

Characteristics of the Population

GENERAL

The major portion of the information on the population of the United States, compiled from the Censuses of Population and Housing of 1950, is presented in this volume. Part 1, the United States Summary, contains three chapters previously published as separate bulletins. Chapter A recapitulates the statistics on the size and distribution of the total population of the United States (originally published in Series P-A U. S. Summary bulletin); Chapter B presents statistics on the general characteristics of the population (originally published in Series P-B U. S. Summary bulletin); and Chapter C presents detailed data on the characteristics of the population of the United States (originally published in Series P-C U. S. Summary bulletin). Most of the data that are presented for the United States in this volume have also been presented for each State, as well as for many of the constituent parts of the State, in the State parts of the volume.

The statistics in Chapter A relate to the total population of the United States and its urban and rural parts, places classified by size, regions, divisions, and the States and their urban and rural parts, counties, minor civil divisions, incorporated and unincorporated places, urbanized areas, standard metropolitan areas, State economic areas, economic subregions, and the metropolitan districts of 1940. Selected statistics are also included for the Territories, possessions, etc.

Most of the tables in this volume are devoted to the presentation of information on the characteristics of the population. Statistics on the general characteristics, contained in Chapter B, include data on urban-rural residence, age, sex, race, nativity, citizenship, country of birth, school enrollment, years of school completed, marital status, residence in 1949, employment status, occupation, industry, class of worker, and family income. In Chapter C, information on most of these characteristics is presented again but in greater detail. The statistics in Chapter C include cross-classifications of age with race, nativity, citizenship, marital status, relationship to household head, education, and employment status; the occupational and industrial attachments of the labor force; and personal income. In addition to data for the United States as a whole, statistics on the characteristics of the population are also shown for the four regions of the country (Northeast, North Central, South, and West), and for the nine groups of States designated as "geographic divisions"; certain summaries for States, and for standard metropolitan areas and cities of 100,000 inhabitants or more, are also included. In most of the tables for the United States, figures are shown separately for the urban, rural-nonfarm, and rural-farm population. Selected statistics are also presented for Alaska, Hawaii, and Puerto Rico.

RELATED MATERIALS

Volume IV, Special Reports

Additional reports on the characteristics of the population will be published in Volume IV of the 1950 Census of Population. These reports relate mainly to the United States and regions with, in some cases, a few tables for States and large standard metropolitan areas and cities. They cover the following subjects: Employment Characteristics, Occupational and Industrial Characteristics, Characteristics of Families, Marital Status, Institu-

tional Population, Nativity and Parentage, Nonwhite Population by Race, Persons of Spanish Surname, Puerto Ricans in Continental United States, State of Birth, Mobility of the Population, Characteristics by Size of Place, Education, and Fertility.

1950 Census of Housing Reports

In addition to the reports on population, the Bureau of the Census is presenting a separate group of reports on housing from the Seventeenth Decennial Census. Housing Volume I provides statistics on the general characteristics of housing, and Housing Volume II provides statistics relating characteristics of households to housing characteristics.

Preliminary Sample Data From the 1950 Census

Preliminary sample figures on characteristics of the population of the United States from the 1950 Census of Population have been published in the Series PC-7 reports. The preliminary figures presented in the Series PC-7 reports were based on tabulations of a sample of about 0.1 percent of the population (150,000 persons) and differ somewhat from the final figures because of sampling variability. Furthermore, other differences appear because the preliminary figures did not include all the refinements that resulted from detailed examination of the schedules in the preparation of the final data.

Current Population Reports

The Bureau of the Census conducts every month the Current Population Survey covering a sample of 25,000 households throughout the country. This survey has been in operation since April 1940 and has provided national estimates of the employment status of the population (*Current Population Reports*, Series P-57, "The Monthly Report on the Labor Force"). The distribution of employed workers by major occupation group is included each quarter in this series; and statistics on other subjects, such as marital status, school enrollment, mobility of the population, and income, are collected in the Current Population Survey and published annually in other series of *Current Population Reports*. The intercensal statistics provided by the Current Population Survey are, in general, designed to be comparable with the data for the United States obtained in the decennial population censuses. Discussion of the comparability of specific statistics is presented below under "Population characteristics."

ARRANGEMENT OF TABLES

Following the 18 text tables (tables A-S), which give selected summary data, are the detailed tables published originally in the Series P-A, P-B, and P-C summary bulletins. They were numbered in such a way as to provide a continuous series when bound together in this volume. Thus tables 1 to 33 present data on the number of inhabitants, tables 34 to 93 present data on general characteristics of the population, and tables 94 to 185 present the detailed data on the characteristics of the population. The general content of the tables in Chapter B and Chapter C is indicated in the outlines on pp. viii to x.

AVAILABILITY OF UNPUBLISHED DATA

The data on the characteristics of the population that were tabulated but not published for States, standard metropolitan areas, cities, and other areas are described in the State bulletins, Series P-B and P-C. The tabulated but unpublished statistics can be made available, upon request, for the cost of transcription or consolidation.

COVERAGE OF CENSUS

Usual Place of Residence

In accordance with Census practice dating back to 1790, each person enumerated in the 1950 Census was counted as an inhabitant of his usual place of residence or usual place of abode, that is, the place where he lives and sleeps most of the time. This place is not necessarily the same as his legal residence, voting residence, or domicile, although, in the vast majority of cases, the use of these different bases of classification would produce identical results.

In the application of this rule, persons were not always counted as residents of the places in which they happened to be found by the census enumerators. Persons in continental United States and Hawaii in places where guests usually pay for quarters (hotels, etc.) were enumerated on the night of April 11, and those whose usual place of residence was elsewhere were allocated to their homes. Visitors found staying in private homes, however, were not ordinarily interviewed there. Information on persons away from their usual place of residence was obtained from other members of their families, landladies, etc. If an entire family was expected to be away during the whole period of the enumeration, information on it was obtained from neighbors. A matching process was used to eliminate duplicate reports for persons who reported for themselves while away and were also reported by their families at home.

Persons in the armed forces quartered on military installations were enumerated as residents of the States, counties, and minor civil divisions in which their installations were located. Members of their families were enumerated where they actually resided. In the 1950 Census, college students living away from home were considered residents of the communities in which they were residing while attending college, rather than as persons temporarily absent from their parental homes as was the practice in 1940. In 1950 the crews of vessels of the American Merchant Marine in harbors of the United States were counted as part of the population of the ports in which their vessels were berthed on April 1, 1950. Crews of American vessels on the high seas or in foreign ports were included in the population abroad; in 1940 crews of American vessels were treated as part of the population of the port from which the vessel operated, regardless of the location of the vessel on April 1, 1940. Inmates of institutions, who ordinarily live there for long periods of time, were counted as inhabitants of the place in which the institution was located; whereas patients in general hospitals, who ordinarily stay for a short time, were counted at, or allocated to, their homes. All persons without a usual place of residence were counted where they were enumerated.

Coverage of Citizens of Foreign Countries

Citizens of foreign countries temporarily visiting or traveling in the United States or living on the premises of an embassy, ministry, legation, chancellery, or consulate were not enumerated. Citizens of foreign countries having their usual residence in the United States as defined above, including those working here (but not living at an embassy, etc.) and those attending school (but not living at an embassy, etc.), were included in the enumeration, however, as were members of their families living with them.

Date of Enumeration

The date of enumeration for the Decennial Censuses of 1950, 1940, and 1930 was April 1 in accordance with the requirements of the Fifteenth Census Act. The Census of 1920 was taken as of January 1 and that of 1910 was taken as of April 15. For the decennial censuses between 1830 and 1900, the date of enumeration was June 1 and in the period 1790 to 1830 the census date was the first Monday in August. The enumeration date April 1 was selected for recent censuses as a date on which the number of persons away from home would be at a minimum and on which the weather conditions favor rather than impede the field work.

Enumeration for the 1950 Census of Population began on April 1, 1950. Two-thirds of the population had been enumerated by mid-April, nine-tenths by the end of the month. This much of the canvass was just about on schedule. Unfavorable weather conditions in certain parts of the country delayed the beginning of enumeration, in some areas to as late as mid-May. Nevertheless, by the end of June all but one percent of the enumeration had been completed.

The fact that the enumeration is spread over a period of weeks, rather than made on a single day, creates certain problems with respect to coverage. Thus, some persons who move during the enumeration period may be missed altogether, since the area in which they originally lived may not be canvassed before they move and enumeration may be completed in the area of their new home by the time they arrive. Conversely, there is the possibility of duplicate enumeration, once at the initial residence and once at their new home. It seems probable, however, that the net result is an underenumeration of these movers. Again, enumerators tend to ignore the explicit date of enumeration and to record information as of the date of their visit. Therefore, in spite of instructions, some infants are included in the census who were born after the census date, and some persons who died after April 1 are excluded.

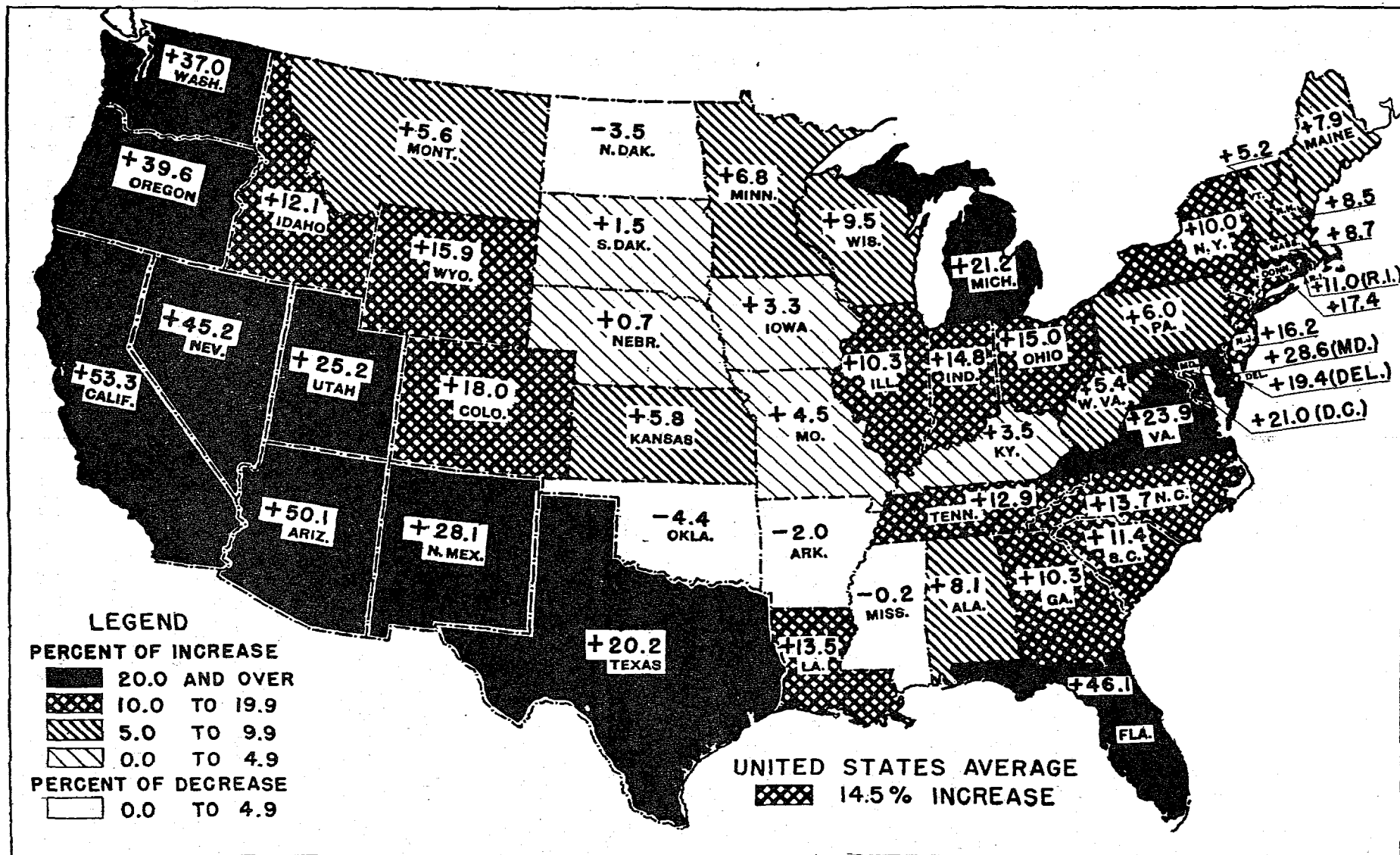
Area of Enumeration

In the 1950 Census the areas enumerated were as follows: continental United States, the Territories of Alaska and Hawaii, American Samoa, the Canal Zone, Guam, Puerto Rico, the Virgin Islands of the United States, and some of the smaller islands and island groups. Certain of the minor possessions, however, were not enumerated; the figures on their population were obtained as far as possible from other sources. (See table 1.)

The 1950 Census also made special provision for the enumeration of members of the armed forces of the United States abroad and their dependents living with them, civilian American citizens employed by the United States Government abroad and their dependents living with them, and the crews of vessels in the American Merchant Marine on the high seas or in foreign ports. This phase of the enumeration was made possible through cooperative arrangements with the Department of Defense, the Department of State, the United States Maritime Administration, and other Federal agencies concerned, whereby these agencies took the responsibility for the distribution and collection of specially designed census reports for individuals and households. Other persons who were only temporarily abroad were supposed to have been reported by their families or neighbors in the United States. Only scattered voluntary reports could be obtained for private citizens who were abroad for a long period of time; this class is not covered by any of the published statistics.

The data in the 1950 Census on the population abroad are the most comprehensive ever obtained in a decennial census. In 1940, for example, the War and Navy Departments gave information to the Bureau of the Census on the number of their personnel stationed abroad; and the State Department furnished the number of employees in the diplomatic service abroad and their dependents.

Figure 2.—PERCENT CHANGE IN TOTAL POPULATION, BY STATES: 1940 TO 1950



DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

INTRODUCTION

No information was obtained on the characteristics of the population abroad such as is available from the schedules employed in the 1950 Census.

In this bulletin the term "United States" when used without qualification refers to the 48 States and the District of Columbia and excludes outlying Territories, possessions, etc. Sometimes, however, the United States in this sense is referred to as "continental United States."

The Census of 1890 was the first at which a complete enumeration was made of the area now comprised within the boundaries of the 48 States and the District of Columbia. Indians living in Indian Territory or on reservations were not included in the population count until 1890, and at earlier censuses large tracts of unorganized and sparsely settled territory were not canvassed by the enumerators. Thus, the sum of the areas enumerated was not always identical with the area included within the legal boundaries of the United States at the respective dates, nor was it always possible to indicate the exact boundaries of the enumerated areas. In the earlier censuses not all of a State or territory was covered by the enumerators but only that part up to the "frontier line" and any large isolated settlements beyond. For example, Iowa Territory in 1840 included all of what is now Iowa and most of what is now Minnesota, but within the Territory the only substantial settlements were in the southeastern corner of what is now Iowa, and hence only this part was covered by the Census of 1840. It is not feasible to make a more exact statement than that the area of what is now Iowa was added to the area of enumeration in 1840. The western part of what is now Minnesota, however, was not included until later.

The Census of 1790 covered areas now embraced in the District of Columbia and the following States: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Kentucky, and Tennessee. Large areas in some of these States, however, were not covered in the enumeration. Only about one-fourth of the area of Georgia, for example, was enumerated.¹

The area added at each census to the area of enumeration within the boundaries of continental United States may be briefly indicated as follows:

1800.—The area now constituting the States of Ohio, Indiana, Illinois, Michigan, Wisconsin, and the south central parts of Alabama and Mississippi. In that year the area now within the States of Illinois and Wisconsin and a part of the present area of Michigan were included in the Territory of Indiana; and three years later, when Ohio was admitted to the Union as a State, the remainder of the present area of Michigan was added to Indiana Territory. The population shown for Indiana Territory in 1800 was substantially that residing within the present limits of Indiana, Illinois, Michigan, and Wisconsin. The population shown for Mississippi and Alabama in 1800 was that residing within Mississippi Territory as then constituted, which embraced the area now forming the south central parts of the States of Mississippi and Alabama.

1810.—The area now constituting Arkansas, the northern parts of Mississippi and Alabama, and all but the southwestern part of Louisiana and the northwestern part of Missouri. (The remainder of the Louisiana Purchase of 1803 was not enumerated in 1810.) The population shown for Mississippi and Alabama for 1810 included that residing within Mississippi Territory as then constituted.

1820.—The extreme southern parts of Alabama and Mississippi, and the southwestern part of Louisiana. Florida was purchased in 1819, but was not enumerated in 1820.

¹ For maps showing the distribution of the population at each census from 1790 to 1910, see U. S. Bureau of Census, *Statistical Atlas of the United States*, U. S. Government Printing Office, Washington, D. C., 1914.

1830.—Florida.

1840.—Iowa, northwestern Missouri, and northeastern Minnesota.

1850.—Texas, Utah, California, that part of New Mexico Territory now constituting the State of New Mexico with the exception of a small portion of the Gadsden Purchase of 1853, and that part of the Territory of Oregon now constituting the States of Oregon and Washington.

1860.—Dakota Territory (organized in 1861 from the area now embraced within the States of North and South Dakota and those parts of Montana and Wyoming lying east of the crest of the Rocky Mountains and north of the forty-third parallel), the remainder of Minnesota, Nebraska (then including that part of the area now constituting Wyoming which lay south of the forty-third parallel and east of the Rocky Mountains), Kansas, Colorado, Nevada, that part of Washington Territory now constituting Idaho and those portions of Montana and Wyoming lying west of the Rocky Mountains, that part of New Mexico Territory now constituting the State of Arizona (including the greater portion of the Gadsden Purchase of 1853), and that part of the Gadsden Purchase which now forms the southwestern part of New Mexico. The population shown for Washington Territory for 1860 was that residing within the limits of the Territory as then constituted, which embraced the area of the present States of Washington, Idaho, and western Montana and Wyoming.

1870 and 1880.—No change.

1890.—Indian Territory and Oklahoma Territory (later combined to form the State of Oklahoma) and Indian reservations.

1900–1950.—No change.

Alaska was first included in a Federal decennial census in 1880, Hawaii in 1900, Puerto Rico in 1910, and American Samoa, Guam, and the Canal Zone in 1920; but a special census of Puerto Rico had been taken in 1899 under the direction of the War Department, and a special census of the Canal Zone had been taken in 1912 by the Department of Civil Administration of the Isthmian Canal Commission. The Virgin Islands of the United States were first enumerated in a regular decennial census in 1930. A special census, however, had been taken as of November 1, 1917, immediately after purchase of the islands by the United States.

Since the Republic of the Philippines was established as an independent country in 1946, the islands were not covered in the 1950 Census. The Philippine Islands had never been enumerated at a decennial census. A special census of the archipelago was taken in 1903 by the Philippine Commission and censuses were taken in 1919 (as of December 31, 1918) and in 1939 (as of January 1, 1939) by the Philippine government.

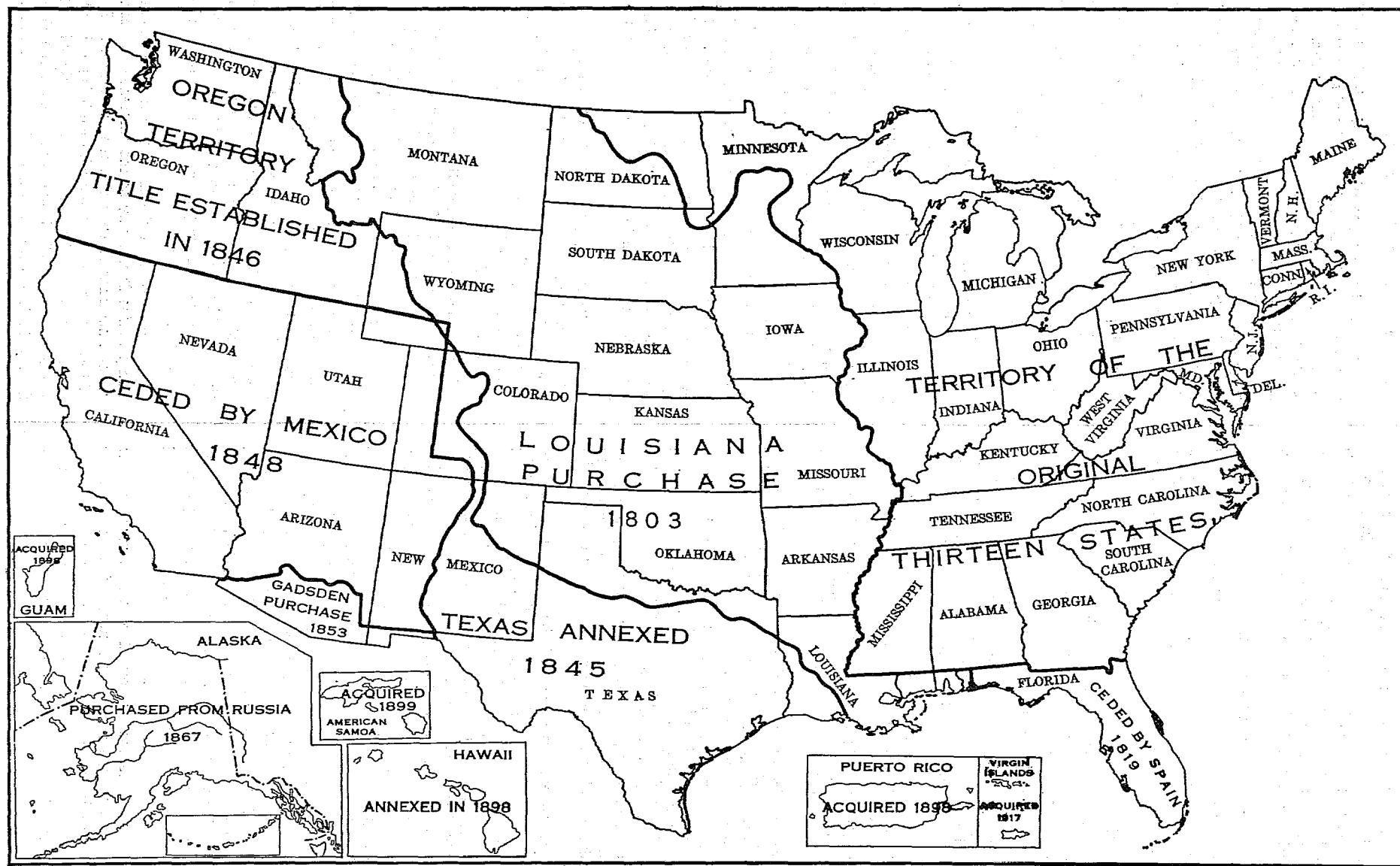
COMPLETENESS OF ENUMERATION

The degree of completeness of enumeration has always been a matter of deep concern to the Bureau of the Census; and, in the course of its history, a number of devices have been developed to aid in securing adequate coverage. These devices include the special procedures for the enumeration of transients and infants, urging notifications from persons who believed that they may not have been enumerated, and the early announcement of population counts in local areas to make possible the thorough investigation of complaints as to the accuracy of the count. In the 1950 Census earlier procedures were strengthened and additional procedures were introduced. Adequate handling of the problem of under-enumeration involves not only the development of techniques in order to insure satisfactory coverage but also methods of measuring the completeness of coverage.

Prior to 1950, no method had been devised to give an over-all direct measure of the completeness of enumeration of the total population. For the most part, discussion in census reports was confined to qualitative statements based on various kinds of

Figure 3.—MAJOR ACQUISITIONS OF TERRITORY BY THE UNITED STATES

[For other areas under the jurisdiction of the United States, see table 1]



evidence. In the 1950 Census, the population of all ages was re-enumerated on a sample basis in a carefully conducted post-enumeration survey; thus a direct check on a case-by-case basis of the actual enumeration was afforded. The results of this survey indicate a net underenumeration in the census count of the total population of the United States of about 2,100,000, or 1.4 percent.

Procedures to Improve Coverage

From the earlier discussion of usual residence and date of enumeration, some of the difficulties involved in obtaining a complete and unduplicated count of the population should be clear. It may safely be said that no national census, either in the United States or abroad, has ever represented an absolutely accurate count.

Experience had shown that many devices might be used to improve the completeness of coverage. The major ones used in the 1950 Census of Population were:

1. A longer and better planned period of training was provided for enumerators. The enumerators were paid while taking a three-day course of training that emphasized the importance of an accurate count, the kinds of people who tended to be missed, and how to discover them. A Training Guide for the instructor, film strips, records, and practice enumeration were among the devices used.
2. Each enumerator was furnished with a map of his enumeration district, showing the boundaries of the area for which he was responsible.
3. An "Infant Card" had to be filled for each baby born after January 1, 1950, since experience had shown that babies are easily missed. Enumerators received 7 cents extra for each infant card filled.
4. A crew leader was assigned to supervise each group of approximately 15 enumerators. His duties included helping enumerators with problem cases and spot-checking a sample of the dwelling units assigned to them.
5. A special enumeration of persons in hotels, tourist courts, and other places where transients usually pay for quarters was made the night of April 11. When transients claimed a usual place of residence elsewhere, records were compared to ensure that they were counted once and only once.
6. "Missed Person" forms were published in the newspaper at the end of the field canvass so that persons who thought they had been missed could fill them out and mail them to the district supervisor.
7. District supervisors made preliminary announcements of the population counted so that any complaints or criticisms concerning the completeness of the enumeration could be submitted before field offices were closed. If the evidence, usually in the form of lists of names and addresses of people believed missed, seemed to indicate appreciable underenumeration, a re-enumeration was made of the affected area.

In this country, the length of the enumeration period, the high degree of population mobility, the difficulty of finding many dwelling units, the living habits of apartment dwellers and lodgers in our metropolitan centers, and the inexperience of most of the enumerators, all represent relatively great problems. In some foreign countries, the canvass is completed in a day or so by means of a radically different organization of the field work. The existence of a continuous population register, the use of self-enumeration, and the use of permanent Government employees as enumerators are factors that may make a quick canvass possible. In some foreign censuses, everyone must remain at home until the entire enumeration is completed or may move about on the streets only with some form of identification to prove that he has been counted. Even with such drastic interference with normal activities, some persons are missed.

Of course, there are considerable differences among censuses with respect to completeness of enumeration, and these differences are due partly to differences in procedures. Accuracy in a census can be increased by using better procedures, but some procedures are so expensive that the improvement would not be worth the added cost.

Indirect Methods of Evaluating Completeness of Coverage

One of the simplest types of evaluation is obtained from the examination of rates of changes for a series of several censuses with respect to their consistency and reasonableness. For example, a comparison of figures for the Southern States among the Censuses of 1860, 1870, and 1880 shows unreasonably low rates of increase for the decade 1860 to 1870 and abnormally high rates of increase for the decade 1870 to 1880. These differences are of such a magnitude that it appears evident that the enumeration of 1870 in these areas was seriously incomplete, undoubtedly as a result of the unsettled conditions of the reconstruction period. In terms of the total population for the United States as a whole, the number initially enumerated was 38,558,371; whereas a later revised figure, taking into account the underenumeration in the Southern States, put the total population of the United States at 39,818,449. For the portion of the United States outside the South, the rate of increase for the decade 1860 to 1870 was almost exactly the same as for the decade 1870 to 1880. Therefore, the figure for the South for 1870 was revised on the assumption that the rate of increase during these two decades was the same.

Another method of estimating the comparative completeness of successive censuses involves the use of vital statistics and immigration statistics in conjunction with census data. Since the population at a given census should represent the population at the previous census plus births and immigration and minus deaths and emigration in the intervening period, it is possible, given the necessary statistics, to calculate the expected population on a given census date and to compare it with the enumerated population. If this comparison shows that the expected population exceeds the enumerated population, it may be inferred that the net amount of underenumeration in the current census exceeded that in the previous census; if, on the other hand, the enumerated population exceeds the expected population the inference is that the current census is the more complete one. These inferences, of course, rest on the assumptions that the error in census counts is always in the direction of net underenumeration and that errors in the measurement of births, deaths, immigration, and emigration are small in relation to the amounts of comparative underenumeration.

The application of this method and assumptions to the decade 1940 to 1950 results in an estimate that the 1950 count was more complete by some 100,000 than that of 1940. For the decade 1930 to 1940, application of the method suggests that the total net number of persons missed in 1940 may have been about 1,300,000 more than that missed in 1930.

The components of population change were probably estimated more accurately for the forties than for the thirties because not all States were in the birth and death registration areas until 1933 and because the registration of vital statistics within these areas has been increasing in completeness. Allowances were made for these factors in the case of births and in the case of infant deaths, but these estimates may be still subject to considerable error. No adjustment was made for underregistration of deaths, other than infant deaths, although some deaths of older persons were not registered. International migration was the smallest component of population change in these decades, but the figures were probably subject to the greatest relative error. In view of these considerations, the result of 100,000 is so close to zero that we cannot be sure whether coverage was more adequate in 1940 or in 1950.

The comparison of the expected with the enumerated population provides figures only on the difference between the amounts of total net underenumeration at two censuses. If, however, one of these totals can be estimated, then it is possible to specify total net underenumeration for each census linked together by this method. As described more fully below, the Post-Enumeration Survey indicates for 1950 a total net underenumeration of 1.4

percent. On this basis, the percentage of net underenumeration would be 1.6 in 1940, and 0.7 in 1930.

Since the expected population under 10 years of age at a given census can be derived from the number of births in the preceding decade, a comparison of the expected and enumerated population gives a direct measure of total net understatement. On this basis, it is estimated that the total net amount of understatement, including both underenumeration and the misreporting of age, in the age group under 10 years was about 1,300,000 in the 1950 Census and about 1,500,000 in the 1940 Census. The corresponding percentages are 4.3 and 6.7. Despite the possible errors in the estimates of births, deaths, and migration used in determining the expected population, it is felt that the indicated difference between net understatement in 1940 and 1950 is in the true direction.

Comparisons of census data with independent counts of corresponding segments of the population are sometimes possible in the case of certain other age-sex groups. For example, there have been several studies for both World War I and World War II relating figures for males of military age from the census to registration figures. Here again, however, interpretation of the differences is complicated by the fact that there are no adequate measures of the accuracy of the Selective Service figures. There is, in fact, some evidence of overreporting in these figures, which were compiled by local boards with little statistical supervision. Nonetheless, these studies do suggest an appreciable underenumeration of males in the appropriate age groups in the Censuses of 1920 and 1940, particularly among Negroes.

Post-Enumeration Survey

A particularly important and useful method of checking the adequacy of enumeration is a direct check on a case-by-case basis of the actual enumeration. A procedure of this type was used in the Post-Enumeration Survey of the 1950 Census, in which a re-enumeration on a sample basis was undertaken. To check for entire households erroneously omitted from the census, a probability sample of about 3,500 small areas was recanvassed and the relistings carefully compared with the original census listings. In addition to the check for erroneously omitted households, a sample of about 22,000 households was reinterviewed to determine the number of persons erroneously omitted in cases where the household had been included. This sample of households was also used to determine the number of persons erroneously included in the census listings and the accuracy of the reports obtained on the characteristics of enumerated persons. Available preliminary evidence of the quality of the census data on characteristics of the population, as revealed by the Post-Enumeration Survey, is presented in connection with the discussion of the specific characteristics in the sections which follow.

The Post-Enumeration Survey interviewers were carefully selected and were given intensive training and supervision. Great efforts were made to limit respondents to the person who was presumably best informed regarding the information desired—usually, the person himself. These precautions resulted in an expenditure per case in the Post-Enumeration Survey many times that of the original enumeration—an expenditure which was feasible only because the study was done on a sample basis. A full description of the procedure and results of this Post-Enumeration Survey will be published at a later date.

As indicated in table A, the net underenumeration in the census count of the total population of the United States is estimated at 1.4 percent (with a standard error of 0.2 percent). The net underenumeration is the difference between the erroneous omissions and the erroneous inclusions. The figures shown in table A represent those errors in the census count which were detected by the Post-Enumeration Survey. Errors not reflected in these figures may have arisen because of the following factors, among others:

1. In the check for erroneously omitted persons, large non-dwelling-unit quarters (i. e., those where 35 or more persons had been enumerated), such as hotels and other accommodations for transients, were excluded. A separate check on those accommodations was undertaken, but the results of this study are not yet available.

2. Identifying all errors in the census coverage is extremely difficult. Although some of the errors in the census listings came from carelessness or ineptness of the enumerators, many of them are a result of the intrinsic difficulty of enumerating certain types of persons—for example, persons with no fixed place of residence. The Post-Enumeration Survey interviewers did succeed in locating many of the persons who were missed or erroneously included in the census, but they could not identify all such cases. A small-scale field check on the Post-Enumeration Survey results indicates that the Post-Enumeration Survey errors were, in general, in the direction of underestimating the number of erroneously omitted persons. This conclusion is also supported by examining the Post-Enumeration Survey figures in the light of other evidence on errors. For example, estimates of children under 5 based on records of births, deaths, and migration point to a shortage in the census figure for this age group of considerably greater magnitude than that reported by the Post-Enumeration Survey; again, although the Post-Enumeration Survey indicates, as had been expected, a greater error in the enumeration of the nonwhite population than the white population, it shows less error for the nonwhite population in the age group 15 to 24 than for other non-white age groups, a difference which might possibly be valid but is more likely attributable to the difficulty experienced by both the census and the Post-Enumeration Survey in listing the most mobile sectors of the population.

3. The reliability of these estimates, as in all statistical surveys, is also affected by errors in the application of sampling and other procedures.

TABLE A.—ESTIMATES OF COVERAGE ERROR FOR PERSONS, BY REGIONS AND SIZE OF PLACE: 1950

(Estimates are rounded to the nearest thousand without being adjusted to group totals, which are independently rounded)

Area	Census population (thousands)	Estimated total population (thousands)	Persons erroneously omitted ¹		Persons erroneously included ²		Net error	
			Number (thousands)	Number per 100 enumerated	Number (thousands)	Number per 100 enumerated	Number (thousands)	Percent of estimated total population
United States.....	150,697	152,788	3,400	2.3	1,309	0.9	2,091	1.4
Northeast.....	39,478	39,794	732	1.9	416	1.1	316	0.8
North Central.....	44,401	45,064	813	1.8	219	0.5	603	1.3
South.....	47,197	48,071	1,381	2.9	507	1.1	874	1.8
West.....	19,622	19,861	479	2.4	177	0.9	293	1.5
Urban.....	96,408	97,504	1,028	2.0	892	0.9	1,036	1.1
Places of 1,000,000 and over.....	17,404	17,634	477	2.7	247	1.4	230	1.3
Places of 50,000 to 1,000,000.....	35,839	36,265	662	1.8	246	0.7	416	1.1
Other.....	43,226	43,615	789	1.8	400	0.9	389	0.9
Rural.....	54,230	55,235	1,472	2.7	417	0.8	1,055	1.9

¹ Includes some persons who were counted elsewhere, at the wrong address, as discussed in the text.

² Includes some persons who were counted only once but at the wrong address, as discussed in the text.

Those errors in the Post-Enumeration Survey which could be identified were almost all in the direction of underestimating the number of persons erroneously omitted from, or erroneously included in, the census, with probably more erroneous omissions than inclusions. These and other considerations suggest that the estimated net underenumeration of 1.4 percent in 1950 is a minimum estimate.

As indicated in table A, there is some variation with residence in the coverage error of the census. In general, the net underenumeration was somewhat greater in rural than in urban areas and it was somewhat greater in the South and West than in the other regions of the United States. Among urban areas the error seems to be greater for the large cities. The error rates would

vary among smaller areas, such as individual States, counties, and cities; but the sample was not large enough to yield reliable estimates for such areas.

In interpreting the figures on erroneous omissions and erroneous inclusions, it should be recognized that these are defined with respect to the listings for a given census enumeration district. (See table B.) For example, some of the "omitted" cases represent the listing of a person in the wrong census enumeration district rather than his complete omission from the census. Such cases will be included in *both* the estimate of erroneous omissions and the estimate of erroneous inclusions (since such persons enumerated in the wrong census enumeration district are both omitted from the listing where their names should appear and included in a listing where their names should not appear). In the absence of duplicate enumeration these cases do not affect the net error. They do, however, affect the other values estimated in table B.

TABLE B.—ESTIMATES OF NUMBER OF PERSONS ERRONEOUSLY OMITTED FROM, OR ERRONEOUSLY INCLUDED IN, CENSUS ENUMERATION DISTRICT LISTINGS, BY RACE AND TYPE OF ERROR, FOR THE UNITED STATES: 1950

Type of error	Total		White		Nonwhite	
	Number (thousands)	Percent of enumerated population	Number (thousands)	Percent of white population	Number (thousands)	Percent of non-white population
Persons erroneously omitted ¹	3,400	2.3	2,697	2.0	703	4.5
In missed households and quasi households.....	2,416	1.6	1,939	1.4	477	3.0
In enumerated households and quasi households.....	984	0.7	758	0.6	226	1.4
Persons erroneously included ²	1,309	0.9	1,122	0.8	187	1.2
Persons who should not have been enumerated anywhere.....	198	0.1	163	0.1	35	0.2
In households erroneously included.....	38	—	33	—	5	—
In households properly included.....	160	0.1	130	0.1	30	0.2
Persons who should have been enumerated in another enumeration district.....	1,111	0.7	959	0.7	152	1.0
In households erroneously included.....	99	0.1	94	0.1	5	—
In households properly included.....	1,012	0.7	865	0.6	147	0.9

¹ Includes some persons who were counted elsewhere, at the wrong address, as discussed in the text.

² Includes some persons who were counted only once but at the wrong address, as discussed in the text.

In an attempt to estimate the number of errors attributable to enumeration of persons in the wrong enumeration district, the sample persons in the Post-Enumeration Survey were asked to

report all addresses where they might have been enumerated. On the basis of a check against the listings for the census enumeration districts containing the reported addresses, it is estimated that about 400,000 persons were enumerated in the wrong enumeration district. This estimate is subject to some bias owing to incompleteness of address reports. Some persons were enumerated in the wrong enumeration district simply because the enumerator used the wrong boundary. The estimate of 400,000 may be subtracted from the estimates of erroneous omissions and erroneous inclusions if interest is restricted to those errors which affect the census tabulations for the United States as a whole. Actually all of the persons enumerated in the wrong enumeration district were enumerated in the correct region and most were enumerated in the correct State, so that this group of errors has practically no effect on either national or regional tabulations and an extremely small effect on State tabulations.

Sampling variability of the Post-Enumeration Survey results.—The limitations of the Post-Enumeration Survey results have been discussed above. An additional limitation is, of course, the presence of sampling variability. Estimates of standard errors are presented in table C. In the interpretation of the Post-Enumeration Survey estimates, it should be remembered that the chances are about 2 out of 3 that the figures estimated from the sample (tables A and B) differ from those that would have been obtained from a post-enumeration survey of the entire population by amounts less than the standard error indicated in this table. The chances are about 19 out of 20 that the estimates are within twice the standard error of the figures which would result from a post-enumeration survey of the entire population.

TABLE C.—STANDARD ERRORS OF COVERAGE ERROR STATISTICS FOR PERSONS: 1950

[Range of 2 chances out of 3]

Size of estimate of coverage error	Estimated standard error of specified types of coverage error		
	Number of persons erroneously omitted	Number of persons erroneously included	Net error
5,000.....	5,000	6,000	12,000
10,000.....	7,000	9,000	17,000
25,000.....	12,000	14,000	26,000
50,000.....	17,000	21,000	38,000
75,000.....	21,000	26,000	46,000
100,000.....	24,000	30,000	54,000
250,000.....	42,000	56,000	88,000
1,000,000.....	115,000	123,000	207,000
2,000,000.....	206,000	210,000	342,000
3,000,000.....	300,000	(1)	(1)

¹ Not applicable.

POPULATION TRENDS AND DISTRIBUTION

UNITED STATES

Population of the United States, Its Territories, Possessions, etc.

The population of the United States, its Territories, possessions, etc., was about 154,230,000 on April 1, 1950 (table 1). If the population of the Philippine Islands is excluded from the 1940 total, the increase over the 10-year period was nearly 20,000,000, or 14.9 percent. Puerto Rico accounted for well over three-fifths of the population outside continental United States, and the Territories for more than one-sixth. The population abroad, principally members of the armed forces and members of their families, numbered close to 500,000.

Population of Continental United States

The population of continental United States on April 1, 1950, was 150,697,361; this figure represents an increase of about 19

million, or 14.5 percent, over the corresponding figure for April 1, 1940 (table 2). In absolute numbers this increase is greater than the increase during any previous intercensal period. In relative terms, however, the increase between 1940 and 1950, although more than double that for the decade 1930 to 1940, is of roughly the same order of magnitude as the increases during the decades 1910 to 1920 and 1920 to 1930 and falls far short of the decennial rates of increase which occurred during the nineteenth century.

