and adjusted for nonreporting of 1965 residence by ARC staff.

\*The Region total includes migrants between subregions within the Appalachian Region. The subregional totals include migrants between zones in a subregion but excludes migrants between subregions.

†Immigration denotes flow in to designated Appalachian Region or subregion from designated non-Appalachian region. Outmigration denotes outmigration from designated Appalachian Region or subregion to designated non-Appalachian region. Where Black and other races shares exceed 100 percent of total net outmigration, White immigration (net) is indicated as follows: Non-Appalachian United States net to Southern Appalachia, 13,000; Northeast net to Southern Appalachia, 7,000; North Central net to Southern Appalachia, 20,000; South Central net to Southern Appalachia, 6,000.

(+) There were small net balances of Blacks and other races into Northern Appalachia for Southeast, South Central and Florida of under 1,000 persons.  
(-) There was a small net balance of Blacks and other races out of Southern Appalachia.



constituted only 5 percent of all immigrants to Appalachia but 8 percent of Appalachian outmigrants. Consequently, 18 percent of net outmigrants from the Region were members of minority races, 71,500 persons out of a net outflow of 390,000 during the five-year period, though minority population was only 7 percent of the total.

In the 1960-65 period estimated net outmigration from Appalachia was 0.7 million persons for a net outmigration rate of 4.0 percent. This dropped to a net outmigration rate of 2.2 percent in the 1965-70 period and shifted to a net immigration rate of 1.6 percent in the 1970-75 period. Thus, the shift toward positive migration accelerated from a net shift of 1.8 percentage points between the first and second half of the 1960s to a net shift of 3.8 percentage points between 1965-70 and 1970-75.

By far the most spectacular turnaround was in Central Appalachia, where the net outmigration rate fell from 12 percent in 1960-65 to 5.6 percent in 1965-70 and turned around to a net immigration rate of 5.3 percent in 1970-75. This amounted to a rate of turnaround more than triple the regional average. Central Appalachia changed from the subregion with the greatest rate of net outmigration to the highest rate of net immigration within a few years.

## Long-Term Population Trends with Projected Change in the Appalachian Region, 1940-1990

The perspective of population change in the Appalachian Region reveals that over a half-century period, total regional population has increased and is projected to continue growing in each decade. However, in the period 1940-70 Appalachian growth was much slower than national population growth so that the Region's share of the nation's population dropped from 12.6 percent in 1940 to 9.0 percent in 1970. Massive outmigration from the Region occurred in these decades, with a net outflow of 3.3 million persons just in the two decades 1950-70, of which two-thirds left in the 1950-60 period. Since 1970 and in projection to 1990, regional population growth lags only slightly behind the national average. If this trend is followed in projection, the Region will contain about 8.8 percent of U.S. population in 1990. Only Northern Appalachia continues to experience outmigration, with the result that it is projected to have only about one-sixth of the Region's total population increase in the 1975-90 period, while Central Appalachia will receive about one-fourth and Southern Appalachia about 60 percent of the projected regional population increase.

Tables 13 through 16 on the following pages contain both growth trends and projections for the Region, subregions, state parts and local development districts by two methods: (a) ratio-trend projections based on weighted formulas using past trends of population ratios and projecting

these; and (b) demographic-trend projections, which are applied only to the recent periods 1966-70 and 1970-75 and use trends in components of population change (births, deaths, net migration) to provide a five-year projection for 1975-80. Both trend series are tied to a national population projection model approximately the same as the current U.S. Bureau of Census Series II projection.

The map on page 40 is based on demographic analysis and reveals that of the 69 local development district areas for the period 1966-80, 38 LDDs or the majority reflect the regional trends with net outmigration in the 1966-70 period, followed by a reversal to net immigration in 1970-75 and projected for 1975-80. These areas are concentrated in the middle portion of Appalachia, including all except one of the Central Appalachian LDDs, as well as bordering districts to the north and south. In addition there is an area in central and western Alabama and northeastern Mississippi which shows this pattern, along with one district in south-central New York.

Fourteen local development districts had an estimated net immigration for all three periods, including the projection to 1980. The largest group, on the southeastern margin of the Region in Southern Appalachia, had exceptional rates of population increase, with 5 districts (or their Appalachian parts) having growth rates equal to twice the national average or faster. A second group of LDDs with continuing net immigration is on the borders of the Northeastern "Megalopolis" in Pennsylvania and West Virginia and a district in Kentucky (part of the Bluegrass LDD).

Seventeen local development districts continue to have lagging migration patterns. Ten of these have



population outmigration for all three periods, and five of this number are projected to have actual smaller populations in 1980 than in 1966. The largest zone of persistent outmigration is a heavily populated region of Western Pennsylvania along with

bordering areas in the Upper Ohio River Valley and in New York state. These 12 districts had a population of 6.0 million in 1960 and are projected to have 5.9 million in 1980. Thus, they have remained static in population numbers while the Region is pro-

jected to have gained some 2 million residents. The only other areas of persistent outmigration are found in the Deep South of Appalachia, in eastern Alabama and east Mississippi.

Table 13

## Population Change and Ratio-Trend Projections Appalachian Region and United States 1940-1990

Geographical Division	Population*						Ratio-Trend Projections†		
	April 1, 1940 (thousands)	April 1, 1950 (thousands)	April 1, 1960 (thousands)	July 1, 1965 (thousands)	April 1, 1970 (thousands)	July 1, 1975 (thousands)	April 1, 1980 (thousands)	April 1, 1985 (thousands)	April 1, 1990 (thousands)
<b>United States</b>	132,166	151,326	179,311	193,485	203,305	213,032	221,650	231,700	241,600
<b>Appalachian Region</b>	16,624.4	17,378.1	17,726.6	18,063.1	18,217.1	19,042.6	19,780	20,621	21,281
<b>Subregions</b>									
<b>Northern</b>									
<b>Appalachia</b>	9,209.7	9,445.2	9,705.6	9,730.9	9,734.0	9,886.9	10,015	10,186	10,268
Maryland	177.8	189.7	195.8	207.5	209.3	215.6	217	219	222
New York	820.7	917.5	1,000.1	1,053.6	1,056.6	1,083.2	1,109	1,137	1,158
Ohio	1,040.8	1,035.1	1,119.6	1,144.4	1,129.9	1,186.3	1,265	1,345	1,405
Pennsylvania	5,712.9	5,784.7	5,930.8	5,900.3	5,930.5	5,955.9	5,965	6,004	5,997
West Virginia	1,457.4	1,518.3	1,459.4	1,425.1	1,407.7	1,445.8	1,459	1,480	1,485
<b>Central</b>									
<b>Appalachia</b>	2,126.9	2,172.7	1,879.1	1,824.5	1,744.9	1,899.5	2,079	2,274	2,415
Kentucky	1,110.4	1,072.7	922.2	913.8	876.5	955.1	1,066	1,182	1,270
Tennessee	332.2	359.2	327.7	337.4	334.6	364.6	393	424	449
Virginia	239.7	253.6	228.2	212.4	197.3	217.2	246	276	297
West Virginia	444.5	487.3	401.0	360.9	336.5	353.5	374	393	399
<b>Southern</b>									
<b>Appalachia</b>	5,287.7	5,760.2	6,141.8	6,507.7	6,738.2	7,265.2	7,686	8,160	8,599
Alabama	1,700.2	1,860.8	1,982.3	2,115.4	2,137.4	2,240.7	2,349	2,461	2,557
Georgia	577.7	619.8	675.0	738.0	813.8	956.3	1,057	1,177	1,300
Mississippi	457.5	426.1	406.2	415.8	418.6	444.0	463	485	502
North Carolina	817.1	881.6	939.7	1,006.2	1,039.0	1,115.9	1,160	1,212	1,263
South Carolina	459.9	523.3	586.5	605.5	656.4	722.1	766	821	873
Tennessee	1,010.4	1,170.6	1,280.0	1,351.2	1,399.9	1,501.1	1,596	1,700	1,791
Virginia	264.9	278.1	272.1	275.7	273.0	285.2	294	304	312
<b>State Parts‡</b>									
Tennessee	1,342.6	1,529.8	1,607.7	1,688.6	1,734.5	1,865.7	1,989	2,124	2,241
Virginia	504.6	531.6	500.3	488.1	470.3	502.3	540	580	608
West Virginia§	1,902.0	2,005.6	1,860.4	1,786.0	1,744.2	1,799.3	1,833	1,873	1,884*

\*Data for 1940, 1950 and 1960 are from the U.S. Census of Population as of April 1, for the respective years. U.S. total includes Alaska and Hawaii for 1940 and 1950 for comparability. July 1, 1965, estimate is based on county estimates for July 1, 1966, revised and adjusted by ARC to new state total estimates, interpolated between 1966 and 1960 census data, using factors for each state derived from new July 1, 1965 state total estimates published by the U.S. Bureau of Census (Series P-25, no. 460), June 1971. April 1, 1970, census data have been revised by post-census corrections through 1977. July 1, 1975, estimate is based on revised county estimates prepared by U.S. Bureau of Census and published in *Population Estimates*, Series P-26 between July 1977 and January 1978.

†Ratio-trend population projection by ARC staff.

‡Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

§Entire state.

Table 14

**Population Change and Demographic-Trend Projections with Estimated and Projected Components of Change  
Appalachian Region and United States  
1970-1975-1980**

Geographical Division	Population*			1975-80 Projected Components of Change†			1970-75 Estimated Components of Change‡		
	April 1, 1980 (thousands)	July 1, 1975 (thousands)	April 1, 1970 (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)
United States	221,650	213,032	203,305	16,112	9,371	1,877	17,489	10,189	2,427
Appalachian Region	19,797	19,042.6	18,217.1	1,418	918	254.7	1,525	1,009	309.0
<b>Subregions</b>									
<b>Northern</b>									
Appalachia	10,010.1	9,886.9	9,734.0	668.7	494.8	- 50.7	743.1	562.9	- 27.2
Maryland	221.0	215.6	209.3	13.6	10.3	2.1	15.6	11.6	2.3
New York	1,131.5	1,083.2	1,056.6	68.8	48.0	- 2.5	81.7	56.3	1.3
Ohio	1,243.9	1,186.3	1,129.9	95.4	58.2	- 20.3	98.4	66.2	24.3
Pennsylvania	5,961.9	5,955.9	5,930.5	378.4	302.0	- 70.4	429.4	345.6	- 58.5
West Virginia	1,481.8	1,445.8	1,407.7	112.5	76.3	- 0.3	118.1	83.4	3.4
<b>Central</b>									
Appalachia	2,027.3	1,890.5	1,744.9	160.0	95.2	72.0	166.6	100.4	79.3
Kentucky	1,026.3	955.1	876.5	80.0	48.3	39.4	85.1	49.8	43.3
Tennessee	392.1	364.6	334.6	26.3	17.5	18.7	28.6	18.5	20.0
Virginia	237.1	217.2	197.3	19.1	10.3	11.2	19.1	11.2	12.0
West Virginia	371.7	353.5	336.5	34.6	19.2	2.8	33.9	21.0	4.1
<b>Southern</b>									
Appalachia	7,759.7	7,265.2	6,738.2	589.5	328.4	233.4	615.4	345.2	256.9
Alabama	2,334.3	2,240.7	2,137.4	180.1	104.6	18.1	192.2	110.7	21.9
Georgia	1,700.1	956.3	813.8	88.8	39.8	94.8	84.9	40.1	97.6
Mississippi	469.1	444.0	418.6	41.7	21.8	5.1	42.7	23.8	6.5
North Carolina	1,182.7	1,115.9	1,039.0	79.3	49.2	36.7	87.3	52.1	41.7
South Carolina	788.6	722.1	656.4	60.3	31.5	32.7	62.3	32.4	35.8
Tennessee	1,594.0	1,501.1	1,399.9	119.1	67.3	41.1	124.1	70.9	47.9
Virginia	295.9	285.2	273.0	20.1	14.2	4.9	21.9	15.2	5.5
<b>State Parts§</b>									
Tennessee	1,986.1	1,865.7	1,734.5	145.3	84.8	59.8	152.7	89.4	67.9
Virginia	533.0	502.3	470.3	39.2	24.5	16.0	40.9	26.4	17.5
West Virginia¶	1,853.5	1,799.3	1,744.2	147.1	95.4	2.5	152.0	104.3	7.5

Source: 1970-75 data compiled by ARC from U.S. Bureau of Census "estimates of the Population of (name of state), Counties and Metropolitan Areas: July 1, 1975 Revised and 1976 Provisional" (also contains corrected 1970 census data), Current Population Reports, Series P-26 and P-25, Washington, 1977-78, 13 reports for Appalachian states and unpublished data tabulations. Data tabulations by ARC computer systems staff.

Note: All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

\*July 1, 1975, estimate is based on revised county estimates prepared by the U.S. Bureau of Census and published in *Population Estimates*, Series P-26 between July 1977 and January 1978. Data for 1970 are from revised U.S. Bureau of Census data. 1980 projections computed by ARC staff.

†Methodology used is demographic-trend population projection computed by ARC staff.

‡Components of change for 1970-75 have been revised using preliminary 1970-76 estimates prepared by U.S. Bureau of Census and 1975 vital statistics for counties from state sources.

§Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

¶Entire state.

**Table 15**  
**Population Change and Ratio-Trend Projections**  
**Appalachian Region and Local Development Districts**  
**1950-1990**

LDD Code	State and Local Development District	Population*					Ratio-Trend Projections†		
		April 1, 1950 (thousands)	April 1, 1960 (thousands)	July 1, 1965 (thousands)	April 1, 1970 (thousands)	July 1, 1975 (thousands)	April 1, 1980 (thousands)	April 1, 1985 (thousands)	April 1, 1990 (thousands)
	<b>Appalachian Region</b>	<b>17,378.1</b>	<b>17,726.6</b>	<b>18,063</b>	<b>18,217.1</b>	<b>19,042.6</b>	<b>19,780</b>	<b>20,621</b>	<b>21,281</b>
	<b>Alabama:</b>								
1A	NW Alabama	165.0	166.8	179.4	182.1	195.7	207	220	231
1B	North Central Alabama	129.1	130.5	152.0	157.0	169.1	183	196	209
1C	Top of Alabama	237.8	280.0	355.7	363.6	380.7	409	435	463
1D	West Alabama‡	172.3	175.7	186.7	180.6	190.2	199	208	214
1E	Birmingham Regional	735.6	797.7	802.1	819.3	851.7	880	914	937
1F	East Alabama	389.4	401.0	406.4	400.9	413.5	426	440	449
1H	Central Alabama‡	31.6	30.5	33.2	33.7	39.8	44	49	54
	<b>Georgia:</b>								
2A	Coosa Valley	248.5	267.3	282.8	302.7	332.1	348	369	390
2B	Georgia Mountains	141.5	154.5	164.8	176.8	198.6	214	232	249
2C	Chattahoochee-Flint‡	41.1	41.8	46.0	50.8	59.0	64	71	78
2D	Atlanta Regional‡	44.5	60.3	75.6	101.0	158.5	204	257	313
2E	NE Georgia‡	44.4	44.2	47.2	51.5	58.1	62	67	72
2F	North Georgia	99.9	107.0	121.7	131.1	150.0	165	182	199
	<b>Kentucky:</b>								
3A	Buffalo Trace‡	25.5	24.0	23.9	23.7	24.6	25	26	27
3B	FIVCO	118.9	120.7	122.3	122.1	127.0	132	137	140
3C	Bluegrass‡	101.3	99.9	108.7	113.4	121.8	131	141	150
3D	Gateway	54.6	50.7	55.0	55.7	58.7	62	65	67
3E	Big Sandy	184.0	151.0	144.7	134.3	153.0	182	214	238
3F	Lake Cumberland‡	151.5	129.6	126.6	123.9	136.1	152	168	181
3H	Cumberland Valley	257.6	206.2	197.6	184.5	203.3	231	260	280
3I	Kentucky River	165.6	128.2	123.6	107.2	118.6	139	159	173
3J	Barren River‡	13.8	11.8	11.5	11.6	12.0	12	12	13
	<b>Maryland:</b>								
4A	Tri-County	189.7	195.8	207.5	209.3	215.6	217	219	222
	<b>Mississippi:</b>								
5A	NE Mississippi	113.9	104.4	108.6	109.6	117.7	124	130	136
5B	Three Rivers‡	151.2	142.6	146.2	150.3	160.1	168	177	185
5C	Golden Triangle	145.0	146.8	149.7	148.5	155.8	161	166	170
5D	East Central Mississippi‡	15.9	12.3	11.4	10.2	10.3	11	11	11
	<b>New York:</b>								
6A	Southern Tier West	256.9	269.5	275.8	275.4	282.5	294	306	315
6B	Southern Tier Central	192.4	211.4	223.6	217.8	219.0	224	228	231
6C	Southern Tier East	468.2	519.1	554.1	563.3	581.7	591	602	613
	<b>North Carolina:</b>								
7A	SW North Carolina	114.2	109.1	111.0	116.0	125.4	131	137	144
7B	Land-of-Sky	191.0	199.8	216.6	223.6	237.6	244	251	260
7C	Isothermal‡	83.7	83.2	87.6	89.7	96.5	101	106	110
7D	Region D	138.4	130.2	137.6	139.4	152.7	163	175	186
7E	Western Piedmont‡	103.4	117.9	132.7	136.5	147.1	153	159	166
7G	NW North Carolina	250.8	299.5	320.7	333.8	356.6	369	383	398
	<b>Ohio:</b>								
8A	Ohio Valley	377.6	441.4	449.8	445.9	480.9	526	573	610
8B	Buckeye Hills-Hocking Valley	201.9	207.9	222.4	219.0	224.4	236	248	258
8C	Ohio Mid-Eastern	455.5	470.3	472.1	464.9	481.0	502	524	538



LDD Code	State and Local Development District	Population*					Ratio-Trend Projections†		
		April 1, 1950 (thousands)	April 1, 1960 (thousands)	July 1, 1965 (thousands)	April 1, 1970 (thousands)	July 1, 1975 (thousands)	April 1, 1980 (thousands)	April 1, 1985 (thousands)	April 1, 1990 (thousands)
<b>Pennsylvania:</b>									
9A	NW Pennsylvania	666.7	721.9	728.2	733.0	751.7	771	792	805
9B	North Central Pennsylvania	250.0	244.2	235.1	231.5	236.7	246	256	261
9C	Northern Tier	142.7	147.7	149.7	157.0	167.2	172	178	184
9D	NE Pennsylvania	978.4	884.4	866.3	873.9	894.3	910	928	936
9E	SW Pennsylvania	2,703.8	2,883.7	2,852.4	2,875.1	2,817.7	2,735	2,676	2,611
9F	Southern Alleghenies	522.9	510.5	501.1	490.4	495.9	510	523	528
9G	SEDA-COG§	520.1	538.3	567.5	569.6	592.5	622	651	673
<b>South Carolina:</b>									
10A	SCACOG	523.3	586.5	605.5	656.4	722.1	766	821	873
<b>Tennessee:</b>									
11A	Upper Cumberland	198.4	183.2	193.1	193.7	212.9	227	242	255
11B	East Tennessee	620.5	654.2	686.5	701.0	756.4	811	870	922
11C	First Tennessee-Virginia	306.3	326.8	348.5	359.4	382.8	405	429	451
11D	South Central Tennessee‡	48.5	54.1	58.9	59.9	62.7	66	69	72
11E	SE Tennessee	356.1	389.3	401.7	420.5	450.8	480	513	541
<b>Virginia:</b>									
12A	LENOWISCO	120.1	100.2	92.7	84.8	93.8	108	123	134
12B	Cumberland Plateau	133.5	128.0	119.7	112.5	123.3	138	153	163
12C	Mount Rogers	161.5	160.1	161.2	159.4	167.5	174	180	185
12D	New River Valley‡	58.1	54.9	56.4	56.1	59.1	61	64	66
12E	Fifth District‡	48.2	48.5	49.8	49.7	50.6	51	51	52
12F	Central Shenandoah‡	10.4	8.6	8.3	7.7	8.0	8	8	8
<b>West Virginia:</b>									
13A	Region 1	340.0	279.5	251.5	238.5	252.0	267	281	287
13B	Region 2	317.5	293.2	279.0	266.8	270.0	270	270	266
13C	B-C-K-P (Region 3)	308.8	317.2	299.1	291.6	294.2	290	287	281
13D	Gauley	179.8	145.4	136.5	122.7	129.0	138	147	151
13E	Mid-Ohio Valley	145.1	153.0	155.4	160.4	164.6	166	169	171
13F	Region 6	276.5	246.4	243.9	243.8	253.5	257	262	265
13G	Region 7	129.0	110.8	110.0	103.5	108.8	115	121	124
13H	Region 8	63.0	59.8	61.3	59.3	63.4	68	72	75
13I	Eastern Panhandle	55.8	60.8	63.4	66.2	73.1	78	84	90
13J	Bel-O-Mar	128.7	125.8	119.0	121.4	119.8	114	110	105
13K	B-H-J (Region 11)	61.3	68.6	66.8	70.2	70.9	69	69	68

\*Data for 1950 and 1960 are from the U.S. Census of Population as of April 1, for the respective years. U.S. total includes Alaska and Hawaii for 1950 for comparability. July 1, 1965 estimate is based on county estimates for July 1, 1966, revised and adjusted by ARC to new state total estimates, interpolated between 1966 and 1960 census data, using factors for each state derived from new July 1, 1965, state total estimates published by the U.S. Bureau of Census (Series P-25, no. 460), June 1971. April 1, 1970, census data have been revised by post-census corrections through 1976. July 1, 1975, estimate is based on revised county estimates prepared by U.S. Bureau of Census and published in *Population Estimates*, Series P-26 between July 1977 and January 1978.

†Methodology used is ratio-trend population projection computed by ARC staff.

‡Data are only for that portion of the local development district in the Appalachian Region.

§Includes Perry County, Pennsylvania.

Table 16

**Population Change and Demographic-Trend Projections  
with Estimated and Projected Components of Change  
Appalachian Region and Local Development Districts  
1970-1975-1980**

LDD Code	State and Local Development District	Population*			1975-80 Projected Components of Change†			1970-75 Estimated Components of Change‡		
		April 1, 1990 (thousands)	July 1, 1975 (thousands)	April 1, 1970 (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)
	<b>Appalachian Region</b>	<b>19,797.0</b>	<b>19,042.6</b>	<b>18,217.1</b>	<b>1,418.1</b>	<b>918.4</b>	<b>251.7</b>	<b>1,525.1</b>	<b>1,008.6</b>	<b>309.0</b>
	<b>Alabama:</b>									
1A	NW Alabama	208.0	195.7	182.1	15.4	9.6	6.5	16.1	9.7	7.2
1B	North Central Alabama	179.8	169.1	157.0	13.5	7.1	4.3	14.6	7.5	5.0
1C	Top of Alabama	394.8	380.7	363.6	28.0	14.8	1.0	32.6	15.3	- 0.2
1D	West Alabama§	198.8	190.2	180.8	16.4	8.8	1.0	16.6	9.1	2.0
1E	Birmingham Regional	882.2	851.7	819.3	67.6	42.1	5.0	70.7	45.0	6.7
1F	East Alabama	424.8	413.5	400.9	35.8	20.3	- 4.2	38.1	22.1	- 3.5
1H	Central Alabama§	46.0	39.8	33.7	3.5	1.9	4.5	3.5	2.0	4.6
	<b>Georgia:</b>									
2A	Coosa Valley	359.8	332.1	302.7	29.6	15.8	13.9	29.7	15.8	15.4
2B	Georgia Mountains	219.6	198.6	176.8	16.3	8.5	13.2	16.6	8.7	13.9
2C	Chattahoochee-Flints	67.3	59.0	50.8	5.7	2.6	5.2	5.5	2.7	5.4
2D	Atlanta Regional§	219.8	158.5	101.0	17.6	4.2	47.9	14.0	4.1	47.5
2E	NE Georgia§	64.7	58.1	51.5	5.3	2.8	4.2	5.1	2.8	4.4
2F	North Georgia	168.9	150.0	131.1	14.3	5.9	10.4	14.0	6.1	11.0
	<b>Kentucky:</b>									
3A	Buffalo Trace§	25.2	24.6	23.7	1.8	1.4	0.1	2.1	1.4	0.3
3B	FIVCO	130.9	127.0	122.1	9.6	6.1	0.4	10.7	6.5	0.8
3C	Bluegrass§	129.5	121.8	113.4	9.9	5.7	3.5	10.2	5.9	4.1
3D	Gateway	61.5	58.7	55.7	5.0	2.8	0.6	5.2	3.0	0.9
3E	Big Sandy	170.9	153.0	134.3	14.2	7.3	11.0	14.4	7.2	11.6
3F	Lake Cumberland§	147.3	136.1	123.9	10.1	7.4	8.5	10.8	7.7	9.0
3H	Cumberland Valley	220.4	203.3	184.5	18.3	11.2	10.1	19.2	11.4	10.9
3I	Kentucky River	128.3	118.6	107.2	10.4	5.8	5.0	11.7	5.9	5.6
3J	Barren River§	12.2	12.0	11.6	0.8	0.7	0.1	0.9	0.8	0.2
	<b>Maryland:</b>									
4A	Tri-County	221.0	215.6	209.3	13.6	10.3	2.1	15.6	11.6	2.3
	<b>Mississippi:</b>									
5A	NE Mississippi	125.2	117.7	109.6	10.3	6.1	3.4	10.7	6.5	3.9
5B	Three Rivers§	169.7	160.1	150.3	15.1	8.3	2.8	15.2	8.9	3.4
5C	Golden Triangle	163.7	155.8	148.5	15.4	6.8	- 1.8	15.8	7.8	- 0.6
5D	East Central Mississippi§	10.5	10.3	10.2	1.0	0.6	- 0.3	1.0	0.6	- 0.3
	<b>New York:</b>									
6A	Southern Tier West	288.9	282.5	275.4	20.5	13.6	- 0.5	22.3	15.9	0.7
6B	Southern Tier Central	218.9	219.0	217.8	14.1	9.7	- 4.5	17.2	12.0	- 4.0
6C	Southern Tier East	593.6	581.7	563.3	34.2	24.8	2.5	42.2	28.4	4.5
	<b>North Carolina:</b>									
7A	SW North Carolina	133.9	125.4	116.0	8.4	5.6	5.7	9.3	6.0	6.2
7B	Land-of-Sky	248.6	237.6	223.6	14.8	12.0	8.2	17.3	12.6	9.2
7C	Isothermal§	102.5	96.5	89.7	7.3	4.6	3.3	7.9	4.9	3.7
7D	Region D	165.0	152.7	139.4	10.8	6.5	8.1	11.7	7.0	8.7
7E	Western Piedmont§	156.5	147.1	136.5	12.2	5.7	2.9	12.9	5.9	3.6
7G	NW North Carolina	376.3	356.6	333.8	26.0	14.8	8.5	28.3	15.8	10.2

LDD Code	State and Local Development District	Population*			1975-80 Projected Components of Change†			1970-75 Estimated Components of Change‡		
		April 1, 1980 (thousands)	July 1, 1975 (thousands)	April 1, 1970 (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)	Births (thousands)	Deaths (thousands)	Net Migration (thousands)
<b>Ohio:</b>										
8A	Ohio Valley	516.2	480.9	445.9	40.8	22.8	17.4	40.9	25.2	19.2
8B	Buckeye Hills-Hocking Valley	230.7	224.4	219.0	16.9	10.4	- 0.1	18.0	12.5	- 0.1
8C	Ohio Mid-Eastern	496.9	481.0	464.9	37.8	25.0	3.1	39.4	28.5	5.2
<b>Pennsylvania:</b>										
9A	NW Pennsylvania	767.2	751.7	733.0	54.7	35.7	- 3.5	59.6	40.6	- 0.2
9B	North Central Pennsylvania	240.5	236.7	231.5	17.2	12.8	- 0.6	19.4	14.3	0.1
9C	Northern Tier	177.4	167.2	157.0	14.0	7.7	4.0	14.2	8.9	4.8
9D	NE Pennsylvania	913.4	894.3	873.9	53.5	53.1	18.6	58.8	60.9	22.5
9E	SW Pennsylvania	2,748.4	2,817.7	2,875.1	160.5	140.3	-89.6	193.4	160.2	-90.6
9F	Southern Alleghenies	501.7	495.9	490.4	36.6	25.3	- 5.5	38.7	29.7	- 3.6
9G	SEDA-CUG <sup>=</sup>	613.4	592.5	569.6	41.9	27.1	6.2	45.3	31.0	8.6
<b>South Carolina:</b>										
10A	SCACOG	783.6	722.1	656.4	50.3	31.5	32.7	62.3	32.4	35.8
<b>Tennessee:</b>										
11A	Upper Cumberland	230.9	212.9	193.7	15.1	10.4	13.3	16.2	11.1	14.1
11B	East Tennessee	806.9	756.4	701.0	56.2	33.9	28.1	59.4	35.4	31.4
11C	First Tennessee-Virginia	403.2	382.8	359.4	29.5	16.8	7.6	31.5	17.5	9.4
11D	South Central Tennessee <sup>§</sup>	64.7	62.7	59.9	4.5	2.9	0.5	5.1	3.1	0.8
11E	SE Tennessee	480.3	450.8	420.5	40.1	20.8	10.2	40.4	22.2	12.2
<b>Virginia:</b>										
12A	LENOWISCO	103.2	93.8	84.8	7.7	4.7	6.2	7.8	5.3	6.5
12B	Cumberland Plateau	134.0	123.3	112.5	11.3	5.6	4.9	11.3	5.9	5.5
12C	Mount Rogers	174.6	167.5	159.4	11.7	8.1	3.5	12.6	8.7	4.2
12D	New River Valley <sup>§</sup>	61.5	59.1	56.1	4.6	3.2	1.0	5.0	3.2	1.2
12E	Fifth District <sup>§</sup>	51.7	50.6	49.7	3.4	2.4	0.1	3.7	2.8	- 0.1
12F	Central Shenandoah <sup>§</sup>	8.1	8.0	7.7	0.3	0.5	0.3	0.5	0.6	0.3
<b>West Virginia:</b>										
13A	Region 1	266.9	252.0	238.5	24.5	13.6	4.0	23.5	15.0	5.0
13B	Region 2	273.0	270.0	266.8	24.1	14.8	- 6.3	24.8	15.6	- 5.9
13C	B-C-K-P (Region 3)	296.1	294.2	291.6	22.9	14.9	- 6.1	24.3	15.8	- 6.0
13D	Gauley	134.7	129.0	122.7	10.1	7.9	3.5	10.7	8.5	4.1
13E	Mid-Ohio Valley	168.6	164.6	160.4	12.7	8.0	- 0.7	13.3	8.9	- 0.2
13F	Region 6	262.8	253.5	243.8	19.7	13.7	3.2	20.3	15.0	4.5
13G	Region 7	114.4	108.8	103.5	8.2	5.9	3.2	8.5	6.8	3.7
13H	Region 8	67.3	63.4	59.3	4.9	3.4	2.3	5.2	3.6	2.6
13I	Eastern Panhandle	79.6	73.1	66.2	5.4	3.7	4.8	5.9	4.0	5.0
13J	Bel-O-Mar	118.7	119.8	121.4	9.4	6.6	- 3.8	10.0	7.7	- 3.8
13K	B-H-J (Region 11)	71.4	70.9	70.2	5.1	3.0	- 1.6	5.5	3.4	- 1.4

Source: 1970-75 data compiled by ARC from U.S. Bureau of Census "Estimates of the Population of (name of state), Counties and Metropolitan Areas: July 1, 1975 Revised and 1976 Provisional" (also contains corrected 1970 census data), *Current Population Reports*, Series P-26 and Series P-25, Washington, 1977-78. 13 reports for Appalachian states and unpublished data tabulations. Data tabulations by ARC computer systems staff.