An examination of the decennial rates of increase since 1790 indicates that during each of the seven decades up to 1860 the population increased by approximately one-third. On the basis of a correction made for the known underenumeration in 1870, the percentage increases for the decades 1860 to 1870 and 1870 to 1880 become, respectively, 26.6 and 26.0 rather than 22.6 and 30.1. (See footnote 3 of table 2.) On the basis of these revised figures, the decennial rates of increase for the period 1860 to 1890

were all in the neighborhood of 25 percent.³ The decennial rates of increase in the period 1890 to 1910 were about 20 percent and those for the period 1910 to 1930, about 15 percent. The percentage increase for the period 1930 to 1940, the decade of the depression, represents an all time low.

Center of Population and Area

The "center of population" is defined by the Bureau of the Census as that point which may be considered as the center of population gravity of the United States; in other words, the point upon which the United States would balance, if it were a rigid plane without weight and the population were distributed thereon with each individual being assumed to have equal weight and to exert an influence on a central point proportional to his distance from that point.³

The center of population of the United States moved westward from the State of Indiana into the State of Illinois between 1940 and 1950. The 1950 center of population is located in Denver township, Richland County, Ill., 8 miles north-northwest of Olney. This point is on a line between Cincinnati and St. Louis, about two-thirds of the distance to St. Louis. In terms of latitude and longitude, the 1950 center is located at latitude 38°50'21" North, longitude 88°9'33" West.

During the decade from 1940 to 1950, the center of population moved 42 miles westward and 7.6 miles southward, reaching its most southerly point as well as its most westerly point. This westward movement of the center of population between 1940 and 1950 is the greatest during the present century and exceeds all movements westward since that for the decade of 1880 to 1890. The longest movement westward was during the decade from 1850 to 1860 when the center advanced 80.6 miles. The shortest movement westward was during the decade from 1910 to 1920 when it advanced only 9.8 miles. The point farthest north was the 1790 location, and the point farthest south, the 1950 location; but the difference is only 30.1 miles. The total westward movement from 1790 to 1940 was 644 miles.

Table D and the accompanying map give the approximate location of the center of population at each census from 1790 to 1950.

The position of the "center of area," that is, the point on which the surface of the United States would balance if it were a plane of uniform weight per unit of area, is located in Smith County, Kans. (approximate latitude 39°50' North, longitude 98°35' West).

³ For a more extensive analysis of population growth in the United States during the nineteenth century, see U. S. Bureau of the Census, *A Century of Population Growth*, U. S. Government Printing Office, Washington, D. C., 1909.

³ In the actual calculation, the center of population is first assumed to be approximately at a certain point. Through this point a parallel and a meridian are drawn, each crossing the entire country. In the determination of the center of population in 1950, the point selected was the intersection of the parallel lat. 30° N. with the meridian of long. 86° W.

The product of the population of a given area by its distance from the assumed parallel is called a north or south moment, and the product of the population of the area by its distance from the assumed meridian is called an east or west moment. In the calculation of north and south moments, the distances are measured in minutes of latitude; in calculating east and west moments, it is necessary to use miles because of the unequal length of the degrees and minutes of longitude in different latitudes. The population of the country is grouped by "square degrees"—that is, by areas included between consecutive parallels and meridians—as they are convenient units with which to work. The population of the incorporated and unincorporated places with 25,000 inhabitants or more is then deducted from that of the respective square degrees in which they lie and treated separately. The center of population of each square degree is assumed to be at its geographical center, except where such an assumption is manifestly incorrect; in these cases the position of the center of population of the square degree is estimated as nearly as possible. The population of each square degree north or south of the assumed parallel is multiplied by the distance of its center from that parallel; a similar calculation is made for the incorporated and unincorporated places with 25,000 inhabitants or more; and the sum of the north moments and the sum of the south moments are ascertained. The difference between these two sums, divided by the total population of the country, gives a correction to the latitude. In a similar manner the sums of the east and of the west moments are ascertained and from them the correction in longitude is made.

TABLE D.—CENTER OF POPULATION: 1790 TO 1950

Year	North latitude	West longitude	Approximate location
1790	38 50 21	88 9 33	8 miles north-northwest of Olney, Richland County, Ill.
1940	38 50 54	87 22 35	2 miles southeast by east of Carlisle, Haddon township, Sullivan County, Ind.
1930	39 3 45	87 8 6	3 miles northeast of Linton, Greene County, Ind.
1920	39 10 21	86 43 15	8 miles south-southeast of Spencer, Owen County, Ind.
1910	39 10 12	86 32 20	In the city of Bloomington, Ind.
1900	39 9 36	85 48 54	6 miles southeast of Columbus, Ind.
1890	39 11 56	85 32 53	20 miles east of Columbus, Ind.
1880	39 4 8	84 39 40	8 miles west by south of Cincinnati, Ohio (in Kentucky).
1870	39 12 0	83 35 42	48 miles east by north of Cincinnati, Ohio.
1860	39 0 24	82 48 48	20 miles south by east of Chillicothe, Ohio.
1850	38 59 0	81 10 0	23 miles southeast of Parkersburg, W. Va. ¹
1840	39 2 0	80 18 0	16 miles south of Clarksburg, W. Va. ¹
1830	38 57 54	79 16 54	19 miles west-southwest of Moorefield, W. Va. ¹
1820	39 5 42	78 33 0	10 miles east of Moorefield, W. Va. ¹
1810	39 11 30	77 37 12	40 miles northwest by west of Washington, D. C. (in Virginia).
1800	39 16 6	76 56 30	18 miles west of Baltimore, Md.
1790	39 16 30	76 11 12	23 miles east of Baltimore, Md.

¹ West Virginia was set off from Virginia Dec. 31, 1862, and admitted as State June 10, 1863.

Area and Density

The gross area, land and water, of the territory under the jurisdiction of the United States at the time of the 1950 Census was 3,628,130 square miles (table 1). The Territories, possessions, etc., had an area of 605,743 square miles and constituted 16.7 percent, or one-sixth, of the aggregate area.

The area in 1790 was 892,135 square miles, or somewhat less than one-fourth of the present area, and embraced substantially all the territory between Canada and Florida and between the Atlantic Ocean and the Mississippi River, together with part of the drainage basin of the Red River of the North. This original territory and the successive major accessions of territory from 1790 to 1920 are shown on the map which appears on page 5. In 1803 the area of the country was nearly doubled by the Louisiana Purchase; and, between 1840 and 1850, three large accessions of territory resulted in further increases aggregating 1,204,896 square miles, equivalent to two-thirds of the former area.

For continental United States, the population per square mile of land area in 1950 was 50.7 (table 2). Beginning with the Census of 1790 in which the population per square mile was 4.5, the figures at each subsequent census have shown an increase in density with the exception of those for the Censuses of 1810 and 1850. In each of these years, the density was lower than it had been in the immediately preceding census because of large accessions of sparsely populated territory in the preceding decade.

Urban and Rural Areas

According to the new definition that was adopted for use in the 1950 Census, the urban population comprises all persons living in (a) places of 2,500 inhabitants or more incorporated as cities, boroughs, and villages, (b) incorporated towns of 2,500 inhabitants or more except in New England, New York, and Wisconsin, where "towns" are simply minor civil divisions of counties, (c) the densely settled urban fringe, including both incorporated and unincorporated areas, around cities of 50,000 or more, and (d) unincorporated places of 2,500 inhabitants or more outside any urban fringe. The remaining population is classified as rural. According to the old definition, the urban population was limited to all persons living in incorporated places of 2,500 inhabitants or more and in areas (usually minor civil divisions)

UNITED STATES SUMMARY

Figure 4.—CENTER OF POPULATION: 1950 AND 1940

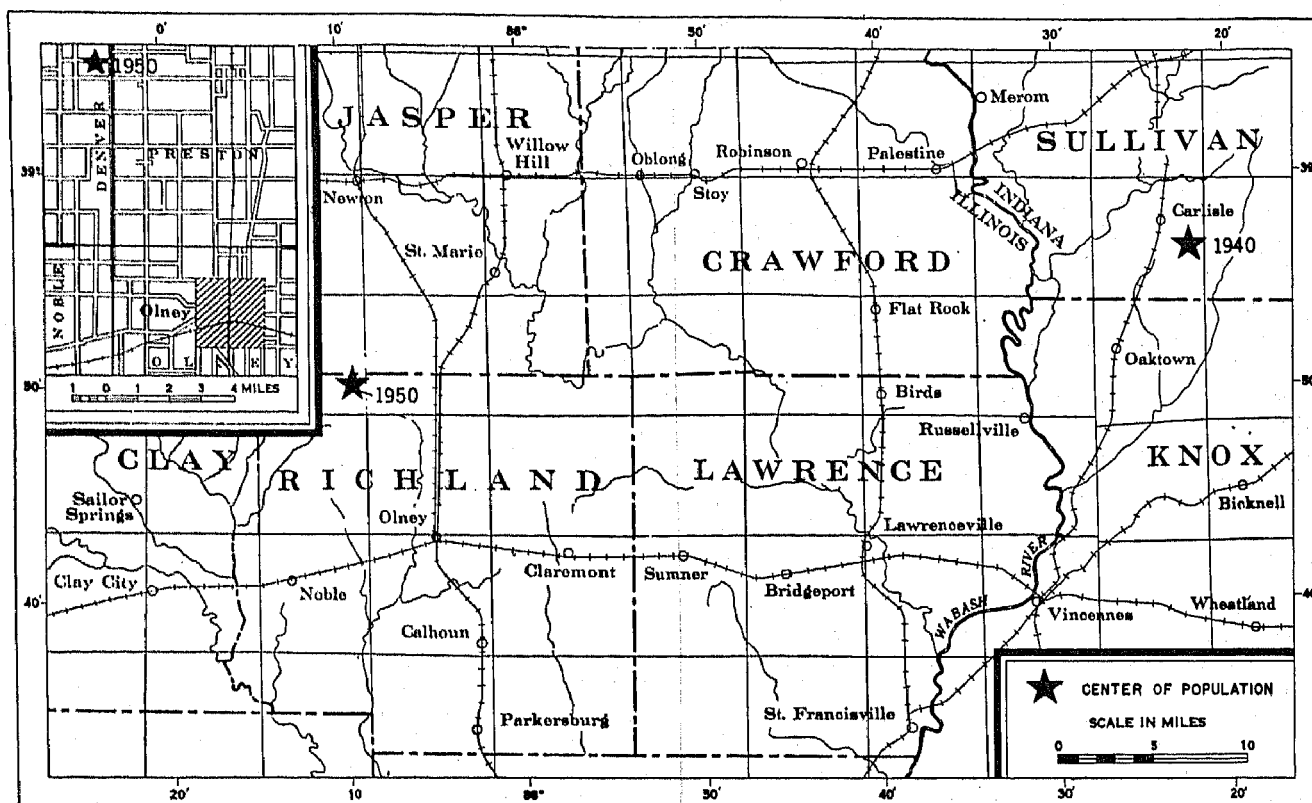
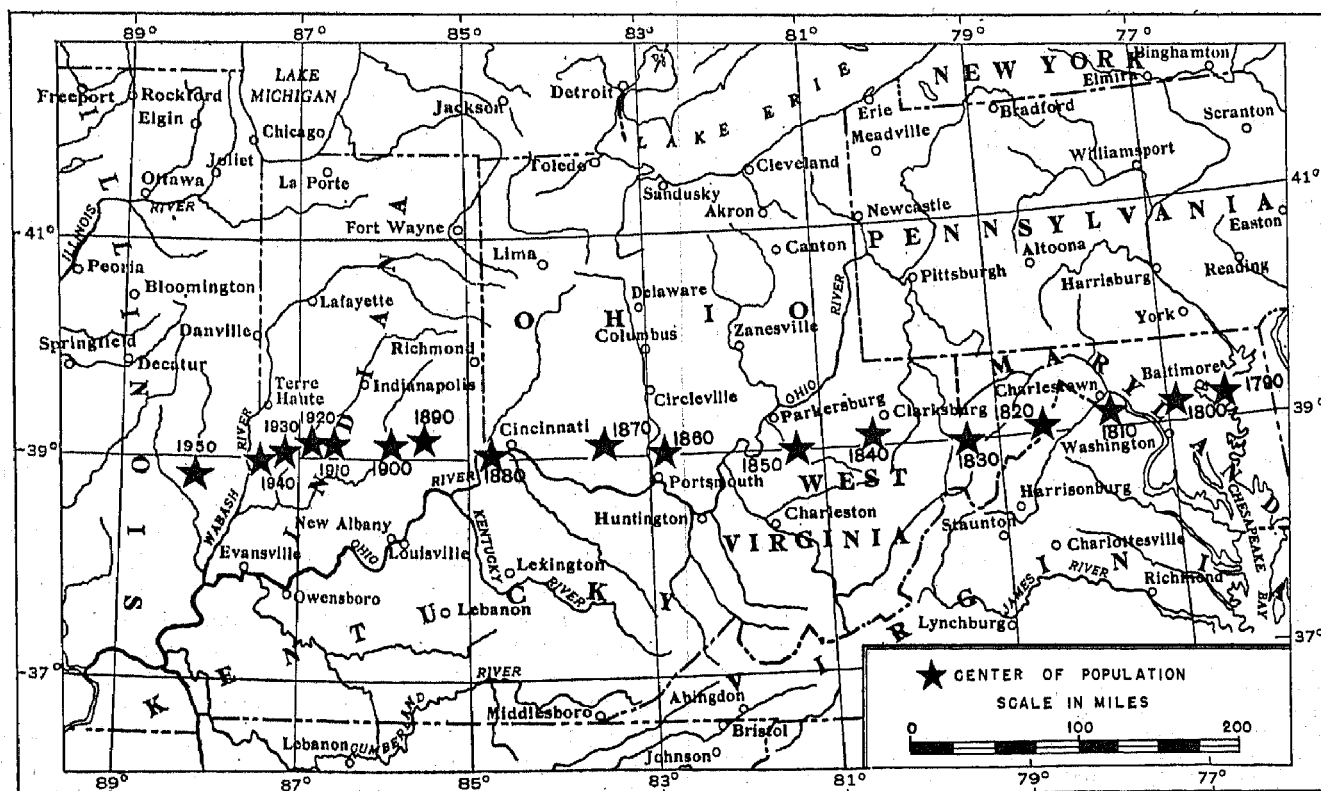


Figure 5.—CENTER OF POPULATION: 1790 TO 1950



classified as urban under special rules relating to population size and density.⁴

In both definitions, the most important component of the urban territory is the group of incorporated places having 2,500 inhabitants or more. A definition of urban territory restricted to such places would exclude a number of equally large and densely settled places, merely because they were not incorporated places. Under the old definition, an effort was made to avoid some of the more obvious omissions by the inclusion of the places classified as urban under special rules. Even with these rules, however, many large and closely built-up places were excluded from the urban territory. To improve the situation in the 1950 Census, the Bureau of the Census set up, in advance of enumeration, boundaries for urban-fringe areas around cities of 50,000 or more and for unincorporated places outside urban fringes. All the population residing in urban-fringe areas and in unincorporated places of 2,500 or more is classified as urban according to the 1950 definition. (Of course, the incorporated places of 2,500 or more in these fringes are urban in their own right.) Consequently, the special rules of the old definition are no longer necessary. For the convenience of those who are interested in the trend of the urban and rural population, the 1950 population is shown in accordance with the old definition as well as in accordance with the 1950 definition. Although the Bureau of the Census has employed other definitions in the course of its history, the statistics on the population by urban and rural residence shown for years prior to 1940 are consistent for the most part with the 1940 definition.

The count of urban places according to the new urban definition includes all incorporated places of 2,500 or more regardless of location and unincorporated places of 2,500 or more. Incorporated places of fewer than 2,500 inhabitants which lie in the urban fringe are not recognized as urban places even though their population is counted as urban. Under the old definition, all incorporated places of 2,500 inhabitants or more and all areas classified as urban under special rules were recognized as urban places. Thus, although the urban population under the old definition was exactly the population living in urban places, the urban population under the new definition includes persons living in territory outside urban places, that is, in incorporated places under 2,500 and unincorporated territory included in the urban-fringe areas.

The rural population is by no means identical with the farm population, that is, the population living on farms. (The rural-nonfarm population of the United States exceeds the rural-farm population.) Practically all of the farm population, however, is rural. Statistics on the farm population are presented in Chapter B of this volume.

There were no urbanized areas delineated in the Territories or possessions. The urban population in Alaska, Hawaii, and Puerto Rico comprises all persons living in places of 2,500 inhabitants or more.

Urban and Rural Population Under New and Old Definitions

Under the new urban-rural definition, 96,467,686 persons, or 64.0 percent of the population of the United States, were classified as urban. The remaining 54,229,675 persons constituted the

rural population. The urban population according to the old definition was 88,927,464, and the rural population was 61,769,897.

The 1950 urban population according to the new urban definition consisted of the following: (a) The 86,550,941 inhabitants of the 3,883 incorporated places of 2,500 inhabitants or more; (b) the 1,994,727 inhabitants of the 401 unincorporated places of 2,500 inhabitants or more; and (c) the 7,922,018 persons living in the urban-fringe areas but outside the incorporated places of 2,500 or more. Under the old definition, the urban population consisted of the 86,550,941 inhabitants of the 3,883 incorporated places of 2,500 inhabitants or more and the 2,376,523 persons living in 140 of the areas classified as urban under special rules in 1940. (There were 141 such areas in 1940. One of the areas, Claremont town, Sullivan County, N. H., was incorporated as a city in 1948; and, consequently, was classified as urban because it was an incorporated place of 2,500 or more.)

Table E presents a cross-classification of the population by urban and rural residence under the new and old urban-rural definitions. As shown in this table, 88,589,867 persons were living in territory classified as urban under both definitions and 53,892,078 were living in territory classified as rural under both definitions. Of the population classified as urban under both definitions, 86,550,941 were residents of incorporated places of 2,500 inhabitants or more. The remaining 2,038,926 of these persons were classified as urban under the old definition because of residence in areas urban under special rules; under the new definition 1,718,422 were classified as urban because of residence in unincorporated territory included in urban-fringe areas and 320,504 because of residence in unincorporated places of 2,500 inhabitants or more. An additional 7,877,819 persons were classified as urban under the new definition, 6,203,596 because of residence in urban-fringe areas (577,992 of whom were living in incorporated places under 2,500 inhabitants and 5,625,604 in unincorporated territory) and 1,674,223 because of residence in unincorporated places of 2,500 or more; these persons were included in the rural population under the old definition. On the other hand, 337,597 persons living in the areas urban under special rules according to the old definition were included in the rural population according to the new definition.

To summarize, the urban population under the new definition included 6,203,596 persons living in urban-fringe areas and 1,674,223 persons living in unincorporated places of 2,500 inhabitants or more who would have been included in the rural population under the old definition. On the other hand, 337,597 persons living in areas urban under special rules according to the old definition were classified as rural according to the new definition. The net increase in the urban population which resulted from the change in definition, therefore, is 7,540,222, or 5.0 percent of the total population of the United States. In terms of the population classified by urban and rural residence in accordance with the old definition, the change in definition resulted in an increase of 8.5 percent in the urban population and a decrease of 12.2 percent in the rural population (table 14).

The population of the incorporated places of 2,500 inhabitants or more constituted 89.7 percent of the urban population under the new definition and 97.3 percent of the urban population under the old definition. The population living in other territory in the urban-fringe areas accounted for 8.2 percent of the urban population under the new definition, and the population in unincorporated places of 2,500 inhabitants or more accounted for the remaining 2.1 percent.

Table 3 presents the 1950 and 1940 population of the 140 areas urban under special rules in 1940 (omitting Claremont) and the classification of their 1950 population by urban and rural residence in accordance with the new definition. Of the 140 areas, only 4 had all of their population classified as rural under the new definition, whereas 21 had all of their population classified as urban under the new definition. The 337,597 persons living in these areas who were included in the rural population

⁴ The areas urban under special rules in 1940 were of 3 types. The first type was limited to the States of New Hampshire, Massachusetts, and Rhode Island, in which States it is not the practice to incorporate as municipalities places with fewer than 10,000 inhabitants. This type was made up of towns (townships) in which there was a village or thickly settled area having 2,500 inhabitants or more, and which comprised, either by itself or when combined with other villages in the same town, more than 50 percent of the total population of the town. The second type of areas urban under special rule was made up of townships and other political subdivisions (not incorporated as municipalities nor containing any areas so incorporated) with a total of 10,000 or more and a population density of 1,000 or more per square mile. The third type of area urban under special rule consisted of 7 places—1 in Vermont and 6 in Maine—which had been classified as urban places in 1930 but about whose status as incorporated places some question was raised in 1940.

according to the new definition amounted to about one-seventh of the total population of the areas.

TABLE E.—POPULATION, URBAN AND RURAL, ACCORDING TO NEW AND OLD URBAN-RURAL DEFINITIONS: 1950

[For description of new and old urban-rural definitions, see text]

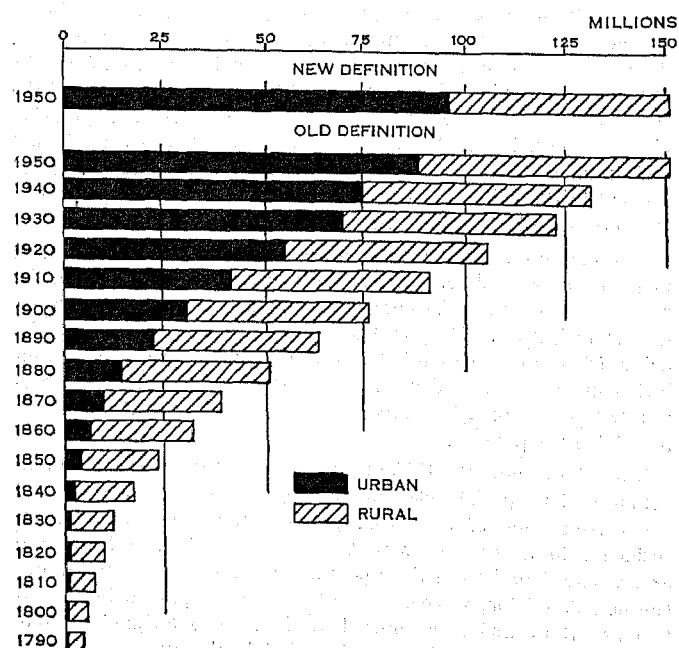
Type of area and class of place in accordance with new urban definition	Total	Type of area and class of place in accordance with old urban definition			
		Urban			Rural
		Total	Incorporated urban places	Areas urban under special rules	
Total.....	150,697,361	88,927,464	86,550,941	2,376,523	61,769,897
Urban, total.....	96,467,686	88,589,867	86,550,941	2,038,926	7,877,819
Within urbanized areas.....	69,249,148	63,045,552	61,327,130	1,718,422	6,203,596
Incorporated places of 2,500 or more.....	61,327,130	61,327,130	61,327,130	-----	-----
Incorporated places under 2,500.....	577,902	-----	-----	-----	577,902
Unincorporated territory.....	7,344,026	1,718,422	-----	1,718,422	5,625,604
Outside urbanized areas.....	27,218,538	25,544,315	25,223,811	320,504	1,674,223
Incorporated places of 2,500 or more.....	25,223,811	25,223,811	25,223,811	-----	-----
Unincorporated places of 2,500 or more.....	1,994,727	320,504	-----	320,504	1,674,223
Rural, total.....	54,229,675	337,597	-----	337,597	53,892,078

Trends in Urban and Rural Population, 1790 to 1950

Trends in the urban and rural population can be examined only on the basis of the old definition. On this basis, the urban population increased from 74,423,702 in 1940 to 88,927,464 in 1950, and the rural population from 57,245,573 in 1940 to 61,769,897 (table 15).

The gains of 14,503,762 in the urban, and 4,524,324 in the rural, population represented increases of 19.5 and 7.9 percent, respectively. The numerical gain in the urban population was second only to the increase of 14,796,850 recorded in the decade 1920 to 1930 and marked the seventh consecutive decade in which the numerical increase in the urban population exceeded that in the

FIGURE 6.—URBAN AND RURAL POPULATION OF THE UNITED STATES: 1790 TO 1950



rural population. The numerical increase in the rural population was the largest since the gain of 4,993,205 for the decade 1890 to 1900.

In 1790, 1 out of every 20 of the 3,929,214 inhabitants of the United States was living in urban territory (table 15). In every decade thereafter, with the exception of that from 1810 to 1820, the rate of growth of the urban population exceeded that of the rural population. By 1860, one out of five persons was included in the urban population. The process of urbanization continued in the following decades, and by 1920 the urban population exceeded the rural population. In 1950 about three out of every five persons were living in urban territory.

Places Classified According to Size

There were 5 places of 1,000,000 or more in 1950; 101 places of 100,000 to 1,000,000; 378 places of 25,000 to 100,000; 3,800 places of 2,500 to 25,000; and 4,437 places of 1,000 to 2,500 (tables 5a, 5b, and K). On the other hand, the places of 1,000,000 or more contained 11.5 percent of the total population; those of 100,000 to 1,000,000, 17.9 percent; those of 25,000 to 100,000, 11.8 percent; those of 2,500 to 25,000, 17.6 percent; those of 1,000 to 2,500, 4.6 percent; and the remaining 36.6 percent lived in smaller places, the unincorporated parts of urban fringes, and the open country. If we regarded each urbanized area as only one "place," the distribution would be somewhat different. For example, "places" of 1,000,000 or more would then contain 25.1 percent of the population and areas outside places of 1,000 or more would account for only 31.7 percent (table 5a).

Again, historical comparisons of groups of places according to size can be made only in terms of the old urban definition (table 5b). Population changes in the size-groups of largest places may be very great because the inclusion or exclusion of a single metropolis has a very marked effect. New York City first achieved a population of a million at the Census of 1880. At that time it included 2.4 percent of the national population total. By 1950, the five places of this size-class included 11.5 percent of the total. The number of places in all but two size-groups has tended to increase steadily up through the latest census. The number of places of 250,000 to 500,000 has been about the same since 1930, but here there are too few cases for the determination of the recent trend. The number of incorporated places of less than 1,000 has declined slightly since 1930. In terms of population, all size groups have a remarkably consistent history of growth, except, again, for the very smallest incorporated places. In terms of percentage of the total population accounted for, the picture is less consistent. In general, the larger size-classes have gained relative to the smaller ones, but there are several recent exceptions. The peak proportion of the United States total was reached in 1930 for both cities of 1,000,000 or more and cities of 250,000 to 500,000. Places of 5,000 to 10,000 represent the smallest class that has been increasing its share. Areas outside places of 1,000 or more, which included 60.9 percent of the population in 1890, included only 37.4 percent in 1950.

APPORTIONMENT

Apportionment Population

The primary reason for the establishment of the decennial census of population, as set forth in the Constitution, was to provide a basis for the apportionment of members of the House of Representatives among the several States. Such an apportionment has been made on the basis of every census from 1790 to 1950, except that of 1920. Prior to 1870, the population basis for apportionment was the total free population of the States, omitting Indians not taxed, plus three-fifths of the number of slaves. After the apportionment of 1860 the fractional count of the number of slaves, of course, disappeared from the procedure; and in 1940 it was determined that there were no longer any Indians who should be classed as "not taxed" under the terms of the apportionment laws. The 1940 and 1950 apportionments,

therefore, were made on the basis of the entire population of the 48 States. All apportionments are made under the constitutional provision that each State should have at least one Representative, no matter how small its population.

The population base for apportionment and other significant items are shown in table F. The results of each apportionment, starting with the initial apportionment in 1789 and including those based on each census from 1790 to 1950, are shown by regions, divisions, and States in table 10.

TABLE F.—POPULATION BASE FOR APPORTIONMENT AND THE NUMBER OF REPRESENTATIVES APPORTIONED: 1790 TO 1950

Census year	Population base ¹	Number of Representatives ²	Ratio of apportionment population to Representatives	Date of apportionment act
1950.....	149,895,183	435	344,587	Nov. 15, 1941.
1940.....	131,000,184	435	301,164	Nov. 15, 1941.
1930.....	122,093,455	435	280,675	June 18, 1929.
1920.....	(3)	435	(3)	(2)
1910.....	91,003,772	435	210,583	Aug. 8, 1911.
1900.....	74,562,608	386	193,167	Jan. 16, 1901.
1890.....	61,008,006	356	173,901	Feb. 7, 1891.
1880.....	49,371,340	325	151,912	Feb. 25, 1882.
1870.....	38,115,641	292	130,533	Feb. 2, 1872. ⁴
1860.....	29,550,088	241	122,614	May 28, 1850. ⁵
1850.....	21,766,091	234	93,020	May 23, 1850. ⁶
1840.....	15,008,370	223	71,338	June 25, 1842.
1830.....	11,030,987	240	46,712	May 22, 1832.
1820.....	8,072,300	213	42,124	Mar. 7, 1822.
1810.....	6,584,231	181	36,377	Dec. 21, 1811.
1800.....	4,879,820	141	34,600	Jan. 14, 1802.
1790.....	3,615,823	105	34,430	Apr. 14, 1792.
		65	30,000	Constitution, 1789.

¹ Excludes the population of the District of Columbia, the population of the Territories, the number of Indians not taxed, and (prior to 1870) two-fifths of the slave population.

² This number is the actual number apportioned at the beginning of the decade.

³ No apportionment was made after the Census of 1920.

⁴ Amended by act of May 30, 1872.

⁵ Amended by act of Mar. 4, 1892.

⁶ Amended by act of July 30, 1852.

⁷ The minimum ratio of population to Representatives stated in the Constitution (art. 1, sec. 2).

The first attempt to make provision for automatic reapportionment was included in the act for the taking of the Seventh and subsequent censuses (approved May 28, 1850). By specifying the number of Representatives to be assigned and the method to be used, it was hoped to eliminate the need for a new act of Congress every decade and assure an equitable distribution of Representatives. When this Census Act was superseded in 1879, the automatic feature was discontinued, and the method of computing the apportionment was determined by Congress on each occasion up to 1910.

No apportionment was made after the Census of 1920, the apportionment of 1910 remaining in effect. In 1929, when the act for the taking of the Fifteenth and subsequent censuses was under consideration, it seemed desirable to incorporate some provision which might prevent the repetition of the 1920 experience. A section was, therefore, included in the act which provided, for the 1930 and subsequent censuses, that unless Congress within a specified time enacted legislation providing for apportionment on a different basis, the apportionment should be made automatically by the method last used. In accordance with this act, a report was submitted by the President to Congress on December 4, 1930, showing the apportionment computations both by the method of major fractions (which was the one used in 1910) and by the method of equal proportions. In 1931, in the absence of additional legislation, the automatically effective apportionment followed the method of major fractions.

The Censuses of 1940 and 1950 were taken under the same law as the Census of 1930, but in 1941 this law was amended to the effect that apportionments based on the 1940 and subsequent censuses should be made by the method of equal proportions. In the application of this method, the Representatives are so assigned

that the average population per Representative has the least possible relative variation between one State and any other.

Changes in Number of Representatives, 1940 to 1950

As a result of the apportionment based on the 1950 Census, seven States gained Representatives and nine States lost Representatives. The largest gain was made by California, which gained seven Representatives: Florida gained two; and Maryland, Michigan, Texas, Virginia, and Washington each gained one. The nine States losing Representatives were: Pennsylvania, three; Missouri, New York, and Oklahoma, two each; and Arkansas, Illinois, Kentucky, Mississippi, and Tennessee, one each.

REGIONS, DIVISIONS, AND STATES

Trends in Population, 1940 to 1950

For purposes of providing summary figures at levels intermediate between those for the United States and those for an individual State, regions and geographic divisions have been used in recent censuses. The latter type of area represents a grouping of contiguous States, and regions in turn are composed of groups of divisions. The component States of each division are indicated on the map which appears on p. xi.

As in earlier periods, the West led the four regions of the United States in rate of population growth during the last 10 years. Between 1940 and 1950 the West had a 40.9 percent increase in population, whereas no other region increased by more than 13.3 percent (table 7). Throughout the last 100 years, census returns consistently have pointed to the West as the region outstripping all others in rate of population gain. Now, for the first time, the numerical intercensal increase in the population of the West, 5,678,260, has also exceeded the numerical increase in any other region. Most of the increase in the West, 4,753,265, took place in the Pacific Division. In the Mountain Division the increase was only 924,995, or somewhat less than one-sixth of the gain for the region. The Pacific and Mountain Divisions surpassed all other divisions with respect to rate of population increase in the last 10 years, the former having an increase of 48.8 percent, and the latter an increase of 22.3 percent.

Second among the regions with respect to both amount and rate of population increase was the South, which had a gain of 5,531,187, or 13.3 percent. Much of this gain took place in the South Atlantic Division, which increased by 3,359,184, or 18.8 percent, and in the West South Central Division, which gained 1,473,047, or 11.3 percent. In the East South Central Division there was only a relatively small increase, 698,956, or 6.5 percent. The South had a number of States with population losses; three of the four States which had population losses were in this region.

The remaining two regions, the North Central and Northeast, had moderate rates of increase. The population of the North Central Region increased by 4,317,430, or 10.8 percent, and the Northeast by 3,501,209, or 9.7 percent. In the North Central Region the large increase occurred in the East North Central Division, which gained 3,773,026, or 14.2 percent. The West North Central Division increased, but by only 544,404, or 4.0 percent. In the Northeast the bulk of the population increase took place in the already heavily populated Middle Atlantic Division, which gained 2,624,046, or 9.5 percent.

The population counts from the 1950 Census show New York to be the most populous, and Nevada to be the least populous, State, just as has been the case since 1890. In between these extremes, however, there has been a considerable rearrangement of the rank of the States with respect to total population (table 11). Thirteen States and the District of Columbia now rank higher than in 1940, whereas 22 other States have dropped in rank during the last 10 years. California had the most conspicuous change in rank, progressing from fifth place in 1940 to second place in 1950. Florida and Washington each moved seven positions upward in rank, Arizona six positions upward, and Mary-

land and Virginia each four positions upward. On the other hand, Arkansas had a sharp drop in rank with respect to total population, falling from twenty-fourth to thirtieth place, and West Virginia dropped from twenty-fifth to twenty-ninth place.

California surpassed all other States with respect to both amount and rate of population increase (table 12). Between 1940 and 1950, California had a population increase of 3,678,836 or 53.3 percent; Oregon and Washington had increases of 39.6 percent and 37.0 percent, respectively. Arizona, Nevada, New Mexico, and Utah formed a second area of rapid population increase, with recorded gains ranging from 25.2 percent for Utah to 50.1 percent for Arizona. A third center of heavy population increase is located in and near the seat of the United States Government. The District of Columbia, Maryland, and Virginia each had increases of more than 20 percent. Florida, Michigan, and Texas, with rates of increase of 46.1, 21.2, and 20.2 percent, respectively, were the only other States which had population increases of one-fifth or more. The rate of increase in the population of Florida was in marked contrast to the rates in the neighboring States of Georgia and Alabama, which had increases of 10.3 and 8.1 percent, respectively.

Only four States, Arkansas, Mississippi, North Dakota, and Oklahoma, had population losses. Three of these States were in the South and one in the North Central Region; all four States were predominantly rural.

Area and Density

Among the regions, the West contained approximately 40 percent of the total land area of the country and 13.0 of the total population in 1950, whereas the Northeast with about 5 percent of the land area contained approximately 26 percent of the population. The South accounted for about 30 percent of the land area of the country and also about 30 percent of the population. The corresponding figures for the North Central States were 25 and 30 percent, respectively. In 1950 there were 241.2 persons per square mile in the Northeast; 58.8 in the North Central States; 53.7 in the South; and 16.6 in the West (table 9).

The Middle Atlantic Division led the other divisions with a density of 300.1 persons per square mile of land area, followed by New England with a density of 147.5 and the East North Central Division with a density of 124.1. The figures on density for the remaining divisions were all less than 100; and the figure for the Mountain Division, 5.9, was the lowest among all divisions.

The District of Columbia, which is also the city of Washington, had a density of 13,150.5 persons per square mile in 1950. Among the States, there were three—Rhode Island, New Jersey, and Massachusetts—with population densities ranging from 596.2 to 748.5. For Connecticut, New York, Maryland, and Pennsylvania, densities ranged from 233.1 to 409.7; and densities of from 108.7 to 193.8 occurred in the following States: Ohio, Delaware, Illinois, Michigan, and Indiana. The population per square mile was less than 10.0 in North and South Dakota and in each of the Mountain States except Colorado.

Shifts in the ranking of States with respect to density in the period between 1900 and 1950 have not, in general, been very marked. The District of Columbia, Rhode Island, New Jersey, Massachusetts, and Connecticut have occupied one or another of the first five places at each of the six decennial censuses in the 50-year period under consideration. Likewise, during the same period Arizona, New Mexico, Montana, Wyoming, and Nevada occupied the last five places. There were, however, some exceptions. Between 1900 and 1950 California rose from thirty-seventh to twentieth place, and Florida, from thirty-sixth to twenty-seventh place. On the other hand, Missouri dropped from seventeenth to twenty-sixth place.

Among the larger Territories and possessions, Alaska with only 0.2 persons per square mile in 1950 was less densely settled than Nevada (1.5), the lowest ranking State. Hawaii was about

as densely settled as Tennessee; and Puerto Rico, although predominantly rural, was as densely settled as New Jersey.

Urban and Rural Population Under New Definition

The Northeast, with an urban population amounting to nearly 80 percent of the total population of the region, led all other regions in the percentage of the population classified as urban under the new definition (table 15). The percentages of the total population classified as urban in the West and in the North Central Regions were about 69.8 and 64.1, respectively; and slightly less than one-half (48.6 percent) of the population of the South was urban. In the Middle Atlantic, New England, and Pacific Divisions, the urban population comprised 75 percent or more of the total population, whereas in the South Atlantic and East South Central Divisions the corresponding percentages were 49.1 and 39.1, respectively. In the remaining divisions, the percentage urban ranged from 52.0 in the West North Central Division to 69.7 in the East North Central Division.

There were four States—New Jersey, New York, Massachusetts, and Rhode Island—among which the percentage of the population classified as urban varied from 84.3 to 86.6 (table G). This group of States was followed by three States—California, Connecticut, and Illinois—in which this percentage varied from 77.6 to 80.7. At the lower end of the distribution, the percentage urban for North Dakota was 26.6 and for Mississippi, 27.9. For an additional group of States—Arkansas, South Dakota, North Carolina, West Virginia, Vermont, South Carolina, and Kentucky—this percentage varied from 33.0 to 36.8. The range in the remaining 32 States was from 42.9 percent for Idaho to 70.7 percent in Michigan. The District of Columbia is completely urban.

Effects of Change in Urban Definition

The net number of persons shifted to the urban population by the change in the urban-rural definition amounted to 5.0 percent of the total population of the United States (table 14). Among the regions, it ranged from 10.6 percent in the West to 3.4 in the North Central Region. For both the Northeast and the South, this percentage was 4.6—slightly less than the national figure.

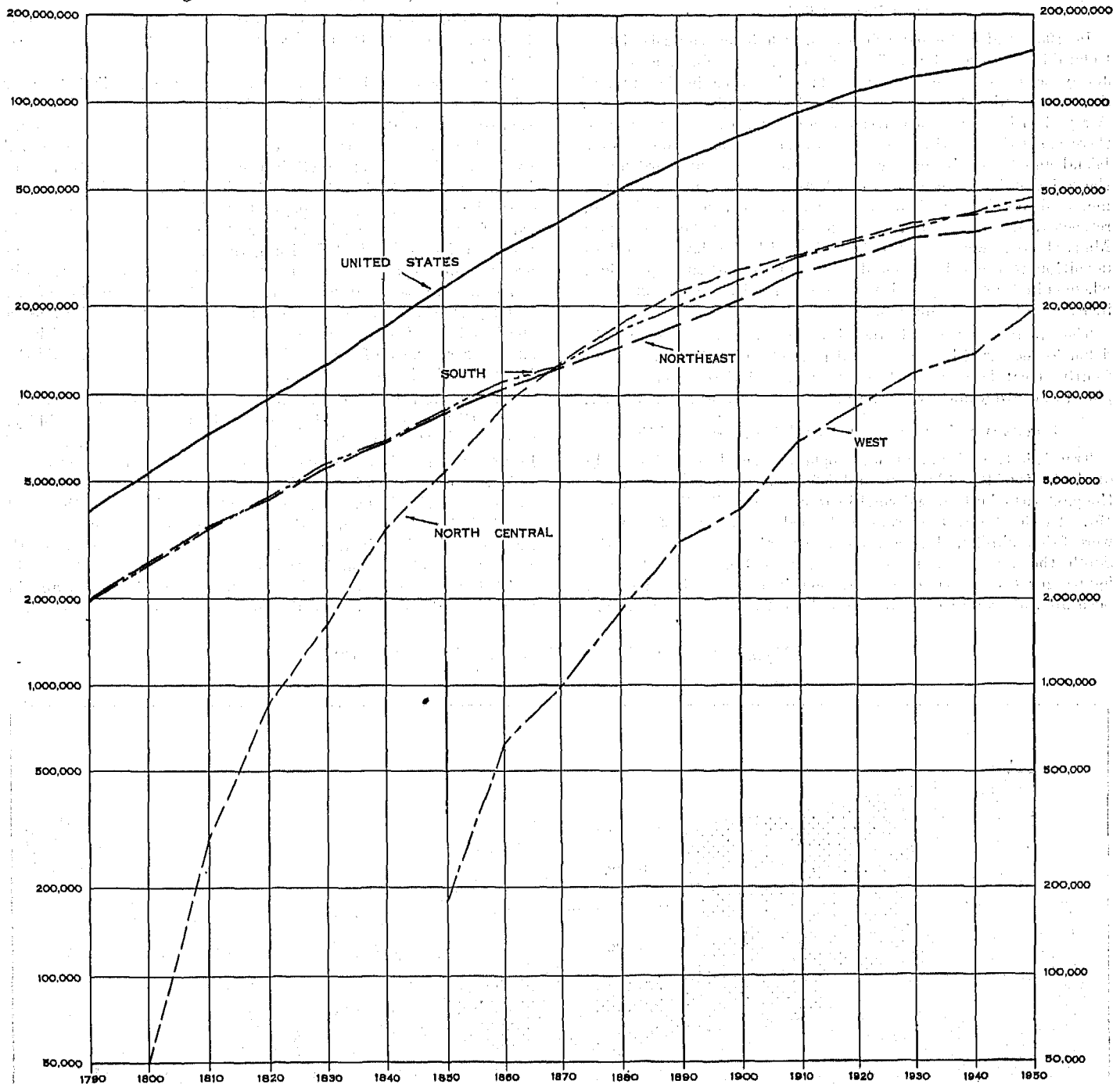
Among the divisions, the net transfer of population from rural to urban effected by the change in the urban-rural definition was least in New England, where it amounted to 1.9 percent of the total population. This low figure reflects the fact that, although the change in definition in this division had the effect of including in the urban classification territory which was rural under the old definition, considerable portions of the towns which had been urban under special rules according to the old definition were shifted into the rural category. As a result, the net gain by reclassification in urban population was small. The greatest net effect of the change in urban definition occurred in the Pacific Division in which 12.1 percent of the total population was transferred from rural to urban.

In three States—North Dakota, Vermont, and Wyoming—the change in the urban-rural definition had no effect on the distribution of the population by urban and rural residence.

Massachusetts and Rhode Island stand in marked contrast to the other States in which the urban and rural distribution of the population was affected by the change in definition. In these States the net effect of this change was to transfer 3.5 percent and 4.2 percent of the total population, respectively, from the urban to the rural classification. Among all the remaining States, however, the change in urban definition resulted in net shifts of population in the opposite direction, that is, from the rural to the urban category. These shifts ranged from 19.0 percent of the total population of Arizona to 0.1 percent of South Dakota.

A comparison of those States in which 10 percent or more of the total population was transferred to the urban category by the change in definition—Arizona, Delaware, Maryland, California, Connecticut, and Maine—with those States in which the corre-

Figure 7.—POPULATION OF THE UNITED STATES AND REGIONS: 1790 TO 1950



sponding figure was less than 1 percent or in which there was no change—Montana, Iowa, Minnesota, Arkansas, Mississippi, South Dakota, North Dakota, Wyoming, and Vermont—suggests that, in general, the effects of the change were large in those States in which population growth had been relatively great between 1940 and 1950 and in which the percent urban under the old definition was relatively high. Since the change in definition involved the shift of thickly settled areas from the rural to the urban classification, these relationships are to be expected. A relatively high concentration of urban population increases the potential size of the "suburban" population which may be converted to urban under the new definition; and, in a period, such as the decade 1940 to 1950, when population growth is concentrated in suburban areas, this potentiality is realized in those States with large increases in population.

The situation is complicated, of course, by variations in State practices with respect to incorporation and annexation. If these two processes have followed closely on the heels of concentrated settlement, then little difference between the urban and rural distribution of the population of a State under the old and new definitions is to be expected. If, however, the development of new areas of concentrated settlement is not recognized by annexation or incorporation, the difference created by the change in definition will be large. A further complication arises in connection with the minor civil divisions which were urban under special rules according to the old definition. The use of whole minor civil divisions as units required the inclusion of their sparsely settled areas. Under the greater refinement of the new definition, these sparsely settled areas reverted to rural territory with the result that in Rhode Island and Massachusetts the change in definition resulted in a net increase in population classified as rural.

Rank of States Under New and Old Urban-Rural Definitions

In 1950 under the old urban-rural definition, the District of Columbia, Rhode Island, Massachusetts, New York, and New Jersey occupied, in that order, the first five ranks in the array of States according to percentage of urban population (table G). Arrayed in the order of percent urban under the new definition, these same States still occupied the first five places, but Rhode Island and Massachusetts, which ranked second and third under the old definition, dropped to fifth and fourth place under the new, and New York and New Jersey rose to third and second place, respectively. This shift reflects the fact that Rhode Island and Massachusetts were the only States in which the change in urban definition resulted in a net decrease in the urban population, whereas in New Jersey and New York it resulted in the usual net increase in urban population.

The greatest increases in rank brought about by the change in definition occurred in Arizona, which rose from fortieth to twenty-fourth place; Delaware, which rose from thirtieth to eighteenth place; and Maryland, which rose from twentieth to twelfth place.

Trends in Urban and Rural Population, 1940 to 1950

Trends in the urban and rural population can be examined only on the basis of the old urban-rural definition. Among the regions, the patterns of urban and rural increase were quite diverse (table 15). In the West, the urban and rural percentages of increase were fairly similar, 42.5 and 38.6, respectively; whereas in the South the corresponding percentages were 35.9 and 0.2. The figures for the North Central Region indicate an intermediate position with a rate of increase for the urban population of 15.2

percent and a rate of increase for the rural population of 4.5 percent. In the Northeast, however, the rural rate of increase, 17.9 percent, was more than twice as large as the urban rate, 7.2 percent.

The geographic divisions fall into several fairly distinct types with respect to patterns of change in the urban and rural population during the decade. The West North Central, East South Central, and West South Central Divisions were characterized by substantial rates of growth in urban areas and by actual losses in rural areas. In the South Atlantic and Mountain Divisions, both the urban and rural populations increased but the urban rate of growth was considerably greater than the rural rate. In the East North Central Division, the urban and rural rates of growth were of about the same magnitude and not appreciably different from the rate of growth of the total population of the country as a whole. The figures for the component divisions of the Northeast (the New England and Middle Atlantic Divisions) showed rural rates of increase in excess of urban rates, as did the figures for the Pacific Division.

The rates of urban and rural increase among the States (exclusive of the District of Columbia) show a similar type of variability. There were 17 States in which there were substantial rates of increase in the urban population but decreases in the rural population. This group of States includes the four States—Arkansas, Mississippi, North Dakota, and Oklahoma—in which the total population decreased during the decade; and, even in these States, the rates of urban increase ranged from 24.9 percent in North Dakota to 42.9 percent in Arkansas. There were 18 States in which both the urban and the rural population increased and in which the urban rate of growth exceeded the rural rate of growth.

Figure 8.—PERCENT URBAN BY STATES: 1950

[Based on classification in accordance with new urban-rural definition]

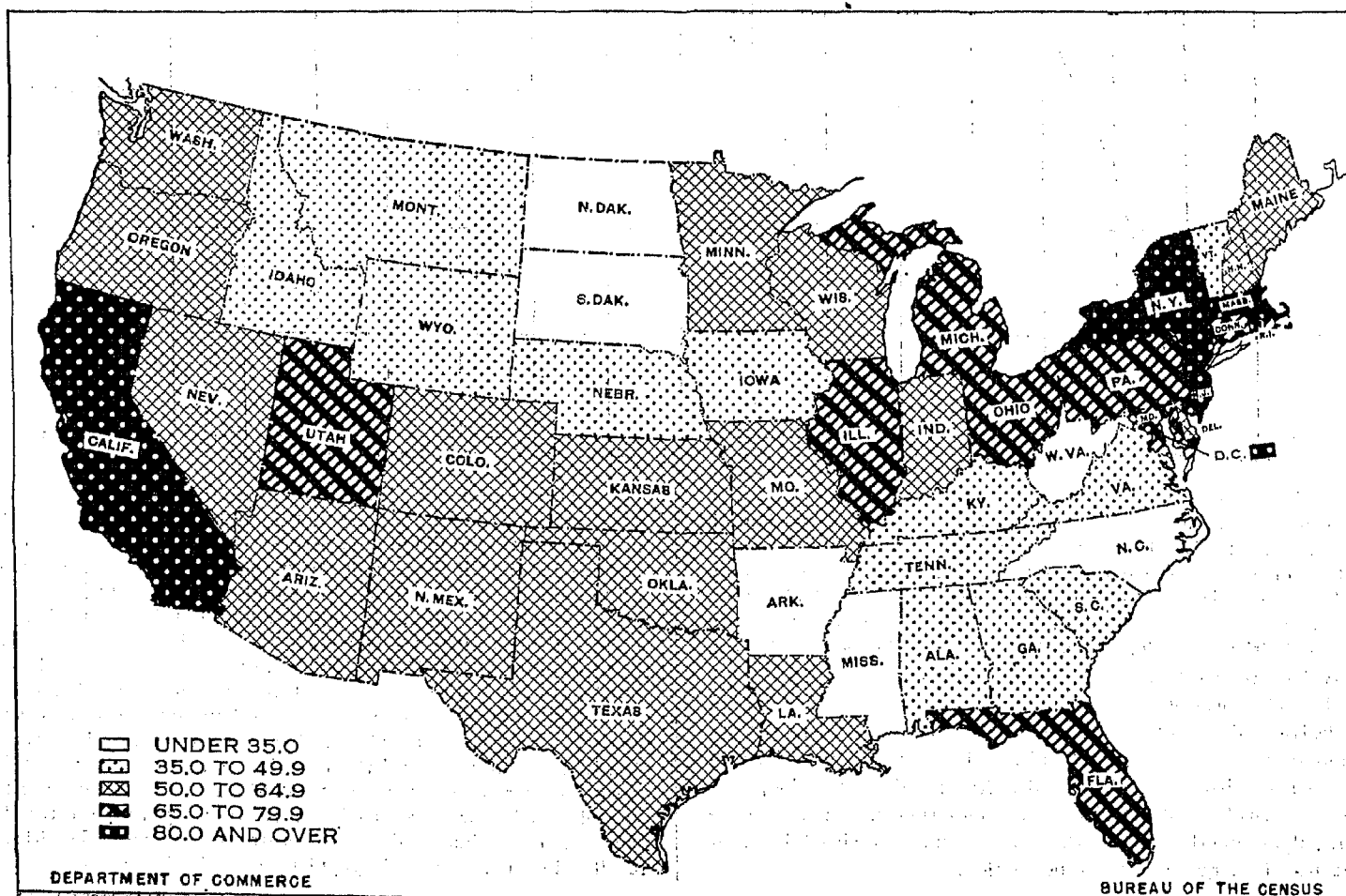


Figure 9.—PERCENT INCREASE IN URBAN POPULATION BY STATES: 1940 TO 1950

[Based on classification in accordance with old urban-rural definition]

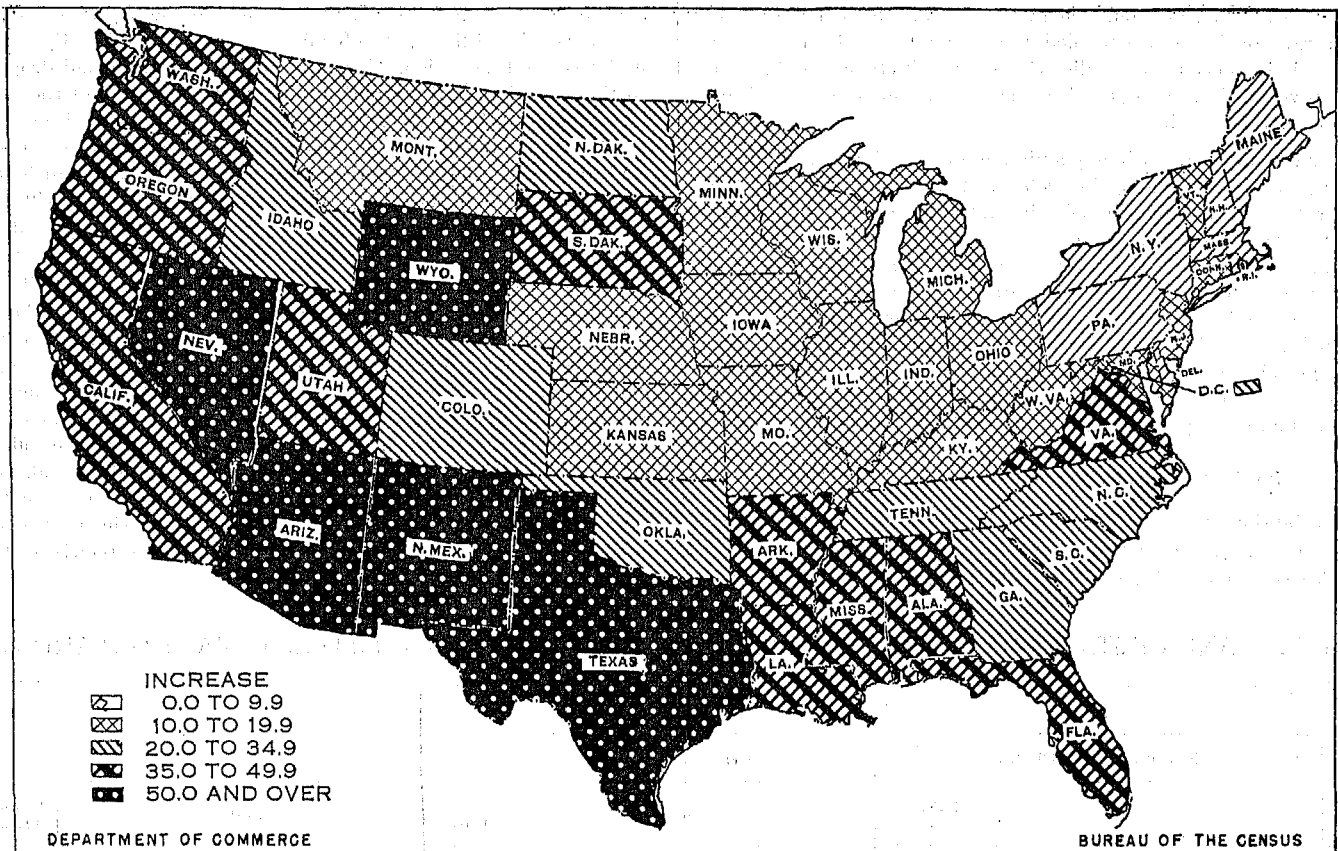
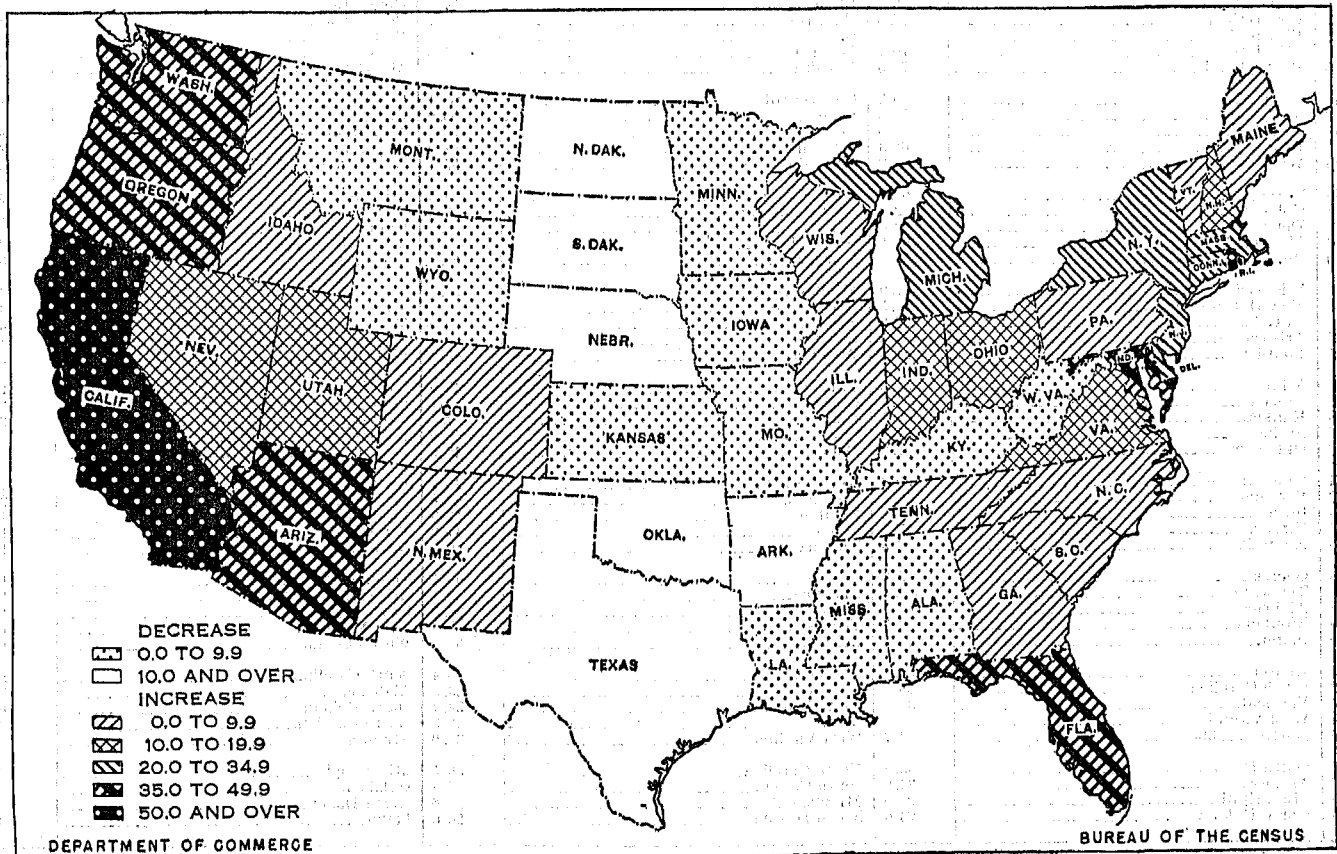


Figure 10.—PERCENT INCREASE IN RURAL POPULATION BY STATES: 1940 TO 1950

[Based on classification in accordance with old urban-rural definition]



UNITED STATES SUMMARY

In the remaining 13 States—California, Connecticut, Delaware, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Rhode Island—the rural rate of increase exceeded the urban rate. In these last States, it is likely that the direction of the difference would have been reversed in most cases if the new definition could have been used over the decade.

In summary, the urban population increased in every State during the decade ending in 1950. It is also apparent that the slow rate of growth or actual decline in the total population of the central areas of the country was primarily a function of decreases or slight increases in the rural population. Finally, the general character of the areas where the rural rate of growth during the decade exceeded the urban rate (which means, of course, that the urban population constituted a smaller percentage of the total population in 1950 than it had in 1940) suggests that the higher rates of rural increase reflect suburban development rather than any upsurge in the farm or village population.

Rank of States by Percent Urban, 1900 to 1950

In 1900 the District of Columbia, Rhode Island, Massachusetts, New York, and New Jersey occupied the first five places among the States ranked with respect to the percent of the population

classified as urban (table G). In 1950, under the old urban-rural definition, these five still occupied the first ranks, and in the same order. The next five places were held in 1900 by Connecticut, Pennsylvania, Illinois, California, and Maryland. By 1950, under the old definition, Maryland and Connecticut had dropped to the twentieth and eleventh ranks, respectively; and they had been replaced by Ohio and Michigan, which have risen from twelfth and sixteenth places, respectively. The greatest gains in rank during the 50-year period were made by Texas, which rose from thirty-fourth place in 1900 to thirteenth place in 1950, and by Oklahoma which rose from forty-seventh to twenty-sixth place.

The five lowest ranking States in 1900 were Arkansas, Mississippi, Oklahoma, North Dakota, and Idaho. Of these States, Oklahoma had risen to twenty-sixth place by 1950, Idaho to thirty-eighth place, and Arkansas to forty-fourth place. In the same period West Virginia, South Carolina, and North Carolina had dropped from fortieth, forty-first, and forty-fourth places, respectively, to positions among the last five ranks. Losses of 10 or more ranks between 1900 and 1950 occurred in the following States: Delaware, Kentucky, Montana, Maine, Maryland, Vermont. In no instances do these declines in rank represent a decrease in the proportion of the population classified as urban during the 50-year period; rather, they represent relatively low rates of increase in the proportion urban.

Table G.—RANK OF STATES ACCORDING TO PERCENT OF POPULATION CLASSIFIED AS URBAN: 1950 AND 1900

Rank	1950				1900	
	New urban-rural definition		Old urban-rural definition		State	Percent urban
	State	Percent urban	State	Percent urban		
1	District of Columbia	100.0	District of Columbia	100.0	District of Columbia	100.0
2	New Jersey	86.6	Rhode Island	88.4	Rhode Island	88.3
3	New York	85.6	Massachusetts	87.9	Massachusetts	86.0
4	Massachusetts	84.4	New York	86.2	New York	72.9
5	Rhode Island	84.3	New Jersey	79.6	New Jersey	70.6
6	California	80.7	Illinois	74.6	Connecticut	59.9
7	Connecticut	77.6	California	67.1	Pennsylvania	54.7
8	Illinois	77.6	Ohio	66.4	Illinois	54.3
9	Michigan	70.7	Pennsylvania	65.8	California	52.3
10	Pennsylvania	70.5	Michigan	64.3	Maryland	49.8
11	Ohio	70.2	Connecticut	64.1	Colorado	48.3
12	Maryland	69.0	Utah	59.9	Ohio	48.1
13	Florida	65.5	Texas	59.8	New Hampshire	46.7
14	Utah	65.3	Missouri	57.9	Delaware	46.4
15	Washington	63.2	Colorado	57.4	Washington	40.8
16	Texas	62.7	Florida	56.6	Michigan	39.3
17	Colorado	62.7	New Hampshire	56.6	Wisconsin	38.2
18	Delaware	62.6	Indiana	56.4	Utah	38.1
19	Missouri	61.6	Wisconsin	56.6	Missouri	36.3
20	Indiana	59.9	Maryland	64.4	Montana	34.7
21	Wisconsin	57.9	Minnesota	53.9	Indiana	34.3
22	New Hampshire	57.5	Washington	53.6	Minnesota	34.1
23	Nevada	57.2	Nevada	52.6	Maine	33.5
24	Arizona	56.5	Louisiana	50.8	Oregon	32.2
25	Louisiana	54.8	Wyoming	49.8	Wyoming	28.8
26	Minnesota	54.5	Oklahoma	49.6	Louisiana	26.5
27	Oregon	53.9	Oregon	48.1	Iowa	25.6
28	Kansas	52.1	Kansas	47.4	Nebraska	23.7
29	Maine	51.7	Iowa	46.9	Kansas	22.4
30	Oklahoma	51.0	Delaware	46.5	Vermont	22.1
31	New Mexico	50.2	New Mexico	46.2	Kentucky	21.8
32	Wyoming	49.8	Nebraska	45.8	Florida	20.3
33	Iowa	47.7	Montana	42.8	Virginia	18.3
34	Virginia	47.0	Maine	41.0	Texas	17.1
35	Nebraska	46.9	Virginia	40.3	Nevada	17.0
36	Georgia	45.3	Georgia	40.1	Tennessee	16.2
37	Tennessee	44.1	Alabama	40.1	Arizona	15.9
38	Alabama	43.8	Idaho	39.8	Georgia	15.6
39	Montana	43.7	Tennessee	38.4	New Mexico	14.0
40	Idaho	42.9	Arizona	38.6	West Virginia	13.1
41	Kentucky	38.8	Vermont	36.4	South Carolina	12.8
42	South Carolina	36.7	Kentucky	33.5	Alabama	11.9
43	Vermont	36.4	South Dakota	33.1	South Dakota	10.2
44	West Virginia	34.6	Arkansas	32.3	North Carolina	9.9
45	North Carolina	33.7	West Virginia	31.9	Arkansas	8.5
46	South Dakota	33.2	North Carolina	30.5	Mississippi	7.7
47	Arkansas	33.0	South Carolina	28.8	Oklahoma	7.4
48	Mississippi	27.9	Mississippi	27.6	North Dakota	7.3
49	North Dakota	26.6	North Dakota	26.6	Idaho	6.2

State Origins and Boundaries

Since 1790, not only have there been changes in the boundaries of the Thirteen Original States, but the whole process of converting newly acquired areas, first into Territories and then into States, involved a considerable number of boundary changes before the State boundaries, as they now exist, were established. The history of major changes as they relate to the 48 States and the District of Columbia as now constituted is outlined below for each State.¹

Alabama.—Alabama was organized as a Territory in 1817 from the eastern part of Mississippi Territory and was admitted to the Union in 1819 as the twenty-second State with boundaries as at present.

Arizona.—Arizona was organized as a Territory in 1863 from the western part of the Territory of New Mexico. Part of the Territory was annexed in 1866 by Nevada, leaving the Territory with boundaries the same as those of the present State. Arizona was admitted to the Union in 1912 as the forty-eighth State.

Arkansas.—Arkansas was organized as a Territory in 1819 with boundaries which also included most of the present area of Oklahoma. The area of the Territory was reduced in 1824 and 1828 to substantially the present boundaries of the State. It was admitted to the Union as the twenty-fifth State in 1836 with boundaries substantially as at present.

California.—California was organized as a State from a part of the area acquired from Mexico in 1848 and was admitted to the Union in 1850 as the thirty-first State with boundaries as at present.

Colorado.—Colorado was organized as a Territory in 1861 from parts of Kansas, Nebraska, New Mexico, and Utah Territories. In 1876, without change in boundaries and with boundaries as at present, it was admitted to the Union as the thirty-eighth State.

Connecticut.—Connecticut was one of the Thirteen Original States.

Delaware.—Delaware was one of the Thirteen Original States.

District of Columbia.—The District of Columbia, formed from territory ceded by Maryland and Virginia, was established as the seat of the Federal Government in accordance with acts of Congress passed in 1790 and 1791. Its boundaries, as defined in 1791, included the present area, together with about 30 square miles in Virginia. In 1846 the area south of the Potomac River was retroceded to Virginia, leaving the District of Columbia with its present limits.

Florida.—Florida was organized as a Territory in 1822, with boundaries as at present, from the area purchased from Spain in 1819 and transferred to the United States in 1821. It was admitted to the Union in 1845 as the twenty-seventh State.

Georgia.—Georgia was one of the Thirteen Original States. At the close of the Revolution, it included territory extending westward to the Mississippi River, constituting most of the area now in Alabama and Mississippi. In 1798 part of this area was organized as the Territory of Mississippi. In 1802 Georgia ceded to the United States all its claims to the region west of its present western boundary and acquired a small strip of land along its northern boundary. These changes left the State with its present boundaries.

Idaho.—Idaho was organized as a Territory in 1863. Its area was reduced in 1864 by the organization of Montana Territory and in 1868 by the organization of Wyoming Territory. Idaho attained its present boundaries in 1873 with the transfer of six square miles to Montana following a resurvey of the Continental

Divide. Idaho was admitted to the Union in 1890 as the forty-third State.

Illinois.—Illinois, organized as a Territory in 1809 from the western part of Indiana Territory, comprised at that time all of the present State of Illinois, almost all of Wisconsin, and parts of Michigan and Minnesota. In 1818 that portion of the Territory lying within the present boundaries of Illinois was admitted to the Union as the twenty-first State.

Indiana.—The Territory of Indiana was organized from the western part of the Territory Northwest of the River Ohio in 1800, at which time it comprised nearly all of the present State of Indiana, together with an area now constituting Illinois, Wisconsin, northeastern Minnesota, and western Michigan. In 1802 an area now constituting the remainder of Michigan was added, and in 1802 and 1803 minor revisions of the eastern boundary took place. The area of the Territory was greatly reduced by the organization of Michigan Territory in 1805 and of Illinois Territory in 1809. In 1816, with the addition of a small strip of land along the northern boundary and the separation of an area in the Upper Peninsula, Indiana was admitted to the Union as the nineteenth State with boundaries as at present.

Iowa.—Iowa was organized as a Territory in 1838 with boundaries that included, in addition to the present area of the State, the eastern parts of the present States of North Dakota and South Dakota and the western part of the present State of Minnesota. Iowa was admitted to the Union in 1846 as the twenty-ninth State with boundaries substantially as at present.

Kansas.—The area now comprising Kansas and part of Colorado was organized as the Territory of Kansas in 1854, and in 1861 that portion of the Territory lying within the present boundaries of Kansas was admitted to the Union as the thirty-fourth State.

Kentucky.—Kentucky, originally a part of Virginia, was admitted to the Union in 1792 as the fifteenth State with boundaries substantially as at present.

Louisiana.—The greater part of the area now constituting Louisiana was organized in 1804 as the Territory of Orleans. It included at that time the Baton Rouge District—that part of the present State lying east of the Mississippi River—but excluded the southwestern part of the present State—that part lying west of the Louisiana Purchase boundary. In 1812 all the present area of Louisiana except the Baton Rouge District was admitted to the Union as the eighteenth State, and upon the addition of the district a few days later Louisiana assumed its present boundaries.

Maine.—Maine, originally a part of Massachusetts, was admitted to the Union in 1820 as the twenty-third State.

Maryland.—Maryland was one of the Thirteen Original States. In 1791 its area was reduced by the formation of the District of Columbia.

Massachusetts.—Massachusetts was one of the Thirteen Original States. In 1820 Maine, previously a part of Massachusetts, was admitted to the Union as a separate State, leaving Massachusetts with boundaries substantially as at present.

Michigan.—Michigan was organized as a Territory in 1805 from the northeastern part of Indiana Territory and comprised the greater part of the area of the present State, including the Lower Peninsula and the eastern end of the Upper Peninsula, and a small part of the present State of Indiana. In 1816 a narrow strip at the southern limit of Michigan Territory was annexed to Indiana Territory. In 1818, when Illinois was admitted as a State, all of Illinois Territory north of the State of Illinois was transferred to Michigan Territory. This transferred area comprised almost all of the present State of Wisconsin, part of Minnesota, and the western part of the Upper Peninsula of Michigan. At the same time a section of unorganized territory, formerly part of Indiana Territory, was annexed by the Territory of Michigan. This annexation comprised the middle portion of the Upper Peninsula and a very small part of Wisconsin not for-

¹ For maps showing the boundaries of the States and Territories at each census from that of 1790 to that of 1900, see U. S. Bureau of the Census, *A Century of Population Growth*, U. S. Government Printing Office, Washington, D. C., 1909. For a detailed discussion of changes in the boundaries of the States, see U. S. Department of the Interior, Geological Survey Bulletin 817, *Boundaries, Areas, Geographic Centers, and Altitudes of the United States and the Several States*, U. S. Government Printing Office, Washington, D. C., 1930.

merly included. In 1834 Michigan Territory was further enlarged by the annexation of that part of Missouri Territory now comprising all of Iowa, the remainder of Minnesota not previously included, and parts of North and South Dakota. With the organization of Wisconsin Territory and the legal cession of a small area to Ohio in 1836, Michigan Territory assumed the limits of the present State. Michigan was admitted to the Union as the twenty-sixth State in 1837.

Minnesota.—Minnesota was organized as a Territory in 1849 from unorganized area formerly within the Territories of Iowa and Wisconsin. It included an area now comprising the State of Minnesota, the eastern parts of the States of North and South Dakota, and a small part of Nebraska. In 1858 that part of the Territory lying within the present boundaries of Minnesota was admitted to the Union as the thirty-second State.

Mississippi.—Mississippi was organized as a Territory in 1798, at which time it included territory now comprising the south central parts of Mississippi and Alabama. The area of the Territory was enlarged in 1804 by the addition of land now comprising the northern parts of Mississippi and Alabama. Its area was further enlarged in 1812 by the addition of the extreme southern portions of the present States of Mississippi and Alabama. In 1817 the eastern part of the Territory was taken to form the Territory of Alabama, and Mississippi was admitted to the Union as the twentieth State with boundaries substantially as at present.

Missouri.—The Territory of Missouri, the name given in 1812 to the former Territory of Louisiana, comprised at that time all of the Louisiana Purchase except the part included in the State of Louisiana. The State of Missouri, formed from a small part of the Territory, was admitted to the Union in 1821. In 1836, when the present northwest corner of the State was added, Missouri assumed its present limits.

Montana.—Montana was organized as a Territory in 1864 from the northeastern part of Idaho Territory with boundaries substantially the same as those of the present State. It was admitted to the Union in 1889 as the forty-first State.

Nebraska.—Nebraska was organized as a Territory in 1854 from unorganized territory originally part of the Louisiana Purchase. Its boundaries included, in addition to the present area of the State, parts of the present States of North and South Dakota, Montana, Wyoming, and Colorado. The area of the Territory was greatly reduced in 1861 by the organization of Dakota and Colorado Territories. At the same time a small area was added to the western part of the Territory. The area was again reduced in 1863 by the organization of Idaho Territory. Nebraska was admitted to the Union in 1867 as the thirty-seventh State with boundaries substantially as at present. In 1870 and 1882 small tracts of land were transferred from the Dakota Territory to Nebraska, and in 1943 small tracts of land were transferred between Iowa and Nebraska.

Nevada.—Nevada, when organized as a Territory in 1861 from part of Utah Territory, comprised only the western part of the present State. In 1864 Nevada was admitted to the Union as the thirty-sixth State, its area having been enlarged in 1862 by the annexation from Utah Territory of a strip of land more than 50 miles wide. In 1866, with annexations from Arizona and Utah Territories, Nevada assumed its present limits.

New Hampshire.—New Hampshire was one of the Thirteen Original States.

New Jersey.—New Jersey was one of the Thirteen Original States.

New Mexico.—The Territory of New Mexico was organized in 1850 from the area now comprising the greater parts of the States of New Mexico and Arizona, together with small portions of Colorado and Nevada. The Territory was enlarged by the addition of the Gadsden Purchase in 1854 and reduced by the organization of Colorado Territory in 1861. With the organization of Arizona

Territory in 1863, the area of New Mexico was reduced to substantially the present area of the State. New Mexico was admitted to the Union in 1912 as the forty-seventh State.

New York.—New York was one of the Thirteen Original States. New York dropped its claim to Vermont after the latter was admitted to the Union as a separate State in 1791. With the annexation of a small area from Massachusetts in 1853, New York assumed its present boundaries.

North Carolina.—North Carolina was one of the Thirteen Original States.

North Dakota.—North Dakota was organized as a State from part of Dakota Territory with boundaries as at present and was admitted to the Union in 1889.

Ohio.—Ohio was organized from part of the Territory Northwest of the River Ohio in 1802 and with minor revisions of the western boundary was admitted to the Union as the seventeenth State in 1803. With the settlement of a boundary dispute with Michigan Territory in 1836, Ohio assumed its present boundaries.

Oklahoma.—The Territory of Oklahoma was organized in 1890 from the western part of Indian Territory and the Public Land Strip, originally a part of Texas. In 1893 the Territory was enlarged by the addition of the Cherokee Outlet, which fixed part of the present northern boundary. In 1907 the Territory and the remaining part of the Indian Territory were combined and admitted to the Union as the forty-sixth State with boundaries substantially as at present. Upon the settlement in 1930 of a boundary dispute with Texas, Oklahoma assumed its present limits.

Oregon.—Oregon was organized as a Territory in 1848, at which time it included the area now constituting the States of Oregon, Washington, Idaho, and parts of western Montana and Wyoming. The area of the Territory was greatly reduced in 1853 by the organization of the Territory of Washington. In 1859, with the transfer to Washington Territory of the area now comprising southern Idaho, western Wyoming, and a small tract in western Montana, Oregon assumed its present boundaries and was admitted to the Union as the thirty-third State.

Pennsylvania.—Pennsylvania was one of the Thirteen Original States. With the purchase of a small tract of land in its northwestern corner from the Federal Government in 1792, Pennsylvania assumed its present boundaries.

Rhode Island.—Rhode Island was one of the Thirteen Original States.

South Carolina.—South Carolina was one of the Thirteen Original States.

South Dakota.—South Dakota was organized as a State from part of Dakota Territory and was admitted to the Union in 1889.

Tennessee.—The Territory South of the River Ohio was organized in 1790, at which time it included the present State of Tennessee and parts of Mississippi, Alabama, and Georgia. In 1796 Tennessee was admitted to the Union as the sixteenth State with boundaries substantially as at present.

Texas.—Texas, originally a part of Mexico, won its independence by revolution in 1835 and 1836 and continued as an independent republic until 1845, when it was annexed to the United States and admitted to the Union as the twenty-eighth State. At this time it included area now comprising parts of Colorado, Kansas, New Mexico, Oklahoma, and Wyoming. In 1850, with the transfer to the United States of the territory now in these other States, Texas assumed practically its present boundaries. Upon settlement of a boundary dispute with Oklahoma in 1930, Texas assumed its present boundaries.

Utah.—The Territory of Utah was organized in 1850, at which time it comprised, in addition to the area of the present State, areas now constituting western Colorado, southwestern Wyoming, and the greater part of Nevada. The area of the Territory was reduced in 1861 by the organization of Nevada and Colorado Territories and by a transfer to Nebraska Territory. It was reduced

again in 1864 and 1866 by the eastward extensions of the boundaries of the State of Nevada and in 1868 by the organization of Wyoming Territory. Utah was admitted to the Union in 1896 as the forty-fifth State with boundaries as at present.

Vermont.—Vermont was admitted to the Union in 1791 as the fourteenth State and was the first to be admitted after the adoption of the Constitution by the Thirteen Original States.

Virginia.—Virginia, one of the Thirteen Original States, included in 1790 the areas now constituting the States of Kentucky and West Virginia. The area of the State was reduced in 1791 by the formation of the District of Columbia and in 1792 by the admission of Kentucky into the Union as a separate State; the area was enlarged in 1846 by the retrocession of the part of the District of Columbia south of the Potomac but was further reduced in 1863 by the admission of West Virginia into the Union as a separate State. In 1866 two additional counties (Berkeley and Jefferson) were annexed to West Virginia, leaving the boundaries of Virginia as at present.

Washington.—Washington was organized as a Territory in 1853 from part of Oregon Territory, and included an area now comprising the State of Washington, northern Idaho, and part of Montana. In 1859, upon the admission of Oregon as a State, the remaining portion of Oregon Territory, comprising the rest of Idaho and parts of Montana and Wyoming, was added to the Territory of Washington. The area of the Territory was reduced to the present limits of the State in 1863, upon the organization of Idaho Territory. Washington was admitted to the Union in 1889 as the forty-second State.

West Virginia.—West Virginia, formed from 48 counties of Virginia, was admitted to the Union in 1863 as the thirty-fifth State. In 1866, with the annexation of two additional counties (Berkeley and Jefferson) from Virginia, the boundaries were established as at present.

Wisconsin.—Wisconsin was organized as a Territory in 1836 from that part of Michigan Territory which lay west of the present limits of the State of Michigan. As originally constituted, the Territory included the present States of Wisconsin, Iowa, Minnesota, the eastern parts of North and South Dakota, and a small part of Nebraska. In 1838 that part of the Territory lying west of the Mississippi River and a line drawn due north from its source to the Canadian boundary was organized as the Territory of Iowa. In 1848 that part of the Territory lying within the present boundaries of the State was admitted to the Union as the thirtieth State.

Wyoming.—Wyoming was organized as a Territory in 1868 with boundaries as at present from parts of Dakota, Idaho, and Utah Territories. It was admitted to the Union in 1890 as the forty-fourth State.

Territories

The circumstances under which the Territories were acquired by the United States and the dates of their acquisition are as follows:

Alaska.—Alaska was acquired by purchase from Russia in 1867 and was organized as a Territory in 1912.

Hawaii.—Hawaii, by voluntary action of its people, ceded its sovereignty to the United States in 1898 and was organized as a Territory on June 14, 1900.

Possessions

The circumstances under which the principal possessions were acquired and the dates of their acquisition are as follows:

American Samoa.—American Samoa was acquired by the United States in accordance with a convention between the United States, Great Britain, and Germany, signed December 2, 1899, ratified February 16, 1900, and proclaimed by the President of the United States on the latter date. Under an Executive order

of February 19, 1900, the islands were placed under the authority of the Secretary of the Navy for use as a naval station. The high chiefs of the Tutuila voluntarily ceded the islands of Tutuila and Aunu'u to the United States on April 17, 1900; and the islands of the Manua group (Tau, Olosega, and Ofu) were ceded by their high chiefs on July 16, 1904. By joint resolution of Congress, approved March 4, 1925, Swains Island was annexed to American Samoa.

Guam.—The island of Guam was ceded by Spain to the United States under the terms of the Treaty of Paris, signed December 10, 1898, and ratified in the following year.

Puerto Rico.—The island of Puerto Rico was formally surrendered by Spain to the United States in October 1898, and was ceded to the United States, together with Vieques, Culebra, and other small adjacent islands, by the Treaty of Paris, signed December 10, 1898, and ratified in the following year.