Note: All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

\*July 1, 1975, estimate is based on revised county estimates prepared by the U.S. Bureau of Census and published in *Population Estimates*, Series P-26 between July 1977 and January 1978. 1970 data is revised U.S. Bureau of Census population data. 1980 projections computed by ARC staff.

†Methodology used is demographic-trend population projection computed by ARC staff.

‡Components of change for 1970-75 have been revised from preliminary estimates prepared by U.S. Bureau of Census, using 1975 vital statistics for counties from state sources.

§Data are only for that portion of the local development district in the Appalachian Region.

= Includes Perry County, Pennsylvania.



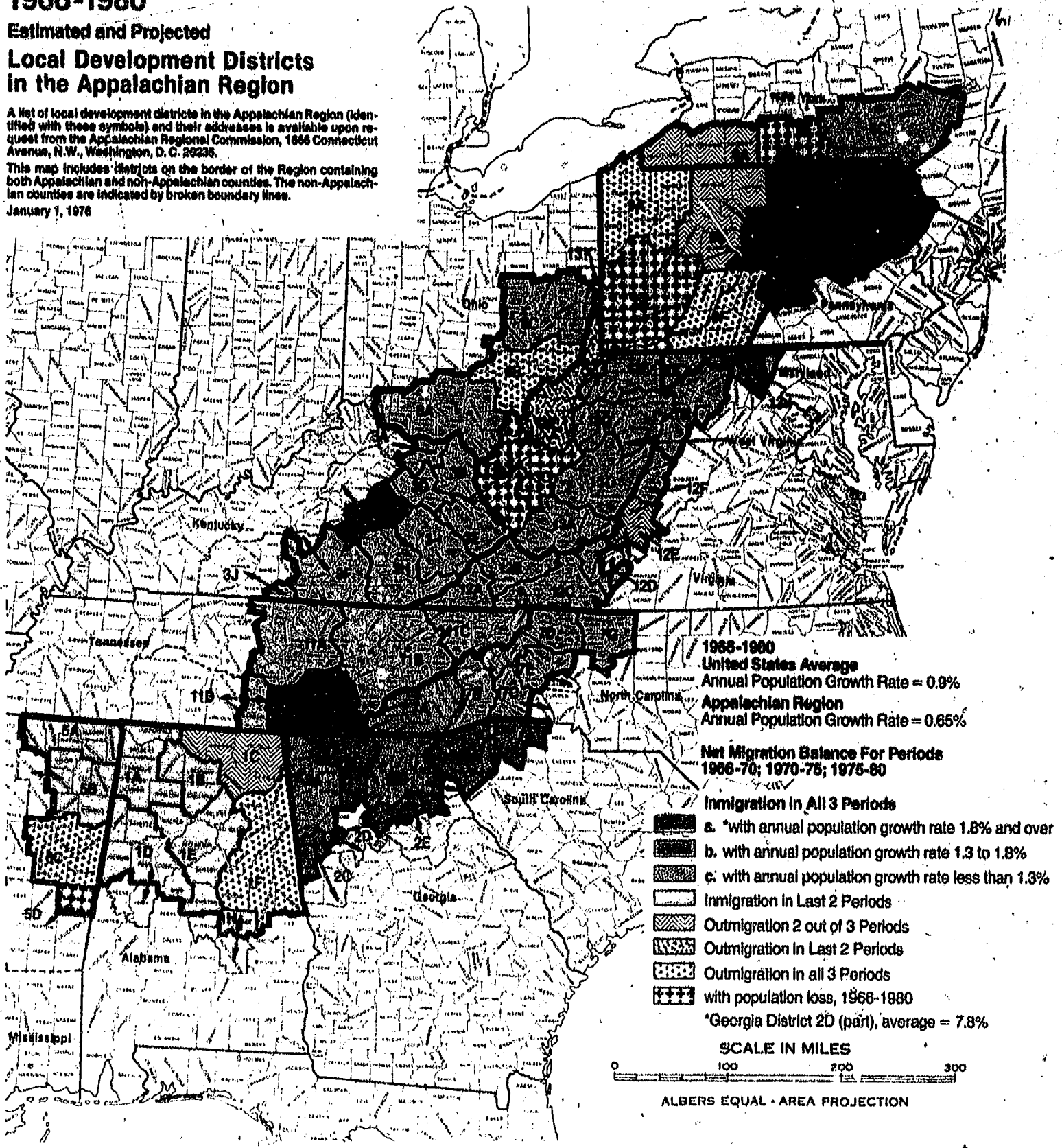
# Net Migration Trends 1966-1980

## Estimated and Projected Local Development Districts in the Appalachian Region

A list of local development districts in the Appalachian Region (identified with these symbols) and their addresses is available upon request from the Appalachian Regional Commission, 1666 Connecticut Avenue, N.W., Washington, D. C. 20235.

This map includes districts on the border of the Region containing both Appalachian and non-Appalachian counties. The non-Appalachian counties are indicated by broken boundary lines.

January 7, 1976



# Economic Development





## Labor Force, Employment and Unemployment Trends in the Appalachian Region

Between 1970 and 1977 the Appalachian civilian labor force grew from 7.1 to 8.1 million persons, a rise of 14½ percent, while the labor force in the non-Appalachian parts of the 12 states grew by 13 percent. This was less than the growth rate nationally (18 percent). See Tables 17 and 18 on pages 43 and 44.

Relatively consistent trends in labor force, employment and unemployment in both Region and nation in the years 1970-74 were broken sharply by the recession year 1975. While the labor force continued to grow, employment dropped and unemployment increased sharply.

Between 1975 and 1977 employment increased and unemployment decreased in both the Region and the nation. The drop in Appalachian unemployment from 8.7 to 7.2 percent of the civilian labor force in a two-year period is similar to the national trend, however, the unemployment rate remained slightly higher than the U.S. rate. The three subregions differed sharply in unemployment rates with Northern Appalachia well above the national level, while Central and Southern Appalachia had a lower incidence of unemployment. Improvement in the 1975-77 period was most rapid in Southern Appalachia. The number of unemployed in the Region, estimated at 386,000 in 1970, had increased to 422,000 in 1974 and then sharply increased to 682,000 in 1975 but since dropped to 608,000 in 1976 and 584,000 in 1977.

The highest 1977 unemployment rates within the Region were in Maryland and New York and the lowest in Kentucky and North Carolina. All unemployment rates were higher in 1977 than in 1970, regionally and nationally, with the exception of Central Appalachian Kentucky and Virginia where unemployment rates were lower in 1977.

In the non-Appalachian parts of the Appalachian states, 1977 unemployment rates were similar in the northern and southern states as a whole to those in the Appalachian subregions but lower in the central states (Kentucky, Tennessee and Virginia) in the non-Appalachian portions.

Labor force participation (ratio relative to population) has increased steadily since 1970 (see Figure 1 on page 45). While Central Appalachia has advanced sharply, the growth of labor force in Northern Appalachia has been remarkably slow in both the 1970-72 and 1975-77 periods.

## Unemployment in the Appalachian Region Local Development District Areas

1977 unemployment rates within the Appalachian local development districts were lowest in the middle portions of the Region extending from three districts in West Virginia and most of Appalachian Kentucky southward to northern Georgia (see map on page 46 and Table 19 on page 48). The intervening areas in Appalachian Virginia, eastern Tennessee and Appalachian South Carolina were below average U.S. levels of unemployment. Over the 1970-77 period unemployment rates dropped in several eastern Kentucky districts, while in northern Georgia

and Appalachian South Carolina they increased from exceptionally low 1970 levels.

Highest 1977 rates of unemployment were found in the mountain highlands of Virginia's Central Shenandoah district, in western Maryland, central West Virginia, in the Southern Alleghenies and northeastern districts in Pennsylvania, and the western half of Appalachian New York. In addition there was one district, Northeast Mississippi, in the Deep South. Unemployment rates were much higher in 1977 than in 1970 in nearly all of these districts, and all except two districts were in Northern Appalachia.

## Appalachian Employment by Industry

Civilian employment in the Appalachian Region numbered 6.5 million persons in 1970, or 8.5 percent of the national total, slightly less than the Region's share (9.0 percent) of U.S. population. Manufacturing, the largest industry group, was even more dominant in the Region than in the nation, with nearly one-third of regional employment (see Figure 2 on page 47). In Southern Appalachia this share was 37 percent (see Figure 3 on page 50). Within manufacturing, two industries (textiles and apparel, and primary metals) had a concentration of employment between 2.7 and 2.8 times the national ratio. Only one other industry, mining, had a comparable level of concentration, based upon the coal mining industry. Only one other nonmanufacturing industry, railroads (with railway express service) had a concentration level as high as 1.5 times the U.S. average. See Figure 4 on page 51.

Central Appalachia, with 9.6 percent of the Region's population, had



Table 17

## Civilian Resident Labor Force, Employment and Unemployment Appalachian Region and United States 1970-1977

Geographic Division	1977 Average				Civilian Labor Force Unemployment		
	Civilian Labor Force (thousands)	Employed Persons (thousands)	Unemployed Persons (thousands)	Civilian Labor Force Unemployment (percent)	Civilian Labor Force Unemployment		
					1976 (percent)	1975 (percent)	1970 (percent)
United States	97,401	90,546.1	6,855	7.0%	7.7%	8.5%	4.9%
Appalachian Region	8,142.5	7,558.1	584.4	7.2%	7.6%	8.7%	5.4%
<b>Subregions</b>							
<b>Northern Appalachia</b>	<b>4,095.5</b>	<b>3,777.7</b>	<b>317.8</b>	<b>7.8%</b>	<b>8.4%</b>	<b>8.9%</b>	<b>5.5%</b>
Maryland	90.7	80.8	9.9	10.9	10.1	9.9	6.2
New York	465.6	426.1	39.5	8.5	9.1	8.6	5.1
Ohio	476.7	441.0	35.7	7.5	8.8	10.1	6.5
Pennsylvania	2,492.3	2,299.2	193.1	7.7	8.3	9.0	5.3
West Virginia	570.2	530.5	39.7	7.0	7.7	7.4	6.0
<b>Central Appalachia</b>	<b>749.3</b>	<b>701.2</b>	<b>48.1</b>	<b>6.4%</b>	<b>6.6%</b>	<b>7.8%</b>	<b>7.0%</b>
Kentucky	392.2	370.4	21.8	5.6	6.4	7.6	7.5
Tennessee	147.6	136.2	11.5	7.8	7.7	11.4	6.6
Virginia	86.6	81.2	5.4	6.3	6.0	6.0	6.9
West Virginia	122.8	113.5	9.3	7.6	6.5	5.4	6.3
<b>Southern Appalachia</b>	<b>3,297.7</b>	<b>3,079.2</b>	<b>218.5</b>	<b>6.6%</b>	<b>6.7%</b>	<b>8.7%</b>	<b>4.9%</b>
Alabama	972.6	899.8	72.8	7.5	7.1	8.1	6.2
Georgia	424.9	398.0	26.9	6.3	8.3	9.3	3.8
Mississippi	198.2	183.9	14.3	7.2	6.5	9.1	5.1
North Carolina	547.7	517.2	30.6	5.6	6.0	9.3	4.5
South Carolina	350.6	328.5	22.0	6.3	6.2	8.7	3.7
Tennessee	669.3	626.1	43.2	6.5	5.9	8.3	4.9
Virginia	134.4	125.7	8.7	6.5	7.7	8.8	4.5
<b>State Parts*</b>							
Tennessee	816.9	762.3	54.6	6.7%	6.2%	8.8%	5.2%
Virginia	221.0	206.9	14.1	6.4	7.1	7.7	5.4
West Virginia†	693.0	644.0	49.0	7.1	7.5	7.0	6.1

Source: National data from U.S. Department of Labor, Bureau of Labor Statistics, based on U.S. Bureau of Census household surveys. State data from individual state reporting agencies.

\* Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

† Entire state.

Table 18

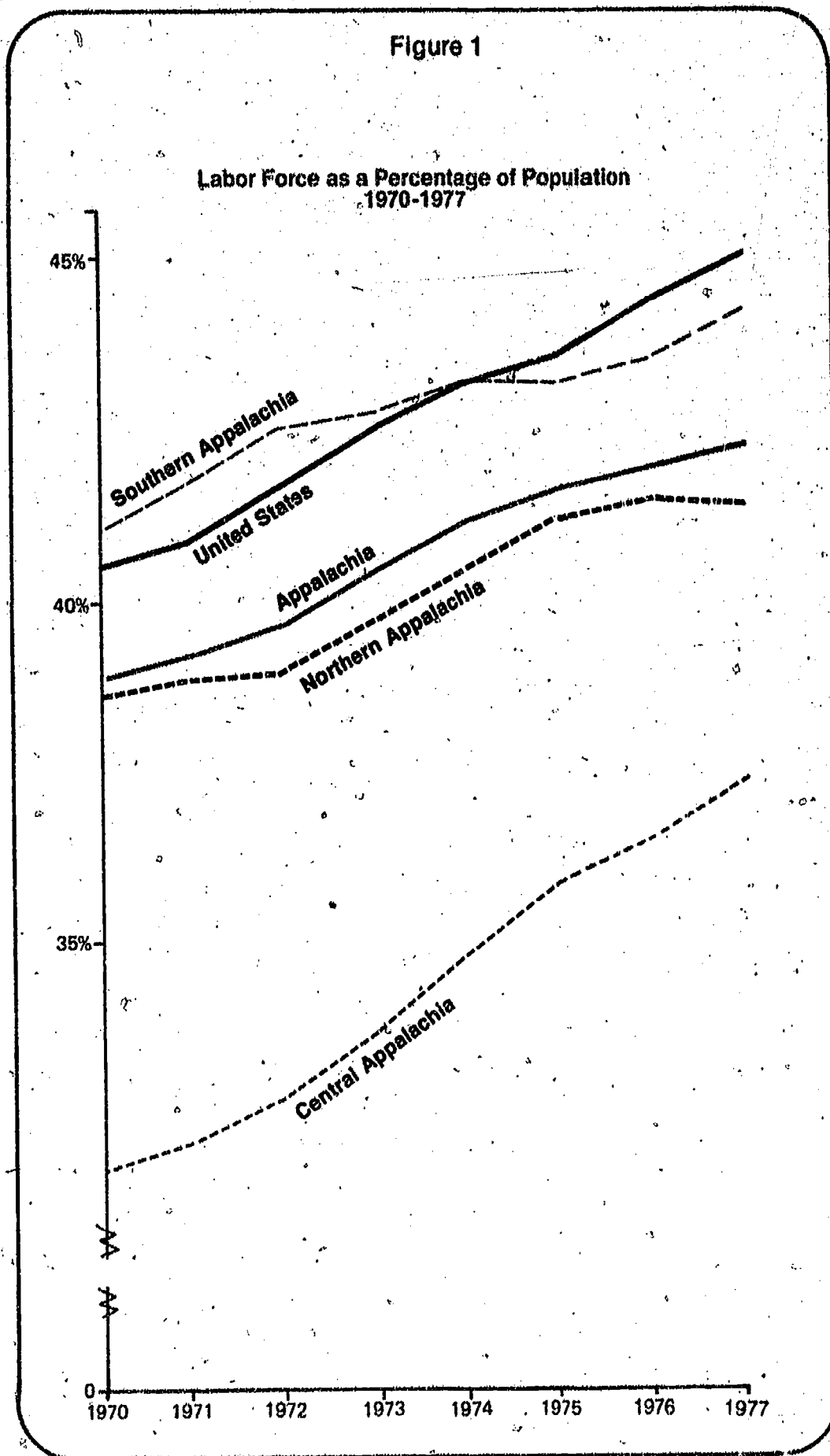
**Civilian Resident Labor Force, Employment and Unemployment  
Non-Appalachian States, Appalachian States and Non-Appalachian State Parts  
1970-1977**

Geographical Division	1977 Average				Civilian Labor Force Unemployment		
	Civilian Labor Force (thousands)	Employed Persons (thousands)	Unemployed Persons (thousands)	Civilian Labor Force Unemployment (percent)	1976 (percent)	1975 (percent)	1970 (percent)
<b>Non-Appalachian States</b> (37 states and Washington, D.C.)	62,500	58,200	4,366	7.0%	7.6 %	8.5 %	5.15%
<b>13 Appalachian States*</b>	34,835	32,346	2,489	7.1%	7.8 %	8.4 %	4.6 %
<b>Non-Appalachian State Parts†</b>	26,693	24,789	1,904	7.1%	7.85%	8.35%	4.4 %
<b>Northern States</b>	16,163	14,907	1,256	7.8%	8.75%	8.8 %	4.4 %
Maryland	1,856	1,748	108	5.8	6.6	6.7	3.2
New York	7,297	6,628	668	9.2	10.3	9.6	4.4
Ohio	4,334	4,059	275	6.3	7.7	9.0	5.2
Pennsylvania	2,676	2,471	205	7.7	7.55	7.7	3.8
<b>Central States</b>	4,367	4,141	226	5.2%	5.7 %	6.9 %	3.9 %
Kentucky	1,116	1,068	48	4.3	5.3	7.2	4.3
Tennessee	1,089	1,024	65	6.0	5.9	8.0	4.5
Virginia	2,162	2,049	113	5.2	5.8	6.3	3.2
<b>Southern States</b>	6,163	5,742	421	6.8%	7.0 %	8.15%	4.5 %
Alabama	561	520	41	7.3	6.1	7.0	5.6
Georgia	1,834	1,705	129	7.0	8.1	8.4	4.1
Mississippi	766	709	57	7.4	6.6	6.8	4.6
North Carolina	2,072	1,948	124	6.0	6.3	8.5	4.3
South Carolina	929	859	70	7.5	7.2	8.7	5.3

Source: National data from U.S. Department of Labor, Bureau of Labor Statistics, based on U.S. Bureau of Census household surveys. State data from individual state reporting agencies.

\*Entire state.

†Entire state of West Virginia is included in data for Appalachian states in Table 17.



in 1970 7.6 percent of its employed population and only 4.8 percent of manufacturing employment, but over 36 percent of its mining employment (primarily coal mining) and 16 percent of agricultural employment (see Table 20 on page 52). During the 1960s, in Central Appalachia agricultural employment dropped by more than one-half and mining by 30 percent so that much of Central Appalachia suffered depressed conditions, though its manufacturing employment increased by 35 percent (not enough to offset the losses).

The Region as a whole increased its employed labor force by 11 percent between 1960 and 1970, a very slow rate of growth compared with the nation (18.5 percent). The increase for the subregions was: Northern, 6.5 percent; Central, 4.2 percent; and Southern, 20.0 percent. The growth of manufacturing in the Region was about the same as for total civilian employment (11 percent) during the 1960s.

Figure 5 on page 53 shows growth trends in major industrial group employment from 1965 to 1975. Though these data are based only on covered employment (see footnote, Figure 5) and refer to jobs rather than people, they are the most nearly comparable uniform data series available for years since 1970 from the U.S. Bureau of the Census.

## Manufacturing Industry Employment and Its Localization in the Appalachian Region

Manufacturing industry employment was more concentrated in the Ap-





# 1977 Unemployment Rate as percent of Civilian Labor Force

## Local Development Districts in the Appalachian Region

A list of local development districts in the Appalachian Region (identified with these symbols) and their addresses is available upon request from the Appalachian Regional Commission, 1856 Connecticut Avenue, N.W., Washington, D. C. 20235.

This map includes districts on the border of the Region containing both Appalachian and non-Appalachian counties. The non-Appalachian counties are indicated by broken boundary lines.

January 1, 1978

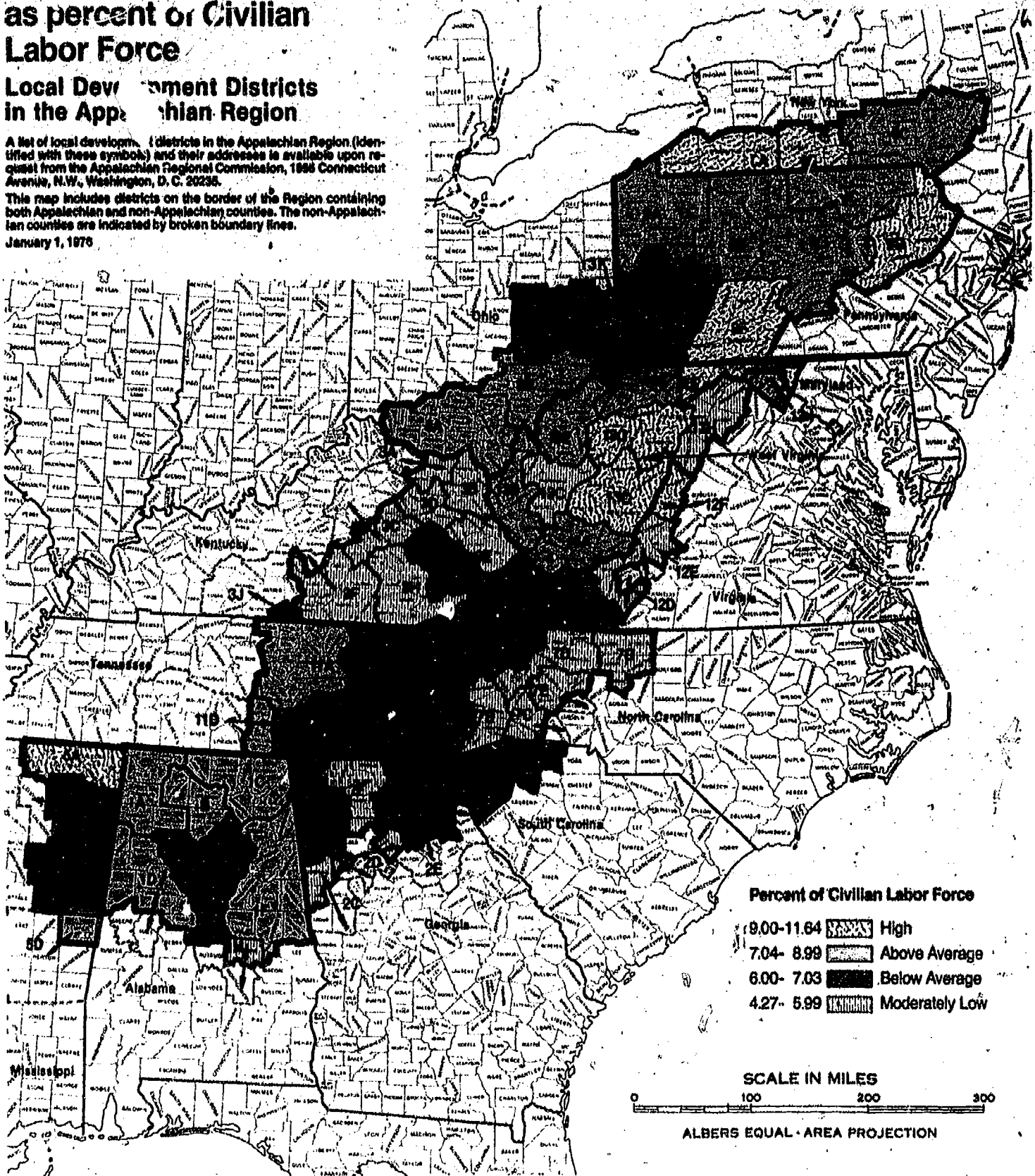
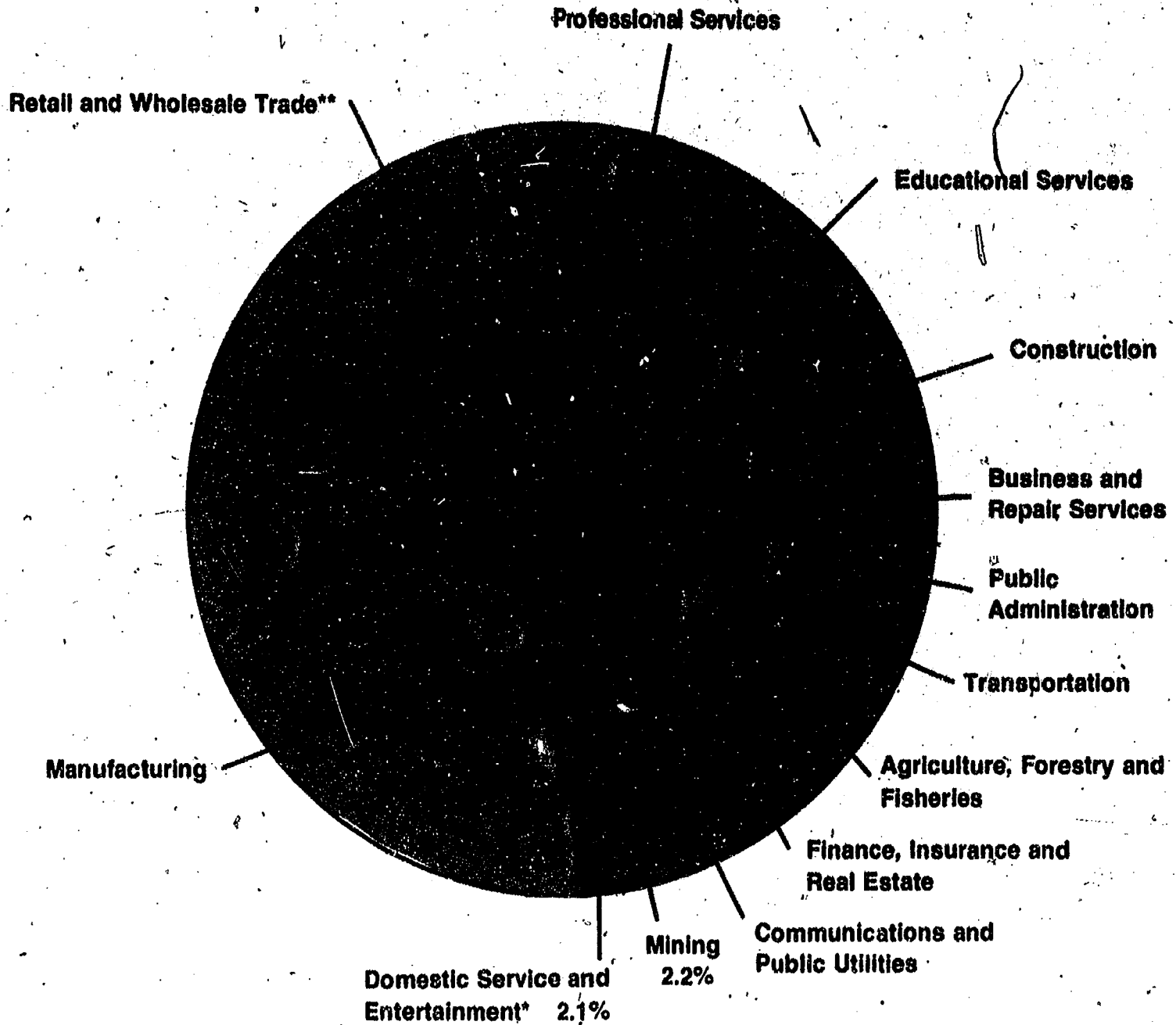


Figure 2

Percent of Civilian Appalachian Labor Force Employed by Industry Division

1970



Total Civilian Labor Force: 6,499,200  
All labor force figures include civilian labor force only.