Virgin Islands of the United States.—The Virgin Islands of the United States, formerly known as the Danish West Indies, were acquired by the United States by purchase from Denmark in 1917, the formal transfer of possession having taken place on March 31 of that year. St. Croix, St. John, and St. Thomas are the 3 principal islands of the group, although there are 65 smaller islands, most of which are uninhabited.

Other Areas

The circumstances under which the Canal Zone came under the jurisdiction of the United States and the Trust Territory of the Pacific Islands came under the trusteeship of the United States are as follows:

Canal Zone.—The use, occupation, and control of the Canal Zone were granted to the United States under the terms of a treaty with the Republic of Panama, signed November 18, 1903, and ratified in the following year.

Trust Territory of the Pacific Islands.—The United States became the administering authority over the Trust Territory of the Pacific Islands (which comprises the Caroline, Marshall, and Marianas Islands except Guam) under an agreement approved by the Security Council of the United Nations on April 2, 1947, and by the United States Government on July 18, 1947. By Executive order, the military government in these islands was terminated on the latter date, and the authority and responsibility for the civil administration were delegated to the Secretary of the Navy.

URBANIZED AREAS

Definition

"Urbanized areas" have been defined for the first time in the 1950 Census. The major objective of the Bureau of the Census in delineating these areas was to provide a better separation of urban and rural population in the vicinity of our larger cities than was possible under the old definition. All persons who resided in urbanized areas on April 1, 1950, are included in the urban population according to the new definition. The effect of the adoption of the urbanized area concept was to include in the urban population 6,203,596 persons living under distinctly urban conditions in the immediate environs of our larger cities who under the old definition would have been included in the rural population. (See table E.)

An urbanized area is an area that includes at least one city with 50,000 inhabitants or more in 1940 or later according to a special census taken prior to 1950 and also the surrounding closely settled incorporated places and unincorporated areas that meet the criteria listed below. Since the urbanized area outside of incorporated places was defined on the basis of housing or population density or of land use, its boundaries for the most part are not political but follow such features as roads, streets, railroads, streams, and other clearly defined lines which may be easily identified by census enumerators in the field. The urbanized area

boundaries were selected after careful examination of all available maps, aerial photographs, and other sources of information, and then were checked in detail in the field by trained investigators to insure that the criteria were followed and that the boundaries were identifiable.

The delineation of the boundaries of the urbanized areas had to be completed prior to the beginning of enumeration; consequently, it was not possible to establish urbanized areas in connection with those cities which attained a population of 50,000 or more according to the 1950 Census. Urbanized areas were established for Fort Smith, Ark., and Muskegon, Mich., both of which had in excess of 50,000 inhabitants according to special censuses conducted prior to 1950. The population of both of these cities fell below 50,000 in 1950. The urbanized areas defined for these two cities, however, were retained in the tabulations.

The urban fringe of an urbanized area is that part which is outside the central city or cities. The following types of areas are embraced if they are contiguous to the central city or cities or if they are contiguous to any area already included in the urban fringe:

1. Incorporated places with 2,500 inhabitants or more in 1940 or at a subsequent special census conducted prior to 1950.
2. Incorporated places with fewer than 2,500 inhabitants containing an area with a concentration of 100 dwelling units or more with a density in this concentration of 500 units or more per square mile. This density represents approximately 2,000 persons per square mile and normally is the minimum found associated with a closely spaced street pattern.
3. Unincorporated territory with at least 500 dwelling units per square mile.
4. Territory devoted to commercial, industrial, transportation, recreational, and other purposes functionally related to the central city.

Also included are outlying noncontiguous areas with the required dwelling unit density located within $1\frac{1}{2}$ miles of the main contiguous urbanized part, measured along the shortest connecting highway, and other outlying areas within one-half mile of such noncontiguous areas which meet the minimum residential density rule.

Although an urbanized area may contain more than one city of 50,000 or more, not all cities of this size are necessarily central cities. The largest city of an area is always a central city. In addition, the second and third most populous cities in the area may qualify as central cities provided they have a population of at least one-third of that of the largest city in the area and a minimum of 25,000 inhabitants. The names of the individual urbanized areas indicate the central cities of the areas.

Population of Urbanized Areas

Somewhat less than one-half of the total, and more than seven-tenths of the urban, population of the United States was living in the 157 urbanized areas in 1950 (table 5a). Of the 69,249,148 persons living in the urbanized areas, 48,377,240 were in the 172 central cities and 20,871,908 were living in the urban-fringe areas. In urban-fringe areas, there were 12,949,890 persons living in 859 incorporated places of 2,500 inhabitants or more, 577,992 persons living in 457 incorporated places under 2,500 inhabitants, and 7,344,026 persons living in unincorporated territory. The number of persons in the incorporated places under 2,500 inhabitants and in unincorporated territory—7,922,018—represents the persons in urban territory living outside urban places, and, consequently, the net addition to the urban population attributable to the urbanized area delineations.

In population, the urbanized areas ranged in size from the Fort Smith Urbanized Area, which had a population of 56,046, to the New York-Northeastern New Jersey Urbanized Area, which had a population of 12,296,117 (table 18). The 12 urbanized areas with more than 1,000,000 inhabitants had a combined population of 37,817,068, or more than one-half the population of the 157 areas. On the other hand, the 3,116,450 persons living in the 38

urbanized areas under 100,000 inhabitants represented less than 5 percent of the total population in urbanized areas.

Seven out of ten of the persons living in the urbanized areas were residents of the central cities. The proportion of the population of the urbanized areas living in the central city or cities, however, varied greatly among the areas, ranging from a low of 28.3 percent for the Wilkes-Barre Urbanized Area to virtually 100 percent for the Beaumont Urbanized Area. There were 79 urbanized areas with 80 percent or more of their population in the central city or cities. Only seven urbanized areas—the Boston, Los Angeles, Phoenix, Pittsburgh, Providence, San Bernardino, and Wilkes-Barre Urbanized Areas—had fewer than half of their inhabitants living in the central cities. (See table 17.)

Population Density

The population per square mile of land area for all 157 urbanized areas was 5,438 (table 17). Three of the areas—the New York-Northeastern New Jersey, Philadelphia, and Lancaster Urbanized Areas—had densities in excess of 9,000. Five—the Atlantic City, Duluth-Superior, Fort Smith, St. Petersburg, and Sioux City Urbanized Areas—had densities under 2,000. The density of the central cities was more than double that of the urban-fringe areas—7,788 as against 3,200. In six of the areas, however, the Brockton, Fall River, Fort Smith, Los Angeles, New Orleans, and Stamford-Norwalk Urbanized Areas, the density of the urban fringe exceeded that of the central city. The density in the central cities varied from 1,414 for Duluth-Superior to 24,537 for the three central cities of the New York-Northeastern New Jersey Urbanized Area. An even greater variation was found in the densities of the urban-fringe areas. In 11 areas the urban-fringe areas had densities in excess of 4,000. At the other extreme, the urban-fringe areas of Beaumont and Amarillo had densities of 29 and 179, respectively. These and other low densities in urban-fringe areas are attributable to the inclusion in the urbanized areas of land devoted to urban uses, such as industrial areas, railroad yards, and airports, which had little or no residential population.

COUNTIES

Definitions

The primary divisions of the States are, in general, termed counties; but in Louisiana these divisions are known as parishes. There are also a number of cities which are independent of any county organization and thus constitute primary divisions of their States, namely, Baltimore in Maryland, St. Louis in Missouri, and 27 cities in Virginia. The District of Columbia, which is not divided into counties, is included here as the equivalent of a county as are also the three parts of Yellowstone National Park in Idaho, Montana, and Wyoming. There were 3,070 counties and parishes in continental United States in 1950 and 33 county equivalents.

The number of counties remained unchanged between 1940 and 1950. Washington County, S. Dak., was annexed by Shannon County. Offsetting this loss, however, was the organization of a new county, Los Alamos, in New Mexico. The number of county equivalents increased by three—three cities in Virginia, Colonial Heights, Falls Church, and Waynesboro, became independent of county organization during the decade. Changes in the number of counties were fairly frequent some decades ago but have become progressively rarer. These changes, as well as changes of county boundaries, are listed in the notes to tables 5 and 6 of the State chapters and in the reports of other censuses.

Population of Counties

The counties ranged in population from Armstrong County, S. Dak., which had 52 inhabitants, to Cook County, Ill., which had 4,508,792 inhabitants. Ten additional counties (Los Angeles, Calif.; Middlesex, Mass.; Wayne, Mich.; Bronx, Kings, New York, and Queens, N. Y.; Cuyahoga, Ohio; Allegheny and Philadelphia, Pa.) had 1,000,000 inhabitants or more. These 11 counties had a combined population of 24,837,059, or nearly one-

sixth of the population of the United States (table H). On the other hand, the 777 counties and county equivalents having fewer than 10,000 inhabitants had a combined population of 4,729,303, or somewhat more than 3 percent of the population. Despite the increase of about one-seventh in the population of the United States as a whole, the median county population was 19,837 in 1950 as against 19,888 in 1940.

TABLE H.—POPULATION IN GROUPS OF COUNTIES CLASSIFIED ACCORDING TO SIZE: 1950

Size of county	1950			1940		
	Number	Percent of total counties	Population	Number	Percent of total counties	Population
Total.....	3,103	100.0	150,697,361	3,100	100.0	131,669,275
Counties of 1,000,000 or more.....	11	0.4	24,837,050	10	0.3	20,705,285
Counties of 500,000 to 1,000,000.....	31	1.0	20,753,791	18	0.6	12,228,219
Counties of 250,000 to 500,000.....	48	1.5	16,609,695	41	1.3	14,718,169
Counties of 100,000 to 250,000.....	151	4.9	23,478,633	117	3.8	18,097,765
Counties of 50,000 to 100,000.....	257	8.3	18,055,117	256	8.3	17,620,088
Counties of 25,000 to 50,000.....	647	20.9	22,695,677	678	21.9	23,029,174
Counties of 10,000 to 25,000.....	1,181	38.1	19,538,080	1,262	40.7	20,924,453
Counties of 5,000 to 10,000.....	510	16.6	3,921,320	475	15.3	3,603,490
Counties of 2,500 to 5,000.....	177	5.7	678,910	161	5.2	608,928
Counties of 1,000 to 2,500.....	66	2.1	119,738	72	2.3	130,007
Counties under 1,000.....	18	0.6	9,335	10	0.3	3,697
Cumulative summary:						
Counties of 10,000 or more.....	2,326	75.0	145,968,053	2,382	76.8	127,323,153
Counties of 25,000 or more.....	1,145	36.9	126,420,972	1,120	36.1	109,398,700
Counties of 100,000 or more.....	241	7.8	85,679,178	186	6.0	65,749,438
Median population.....			19,837			19,888

¹ Includes 3,070 counties; Baltimore city, Md.; St. Louis city, Mo.; the District of Columbia; 27 independent cities in Virginia in 1950 and 24 in 1940; and the parts of Yellowstone National Park in Idaho, Montana, and Wyoming.

Trends in Population, 1940 to 1950

Despite the record gain of 19,000,000 in the population of the United States as a whole, nearly one-half of the counties lost population and nearly one-fourth lost 10 percent or more (table 20). Of the 3,103 counties and county equivalents, 1,518, or 48.9 percent, lost population, and 708, or 22.8 percent, lost 10 percent or more. Of the 1,585 counties which gained population, 884, or 28.5 percent of the counties, increased by 10 percent or more and 520, or 16.8 percent, increased by 20 percent or more. More than four out of every five counties in the Northeast, and more than three out of every five counties in the West, increased in population. In both the North Central States and the South, more than half the counties lost population. Connecticut, Delaware, and Rhode Island, all of which have relatively few counties, were the only States in which all counties increased in population.

Thirty-one counties and the independent city of Falls Church, Va., more than doubled in population between 1940 and 1950 (table J). All but one of these counties—Grant County, Kans.—were located in the South or in the West. Twelve of these counties and Falls Church city were in the South Atlantic States and seven in the Pacific States.

The fastest growing county in the United States between 1940 and 1950 was Warwick County, Va., which had a population increase of 331.2 percent. At the other extreme, the largest percentage decline was experienced in Esmeralda County, Nev., which had a decline of 60.5 percent.

Counties in Alaska, Hawaii, and Puerto Rico

Alaska, Hawaii, and Puerto Rico are also divided into counties or county equivalents. Alaska is divided into 4 judicial divisions; Puerto Rico is divided into 77 municipalities; Hawaii is officially divided into 5 counties. However, Kalawao County, which con-

sists exclusively of the Kalaupapa Leper Settlement, has no local government and is controlled entirely by the Territorial Board of Hospitals and Settlement. It is included with Maui County for purposes of representation in the Territorial Legislature, and it has been combined with Maui County in the 1950 Census tabulations, as in the 1940 and 1930 tabulations.

TABLE J.—COUNTIES THAT INCREASED BY 100 PERCENT OR MORE BETWEEN 1940 AND 1950

Rank	County	Population		Increase, 1940 to 1950	
		1950	1940	Number	Percent
1	Warwick, Va.....	39,875	9,248	30,627	331.2
2	Benton, Wash.....	61,370	12,058	39,317	326.2
3	Andrews, Texas.....	5,002	1,277	3,725	291.7
4	Moore, Texas.....	13,340	4,461	8,888	199.2
5	Contra Costa, Calif.....	208,984	100,460	108,524	107.6
6	Clark, Nev.....	48,289	16,414	31,875	194.2
7	Falls Church, Va. ¹	7,635	2,576	4,059	192.6
8	Ector, Texas.....	42,102	15,051	27,051	179.7
9	Norfolk, Va.....	90,937	35,823	55,114	178.9
10	Jefferson, Oreg.....	5,536	2,042	3,494	171.1
11	Caribou, Idaho.....	5,570	2,284	3,286	144.1
12	Fairfax, Va.....	98,567	40,928	57,639	140.8
13	Grant, Kans.....	4,838	1,946	2,892	138.3
14	Arlington, Va.....	135,440	57,040	78,400	137.5
15	Mineral, Nev.....	5,500	2,342	3,158	137.4
16	Onslow, N. C.....	42,047	17,939	24,108	134.4
17	Orange, Texas.....	40,567	17,382	23,185	133.4
18	Anderson, Tenn.....	59,407	26,504	32,903	124.1
19	Clay, Fla.....	14,823	6,465	8,358	121.4
20	Midland, Texas.....	26,785	11,721	15,064	120.0
21	Prince Georges, Md.....	104,182	89,490	14,692	117.0
22	Franklin, Wash.....	13,563	6,307	7,256	115.0
23	Okaloosa, Fla.....	27,533	12,900	14,633	113.4
24	Solano, Calif.....	104,833	40,118	64,715	113.4
25	Monroe, Fla.....	20,967	14,078	6,889	112.8
26	Douglas, Oreg.....	54,549	25,728	28,821	112.0
27	Princess Anne, Va.....	42,277	19,084	23,193	111.6
28	Broward, Fla.....	88,933	39,794	49,139	110.9
29	San Mateo, Calif.....	235,650	111,782	123,868	110.8
30	Bernalillo, N. Mex.....	146,673	69,391	77,282	109.9
31	Bay, Fla.....	42,080	20,086	21,994	109.4
32	Jefferson, La.....	103,873	50,427	53,446	106.0

¹ Independent city.

Table 19 presents the 1950 and 1940 population of the counties in continental United States, Alaska, Hawaii, and Puerto Rico, together with the rate of change for the decade.

MINOR CIVIL DIVISIONS

Definitions

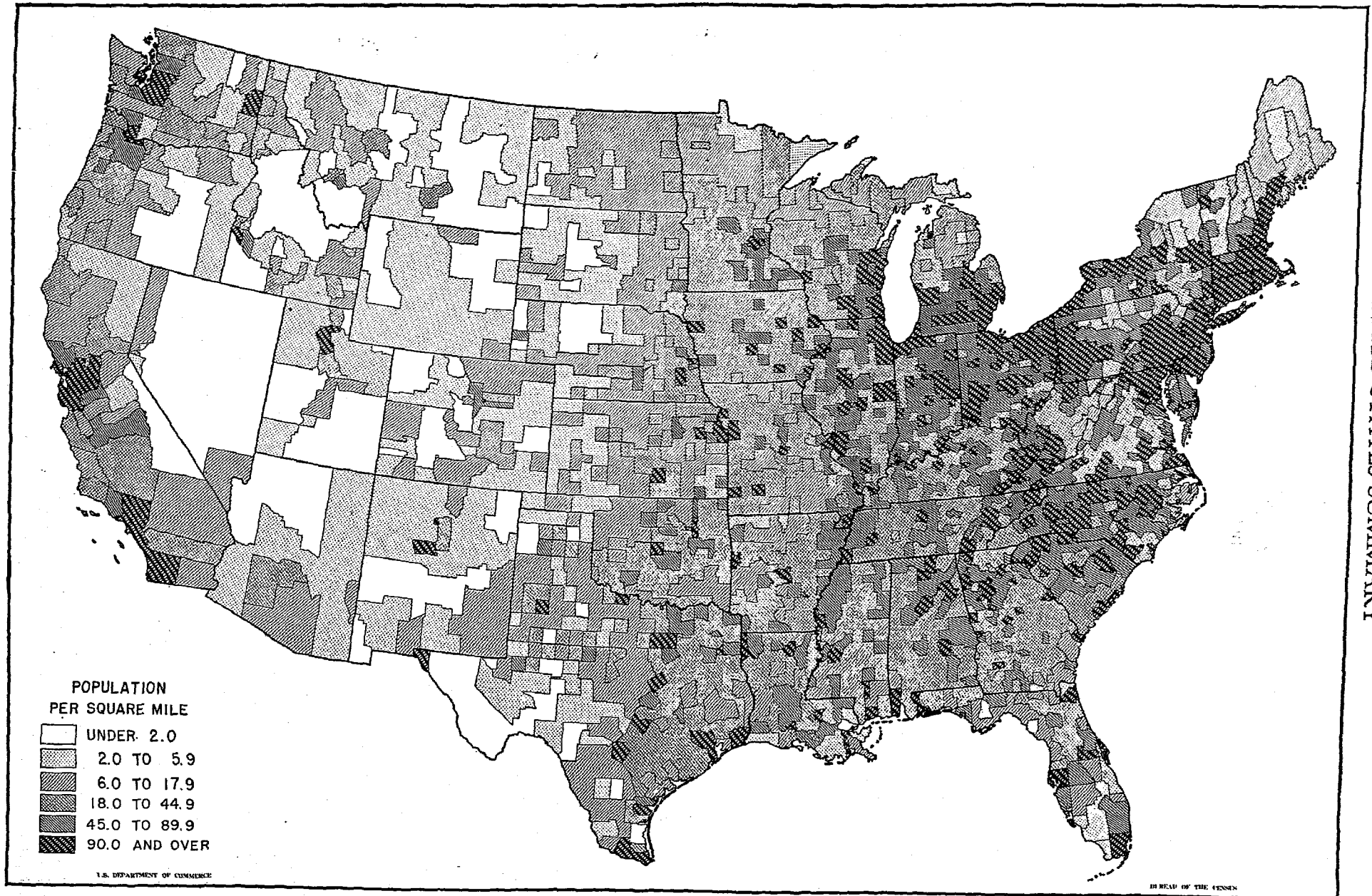
To the primary political divisions into which counties are divided, the Bureau of the Census applies the general term "minor civil divisions." In addition to the county divisions shown by the Bureau, there are thousands of school, taxation, election, and other units for which separate census figures are not published. Where more than one type of primary division exists in a county, the Bureau of the Census uses the more stable divisions, so as to provide insofar as possible comparable statistics from decade to decade.

Changes in Units, 1940 to 1950

The minor civil divisions shown for the State of Washington in previous censuses were the election precincts, a few townships, and some of the cities and towns. The election precincts are not suitable for statistical purposes because their boundaries change so frequently as to prevent comparisons of data from one period to another. Accordingly, the minor civil divisions were replaced in the 1950 Census by "census county divisions," which are newly established special areas which will remain as relatively permanent statistical areas corresponding to the minor civil divisions in other States.

The census county divisions were defined by the State Census Board of Washington on the basis of criteria approved by the

Figure 11.—POPULATION PER SQUARE MILE BY COUNTIES: 1950



Bureau of the Census and were reviewed by interested State and local groups, the Bureau of Agricultural Economics, United States Department of Agriculture, and by the Bureau of the Census.

A total of 642 census county divisions was established in the State. Each incorporated place with a population of 2,500 or more, according to a 1948 estimate of the Washington State Census Board, was made a separate census county division, and each incorporated place of 10,000 inhabitants or more which was not divided into census tracts was divided into census county subdivisions. The census tracts in the adjacent areas of Seattle and Tacoma outside incorporated places of 10,000 inhabitants or more are recognized as census county divisions.

The minor civil divisions shown for Florida in previous censuses were election precincts. The boundaries of election precincts, however, have been subject to frequent changes. In the 1950 Census, therefore, the election precincts were replaced by another division of the counties, the commissioner's districts, the boundaries of which are less subject to change.

Number and Types of Minor Civil Divisions

There were 48,529 minor civil divisions or their equivalents recognized by the Bureau of the Census in continental United States on April 1, 1950. The most numerous of the minor civil divisions were the civil and judicial townships, which numbered 20,879 and were found in 20 States. The total also included 8,708 precincts, 6,739 districts, and 4,326 independent municipalities, and 3,599 towns. The remaining minor civil divisions are known as beats, gores, grants, islands, purchases, surveyed townships, etc., some of which are found only in a single State. The number and types of minor civil divisions in each State are shown in table 21.

For the number and types of minor civil divisions in each State in 1940, see reports of the Sixteenth Census (1940), *Areas of the United States: 1940*, U. S. Government Printing Office, Washington, D. C., 1942, p. 5.

Minor Civil Divisions in Alaska, Hawaii, and Puerto Rico

The 4 judicial divisions in Alaska are divided into 46 recording districts. The 5 counties in Hawaii are divided into 28 judicial districts. The 77 municipalities in Puerto Rico are divided into 943 barrios, including those in cities, towns, and villages.

INCORPORATED AND UNINCORPORATED PLACES

Definitions

The term "place" as used in reports of the 1950 Census refers to a concentration of population, regardless of the existence of legally prescribed limits, powers, or functions. Most of the places listed are incorporated as cities, towns, villages, or boroughs, however. In addition, the larger unincorporated places outside the urbanized areas were delineated and those with a population of 1,000 or more are presented in the same manner as incorporated places of equal size. Each unincorporated place possesses a definite nucleus of residences and has its boundaries drawn so as to include, if feasible, all the surrounding closely settled area. Although there are unincorporated places in the urban-fringe areas, it was not considered feasible to establish boundaries for such places and therefore they were not identified as separate places.

Political units recognized as incorporated places in the reports of the 1950 Census are those which are incorporated as cities, boroughs, towns, and villages with the exception that towns are not recognized as incorporated places in the New England States, New York, and Wisconsin. The towns in these States are minor civil divisions similar to the townships found in other States and not necessarily thickly settled centers of population such as the cities, boroughs, towns, and villages in other States. Similarly, in those States where some townships possess powers and functions similar to those of incorporated places, the townships are not classified as "incorporated places." Thus some minor civil divisions which are "incorporated" in one legal sense of the word

are not regarded by the Census Bureau as "incorporated places." Without this restriction all of the towns in the New England States, New York, and Wisconsin and the townships in States such as New Jersey would have to be counted as incorporated places without any consideration of the nature of population settlement. The densely settled portion of a town or township in these States, however, may be recognized by the Bureau of the Census as an unincorporated place (or as part of an urban fringe).

Relationship Between Incorporated Places and Counties

In most States the incorporated places form subdivisions of the minor civil divisions in which they are located. In other States, however, all or some of the incorporated places are also minor civil divisions. St. Louis, Baltimore, and 27 cities in Virginia are independent of any county organization. In a number of instances, such as Philadelphia, San Francisco, and Denver, the incorporated place is coextensive with the county in which it is located. New York City, on the other hand, is made up of five counties.

Trends in the Population of Incorporated Places

Nearly three-fourths of the population gain in continental United States between 1940 and 1950 was accounted for by the increase in the number of persons living in incorporated places. In 1950 there were 96,062,627 persons living in 17,118 incorporated places (table K). This represents an increase of about 14,200,000, or 17.4 percent, over the 81,843,011 persons living in the 16,611 incorporated places reported in 1940.

TABLE K.—POPULATION IN GROUPS OF INCORPORATED AND UNINCORPORATED PLACES CLASSIFIED ACCORDING TO SIZE: 1950

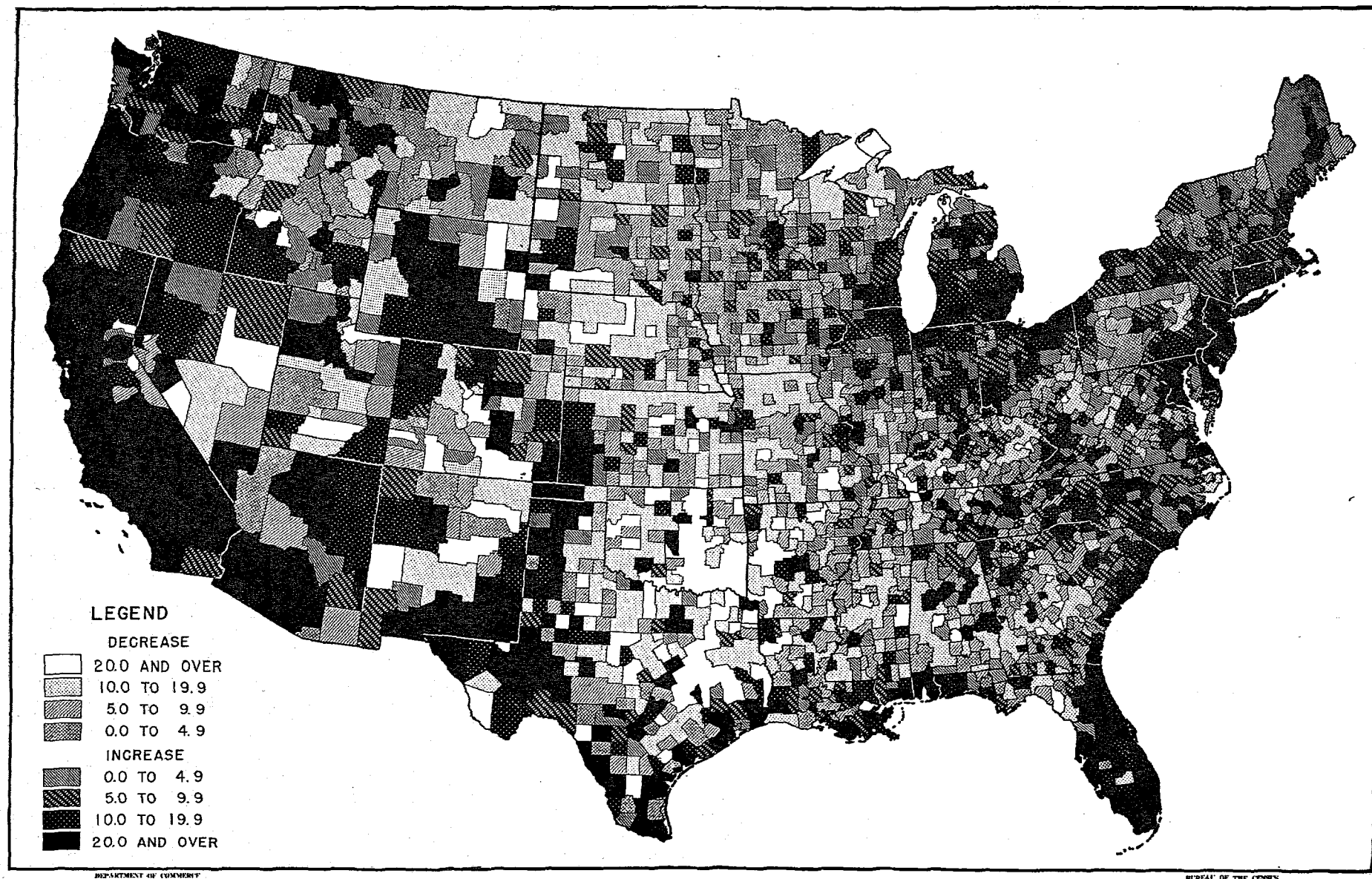
Size of place	Incorporated places		Unincorporated places of 1,000 or more	
	Number	Population	Number	Population
Total	17,118	96,062,627	1,430	3,555,498
Places of 1,000,000 or more.....	5	17,404,450	—	—
Places of 500,000 to 1,000,000.....	13	9,186,045	—	—
Places of 250,000 to 500,000.....	23	8,241,600	—	—
Places of 100,000 to 250,000.....	65	9,478,682	—	—
Places of 50,000 to 100,000.....	120	8,930,823	—	—
Places of 25,000 to 50,000.....	240	8,710,867	3	96,864
Places of 10,000 to 25,000.....	752	11,615,155	26	351,360
Places of 5,000 to 10,000.....	1,093	7,699,609	83	509,087
Places of 2,500 to 5,000.....	1,557	5,512,070	289	977,436
Places of 1,000 to 2,500.....	3,408	5,382,637	1,029	1,570,769
Places under 1,000.....	9,827	4,120,049	—	—

Cities of 100,000 or More

Table 23 presents the population of cities having 100,000 inhabitants or more in 1950, with comparative figures going back to the first census in which the city appears. There were 106 cities of 100,000 inhabitants or more in continental United States in 1950, whereas in 1940 there were only 92 cities of this size. The population of Lowell, Mass., dropped below 100,000 in 1950, and there were 15 cities the population of which passed 100,000. Nine of these cities were in the South, three in the West, two in the Northeast, and one in the North Central Region.

There were 44,311,617 persons living in the 106 cities of 100,000 inhabitants or more in 1950. This total represents an increase of 6,323,628, or 16.6 percent, over the 37,987,989 persons living in the 92 cities of this size in 1940 (table 5b). The largest numerical increase among cities of this size was experienced in Los Angeles, which had a gain of 466,081. The next largest increase was recorded in New York City, which experienced a gain of 436,962. The large percent increase in Baton Rouge is attributable in great measure to an annexation. Aside from Baton Rouge, the largest

Figure 12.—PERCENT INCREASE IN POPULATION BY COUNTIES: 1940 TO 1950



percent increase was recorded in Corpus Christi, which had a gain of 89.0 percent. Of the eight cities of 100,000 inhabitants or more in 1950 which lost population between 1940 and 1950, all but one—Wilmington, Del.—were located in the Northeast. Scranton, Pa., which experienced a loss of 14,868, or 10.6 percent, led these cities in both the amount and rate of decline.

Between 1940 and 1950 there were a number of changes in the ranking of the 10 most populous cities (table 25). The three cities which ranked first, second, and third in 1940—New York, Chicago, and Philadelphia—retained their positions in 1950. The only other one of the first 10 cities to retain its position was St. Louis, which occupied eighth place. Los Angeles replaced Detroit as the fourth most populous city, and Baltimore replaced Cleveland as the sixth most populous city. Washington, D. C., became one of the 10 most populous cities for the first time, reaching the ninth position and replacing Boston, which now ranks as the tenth most populous city. Pittsburgh, which occupied the tenth position in 1940, dropped to twelfth in 1950.

TABLE L.—CITIES OF 25,000 OR MORE IN 1950 THAT INCREASED BY 100 PERCENT OR MORE BETWEEN 1940 AND 1950

Rank	City	Population		Increase, 1940 to 1950	
		1950	1940	Number	Percent
1	Richmond, Calif. ¹	99,545	23,642	75,003	321.1
2	Baton Rouge, La. ²	125,029	34,719	90,010	261.8
3	Odessa, Texas ³	29,495	9,573	19,922	208.1
4	Compton, Calif. ⁴	47,001	16,198	31,793	196.3
5	Albuquerque, N. Mex. ⁵	99,815	35,449	61,366	173.1
6	Norman, Okla. ⁶	27,006	11,429	15,577	136.3
7	Lynwood, Calif. ⁷	25,823	10,082	14,841	135.1
8	Euclid, Ohio ⁸	41,306	17,866	23,430	131.7
9	Independence, Mo. ⁹	30,963	10,066	20,897	130.1
10	Burbank, Calif. ¹⁰	78,577	34,337	44,240	128.8
11	Lubbock, Texas ¹¹	71,747	31,853	39,894	125.2
12	Panama City, Fla. ¹²	25,814	11,610	14,204	122.3
13	Vancouver, Wash. ¹³	41,064	18,788	22,276	121.8
14	San Mateo, Calif. ¹⁴	41,782	19,403	22,379	115.3
15	Biloxi, Miss. ¹⁵	37,425	17,475	19,950	114.2
16	Redwood City, Calif. ¹⁶	25,544	12,453	13,091	105.1
17	Key West, Fla. ¹⁷	20,433	12,027	18,506	104.5
18	San Angelo, Texas ¹⁸	52,093	25,802	26,291	101.9
19	Fort Lauderdale, Fla. ¹⁹	36,328	17,996	18,332	101.9

¹ Part of township 10, Contra Costa County, annexed to Richmond in 1940.

² Parts of old police jury wards 3, 6, 8, and 9, East Baton Rouge Parish, annexed to Baton Rouge in 1940.

³ Parts of precincts 1, 2, 3, and 4, Ector County, annexed to Odessa since 1940.

⁴ Part of Compton township, Los Angeles County, annexed to Compton since 1940.

⁵ Parts of precincts 5, 13, 15, and 24, Bernalillo County, annexed to Albuquerque since 1947.

⁶ Parts of Liberty, Noble, and Norman townships, Cleveland County, annexed to Norman in 1948 and 1949, in 1944, and in 1940, 1944, and every year 1946 through 1950, respectively.

⁷ Parts of Compton township, Los Angeles County, annexed to Lynwood since 1940.

⁸ Part of Blue township, Jackson County, annexed to Independence in 1948.

⁹ Part of Los Angeles township and Los Angeles city, Los Angeles County, annexed to Burbank in 1948.

¹⁰ Parts of precinct 1, Lubbock County, annexed to Lubbock in 1940, 1941, and every year 1945 through 1950.

¹¹ Parts of Clark County annexed to Vancouver in 1940, 1947, 1948, and 1950.

¹² Parts of township 3, San Mateo County, annexed to San Mateo in 1945, 1947, 1948, and 1950.

¹³ Parts of township 3, San Mateo County, annexed to Redwood in 1940, 1943, and each year 1945 through 1949.

¹⁴ Parts of precincts 1 and 2, Tom Green County, annexed to San Angelo in 1940, 1942, 1947, 1948, and 1949 and in 1949, respectively.

Unincorporated Places

Of the unincorporated places for which boundaries were delineated by the Bureau of the Census, 1,430 were found to have 1,000 inhabitants or more (table K). There were 3,565,496 persons living in these unincorporated places, 1,570,769 of whom were living in the 1,029 places of 1,000 to 2,500 inhabitants.

Variations in local practice with respect to incorporation and in the extent to which densely settled areas outside incorporated places were included in urban-fringe areas affect the number of unincorporated places in a given State. Three States—Delaware, Iowa, and North Dakota—and the District of Columbia had no unincorporated places. In the remaining 45 States, the number of unincorporated places ranged from 1 in Minnesota, South Dakota, and Wyoming to 143 in Pennsylvania. The number of persons living in unincorporated places varied from 1,727 in Minnesota to 383,281 in California.

Incorporated and Unincorporated Places in Alaska, Hawaii, and Puerto Rico

There were 27 incorporated places in Alaska in 1950, 9 of which were incorporated as cities and 18 of which were incorporated as towns. The most populous of the incorporated places was the city of Anchorage, which had a population of 11,254. Three additional places—Fairbanks city, Juneau city, and Ketchikan town—had more than 5,000 inhabitants. The 27 incorporated places had a combined population of 45,630, or 35.5 percent of the population of the Territory. In addition to the incorporated places in Alaska, the Bureau of the Census enumerated separately all places recognized locally. All such places with 25 inhabitants or more are reported as unincorporated places.

There are no incorporated places in Hawaii or Puerto Rico. The cities, towns, and villages in both Hawaii and Puerto Rico are unincorporated places which have locally recognized boundaries.

STANDARD METROPOLITAN AREAS

It has long been recognized that for many types of social and economic analysis it is necessary to consider as a unit the entire population in and around the city whose activities form an integrated social and economic system. Prior to the 1950 Census, areas of this type had been defined in somewhat different ways for different purposes and by various agencies. Leading examples were the metropolitan districts of the Census of Population, the industrial areas of the Census of Manufactures, and the labor market areas of the Bureau of Employment Security. The usefulness of data published for any of these areas was limited by this lack of comparability.

Accordingly, the Federal Committee on Standard Metropolitan Areas, composed of representatives of interested Federal agencies, including the Bureau of the Census, and sponsored by the Bureau of the Budget, established the "standard metropolitan area" so that a wide variety of statistical data might be presented on a uniform basis. Since counties instead of minor civil divisions are used as the basic component of standard metropolitan areas (except in the New England States), it was felt that many more kinds of statistics could be compiled for them than for such areas as the formerly established metropolitan districts, which were not defined in terms of counties.

Definition

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

The criteria of metropolitan character relate primarily to the character of the county as a place of work or as a home for concentrations of nonagricultural workers and their dependents. Specifically, these criteria are:

1. The county must (a) contain 10,000 nonagricultural workers, or (b) contain 10 percent of the nonagricultural workers working in the standard metropolitan area, or (c) have at least one-half of its population residing in minor civil divisions with a population density of 150 or more per square mile and contiguous to the central city.

2. Nonagricultural workers must constitute at least two-thirds of the total number of employed persons of the county.

The criteria of integration relate primarily to the extent of economic and social communication between the outlying counties and the central county as indicated by such items as the following:

1. Fifteen percent or more of the workers residing in the contiguous county work in the county containing the largest city in the standard metropolitan area, or

2. Twenty-five percent or more of the persons working in the contiguous county reside in the county containing the largest city in the standard metropolitan area, or

3. The number of telephone calls per month to the county containing the largest city of the standard metropolitan area from the contiguous county is four or more times the number of subscribers in the contiguous county.

In New England, the city and town are administratively more important than the county, and data are compiled locally for such minor civil divisions. Here towns and cities were the units used in defining standard metropolitan areas, and most of the criteria set forth above could not be applied. In their place, a population density criterion of 150 persons or more per square mile, or 100 persons or more per square mile where strong integration was evident, has been used.

Central Cities

Although there may be several cities of 50,000 or more in a standard metropolitan area, not all are necessarily central cities. The largest city in a standard metropolitan area is the principal central city. Any other city of 25,000 or more within a standard metropolitan area, and having a population amounting to one-third or more of the population of the principal city, is also a central city. However, no more than three cities have been defined as central cities of any standard metropolitan area. The name of every central city is included in the name of the area, with the exception that in the case of the New York-Northeastern New Jersey Standard Metropolitan Area, "Jersey City" and "Newark" are not part of the name.

Relation of Standard Metropolitan Areas to Other Specially Defined Areas

The standard metropolitan area is one of several areas which have been specially defined for purposes of separately identifying large concentrations of population in and around cities of 50,000 or more. Other areas in this class are the metropolitan district of 1940 and the urbanized area.

Since, as described in the following section on this type of area, the metropolitan district was built up from minor civil divisions and since the standard metropolitan area is generally composed of whole counties, the standard metropolitan area ordinarily includes a larger territory than the corresponding metropolitan district. There are, however, cases in which parts of the metropolitan district, as defined in 1940, do not fall within any standard metropolitan area. It is also true that in a number of cases single metropolitan districts of 1940 have been split into two standard metropolitan areas. Many metropolitan districts would have been changed, of course, had they been brought up to date for 1950.

In general, then, the two kinds of areas are not comparable. The fact that metropolitan districts were defined almost wholly in terms of density and that standard metropolitan areas include whole counties means that the population density of the standard metropolitan area is considerably lower on the average and shows more variation from one area to another. Differences between the two types of areas are relatively minor in New England and would have been even less had the metropolitan districts been brought up to date.

The urbanized area can be characterized as the physical city as distinguished from both the legal city and the metropolitan community. Urbanized areas are smaller than standard metropolitan areas and in most cases are contained in standard metropolitan areas. However, in a few instances, the fact that the boundaries of standard metropolitan areas are determined by county lines, and those of urbanized areas by the pattern of urban growth, means that there are small segments of urbanized areas which lie outside standard metropolitan areas. In general, then, urbanized areas represent the thickly settled core of the standard metropolitan areas, with the exceptions noted above. Because of discontinuities in land settlement, there are also some cases in which a single standard metropolitan area contains two urbanized areas. The lists of urbanized areas and of standard metropolitan areas also differ somewhat because the 1950 population of cities was not available in time for use in defining the former.

Population of Standard Metropolitan Areas and Their Component Parts, 1950

The aggregate population of the 168 standard metropolitan areas in continental United States in 1950 was 84,500,680, and their aggregate area was 207,583 square miles, or 7.0 percent and 56.1 percent of the total land area and total population, respectively. Of the population of 84,500,680, 49,412,792 persons, or 58.5 percent, were living in central cities, and the remaining 35,087,888 were in the areas outside central cities (tables 26 to 29).