\*Domestic service in private households, 1.6%; entertainment and recreation services, 0.5%.  
\*\*Retail trade, 14.7%; wholesale trade, 3.2%.

Table 19

**Civilian Resident Labor Force, Employment and Unemployment  
Appalachian Region and Local Development Districts  
1970-1977**

LDD Code	State and Local Development District	1977 Average				Civilian Labor Force Unemployment		
		Civilian Labor Force (thousands)	Employed Persons (thousands)	Unemployed Persons (thousands)	Labor Force Unemployment (percent)	1976 (percent)	1975 (percent)	1970 (percent)
	<b>Appalachian Region</b>	8,142.5	7,558.1	584.4	7.2%	7.6%	8.7%	5.4%
	<b>Alabama:</b>							
1A	NW Alabama	80.9	74.2	6.7	8.3%	8.1%	10.3%	7.6%
1B	North Central Alabama	68.4	62.7	5.8	8.4	8.6	9.1	6.1
1C	Top of Alabama	170.7	157.2	13.5	7.9	7.8	9.1	6.4
1D	West Alabama	81.4	75.4	5.9	7.3	5.9	7.0	6.2
1E	Birmingham Regional	383.6	357.1	26.5	6.9	6.6	6.7	5.4
1F	East Alabama	172.3	158.7	13.6	7.9	7.3	9.6	7.1
1H	Central Alabama*	15.3	14.5	0.8	5.6	4.6	4.9	3.6
	<b>Georgia:</b>							
2A	Coosa Valley	150.2	139.7	10.5	7.0%	8.9%	9.5%	4.1%
2B	Georgia Mountains	89.5	83.6	5.9	6.6	9.0	10.4	3.5
2C	Chattahoochee-Flint*	34.2	32.3	1.9	5.6	7.7	8.5	3.5
2D	Atlanta Regional*	51.3	48.6	2.6	5.1	5.5	6.4	2.6
2E	NE Georgia	27.2	25.4	1.8	6.8	7.5	9.3	2.8
2F	North Georgia	72.6	68.4	4.2	5.8	8.7	10.1	4.7
	<b>Kentucky:</b>							
3A	Buffalo Trace*	9.5	9.0	5.0	5.4%	4.8%	6.5%	3.9%
3B	FIVCC	48.6	46.1	2.5	5.1	5.2	7.1	6.3
3C	Bluegrass*	62.0	59.1	2.9	4.6	5.4	7.1	4.7
3D	Gateway	25.8	24.3	1.5	5.8	6.4	8.5	6.1
3E	Big Sandy	61.9	58.3	3.6	5.8	6.3	6.1	8.9
3F	Lake Cumberland*	59.3	56.2	3.1	5.2	6.0	8.3	7.6
3H	Cumberland Valley	80.2	75.5	4.7	5.9	7.3	7.9	9.7
3I	Kentucky River	39.7	37.1	2.7	6.7	8.5	8.8	9.0
3J	Barren River*	5.2	4.9	0.3	6.2	5.5	9.3	4.5
	<b>Maryland:</b>							
4A	Tri-County	90.7	80.8	9.9	10.9%	10.1%	9.9%	6.2%
	<b>Mississippi:</b>							
5A	NE Mississippi	53.8	48.7	5.1	9.5%	8.3%	10.8%	5.6%
5B	Three Rivers*	75.6	70.7	4.8	6.4	5.7	9.0	4.7
5C	Golden Triangle	65.3	61.2	4.1	6.2	5.8	7.8	4.9
5D	East Central Mississippi*	3.6	3.2	0.3	8.9	10.8	9.8	8.7
	<b>New York:</b>							
6A	Southern Tier West	120.7	109.8	10.9	9.0%	10.0%	9.4%	5.5%
6B	Southern Tier Central	91.3	82.7	8.5	9.3	9.3	9.2	5.2
6C	Southern Tier East	253.7	233.6	20.1	7.9	8.6	8.0	4.9



LDD State and Local Code	Development District	1977 Average			Civilian Labor Force Unemployment			
		Civilian Labor Force (thousands)	Employed Persons (thousands)	Unemployed Persons (thousands)	Labor Force Unemployment (percent)	1976 (percent)	1975 (percent)	1970 (percent)
<b>North Carolina:</b>								
7A	SW North Carolina	54.0	50.4	3.6	6.6%	6.7%	11.0%	6.5%
7B	Land-of-Sky	111.2	105.3	6.0	5.4	5.4	9.0	4.4
7C	Isothermal*	48.7	46.2	2.5	5.1	5.3	9.7	4.0
7D	Region D	74.0	69.9	4.1	5.5	6.1	9.9	5.5
7E	Western Piedmont*	74.2	69.9	4.3	5.8	6.6	10.3	4.7
7G	NW North Carolina	185.6	175.4	10.2	5.5	6.1	8.3	4.8
<b>Ohio:</b>								
8A	Ohio Valley	184.7	169.4	15.4	8.3%	10.0%	11.6%	7.3%
8B	Buckeye Hills-Hocking Valley	88.3	82.0	6.2	7.1	8.5	9.7	6.4
8C	Ohio Mid-Eastern	203.7	189.6	14.1	6.9	7.8	8.9	5.9
<b>Pennsylvania:</b>								
9A	NW Pennsylvania	314.1	290.0	24.1	7.7%	8.7%	9.5%	4.7%
9B	North Central Pennsylvania	104.1	95.7	8.4	8.1	7.9	11.0	6.9
9C	Northern Tier	68.8	63.4	5.4	7.8	8.1	9.9	6.1
9D	NE Pennsylvania	385.8	349.4	36.4	9.4	9.2	10.8	5.2
9E	SW Pennsylvania	1,162.4	1,083.4	79.0	6.8	8.0	7.6	5.3
9F	Southern Alleghenies	201.9	183.0	18.9	9.4	7.8	9.0	5.6
9G	SEDA-COG†	255.3	234.4	20.9	8.2	8.5	10.5	5.2
<b>South Carolina:</b>								
10A	SCACOG	350.6	328.5	22.0	6.3%	6.2%	8.7%	3.7%
<b>Tennessee:</b>								
11A	Upper Cumberland	90.4	83.5	6.9	7.6%	7.1%	11.6%	6.9%
11B	East Tennessee	329.2	306.7	22.5	6.8	6.4	8.7	4.4
11C	First Tennessee-Virginia	162.0	152.0	10.0	6.1	6.0	8.2	6.4
11D	South Central Tennessee*	9.2	27.1	2.1	7.2	6.1	8.3	8.5
11E	SE Tennessee	206.2	193.0	13.2	6.4	5.7	7.9	4.5
<b>Virginia:</b>								
12A	LENOWISCO	37.2	34.8	2.4	6.6%	6.6%	6.3%	7.0%
12B	Cumberland Plateau	49.4	46.4	3.0	6.1	5.5	5.8	6.8
12C	Mount Rogers	79.3	73.7	5.6	7.0	8.1	9.2	4.6
12D	New River Valley*	28.5	27.0	1.5	5.1	6.4	8.2	5.0
12E	Fifth District*	22.8	21.6	1.2	5.4	7.0	7.1	3.1
12F	Central Shenandoah*	3.7	3.3	0.4	11.6	14.9	16.2	6.3
<b>West Virginia:</b>								
13A	Region 1	90.2	83.8	6.5	7.2%	5.9%	5.1%	6.4%
13B	Region 2	99.8	92.4	7.4	7.4	7.7	7.0	6.4
13C	B-C-K-P (Region 3)	125.2	118.5	6.7	5.4	6.1	5.8	5.0
13D	Gauley	45.8	41.1	4.7	10.3	9.1	7.0	8.5
13E	Mid-Ohio Valley	64.5	59.8	4.7	7.3	9.9	10.6	6.8
13F	Region 6	97.6	90.5	7.0	7.2	7.2	7.0	4.6
13G	Region 7	40.4	36.4	4.1	10.1	12.0	9.6	6.5
13H	Region 8	23.8	22.4	1.3	5.6	6.1	5.9	3.8
13I	Eastern Panhandle	28.9	26.7	2.2	7.5	8.5	8.4	5.6
13J	Bel-O-Mar	49.8	46.6	3.2	6.5	7.6	7.5	5.1
13K	B-H-J (Region 11)	27.0	25.8	1.2	4.3	4.2	4.7	3.2

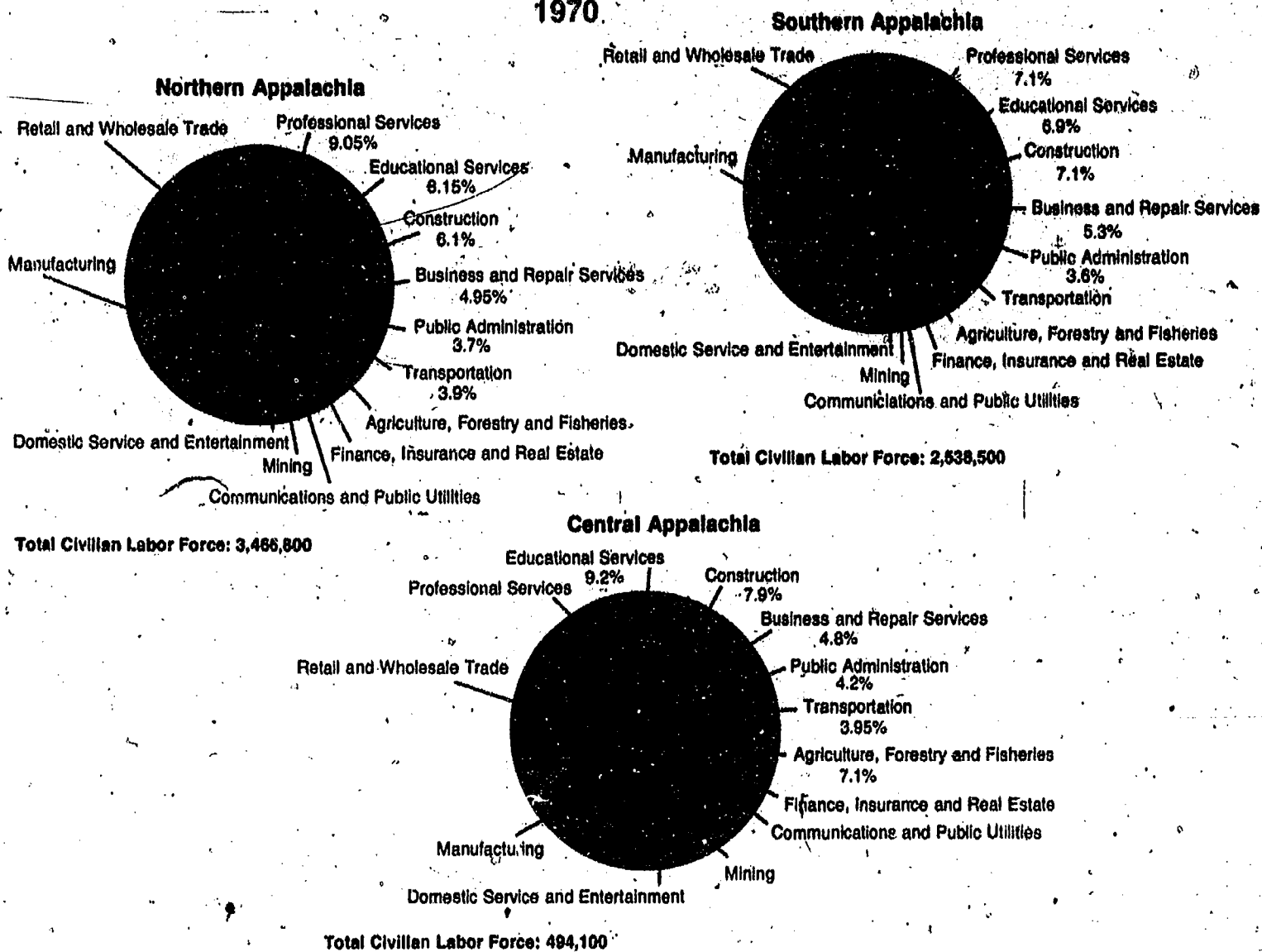
Source: National data from U.S. Department of Labor, Bureau of Labor Statistics, based on U.S. Bureau of Census household surveys. State data from individual state reporting agencies.

\*Data are only for that portion of the local development district in the Appalachian Region.

†Includes Perry County, Pennsylvania.

Figure 3

Percent of Civilian Labor Force Employed In Industry Divisions by Subregion  
1970.



Percent of Civilian Labor Force Employed by Industry Division  
United States  
1970

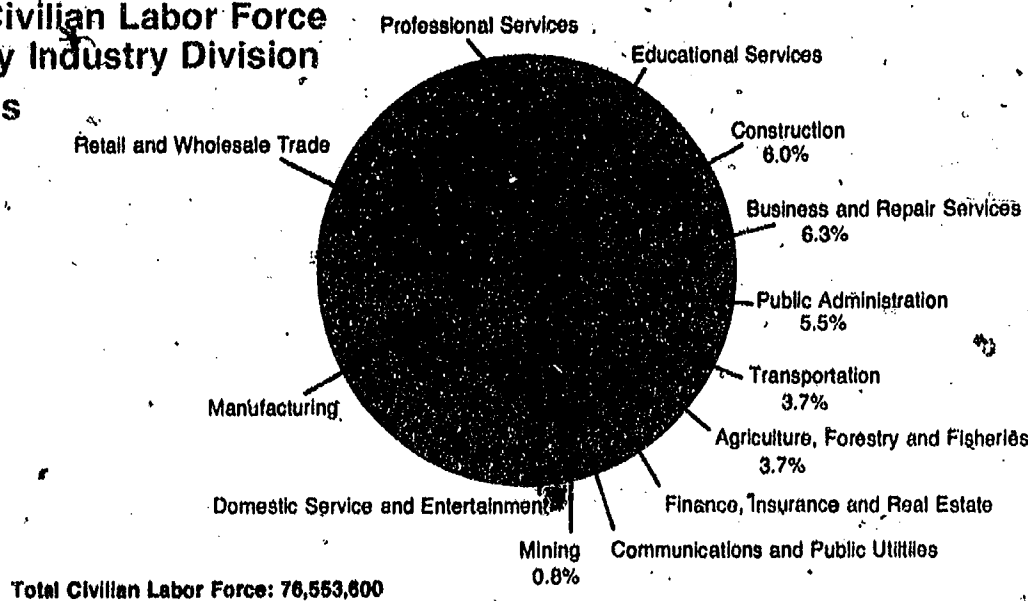


Figure 4

**Civilian Employed Persons in Manufacturing Industry Groups  
as a Percent of Total Employment  
1970**

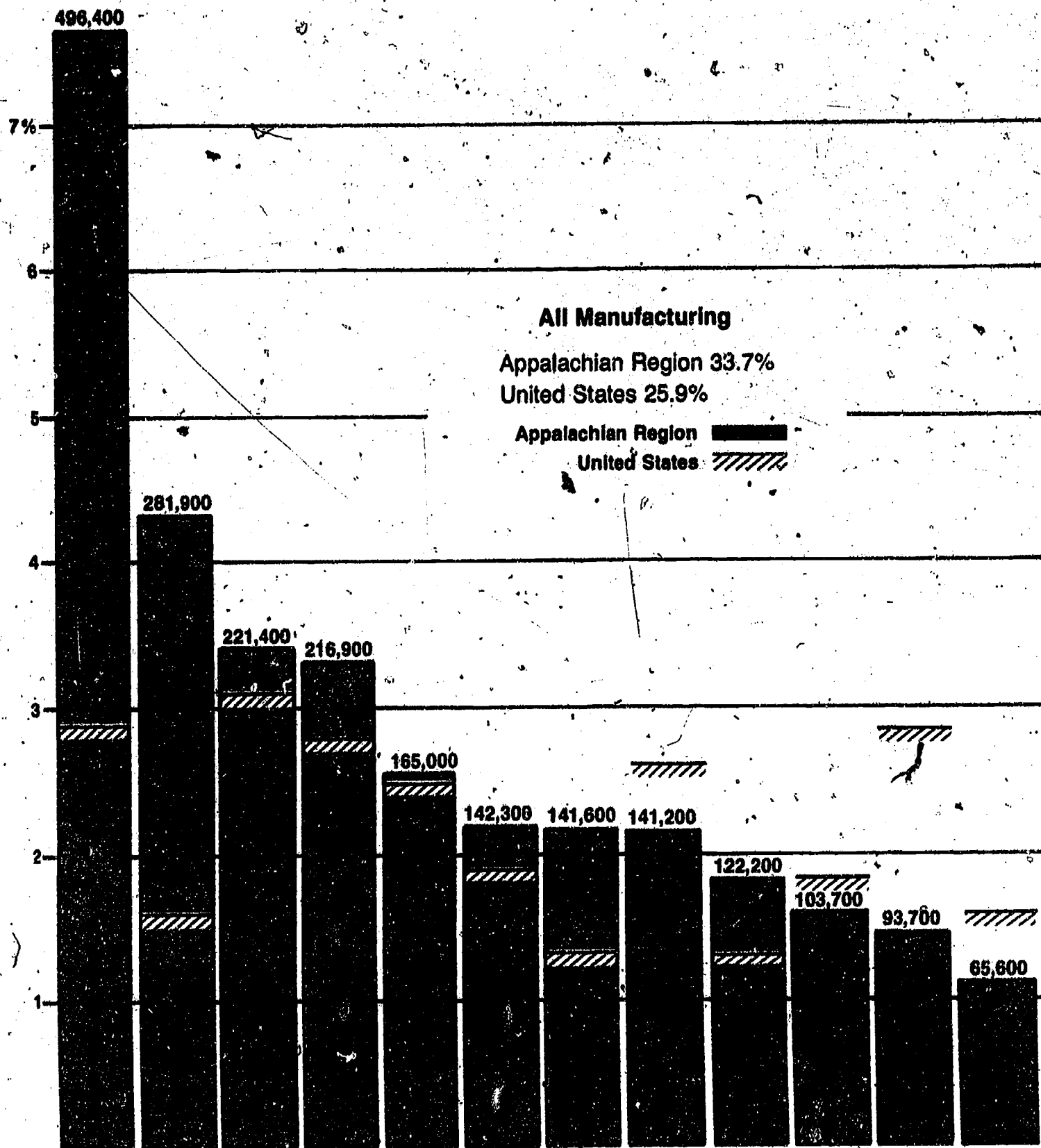




Table 20

**Civilian Employed Persons  
by Major Industrial Group  
Appalachian Region and Subregions  
1970**

	Appalachian Region	Northern Appalachia	Central Appalachia	Southern Appalachia
<b>Total Employed Civilian Population</b>	<b>6,499,200</b>	<b>3,366,800</b>	<b>494,100</b>	<b>2,538,500</b>
Manufacturing	2,191,700	1,138,800	105,900	947,000
Retail and Whole- sale Trade	1,159,000	643,400	84,300	431,300
Professional Services	527,800	313,700	33,100	181,000
Educational Services	502,800	282,500	45,500	174,700
Business, Repair and Personal Services	328,900	171,600	23,700	133,500
Construction	430,600	211,300	39,200	180,200
Public Adminis- tration	241,400	129,800	20,900	90,700
Transportation	225,800	135,200	19,500	71,200
Agriculture, For- estry and Fisheries	217,300	89,500	35,100	92,700
Finance, Insur- ance and Real Estate	203,000	112,700	10,100	80,100
Communications and Public Utilities	188,600	101,600	13,600	73,500
Mining	145,100	76,400	52,800	15,900
Other (Domestic Service and Entertainment)	137,200	60,200	10,400	66,600

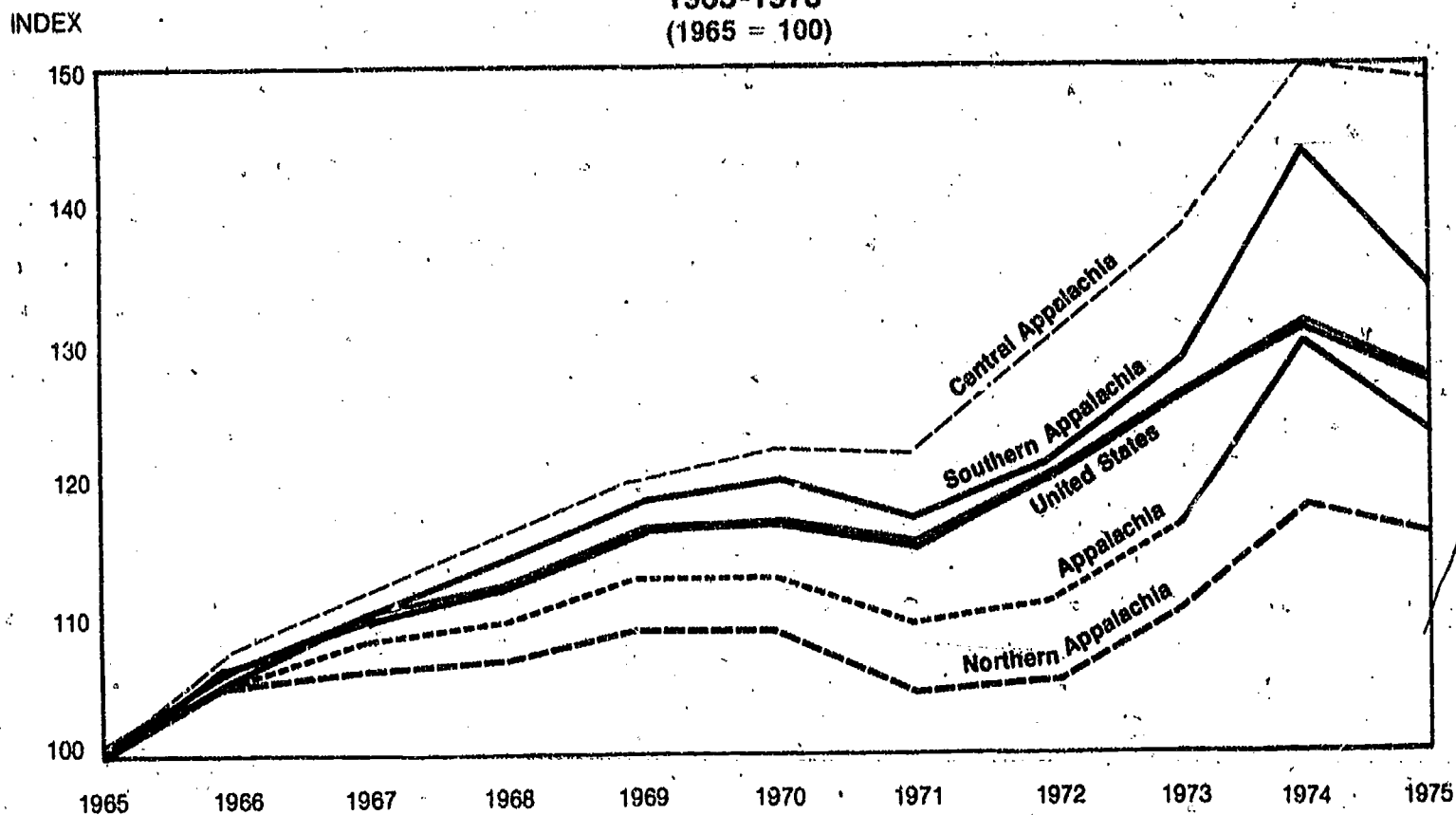
**Civilian Employed Persons  
by Industry  
Appalachian Region  
1970**

	Appalachian Region
<b>Retail and Wholesale Trade</b>	
Wholesale Trade	205,600
Food, Bakery and Dairy Stores	167,400
Eating and Drinking Places	153,100
General Merchandise Retailing	153,800
Automotive Retailing and Service Stations	156,700
Other Retail Trade	322,400
<b>Professional Services</b>	
Hospitals	218,200
Other Medical and Health Services	103,400
Welfare, Religious and Nonprofit Membership Organizations	91,600
Legal, Engineering and Miscellaneous Professional Services	114,600
<b>Educational Services</b>	
Public Schools and Colleges	358,900
Private Schools and Colleges	122,900
Other Education Services	21,000
<b>Business Repair and Personal Services</b>	
Business Services	60,200
Repair Services	85,300
Personal Services (hotels, motels, barber and beauty shops, etc.)	183,300
<b>Finance, Insurance and Real Estate</b>	
Banking and Credit Agencies	82,100
Insurance, Real Estate and Other Finance	120,900
<b>Communications and Public Utilities</b>	
Communications	68,900
Utilities and Sanitary Services	119,700
<b>Domestic Service</b>	101,500
<b>Entertainment and Recreation Services</b>	35,700
<b>Transportation</b>	
Railroads and Railway Express Service	79,300
Trucking Services and Warehousing	94,700
Other Transportation	51,900

Source: U.S. Bureau of Census, 1970 Census of Population.

Figure 5

Growth Trends in Major Industrial Group Employment  
1965-1975  
(1965 = 100)



Major Industrial Group: These data represent only employment covered by the Federal Insurance Contributions Act. This includes covered wage and salary employment of private nonfarm employers and all covered employment of religious, charitable, educational and other nonprofit organizations. It does not include government employees, self-employed individuals, farm workers, domestic service workers, railroad employees or employment on oceanborne vessels. Data refer to mid-March of the calendar year and represent covered employment in the first quarter only.

Source: *County Business Patterns*. U.S. Department of Commerce, Bureau of the Census.

palachian Region than in the nation in 1975 as measured by any of three localization indexes: covered employment; resident civilian labor force; or total resident population.

Manufacturing employment is most concentrated in Southern Appalachia. Localization is below the national average level only in Central Appalachia where the index relative to resident population drops to, just over one-half the national average.

Total 1975 manufacturing employment and localization indexes are shown in Table 21 on page 54 for the Region and three subregions, along with detail for each of the 20 major groups and for auxiliary and administrative units.

Total Manufacturing Employment  
1975

Localization Index Measured  
Against Base of:

Geographical Division	Total Covered Employment	Resident Civilian Labor Force	Total Resident Population
Appalachian Region	133	127	120
Northern Appalachia	126	123	115
Central Appalachia	86	63	53
Southern Appalachia	151	146	143

Employment data are from *County Business Patterns*, 1975.

The five leading industry groups in the Region in 1975 were: primary metals, textile mills, apparel and textile products, machinery, and electric

and electronic industries. Together they accounted for 53 percent of all manufacturing establishment employment in the Region with a total

Table 21

**Manufacturing Industry Employment  
by Major Industry Group  
Appalachian Region  
March 1975**

Major Industry Group	SIC Code	FICA Covered Employment, March 1975			
		Appalachian Region (thousands)	Northern Appalachia (thousands)	Central Appalachia (thousands)	Southern Appalachia (thousands)
Total Manufacturing		1,968.6	983.4	27.0	898.3
Localization Index		133	126	86	151
Manufacturing Establishments		1,878.1	923.5	84.9	869.7
Localization Index		136	126	90	156
Primary Metal Industries	33	255.5	185.3	7.5	62.8
Localization Index		275	377	117	168
Textile Mill Products	22	232.8	19.6	2.9	210.3
Localization Index		357	57	65	801
Apparel and Textile Products	23	208.4	69.1	21.2	118.2
Localization Index		219	137	325	308
Machinery, except Electrical	35	151.2	102.2	8.2	40.7
Localization Index		91	116	72	61
Electric and Electronic Equipment	36	143.1	83.6	7.7	51.7
Localization Index		113	125	89	102
Fabricated Metal Products	34	130.1	79.5	2.7	47.9
Localization Index		116	133	35	106
Chemicals and Allied Products	28	103.6	42.5	6.4	54.7
Localization Index		154	119	138	202
Food and Kindred Products	20	103.3	48.5	4.3	50.5
Localization Index		89	79	54	108
Stone, Clay and Glass Products	32	93.7	67.6	2.4	23.7
Localization Index		202	276	75	127
Furniture and Fixtures	25	70.7	16.0	2.1	52.6
Localization Index		223	95	96	412
Transportation Equipment	37	66.2	46.0	2.1	18.2
Localization Index		52	68	24	35
Printing and Publishing	27	57.8	34.9	2.0	20.8
Localization Index		67	76	34	60
Lumber and Wood Products	24	56.7	23.1	6.1	27.5
Localization Index		124	96	196	150
Rubber and Miscellaneous Plastic Products	30	51.6	24.5	1.5	25.6
Localization Index		109	98	48	135
Paper and Allied Products	26	47.7	23.2	1.2	23.3
Localization Index		102	93	38	123
Leather and Leather Products	31	27.1	15.8	3.0	8.3
Localization Index		149	164	244	114
Instruments and Related Products	38	27.1	18.3	1.3	7.4
Localization Index		65	83	47	44
Miscellaneous Manufacturers	33	27.0	13.8	1.4	11.8
Localization Index		83	80	62	90
Tobacco Manufacturers	21	17.0	4.3	0	12.7*
Localization Index		320	153	0	594
Petroleum and Coal Products	29	7.4	5.7	0.8	1.0
Localization Index		64	92	101	20
Administrative and Auxiliary Units		90.5	59.9	2.1	28.6
Localization Index		99	124	33	78

Source: Special tabulations from U.S. Bureau of Census, *County Business Patterns 1975* Washington, D.C., U.S. Government Printing Office 1977-78. Localization indexes computed by ARC staff, based on *County Business Patterns 1975* first quarter employment covered by the Federal Insurance Contributions Act, for the United States, the Appalachian Region and the three subregions. An index of 100 means that the industry employment in the given area is the same proportion of the total as in the United States as a whole.

\*Primarily localized in Forsyth County (Winston-Salem), North Carolina.



of 991,000. Appalachia contained 14.6 percent of all U.S. employment in these industries for a localization index of 181. Textile mills were most localized (but only in Southern Appalachia), while primary metals and apparel industries followed.

Including the next four industry groups (see Table 21 on page 54), the leading nine groups employed 1,422,000 persons at manufacturing establishments in Appalachia or 76 percent of the total in 1975. The remaining eleven industry groups had a total employment of only 456,000 in the Region or less than the two largest groups. Among these, relatively high-localization indexes were found only for furniture and fixtures in Southern Appalachia, leather and leather products distributed throughout the Region and tobacco manufactures concentrated in Winston-Salem, North Carolina. Of the twenty major industry groups, employment localization indexes for the Appalachian Region were above 200 for six; between 100 and 200 for seven and below 100 for seven in 1975. The lowest index in the Region was 52 for transportation equipment industry employment. This pattern reflects both the diversity within Appalachia and specialization in many industries which are resource-based or labor-based within the Region.

### Geographic Concentration of Manufacturing Industry

Within the Appalachian Region 18 counties had 1975 manufacturing employment equal to 1 percent or more of the Region's total, accounting for a grand total of 730,000 or 37 percent of total Appalachian manufacturing employment. Ten of these counties were located in Northern Appalachia, including all four of

## LEADING MANUFACTURING COUNTIES IN THE APPALACHIAN REGION March 1975

Rank	County (Principal Center)	1975 Manufacturing Employment	Localization Index
1	Allegheny, PA (Pittsburgh)	162,111	97
2	Jefferson, AL (Birmingham)	59,320	84
3	Greenville, SC (Greenville)	46,067	119
4	Forsyth, NC (Winston-Salem)	44,169	136
5	Erie, PA (Erie)	43,398	156
6	Beaver, PA (Pittsburgh SMSA)	40,252	202
7	Luzerne, PA (Wilkes-Barre)	40,108	139
8	Hamilton, TN (Chattanooga)	40,065	130
9	Westmoreland, PA (Pittsburgh SMSA)	35,796	132
10	Spartanburg, SC (Spartanburg)	35,352	184
11	Broome, NY (Binghamton)	30,703	148
12	Lackawanna, PA (Scranton)	25,972	130
13	Knox, TN (Knoxville)	23,639	86
14	Sullivan, TN (Kingsport)	23,543	155
15	Anderson, SC (Anderson)	21,079	195
16	Schuylkill, PA (Pottsville)	19,813	172
17	Washington, PA (Pittsburgh SMSA)	19,486	124
18	Cambridge, PA (Johnstown)	19,250	119
<b>Subtotal, 10 Northern Appalachian Counties</b>		<b>436,889</b>	<b>123</b>
<b>Subtotal, 8 Southern Appalachian Counties</b>		<b>293,234</b>	<b>119</b>
<b>TOTAL, 18 Appalachian Counties</b>		<b>730,123</b>	<b>122</b>

Source: County Business Patterns 1975.

the Pittsburgh metropolitan area counties, and eight in Southern Appalachia. The 1975 localization indexes for manufacturing ranged from a high of 202 in Beaver County, Pennsylvania, to a low of 84 in Jefferson County, Alabama, with a mean value for all 18 counties of 122. The individual counties with their rank in the Region and index follows.

### Total Personal Income in the Appalachian Region

Total personal income in Appalachia increased from \$39 billion in 1965 to

\$104 billion in 1976, but because of both inflation and population change it is more instructive to study relative levels.

Regional per capita income levels gained on the national level: from 1965 to 1976 they increased from 78.2 percent to 84.8 percent of the U.S. average level, with 4 percentage points of this gain in the 1970-76 period (see Table 22 on page 56). All subregions shared in this relative growth, but the advance was quite slow in Northern Appalachia, while the most rapid gains were in Central Appalachia. Southern Appalachia did better than the regional average (see Figure 6 on page 57). All state areas excepting Ap-

Table 22

**Total Personal Income, per Capita Income and Relative Levels  
Appalachian Region and the United States  
1965-1976**

Geographical Division	Population* July 1, 1976 (thousands)	Total Personal Income 1976 (millions)	Total Personal Income per Capita			Percent of U.S. Average			
			1976 (dollars)	1975 (dollars)	1970 (dollars)	1976	1975	1970	1965
United States	214,648	\$ 1,372,833	\$6,396	\$5,903	\$3,966	100%	100%	100%	100%
Appalachian Region	19,194	\$ 104,161	\$5,427	\$4,946	\$3,203	85%	84%	81%	78%
<b>Subregions</b>									
Northern Appalachia	9,911	\$ 57,277	\$5,779	\$5,295	\$3,483	90%	90%	88%	87%
Maryland	217	1,163	5,349	5,067	3,316	84	86	84	81
New York	1,090	5,956	5,465	5,235	3,640	85	87	92	90
Ohio	1,190	6,111	5,134	4,654	3,101	80		78	76
Pennsylvania	5,956	35,967	6,039	5,511	3,606	94	93	91	90
West Virginia	1,458	8,080	5,541	5,012	3,176	87	85	80	80
Central Appalachia	1,939	\$ 8,934	\$4,607	\$4,121	\$2,342	72%	70%	59%	52%
Kentucky	980	4,245	4,330	3,901	2,200	68	66	55	49
Tennessee	372	1,622	4,356	3,905	2,373	68	66	60	53
Virginia	224	1,156	5,156	4,558	2,440	81	77	62	49
West Virginia	362	1,911	5,272	4,669	2,622	82	79	66	59
Southern Appalachia	7,344	\$ 37,950	\$5,168	\$4,687	\$3,024	81%	79%	76%	73%
Alabama	2,273	12,068	5,309	4,840	3,049	83	82	77	75
Georgia	973	4,774	4,906	4,546	2,974	77	77	75	70
Mississippi	446	1,942	4,349	3,744	2,431	68	63	61	53
North Carolina	1,122	6,025	5,369	4,830	3,149	84	82	79	75
South Carolina	729	3,972	5,448	4,849	3,251	85	82	82	78
Tennessee	1,512	7,868	5,202	4,748	3,065	81	80	77	75
Virginia	287	1,301	4,533	4,136	2,652	71	70	67	60
<b>State Parts †</b>									
Tennessee	1,885	\$ 9,490	\$5,035	\$4,583	\$2,931	79%	78%	74%	70%
Virginia	511	2,457	4,806	4,318	2,563	75	73	65	55
West Virginia‡	1,821	9,991	5,487	4,946	3,069	86	84	77	76

Source: U.S. Department of Commerce, Bureau of Economic Analysis, tabulations of 1976 total personal income per capita by county for each Appalachian state. Data for all counties in the United States were published in the *Survey of Current Business*, June 1978. Appalachian data tabulated by ARC staff. 1975 and 1970 data for total personal income series from special tabulations prepared for the Appalachian Regional Commission. 1970 per capita income adjusted to census state population estimates for 1970 by ARC staff. 1965 data based on tabulations of Bureau of Economic Analysis data by ARC staff.

Note: Total personal income (TPI) includes nonmoney imputed income, including net rental value of owner-occupied homes; payments in kind; value of food consumed on farms; employer fringe benefits; food stamps, etc. TPI income in 1975 was 21.4 percent higher, and in 1972 and 1969 was 20 percent higher for the U.S. expressed in dollars, than personal money income (U.S. Bureau of Census revenue-sharing data series).

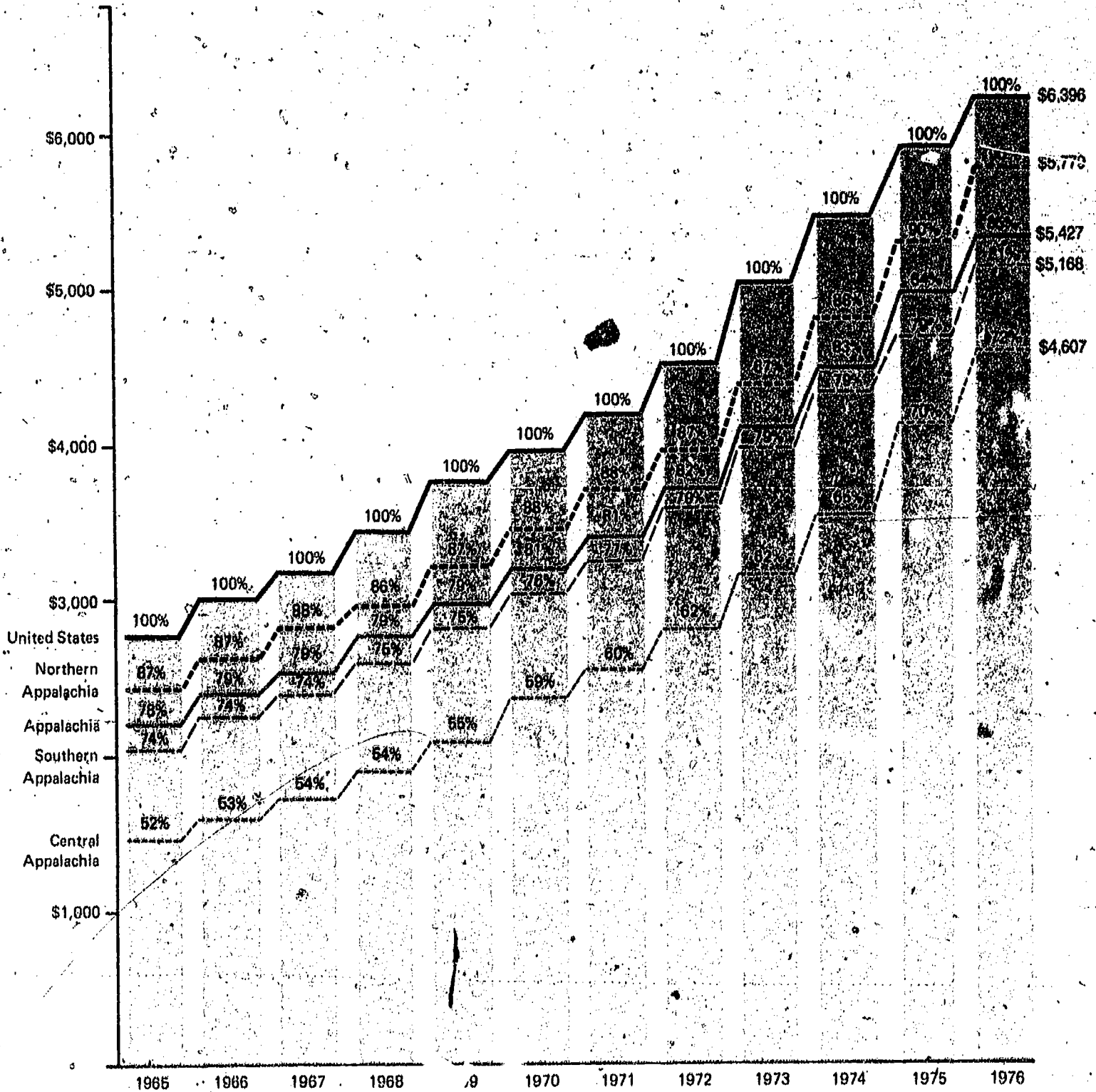
\* U.S. Bureau of Census provisional Population estimates for July 1, 1976.

† Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

‡ Entire state.

Figure 6

**Total Personal Income per Capita and Income  
as Percent of United States Level  
Appalachian Region and United States  
1965-1976**





palachian New York were at higher relative levels of per capita income in 1976 than in 1965.

No Appalachian state area equaled the U.S. average (and only a few counties did) in 1976, but the range in 1976 among the state parts from 94 percent in Pennsylvania to 68 percent of the U.S. per capita level in Appalachian Mississippi represents a narrowing of the gap within the Region since 1965 (New York, 90 percent; Appalachian Kentucky, 49.5 percent of U.S.).

Between 1970 and 1975 relative per capita income advanced in metropolitan and urban counties at roughly the regional rate; but rural Appalachian counties made larger gains, closing the gap sufficiently so that by 1975 their income levels were just 12 percentage points below the urban county income (the same as the gap between metropolitan and urban counties, see Table 23 on page 60). Per capita income levels were highest for all three county groups in Northern Appalachia but were almost at identical levels in Central and Southern Appalachia. The difference in 1975 per capita income levels between these two subregions reflected the different proportions of population in each county group for the subregion as a whole.

## Per Capita Money Income Trends, 1969-1974

Appalachian per capita money income advanced from \$2,505 in 1969 to \$3,773 in 1974, rising from 80.3 percent to 82.5 percent of the U.S. average level in five years. However, only five counties in the Region had 1974 per capita averages higher than the U.S. average, while 392 counties were below the U.S. average. A total

of 190 counties had 1974 per capita incomes of less than 70 percent of the U.S. average. Despite this continuing lag, adjusted per capita income in the Region over the five-year period increased at an annual rate of 2.4 percent, roughly one-third faster than the U.S. increase of 1.8 percent yearly. The difference was entirely due to the more rapid advances in income in Central and Southern Appalachia (see Table 24 on page 61).

The 1970-75 period in the Appalachian Region is best described as a period of accelerated economic and social development, with significant growth of both population and per capita income. Of the subregions, Central Appalachia had the most rapid development but started from the lowest level (58.5 percent of U.S. per capita income of 1969). Southern Appalachia, in common with other developing areas of the South, advanced with an 8-percent increase in population and per capita income rising from 77 to 81.5 percent of national levels. Northern Appalachia kept pace with the nation but did not advance from its level of 1969 income (86.5 percent of U.S. per capita). Population increase (less than 2 percent) was far below the national rate.

At the county level there was a wide disparity in per capita income in 1975 (1974 income) from 108 percent of the U.S. average level in Allegheny County, Pennsylvania to 38 percent in Owsley and Wolfe Counties, Kentucky, and Kemper County, Mississippi. Generally counties with per capita money income below 70 percent of the U.S. average are rural counties with smaller populations located in the middle and southern portions of the Region extending southward from south-central Ohio and northeastern West Virginia.

At the local development district level (Table 25 on page 62 and map

page 64), average differences diminish somewhat. This is due to the mix of counties in each district and the presence of centers of economic activity with the result that only 18 of the 69 districts had average per capita money incomes below 70 percent of the national average in 1974. Fourteen districts were in the more affluent group by regional standards; of these, nine were in Northern and five in Southern Appalachia. The middle group, with per capita levels between 70 and 85 percent of the nation's average in 1974 income, composed one-half or 12 of the districts in Northern Appalachia, a majority (21) of the 32 districts in Southern Appalachia but only four of the 13 districts in Central Appalachia. Central Appalachia had one-half or 9 of all the lower-income development districts in the Region in 1975.

## Poverty Status of Population and Families in the Appalachian Region

Poverty status in the 1970 Census was measured by family or individual money income levels which fell below the "poverty level" (in 1969 the level for a nonfarm family of four with a male head under 65 was \$3,715; for an individual male under 65 it was \$1,975). The proportion of household population in Appalachia with 1969 incomes below the poverty level was 32 percent higher than the U.S. proportion, but this had dropped in one decade from 41 percent higher (see Tables 26 and 27 on pages 65 and 66).

The incidence of poverty in 1970 was least in Northern Appalachia and greatest in Central Appalachia; in the

**Distribution of Appalachian Counties  
by 1974 Money Income Level**

*1974 Money Income Per Capita as Percentage of U.S. Level*

Geographical Divisional	Total Counties	Index of Per Capita Money Income (U.S. = 100)					
		100+	85-100	70-85	55-70	40-55	under 40
Appalachian Region	397	5	42	160	147	38	5
Northern Appalachia	143	2	28	77	33	3	0
Central Appalachia	85	0	2	16	36	27	4
Southern Appalachia	169	3	12	67	78	8	1

**Distribution of Appalachian Local Development District  
Areas by 1974 Money Income Level**

*1974 Money Income Per Capita as Percentage of U.S. Level*

Geographical Division	Number of Local Development Districts	Index of Per Capita Money Income (U.S. = 100)					
		100+	85-100	70-85	55-70	40-55	under 40
Appalachian Region	69	2	12	37	15	2	1
Northern Appalachia	24	1	8	12	3	0	0
Central Appalachia	13	0	0	4	7	2	0
Southern Appalachia	32	1	4	21	5	0	1

southern subregion it was somewhat above the regional average. Improvement in the 1960s relative to the United States was greatest in the South, while the northern subregion showed a modest improvement and in Central Appalachia the relative index worsened slightly though its absolute level in percentage of poverty population dropped by the greatest number of percentage points (see Table 27 on page 66 and Figure

7 on page 67). Poverty incidence was least in Appalachian Pennsylvania, though the state had the largest total number of persons below the low-income level. The state area with the greatest incidence of poverty was Kentucky (39 percent), but the actual number ranked fifth among Appalachian state areas.

In Appalachia as in the nation, low-income population was concentrated among certain groups: blacks

and other minorities; older persons; and rural population. Table 26 shows the incidence of poverty among the Region's black families (36 percent) and among persons 65 years of age and older (37 percent). However, black families were only 6.1 percent of the Region's total (9.5 percent of the U.S. total), and older persons were 10.4 percent of Appalachian household population (9.7 percent of the U.S. total) in 1970. The incidence

Table 23

**Total Personal Income, per Capita Data and Relative Levels Appalachian Region,  
Subregions and County Group (metro, urban, rural)  
1970-1975**

Geographical Division	Population July 1, 1975* (thousands)	Total Personal Income 1975 (millions)	Total Personal Income per Capita		Percent of U.S. Average		Percent Change 1970-1975
			1975 (dollars)	1970 (dollars)	1975	1970	
<b>United States</b>	<b>213,039</b>	<b>\$1,257,535.0</b>	<b>\$5,903</b>	<b>\$3,966</b>	<b>100%</b>	<b>100%</b>	<b>48.8%</b>
<b>Appalachian Region</b>	<b>19,027</b>	<b>\$ 94,105.0</b>	<b>\$4,946</b>	<b>\$3,203</b>	<b>84%</b>	<b>81%</b>	<b>54.4%</b>
Metropolitan Counties	9,469	51,755	5,466	3,567	93	90	53.2
Urban Counties	4,803	23,025	4,794	3,146	81	79	52.4
Rural Counties	4,755	19,325	4,065	2,515	69	63	61.6
<b>Subregions</b>							
<b>Northern Appalachia</b>	<b>9,860.4</b>	<b>\$ 52,210.8</b>	<b>\$5,295</b>	<b>3,483</b>	<b>90%</b>	<b>88%</b>	<b>52.0%</b>
Metropolitan Counties	5,317.6	30,467.8	5,730	3,764	97	95	52.2
Urban Counties	2,838.5	14,177.2	4,995	3,297	85	83	51.5
Rural Counties	1,704.3	7,565.8	4,439	2,872	75	72	54.6
<b>Central Appalachia</b>	<b>1,886.0</b>	<b>\$ 7,771.4</b>	<b>\$4,121</b>	<b>\$2,344</b>	<b>70%</b>	<b>59%</b>	<b>75.8%</b>
Metropolitan Counties	198.6	1,022.6	5,149	3,159	87	80	63.0
Urban Counties	338.2	1,540.7	4,556	2,690	77	68	69.4
Rural Counties	1,349.2	5,208.2	3,860	2,131	65	54	81.1
<b>Southern Appalachia</b>	<b>7,260.2</b>	<b>\$ 34,122.8</b>	<b>\$4,687</b>	<b>\$3,028</b>	<b>79%</b>	<b>76%</b>	<b>54.8%</b>
Metropolitan Counties	3,952.8	20,264.2	5,127	3,301	87	83	55.3
Urban Counties	1,626.5	7,307.4	4,493	2,961	76	75	51.7
Rural Counties	1,700.9	6,551.1	3,851	2,453	65	62	57.0

Source: U.S. Department of Commerce, Bureau of Economic Analysis, special tabulations for Appalachian Regional Commission. Per capita income adjusted to conform to Bureau of Census July 1, 1970 estimates of population for states.

Note: Total personal income (TPI) includes non-money imputed income, including net rental value of owner-occupied homes; payments in kind; value of food consumed on farms; employer fringe benefits; food stamps, etc. TPI income in 1975 was 21.4 percent, and higher, and in 1972 and 1969 was 20 percent higher for the U.S. expressed in dollars, than personal money income (U.S. Bureau of Census revenue-sharing data series).

\* July 1, 1975, estimate is based on revised county estimates prepared by the U.S. Bureau of Census and published in Population Estimates, Series P-26 between July 1977 and January 1978.



Table 24

## Per Capita Money Income with 1969-1974 Trends Adjusted for Inflation Appalachian Region and United States

Geographical Division	Population*		Per Capita Money Income*			1969-1974 Income Change†		1974 per capita Income Index (U.S. = 100)
	July 1, 1975 (thousands)	April 1, 1970 (thousands)	1974 (dollars)	1974 (in 1969 dollars)	1969 (dollars)	Total Change (percent)	Annual Rate (percent)	
United States	214,659	203,305	\$4,572	\$3,411	\$3,119	9.4%	1.8%	100
Appalachian Region	19,070	18,217	\$3,773	\$2,815	\$2,505	12.4%	2.4%	82.5
<b>Subregions</b>								
<b>Northern Appalachia</b>	<b>9,896</b>	<b>9,734</b>	<b>\$3,957</b>	<b>\$2,953</b>	<b>\$2,698</b>	<b>9.4%</b>	<b>1.8%</b>	<b>86.5</b>
Maryland	215	209	3,885	2,899	2,599	11.5	2.2	85
New York	1,081	1,057	3,912	2,919	2,845	2.6	0.5	86
Ohio	1,191	1,130	3,613	2,696	2,443	10.4	2.0	79
Pennsylvania	5,962	5,931	4,098	3,058	2,790	9.6	1.9	90
West Virginia	1,446	1,408	3,704	2,763	2,421	14.2	2.7	81
<b>Central Appalachia</b>	<b>1,896</b>	<b>1,745</b>	<b>\$2,995</b>	<b>\$2,235</b>	<b>\$1,824</b>	<b>22.5%</b>	<b>4.1%</b>	<b>65.5</b>
Kentucky	958	877	2,834	2,114	1,732	22.0	4.1	62
Tennessee	365	335	3,023	2,256	1,931	16.8	3.2	66
Virginia	220	197	3,220	2,402	1,807	33.0	5.9	70
West Virginia	354	336	3,265	2,436	1,966	23.9	4.4	71
<b>Southern Appalachia</b>	<b>7,278</b>	<b>6,738</b>	<b>\$3,726</b>	<b>\$2,780</b>	<b>\$2,402</b>	<b>15.7%</b>	<b>3.0%</b>	<b>81.5</b>
Alabama	2,241	2,137	3,787	2,826	2,430	16.3	3.1	83
Georgia	958	814	3,711	2,769	2,419	14.5	2.7	81
Mississippi	445	419	2,953	2,203	1,861	18.4	3.4	65
North Carolina	1,118	1,039	3,808	2,841	2,437	16.6	3.1	83
South Carolina	724	656	3,976	2,966	2,571	15.4	2.9	87
Tennessee	1,503	1,400	3,746	2,795	2,438	14.6	2.8	82
Virginia	289	273	3,439	2,566	2,250	14.0	2.7	75
<b>State Parts‡</b>								
Tennessee	1,868	1,735	\$3,605	\$2,690	\$2,340	14.9%	2.8%	79
Virginia	509	470	3,344	2,495	2,064	20.9	3.9	73
West Virginia§	1,799	1,744	3,617	2,699	2,333	15.7	3.0	79

\* U.S. Bureau of Census population and per capita income estimates for revenue sharing published in *Current Population Estimates* (Series P-25, Nos. 649-698), Washington, D.C., 1977.