The 14 standard metropolitan areas with a population of a million or more in 1950 had an aggregate population of 44,440,496, or more than half of the total, whereas the total population of the 17 areas of fewer than 100,000 was 1,430,076. The New York-Northeastern New Jersey Standard Metropolitan Area had the largest population (12,911,994), and the Laredo Standard Metropolitan Area, the smallest population (56,141). Somewhat more than two-thirds of the 168 standard metropolitan areas were areas with total populations ranging between 100,000 and 500,000.

There were 40 standard metropolitan areas with less than half their total population in their central cities. These areas ranged from those such as the Los Angeles, Boston, Pittsburgh, and Atlanta areas, to relatively small ones such as the Orlando, Asheville, and Jackson, Mich., areas. These standard metropolitan areas lie in 19 States, largely in the Northeast and the South, but are most numerous in 2 States—Pennsylvania and California. Of the 12 standard metropolitan areas with principal central cities in Pennsylvania, 9 have more than half their population outside their central cities, and in California 6 out of 8 areas are of this class.

Trends in Population, 1940 to 1950

The population of 84.5 million in standard metropolitan areas represents an increase of 15.2 million, or 22.0 percent, over the 69.3 million inhabitants of those areas in 1940 (table 27). The rate of increase in the population of central cities during the decade, 13.9 percent, was slightly less than that for the country as a whole. In the outlying parts of standard metropolitan areas, however, the population increased by about 9.2 million, or 35.5 percent of the 1940 population of these areas. Standard metropolitan areas stand in marked contrast then with the remainder of the country in which the rate of increase was only 6.1 percent. Of the increase of about 19 million for the United States during the decade, about four-fifths occurred in standard metropolitan areas and nearly one-half occurred outside the central cities.

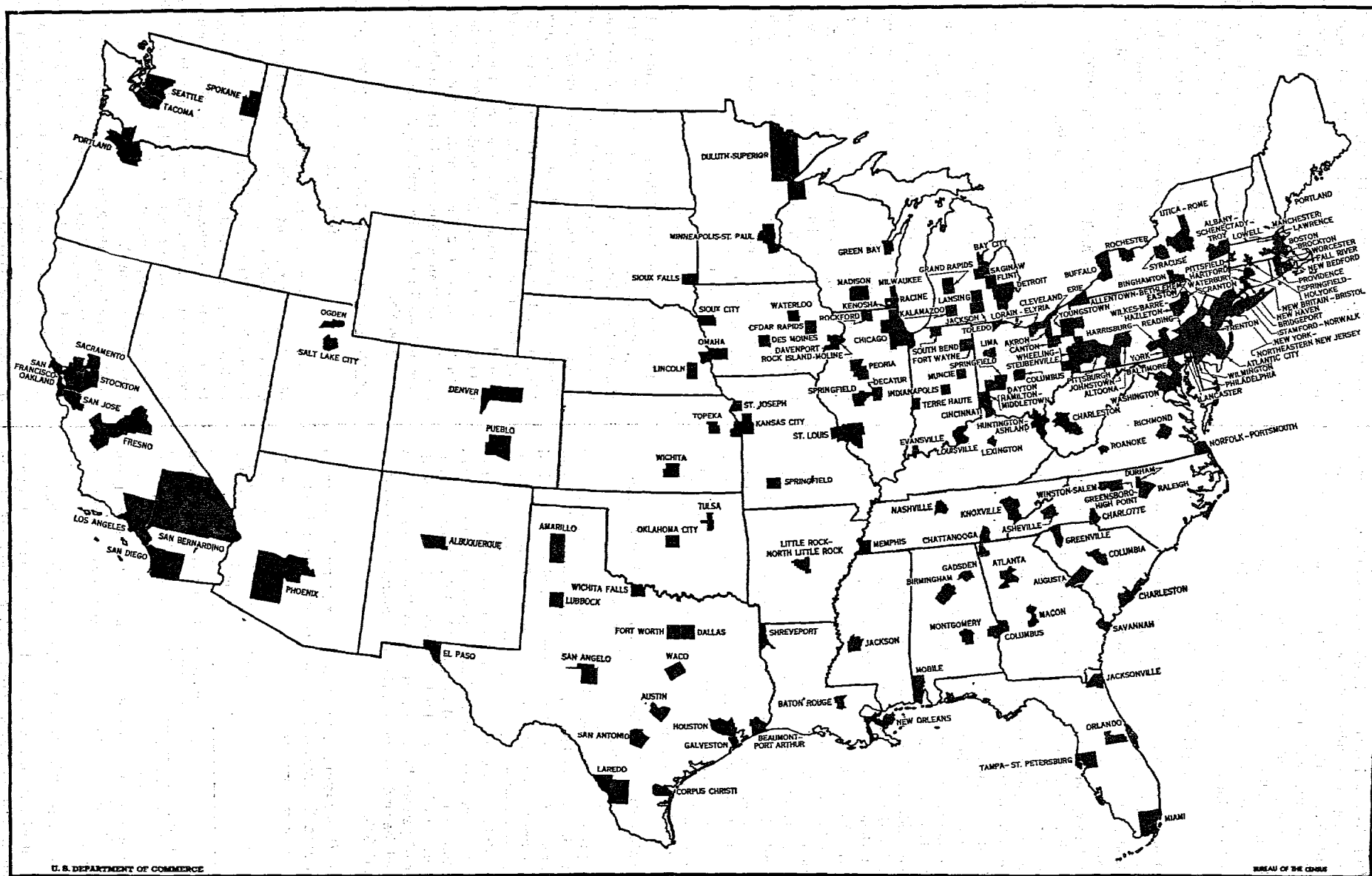
The population increased most rapidly in those standard metropolitan areas that ranged in size in 1950 from 500,000 to 1,000,000, where the rate of increase was 28.4 percent (table M). The rate of increase for standard metropolitan areas of 1,000,000 or more (19.0 percent) was the lowest. The figures for areas in the size-classes 100,000 to 250,000 and 250,000 to 500,000 indicate increases of about 24 percent, and the rate of growth in areas of less than 100,000 (22.5 percent) was about the same as that for all the areas.

TABLE M.—POPULATION IN GROUPS OF STANDARD METROPOLITAN AREAS CLASSIFIED ACCORDING TO SIZE: 1950 AND 1940

Size of areas	Number of areas	Population	
		1950	1940
Total (168 areas).....	168	84,500,680	69,279,675
Areas of 1,000,000 or more.....	14	44,440,496	37,351,783
Areas of 500,000 to 1,000,000.....	10	12,398,635	9,657,043
Areas of 250,000 to 500,000.....	44	14,594,878	11,736,609
Areas of 100,000 to 250,000.....	74	11,636,595	9,366,468
Areas under 100,000.....	17	1,430,076	1,167,682

Of the 168 standard metropolitan areas, 162 gained population between 1940 and 1950 and 6 lost population. The areas with population losses were Altoona, Johnstown, Scranton, Wilkes-Barre—

Figure 13.—STANDARD METROPOLITAN AREAS: 1950



Hazleton, Duluth-Superior, and Wheeling-Steubenville. In each of these areas except the Duluth-Superior area, the central cities also lost population. Of the 162 standard metropolitan areas that gained population, 91, or slightly more than half, had increases of 20 percent or more, and 46, or slightly more than a fourth of all standard metropolitan areas, had increases of one-third or more. One area, that of Albuquerque, more than doubled in population with an increase of 109.9 percent.

Population Density

In 1950, the population per square mile of land area for all of the 168 standard metropolitan areas was 407 as compared with 51 for the United States as a whole (table 29). There were three standard metropolitan areas—Milwaukee, New York-Northeastern New Jersey, and Boston—with more than 3,000 inhabitants per square mile. At the other end of the scale eight standard metropolitan areas—Amarillo, Fresno, San Angelo, Pueblo, Phoenix, Duluth-Superior, Laredo, and San Bernardino—had a population density of less than 50 per square mile. This extreme variation in density among standard metropolitan areas is an indication, of course, of the limitations of counties as a basis for defining such areas. The area of San Bernardino County, Calif., for example, is greater than that of any of the New England States except Maine, and it is more than 5 times as large as the New York-Northeastern New Jersey Standard Metropolitan Area and 84 times as large as the Milwaukee Standard Metropolitan Area. In short, in those parts of the country where counties are large the use of counties yields only a very rough approximation of genuinely metropolitan areas. There was also considerable variability, however, in density among the central cities of standard metropolitan areas. Among central cities the number of persons per square mile ranged from 1,304 in the Pittsfield Standard Metropolitan Area to 24,537 in the New York-Northeastern New Jersey area. For areas outside of central cities, this figure ranged from 1 in the Laredo Standard Metropolitan Area to 2,172 in the Boston area.

Relationship Between Population in Standard Metropolitan Areas and Urbanized Areas

Table N presents a cross-classification of the population by residence inside and outside standard metropolitan areas and urbanized areas. Of the 84,500,680 persons living in standard metropolitan areas, 68,989,014, more than four-fifths, were also residents of urbanized areas. On the other hand, only 260,134 persons were living in urbanized areas but outside standard metropolitan areas. There were no standard metropolitan areas established for Muskegon, Mich., and Fort Smith, Ark. If the population of the urbanized areas established for these cities is excluded, the number of persons living in segments of the urbanized areas which extend beyond the boundaries of standard metropolitan areas was 118,843.

TABLE N.—POPULATION INSIDE AND OUTSIDE URBANIZED AREAS AND STANDARD METROPOLITAN AREAS: 1950

Location	Population	Inside standard metropolitan areas	Outside standard metropolitan areas
Total.....	150,697,361	84,500,680	66,196,681
Inside urbanized areas.....	68,240,148	68,989,014	260,134
Outside urbanized areas.....	81,448,213	15,511,666	65,936,547

¹ Includes population (141,291) of 2 urbanized areas which are located entirely outside of standard metropolitan areas.

² Includes population (1,732,845) of 18 standard metropolitan areas which contain no urbanized areas.

Standard Metropolitan Areas in Hawaii and Puerto Rico

In the Territories and possessions of the United States, there are four standard metropolitan areas, none of which had a population

as great as half a million (table 27). The largest of the four areas was that of San Juan-Río Piedras, P. R., which had a population of 465,741, and was slightly smaller in population than the Memphis Standard Metropolitan Area, which ranked thirty-sixth in size in continental United States.

The Honolulu Standard Metropolitan Area has a population of 353,020, slightly less than that of the Wheeling-Steubenville area, which ranked forty-eighth in size in continental United States. It is the only standard metropolitan area in the Territory of Hawaii and contains more than 70 percent of the population of the Territory. The other two standard metropolitan areas outside continental United States are the Ponce and Mayagüez areas in Puerto Rico, with 126,810 and 87,307 inhabitants, respectively

1940 METROPOLITAN DISTRICTS

Definition

Metropolitan districts were defined for every city of 50,000 inhabitants or more in 1940, two or more such cities sometimes being in one district. In general, metropolitan districts included, in addition to the central city or cities, all adjacent and contiguous minor civil divisions or incorporated places having a population density of 150 or more per square mile. Since the metropolitan districts are being replaced by the standard metropolitan areas, no attempt was made to redefine the 1940 metropolitan districts or to define metropolitan districts for those cities which attained a population of 50,000 or more in 1950. Insofar as possible, the 1950 figures represent the population of the territory included in the metropolitan districts in 1940, as an effort was made to use in the enumeration the 1940 limits of the metropolitan districts even though the pertinent minor civil divisions might have changed their boundaries. For the constituent parts of the metropolitan districts in 1940, see reports of the Sixteenth Census (1940), *Population*, Vol. I.

Trends in Population, 1940 to 1950

The 1950 population of the 140 metropolitan districts of 1940 was 76,203,556, an increase of 13,237,783, or 21.0 percent, over the 1940 population. Almost one-fifth of this increase was contributed by the Los Angeles and New York-Northeastern New Jersey Metropolitan Districts. All but four of the districts gained. The rates of change ranged from a gain of 90.5 percent for Corpus Christi to a loss of 14.0 percent for Scranton-Wilkes-Barre. All but 1 of the 17 districts which gained more than 50 percent were located in the South and West and were heavily concentrated in California and Texas. An additional 24 districts gained more than a third but less than a half. None of the districts which gained more than a third were in the Northeast. Three of the four metropolitan districts which lost population were located in Pennsylvania.

STATE ECONOMIC AREAS AND ECONOMIC SUBREGIONS

State Economic Areas

State economic areas are relatively homogeneous subdivisions of States. They consist of single counties or groups of counties which have similar economic and social characteristics. The boundaries of these areas have been drawn in such a way that each State is subdivided into relatively few parts, with each part having certain significant characteristics which distinguish it from adjoining areas. The country has been subdivided into 501 State economic areas. In publications from the Population Census, however, some of the thinly populated agricultural areas have been combined.

The grouping of the 3,103 counties or equivalent subdivisions of the United States into State economic areas is the product of a special study sponsored by the Bureau of the Census in cooperation with the Bureau of Agricultural Economics and several State and private agencies. The delimitation procedure was devised by Dr. Donald J. Bogue of the Scripps Foundation for

Research in Population Problems, on loan to the Bureau of the Census.⁶

Relation to Standard Metropolitan Areas

The combination of counties into State economic areas has been made for the entire country, and in this process the larger standard metropolitan areas (those with a population of 100,000 or more in 1940) have been recognized as metropolitan State economic areas. When a standard metropolitan area is located in two or more States, each State part becomes a metropolitan State economic area. In New England this correspondence does not exist because State economic areas are composed of counties whereas standard metropolitan areas are built up from towns. Here, counties with more than half their population in a standard metropolitan area are classified as metropolitan. Likewise, because standard metropolitan areas were set up on the basis of the 1950 population and State economic areas on the basis of the 1940 population, there are some standard metropolitan areas which are not recognized in the State-economic-area classification and one metropolitan State economic area (Michigan C) is not recognized in the standard-metropolitan-area classification.

Uses

In the establishment of State economic areas, factors in addition to industrial and commercial activities were taken into account. Demographic, climatic, physiographic, and cultural factors, as well as factors pertaining more directly to the production and exchange of agricultural and nonagricultural goods, were considered. The net result then is a set of areas, intermediate in size between States, on the one hand, and counties, on the other, which are relatively homogeneous with respect to a large number of characteristics. Areas of this type are well adapted for use in a wide variety of studies in which State data are neither sufficiently refined nor homogeneous and in which the manipulation of county data presents real difficulty. Moreover, a standard set of areas, such as these, makes possible studies in widely different fields on a comparable area basis.

Economic Subregions

These areas represent combinations of State economic areas. By this combination, the 501 State economic areas are consolidated into a set of 119 areas which cut across State lines but which preserve to a great extent the homogeneous character of the State economic areas. The economic subregions are perhaps best adapted to those analyses of the geographic distribution of characteristics of the population within the country as a whole in which there is no need for the recognition of State boundaries and in which the greater refinement permitted by the larger number of areas is desirable. The publication of data from the 1950 Census in several fields has been planned for economic subregions.

⁶ For further discussion and materials on State economic areas and their uses, see U. S. Bureau of the Census, *State Economic Areas*, U. S. Government Printing Office, Washington, D. C., 1951.

Figures on the total population of economic subregions and their component State economic areas are presented in table 31. A map showing the boundaries of State economic areas and economic subregions appears on page 32. In table 19, which presents statistics for counties, each county is identified by the number or letter designation of the State economic area into which it falls.

CENSUS TRACTS

Definition

Census tracts are small areas, having a population generally between 3,000 and 6,000, into which certain large cities (and in some cases their adjacent areas) have been subdivided for statistical and local administrative purposes, through cooperation with a local committee in each case.⁷ The tract areas are established with a view to approximate uniformity in population, with some consideration of uniformity in size of area, and with due regard for physical features. Each tract is designed to include an area fairly homogeneous in population characteristics. In cities where ward lines are infrequently changed, the tracts may form subdivisions of wards; but the tracts are usually laid out without regard to ward boundaries. The tracts are intended to remain unchanged from census to census and thus to make possible studies of changes in social and economic characteristics of the population within small sections of the city.

Areas Tracted in 1950

There are 12,633 tracts in the 69 tracted areas for which 1950 Census data are available on this basis. Tract data were tabulated for 8 cities in 1910 and 1920, 18 cities in 1930, and 60 areas in 1940. Figures on the total population by tracts have been published for each of the 1950 areas in Series PC-10, *Advance Reports*. The characteristics of the population and housing of census tracts will be published as Volume III, *Census Tract Statistics*, for all but a few of the 69 areas. Table 33 presents the number of tracts in the city and in the adjacent part of each tracted area.

SPECIAL CENSUSES

The Bureau of the Census has an established procedure for taking a special census at the request and expense of a local community. Generally, the areas for which special censuses are taken are those which have experienced an unusual increase in population either because of changes in political boundaries or because of relatively high in-migration. The areas in which special censuses were conducted by the Bureau of the Census between April 1, 1940, and April 1, 1950, are shown in table 32; more than 400 separate special censuses were conducted during the decade 1940 to 1950.

The Bureau of the Census has published separately the results of these special censuses in varying detail in *Current Population Reports*, Series P-SC and P-28.

⁷ For a further discussion of census tract data and their uses, see U. S. Bureau of the Census, *Census Tract Manual*, 3d edition, January 1947.

POPULATION CHARACTERISTICS

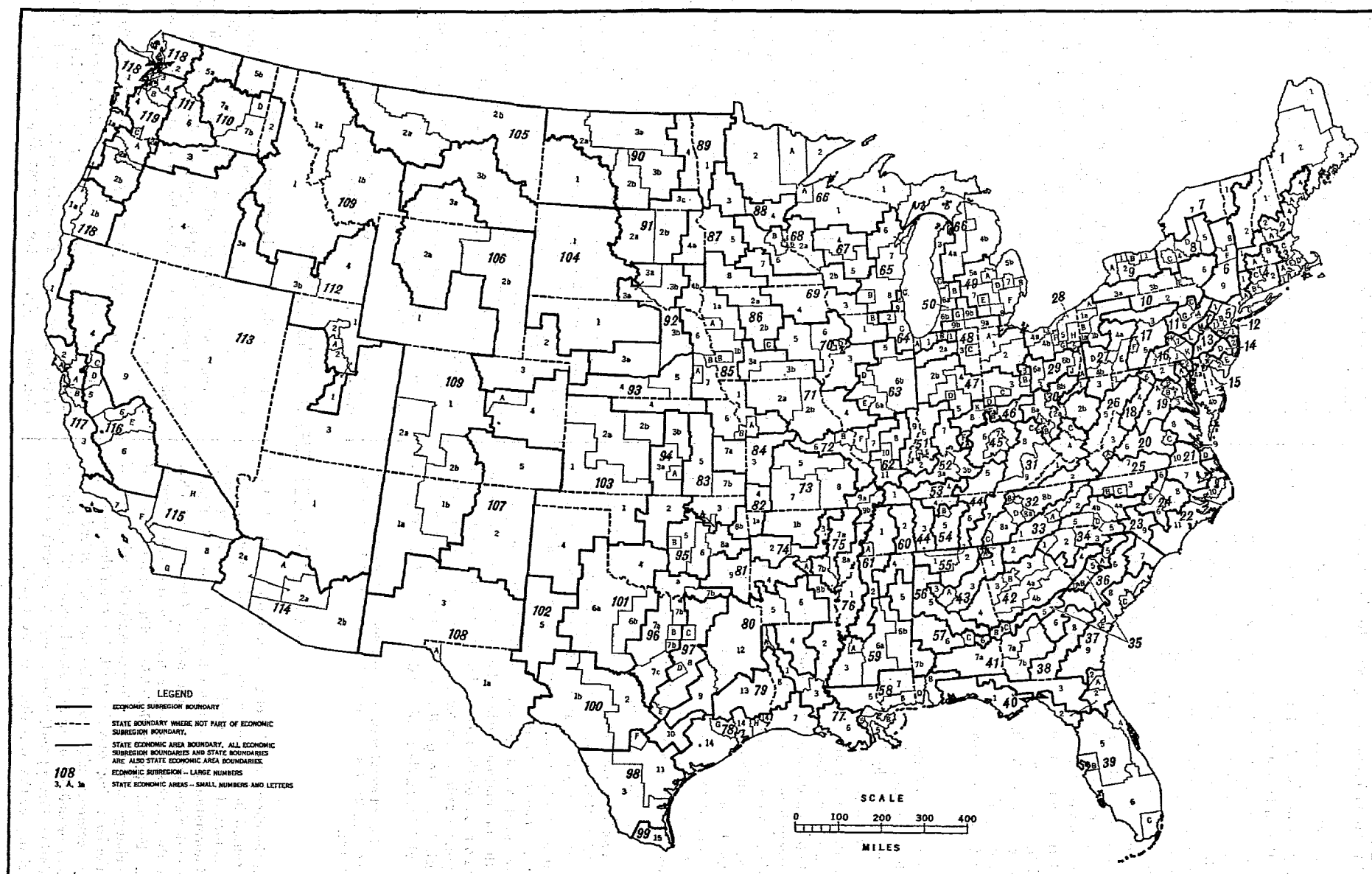
Statistics on the characteristics of the population of the United States are presented in Chapters B and C of this volume. The following text summarizes the available evidence on the quality of the census information and provides, in graphic form, in figures 15 to 33, the major summary data based on Chapter B tables. Definitions of the pertinent concepts used in the 1950 Census are also given. Several of these definitions differ from those used in 1940. The changes were made after consultation with users of census data in order to improve the statistics, even though it was recognized that comparability would be adversely affected. In many cases the new definitions were tested in connection with the Current Population Survey; and, where feasible, measures of the impact of the change on the statistics were developed.

The schedule used in enumerating the population in the 1950 Census is reproduced in the Appendix. *The Enumerator's Reference Manual* supplied the census enumerators with instructions on the method of filling out the schedule and on the determination of what persons should be enumerated in their respective districts. The major part of these instructions is also reproduced in the Appendix.

QUALITY OF DATA ON CHARACTERISTICS

The 1950 Census is the first for which there is any substantial body of evidence on the quality of the statistics on characteristics of the population. This evidence is based on the Post-Enumeration Survey (p. 7), the Current Population Survey (p. 1), and

Figure 14.—ECONOMIC SUBREGIONS AND STATE ECONOMIC AREAS: 1950



DEPARTMENT OF COMMERCE

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on comparisons with other independent sources. Wherever available these indications of quality are cited in connection with the discussion of the specific characteristic in the following pages. As a guide to users of the data, the text emphasizes the limitations of the statistics and the specific problems that might affect interpretation in certain types of analysis. In general, however, it appears that census enumerators were successful in obtaining sufficiently adequate reports concerning the characteristics of the population for most purposes for which census results are used. Many of the difficulties arose from failure to report accurately on unusual or complicated cases or to obtain information on minor activities.

The Post-Enumeration Survey provides measurements of total error in the census statistics on characteristics of the population that are made up of several parts: (1) Errors arising from faulty coverage of persons in the census; (2) errors arising from misreporting of a particular characteristic; and, for some subjects, (3) errors arising from misreporting of age when it is used as a control upon the reporting or tabulating of the given characteristic. The Post-Enumeration Survey, like other quality checks based on reinterviews, reveals considerable variability of response as between one interview and another. In general, the results suggest that the original census report frequently differed from the check enumeration report but for most characteristics these differences tend to cancel each other. As a consequence, the distributions as shown by the census data and by the Post-Enumeration Survey are similar for most subjects. The percentage of either net or gross errors depends upon the number of class intervals or other categories chosen for comparing the distributions. Analysis of the effect of the errors on statistics showing cross-classifications is still incomplete, but will appear in the full report on the accuracy of the 1950 Census.

Several factors affect the interpretation of the measurement of differences between the census and the Post-Enumeration Survey. As stated earlier, the available Post-Enumeration Survey data did not include information for persons in hotels, in institutions, and other large nondwelling unit quarters. Such persons are typically difficult to interview and generally differ from persons in private households with respect to age, income, occupation, and other characteristics. Because of this factor, the degree of accuracy in census data indicated by the check survey may be somewhat overstated.

For various reasons the Post-Enumeration Survey did not start until the end of July 1950.¹ The lapse of time between the original census and the check interview was of little consequence in evaluating the accuracy of such items as age, nativity, and education, but may affect the comparisons of the original and second reports on the job held during the census week or the recollection of income received during 1949. For example, some of the differences in descriptions of occupation and industry undoubtedly reflect actual differences in jobs and not variations in the descriptions of the same job.

Finally, the Post-Enumeration Survey estimates are based on a small sample, and in some cases, have relatively large sampling errors which do not permit detailed analysis of the data.

INTERNAL CONSISTENCY OF DATA

In the 1950 Censuses of Population and Housing, sampling procedures were used both in the enumeration, to supplement the information obtained from the total population, and in tabulation of the results. For a description of the sample, estimates of the sampling variability, and method of obtaining improved estimates, see the section on "Reliability of sample data." The statistics in Chapter B were based on complete counts of the population, except for those characteristics, such as school enrollment and income,

¹ For a further discussion of the plan of the Post-Enumeration Survey, see Marks, Mauldin, and Nisselson, "The Post-Enumeration Survey of the 1950 Censuses: A Case History in Survey Design," *Journal of American Statistical Association*, June 1953, pp. 220-243.

that were reported for only a 20-percent sample of the population. For Chapter C, only the tabulations relating to occupation and industry are based on complete counts. All the other tabulations are confined to the 20-percent sample. Accordingly, because of sampling variability and certain small biases, described in the section on "Reliability of sample data," differences may be expected between figures obtained from the complete count and the corresponding figures based on the 20-percent sample.

Some differences between figures for corresponding items in different tables are caused by errors in the tabulation processes. These errors include machine failure, loss of punch cards, and other types. (The net effect is a tendency toward slightly smaller counts of the same item in successive tabulations.) Experience has shown that in mass operations two tabulations of a set of punch cards are not likely to yield precisely identical results. Therefore, tolerance limits allowing for insignificant variations were established in advance for each tabulation. If the differences between the results of two tabulations fell within these limits, nothing was done to bring them into exact agreement with each other. This procedure was adopted in order to provide a greater volume of data within the limits of time and resources available. In earlier censuses, however, the results of different tabulations were adjusted to bring them into exact agreement.

The Chapter B tabulations for four States (Alabama, Iowa, Louisiana, and Virginia) were carried out on electronic equipment that differed from the conventional machines. Adaptation of the standard procedures for these States resulted in different treatment of certain types of cases. For example, some cards were erroneously included in the sample tabulations on education and on residence in 1949 and were classified with the group for whom information was not reported.

MEDIANS

Medians are presented in connection with the data on age, education, and income which appear in this bulletin. The median is the value which divides the distribution into two equal parts—one-half of the cases falling below this value and one-half of the cases exceeding this value. In the computation of medians, cases for which the information was not reported are omitted. The median income for families and unrelated individuals is based on the total number reporting, including those reporting no income.

FARM POPULATION—RURAL AND URBAN

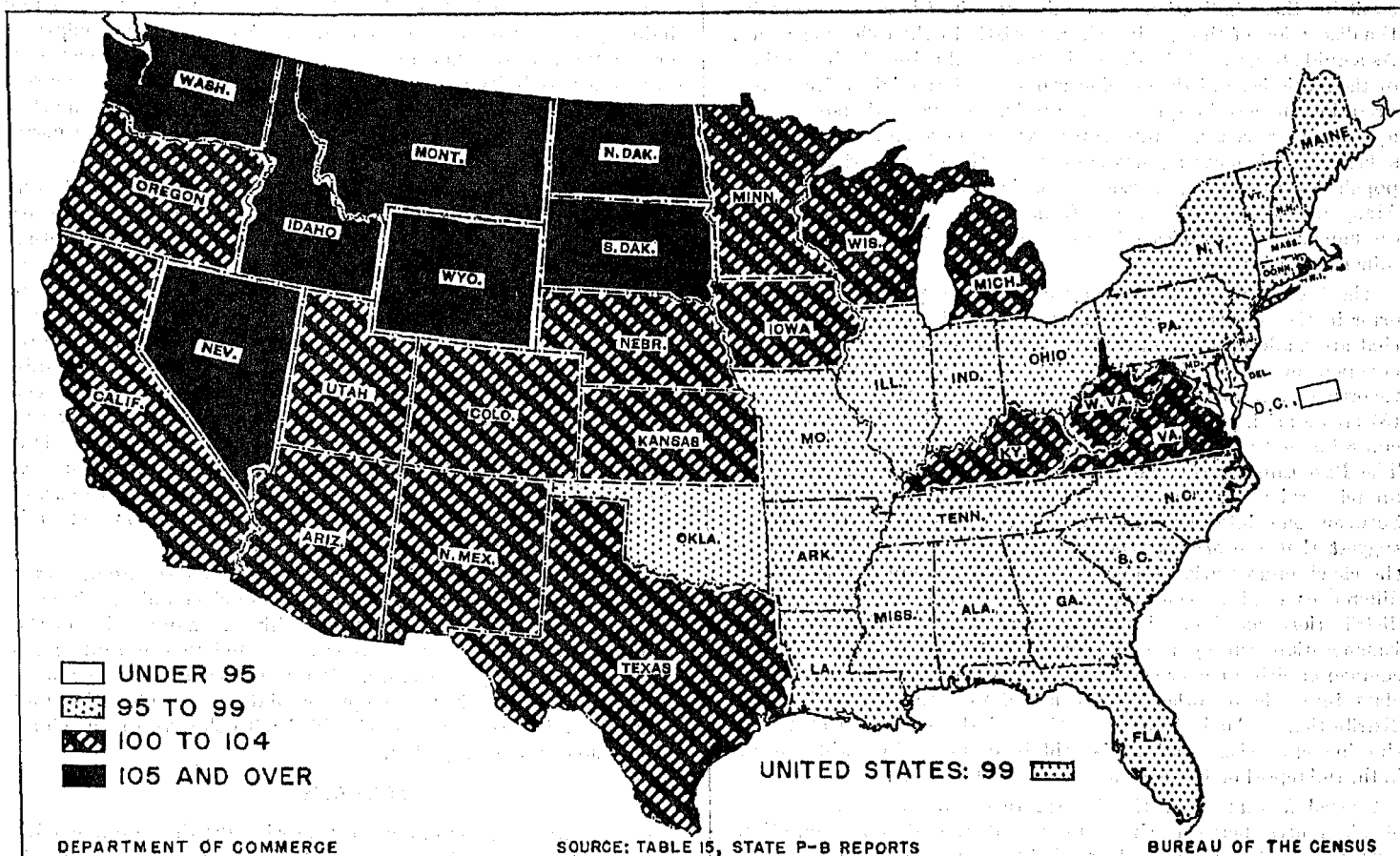
Definitions

The farm population for 1950 includes all persons living on farms, as determined by the question, "Is this house on a farm (or ranch)?" The enumerators were also instructed to classify persons living on what might have been considered farm land as nonfarm if they paid cash rent for their homes and yards only. Persons in institutions, summer camps, "motels," and tourist camps were classified as nonfarm residents.

Farm residence is therefore determined without regard to occupation. The classification depends upon the respondent's conception of what is meant by the word "farm," and consequently reflects local usage rather than the uniform application of an objective definition. For this reason, there is considerable variability of response among families living in areas where farm operation is part time or incidental to other activities.

The population living on farms has never, of course, been identical with the population dependent on agriculture; but there is some evidence that the number of persons dependent on agriculture has been decreasing more rapidly than the total number of farm residents. Some workers living on farms have both an agricultural and a nonagricultural job; others shift from agriculture to nonagricultural work with the season. Some farm households contain both an agricultural and a nonagricultural worker. Finally, some farm households do not contain any agricultural workers and conversely some agricultural workers, including

Figure 15.—MALES PER 100 FEMALES IN THE TOTAL POPULATION, BY STATES: 1950



farmers and farm laborers, do not live on farms. According to the 1950 Population Census, 27 percent of employed workers living on rural farms were working in nonagricultural industries. On the other hand, 18 percent of the workers employed in agriculture did not live on rural farms. These data on industrial attachment referred to only the job the worker held (or to the one at which he worked the greatest number of hours) during the week preceding his enumeration, as explained in the section on "Occupation, industry, and class of worker." Further evidence on this point is provided by data on major source of earnings over the period of a year. According to the Current Population Survey, about 85 percent of the families living on rural farms in April 1951 reported that nonfarm work was the major source of their earnings in 1950. Apparently the distinctions between the farm and non-farm populations have become somewhat blurred, but large differences in way of life still persist and a majority of farm residents are dependent on agriculture for their livelihood.

In this volume, most of the data are presented for the rural-farm population rather than for the total farm population, since virtually all the farm population is located in rural areas. Only 1.2 percent of the farm population lived in urban areas in 1950.

Comparability

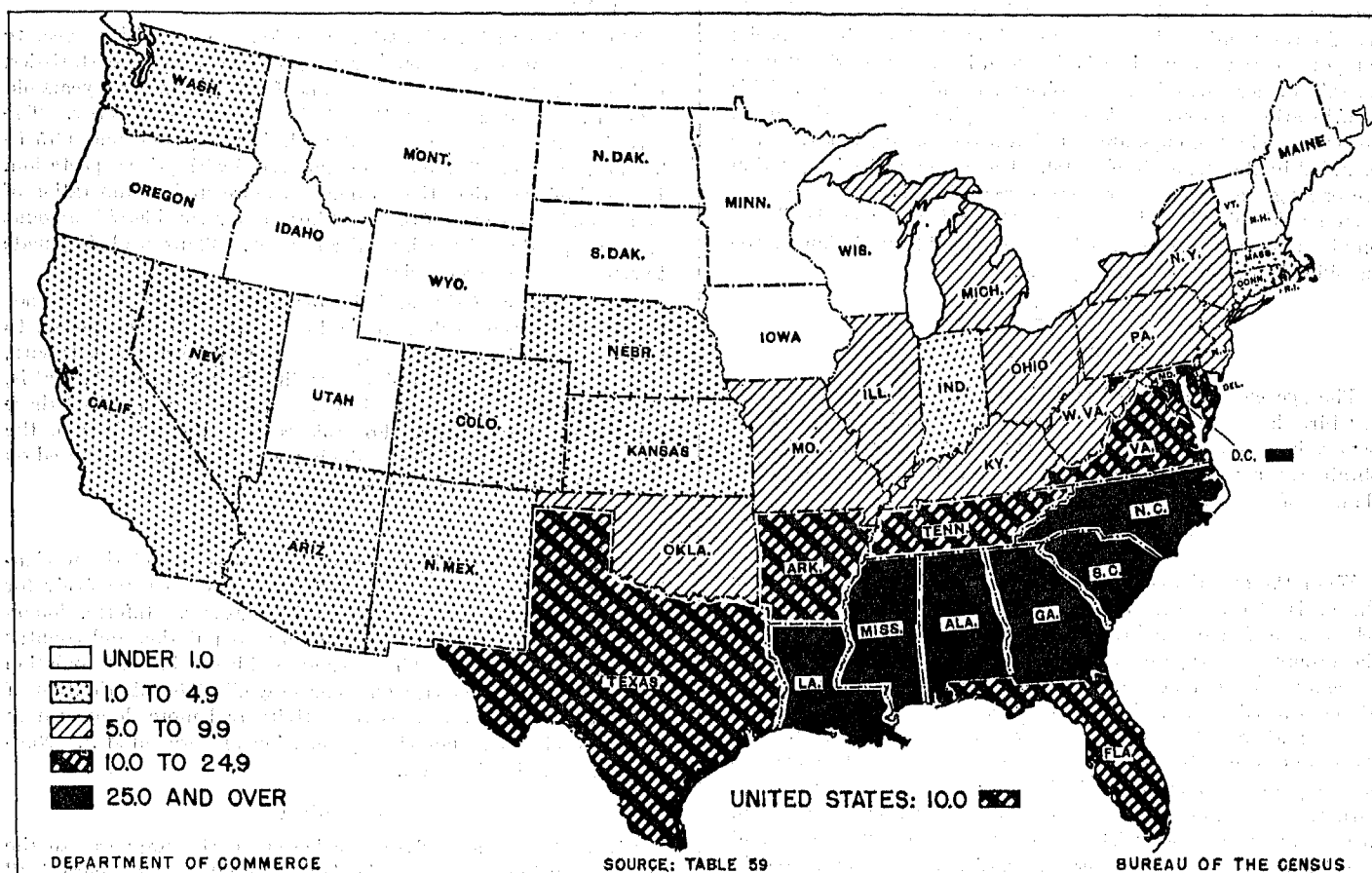
In the 1940 and 1930 Censuses of Population, as in 1950, the farm population was defined to include all persons living on farms, without regard to occupation. In 1940, the decision as to whether the household lived on a farm was left to the enumerator and no specific definition given him. In 1930, the instruction to the enumerator read, "If the family lives on a farm, that is, a place for which a farm schedule is made out *and which is also locally regarded as a farm*, the answer should be 'Yes,' even though no member of the family works on the farm. It is a question here of residence, not occupation." In the 1940 and 1930 Censuses,

there was no specific exclusion of persons paying cash rent for their homes and yards only, nor of persons living in institutions, summer camps, etc. Moreover, in the 1950 Census, but not in earlier censuses, the enumerators in rural areas were specifically instructed to base the farm-nonfarm classification on the respondent's answer to the question, "Is this house on a farm?" For the United States as a whole, there is evidence from the Current Population Survey that the farm population in 1950 would have been somewhat larger had the 1940 procedure been used, but the change in procedure accounts for only a minor part of the indicated change in the size of the farm population over the decade. Hence the 1950 and 1940 Census levels are only roughly comparable, and the indicated declines are probably somewhat exaggerated in most areas.

Estimates of the population living on farms have been provided by the Current Population Survey in the years following the 1940 Census. For April 1950, the revised estimate from the Current Population Survey was about 1,700,000 higher than the final 1950 Census count, although the same definition was specified for both enumerations. This difference was well in excess of the sampling error of the estimate. Examination of the returns for identical households in the two enumerations revealed that the largest part of the discrepancy (approximately 1½ million) was due to differences in classification. Although there is no conclusive evidence on the relative validity of the Current Population Survey as compared with the census classification of particular households as farm or nonfarm, investigations in other subject-matter fields have demonstrated that the more experienced and better-trained Current Population Survey enumerators were more likely to treat marginal cases in a correct fashion.

The extensive revisions required in the farm population series over the years and the large Current Population Survey-census difference reflect the serious nature of the measurement problem in this field. Contributing substantially to this problem has been

Figure 16.—PERCENTAGE OF NEGROES IN THE TOTAL POPULATION, BY STATES: 1950



the relative vagueness of the various definitions of farm residence which have been used in censuses and in enumerative surveys. The definition adopted for the 1950 Census was initially and may still be regarded as a significant improvement over those used previously. Regardless of its theoretical merits, however, it apparently does not embody the objectivity required to obtain uniform and consistent measurements. The whole question of the comparability of the census and Current Population Survey figures is dealt with in considerable detail in: U. S. Bureau of the Census and U. S. Bureau of Agricultural Economics, *Farm Population*, Series Census-BAL, No. 16, "Revised Estimates of the Farm Population of the United States: 1910 to 1950," March 9, 1953.

RURAL-NONFARM POPULATION

The rural-nonfarm population includes all persons living outside urban areas who do not live on farms. In 1940 and earlier, persons living in the suburbs of cities constituted a large proportion of the rural-nonfarm population. The effect of the new urban-rural definition has been to change the classification of a considerable number of such persons to urban. The rural-nonfarm population is, therefore, somewhat more homogeneous than under the old definition. It still comprises, however, persons living in a variety of types of residences, such as isolated nonfarm homes in the open country, villages and hamlets of fewer than 2,500 inhabitants, and some of the fringe areas surrounding the smaller incorporated places.

RACE AND COLOR

Definitions

The concept of race as it has been used by the Bureau of the Census is derived from that which is commonly accepted by the general public. It does not, therefore, reflect clear-cut definitions of biological stock, and several categories obviously refer to na-

tionalities. Although it lacks scientific precision, it is doubtful whether efforts toward a more scientifically acceptable definition would be appreciably productive, given the conditions under which census enumerations are carried out. The information on race is ordinarily not based on a reply to questions asked by the enumerator but rather is obtained by observation. Enumerators were instructed to ask a question when they were in doubt. Experience has shown that reasonably adequate identification of the smaller "racial" groups is made in areas where they are relatively numerous but that representatives of such groups may be misclassified in areas where they are rare.

Color.—The term "color" refers to the division of population into two groups, white and nonwhite. The group designated as "nonwhite" consists of Negroes, Indians, Japanese, Chinese, and other nonwhite races. Persons of Mexican birth or ancestry who were not definitely Indian or of other nonwhite race were classified as white in 1950 and 1940. In the 1930 publications, Mexicans were included in the group "Other races," but the 1930 data published in this report have been revised to include Mexicans in the white population.

Negro.—In addition to full-blooded Negroes, this classification includes persons of mixed white and Negro parentage and persons of mixed Indian and Negro parentage unless the Indian blood very definitely predominates or unless the individual is accepted in the community as an Indian.

Other races.—This category includes Indians, Japanese, Chinese, and other nonwhite races.