† 1974 income expressed in approximate 1969 dollars to eliminate inflation. The factor used is  $1974/1969 = 1.3403$  based on a weighted index composed of disposable personal income and cost of government purchases of goods and services used as a deflator of 1974 dollars. Source: *Economic Report of the President*, January 1978, Washington, D.C., 1978, Tables B-3 and B-22. 1969-1974 income change is measured after adjustment for inflation.

‡ Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

§ Entire state.

Table 25

## Per Capita Money Income with 1969-1974 Trends Adjusted for Inflation Appalachian Region and Local Development Districts

LDD Code	State and Local Development District	Population*		Per Capita Money Income*			1969-1974 Income Change†		1974 per capita Income Index (U.S. = 100)
		July 1, 1975 (thousands)	April 1, 1970 (thousands)	1974 (dollars)	1974 in 1969 dollars	1969 (dollars)	Total Change (percent)	Annual Rate (percent)	
	<b>Appalachian Region-</b>	<b>19,070.0</b>	<b>18,217.1</b>	<b>\$3,773</b>	<b>\$2,816</b>	<b>\$2,505</b>	<b>12.4%</b>	<b>2.4%</b>	<b>83</b>
	<b>Alabama:</b>								
1A	NW Alabama	196.3	182.1	\$3,461	\$2,582	\$2,236	15.5%	2.9%	76
1B	North Central Alabama	169.6	157.0	3,400	2,537	2,236	13.5	2.6	74
1C	Top Of Alabama	380.3	363.6	3,820	2,850	2,600	9.6	1.9	74
1D	West Alabama†	180.6	180.8	3,308	2,468	2,084	19.6	3.6	74
1E	Birmingham Regional	850.8	819.3	4,281	3,194	2,651	20.5	3.8	94
1F	East Alabama	413.6	400.9	3,335	2,488	2,185	13.9	2.6	73
1H	Central Alabama†	40.3	33.7	3,189	2,379	2,038	16.7	3.1	70
	<b>Georgia:</b>								
2A	Coosa Valley	332.9	302.7	\$3,634	\$2,711	\$2,450	10.7%	2.0%	79
2B	Georgia Mountains	199.0	176.8	3,415	2,548	2,235	14.0	2.7	75
2C	Chattahoochee-Flint†	58.6	50.8	3,491	2,605	2,311	12.7	2.4	76
2D	Atlanta Regional†	158.5	101.0	4,622	3,449	2,821	22.2	4.1	101
2E	NE Georgia†	58.4	51.5	3,233	2,412	2,177	16.8	2.1	71
2F	North Georgia	150.5	131.1	3,588	2,677	2,424	10.4	2.0	78
	<b>Kentucky:</b>								
3A	Buffalo Trace†	24.7	23.7	\$2,682	\$2,001	\$1,829	9.4%	1.8%	59
3B	FIVCO	127.0	122.1	3,527	2,632	2,284	15.2	2.9	77
3C	Bluegrass†	121.9	113.4	3,235	2,414	2,148	12.4	2.4	71
3D	Gateway	58.6	55.7	2,783	2,076	1,772	17.2	3.2	61
3E	Big Sandy	153.7	134.3	3,063	2,285	1,595	43.3	7.5	67
3F	Lake Cumberland†	136.4	123.9	2,546	1,900	1,691	12.3	2.4	56
3H	Cumberland Valley	204.0	184.5	2,509	1,872	1,479	26.6	4.8	55
3I	Kentucky River	119.3	107.2	2,377	1,773	1,293	37.2	6.5	52
3J	Barren River†	12.0	11.6	2,383	1,778	1,617	10.0	1.9	52
	<b>Maryland:</b>								
4A	Tri-County	214.9	209.3	\$3,885	\$2,899	\$2,599	11.5%	2.2%	85
	<b>Mississippi:</b>								
5A	NE Mississippi	117.8	109.6	\$2,826	\$2,108	\$1,769	19.2%	3.6%	62
5B	Three Rivers†	161.1	150.3	3,169	2,364	1,999	18.3	3.4	69
5C	Golden Triangle	156.0	148.5	2,906	2,168	1,841	17.8	3.3	64
5D	East Central Mississippi†	10.5	10.2	1,753	1,308	1,138	14.9	2.8	38
	<b>New York:</b>								
6A	Southern Tier West	282.1	275.4	\$3,700	\$2,761	\$2,679	3.0%	0.6%	81
6B	Southern Tier Central	219.2	217.8	3,939	2,939	2,791	5.3	1.0	86
6C	Southern Tier East	580.0	563.3	4,004	2,987	2,948	1.3	0.3	88
	<b>North Carolina:</b>								
7A	SW North Carolina	125.7	116.0	\$3,077	\$2,296	\$1,999	14.8%	2.8%	67
7B	Land-of-Sky	237.5	223.6	3,940	2,940	2,511	17.1	3.2	86
7C	Isothermal†	96.5	89.7	3,572	2,665	2,300	15.9	3.0	78
7D	Region D	153.4	139.4	3,049	2,275	1,920	18.5	3.5	67
7E	Western Piedmont†	147.6	136.5	3,669	2,737	2,421	13.1	2.5	80
7G	NW North Carolina	357.4	333.8	4,424	3,301	2,798	18.0	3.4	97

LDD State and Local Code	Development District	Population*		Per Capita Money Income			1969-1974 Income Change†		1974 per capita Income Index (U.S. = 100)
		July 1, 1975 (thousands)	April 1, 1970 (thousands)	1974 (dollars)	1974 in 1969 dollars	1969 (dollars)	Total Change (percent)	Annual Rate (percent)	
<b>Ohio:</b>									
8A	Ohio Valley	483.7	445.9	\$3,474	\$2,592	\$2,376	9.1%	1.8%	70
8B	Buckeye Hills-Hocking Valley	227.3	219.0	3,352	2,501	2,305	8.5	1.6	73
8C	Ohio Mid-Eastern	480.3	464.9	3,876	2,892	2,572	12.4	2.4	85
<b>Pennsylvania:</b>									
9A	NW Pennsylvania	750.3	733.0	\$3,947	\$2,945	\$2,685	9.7%	1.9%	86
9B	North Central Pennsylvania	238.2	231.5	3,543	2,643	2,426	9.0	1.7	77.5
9C	Northern Tier	168.7	157.0	3,409	2,543	2,424	4.9	1.0	75
9D	NE Pennsylvania	894.3	873.9	3,807	2,840	2,625	8.2	1.6	83
9E	SW Pennsylvania	2,816.7	2,875.1	4,485	3,346	3,018	10.9	2.1	98
9F	Southern Alleghenies	496.6	490.4	3,795	2,831	2,509	12.9	2.4	83
9G	SEDA-GOG§	597.6	569.6	3,568	2,662	2,515	5.8	1.1	78
10A	<b>South Carolina:</b> SCACOG	723.9	656.4	\$3,976	\$2,966	\$2,571	15.4%	2.9%	87
<b>Tennessee:</b>									
11A	Upper Cumberland	212.2	193.7	\$2,886	\$2,153	\$1,852	16.3%	3.1%	63
11B	East Tennessee	758.8	701.0	3,701	2,761	2,374	16.3	3.1	81
11C	First Tennessee-Virginia	382.8	359.4	3,538	2,640	2,305	14.5	2.7	77
11D	South Central Tennessee†	63.0	59.9	3,519	2,626	2,310	13.7	2.6	77
11E	SE Tennessee	450.8	420.5	3,850	2,873	2,543	13.0	2.5	84
<b>Virginia:</b>									
12A	LENOWISCO	95.4	84.8	\$3,153	\$2,352	\$1,781	32.1%	5.7%	69
12B	Cumberland Plateau	124.8	112.5	3,271	2,441	1,826	33.7	6.0	72
12C	Mount Rogers	169.5	159.4	3,292	2,456	2,146	14.5	2.7	72
12D	New River Valley‡	59.3	56.1	3,613	2,696	2,432	10.8	2.1	79
12E	Fifth District‡	51.8	49.7	3,756	2,802	2,417	15.9	3.0	82
12F	Central Shenandoah‡	7.9	7.7	3,201	2,388	1,999	19.5	3.6	70
<b>West Virginia:</b>									
13A	Region 1	251.7	238.5	\$3,334	\$2,488	\$2,038	22.1%	4.1%	73
13B	Region 2	269.2	266.8	3,518	2,625	2,254	16.5	3.1	77
13C	B-C-K-P (Region 3)	293.5	291.6	4,099	3,058	2,651	15.4	2.9	90
13D	Gauley	129.0	122.7	3,089	2,305	1,904	21.0	3.9	68
13E	Mid-Ohio Valley	164.4	160.4	3,628	2,707	2,405	12.6	2.4	79
13F	Region 6	253.6	243.8	3,612	2,685	2,372	13.6	2.6	79
13G	Region 7	110.9	103.5	2,914	2,174	1,855	17.2	3.2	64
13H	Region 8	63.1	59.3	3,066	2,288	2,015	13.5	2.6	67
13I	Eastern Panhandle	73.2	66.2	3,671	2,739	2,425	12.9	2.5	80
13J	Bel-O-Mar	119.5	121.4	4,087	3,049	2,736	11.5	2.2	89
13K	B-H-J (Region 11)	71.2	70.2	4,706	3,511	2,954	18.9	3.5	103

\*U.S. Bureau of Census population and per capita income estimates for revenue sharing published in *Current Population Estimates* (Series P-25, Nos. 649-698), Washington, D.C., 1977.

†1974 income expressed in approximate 1969 dollars to eliminate inflation. The factor used is  $1974/1969 = 1.3403$  based on a weighted index composed of disposable personal income and cost of government purchases of goods and services used as a deflator of 1974 dollars. Source: *Economic Report of the President*, January 1978, Washington, D.C., 1978. Tables B-3 and B-22. 1969-1974 income change is measured after adjustment for inflation.

‡Data are only for that portion of the local development district in the Appalachian Region.

§Includes Perry County, Pennsylvania.



# 1974 Money Income Per Capita Local Development Districts in the Appalachian Region

A list of local development districts in the Appalachian Region (identified with these symbols and their addresses is available upon request from the Appalachian Regional Commission, 1600 Connecticut Avenue, N.W., Washington, D. C. 20235.

This map includes districts on the border of the Region containing both Appalachian and non-Appalachian counties. The non-Appalachian counties are indicated by broken boundary lines.  
January 1, 1978

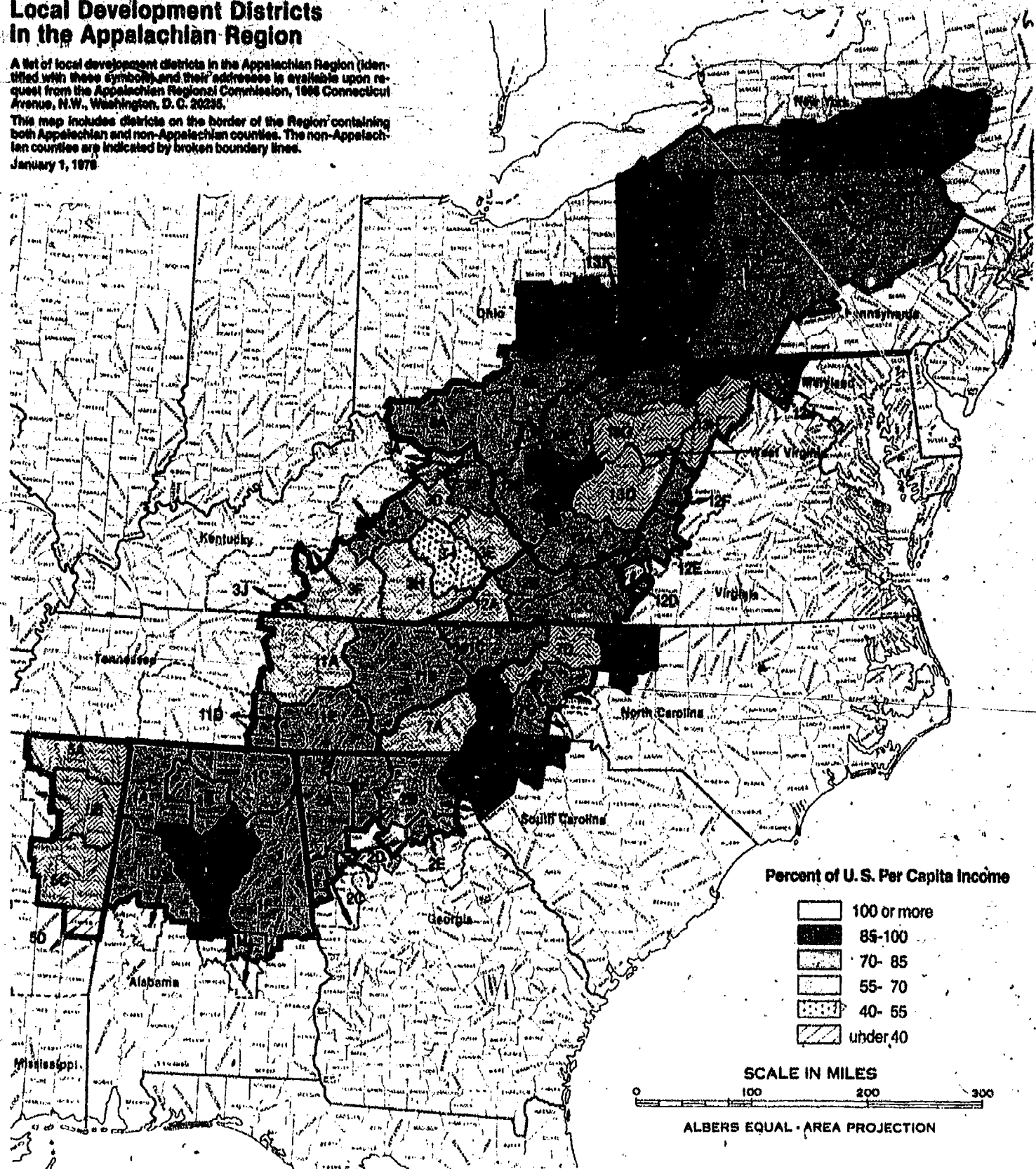


Table 26

**Poverty Status and Incidence Among Selected Population Groups  
Appalachian Region and United States  
1970 Census**

Geographical Division	Families below Poverty Level				Persons below Poverty Level		
	Total Number of Families	All Families (percent)	White Families (percent)	Black Families (percent)	All Persons (percent)	Persons 65 Years and Under (percent)	Persons 65 Years and Over (percent)
United States	5,462,216	10.7%	8.6%	29.8%	13.7%	12.2%	27.3%
Appalachian Region	701,759	14.8%	13.5%	36.0%	18.1%	16.0%	36.6%
<b>Subregions</b>							
<b>Northern Appalachia</b>	258,562	10.3%	9.9%	25.7%	13.4%	11.3%	30.3%
Maryland	6,343	11.5	11.3	24.0	14.8	12.6	33.8
New York	20,959	8.1	8.0	17.9	11.5	9.5	29.3
Ohio	37,534	13.0	12.8	24.0	16.0	13.5	36.3
Pennsylvania	133,381	8.7	8.2	25.5	11.4	9.5	27.5
West Virginia	60,345	16.4	16.0	30.4	20.4	18.1	38.4
<b>Central Appalachia</b>	135,969	30.0%	29.8%	38.3%	34.7%	32.9%	49.9%
Kentucky	75,722	33.6	33.5	43.3	38.8	37.2	51.9
Tennessee	24,796	27.5	27.2	42.6	31.1	28.5	52.5
Virginia	14,099	27.5	27.4	38.4	31.3	29.4	48.8
West Virginia	21,352	24.9	24.2	34.1	29.8	28.3	42.3
<b>Southern Appalachia</b>	307,228	17.3%	14.5%	39.2%	20.6%	18.3%	43.3%
Alabama	102,181	18.4	14.1	40.2	22.1	19.9	43.7
Georgia	31,904	14.7	13.6	31.2	16.9	14.4	45.0
Mississippi	29,728	28.1	19.0	58.7	33.8	31.0	55.6
North Carolina	44,935	16.1	14.8	30.5	18.8	16.3	41.3
South Carolina	22,306	13.0	9.9	32.3	16.2	14.2	39.7
Tennessee	64,217	17.1	16.0	35.3	20.3	18.1	41.3
Virginia	11,957	16.4	16.0	27.0	19.4	17.0	38.8
<b>State Parts*</b>							
Tennessee	89,013	19.1%	18.3%	35.7%	22.4%	20.1%	43.8%
Virginia	26,056	21.0	20.8	29.2	24.4	22.3	42.8
West Virginia	81,697	18.0	17.5	31.9	22.2	20.1	39.1

Source: Compiled by Appalachian Regional Commission from fourth count tabulations of the 1970 Census of Population. All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.  
 \*Entire state.

Table 27

**Poverty Status of Total Household Population  
Appalachian Region and United States  
1960-1970**

Geographical Division	Below Poverty Level in 1970			Below Poverty Level in 1960		
	Number of Persons	Percent of Household Population	Poverty Index	Number of Persons	Percent of Household Population	Poverty Index
United States	27,124,985	13.7%	100	38,684,545	22.1%	100
Appalachian Region	3,228,449	18.1%	132	5,446,612	31.2%	141
<b>Subregions:</b>						
<b>Northern Appalachia</b>	<b>1,268,311</b>	<b>13.4%</b>	<b>97</b>	<b>2,082,243</b>	<b>21.9%</b>	<b>99</b>
Maryland	30,214	14.8	108	47,939	24.9	113
New York	116,917	11.5	84	165,110	17.1	77
Ohio	176,373	16.0	117	287,115	26.1	118
Pennsylvania	663,677	11.4	84	1,126,903	19.3	88
West Virginia	280,930	20.4	149	455,176	31.6	143
<b>Central Appalachia</b>	<b>597,502</b>	<b>34.7%</b>	<b>254</b>	<b>1,012,491</b>	<b>54.1% †</b>	<b>245</b>
Kentucky	331,373	38.8	284	536,079	58.4	264
Tennessee	102,574	31.1	227	173,198	53.6	242
Virginia	61,372	31.3	229	121,596	53.0	240
West Virginia	99,183	29.8	217	181,618	45.4	205
<b>Southern Appalachia</b>	<b>1,362,636</b>	<b>20.6%</b>	<b>151</b>	<b>2,351,878</b>	<b>38.7%</b>	<b>175</b>
Alabama	463,306	22.1	161	762,251	33.8	175
Georgia	135,957	16.9	125	258,812	38.5	174
Mississippi	138,594	33.8	246	225,941	56.0	253
North Carolina	190,440	18.8	137	341,949	37.2	169
South Carolina	104,010	16.2	118	195,940	34.0	154
Tennessee	278,487	20.3	148	459,357	36.3	164
Virginia	51,842	19.4	141	107,588	40.1	181
<b>State Parts*</b>						
Tennessee	381,061	22.4%	104	632,555	39.9%	180
Virginia	113,214	.4	178	229,184	24.4	208
West Virginia†	380,113	22.2	162	636,794	34.6	157

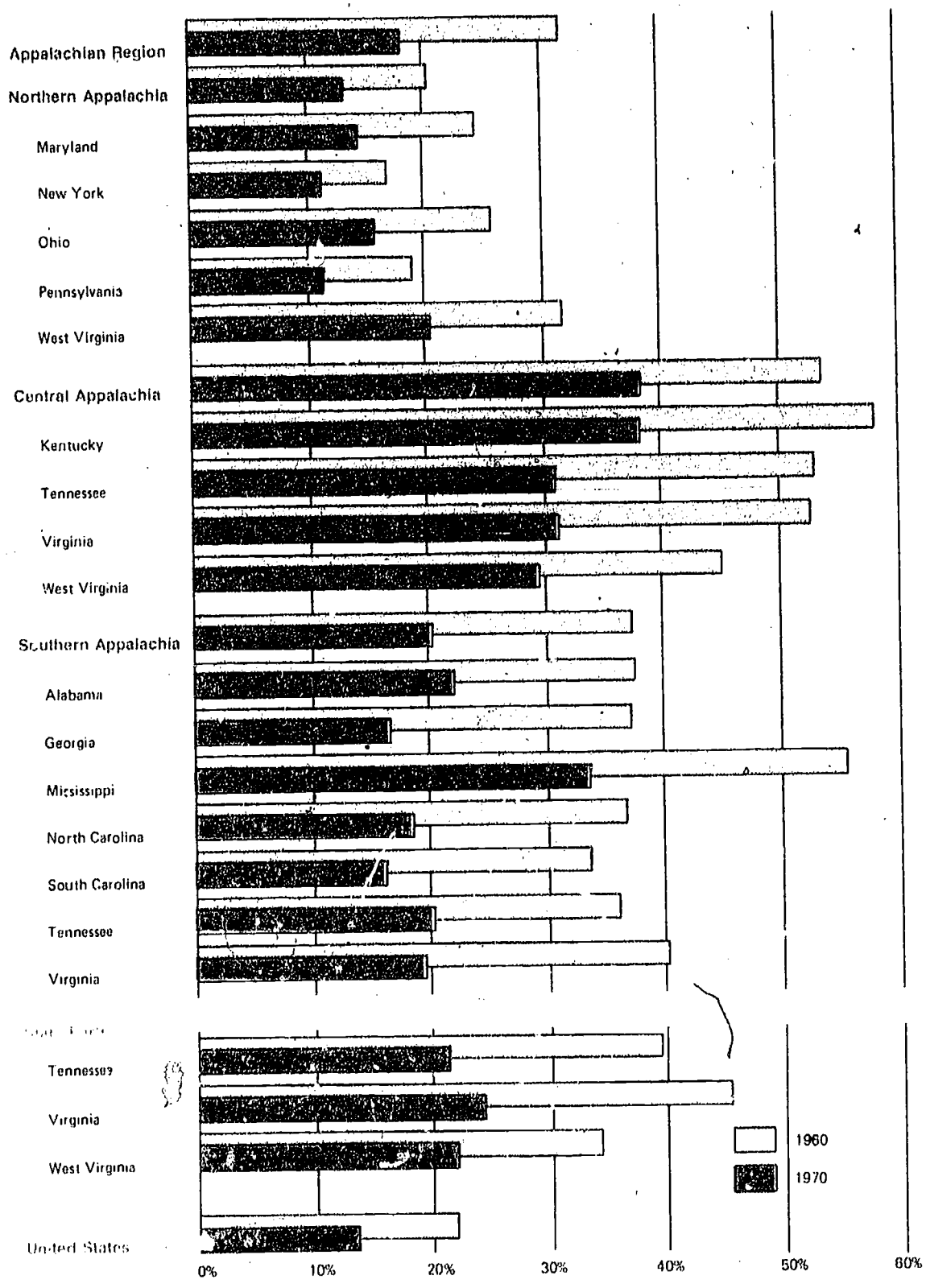
Source: Compiled by Appalachian Regional Commission from fourth count tabulations of the 1970 Census of Population, 1960 data file on computer tape furnished by the Office of Economic Opportunity (now the Community Services Administration). All data totals are independently rounded from unrounded source data; totals may not add due to rounding.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.  
†Entire state.



Figure 7

Persons below Poverty Level as a Percentage of Household Population  
1960 and 1970



\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here

**Poverty Status of Families with Related Children Under 18 years  
and with Female Head  
Appalachian Region and United States  
1970 Census**

Geographical Division	All Families with Children						Families with Female Head			
	Total with Children		Below Poverty Level				Families with Children		Below Poverty Level	
	Number of Families	Children per Family	Number of Families	Children per Family	Percent of Total Families	Percent of Total Children	Number of Families	Below Poverty Level	Children Per Family	Percent of Total Families
<b>United States</b>	29,540,540	2.36	3,480,419	3.03	11.8%	15.1%	3,468,430	1,498,283	2.87	43.2%
<b>Appalachian Region</b>	2,688,573	2.29	402,334	2.94	15.0%	19.2%	276,899	131,681	2.69	47.6%
<b>Subregions</b>										
<b>Northern Appalachia</b>	1,383,846	2.32	145,770	2.88	10.5%	13.1%	129,704	55,863	2.59	43.1%
Maryland	3,506	2.23	3,620	2.85	11.9	15.1	2,897	1,318	2.44	45.5
New York	148,504	2.42	12,086	2.92	8.1	9.8	13,351	4,638	2.65	34.7
Ohio	164,880	2.38	20,421	2.97	12.4	15.4	14,183	6,482	2.63	45.7
Pennsylvania	835,938	2.31	74,859	2.85	9.0	11.1	78,376	32,828	2.61	41.9
West Virginia	204,018	2.27	34,784	2.88	17.0	21.7	20,897	10,597	2.53	50.7
<b>Central Appalachia</b>	265,087	2.38	82,409	2.95	31.1%	38.6%	30,384	18,698	2.56	61.5%
Kentucky	132,489	2.42	46,532	2.98	35.1	43.2	15,213	9,785	2.60	64.3
Tennessee	51,141	2.23	13,682	2.82	26.8	33.9	5,565	3,019	2.48	54.2
Virginia	30,535	2.34	8,405	2.89	27.5	34.0	3,145	1,866	2.29	59.3
West Virginia	50,922	2.44	13,790	3.04	27.1	33.7	6,461	4,028	2.62	62.3
<b>Southern Appalachia</b>	1,039,640	2.23	174,155	2.99	16.8%	22.5%	116,811	57,120	2.83	48.9%
Alabama	328,455	2.28	60,086	3.04	18.3	24.4	39,479	21,556	2.94	54.6
Georgia	130,081	2.22	16,759	2.93	12.9	17.0	11,957	4,778	2.73	40.0
Mississippi	61,846	2.49	17,352	3.43	28.1	38.6	7,997	5,100	3.33	63.8
North Carolina	160,512	2.13	23,840	2.78	14.9	19.4	17,212	7,433	2.63	43.2
South Carolina	102,535	2.21	13,122	3.08	12.8	17.9	12,015	5,007	2.84	41.7
Tennessee	215,071	2.16	36,508	2.83	17.0	22.2	24,147	11,634	2.65	48.2
Virginia	41,140	2.16	6,488	2.80	15.8	20.5	4,004	1,612	2.22	40.3
<b>State Parts</b>										
Tennessee	266,212	2.17	50,190	2.83	18.9%	24.5%	29,712	14,653	2.61	49.3%
Virginia	71,675	2.23	14,893	2.85	20.8	26.5	7,149	3,478	2.26	48.7
West Virginia <sup>†</sup>	254,940	2.31	48,574	2.93	19.1	24.2	27,358	14,625	2.55	53.5

Source: Tabulated and compiled by Appalachian Regional Commission from fourth count computer tape data from 1970 Census of Population.

\* Figures for the subregional portions of these three states, the only states which fall in two subregions, are combined here.

† Entire state.

of poverty among Appalachian black families was one-fifth higher than the U.S. average level and among the older Appalachian population, one-third higher than the national average.