Mixed Parentage

Persons of mixed parentage are classified according to the race of the nonwhite parent and mixtures of nonwhite races are generally classified according to the race of the father.

In 1950, for the first time, an attempt was made to identify persons of mixed white, Negro, and Indian ancestry living in certain communities in the eastern United States in a special category so that they might be included in the categories "Other races," rather than being classified as white or Negro. This identification was accomplished with varying degrees of success, however. These groups are not shown separately, but they are included in the "Nonwhite" total. The communities in question are of long standing and are locally recognized by special names, such as "Siouian" or "Croatan," "Moor," and "Tunica." In previous censuses, there had been considerable variation in the classification of such persons by race.

AGE

Definition

The age classification is based on the age of the person at his last birthday as of the date of enumeration, that is, the age of the person in completed years. The enumerator was instructed to obtain the age of each person as of the date of his visit rather than as of April 1, 1950.

Assignment of Unknown Ages

When the age of a person was not reported, it was estimated on the basis of other available information such as marital status, school attendance, employment status, age of other members of the family, and type of household. Age was estimated by this procedure in the 1950 Census for 0.19 percent of the population of the United States. This method of assigning unknown ages on the basis of related information was used for the first time in the 1940 Census when estimates of age were made for 0.16 percent of the population of the United States. In previous censuses, with the exception of 1880, persons of unknown age were shown in a separate category. The summary totals for "14 years and over" and "21 years and over" for earlier censuses presented in this volume include all persons of "unknown age" since there is evidence that most of the persons for whom age was not reported were in the age classes above these limits.

Quality of Data

According to the Post-Enumeration Survey, the quality of 1950 Census statistics on the age distribution of the population is generally good. The Post-Enumeration Survey verified the 1950 Census report on age by means of a more detailed question on exact date of birth and by on-the-spot probing of discrepancies between the two reports. In addition to age reporting errors revealed in this fashion, the Post-Enumeration Survey also shows the effect of net underenumeration of the population on the age distribution.

The net age reporting error, resulting from erroneous reporting of age for persons counted in the census, is not in the same direction for all 5-year age groups. In those from 5 to 49 years, there is generally a net overstatement resulting from age misreporting, whereas in the remainder of the age span there is a net understatement. This pattern is contrary to the expectation that there would be an overstatement in the age group 65 and over due to exaggeration of age for older persons. The absolute amounts of net age misreporting are small.

The estimated net underenumeration for the entire population was 1.4 percent. (See p. 7.) Although the Post-Enumeration Survey sample does not permit making reliable estimates of differences in net underenumeration among specific age groups, it does indicate that the net underenumeration was less than the average for the ages 15 to 39.

The combination of underenumeration and age reporting errors results generally in small net undercounts in the 5-year age groups. The largest undercounts occur in the age groups under 5 years and 45 years and over. In general, the effect of the net undercounts on the census age distribution is slight. For example,

the median age shown in the census appears to be low by only about 0.1 year.

The findings of the Post-Enumeration Survey with respect to age do not agree completely with evidence from vital statistics, which point to a greater undercount of children under 5 years old than that estimated by the Post-Enumeration Survey. The Post-Enumeration Survey results relating to young males 15 to 34 and to persons 65 and over do not accord with prior expectation. It was believed that there would be more underenumeration of young males (because of their mobility) and a considerable amount of overreporting of age by older persons. Plans are being made to study these discrepancies.

The accuracy of the statistics for single years of age was not measured by the Post-Enumeration Survey. There appears to be a tendency in the 1950 Census data, as in earlier census data, toward the overreporting of ages ending in 0, 2, 5, and 8, that is, the frequencies for these single years of age tend to exceed those for the adjoining years. For this reason, the medians in the tables presenting statistics in single years of age are computed on the basis of 5-year age groups.

NATIVITY

Because of the declining numerical importance of the foreign-born population, nativity has not been used so extensively for cross-classifications in 1950 as in earlier censuses. Information on the nativity and parentage of the white population and country of origin of the foreign-white stock are published in the *Population Special Report*, "Nativity and Parentage." The distribution of the separate nonwhite races by nativity and more detailed data on the foreign-born nonwhite population are presented in "Non-white Population by Race."

Definitions

The statistics on nativity are based on the responses to the question, "What State (or foreign country) was he born in?" asked of all persons. In this volume, the population is classified according to place of birth into two basic groups, native and foreign born. A person born in the United States or any of its Territories, possessions, etc., is counted as native. Also included as native is the small group of persons who, although born in a foreign country or at sea, were American citizens by birth because their parents were American citizens. Since the Republic of the Philippines was established as an independent country in 1946, persons living in the United States who had been born in the Philippine Islands were classified as foreign born in the 1950 Census whereas in earlier censuses they had been classified as native. The small number of persons for whom place of birth was not reported were assumed to be native.

Quality of Data

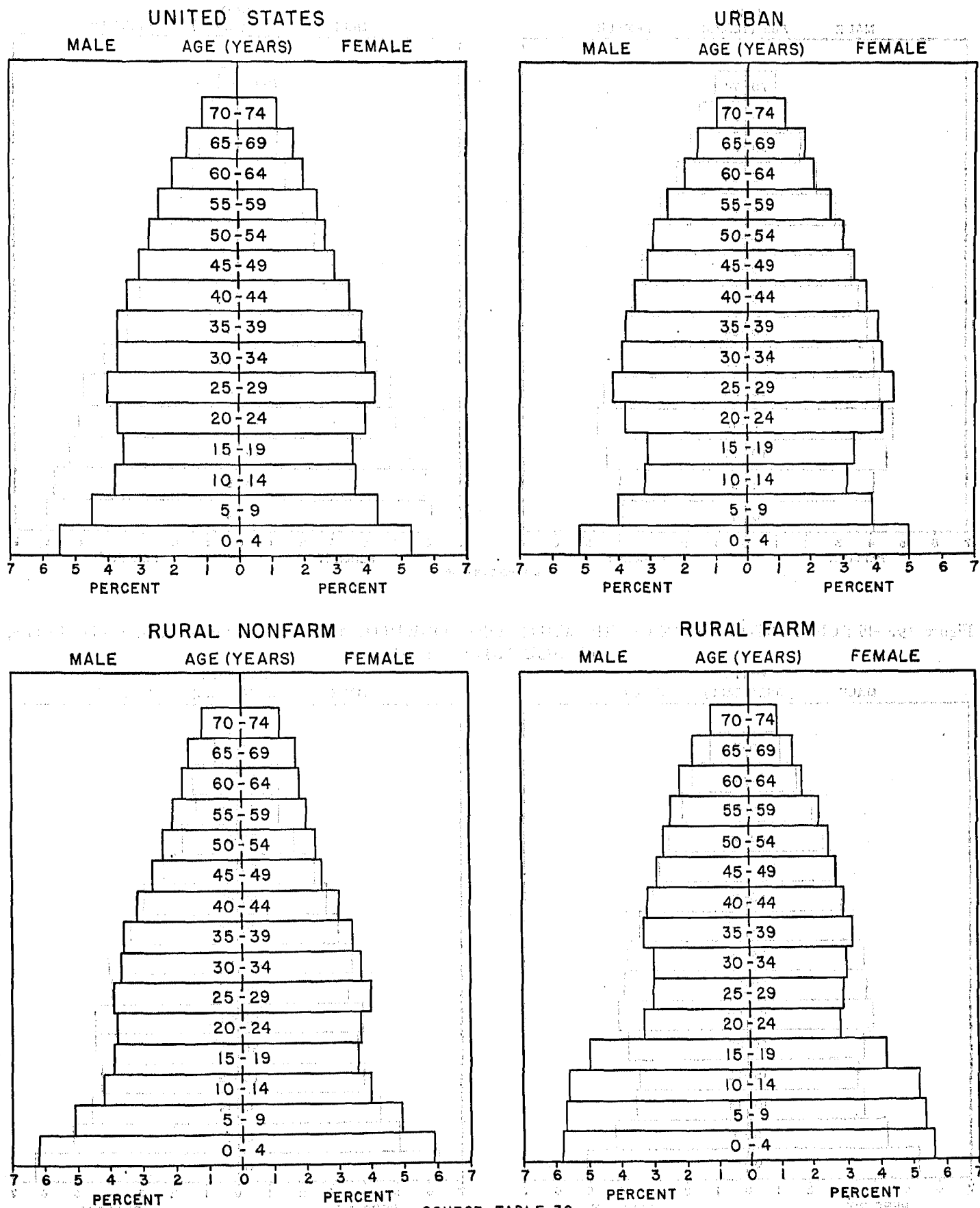
The data on nativity have a high degree of accuracy. According to the Post-Enumeration Survey, the estimated net underenumeration rates are 1.4 percent for the native population and 0.6 percent for the foreign born. Additional error resulting from the actual misreporting of nativity for persons properly counted in the census was negligible. The gross reporting error was 0.6 percent, and the differences tended to cancel.

CITIZENSHIP

Definitions

The statistics on this subject are based on replies to the question, "Is he naturalized?" asked of all persons of foreign birth. The classification of the population by citizenship embraces two major categories, citizen and alien. Citizens are subdivided into native and naturalized. It is assumed that all natives are citizens of the United States. In addition to the citizen and alien categories, there is a third group, made up of foreign-born persons from whom no report on citizenship was obtained, designated "citizenship not reported."

Figure 17.—PERCENT DISTRIBUTION OF THE POPULATION OF THE UNITED STATES, URBAN AND RURAL, BY AGE AND SEX: 1950



SOURCE: TABLE 38

Figure 18.—PERCENT DISTRIBUTION OF THE TOTAL POPULATION OF THE UNITED STATES, BY AGE AND SEX:
1940 AND 1900

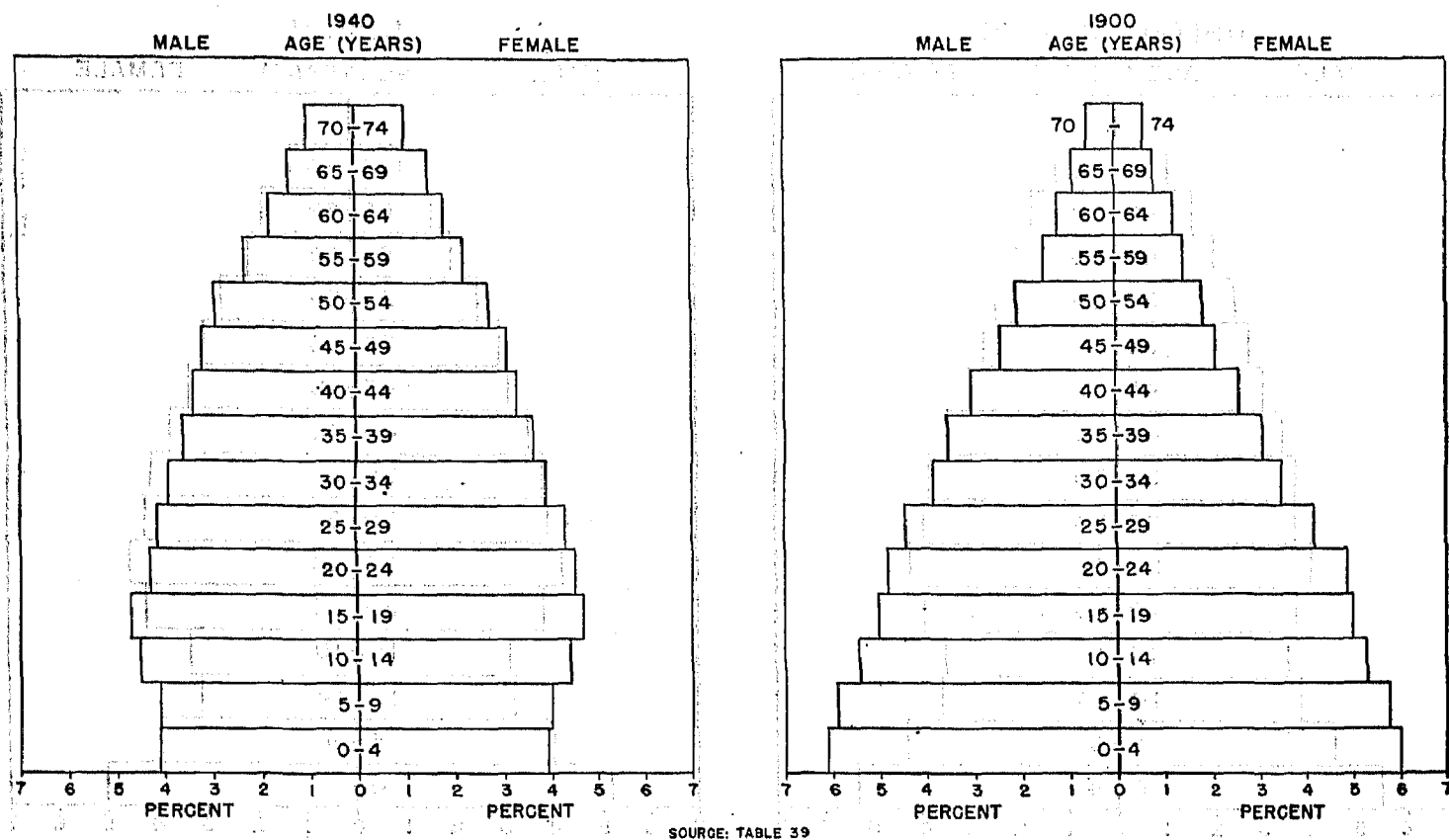


Figure 19.—PERCENT DISTRIBUTION OF THE WHITE AND NONWHITE POPULATION OF THE UNITED STATES,
BY AGE AND SEX: 1950

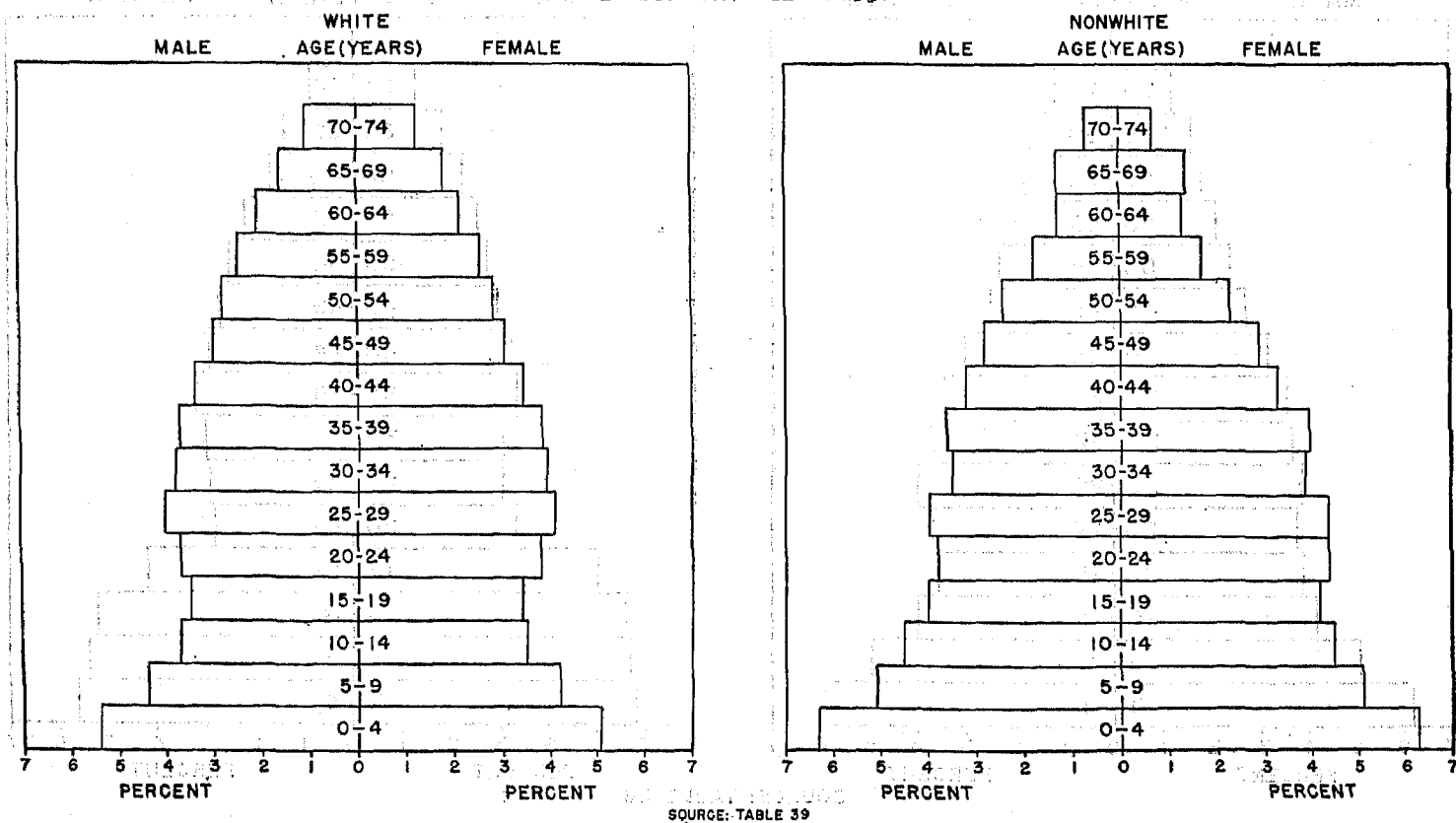


Figure 20.—PERCENTAGE OF NATIVE WHITES IN THE TOTAL POPULATION, BY STATES: 1950

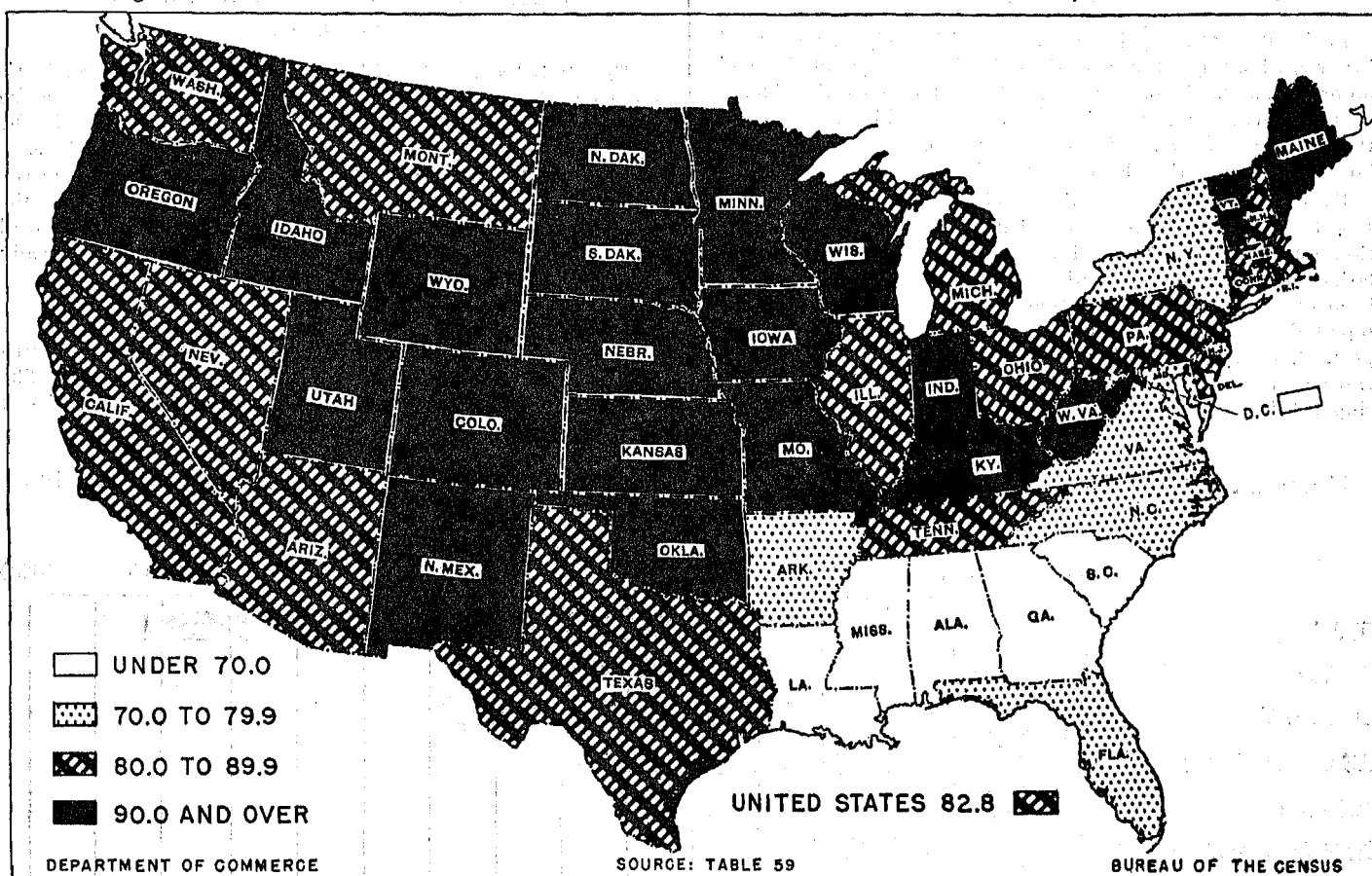
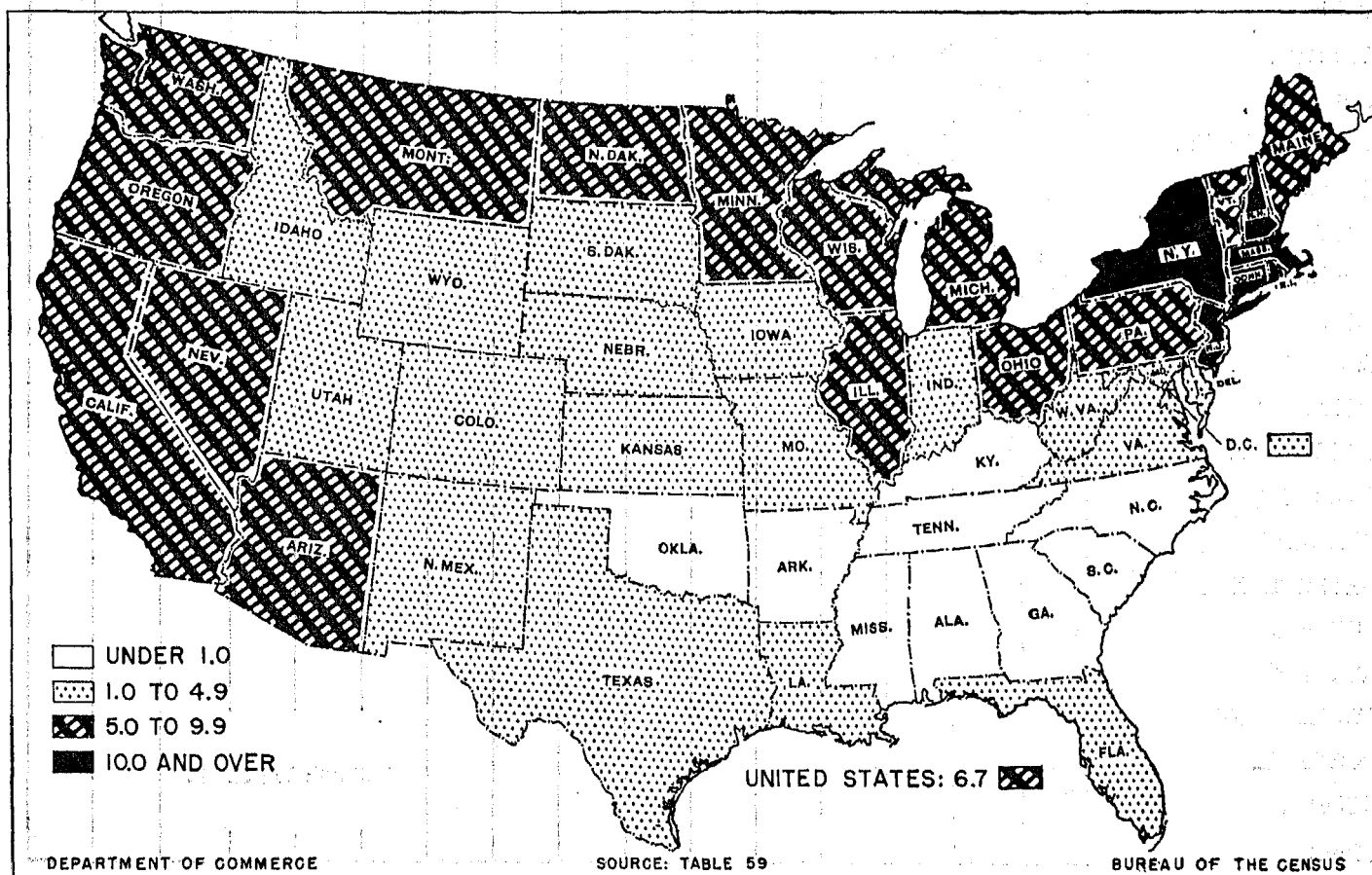


Figure 21.—PERCENTAGE OF FOREIGN-BORN WHITES IN THE TOTAL POPULATION, BY STATES: 1950



Quality of Data

In the 1950 Census, the question on citizenship was answered for approximately 92 percent of the foreign-born population and no report was made for 8 percent. The Post-Enumeration Survey results indicate that errors in the answers on citizenship were in the direction of overstating the number of naturalized foreign born and understating the number of aliens.

For the 8 percent not reporting on citizenship in the census, the Post-Enumeration Survey results indicate a citizenship distribution not essentially different from that of the foreign-born population for which the information was reported. This conclusion is contrary to the assumption that the category "Citizenship not reported" comprises persons who are actually aliens, for the most part. This assumption is reflected in the combination of this category with the alien category in some of the tables on citizenship in this and earlier censuses.

COUNTRY OF BIRTH OF FOREIGN-BORN WHITE

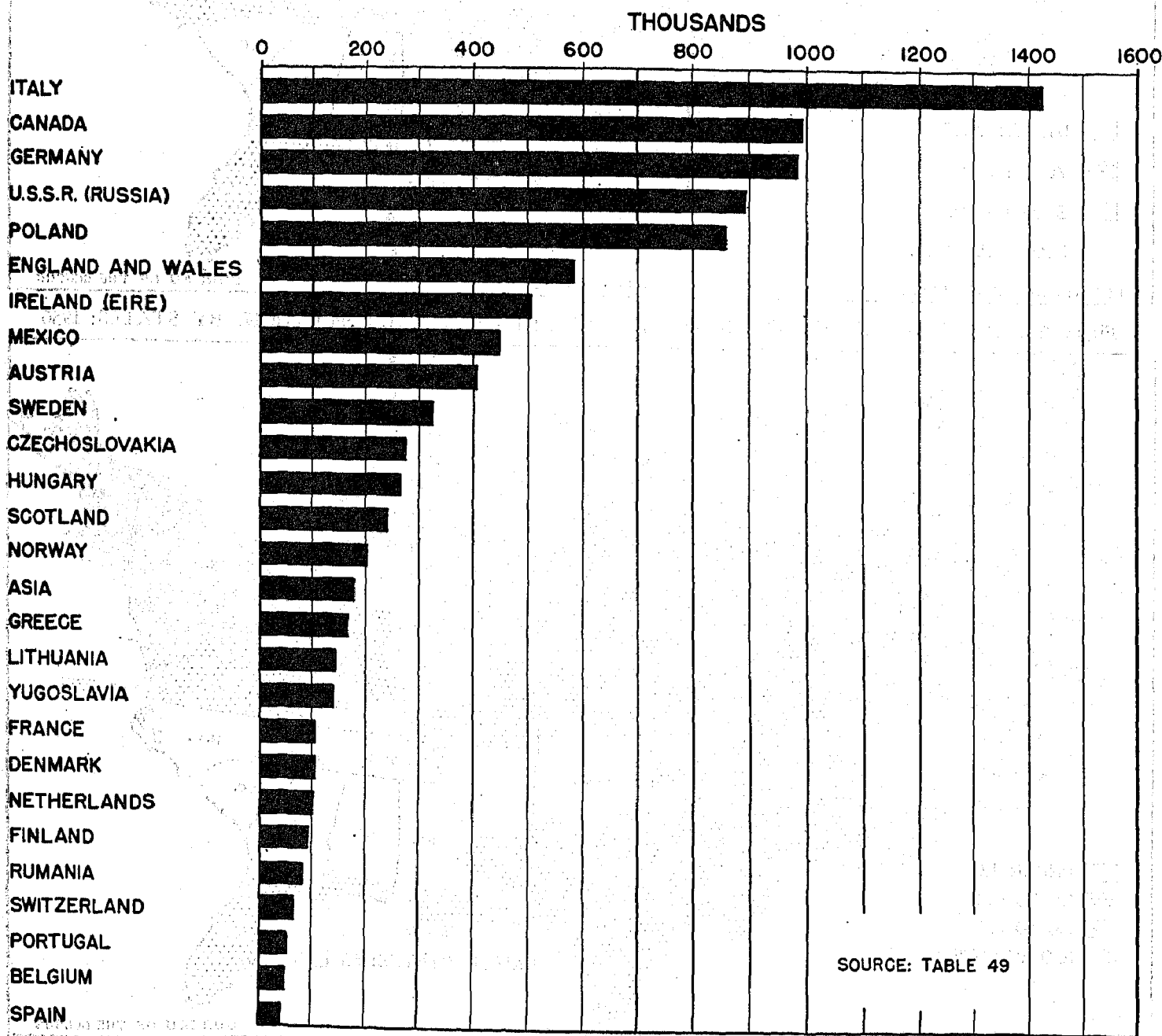
Definitions

The statistics on this subject are based on the respondent's answer to the question, "What State (or foreign country) was he born in?" asked of all persons. In case questions arose in the interview involving changes in international boundaries, the enumerator was instructed to decide the question on the basis of the international boundaries as of April 1, 1950. In coding and editing, however, changes in boundaries which had resulted from World War II were accepted only when such changes had been officially recognized by the United States.

Comparability

In 1940 the classification of the population by country of birth was based on the political boundaries of January 1, 1937. The corresponding 1930 data are based on the political boundaries of

Figure 22.—FOREIGN-BORN WHITE POPULATION OF THE UNITED STATES, BY COUNTRY OF BIRTH: 1950



that year, which were, in most respects, identical with those of January 1, 1937.

For the censuses from 1860 to 1900, figures on country of birth are shown for the total foreign-born population. From 1910 to 1950, however, this item is presented for the foreign-born white only. Although the 1950 statistics on country of birth are presented only for the foreign-born white population in this report, subsequent reports will contain information on the country of birth of the nonwhite population.

Quality of Data

For the vast majority of foreign-born white persons, the information on country of birth is consistent. On the basis of data from the Post-Enumeration Survey, it is estimated that the same country of birth was obtained in the census and the survey for approximately 90 percent of the foreign-born persons properly included in the 1950 Census.

Evidence on the quality of the data can also be derived from the examination of census-to-census variations in the classification by country of birth. An examination of these figures seems to indicate that a completely accurate count for the countries of Central and Eastern Europe, whose boundaries were changed as the result of World War I, has never been achieved. In coding country of birth in the 1950 Census, persons for whom "Austria-Hungary" was reported were allocated on the basis of surname to the various countries created out of the territory of the old empire after World War I. Even with this procedure, however, there appears to be some indication that Austria and Hungary are overreported at the expense of Yugoslavia and Czechoslovakia. In 1950 the situation was further complicated by the fact that, although there were extensive *de facto* boundary changes as a result of World War II, only a small number of these changes were officially recognized by the United States. In general, many foreign-born persons are likely to report in terms of the boundaries at the time of their birth or emigration or in accordance with national preferences rather than in accordance with 1950 boundaries.

In the 1950 Census an extreme case of the difficulty of classification by country of origin is represented by the figures for Northern Ireland. In previous censuses the schedule itself carried a statement over the country-of-birth column instructing the enumerator to distinguish between Ireland (Eire) and Northern Ireland. This statement was not carried on the 1950 schedule, however; and the name of the Irish Free State had been changed officially to Ireland. The net result of this situation was that, for the decade 1940 to 1950, the number of persons classified as having been born in Northern Ireland decreased by about 85 percent. Apparently many persons born in Northern Ireland were reported as having been born in Ireland. This reduction occurred in spite of the fact that explicit and detailed instructions for this classification appeared in the *Enumerators' Reference Manual*. In summary, it appears that where there are elements of ambiguity in the definition of the country, classification may well be fairly inaccurate. However, in the case of countries which have maintained the same boundaries over a long period of time and the differentiations are clear cut, a much more adequate classification is made.

MARITAL STATUS

Definitions

In the 1950 Census, data on marital status are based on the replies to the question, "Is he now married, widowed, divorced, separated, or [has he] never [been] married?" The classification refers to the status at the time of enumeration. Persons classified as married comprise, therefore, both those who have been married only once and those who remarried after having been widowed or divorced. Persons reported as separated or in common-law marriages are classified as married. Those reported as never married or with annulled marriages are classified as single. Since it is probable that some divorced persons are reported as single,

married, or widowed, the census returns doubtless understate somewhat the actual number of divorced persons who have not remarried.

In some tables, the category "Married" is further divided into "married, spouse present," and "married, spouse absent." In the office processing, this classification was made for a 20-percent sample of the data collected. A person is classified as "married, spouse present" if the person's husband or wife was reported as a member of the household or quasi household in which the person was enumerated, even though he or she may have been temporarily absent on business or vacation, visiting, in a hospital, etc., at the time of the enumeration. The number of married men with wife present who are classified as heads of households is the same as the number of married couples "with own household," except for differences arising from processing errors. It is also the same as the number of wives of heads of households shown in the tables on relationship to head of household, except for differences arising from sampling variation or from processing errors. The number shown as not head of household is the same as the number of married couples without own household, again except for differences arising from processing errors.

Persons reported as separated are shown as one subdivision of the group designated as "married, spouse absent." Separated

FIGURE 23.—PERCENT DISTRIBUTION OF THE POPULATION OF THE UNITED STATES 14 YEARS OLD AND OVER, BY MARITAL STATUS: 1890 TO 1950

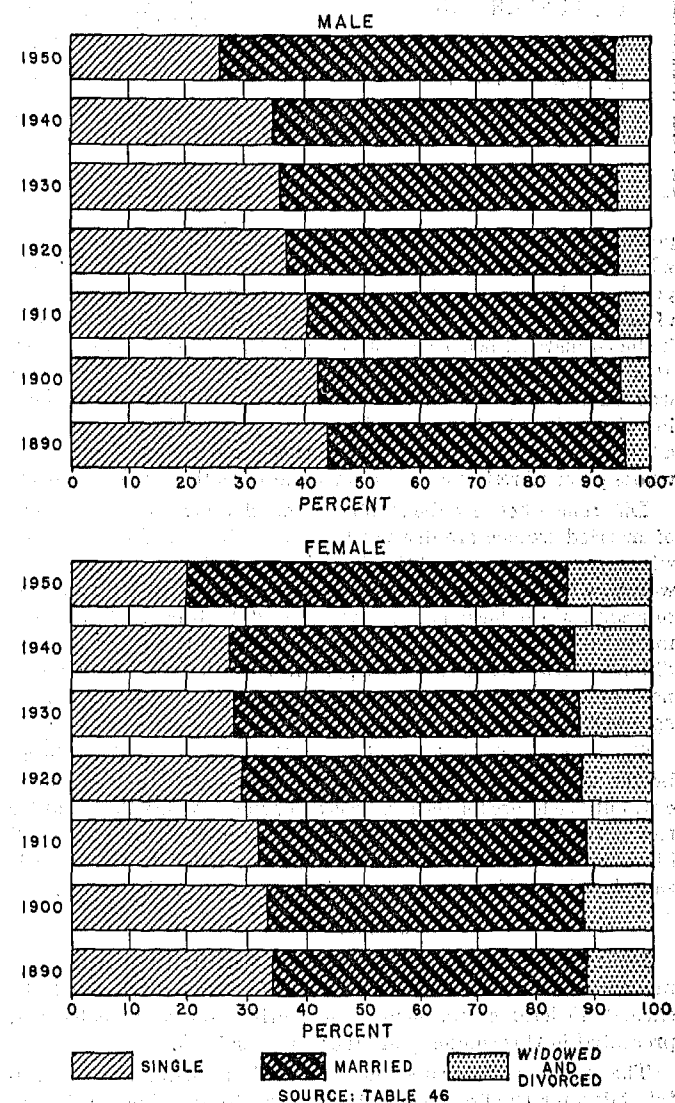
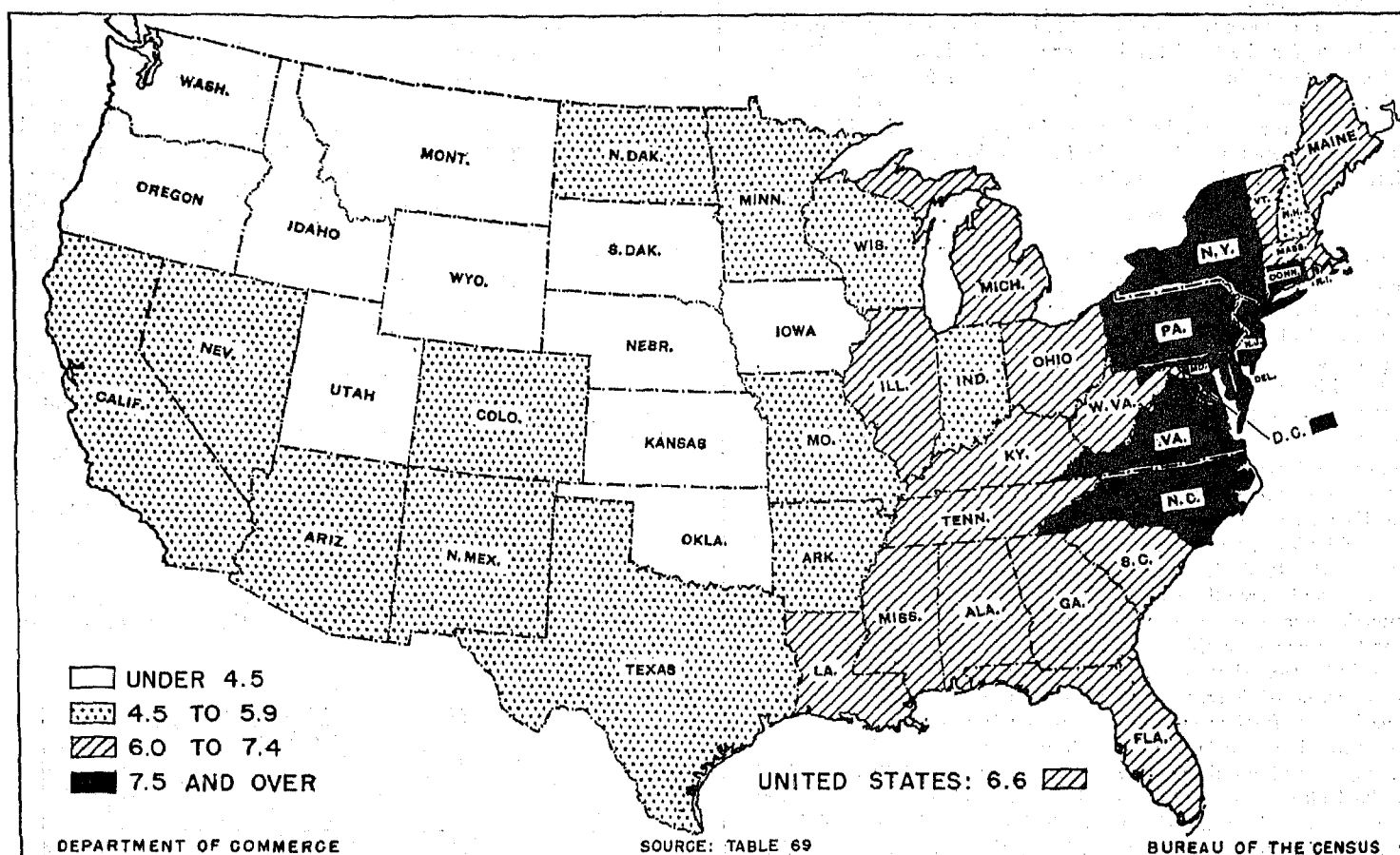


Figure 24.—PERCENTAGE OF MARRIED COUPLES WITHOUT OWN HOUSEHOLD, BY STATES: 1950



persons include those with legal separations, those living apart with intentions of obtaining a divorce, and other married persons permanently or temporarily estranged from their spouse because of marital discord. The group "other married, spouse absent" includes married persons employed and living for several months at a considerable distance from their homes, those whose spouse was absent in the armed forces, in-migrants whose spouse remained in other areas, husbands or wives of inmates of institutions, and all other married persons (except those reported as separated) whose place of residence was not the same as that of their spouse.

Differences between the number of married men and the number of married women are due partly to the absence of husbands or wives from the country at the time of enumeration. Examples are women whose husbands were in the armed forces overseas and immigrants whose husbands or wives were still abroad. Differences may also arise from spouses having their usual place of residence in different areas within the country, from variations in the completeness of enumeration of married men and women, and from response and processing errors.