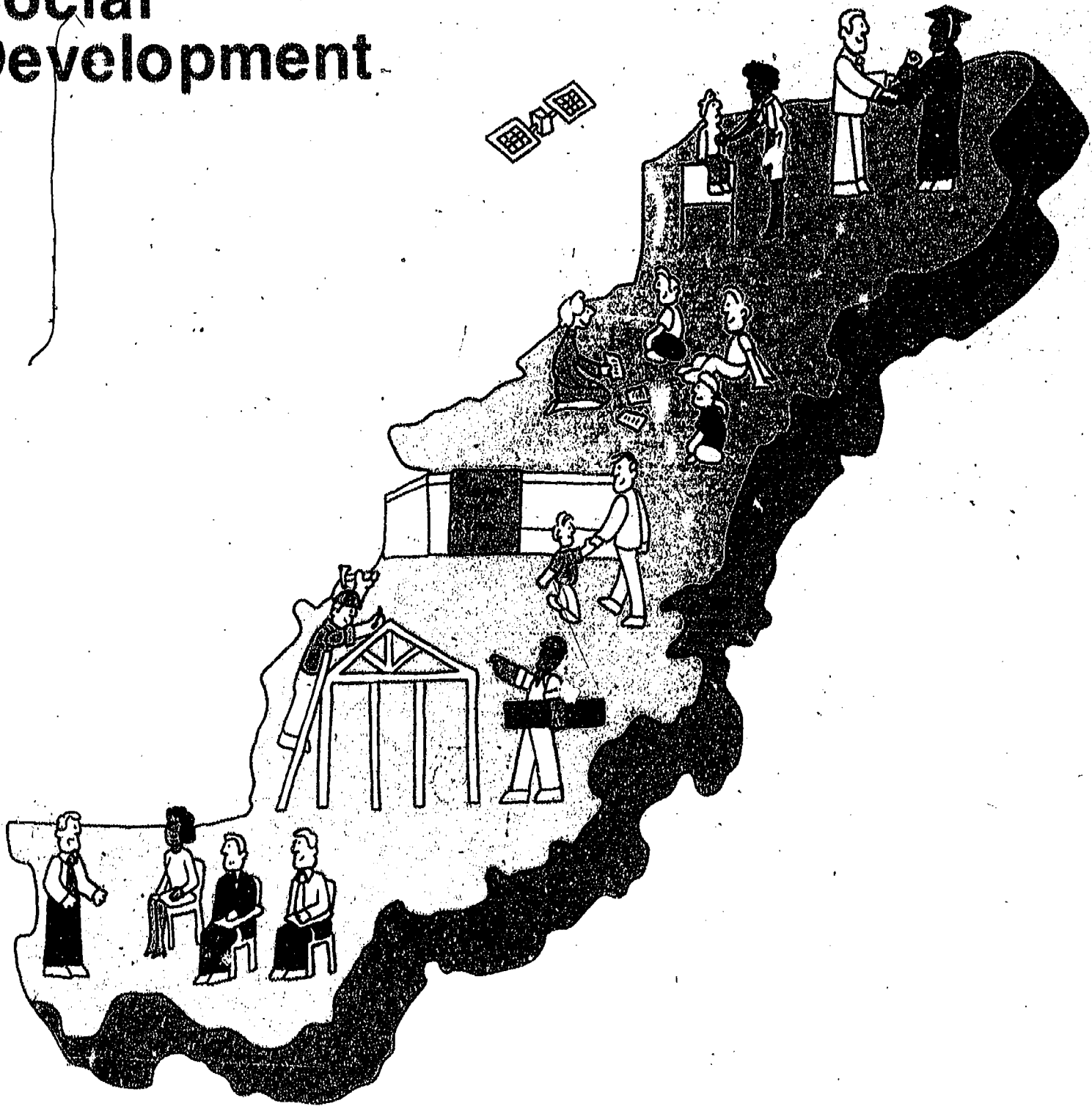
In the Appalachian Region, 19 percent of related children under 18 years of age were in families below the poverty level, more than one-

fourth higher than the national average in 1970 (15 percent). The total number of children in the Region was 402,000 or 11.5 percent of the nation's children in such families (see Table 28 on page 68). Within the Region the proportion of children in poverty families varied widely from 10 percent in Appalachian New York to 43 percent in Appalachian Kentucky,

with the proportion over one-third in all Central Appalachian state areas and in Appalachian Mississippi.

One-tenth of Appalachian families with related children under 18 were headed by women; 48 percent of these fell below the poverty level in 1970, but this proportion was only one-tenth higher than the U.S. average (43 percent).

# Social Development





## Educational Attainment and School Enrollment in the Appalachian Region

The Appalachian Region lags behind the nation in educational attainment of its adults, youth and young children, as measured by four indicators from the 1970 Census: completion of four years or more of college; noncompletion of high school by youth; and school enrollment of children aged 3 and 4.

In the Region in 1970, 56 percent of all adults aged 25 years and over had not completed four years of high school, contrasted with 47 percent for the non-Appalachian U.S.; those completing four or more years of college constituted 7.3 percent of all Appalachians (10.7 percent in the rest of the country). See Figure 8 on page 71 and Table 29 on page 72.

Among youth aged 18 through 24, the proportion not completing high school was 31.5 percent in Appalachia vs. 27.0 percent in the rest of the nation (see Table 30 on page 73). For the same group an estimated 22 percent were enrolled in college in Appalachia, contrasted with 24 percent in the rest of the United States. Since students are counted in the census at their place of college residence, this statistic may reflect the presence of colleges and enrollments of nonresidents of the Region. It appears from the data that deficiencies in educational attainment of Appalachian youth in 1970 were somewhat less than those of their elders.

The "dropout rate," measured approximately by population aged 16 and 17 years not enrolled in school, was 14 percent in the Appalachian

Region in 1970 but only 10 percent in the U.S. (see Table 31 on page 74). Between 1960 and 1970 population in this age group increased by only 12.5 percent in the Region, while in the rest of the U.S. it grew by 40 percent! This reflects the large outmigration from Appalachia which occurred in the decade of the 1960s. This factor conditioned the result that the absolute number of "dropouts" in the Region fell by over 30 percent in the decade, while the *proportion* improved much less than in the U.S. generally.

Subregional differences in educational attainment generally show the greatest deficiencies in Central Appalachia and the highest levels of attainment in the northern subregion, with Appalachian New York and Pennsylvania frequently at levels more favorable than the U.S. average. Southern Appalachia lay somewhere between the extremes, with some characteristics (adults with four or more years of college) closer to the northern level and others ("dropout" rate for 16- and 17-years olds) nearer the central level. For early childhood schooling, the southern subregion had in 1970 the highest proportion enrolled.

The measures of educational attainment are for 1970, and it is well to bear in mind that some characteristics have changed considerably since then. For the United States as a whole, data are available for 1975, showing the following:

	1975	1970
Adults, less than four years of high school	37.4%	47.6%
Adults, four years of college, or more	13.9	10.7
Youth 18-24, not completed high school	22.2	27.4
Youth 18-24, enrolled in college	26.3	23.6
Youth 16-17, not in school	#11.0	**10.7
Children 3-4, enrolled in school	31.5	12.5

#Data for the United States show that in 1975 22 percent of youth 16-17 years old not in school had completed at least four years of high school and were not technically "dropouts."

\*\*Data for the United States from census cross-tabulations show that 11.5 percent of youth 16-17 had completed at least four years of high school and were not "dropouts." These cross-tabulations are not available for the Appalachian Region.

These characteristics may also have improved in Appalachia, but at present the 1975 data are not available for the Region.




## Vital Trends in the Appalachian Region

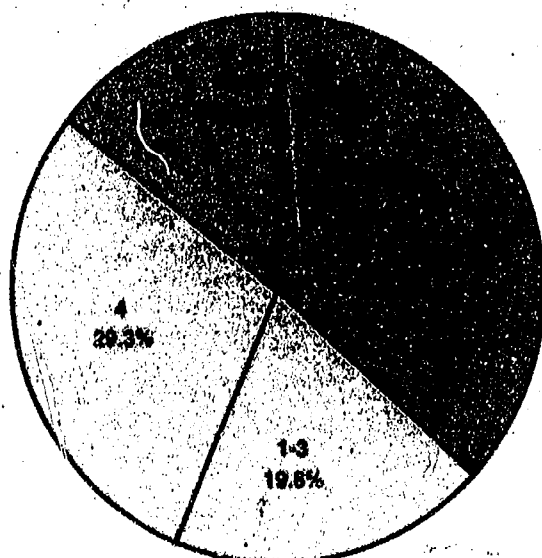
In 1975 the United States recorded the lowest birth and death rates in its history, and the Appalachian Region, paralleling the nation, also recorded its lowest level of vital rates. In recent years the Region has had lower crude birth rates than the nation and consistently higher death rates. With 8.94 percent of the U.S. total population in 1975, Appalachian births were only 8.5 percent, but the Region's deaths were 9.9 percent of the respective national totals. Hence, Appalachia had only 6.4 percent of the U.S. natural population growth for the year.

Vital rates vary remarkably in different parts of the Region (see Table 32 on page 75). In Northern Appalachia birth rates are relatively low and death rates high, in the Central subregion birth rates are high and death rates are above average levels, in Southern Appalachia birth rates are above the regional average but death rates are low. For state parts within subregions, the 1975 birth rate per 1,000 population varied from 11.7 in Appalachian Maryland to 18.3 in Central Appalachian West Virginia, and the 1975 death rate per 1,000

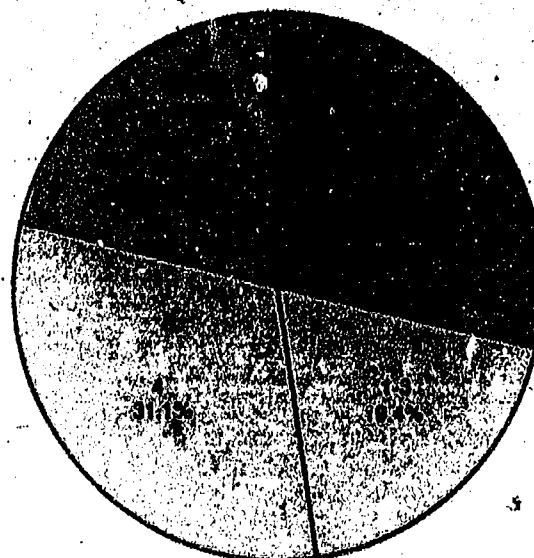
Figure 8

**Years of School Completed by Persons 25 Years and Over  
1970**

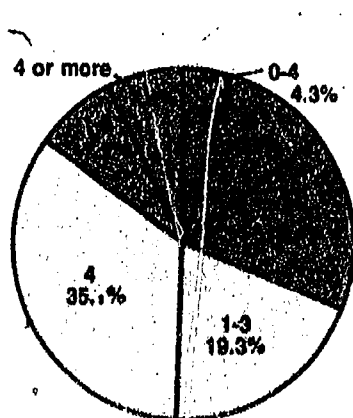
College   
High School   
Elementary 



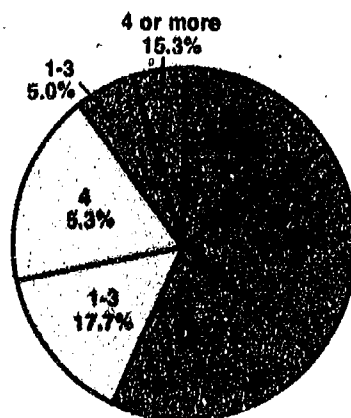
**Appalachia**  
Number of Persons 25 Years and Over  
10,066,768



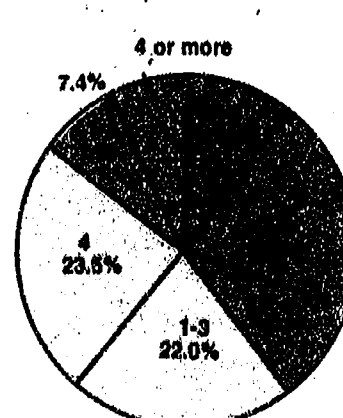
**United States**  
Numbers of Persons 25 Years and Older  
109,899,359



**Northern Appalachia**  
Number of Persons  
25 Years and Older  
5,473,330



**Central Appalachia**  
Number of Persons  
25 Years and Older  
935,159



**Southern Appalachia**  
Number of Persons  
25 Years and Older  
3,656,279

Table 29

## Adult Educational Attainment Appalachian Region and United States 1970

Geographical Division	Number of Persons 25 Years and Older	Persons: 25 Years and Older				Combined Index*
		Less Than High School Education (total number)	Less Than High School Education (percent)	Four or More Years of College (total number)	Four or More Years of College (percent)	
United States	109,899,359	52,373,312	47.7%	11,717,266	10.7%	100.0
Appalachian Region	10,066,768	5,661,734	56.2%	733,814	7.3%	66.7
<b>Subregions</b>						
<b>Northern Appalachia</b>	<b>5,473,330</b>	<b>2,738,977</b>	<b>50.0%</b>	<b>417,372</b>	<b>7.6%</b>	<b>79.3</b>
Maryland	118,483	63,870	53.9	7,515	6.3	65.7
New York	564,812	242,116	42.9	61,014	10.8	122.0
Ohio	617,952	336,641	54.5	32,014	5.2	59.3
Pennsylvania	3,382,843	1,652,439	48.8	259,764	7.7	82.5
West Virginia	789,240	443,911	56.2	57,065	7.2	66.4
<b>Central Appalachia</b>	<b>935,159</b>	<b>673,286</b>	<b>72.0%</b>	<b>46,619</b>	<b>5.0%</b>	<b>43.2</b>
Kentucky	463,274	340,843	73.6	23,399	5.1	42.7
Tennessee	186,163	129,706	69.7	10,812	5.8	48.2
Virginia	105,526	80,622	76.4	3,833	3.6	34.9
West Virginia	180,196	122,115	67.8	8,575	4.8	44.4
<b>Southern Appalachia</b>	<b>3,658,279</b>	<b>2,249,471</b>	<b>61.5%</b>	<b>269,823</b>	<b>7.4%</b>	<b>61.4</b>
Alabama	1,150,149	670,645	58.3	90,371	7.9	66.8
Georgia	433,879	301,088	69.4	22,210	5.1	45.1
Mississippi	217,370	138,034	63.5	15,169	7.0	57.8
North Carolina	577,576	365,426	63.3	42,585	7.4	59.8
South Carolina	351,508	224,277	63.8	29,980	8.5	64.8
Tennessee	771,716	443,902	57.5	61,863	8.0	68.5
Virginia	156,081	106,099	68.0	7,645	4.9	44.9
<b>State Parts†</b>						
Tennessee	957,879	573,608	59.9%	72,675	7.6%	63.9
Virginia	261,607	186,721	71.4	11,478	4.4	40.7
West Virginia‡	969,436	566,026	58.4	65,640	6.8	61.6

Source: Tabulations are estimates by the Appalachian Regional Commission from U.S. Bureau of Census, "1970 Census of Population," fourth count computer data files (sample counts).

\* Combined index is mean of index of college education (based on percentage relative to U.S.) and inverse index of less than high school education. Values below 100 represent combined educational attainment levels below the U.S. average.

† Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

‡ Entire state.



Table 30

## Youth Educational Attainment Appalachian Region and United States 1970

Geographical Division	Persons 18-24 Years Old					
	Number of Persons 18-24 Years Old	Less Than High School Education (total number)	Less Than High School Education (percent)	Enrolled in College (total number)	Enrolled in College (percent)	Combined Index
United States	23,383,006	6,395,824	27.4%	5,524,042	23.6%	100
Appalachian Region	1,998,005	629,301	31.5%	436,000	21.8%	90
<b>Subregions</b>						
<b>Northern Appalachia</b>	<b>1,044,581</b>	<b>247,750</b>	<b>23.7%</b>	<b>262,000</b>	<b>25.1%</b>	<b>111</b>
Maryland	22,878	6,790	29.7	3,500	15.0	79
New York	128,588	28,606	22.2	43,000	34.0	133
Ohio	119,570	35,697	29.9	26,000	21.5	91
Pennsylvania	616,920	129,691	21.0	151,000	24.5	117
West Virginia	156,625	46,966	30.0	38,500	24.5	98
<b>Central Appalachia</b>	<b>187,052</b>	<b>86,239</b>	<b>46.1%</b>	<b>29,500</b>	<b>16.0%</b>	<b>63</b>
Kentucky	97,044	44,148	45.5	18,000	19.0	70
Tennessee	35,810	15,632	43.7	5,500	16.0	65
Virginia	20,762	11,700	56.4	2,000	10.0	45
West Virginia	33,436	14,759	44.1	3,800	11.0	55
<b>Southern Appalachia</b>	<b>766,372</b>	<b>295,312</b>	<b>38.5%</b>	<b>144,500</b>	<b>19.0%</b>	<b>75</b>
Alabama	237,219	89,805	37.9	44,000	18.5	75
Georgia	92,637	42,446	45.8	12,000	13.0	57
Mississippi	49,539	19,764	39.9	11,500	23.0	83
North Carolina	117,505	43,227	36.8	22,000	19.0	77
South Carolina	78,429	29,996	38.2	16,500	21.0	80
Tennessee	163,029	57,194	35.1	35,000	21.5	85
Virginia	28,014	12,880	46.0	3,500	13.0	57
<b>State Parts*</b>						
Tennessee	198,839	72,826	36.6	40,500	20.5	81
Virginia	48,776	24,580	50.4	5,500	11.0	51
West Virginia†	190,061	61,725	32.5	42,258	22.2	89

Source: 1970 Census of Population, fourth count computer data files (sample counts). Count of persons aged 18-24 enrolled in college available only for whole states and 1970 standard metropolitan statistical areas of 250,000 population or more; missing data estimated by ARC staff based on tabulations of correlative data.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

† Entire state.

**Table 31**  
**Youth 16-17 Years Old Not Enrolled in School**  
**Appalachian Region and United States**  
**1960-1970**

Geographical Division	Number of Persons 16-17 Years Old 1970	Persons 16-17 Years Old in 1970			Number of Persons 16-17 Years Old 1960	Persons 16-17 Years Old in 1960		
		Not Enrolled in School (total number)	Not Enrolled in School (percent)	Not Enrolled in School Index*		Not Enrolled in School (total number)	Not Enrolled in School (percent)	Not Enrolled in School Index
<b>United States</b>	<b>7,804,905</b>	<b>833,440</b>	<b>10.7%</b>	<b>100.0</b>	<b>5,710,672</b>	<b>1,089,165</b>	<b>19.1%</b>	<b>100.0</b>
<b>Appalachian Region</b>	<b>716,868</b>	<b>101,359</b>	<b>14.1%</b>	<b>132.4</b>	<b>636,947</b>	<b>146,017</b>	<b>22.9%</b>	<b>120.2</b>
<b>Subregions</b>								
<b>Northern Appalachia</b>	<b>379,254</b>	<b>37,192</b>	<b>9.8%</b>	<b>91.8</b>	<b>325,093</b>	<b>60,104</b>	<b>18.5%</b>	<b>96.9</b>
Maryland	7,550	1,011	13.4	125.4	6,925	1,554	22.4	117.7
New York	40,950	3,494	8.5	79.9	32,333	4,707	14.6	76.3
Ohio	43,913	5,216	11.9	111.2	37,622	7,225	19.2	100.7
Pennsylvania	231,097	19,024	8.2	77.1	194,855	32,902	16.9	88.5
West Virginia	55,744	8,447	15.2	141.9	53,358	13,716	25.7	134.8
<b>Central Appalachia</b>	<b>75,149</b>	<b>17,067</b>	<b>22.7%</b>	<b>212.7</b>	<b>81,357</b>	<b>26,426</b>	<b>32.5%<sup>‡</sup></b>	<b>170.3</b>
Kentucky	36,993	9,362	25.3	237.0	40,038	13,209	33.0	173.0
Tennessee	13,356	2,773	20.8	194.4	13,504	4,309	31.9	167.3
Virginia	8,781	1,734	19.7	184.9	10,196	3,764	36.9	193.6
West Virginia	16,019	3,198	20.0	187.0	17,619	5,144	29.2	153.1
<b>Southern Appalachia</b>	<b>262,465</b>	<b>47,100</b>	<b>17.9%</b>	<b>168.1</b>	<b>230,497</b>	<b>59,487</b>	<b>25.8%</b>	<b>135.3</b>
Alabama	86,595	13,725	15.8	148.4	72,794	17,158	23.6	123.6
Georgia	30,261	7,645	25.3	236.6	26,603	7,446	28.0	146.8
Mississippi	17,118	3,295	19.4	180.3	16,126	3,048	18.9	99.1
North Carolina	39,102	6,667	17.1	159.7	36,173	9,274	25.6	134.4
South Carolina	25,839	4,329	16.8	161.4	20,707	6,739	32.5	170.6
Tennessee	52,802	9,764	18.5	173.2	47,200	12,610	26.7	140.1
Virginia	10,748	1,675	15.6	145.9	10,894	3,212	29.5	154.6
<b>State Parts*</b>								
Tennessee	66,158	12,537	19.0%	177.5	60,704	16,919	27.9%	146.1
Virginia	19,529	3,409	17.5	163.5	21,090	6,976	33.1	173.4
West Virginia†	71,763	11,645	16.2	152.0	70,977	18,860	26.6	139.3

Source: 1970 Census of Population, fourth count computer data files (sample counts). 1960 Census of Population, sample count data. Tabulations by ARC staff.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

† Entire state.

Table 32  
**Live Births, Total Deaths, Natural Increase and Vital Rates**  
**Appalachian Region and United States**

Geographical Division	Population July 1, 1975	Live Births 1975	Birth Rate 1975 (per 1,000)	Total Deaths 1975	Death Rate 1975 (per 1,000)	Natural Increase 1975	Natural Increase 1975 (per 1,000)	Birth Rate 1970 (per 1,000)	Death Rate 1970 (per 1,000)
<b>United States</b>	<b>213,032,000</b>	<b>3,144,198</b>	<b>14.8</b>	<b>1,892,879</b>	<b>8.9</b>	<b>1,251,319</b>	<b>5.9</b>	<b>18.3</b>	<b>9.4</b>
<b>Non-Appalachian United States</b>	<b>193,990,000</b>	<b>2,875,785</b>	<b>14.8</b>	<b>1,704,881</b>	<b>8.8</b>	<b>1,170,904</b>	<b>6.0</b>	<b>18.4</b>	<b>9.3</b>
<b>Appalachian Region</b>	<b>19,042,600</b>	<b>268,413</b>	<b>14.1</b>	<b>187,998</b>	<b>9.9</b>	<b>80,415</b>	<b>4.2</b>	<b>17.4</b>	<b>10.4</b>
<b>Subregions</b>									
<b>Northern Appalachia</b>	<b>9,886,900</b>	<b>129,880</b>	<b>13.1</b>	<b>103,568</b>	<b>10.5</b>	<b>26,312</b>	<b>2.7</b>	<b>16.4</b>	<b>11.1</b>
Maryland	215,600	2,514	11.7	2,120	9.8	394	1.8	16.5	10.5
New York	1,083,200	14,183	13.1	10,273	9.5	3,910	3.6	17.7	10.2
Ohio	1,186,300	18,030	15.2	12,276	10.3	5,754	4.9	17.7	11.3
Pennsylvania	5,955,900	73,649	12.4	63,427	10.6	10,222	1.7	15.8	11.2
West Virginia	1,445,800	21,504	14.9	15,472	10.7	6,032	4.2	16.9	11.3
<b>Central Appalachia</b>	<b>1,890,500</b>	<b>31,824</b>	<b>16.8</b>	<b>19,255</b>	<b>10.2</b>	<b>12,569</b>	<b>6.6</b>	<b>18.3</b>	<b>10.7</b>
Kentucky	955,100	16,563	17.3	9,535	10.0	7,028	7.4	18.8	10.5
Tennessee	364,600	5,231	14.3	3,554	9.7	1,677	4.6	16.9	10.3
Virginia	217,200	3,574	16.5	2,159	9.9	1,415	6.5	17.9	10.3
West Virginia	353,500	6,456	18.3	4,007	11.3	2,449	6.9	18.7	11.7
<b>Southern Appalachia</b>	<b>7,265,200</b>	<b>106,709</b>	<b>14.7</b>	<b>65,175</b>	<b>9.0</b>	<b>41,534</b>	<b>5.7</b>	<b>18.6</b>	<b>9.4</b>
Alabama	2,240,700	34,018	15.2	20,833	9.3	13,185	5.9	18.7	9.6
Georgia	956,300	15,105	15.8	7,705	8.1	7,400	7.7	20.4	8.7
Mississippi	444,000	7,560	17.0	4,389	9.9	3,171	7.1	19.3	10.7
North Carolina	1,115,900	14,832	13.3	9,863	8.8	4,969	4.5	17.4	9.2
South Carolina	722,100	10,471	14.5	6,128	8.5	4,343	6.0	18.9	9.2
Tennessee	1,501,100	21,163	14.1	13,429	8.9	7,734	5.2	18.3	9.3
Virginia	285,200	3,560	12.5	2,828	9.9	732	2.6	16.6	10.4
<b>State Parts*</b>									
Tennessee	1,865,700	26,394	14.1	16,983	9.1	9,411	5.0	18.0	0.5
Virginia	502,300	7,134	14.2	4,987	9.9	2,147	4.3	17.2	10.4
West Virginia†	1,799,300	27,960	15.5	19,479	10.8	8,481	4.7	17.3	11.4

Source: Appalachian Region and state part data derived from vital statistics reports of individual states, for 1975 and 1970. United States data from National Center for Health Statistics, summary reports on final natality and mortality statistics for 1975 and 1970. Population base data from U.S. Bureau of Census mid-year estimates, revised 1975 and 1970 data, compiled and tabulated by ARC staff for the Region and its parts.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

†Entire state.



population ranged from 8.1 in Appalachian Georgia to 11.3 in Central Appalachian West Virginia. Natural increase rates, reflecting remarkable differences in vital rates, varied from 1.7 per 1,000 population in Appalachian Pennsylvania to 7.7 in Appalachian Georgia and 7.4 in Appalachian Kentucky.

Between 1970 and 1975 both birth and death rates shifted downward, with the shifts in the Region parallel to the national trends. Within the Appalachian Region the shift in Central Appalachian West Virginia's vital rates was extraordinarily small. At the opposite extreme the natural increase rate fell sharply in the northeastern part of the Region in Appalachian New York, Pennsylvania and Maryland.

The United States birth rate remained the same (14.8 per 1,000 population) in 1976 as in 1975, as did the death rate (8.9). However, the age-adjusted death rate was the lowest in U.S. history. In 1977 provisional data indicate that the birth rate went up to 15.3, while the death rate fell further to 8.8. Projections of average birth and death rates for the 1980 period based on demographic-trend analysis (see Table 14 on page 35 and accompanying text) suggest that Appalachian birth rates may rise slightly relative to national changes but that death rates will remain at about present levels.

## Infant Mortality Trends in the Appalachian Region

Infant mortality rates have dropped rapidly under the impact of modern health care, and the Appalachian Region is no exception to this trend. Infant mortality (deaths under 1 year of age per 1,000 live births) in Appalachia fell from 26.5 in 1960 to 22.9 in 1968 and 17.0 in 1975 (see Table 33 on page 77). The rate of reduction in 1960-68 was slower than for the nation as a whole (which fell from 26.0 to 21.8), but in the 1968-75 period the infant mortality rate fell in the Region at about the same rate as in the U.S. (where it dropped from 21.8 to 16.1). In 1975 the infant mortality rate for the Appalachian Region was 6 percent higher than for the U.S. For the Appalachian white population it was 13 percent higher than the rate for the U.S. white population in 1974, while for Appalachian nonwhites the rate was 5 percent higher than for the U.S. nonwhite population. Nonwhites (7 percent of Appalachian population) contributed 10 percent of the Region's births and 15 percent of its infant mortality in 1974. (see Table 34 on page 78).