The number of married men with wife present should obviously be the same as the number of married women with husband present, but the figure for the former is somewhat smaller than that for the latter. The difference may be attributed in part to small biases which arose when the enumerators failed to follow their sampling instructions exactly and in part to processing errors.

Comparability

Earlier census data.—Inquiry regarding marital status was first made in the census of 1880, but the results were not tabulated; the earliest Federal census figures for marital status available and presented in this summary are therefore for 1890.

The category "Separated" was included in the question on marital status for the first time in 1950. Previously, the question in-

cluded the categories "Single," "Married," "Widowed," and "Divorced." This change may have made the number of persons reported as divorced somewhat smaller in 1950 than it would have been under the earlier procedure.

In 1950, as in previous censuses, marital status was not reported for a small number of persons. For such persons marital status was estimated in 1940 and 1950 on the basis of age and the presence of spouse or children. Because of the methods used in 1950, however, some persons who would have been classified as single under the 1940 procedure were classified as "married, spouse absent" or "widowed" in 1950.

TABLE O.—MARITAL STATUS OF PERSONS 14 YEARS OLD AND OVER BY SEX, BASED ON 1950 CENSUS (SERIES P-B) AND ON CURRENT POPULATION SURVEY, FOR THE UNITED STATES

Marital status and sex	Census		Current Population Survey ¹	
	Number	Percent	Number	Percent
Male, 14 years and over	55,311,617	100.0	54,287,000	100.0
Single.....	14,518,079	26.2	14,212,000	26.2
Married.....	37,399,617	67.6	37,022,000	68.2
Widowed and divorced.....	3,393,921	6.1	3,054,000	5.6
Female, 14 years and over	57,042,417	100.0	56,635,000	100.0
Single.....	11,454,266	20.1	11,126,000	19.6
Married.....	37,503,836	65.7	37,451,000	66.1
Widowed and divorced.....	8,084,315	14.2	8,058,000	14.2

¹ Excludes about one-half million members of the armed forces (mostly single) who were living in military barracks; also assumes about one-fourth million fewer in institutions than shown by census.

In the censuses from 1890 to 1930, marital status was tabulated for persons under 15 years of age as a group. To obtain the marital

status distribution of the population 14 years old and over at those dates for this report, it has been necessary to assume that the small number of persons under 15 years of age classified as married, widowed, divorced, or with marital status not reported were 14 years old.

Current Population Survey.—Statistics on marital status for the United States as a whole are published annually from the Current Population Survey. In general, the results obtained from the Current Population Survey for March 1950 agree with those obtained from the 1950 Census with respect to the proportion of persons in each broad category of marital status. The most noteworthy difference occurred among widowed and divorced males (see table O).

HOUSEHOLD AND FAMILY

Definitions

Statistics on the number of households, the number of inmates of institutions, and household relationship were obtained from information on relationship for all persons enumerated in the 1950 Census. The identification of families was made largely on the basis of the reports on name and relationship. Family data were coded and tabulated only for persons in the 20-percent sample, however.

Household.—A household includes all the persons who occupy a house, an apartment or other group of rooms, or a room that constitutes a dwelling unit. In general a group of rooms occupied as separate living quarters is a dwelling unit if it has separate cooking equipment or a separate entrance; a single room occupied as separate living quarters is a dwelling unit if it has separate cooking equipment or if it constitutes the only living quarters in the structure. A household includes the related family members and also the unrelated persons, if any, such as lodgers, foster children, wards, or employees who share the dwelling unit. A person living alone in a dwelling unit, or a group of unrelated persons sharing a dwelling unit as partners, is also counted as a household. The count of households excludes groups of persons living as members of quasi households. (See definition of quasi household below.)

The average population per household is obtained by dividing the population in households by the number of households. It excludes persons living in quasi households.

Head of household.—One person in each household is designated as the "head." The number of heads, therefore, is equal to the number of households. The head is usually the person regarded as the head by the members of the household. Married women are not classified as heads if their husbands are living with them at the time of the census.

Wife.—The total number of females shown under the heading "wife" is ordinarily somewhat less than the total number of married women with husband present, since the category "Wife" in the relationship tables includes only wives of heads of households. As indicated in the section on "Marital status," the number of "wives" is directly comparable with data in the marital status tables on the number of married men with wife present who are heads of households. Either of these figures may be used to indicate the number of "husband-wife households."

Child.—This category includes sons and daughters, stepchildren and adopted children of the head regardless of their age or marital status. It excludes all other children and also sons-in-law and daughters-in-law and, of course, any children of the head no longer living in the household.

Grandchild.—This category comprises all persons living in the household who are sons, daughters, stepchildren, or adopted children of a child of the head.

Parent.—This class comprises parents and parents-in-law of the head if living in the household.

Other relative.—This group includes such relatives of the head as sons-in-law, sisters-in-law, nephews, brothers, aunts, grand-

parents, cousins, and great-grandchildren, if these are members of the household.

Lodger.—All persons in households who are not related to the head, except resident employees and their families, are counted as lodgers. Among these persons are lodgers, roomers, and boarders, and their relatives residing in the same household. Also included here are the small number of partners, foster children, and wards.

Resident employee.—This category consists of all employees of the head of the household who usually reside in the household with their employer, and their relatives residing in the same household. The main types of such employees are cooks, maids, nurses, and hired farm hands. In 1950, the small number of relatives of resident employees were included in the count of resident employees with whom they lived, whereas, in 1940, they were shown as lodgers.

Quasi household.—A quasi household is a group of persons living in quarters not classified as a dwelling unit, for example, in a house with at least five lodgers, or in a hotel, institution, labor camp, or military barracks.

Head of quasi household.—Heads of quasi households are usually managers or officers in institutions, hotels, lodginghouses, and similar establishments. If the landlady in a rooming house reported herself as the head but her husband was a member of the quasi household he was designated as head for consistency with the treatment of married heads and wives of heads of households. The number of heads of quasi households also represents the number of quasi households.

Family.—A family, as defined in the 1950 Census, is a group of two or more persons related by blood, marriage, or adoption and living together; all such persons are regarded as members of one family. A family may comprise persons in either a household or a quasi household. If the son of the head of the household and the son's wife are members of the household, they are treated as part of the head's family. A lodger and his wife who are not related to the head of the household, or a resident employee and his wife living in, are considered as a separate family, however. Thus, a household may contain more than one family. A household head living alone or with nonrelatives only is not regarded as a family. Some households therefore, do not contain a family.

The average population per family is obtained by dividing the population in families by the number of families. In this report the "population in families" includes, in addition to family members, about 171,000 unrelated individuals under 14 years old.

In tables 140 and 164, persons 14 years old and over are classified by family status, that is, in the categories head of family, wife or other relative of family head, unrelated individual, and inmate of institution. This classification differs from that in tables 107, 148, and 169, which pertains to relationship to household head.

Unrelated individual.—Unrelated individuals are those persons (other than inmates of institutions) who are not living with any relatives. In the office processing, this classification was made for a 20-percent sample of the data collected. Statistics on unrelated individuals in this report are limited to those 14 years old and over. An unrelated individual may be (a) a household head living alone or with nonrelatives only, (b) a lodger or resident employee with no relatives in the household, or (c) a member of a quasi household who has no relatives living with him. Thus, a widow who occupies her house alone or with one or more persons not related to her, a roomer not related to anyone else in the dwelling unit, a maid living as a member of her employer's household but with no relatives in the household, and a resident staff member in a hospital living apart from any relatives, are all examples of unrelated individuals.

Institutional population.—The institutional population includes those persons living as inmates in such places as homes for delinquent or dependent children, homes and schools for the mentally or physically handicapped, places providing specialized medical care, homes for the aged, prisons and jails. Staff members and

their families are not included in the institutional population. The total count of inmates may be found in tables 47 and 69. The number of inmates 14 years old and over is given in certain of the employment status tables in Chapters B and C, and in table 90 on income in Chapter C.

Inmates of institutions are not counted as "unrelated individuals," largely because statistics on "unrelated individuals" are more useful to consumers of data on labor force, income, and housing if they exclude inmates.

Comparability

Earlier census data.—Minor changes in the instructions for identifying dwelling units in 1950 as compared with 1940 may have affected to a slight extent the increase in households between the two dates. For example, in the 1940 Census, the occupants of a lodginghouse were regarded as constituting a quasi household if the place included 11 or more lodgers; in the 1950 Census the criterion was reduced to 5 or more lodgers. In general, however, the number of households and the number of occupied dwelling units in the 1950 Census may be regarded as comparable with the number of "families," "private households," and occupied dwelling units as shown in the census reports for 1930 and 1940.

In the 1950 Census, the number of households and the number of occupied dwelling units were identical by definition; small differences between these numbers appear in the published reports, however, because the data for the Population and the Housing reports were processed independently.

The term "family" as used in the 1950 Census is not comparable with that used by the Bureau of the Census before 1947. The new definition excludes the large number of household heads with no relatives in the household who would have been classified as families under the old definition. On the other hand, the new definition includes the small number of groups of mutually related lodgers or employees in households and of mutually related persons in quasi households who would not have been classified as families under the old definition. The net effect has been to decrease the number of families.

In certain Population and Housing reports of the 1940 Census, the average population per household included the relatively small number of persons living in quasi households. Such persons were excluded in calculating the average population per household shown in the present volume.

The coverage of the institutional population in the 1950 Census is somewhat more inclusive than that in the 1940 Census. For example, patients in tuberculosis sanatoria were counted as inmates in 1950 but not in 1940. Furthermore, the identification of certain other types of institutions, such as nursing, convalescent, and rest homes, was probably improved in 1950 by the use of lists of such places compiled from welfare agencies.

Quality of Data

The identification of separate dwelling units or households presents no problems in most instances; but, when living arrangements are unusual, two enumerators may classify the situation differently. For example, estimates of the number of households and the number of families for the United States as a whole from the Current Population Survey for March 1950 were higher than the corresponding figures from the census. For households, the census count was 42,857,335 (table 47) and the survey estimate, 43,468,000. For families, the census figure, based on a 20-percent sample, was 38,310,980 (table 47), whereas the survey estimate was 39,198,000. In both cases, the differences are too great to be attributed to sampling variability alone. Such factors as the methods used in weighting the survey estimates and the differences between the training and experience of the interviewers used in the survey and in the census may also account for the lack of agreement in the two sets of data.

These factors also affect the comparability of the figures on the number of unrelated individuals obtained from the 1950 Census

and from the Current Population Survey. The census figure for those 14 years old and over was 11,051,050 (table 47), and the survey estimate for March 1950 was 8,834,000. In this case, however, the difference is in part a reflection of the fact that, unlike the census, the survey excluded from its coverage all members of the armed forces except those living off post or with their families on post. Moreover, college students were generally enumerated at their own homes in the Current Population Survey and classified as family members but were enumerated at their college residence in the 1950 Census, usually as unrelated individuals. The differences in coverage of the armed forces and college students may account for about 1,250,000 of the total difference.

Data available currently from a sample of persons included in the 1950 Census of Population and also included in the Current Population Survey for April 1950 indicate that the survey enumerators classified as heads of households a considerable number of persons whom census enumerators classified as other types of household members, generally as lodgers. This fact suggests that, when complex living arrangements were encountered, survey enumerators more often than census enumerators identified as a separate household a person or group of mutually related persons occupying only a part of the living quarters in a house or apartment.

The Post-Enumeration Survey also provides some measures of the accuracy of the 1950 Census data on number of households and on relationship to household head. Data on marital status, however, were not checked. The Post-Enumeration Survey results indicate a net undercount of about a million households, or 2.5 percent, in the 1950 Census. In many cases this undercount reflects errors of classifying an enumerated group of persons as a single household instead of as two or more. Besides the difficulty in identifying the proper household relationship where living arrangements are complex, other factors affecting the count of households include failure to enumerate buildings where people live and errors in the classification of dwelling units as occupied by residents, occupied by nonresidents, or vacant.

Post-Enumeration Survey data on relationship to household head indicate that census enumerators had a tendency to miss household members in the categories "Lodger" and "Resident employee" relatively more often than those members who are household heads or relatives of heads.

SCHOOL ENROLLMENT

Definitions

The data on school enrollment were derived from answers to the question, "Has he attended school at any time since February 1?" This question was asked of a 20-percent sample of persons under 30 years of age.

"Regular" schools.—In the instructions to the enumerators, enrollment was defined as enrollment in "regular" schools only. Such schools are public, private, or parochial schools, colleges, universities, or professional schools, either day or night—that is, those schools where enrollment may lead to an elementary or high school diploma, or to a college, university, or professional school degree. Enrollment may be full time or part time.

If a person was enrolled in such a school subsequent to February 1, 1950, he was classified as enrolled even if he had not actually attended school since that date. For example, he may not have attended because of illness.

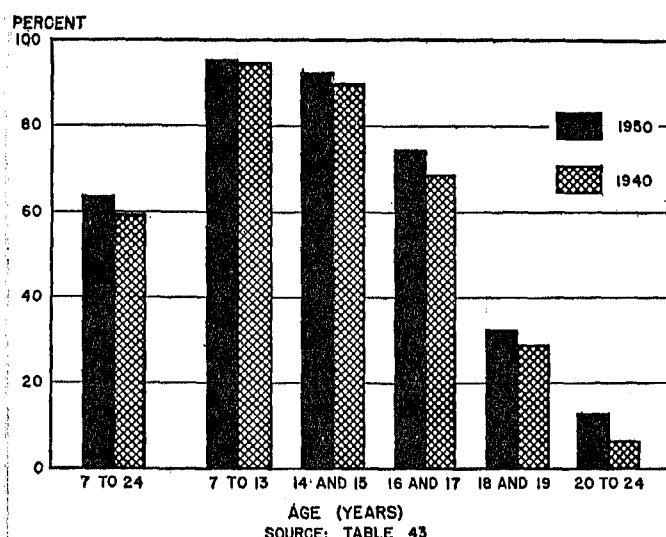
If a person was receiving regular instruction at home from a tutor and if the instruction was considered comparable to that of a regular school or college, the person was counted as enrolled. Enrollment in a correspondence course was counted only if the course was given by a regular school, such as a university, and the person received credit thereby in the regular school system.

Kindergarten.—Children enrolled in kindergarten were reported separately in 1950 and were not counted as enrolled in school. The statistics on kindergarten enrollment were tabulated only for

children 5 and 6 years old. Nursery schools were not regarded as kindergartens or schools.

Schools excluded.—Persons enrolled in vocational, trade, or business schools were excluded from the enrollment figures unless such schools were graded and considered a part of a regular school system. Persons receiving on-the-job training in connection with their work were not counted as enrolled in school. Persons enrolled in correspondence courses other than those described above were not counted as enrolled in school.

FIGURE 25.—PERCENTAGE OF THE POPULATION OF THE UNITED STATES 7 TO 24 YEARS OLD ENROLLED IN SCHOOL, BY AGE: 1950



Editing of 1950 Data

In 1950, as in prior censuses, persons for whom there was no report as to school enrollment are not shown separately. In both 1940 and 1950, the editing rules were determined largely on the basis of information on ages of compulsory attendance as compiled by the United States Office of Education. Additional information used included other items on the schedule and results of Current Population Surveys showing the enrollment rates for various age groups. In general, for persons not reporting on school enrollment, those 5 through 17 years of age were treated as enrolled, whereas those 18 through 29 years old were considered not enrolled. Although it was realized that a considerable number of children 5 years old and some 6 years old were not enrolled in school, the treatment of those with no report on school enrollment as enrolled for the entire group 5 to 17 years was made uniform in order to simplify the mechanical editing procedure.

Comparability

Earlier census data.—The corresponding question in the Censuses of 1910, 1920, and 1930 applied to a somewhat longer period, the period since the preceding September 1. The census dates were April 15 in 1910, January 1 in 1920, and April 1 in 1930. Furthermore, in these censuses the question was not restricted as to the kind of school the person was attending.

In 1940, the question referred to the period from March 1 to the date of the enumeration, which began on April 1. There are indications that in some areas the schools closed early (i. e., before March 1) for such reasons as floods, lack of funds, or crop sowing. For such areas the enrollment rates, therefore, were relatively low. In order to insure more complete comparability among areas in 1950, it was considered advisable to increase the reference period to that between February 1 and the time of enumeration.

In 1950, for the first time in a decennial census, kindergarten enrollment was separately identified. In earlier censuses no

specific instructions were given about kindergarten, and, therefore, enrollment figures for children 5 and 6 years old undoubtedly included some children enrolled in kindergarten.

As mentioned in the section on "Usual place of residence," college students were enumerated in 1950 at their college residence whereas in previous years they were generally enumerated at their parental home. This change in procedure should not have affected the comparability of 1950 and 1940 national totals on school enrollment, but it might have affected the comparability of 1950 and 1940 figures on school enrollment at college age for some States and local areas.

Current Population Survey.—In each year starting with 1945, the Bureau of the Census has collected statistics on school enrollment for the United States as part of the Current Population Survey for October. The basic definitions used in these surveys are the same as those of the 1950 Census. The figures are not strictly comparable, however, because the survey is taken in October rather than in April and relates to enrollment in the fall term. Although the April 1950 Census figures and the October 1949 survey figures on enrollment both pertain to the same school year, 1949-1950, the April 1950 figures may be properly compared with those for October 1949 only if some allowance is made (a) for those persons who left school between October 1949 and February 1950, either by dropping out or by graduation; and (b) for persons who entered school after October.

For younger children, particularly those 5 and 6 years old, a comparison of October and April enrollments is misleading. Many school systems operate under the policy of permitting children to start the first grade only if they have attained a certain age by the beginning of the school year. This requirement maximizes enrollments for these ages in the fall, whereas by April many children have attained the given age but are not yet enrolled.

Data from school systems.—Data on school enrollment are also collected and published by State and local governmental agencies and by the United States Office of Education. These data are obtained from reports of school systems and institutions of higher learning and are only roughly comparable with the enrollment data collected by the Bureau of the Census by household interviews. For comparable grades, the census enrollment figures tend to be lower, largely because they refer to shorter time periods; moreover, they count a person only once, although he may have attended more than one school during the reporting period.

YEAR OF SCHOOL IN WHICH ENROLLED AND YEARS OF SCHOOL COMPLETED

Definitions

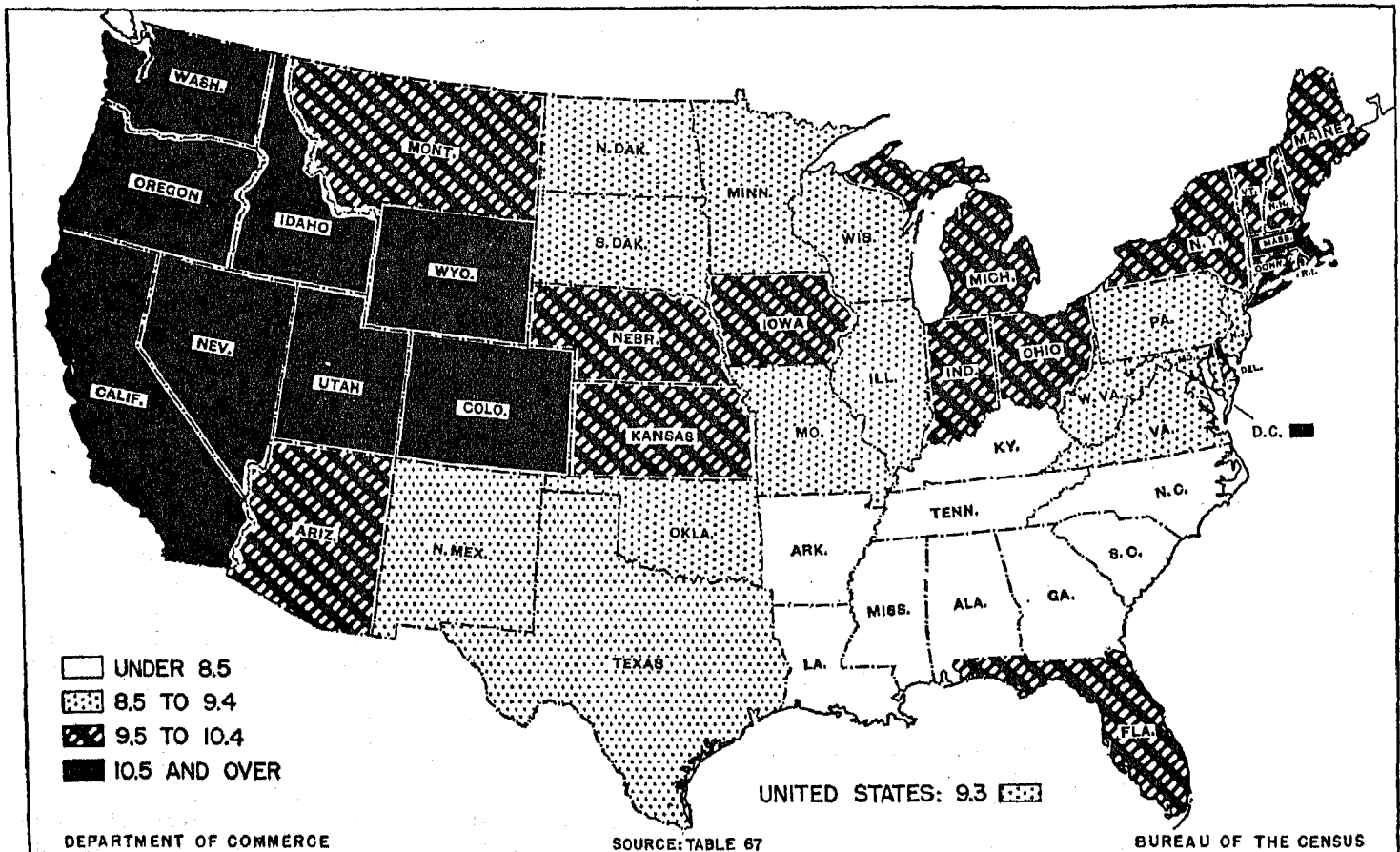
The data on year of school in which enrolled were derived from the answers to the first of the following two questions, and those on years of school completed from the combination of answers to both questions: (a) "What is the highest grade of school that he has attended?" and (b) "Did he finish this grade?" These questions were asked of a 20-percent sample of persons of all ages. In Chapter B, data on years of school completed are shown only for the population 25 years old and over, practically all of whom had completed their formal education. In Chapter C, data on year in which enrolled are shown for persons 5 to 29 years old and data on years of school completed are shown for persons 5 years old and over.

The questions on educational attainment applied only to progress in "regular" schools, as defined in the section on "School enrollment."

Highest grade of school attended.—The question called for the highest grade attended, regardless of "skipped" or "repeated" grades, rather than the number of full school years which the person had spent in school.

In some areas in the United States, the school system has, or used to have, 7 years of elementary school rather than the more

Figure 26.—MEDIAN YEARS OF SCHOOL COMPLETED FOR PERSONS 25 YEARS OLD AND OVER, BY STATES: 1950



conventional 8 years. For the sake of comparability, persons who had progressed beyond a 7-year elementary school system were treated as though they had progressed beyond the usual 8-year system. Junior high school grades were translated into their elementary or high school equivalent.

In the case of persons whose highest grade of attendance was in a foreign school system, the enumerator was instructed to obtain the approximate equivalent grade in the American school system or, if that were too difficult to determine, the number of years the person had attended school. Persons whose highest level of attendance was in an ungraded school were treated in similar fashion. Persons whose highest level of training was by a tutor and whose training was regarded as qualifying under the "regular" school definition were also given the approximate equivalent in the regular school system.

Completion of highest grade.—The second question on educational attainment was to be answered "Yes" if the person had completed the full grade. If the person was still attending school in that grade, had completed only a half grade, or had dropped out of or failed to pass the last grade attended, the required answer was "No." In the case of persons who failed to report on completion of the grade, those classified as enrolled were assumed not to have finished and those not enrolled were assumed to have finished.

Comparability

Year of school in which enrolled and years of school completed.—In the present report, the year of school in which enrolled is shown for enrolled persons 5 to 29 years old, and the years of school completed are shown for all persons 5 years old and over.

For 1950, statistics on educational attainment for persons enrolled in school are shown in terms of the school year in which

they were enrolled, whereas in the 1940 reports statistics were shown in terms of the highest grade they had completed. The present procedure was adopted because it provides statistics in a form that should be generally more useful to those interested in school systems.

Generally, the grade in which persons are enrolled is one grade higher than the highest grade completed. Data from a preliminary sample of the 1950 Census, however, indicate that, by the time of the census enumeration, about 15 percent of the "enrolled" population 5 to 29 years old had completed the same grade in which they had been enrolled. This apparent contradiction occurs because the question on enrollment referred to "any time since February 1" whereas the completion question referred to the date of enumeration. Thus, highest grades of school completed for the enrolled population obtained by subtracting one grade from the grade in which enrolled must be considered only approximately correct.

The 1940 Census reports included data on highest grade of school completed for the population 5 to 24 years old not enrolled in school. As a result of the facts noted above, similar data for 1950 could be only approximated. Two steps would be involved: First, one grade should be deducted from the grade in which enrolled (as given in table 112) in order to approximate the highest grade completed for persons enrolled in school; second, the number of enrolled persons who have completed a given grade should be subtracted from the total number of persons who have completed the grade (as given in table 114).

Quality of Data

In 1940 a single question was asked on highest grade of school completed. Analysis of data from the 1940 Census returns and from surveys conducted by the Bureau of the Census using the 1940 type of question wording indicated that respondents fre-

quently reported the year or grade in which they are enrolled, or had last been enrolled, instead of the one completed. There is evidence that, as a result of the change in the questions in 1950, there was relatively less exaggeration in reporting educational attainment than in 1940. For example, data from a preliminary sample of the 1950 Census for persons of elementary and high school ages show larger proportions in 1950 than in 1940 in both the modal grade and the next lower grade for a particular age, and smaller proportions in each of the first two grades above the mode. Hence, the indicated increases in attainment between 1940 and 1950 tend to understate the true increases.

For 80 percent of the persons enumerated in the census, the original report on educational attainment and the Post-Enumeration report were the same or only one grade apart. The net effect of misreporting educational attainment on statistics for specific grades varied from grade to grade but was minor for many grades. In addition, 1950 Census data on median level of school attainment are but slightly affected by errors in reporting. The median number of school years completed by persons 25 years old and over derived from census data which have been adjusted for this misreporting of grade of school attained differs by only about one-tenth of one year from the median originally obtained from the census.

For persons 25 years old and over, the amount of overreporting of years of school completed somewhat exceeded the amount of underreporting. Apparently, when reporting educational attainment, respondents had some tendency to round upward to a "terminal" grade such as the 8th or 12th grade.

Median School Years

Median educational attainment (i. e., either median year of school in which enrolled or median school years completed) is expressed in terms of a continuous series of numbers. For example, the fourth year of high school is indicated by 12 and the first year of college by 13. For the sake of comparability, the first year of high school is uniformly represented by 9, although, as previously noted, there are some areas with only 7 years of elementary school.

The procedure used in both 1950 and 1940 for calculating the median year of school completed makes allowance for the fact that many persons reported as having completed a given full school year have also completed a part of the next higher grade. It is assumed, for example, that persons who reported 6 full years of school completed had actually completed 6.5 grades. At the time of enumeration, persons enrolled in school had probably completed somewhat more than one-half grade beyond their last full year, on the average, whereas persons who had left school had probably completed less than one-half year beyond their last full year, on the average. A similar procedure was followed in the computation of the median school year in which enrolled.

Illiteracy

The last decennial census in which information was collected on illiteracy was that of 1930. This question was dropped because of the relatively small number of illiterates remaining even at that date and because of the more useful information obtainable from questions on educational attainment. The transition from illiteracy to literacy is obviously a gradual process and is not reflected in the completion of a particular grade of school. For example, data from the Current Population Survey of October 1947 indicate that among persons 14 years old and over the proportion reported as illiterate ranged from 80.1 percent of those who had not completed a year of school to 4.7 percent of those who had completed 4 years. From this survey and a similar one conducted in October 1952, it is estimated that the number of illiterates 14 years old and over in 1950 was about 3,600,000, or 3.2 percent of the corresponding population.

RESIDENCE IN 1949

Definitions

The data on residence in 1949 were derived from answers to several questions asked for a 20-percent sample of persons 1 year old and over. The first question was, "Was he living in this same house a year ago?" Each person who was not living in the same house was asked, "Was he living in this same county a year ago?" and if not, "What county and State was he living in a year ago?"

Residence in 1949 is the usual place of residence one year prior to the date of enumeration. As indicated by the categories of table 48, residence in 1949 was used in conjunction with residence in 1950 to determine the extent of mobility of the population. Persons who changed residence from 1949 to 1950 were classified by the type of move, viz., "Different house, same county," and "Different county or abroad." Residence abroad includes residence in all foreign countries and all Territories and possessions, etc., of the United States. The group whose residence was "same house as in 1950" includes all persons 1 year old and over who were living in the same house on the date of enumeration in 1950 as on the date one year prior to enumeration. Included in this group are persons who had never moved during the 12 months as well as persons who had moved but by 1950 had returned to their 1949 residence. Persons 1 year old and over for whom complete and consistent information regarding residence in 1949 was not available are included in the group "residence not reported."

The number of persons who were living in different houses in 1950 and 1949 is somewhat less than the total number of moves during the year. Some persons in the same house at the two dates had moved during the year but by the time of enumeration had returned to their 1949 residence. Other persons made two or more progressive moves. Furthermore, persons in a different house in the same county may actually have moved between counties during the year but by 1950 had returned to the same county of residence as that in 1949.

The mobility statistics in this volume relate to one particular 12-month period. Annual data from the Current Population Survey indicate that in the period of slight economic recession from 1949 to 1950, mobility was at a relatively low level as compared with that of other postwar years. Therefore, the directions of net flow and the patterns of mobility shown by the 1950 Census data may not be typical in some respects of the period since the end of World War II.

Comparability

A similar set of questions on mobility was first asked in the 1940 Census. These questions, however, applied to residence five years earlier rather than one year earlier.

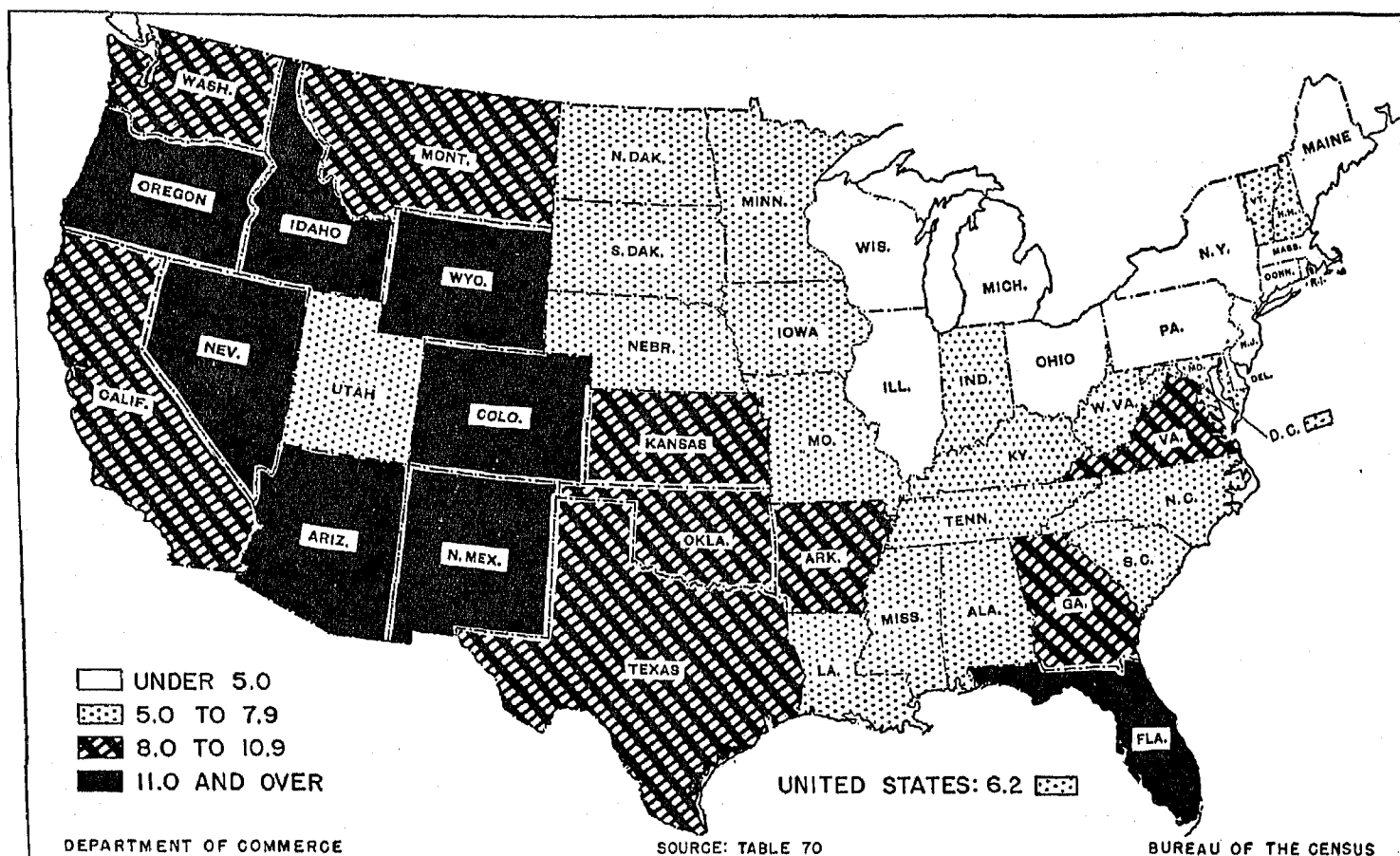
Quality of Data

According to the Post-Enumeration Survey, the population covered by the mobility inquiry (persons 1 year old and over) was underenumerated by the same proportion as the total population, i. e., 1.4 percent. For the enumerated population, differences in reporting of mobility status between the 1950 Census and the Post-Enumeration Survey amounted to 8.2 percent. Most of these errors, however, were offsetting, so that the net error as measured by the Post-Enumeration Survey was negligible.

Another measure of the consistency of response in the mobility questions is provided by a comparison of the 1950 Census data with Current Population Survey data for roughly the same period. The questions on migration were carried in the Current Population Survey for March 1950 and also related to residence a year ago.

UNITED STATES SUMMARY

Figure 27.—PERCENTAGE OF THE 1950 POPULATION 1 YEAR OLD AND OVER LIVING IN A DIFFERENT COUNTY OR ABROAD IN 1949, BY STATES



The distributions for the United States from the Current Population Survey and the 1950 Census are presented in table P. In the calculation of the percentages, the number of persons for whom residence a year ago was not reported was excluded.

TABLE P.—RESIDENCE IN 1949 OF PERSONS 1 YEAR OLD AND OVER, BASED ON 1950 CENSUS (SERIES P-B) AND ON CURRENT POPULATION SURVEY, FOR THE UNITED STATES

Residence in 1949	Census	Current Population Survey
Total.....	100.0	100.0
Same house.....	82.6	80.9
Different house, same county.....	11.4	13.1
Different county, same State.....	3.0	3.0
Different State.....	2.6	2.6
Abroad.....	0.4	0.3

A higher proportion of the population was reported as living in the same house a year ago in the 1950 Census than in the Current Population Survey. On the other hand, the proportion of those who had moved within the same county was lower in the census. The proportion of migrants, both within the State of residence in 1950 and between States, was the same in both. Sampling variability and the slight difference in dates cannot account for the differences entirely. They seem to be further evidence that the Current Population Survey enumerators tend to be more successful than the census enumerators at identifying marginal groups with respect to a given phenomenon. In the case of mobility, the marginal group is represented by persons who moved only short distances, namely, within a county.

The statistics on mobility in Chapter B of this report are slightly affected by tabulation errors, according to evidence provided by later tabulations. Mobility data are also presented in *Mobility of the Population: State of Residence in 1949 and 1950*, Series PC-14, No. 17. The total number of persons in the United States who were not reported as living in the same house in 1950 as in 1949 based on table 48 of the present report is 27,972,895. The number indicated in the Series PC-14 report is 27,813,260. The difference, 159,635, represents 0.1 percent of the total population 1 year old and over.

A comparison of the statistics for States which appear in table 70 of this volume with those presented in the Series PC-14 report indicates that, in all but five States, the differences did not exceed 0.2 percent of the population 1 year old and over. The largest difference—1.2 percent—was in the statistics for Rhode Island. In the remaining four States—Alabama, Iowa, Louisiana, and Virginia—the differences ranged from 0.7 percent for Alabama to 0.5 percent for Louisiana. These five States account for more than half of the difference between the national figures in the two reports. The data for the five States which are presented in Volume II appear to be at fault, but the errors were discovered after it was no longer feasible to make corrections. The major part of the difference in Rhode Island is attributable to mechanical failures in the tabulation of the data for Volume II, which resulted in the tabulation of some cards as “residence not reported” which should have been classified as “same house as in 1950.” In the tabulations of the data for Volume II for Alabama, Iowa, Louisiana, and Virginia, special equipment was used; and here a procedure was followed whereby some persons not in the sample were counted by mistake in the category “Residence not reported.”

EMPLOYMENT STATUS

Definitions

Census week.—The 1950 data on employment status pertain to the calendar week preceding the enumerator's visit. This week, defined as the "census week," is not the same for all respondents, because not all persons were enumerated during the same week. (A majority of the population was enumerated during the first half of April.) The 1940 data refer to a fixed week for all persons, March 24 to 30, 1940, regardless of the date of enumeration.

Employed.—Employed persons comprise all civilians 14 years old and over who, during the census week, were either (a) "at work"—those who did any work for pay or profit, or worked without pay for 15 hours or more on a family farm or in a family business; or (b) "with a job but not at work"—those who did not work and were not looking for work but had a job or business from which they were temporarily absent because of vacation, illness, industrial dispute, bad weather, or layoff with definite instructions to return to work within 30 days of layoff. Also included as "with a job" are persons who had new jobs to which they were scheduled to report within 30 days.

Unemployed.—Persons 14 years old and over are classified as unemployed if they were not at work during the census week but were either looking for work or would have been looking for work except that (a) they were temporarily ill, (b) they expected to return to a job from which they had been laid off for an indefinite period, or (c) they believed no work was available in their community or in their line of work. Since no specific questions identifying persons in these last three groups were included on the census schedule, it is likely that some persons in these groups were not returned by the census enumerators as unemployed. For some purposes, unemployed persons with previous work experience are classified separately. When information on the schedule was insufficient for this distinction to be made the unemployed person was classified as an experienced worker, since the great majority of persons seeking work have had previous work experience.

Labor force.—The labor force includes all persons classified as employed or unemployed, as described above, and also members of the armed forces (persons on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard). The "civilian labor force," comprises the employed and unemployed components of the labor force. The "experienced labor force," consists of the armed forces, employed workers, and the unemployed with previous work experience. The "experienced civilian labor force" comprises the two latter groups.

Not in labor force.—Persons not in the labor force comprise all civilians 14 years of age and over who are not classified as employed or unemployed, including persons doing only incidental unpaid family work (less than 15 hours during the census week). Persons not in the labor force are further classified in this report into the following categories:

1. *Keeping house.*—Persons primarily occupied with their own home housework.
2. *Unable to work.*—Persons who cannot work because of a long-term physical or mental illness or disability. There is some evidence, however, that some persons were reported as "unable to work" who were only temporarily ill or who, although elderly, were not permanently disabled.
3. *Inmates of institutions.*—Persons, other than staff members and their families, living in institutions. (See definition of institutional population on p. 43.) Staff members of institutions and their families are classified into employment status categories on the same basis as are persons living outside of institutions.
4. *Other and not reported.*—Persons in this general category include the following two groups which are combined for the purpose of this report:
 - a. Persons not in the labor force other than those keeping house, unable to work, or in institutions. This group includes students, the retired, those too old to work, the voluntarily

idle, and seasonal workers for whom the census week fell in an "off" season and who were not reported as unemployed.

b. Persons for whom information on employment status was not reported. Although the number of persons classified as "not reported" was not tabulated separately for this report, it is estimated on the basis of preliminary data that the number in this group is approximately 1.2 million for the United States as a whole, or only about 1 percent of the total United States population 14 years old and over. Analysis of the characteristics (sex, age, color, marital status, school enrollment, and urban-rural residence) of persons in this group suggests that approximately half a million might have been added to the labor force had the necessary information been obtained. There may be considerable variation from State to State, however, in the proportion of persons classified as "not reported" and within this group, in the number who might have been labor force members.