Within the Region the infant mortality rate was highest in Central Ap-

palachia, but the improvement in this subregion over the 15-year period was the greatest in the Region and well above the national shift. The infant mortality rate in Southern Appalachia improved in 1960-68 by about the same amount as the U.S. average but accelerated its improvement in the later period (1968-75). Northern Appalachian infant mortality lagged in its improvement; lower than the U.S. average rate in 1960, it fell much less rapidly, so that in 1975 its infant mortality rate was about the same as the U.S. average (though, if adjusted for racial mix, it was higher). Within Appalachian state areas, 1975 infant mortality ranged from 14.7 in Maryland to 22.4 in Mississippi. The most rapid improvement occurred in 1968-75 in Mississippi, Georgia, North Carolina and Kentucky.

## Appalachian Housing

In 1970 the Appalachian Region contained just under 9 percent of the nation's housing units but a much higher share than the nation of units with various deficiencies: lack of plumbing facilities (most often a flush toilet); poor structural condition and older age; lack of a telephone; or lack of a piped water supply. The average value of owner units (\$14,350) was only 74 percent of the U.S. level.

Table 35 on page 79 and Figure 9 on page 80 measure the number and proportions of occupied housing units within Appalachia which lack one or more plumbing facilities or have all plumbing but are overcrowded (1.01 or more persons per room). Deficient units constituted 38 percent of all occupied housing in Central Appalachia but only 13 percent in Northern Appalachia and 21 percent in Southern Appalachia. Proportions varied from 11 percent in

**Projected Vital Rates**  
July 1, 1975—April 1, 1980

Geographical Area	Birth Rate (per 1,000)	Death Rate (per 1,000)	Natural Increase Rate (per 1,000)
United States*	15.6	9.1	6.5
Appalachian Region	15.4	10.0	5.4
Northern Appalachia	14.2	10.5	3.7
Central Appalachia	17.2	10.2	7.0
Southern Appalachia	16.5	9.2	7.3

\*Projection model based on Census Series II projections with trended demographic projections for subnational areas.

Table 33

### Live Births and Infant Deaths Appalachian Region and United States 1960-1975

Geographical Division	Live Births 1975	Infant Deaths 1975	Infant Deaths per 1,000 Live Births				Infant Deaths 1960	Live Births 1960
			1975	1974	1968	1960		
United States	3,144,198	50,525	16.1	16.7	21.8	26.0	110,873	4,257,850
Appalachian Region	268,413	4,571	17.0	17.7	22.9	26.5	10,271	387,604
<b>Subregions</b>								
<b>Northern Appalachia</b>	<b>129,880</b>	<b>2,079</b>	<b>16.0</b>	<b>16.7</b>	<b>21.0</b>	<b>23.8</b>	<b>4,890</b>	<b>205,102</b>
Maryland	2,514	37	14.7	15.7	17.9	25.0	101	4,048
New York	14,183	220	15.5	14.7	18.7	22.6	513	22,746
Ohio	18,030	278	15.4	15.9	21.7	24.0	582	24,246
Pennsylvania	73,649	1,164	15.8	17.1	21.1	23.9	2,946	123,240
West Virginia	21,504	380	17.7	17.5	22.1	24.3	748	30,822
<b>Central Appalachia</b>	<b>31,824</b>	<b>569</b>	<b>17.9</b>	<b>19.1</b>	<b>25.2</b>	<b>30.7</b>	<b>1,302</b>	<b>42,418</b>
Kentucky	16,563	284	17.1	17.4	24.1	30.9	663	21,480
Tennessee	5,231	74	14.1	19.1	23.8	28.3	198	6,998
Virginia	3,574	78	21.8	20.4	26.2	34.8	184	5,288
West Virginia	6,456	133	20.6	22.4	28.8	29.7	257	8,652
<b>Southern Appalachia</b>	<b>106,709</b>	<b>1,923</b>	<b>18.0</b>	<b>18.5</b>	<b>24.8</b>	<b>29.1</b>	<b>4,079</b>	<b>140,084</b>
Alabama	34,018	607	17.8	19.6	24.6	31.0	1,450	46,844
Georgia	15,105	248	16.4	17.3	24.0	29.1	442	15,166
Mississippi	7,560	169	22.4	22.4	33.2	32.9	325	9,884
North Carolina	14,832	283	19.1	17.8	26.0	26.8	553	20,634
South Carolina	10,471	198	18.9	19.2	24.7	27.6	384	13,922
Tennessee	21,163	342	16.2	16.7	22.4	27.6	782	28,368
Virginia	3,560	76	21.3	15.4	21.8	27.2	143	5,266
<b>State Parts*</b>								
Tennessee	26,394	416	15.8	17.2	22.7	27.7	980	35,366
Virginia	7,134	154	21.6	17.8	23.7	31.0	327	10,554
West Virginia†	27,960	513	18.3	18.7	23.5	25.5	1,005	39,474

Source: Data for 1968, 1974 and 1975 provided by state departments of vital statistics of the Appalachian states. Data for 1960 live births from 1962 *City and County Data Book* computer file data. 1960 infant deaths from *Vital Statistics of the United States, 1960, Volume II—Mortality, Part B, Table 9-1*, tabulated by ARC staff.

Note: Vital statistics based on registered occurrences only, adjusted to place of residence for deaths and adjusted to place of mother's residence for births.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

†Entire state.

Table 34

**White and Nonwhite Live Births and Infant Deaths  
Appalachian Region and United States  
1974**

Geographical Division	Total Population			White Population			Nonwhite Population		
	Live Births	Infant Deaths	Infant Deaths per 1,000 Live Births	Live Births	Infant Deaths	Infant Deaths per 1,000 Live Births	Live Births	Infant Deaths	Infant Deaths per 1,000 Live Births
<b>United States</b>	<b>3,159,958</b>	<b>52,776</b>	<b>16.70</b>	<b>2,575,792</b>	<b>38,249</b>	<b>14.85</b>	<b>584,166</b>	<b>14,527</b>	<b>24.87</b>
<b>Appalachian Region</b>	<b>273,442</b>	<b>4,838</b>	<b>17.69</b>	<b>245,635</b>	<b>4,109</b>	<b>16.73</b>	<b>27,807</b>	<b>729</b>	<b>26.22</b>
<b>Subregions</b>									
<b>Northern Appalachia</b>	<b>130,776</b>	<b>2,187</b>	<b>16.72</b>	<b>124,963</b>	<b>2,025</b>	<b>16.20</b>	<b>5,813</b>	<b>162</b>	<b>27.87</b>
Maryland	2,616	41	15.7	2,543	40	15.7	73	1	14.
New York	14,240	209	14.7	13,831	201	14.5	409	8	20.
Ohio	17,762	282	15.9	17,282	273	15.8	480	9	19.
Pennsylvania	74,821	1,281	17.12	70,728	1,153	16.30	4,093	128	31.3
West Virginia	21,337	374	17.5	20,579	358	17.4	758	16	21.
<b>Central Appalachia</b>	<b>30,545</b>	<b>582</b>	<b>19.05</b>	<b>29,588</b>	<b>559</b>	<b>18.89</b>	<b>957</b>	<b>23</b>	<b>24.0</b>
Kentucky	15,484	269	17.4	15,172	266	17.5	312	3	10.
Tennessee	5,233	100	19.1	5,097	96	18.8	136	4	29.
Virginia	3,529	72	20.4	3,474	70	20.1	55	2	36.
West Virginia	6,299	141	22.4	5,845	127	21.7	454	14	31.
<b>Southern Appalachia</b>	<b>112,121</b>	<b>2,069</b>	<b>18.45</b>	<b>91,084</b>	<b>1,525</b>	<b>16.74</b>	<b>21,037</b>	<b>544</b>	<b>25.86</b>
Alabama	35,002	686	19.6	25,579	456	17.8	9,423	230	24.4
Georgia	15,966	276	17.3	14,514	244	16.8	1,452	32	22.0
Mississippi	8,083	181	22.4	4,973	79	15.9	3,110	102	32.8
North Carolina	15,702	279	17.8	13,529	222	16.4	2,173	57	26.2
South Carolina	11,211	215	19.2	8,525	149	17.5	2,686	66	24.6
Tennessee	22,317	373	16.7	20,294	321	15.8	2,023	52	25.7
Virginia	3,840	59	15.4	3,670	54	14.7	170	5	29.
<b>State Parts*</b>									
Tennessee	27,550	473	17.2	25,391	417	16.4	2,159	56	25.9
Virginia	7,369	131	17.8	7,144	124	17.4	225	7	31.
West Virginia†	27,636	515	18.6	26,424	485	18.4	1,212	30	24.8

Source: Data provided by state departments of vital statistics of the Appalachian states and tabulated by ARC staff.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

†Entire state.



Table 35

**Occupied Housing Units with Deficiencies  
Appalachian Region and United States  
1970**

Geographical Division	Occupied Housing Units	Deficient Occupied Housing Units		Occupied Housing Units Lacking one or More Plumbing Facilities		Overcrowded Occupied Housing Units with Plumbing	
		(total number)	(percent)	(total number)	(percent)	(total number)	(percent)
<b>United States</b>	<b>63,449,747</b>	<b>8,237,184</b>	<b>13.0%</b>	<b>3,772,817</b>	<b>45.8%</b>	<b>4,464,367</b>	<b>54.2%</b>
<b>Appalachian Region</b>	<b>5,640,042</b>	<b>1,034,077</b>	<b>18.3%</b>	<b>716,238</b>	<b>69.2%</b>	<b>317,839</b>	<b>30.8%</b>
<b>Subregions</b>							
<b>Northern Appalachia</b>	<b>3,045,816</b>	<b>399,009</b>	<b>13.1%</b>	<b>238,927</b>	<b>59.9%</b>	<b>160,082</b>	<b>40.1%</b>
Maryland	66,635	9,603	14.4	6,533	68.0	3,070	32.0
New York	324,076	26,152	8.1	12,250	46.8	13,902	53.2
Ohio	348,983	70,609	20.2	50,319	71.3	20,290	28.7
Pennsylvania	1,860,471	205,379	11.0	106,621	51.9	98,758	48.1
West Virginia	445,651	87,266	19.6	63,204	72.4	24,062	27.6
<b>Central Appalachia</b>	<b>522,620</b>	<b>200,793</b>	<b>38.4%</b>	<b>173,733</b>	<b>86.5%</b>	<b>27,060</b>	<b>14.5%</b>
Kentucky	259,533	108,952	42.0	96,631	88.7	12,321	11.3
Tennessee	104,525	34,418	32.9	29,681	86.2	4,737	13.8
Virginia	57,725	24,310	42.1	21,386	88.0	2,924	12.0
West Virginia	100,837	33,113	32.8	26,035	78.6	7,078	21.4
<b>Southern Appalachia</b>	<b>2,071,606</b>	<b>434,275</b>	<b>21.0%</b>	<b>303,578</b>	<b>69.9%</b>	<b>130,697</b>	<b>30.1%</b>
Alabama	653,726	132,000	20.2	90,049	68.2	41,951	31.8
Georgia	247,892	52,824	21.3	35,619	67.4	17,205	32.6
Mississippi	123,903	39,544	31.9	32,406	81.9	7,138	18.1
North Carolina	323,004	65,114	20.2	45,237	69.5	19,677	30.5
South Carolina	201,559	37,623	18.7	23,403	62.2	14,220	37.8
Tennessee	437,217	82,153	18.8	55,865	68.0	26,288	32.0
Virginia	84,305	25,017	29.7	20,999	83.9	4,018	16.1
<b>State Parts*</b>							
Tennessee	541,742	116,571	21.5%	85,546	73.4%	31,025	26.6%
Virginia	142,030	49,327	34.7	42,385	85.9	6,942	14.1
West Virginia†	546,488	120,379	22.0	89,239	74.1	31,140	25.9

Source: 1970 Census of Population and Housing, first count computer file data (100 percent count).

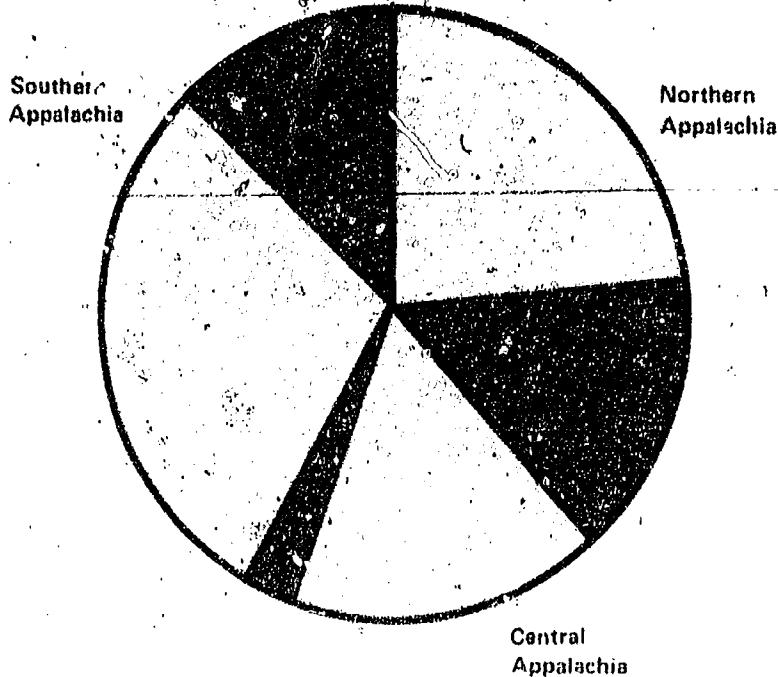
\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

†Entire state.

Figure 9

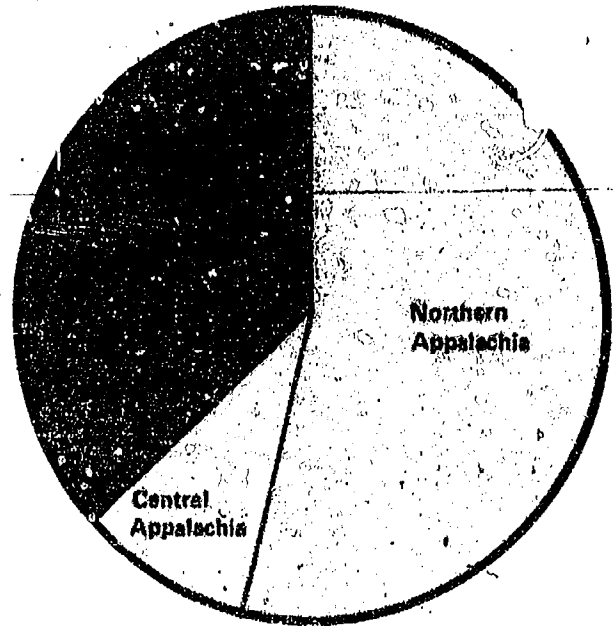
Occupied Housing Units with Deficiencies

Appalachian Region = 1.034 million (18.3% of total occupied housing units)  
 units lacking 1 or more plumbing facilities  
 units with plumbing, with 1.01 or more persons per room

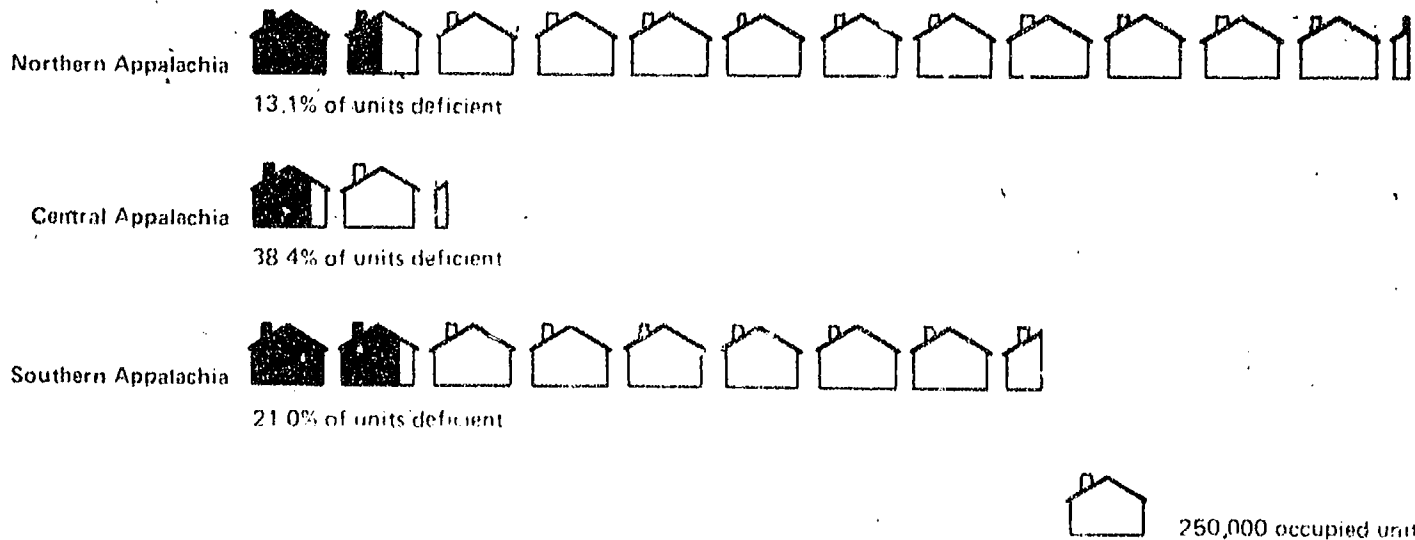


Total Occupied Housing Units

Appalachian Region = 5.64 million



Percentage of Occupied Housing Units with Deficiencies

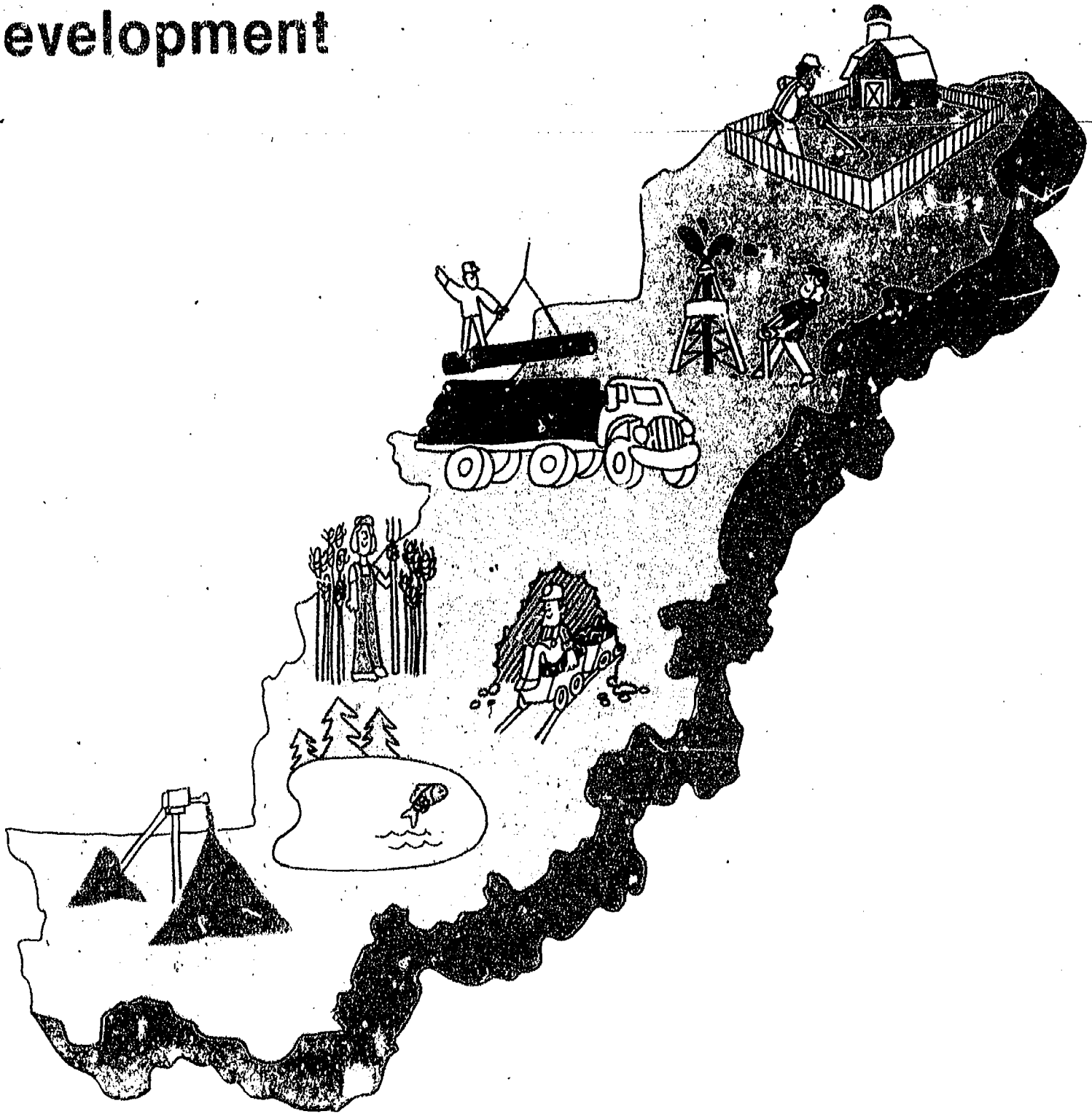


northern metropolitan counties to 44 percent in Central Appalachian rural counties. Nearly seven out of ten deficient units in the Region had plumbing deficits; in Central Appalachia this proportion reached 86 percent, while in the northern subregion it was only six out of ten.

Changes in definitions make comparisons with 1960 difficult, but on a relative scale, it appears that housing in Northern and Southern Appalachia improved more rapidly than the national average, while Central Appalachian housing lagged behind, probably in part because of

the very high rate of outmigration during the 1960s. The Region as a whole showed a slight improvement relatively but remained with deficiencies about 45 percent higher than the national proportion in 1970 (as measured by the two criteria used)

# Natural Resource Development





## Appalachian Coal Production

Appalachia supplied 61 percent of all coal produced in the United States in 1975. The coal is found chiefly in Northern and Central Appalachia, which mined 32 and 26 percent of total U.S. production, respectively (see Table 36 on page 83 and map on page 84). In contrast, Southern Appalachia mined only 4 percent of the U.S. total in 1975, and this production was concentrated in Alabama and Tennessee. Three states, Kentucky, Pennsylvania and West Virginia, produced 72 percent of Appalachian coal in 1975. At the same time four other states, Mississippi, New York, North Carolina and South Carolina, produced no coal at all.

Surface-mined coal, which includes coal produced by strip, auger and strip-auger methods, has become more important to Appalachia's coal industry in recent years. Between 1970 and 1975 the proportion of surface-mined coal in Appalachia jumped from 35 to 44 percent of the total. However, it still remains less than other areas of the country in which surface-mined coal accounted for 73 percent of 1975 production. Underground-mined coal, though still constituting 56 percent of Appalachian coal production in 1975, slipped rapidly from 65 percent of the Region's production between 1970 and 1974.

## Mineral Industry Establishments in the Appalachian Region

Mineral industry establishments and operations in the Appalachian Region were 22 percent of the total number in the nation in 1972, but this relatively

high level was essentially due to coal mining operations, which comprised 84 percent of the U.S. total number and accounted for 54 percent of all mineral establishments in the Region (see Table 37 on page 85). However, for both coal and oil and gas operations, the Appalachian industry is older than its counterparts farther west, and production per operation was less than the national average. Three sectors of the nonmetallic minerals mining also had relatively high proportions of U.S. total establishments: dimension stone (estimated at about one-fourth); clays, ceramic and refractory materials (about one-fifth); and the crushed stone industry (just under one-fifth). These data are not surprising in view of the earth resources of the mountains and their location in the densely populated eastern United States, but the very low number of metallic ore mines (only 3 percent of the nation's) contrasts with other operations.

Within the Region mineral fuels accounted for 86 percent (4,833) of all mining operations. Of the 747 non-metallic mineral establishments, crushed stone quarries are estimated to constitute about 45 percent of the total; sand and gravel extraction, about one-third; clays, ceramic and refractory materials, about one-tenth; dimension stone, 7 to 8 percent; and miscellaneous minerals, 6 to 7 percent. Bituminous coal mining is concentrated in Central Appalachia; Northern Appalachia has all of the anthracite coal mining (in Pennsylvania) and the lion's share of oil and gas extraction. In economic importance, bituminous coal leads in the North. Southern Appalachia has the majority of its operations in nonmetallic minerals, of which there is a diversity. In addition, most of the metal ore mines in the Region are in the South, concentrated in Tennessee.

## Agriculture and Farm Land in Appalachia

The Appalachian Region occupies a central location in and includes the most mountainous parts of the eastern United States. The Region accounts for the following shares of the total area comprised by the 26 states east of the Mississippi River:

- 23 percent of the total land area (1970)
- 21 percent of the total farm population (1970)
- 18 percent of the total farm acreage (1974)
- 13 percent of the total value of farm land and buildings. (1974)

Appalachian farms are small (average: 146 acres in 1974) even by eastern U.S. standards (see Table 38 on page 86). In addition, the value of land and buildings per acre is significantly lower (\$442) than elsewhere in the eastern United States (\$619). Hence, the average value per farm is only one-half (\$64,400) the value for farms in the non-Appalachian eastern U.S. (\$129,300).

Farm production in Northern Appalachia is specialized in dairying, in Central Appalachia in livestock and crops and in Southern Appalachia in poultry and poultry products. Farm size is smallest in Appalachian North Carolina, but total value of land and buildings per acre is lowest in West Virginia. These characteristics are in part inherited from earlier days of isolation and subsistence farming as well as related to the rugged topography. The 1974 average value of land and buildings per farm varied widely in the Region from \$41,200 in Kentucky to \$122,500 in Appalachian Maryland.

Table 36  
**Coal Production**  
**Appalachian Region and United States**  
**1970-1975**

Geographical Division	1975			1970 Underground and Surface (in thousand short tons)	Percent Change 1970-75
	Underground (in thousand short tons)	Surface (in thousand short tons)	Underground and Surface (in thousand short tons)		
<b>United States</b>	<b>293,467</b>	<b>361,174</b>	<b>654,641</b>	<b>612,661</b>	<b>6.9%</b>
<b>Non-Appalachian - United States</b>	<b>69,089</b>	<b>184,602</b>	<b>253,690</b>	<b>187,157</b>	<b>35.5%</b>
<b>Appalachian Region</b>	<b>224,378</b>	<b>176,572</b>	<b>400,951</b>	<b>425,504</b>	<b>- 5.8%</b>
<b>Subregions</b>					
<b>Northern Appalachia</b>	<b>113,116</b>	<b>94,529</b>	<b>207,644</b>	<b>232,612</b>	<b>-10.7%</b>
Maryland	104	2,502	2,606	1,615	61.0
New York	—	—	—	—	—
Ohio	15,416	29,815	45,231	53,285	-15.5
Pennsylvania	45,272	45,069	90,340	90,719	0.1
West Virginia	52,324	17,343	69,667	87,493	-20.4
<b>Central Appalachia</b>	<b>102,734</b>	<b>66,550</b>	<b>169,285</b>	<b>171,000</b>	<b>- 1.0%</b>
Kentucky	40,628	46,628	87,257	72,502	20.4
Tennessee	2,892	4,010	6,902	6,904	- 0.0
Virginia	23,181	12,329	35,510	35,016	1.4
West Virginia	36,033	3,583	39,616	56,578	-30.0
<b>Southern Appalachia</b>	<b>8,528</b>	<b>15,493</b>	<b>24,022</b>	<b>21,892</b>	<b>9.7%</b>
Alabama	7,614	15,029	22,644	20,560	10.1
Georgia*	—	74	74	—	**
Mississippi	—	—	—	—	—
North Carolina	—	—	—	—	—
South Carolina	—	—	—	—	—
Tennessee	914	390	1,304	1,332	- 2.1
Virginia	—	—	—	—	—
<b>State Parts†</b>					
Tennessee	3,806	4,400	8,206	8,236	- 0.4%
Virginia	23,181	12,329	35,510	35,016	1.4
West Virginia‡	88,357	20,926	109,283	144,071	-24.1

Source: U.S. Bureau of Mines. 1975 Minerals Yearbook and 1970 Minerals Yearbook

\*No production reported for Appalachian Georgia in 1970.

†Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

‡Entire state.

# 1975 Coal Production

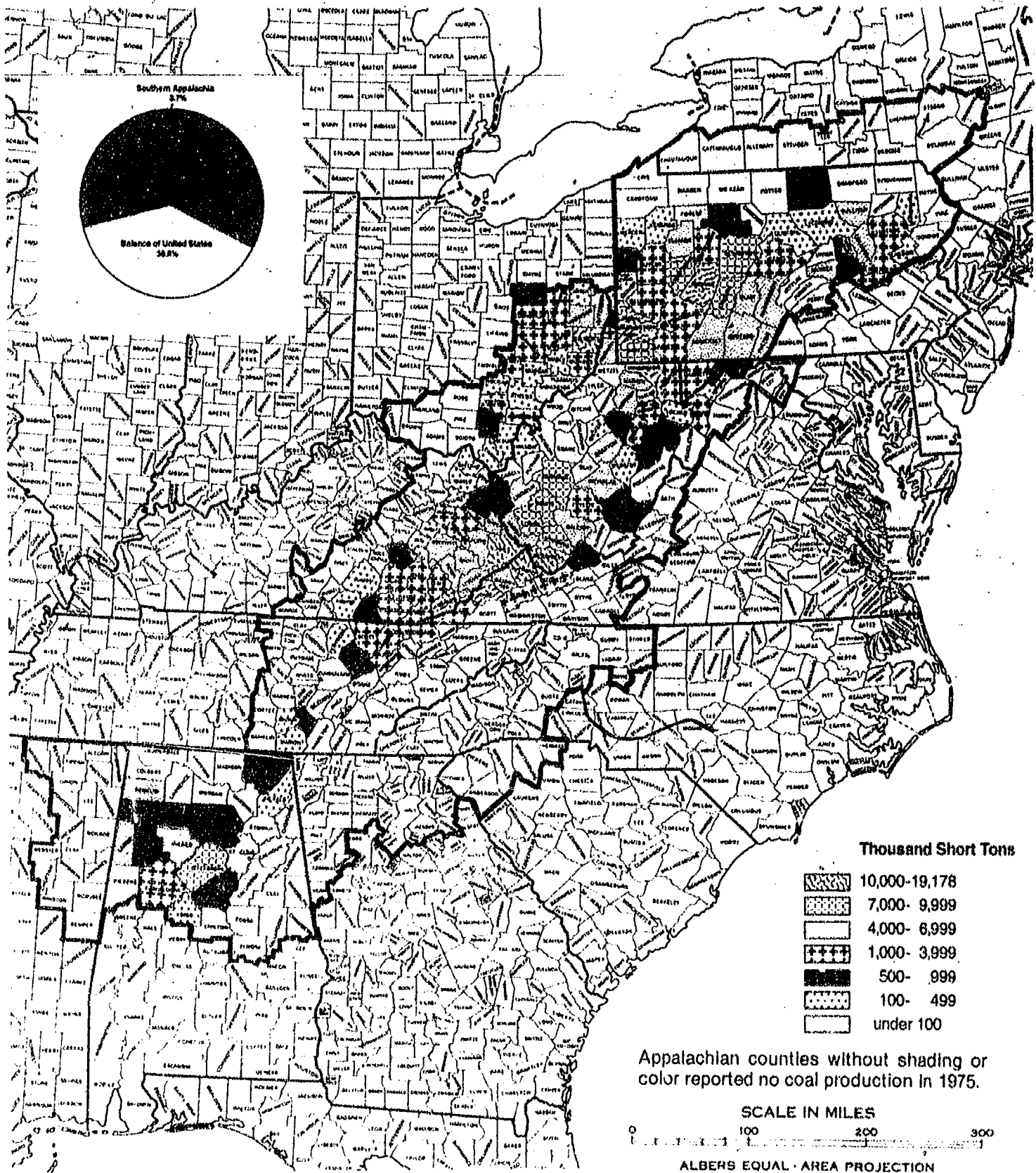




Table 37

**Number of Mineral Industry Establishments  
Appalachian Region and United States  
1972**

Geographical Division	All Mineral Industries	Metal Mining	Anthracite Mining	Bituminous Coal and Lignite Mining	Oil and Gas Extraction	Nonmetallic Minerals Mining
<b>United States</b>	<b>25,269</b>	<b>1,014</b>	<b>230</b>	<b>3,365</b>	<b>14,498</b>	<b>6,162</b>
<b>Appalachian Region</b>	<b>5,608</b>	<b>28</b>	<b>224</b>	<b>2,807</b>	<b>1,802</b>	<b>747</b>
<b>Subregions</b>						
<b>Northern Appalachia</b>	<b>3,333</b>	<b>3</b>	<b>224</b>	<b>1,219</b>	<b>1,488</b>	<b>399</b>
Maryland	48	—	—	30	4	14
New York	147	1	—	—	108	38
Ohio	723	—	—	185	441	97
Pennsylvania	1,393	1	224	577	388	203
West Virginia	1,022	1	—	427	547	47
<b>Central Appalachia</b>	<b>1,824</b>	<b>4</b>	<b>—</b>	<b>1,460</b>	<b>269</b>	<b>91</b>
Kentucky	909	1	—	697	162	49
Tennessee	139	3	7	105	8	23
Virginia	406	—	—	387	9	10
West Virginia	370	—	—	271	90	9
<b>Southern Appalachia</b>	<b>451</b>	<b>21</b>	<b>—</b>	<b>128</b>	<b>45</b>	<b>257</b>
Alabama	167	3	—	90	18	56
Mississippi	37	—	—	—	18	19
North Carolina	56	1	—	1	2	52
South Carolina	6	—	—	—	—	6
Tennessee	115	13	—	33	3	66
Virginia	34	2	—	4	1	27
<b>States Parts*</b>						
Tennessee	254	16	—	138	11	89
Virginia	440	2	—	391	10	37
West Virginia†	1,392	1	—	698	637	56

Source: U.S. Bureau of Census, 1972 *Census of Mineral Industries*. Tabulations by ARC staff.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

†Entire state.

Table 38  
**Farm Land and Selected Characteristics of Farms  
 Appalachian Region and States East of Mississippi River  
 1974**

Geographical Division	Land Area 1970 (in thousands of acres)	Farm Land 1974 (in thousands of acres)	Farm Land as Percent of Total	Number of Farms 1974	Percent Change in Number of Farms 1959-74	Average Farm Size 1974 (in acres)	Average Farm Value per Acre 1974	Average Value per Farm 1974
<b>States East of Mississippi River (entire state)</b>	<b>546,126</b>	<b>227,991</b>	<b>41.7%</b>	<b>1,174,339</b>	<b>-43.4%</b>	<b>194</b>	<b>\$587</b>	<b>\$114,000</b>
<b>States East of Mississippi River (Non-Appalachian part)</b>	<b>421,409</b>	<b>187,471</b>	<b>44.5%</b>	<b>896,536</b>	<b>-42.0%</b>	<b>209</b>	<b>\$619</b>	<b>\$129,300</b>
<b>Appalachian Region</b>	<b>124,717</b>	<b>40,520</b>	<b>32.5%</b>	<b>277,803</b>	<b>-47.6%</b>	<b>146</b>	<b>\$442</b>	<b>\$ 64,400</b>
<b>Subregions</b>								
<b>Northern Appalachia</b>	<b>53,492</b>	<b>16,202</b>	<b>30.3%</b>	<b>87,962</b>	<b>-48.9%</b>	<b>184</b>	<b>\$425</b>	<b>\$ 78,200</b>
Maryland	989	326	33.0	1,705	-48.0	191	641	122,500
New York	7,555	3,028	40.1	13,286	-45.8	228	396	90,200
Ohio	8,789	3,869	44.0	23,836	-40.7	162	418	67,900
Pennsylvania	23,440	5,793	24.7	34,180	-48.8	169	501	85,000
West Virginia	12,718	3,185	25.0	14,955	-59.9	213	299	63,700
<b>Central Appalachia</b>	<b>20,420</b>	<b>7,176</b>	<b>35.1%</b>	<b>58,916</b>	<b>-44.2%</b>	<b>122</b>	<b>\$353</b>	<b>\$ 42,900</b>
Kentucky	10,843	4,277	39.4	34,986	-43.3	122	336	41,100
Tennessee	4,819	1,942	40.3	16,576	-39.1	117	398	46,600
Virginia	2,072	646	31.2	5,400	-45.5	120	345	41,200
West Virginia	2,687	311	11.6	1,954	-71.0	159	314	50,100
<b>Southern Appalachia</b>	<b>50,806</b>	<b>17,143</b>	<b>33.7%</b>	<b>130,925</b>	<b>-48.2%</b>	<b>131</b>	<b>\$495</b>	<b>\$ 64,800</b>
Alabama	15,744	5,114	32.5	34,603	-46.2	148	436	64,500
Georgia	6,915	1,791	25.9	14,031	-50.8	128	663	84,600
Mississippi	6,599	3,232	49.0	15,271	-58.9	212	343	72,500
North Carolina	7,607	1,959	25.8	22,458	-50.9	87	624	54,400
South Carolina	2,503	648	25.9	4,750	-63.3	136	619	84,300
Tennessee	7,496	2,863	38.2	30,160	-37.0	95	594	50,400
Virginia	3,942	1,536	39.0	9,652	-41.1	159	416	66,200
<b>State Parts*</b>								
Tennessee	12,314	4,805	39.0%	46,736	-37.8%	103	\$515	\$ 52,900
Virginia	6,014	2,182	36.3	15,052	-42.8	145	395	57,300
West Virginia†	15,405	3,497	22.7	16,009	-61.6	207	300	62,100

Source: Data are from 1974 Census of Agriculture, individual state volumes, tabulated and analyzed by ARC staff. 1959 base year data from 1959 Census of Agriculture summary data in 1962 City and County Data Book from ARC computer files.

\*Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here.

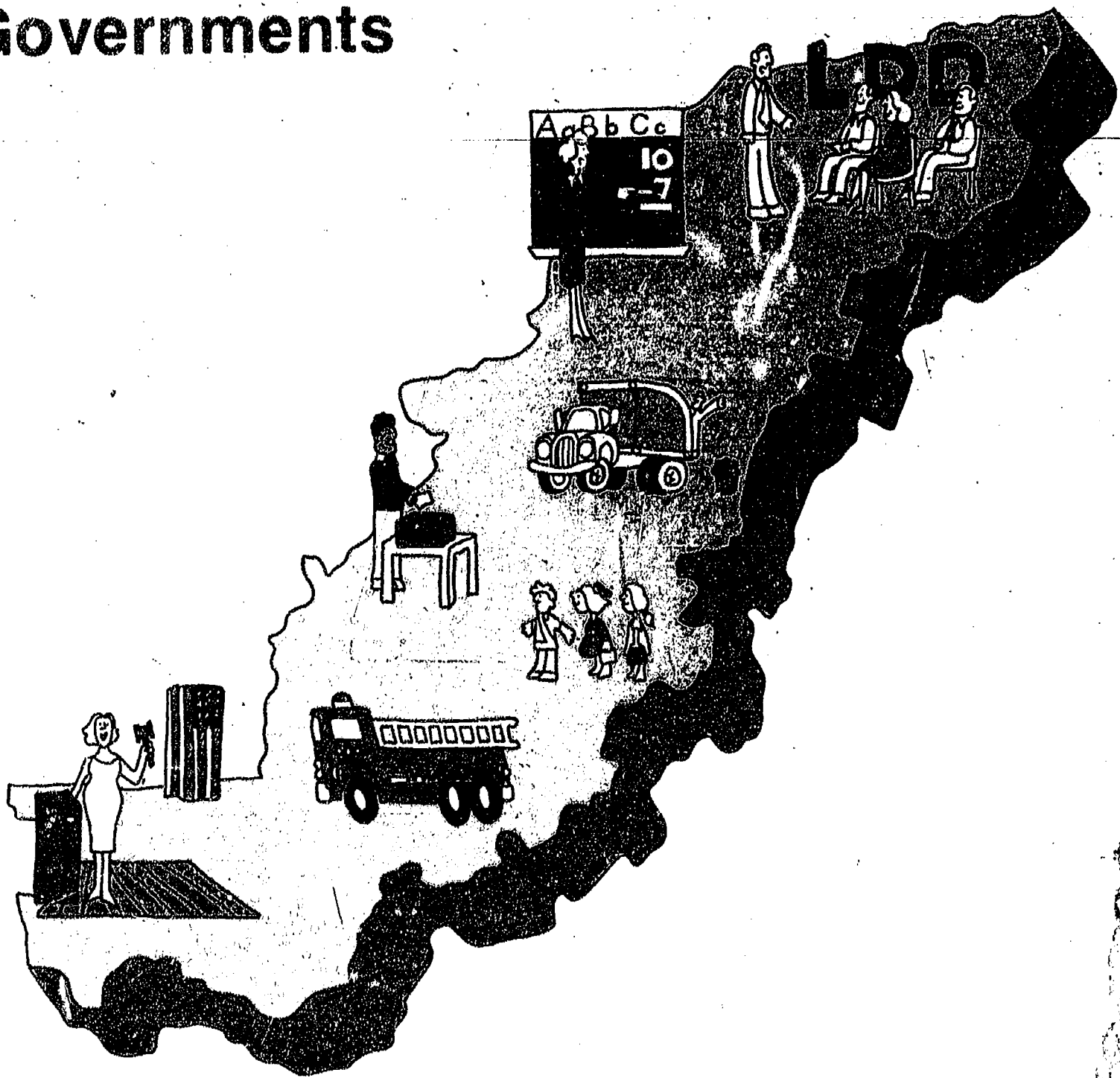
†Entire state.

Less than one-half of all land was in farms everywhere in the Region. For the entire Region farm acreage was 32 percent of the total, while it

was 44 percent of the total land in the non-Appalachian eastern United States. The decline in the number of farms is parallel to national and re-

gional trends, with rapid declines in West Virginia and the Appalachian parts of South Carolina and Mississippi.

# Local Governments





## Local Governments in the Appalachian Region

With 9 percent of the U.S. population, the Appalachian Region had in 1977, 10 percent of the number of local governments in the nation; these governments spent only 6 percent of all funds disbursed by local government in 1971-72.

Governmental complexity measured by number of governmental units per 100,000 population was greatest in Appalachian Ohio, New York and Pennsylvania. These three states, with 44 percent of regional population in 1976, accounted for 64 percent of the number of local governments in the Region and raised the average level of Northern Appalachia much above the rest of the

Region. Townships accounted for almost one-third of local governments in these three states, the only Appalachian states containing these units as active governments.

Table 39 shows detailed data as well as trends from 1972 to 1977 in the Region. During this five-year span there was a continued increase in special districts in all subregions, and a small gain in the number of municipalities and school districts, while townships remained stationary with a decline of only two in number. Overall, the Region gained (net) 427 local governments in five years; 371 of these were special districts. Northern Appalachia had by far the largest increase both in number and relative to its population. Within Northern Appalachia the major increase was in Pennsylvania, which increased its share of Northern Appalachia's local governments from 62 to 63 percent.

Appalachia's local governments raised \$3.4 billion of local general revenues in 1971-72, 5.2 percent of the national total locally raised. Revenue sharing by the states added to this by providing \$2.6 billion of state aid within the Region (7.45 percent of the national total of such aid). Federal general revenue sharing had not yet been implemented in the census year, and total federal direct aid to the Region's local governments amounted to \$0.3 billion in 1971-72, or 6.2 percent of the national total. The Region's level of per capita general revenues slipped in every category (locally raised, state and federal aid) relative to national trends in the five-year period (1967-72). Northern Appalachia showed both the highest level of expenditures and the greatest growth rate in the period 1967-72 among the three subregions (see Table 40 on page 90 and Figure 10 on page 91).

Table 39  
**Number of Local Governments by Type,  
 Appalachian Region and United States  
 1972-1977**

Geographical Division	1977					Local Governments per 100,000 Population	1972 Local Governments	1972-77 Change In Number
	Local Governments*	County Governments	Municipalities	School Districts	Special Districts			
United States	79,862	3,042	18,862	15,174	25,962	37.2	78,218	1,644
Appalachian Region	8,267	397	2,239	951	2,818	43.1	7,840	427
<b>Subregions</b>								
<b>Northern Appalachia</b>	<b>5,858</b>	<b>143</b>	<b>1,320</b>	<b>692</b>	<b>1,841</b>	<b>59.2</b>	<b>5,546</b>	<b>312</b>
Maryland	45	3	24	0	18	20.9	43	2
New York	742	14	130	145	185	68.3	750	8
Ohio	896	28	226	119	81	75.2	899	3
Pennsylvania	3,677	52	751	382	1,340	61.9	3,427	250
West Virginia	498	46	189	46	217	33.9	427	71
<b>Central Appalachia</b>	<b>674</b>	<b>85</b>	<b>209</b>	<b>81</b>	<b>299</b>	<b>34.6</b>	<b>631</b>	<b>43</b>
Kentucky	376	49	97	71	159	38.3	366	10
Tennessee	160	20	47	1	92	42.8	143	17
Virginia	41	7	27	0	7	18.2	41	0
West Virginia	97	9	38	9	41	26.6	81	16
<b>Southern Appalachia</b>	<b>1,735</b>	<b>169</b>	<b>710</b>	<b>178</b>	<b>678</b>	<b>23.6</b>	<b>1,663</b>	<b>72</b>
Alabama	566	35	256	75	200	25.0	518	48
Georgia	311	35	132	47	97	31.9	308	3
Mississippi	212	20	71	39	82	47.3	200	12
North Carolina	176	29	82	0	65	15.7	173	3
South Carolina	126	6	44	16	60	17.3	131	5
Tennessee	267	30	95	1	161	18.8	278	9
Virginia	57	14	30	0	13	19.8	57	0
<b>State Parts†</b>								
Tennessee	447	50	142	2	253	23.6	421	26
Virginia	98	21	57	0	20	19.1	96	2
West Virginia <sup>§</sup>	595	55	227	55	258	32.5	508	87

Source: U.S. Bureau of Census, *1977 Census of Governments*, Volume 1, Governmental Organization. County data tabulated by ARC staff for Appalachian Region. Multicounty governments are counted only in the county where centered to omit duplication.

\*Local governments include township governments in 1977 as follows: United States, 16,822; Appalachian Region and Northern Appalachia, 1,862; Appalachian parts of New York, 268; Ohio, 442; and Pennsylvania, 1,152.

Ratio based on number of local governments on January 1, 1977, and population estimate for July 1, 1976, from U.S. Bureau of Census revenue-sharing estimate.

Figures for the two subregional portions of these three states, the only states which fall in two subregions, are combined here. Entire state.

Table 40

## Local Government Finances Appalachian Region and United States

	Fiscal Year 1971-72 Revenues				Fiscal Year 1971-72 Expenditures			1967-72 Percent Change in per Capita Expenditures
	General Revenues (millions)	Locally Raised Revenue per Capita	Locally Raised Revenue per Capita as Percent of Total General Revenues	State Aid as Percent of Total General Revenues	General Expenditures (millions)	Expenditures per Capita	Education Expenditures as Percent of Total General Expenditures	
United States	\$105,243.0	\$318	62.3%	33.4%	\$106,499.0	\$516	45.7%	70.9%
Appalachian Region	\$ 6,337.7	\$186	54.2%	41.3%	\$ 6,344.5	\$343	54.5%	61.8%
<b>Northern Appalachian States</b>								
(Appalachian portion)	\$ 3,399.6	\$223	55.2%	40.4%	\$ 3,382.9	\$402	54.7%	63.3%
Maryland	89.3	210	49.7	45.7	85.0	403	57.4	46.5
New York	702.4	308	46.8	50.4	742.7	696	49.0	74.0
Ohio	370.8	192	59.6	36.7	370.3	322	53.6	59.4
Pennsylvania	2,237.1	214	57.3	37.6	2,184.9	365	56.7	68.2
<b>Central Appalachian States</b>								
(Appalachian portion)	\$ 1,340.9	\$139	54.1%	43.8%	\$ 1,348.9	\$274	60.5%	51.8%
Kentucky	220.5	85	38.2	57.4	188.6	210	73.3	32.1
Tennessee	540.8	174	57.2	36.3	563.6	317	49.2	48.8
Virginia	122.2	109	40.3	53.3	118.1	245	67.3	64.4
West Virginia*	477.4	142	52.6	44.2	478.6	271	67.1	63.3
<b>Southern Appalachian States</b>								
(Appalachian portion)	\$ 1,597.3	\$168	54.4%	41.3%	\$ 1,612.7	\$312	49.3%	58.9%
Alabama	658.5	177	58.1	36.7	665.5	307	45.5	56.6
Georgia	261.3	180	58.2	39.5	266.6	316	52.0	59.6
Mississippi	128.4	135	44.7	51.1	130.4	306	52.0	45.7
North Carolina	354.1	155	46.4	49.5	353.4	334	49.7	58.3
South Carolina	195.0	168	57.9	37.8	196.8	293	55.8	78.7

Source: U.S. Bureau of Census, 1972 Census of Governments, special computer data tape prepared by Governments Division for ARC. Tabulated by ARC data systems staff.

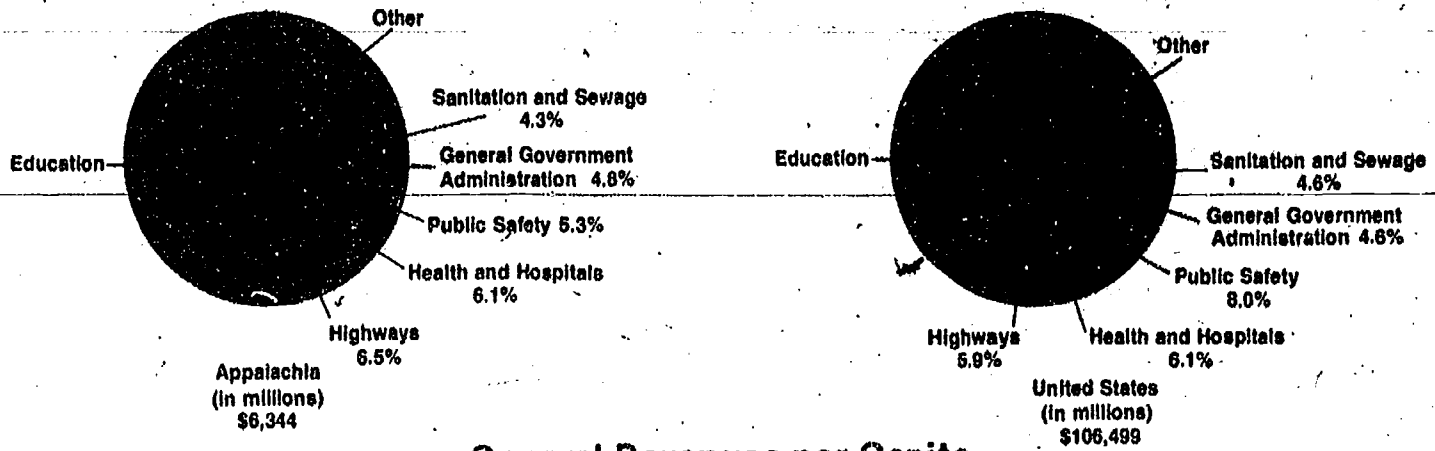
\*Entire state.



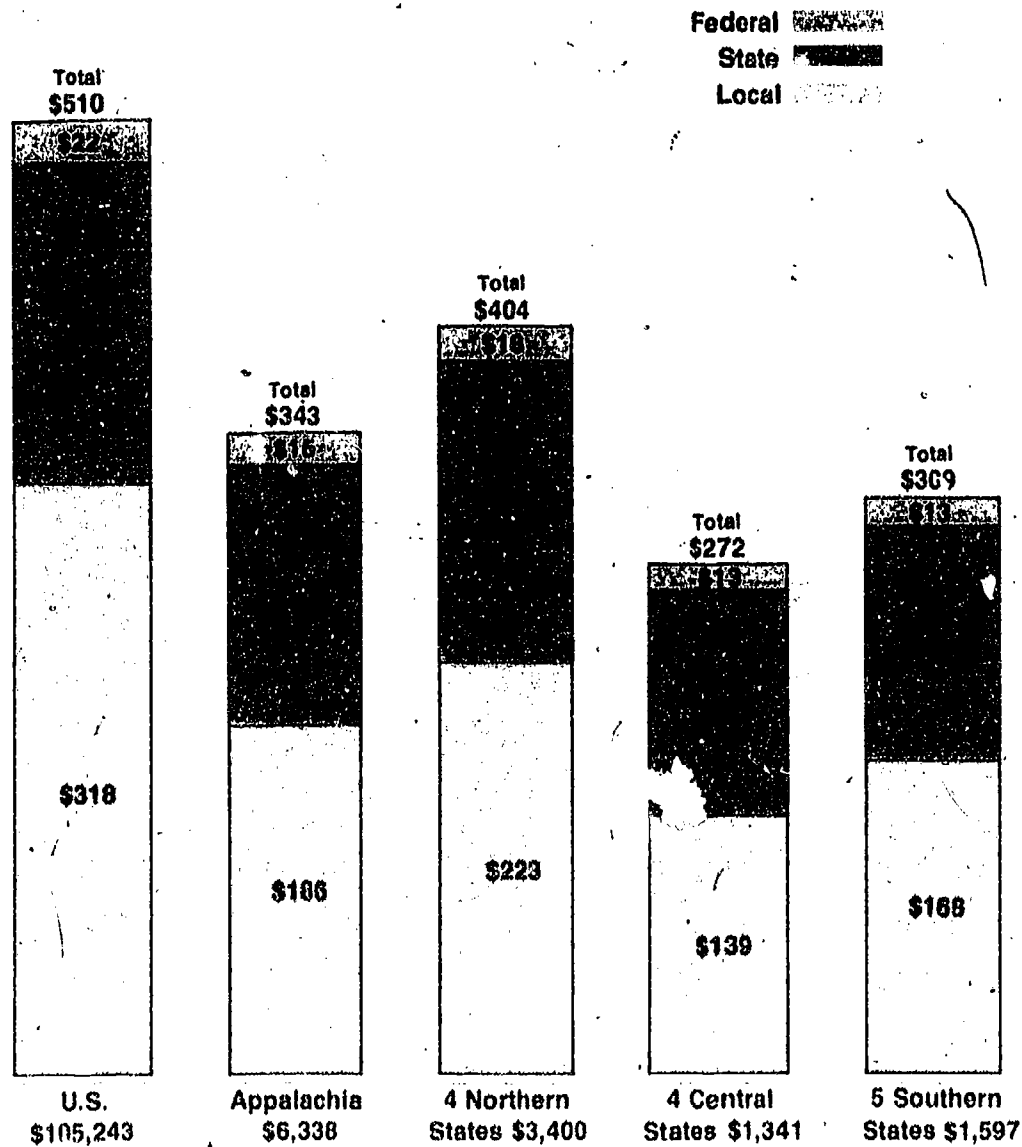
Figure 10

## Local Government Expenditures by Function and General Revenues per Capita

### General Expenditures by Function



### General Revenues per Capita



Totals in millions

Jerome P. Pickard was primarily responsible for preparing this reference book. Joe Cerniglia assisted in the data collection. The editors were Judith F. Maher and Jean Truman. Pete Middelthon designed the publication and Robert Oren/Graham Associates, Inc. was responsible for the illustrations.

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