Basis for Classification

The employment status classification is based primarily on a series of interrelated "sorter" questions designed to identify, in this sequence: (a) Persons who worked at all during the Census week; (b) those who did not work but were looking for work; and (c) those who neither worked nor looked for work but had a job or business from which they were temporarily absent. The four questions used for this purpose are described below:

1. "What was this person doing most of last week—working, keeping house, or something else?" This question was designed to classify persons according to their major activity and to identify the large number of full-time workers. Persons unable to work at all because of physical or mental disabilities were also identified here.
2. "Did this person do any work at all last week, not counting work around the house?" This question was asked of all persons except those reported in the previous question as working or as unable to work. It was designed to identify persons working part time or intermittently in addition to their major activity.
3. "Was this person looking for work?" Asked of persons replying in the previous question that they did not work at all, this question served to obtain a count of the unemployed.
4. "Even though he didn't work last week, does he have a job or business?" Persons temporarily absent from their job or business were identified by means of this question, which was asked of persons neither working nor looking for work.

Problems in Classification

Classification of the population by employment status is usually correct for most regular full-time workers but is subject to error in marginal cases. Some of the concepts are difficult to apply; more important, for certain groups, the complete information needed is not always obtained. For example, housewives, students, and semiretired persons, who are in the labor force on only a part-time or intermittent basis, may fail to report that they are employed or looking for work unless carefully questioned. In many cases, enumerators may assume that such persons could not be in the labor force and will omit the necessary questions. As a result of these failures, the statistics will understate the size of the labor force and overstate the number of persons not in the labor force. (See also paragraph below on "Current Population Survey.")

Comparability

Statistics on gainful workers.—The data on the labor force for 1940 and 1950 are not exactly comparable with the statistics for gainful workers presented in this report for 1920 and 1930 because of differences in definition. "Gainful workers" were persons reported as having a gainful occupation, that is, an occupation in which they earned money or a money equivalent, or in which they assisted in the production of marketable goods, regardless of whether they were working or seeking work at the time of the census. A person was not considered to have had a gainful occupation if his activity was of limited extent. The labor force is defined on the basis of activity during the census week only and includes all persons who were employed, unemployed, or in the armed forces in that week. Certain classes of persons, such as retired workers, some inmates of institutions, recently inca-

UNITED STATES SUMMARY

Figure 28.—PERCENT CHANGE, 1940 TO 1950, IN THE SIZE OF THE LABOR FORCE AND IN THE NUMBER OF PERSONS 14 YEARS OLD AND OVER, BY SEX, BY STATES

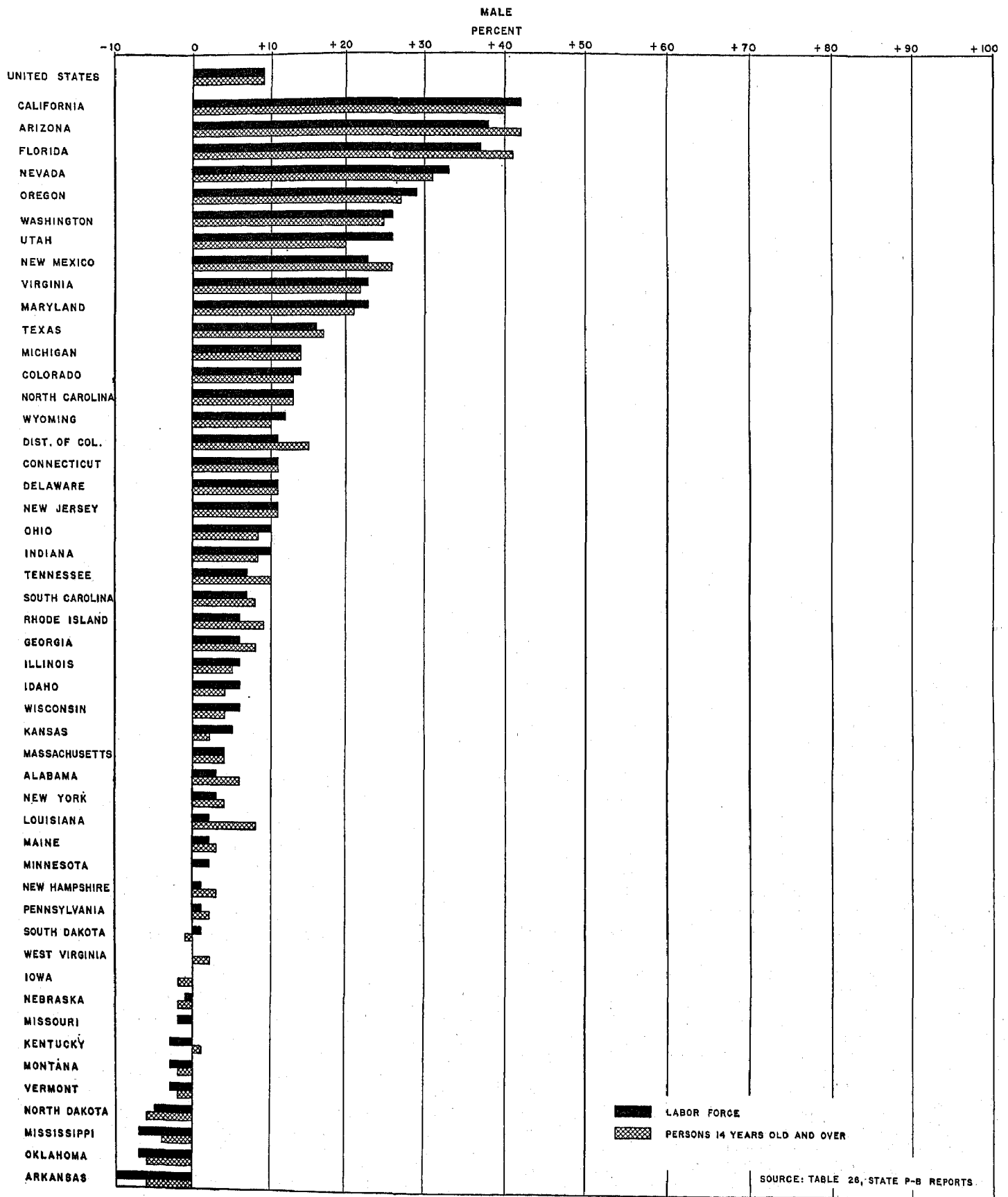
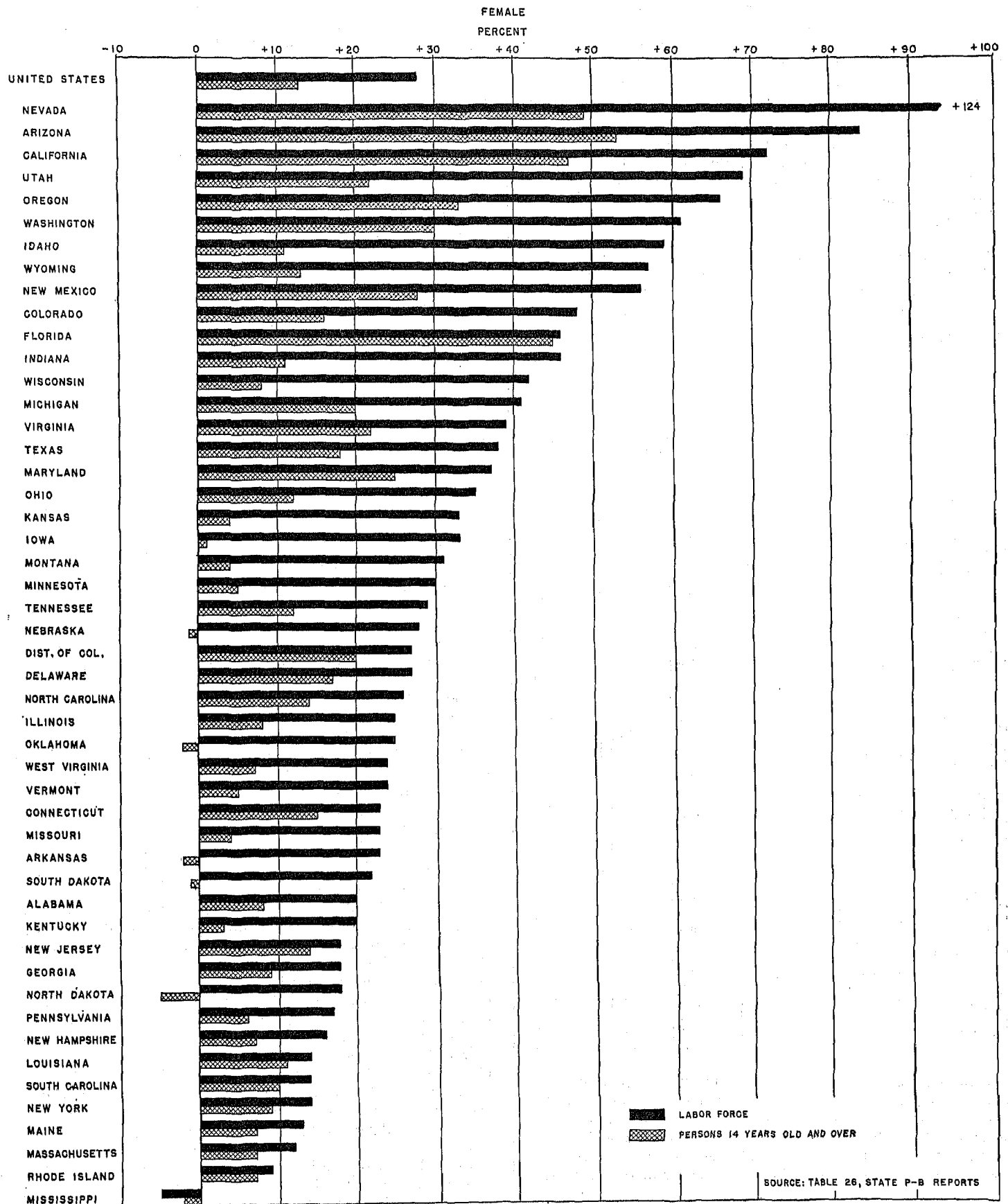


Figure 28.—PERCENT CHANGE, 1940 TO 1950, IN THE SIZE OF THE LABOR FORCE AND IN THE NUMBER OF PERSONS 14 YEARS OLD AND OVER, BY SEX, BY STATES—CON



pacitated workers, and seasonal workers neither working nor seeking work at the time of the census, were frequently included among gainful workers; but, in general, such persons are not included in the labor force. On the other hand, the census included in the labor force for 1940 and 1950 persons seeking work without previous work experience, that is, new workers. Such new workers as there were at the time of the 1920 and 1930 Censuses were probably for the most part not reported as gainful workers.

In 1920, the census date was January 1, whereas that for 1930, 1940, and 1950 was April 1. For this additional reason, the number of gainful workers reported for 1920, especially in agricultural areas, may not be altogether comparable with the statistics for later years.

TABLE Q.—LABOR FORCE PARTICIPATION RATES BASED ON REPORTS FOR IDENTICAL PERSONS OBTAINED BY 1950 CENSUS AND BY CURRENT POPULATION SURVEY ENUMERATORS, BY AGE, COLOR, AND SEX

[Data for approximately 51,000 persons enumerated in both the census and the Current Population Survey for April 1950]

Age, color, and sex	Labor force participation rates		Census rate as percent of Current Population Survey rate
	Based on census enumeration	Based on Current Population Survey enumeration	
TOTAL			
Male, 14 years and over.....	81.5	84.0	97.0
14 to 17 years.....	27.0	35.0	77.1
18 to 24 years.....	83.1	86.2	96.4
25 to 44 years.....	95.1	96.9	98.1
45 to 64 years.....	90.1	92.1	97.8
65 years and over.....	44.4	45.9	96.7
Female, 14 years and over.....	29.2	31.7	92.1
14 to 17 years.....	13.2	17.1	77.2
18 to 24 years.....	44.0	45.5	96.7
25 to 44 years.....	32.4	35.1	92.3
45 to 64 years.....	20.5	32.1	91.9
65 years and over.....	7.0	8.9	78.7
WHITE			
Male, 14 years and over.....	81.7	84.0	97.3
14 to 17 years.....	25.0	33.6	70.2
18 to 24 years.....	83.2	85.9	96.0
25 to 44 years.....	95.5	97.1	98.4
45 to 64 years.....	90.3	92.0	98.2
65 years and over.....	44.5	46.0	96.7
Female, 14 years and over.....	28.3	30.6	92.5
14 to 17 years.....	13.2	16.7	79.0
18 to 24 years.....	45.0	46.4	97.0
25 to 44 years.....	31.1	33.5	92.8
45 to 64 years.....	28.4	30.8	92.2
65 years and over.....	6.7	8.4	79.8
NONWHITE			
Male, 14 years and over.....	79.5	84.2	94.4
14 to 17 years.....	37.5	46.1	81.3
18 to 24 years.....	82.0	80.5	91.6
25 to 44 years.....	90.9	94.2	96.5
45 to 64 years.....	88.3	93.2	94.7
65 years and over.....	43.9	43.9	100.0
Female, 14 years and over.....	37.0	41.7	88.7
14 to 17 years.....	13.0	20.0	65.0
18 to 24 years.....	35.9	37.9	94.7
25 to 44 years.....	44.7	50.0	89.4
45 to 64 years.....	42.0	45.5	90.3
65 years and over.....	11.1	15.1	73.5

1940 Census.—During the period 1940 to 1950, various changes were developed in the questionnaires and in interviewing techniques, designed to obtain a more nearly complete count of the labor force.⁹ Although the changes in questionnaire design were incorporated into the 1950 Census schedule, and interviewing techniques were stressed in training, the quality of the 1950 sta-

tistics does not appear to differ from that for 1940 because of these measures.

The 1940 data for employed persons in this volume vary in some cases from the figures originally published in the 1940 reports. The appropriate 1940 figures for the employed shown in the present report have been adjusted to exclude the estimated number of men in the armed forces at that time. This was done to achieve comparability with the 1950 employed total which is limited to civilians.

Current Population Survey.—The estimated size of the civilian labor force in the United States based on the Current Population Survey is about 5 percent above the corresponding figure from the 1950 Census. The discrepancy lies chiefly in the count of incidental workers. Examination of the census returns for a sample of households that were also included in the Current Population Survey for April 1950 indicates that although differences of all kinds were found, on balance, the Current Population Survey enumerators, who are much more experienced than were the temporary census enumerators, reported more completely the employment or unemployment of teen-agers and women 25 years old and over. This difference is reflected in higher labor force participation rates and unemployment rates for those groups and a more accurate reporting of persons employed in industries, such as agriculture, trade and personal services, where part-time or occasional work is widely prevalent. These are the groups for whom variability in response is relatively great in labor force surveys. On the other hand, the differences were at a minimum for men and for young women—the major components of the “full-time” labor force. Table Q compares the labor force participation rates—i. e., the proportion of the population in the labor force—for broad age groups by sex and color, based on reports for identical persons obtained by census and by Current Population Survey enumerators.

It may be estimated on the basis of the above analysis that perhaps 3 percent of the total population 14 years old and over in April 1950 were actually in the labor force but were classified outside the labor force in the census returns. This percentage varies from State to State and between one population group and another. For example, misclassification was somewhat greater for nonwhite than for white persons as shown in table Q. This difference reflects in large measure the fact that proportionately more nonwhite workers are unemployed, or employed as service workers or laborers, groups that were particularly subject to misclassification in the census.

Other data.—Because the 1950 Census employment data were obtained by household interviews, they differ from statistics based on reports from individual business establishments, farm enterprises, and certain government programs. The data based on household interviews provide information about the work status of the whole population.

Persons employed at more than one job are counted only once as employed and are classified according to the job at which they worked the greatest number of hours during the census week. In statistics based on reports from business and farm establishments, on the other hand, persons who work for more than one establishment may be counted more than once. Moreover, other data, unlike those presented here, generally exclude private household workers, unpaid family workers, and self-employed persons, and may include workers less than 14 years of age. An additional difference arises from the fact that persons with a job but not at work are included with the employed in the statistics shown here, whereas only part of this group is likely to be included in employment figures based on establishment payroll reports. Furthermore, the household reports include persons on the basis of their place of residence regardless of where they work, whereas establishment reports relate persons to their place of work regardless of where they live; the two types of data may not be comparable for areas where a significant number of workers commute to or from other areas.

⁹ See U. S. Bureau of the Census, *Current Population Reports*, “Labor Force, Employment, and Unemployment in the United States, 1940 to 1948,” Series P-50, No. 2, September 1947.

For a number of reasons, the unemployment figures of the Bureau of the Census are not directly comparable with the published figures for unemployment compensation claims or claims for veterans' readjustment allowances. Certain persons such as private household and government workers are generally not eligible for unemployment compensation. Further, the place where claims are filed may not necessarily be the same as the place of residence of the unemployed worker. In addition, the qualifications for drawing unemployment compensation differ from the definition of unemployment used by the Bureau of the Census. Persons working only a few hours during the week and persons classified as "with a job but not at work" are sometimes eligible for unemployment compensation but are included by the Bureau among the "employed."

HOURS WORKED DURING CENSUS WEEK

The data on hours worked were derived from answers to the question, "How many hours did he work last week?" asked of persons who reported they had worked during the week prior to their enumeration. The statistics refer to the number of hours actually worked during the census week, and not necessarily to the number usually worked or the scheduled number of hours. For persons working at more than one job, the figures relate to the combined number of hours worked at all jobs during the week. The data on hours worked presented in this report provide abroad classification of young employed persons into full-time and part-time workers. The proportion of persons who worked only a small number of hours is understated because such persons were omitted from the labor force count more frequently than were full-time workers.

WEEKS WORKED IN 1949

Definitions

The statistics on weeks worked are based on replies to the question, "Last year, in how many weeks did this person do any work at all, not counting work around the house?" This question was asked of a 20-percent sample of persons 14 years old and over. The data pertain to the number of different weeks during 1949 in which a person did any work for pay or profit (including paid vacations and sick leave) or worked without pay on a family farm or in a family business. Weeks of active service in the armed forces are also included. It is probable that the number of persons who worked in 1949 is understated, because there is some tendency for respondents to forget intermittent or short periods of employment.

Comparability

In 1950, no distinction was made between a part-time and a full-time work week, whereas in 1940 the enumerator was instructed to convert part-time work to equivalent full-time weeks. A full-time week was defined as the number of hours locally regarded as full time for the given occupation and industry. A further difference is that, in the 1940 reports, the data were shown for wage and salary workers only and were published in terms of months rather than weeks.

OCCUPATION, INDUSTRY, AND CLASS OF WORKER

In the 1950 Census of Population, information on occupation, industry, and class of worker was collected for persons in the experienced civilian labor force. All three items related to one specific job held by the person. For an employed person, the information referred to the job he held during the census week. If he was employed at two or more jobs, the job at which he worked the greatest number of hours during the census week was reported. For an experienced unemployed person, the information referred to the last job he had held.

The classification systems used for the occupation and industry data in the 1950 Census of Population are described below. These systems were developed in consultation with many individuals,

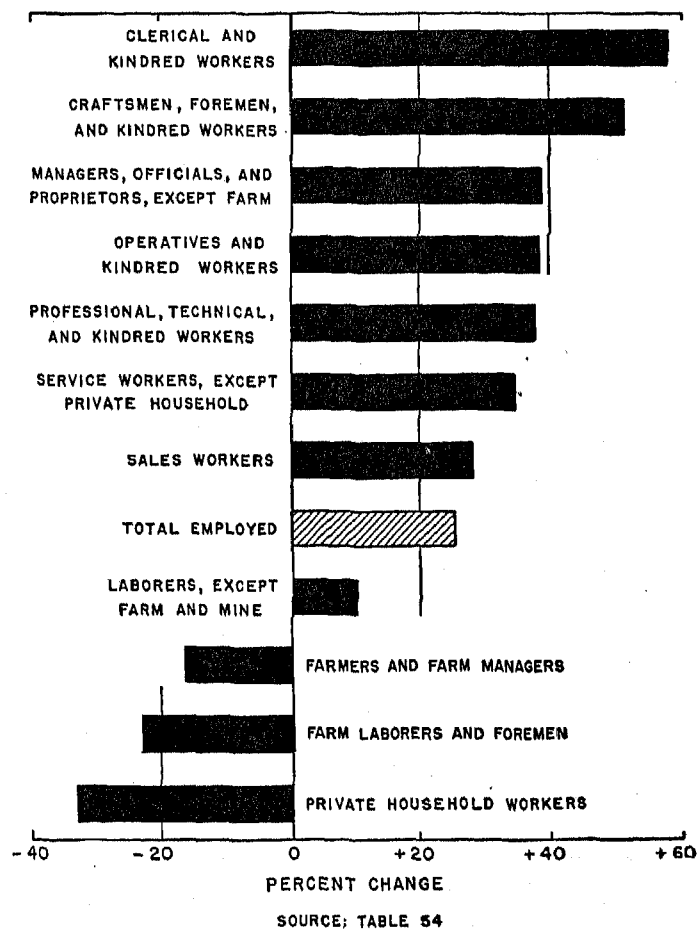
private organizations, and government agencies, and, in particular, the Joint Committee on Occupational Classification (sponsored by the American Statistical Association and the United States Bureau of the Budget).

Occupation

The occupation information presented here was derived from answers to the question, "What kind of work was he doing?"

Classification system.—The occupational classification system developed for the 1950 Census of Population is organized into 12 major groups, which form the basis for the occupation data in Chapter B of this volume. The system consists of 469 items, 270 of which are specific occupation categories; the remainder are

FIGURE 29.—PERCENT CHANGE, 1940 TO 1950, IN THE NUMBER OF EMPLOYED PERSONS IN THE UNITED STATES, BY MAJOR OCCUPATION GROUP



subgroupings (mainly on the basis of industry) of 13 of the occupation categories. For the detailed occupation tables in Chapter C, certain of the categories were combined, and the detailed occupation list used here consists of 446 items (tables 124, 125, and 158). The composition of each of the detailed categories is shown in the publication, U. S. Bureau of the Census, *1950 Census of Population, Classified Index of Occupations and Industries*, Washington, D. C., 1950.

In the presentation of cross-classifications of occupation by urban-rural residence, age, race, class of worker, and income, intermediate occupational classifications of 158 items for males and 67 items for females have been used (tables 126 to 129 and 159). These intermediate classifications represent selections and combinations of the items in the detailed system. The relationships between the two levels of classification are given in Lists A and B for males and females, respectively.

List A.—INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR MALES (158 ITEMS) WITH COMPONENT DETAILED ITEMS

[Detailed occupation not shown where intermediate occupation consists of only one detailed occupation. "N. e. c." means not elsewhere classified]

- | | | |
|--|--|--|
| <p>1. Accountants and auditors</p> <p>2. Architects</p> <p>3. Artists and art teachers</p> <p>4. Authors, editors, and reporters
Authors
Editors and reporters</p> <p>5. Chemists</p> <p>6. Clergymen</p> <p>7. College presidents, professors, and instructors
(n. e. c.)</p> <p>8. Dentists</p> <p>9. Designers and draftsmen
Designers
Draftsmen</p> <p>10. Engineers, aeronautical</p> <p>11. Engineers, civil</p> <p>12. Engineers, electrical</p> <p>13. Engineers, mechanical</p> <p>14. Other technical engineers
Engineers, chemical
Engineers, industrial
Engineers, metallurgical, and metallurgists
Engineers, mining
Engineers, not elsewhere classified</p> <p>15. Lawyers and judges</p> <p>16. Musicians and music teachers</p> <p>17. Natural scientists (n. e. c.)</p> <p>18. Pharmacists</p> <p>19. Physicians and surgeons</p> <p>20. Social scientists</p> <p>21. Social, welfare, and recreation workers
Recreation and group workers
Social and welfare workers, except group</p> <p>22. Surveyors</p> <p>23. Teachers (n. e. c.)</p> <p>24. Technicians, medical and dental</p> <p>25. Other professional, technical, and kindred workers
Actors and actresses
Airplane pilots and navigators
Athletes
Chiropractors
Dancers and dancing teachers
Dietitians and nutritionists
Entertainers (n. e. c.)
Farm and home management advisors
Foresters and conservationists
Funeral directors and embalmers
Librarians
Nurses, professional
Nurses, student professional
Optometrists
Osteopaths
Personnel and labor relations workers
Photographers
Radio operators
Religious workers
Sports instructors and officials
Technicians, testing
Technicians (n. e. c.)
Therapists and healers (n. e. c.)
Veterinarians
Professional, technical, and kindred workers
(n. e. c.)</p> <p>26. Farmers and farm managers
Farmers (owners and tenants)
Farm managers</p> <p>27. Officials and inspectors, State and local administration
Inspectors, State public administration
Inspectors, local public administration
Officials and administrators (n. e. c.), State public administration
Officials and administrators (n. e. c.), local public administration</p> <p>28. Other specified managers and officials
Buyers and department heads, store
Buyers and shippers, farm products
Conductors, railroad
Credit men
Floormen and floor managers, store
Inspectors, Federal public administration and postal service
Managers and superintendents, building</p> | <p>28. Other specified managers and officials—Con.
Officers, pilots, pursers, and engineers, ship
Officials and administrators (n. e. c.), Federal public administration and postal service
Officials, lodge, society, union, etc.
Postmasters
Purchasing agents and buyers (n. e. c.)
Managers, officials, and proprietors (n. e. c.)—salaried:</p> <p>29. Manufacturing</p> <p>30. Wholesale and retail trade
Wholesale trade
Food and dairy products stores, and milk retailing
General merchandise and five and ten cent stores
Apparel and accessories stores
Furniture, home furnishings, and equipment stores
Motor vehicles and accessories retailing
Gasoline service stations
Eating and drinking places
Hardware, farm implement, and building material retailing
Other retail trade</p> <p>31. Finance, insurance, and real estate
Banking and other finance
Insurance and real estate</p> <p>32. Other industries (incl. not reported)
Construction
Transportation
Telecommunications, and utilities and sanitary services
Business services
Automobile repair services and garages
Miscellaneous repair services
Personal services
All other industries (incl. not reported)
Managers, officials, and proprietors (n. e. c.)—self-employed:</p> <p>33. Construction</p> <p>34. Manufacturing</p> <p>35. Wholesale trade</p> <p>36. Eating and drinking places</p> <p>37. Retail trade, except eating and drinking places
Food and dairy products stores, and milk retailing
General merchandise and five and ten cent stores
Apparel and accessories stores
Furniture, home furnishings, and equipment stores
Motor vehicles and accessories retailing
Gasoline service stations
Hardware, farm implement, and building material retailing
Other retail trade</p> <p>38. Other industries (incl. not reported)
Transportation
Telecommunications, and utilities and sanitary services
Banking and other finance
Insurance and real estate
Business services
Automobile repair services and garages
Miscellaneous repair services
Personal services
All other industries (incl. not reported)</p> <p>39. Bookkeepers</p> <p>40. Mail carriers</p> <p>41. Other clerical and kindred workers
Agents (n. e. c.)
Attendants and assistants, library
Attendants, physician's and dentist's office
Baggage men, transportation
Bank tellers
Cashiers
Collectors, bill and account
Dispatchers and starters, vehicle
Express messengers and railway mail clerks
Messengers and office boys
Office machine operators
Shipping and receiving clerks
Stenographers, typists, and secretaries
Telegraph messengers
Telegraph operators
Telephone operators
Ticket, station, and express agents
Clerical and kindred workers (n. e. c.)</p> <p>42. Insurance agents and brokers</p> <p>43. Real estate agents and brokers</p> <p>44. Other specified sales workers
Advertising agents and salesmen
Auctioneers
Demonstrators
Hucksters and peddlers
Newsboys
Stock and bond salesmen</p> | <p>Salesmen and sales clerks (n. e. c.):</p> <p>45. Manufacturing</p> <p>46. Wholesale trade</p> <p>47. Retail trade</p> <p>48. Other industries (incl. not reported)</p> <p>49. Bakers</p> <p>50. Blacksmiths, forgers, and hammermen
Blacksmiths
Forgemen and hammermen</p> <p>51. Boiler makers</p> <p>52. Cabinetmakers and patternmakers
Cabinetmakers
Pattern and model makers, except paper</p> <p>53. Carpenters</p> <p>54. Compositors and typesetters</p> <p>55. Cranemen, hoistmen, and construction machinery operators
Cranemen, derrickmen, and hoistmen
Excavating, grading, and road machinery operators</p> <p>56. Electricians
Foremen (n. e. c.):</p> <p>57. Manufacturing, durable goods
Metal industries
Machinery, including electrical
Transportation equipment
Other durable goods</p> <p>58. Manufacturing, nondurable goods (incl. not specified manufacturing)
Textiles, textile products, and apparel
Other nondurable goods (incl. not specified manufacturing)</p> <p>59. Nonmanufacturing industries (incl. not reported)
Construction
Railroads and railway express service
Transportation, except railroad
Telecommunications, and utilities and sanitary services
Other industries (incl. not reported)</p> <p>60. Linemen and servicemen, telegraph, telephone, and power</p> <p>61. Locomotive engineers</p> <p>62. Locomotive firemen</p> <p>63. Machinists and job setters
Job setters, metal
Machinists</p> <p>64. Masons, tile setters, and stone cutters
Brickmasons, stonemasons, and tile setters
Stone cutters and stone carvers</p> <p>65. Mechanics and repairmen, airplane</p> <p>66. Mechanics and repairmen, automobile</p> <p>67. Mechanics and repairmen, radio and television</p> <p>68. Other mechanics and repairmen, and loom fixers
Loom fixers
Mechanics and repairmen, office machine
Mechanics and repairmen, railroad and car shop
Mechanics and repairmen, not elsewhere classified</p> <p>69. Millwrights</p> <p>70. Molders, metal</p> <p>71. Painters (construction), paperhangers, and glaziers
Glaziers
Painters, construction and maintenance
Paperhangers</p> <p>72. Plasterers and cement finishers
Cement and concrete finishers
Plasterers</p> <p>73. Plumbers and pipe fitters</p> <p>74. Printing craftsmen, except compositors and typesetters
Electrotypers and stereotypers
Photoengravers and lithographers
Pressmen and plate printers, printing</p> <p>75. Shoemakers and repairers, except factory</p> <p>76. Stationary engineers</p> <p>77. Structural metal workers</p> |
|--|--|--|

List A.—INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR MALES (158 ITEMS) WITH COMPONENT DETAILED ITEMS—Con.

- | | | |
|---|--|--|
| <p>78. Tailors and furriers
Furriers
Tailors and tailoresses</p> <p>79. Tinsmiths, coppersmiths, and sheet metal workers</p> <p>80. Toolmakers, and die makers and setters</p> <p>81. Other craftsmen and kindred workers
Bookbinders
Decorators and window dressers
Engravers, except photoengravers
Heat treaters, annealers, and temperers
Inspectors, scalers, and graders, log and lumber
Inspectors (n. e. c.), construction
Inspectors (n. e. c.), railroads and railway express service
Inspectors (n. e. c.), transportation except railroad, communication, and other public utilities
Inspectors (n. e. c.), other industries (incl. not reported)
Jewelers, watchmakers, goldsmiths, and silver-smiths
Millers, grain, flour, feed, etc.
Motion picture projectionists
Opticians, and lens grinders and polishers
Piano and organ tuners and repairmen
Rollers and roll hands, metal
Roofers and slaters
Upholsterers
Craftsmen and kindred workers (n. e. c.)
Members of the armed forces</p> <p>82. Apprentices
Apprentices, auto mechanics
Apprentices, bricklayers and masons
Apprentices, carpenters
Apprentices, electricians
Apprentices, machinists and toolmakers
Apprentices, mechanics, except auto
Apprentices, plumbers and pipe fitters
Apprentices, building trades (n. e. c.)
Apprentices, metalworking trades (n. e. c.)
Apprentices, printing trades
Apprentices, other specified trades
Apprentices, trade not specified</p> <p>83. Attendants, auto service and parking</p> <p>84. Brakemen and switchmen, railroad
Brakemen, railroad
Switchmen, railroad</p> <p>85. Bus drivers</p> <p>86. Filers, grinders, and polishers, metal</p> <p>87. Furnacemen, smeltermen, and heaters
Furnacemen, smeltermen, and pourers
Heaters, metal</p> <p>88. Laundry and dry cleaning operatives</p> <p>89. Meat cutters, except slaughter and packing house</p> <p>90. Mine operatives and laborers (n. e. c.)
Coal mining
Crude petroleum and natural gas extraction
Mining and quarrying, except fuel</p> <p>91. Motormen, street, subway, and elevated railway</p> <p>92. Painters, except construction and maintenance</p> <p>93. Power station operators</p> <p>94. Sailors and deck hands</p> <p>95. Sawyers</p> <p>96. Spinners and weavers, textile
Spinners, textile
Weavers, textile</p> <p>97. Stationary firemen</p> <p>98. Taxicab drivers and chauffeurs</p> <p>99. Truck drivers and deliverymen
Deliverymen and routemen
Truck and tractor drivers</p> <p>100. Welders and flame-cutters</p> <p>101. Other specified operatives and kindred workers
Asbestos and insulation workers
Blasters and powdermen
Boatmen, cannalmen, and lock keepers
Chainmen, rodmen, and axmen, surveying
Conductors, bus and street railway
Dressmakers and seamstresses, except factory
Dyers
Fruit, nut, and vegetable graders and packers, except factory
Milliners
Motormen, mine, factory, logging camp, etc.
Oilers and greasers, except auto
Photographic process workers</p> | <p>Operatives and kindred workers (n. e. c.):</p> <p>102. Sawmills, planing mills, and miscellaneous wood products
Glass and glass products
Sawmills, planing mills, and mill work
Miscellaneous wood products</p> <p>103. Furniture and fixtures</p> <p>104. Stone, clay, and glass products
Glass and glass products
Cement, and concrete, gypsum, and plaster products
Structural clay products
Pottery and related products
Miscellaneous nonmetallic mineral and stone products</p> <p>105. Primary metal industries
Blast furnaces, steel works, and rolling mills
Other primary iron and steel industries
Primary nonferrous industries</p> <p>106. Fabricated metal industries (incl. not specified metal)
Fabricated steel products
Fabricated nonferrous metal products
Not specified metal industries</p> <p>107. Machinery, except electrical
Agricultural machinery and tractors
Office and store machines and devices
Miscellaneous machinery</p> <p>108. Electrical machinery, equipment, and supplies</p> <p>109. Motor vehicles and motor vehicle equipment</p> <p>110. Transportation equipment, except motor vehicle
Aircraft and parts
Ship and boat building and repairing
Railroad and miscellaneous transportation equipment</p> <p>111. Other durable goods
Professional equipment and supplies
Photographic equipment and supplies
Watches, clocks, and clockwork-operated devices
Miscellaneous manufacturing industries</p> <p>112. Food and kindred products
Meat products
Dairy products
Canning and preserving fruits, vegetables, and sea foods
Grain-mill products
Bakery products
Confectionery and related products
Beverage industries
Miscellaneous food preparations and kindred products
Not specified food industries</p> <p>113. Yarn, thread, and fabric mills</p> <p>114. Knitting, and other textile mill products
Knitting mills
Dyeing and finishing textiles, except knit goods
Carpets, rugs, and other floor coverings
Miscellaneous textile mill products</p> <p>115. Apparel and other fabricated textile products
Apparel and accessories
Miscellaneous fabricated textile products</p> <p>116. Paper and allied products
Pulp, paper, and paperboard mills
Paperboard containers and boxes
Miscellaneous paper and pulp products</p> <p>117. Chemicals and allied products
Synthetic fibers
Drugs and medicines
Paints, varnishes, and related products
Miscellaneous chemicals and allied products</p> <p>118. Leather and leather products
Leather: tanned, curried, and finished
Footwear, except rubber
Leather products, except footwear</p> <p>119. Other nondurable goods
Tobacco manufactures
Printing, publishing, and allied industries
Petroleum refining
Miscellaneous petroleum and coal products
Rubber products</p> <p>120. Not specified manufacturing industries</p> <p>121. Transportation, communication, and other public utilities
Railroads and railway express service
Transportation, except railroad
Telecommunications, and utilities and sanitary services</p> <p>122. Wholesale and retail trade</p> | <p>Operatives and kindred workers—Con.</p> <p>123. Other industries (incl. not reported)
Construction
Business and repair services
Personal services
Public administration
All other industries (incl. not reported)</p> <p>124. Private household workers
Housekeepers, private household—living in
Housekeepers, private household—living out
Laundresses, private household—living in
Laundresses, private household—living out
Private household workers (n. e. c.)—living in
Private household workers (n. e. c.)—living out</p> <p>125. Barbers, beauticians, and manicurists</p> <p>126. Charwomen, janitors, and porters
Charwomen and cleaners
Janitors and sextons
Porters</p> <p>127. Cooks, except private household</p> <p>128. Elevator operators</p> <p>129. Firemen, fire protection</p> <p>130. Guards and watchmen
Guards, watchmen, and doorkeepers
Watchmen (crossing) and bridge tenders</p> <p>131. Policemen, sheriffs, and marshals
Marshals and constables
Policemen and detectives, government
Policemen and detectives, private
Sheriffs and bailiffs</p> <p>132. Waiters, bartenders, and counter workers
Bartenders
Counter and fountain workers
Waiters and waitresses</p> <p>133. Other service workers, except private household
Attendants, hospital and other institution
Attendants, professional and personal service (n. e. c.)
Attendants, recreation and amusement
Boarding and lodging house keepers
Bootblacks
Housekeepers and stewards, except private household
Midwives
Practical nurses
Ushers, recreation and amusement
Service workers, except private household (n. e. c.)</p> <p>134. Farm laborers, unpaid family workers</p> <p>135. Farm laborers, except unpaid, and farm foremen
Farm foremen
Farm laborers, wage workers
Farm service laborers, self-employed</p> <p>136. Fishermen and oystermen</p> <p>137. Longshoremen and stevedores</p> <p>138. Lumbermen, raftsmen, and wood choppers</p> <p>139. Other specified laborers
Garage laborers and car washers and greasers
Gardeners, except farm, and groundskeepers
Teamsters</p> <p>Laborers (n. e. c.):</p> <p>140. Furniture, saw and planing mills, and miscellaneous wood products
Sawmills, planing mills, and mill work
Miscellaneous wood products
Furniture and fixtures</p> <p>141. Stone, clay, and glass products
Glass and glass products
Cement, and concrete, gypsum, and plaster products
Structural clay products
Pottery and related products
Miscellaneous nonmetallic mineral and stone products</p> <p>142. Primary metal industries
Blast furnaces, steel works, and rolling mills
Other primary iron and steel industries
Primary nonferrous industries</p> <p>143. Fabricated metal industries (incl. not specified metal)
Fabricated steel products
Fabricated nonferrous metal products
Not specified metal industries</p> <p>144. Machinery, including electrical
Agricultural machinery and tractors
Office and store machines and devices
Miscellaneous machinery
Electrical machinery, equipment, and supplies</p> |
|---|--|--|

UNITED STATES SUMMARY

List A.—INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR MALES (158 ITEMS) WITH COMPONENT DETAILED ITEMS—Con.

- | | | |
|---|---|--|
| <p>145. Laborers (n. e. c.)—Con.
Transportation equipment
Motor vehicles and motor vehicle equipment
Aircraft and parts
Ship and boat building and repairing
Railroad and miscellaneous transportation equipment</p> <p>146. Other durable goods
Professional equipment and supplies
Photographic equipment and supplies
Watches, clocks, and clockwork-operated devices
Miscellaneous manufacturing industries</p> <p>147. Food and kindred products
Meat products
Dairy products
Canning and preserving fruits, vegetables, and sea foods
Grain-mill products
Bakery products
Confectionery and related products
Beverage industries
Miscellaneous food preparations and kindred products
Not specified food industries</p> | <p>148. Laborers (n. e. c.)—Con.
Textile mill products and apparel
Knitting mills
Dyeing and finishing textiles, except knit goods
Carpets, rugs, and other floor coverings
Yarn, thread, and fabric mills
Miscellaneous textile mill products
Apparel and accessories
Miscellaneous fabricated textile products</p> <p>149. Chemicals and allied products
Synthetic fibers
Drugs and medicines
Paints, varnishes, and related products
Miscellaneous chemicals and allied products</p> <p>150. Other nondurable goods
Tobacco manufactures
Pulp, paper, and paperboard mills
Paperboard containers and boxes
Miscellaneous paper and pulp products
Printing, publishing, and allied industries
Petroleum refining
Miscellaneous petroleum and coal products
Rubber products
Leather: tanned, curried, and finished</p> | <p>150. Laborers (n. e. c.)—Con.
Other nondurable goods—Con.
Footwear, except rubber
Leather products, except footwear</p> <p>151. Not specified manufacturing industries</p> <p>152. Construction</p> <p>153. Railroads and railway express service</p> <p>154. Transportation, except railroad</p> <p>155. Telecommunications, and utilities and sanitary services</p> <p>156. Wholesale and retail trade</p> <p>157. Other industries (incl. not reported)
Business and repair services
Personal services
Public administration
All other industries (incl. not reported)</p> <p>158. Occupation not reported</p> |
|---|---|--|

List B.—INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR FEMALES (67 ITEMS) WITH COMPONENT DETAILED ITEMS

[Detailed occupation not shown where intermediate occupation consists of only one detailed occupation. "N. e. c." means not elsewhere classified]

- | | | |
|---|---|--|
| <p>1. Accountants and auditors</p> <p>2. Actresses, dancers, and entertainers (n. e. c.)
Actors and actresses
Dancers and dancing teachers
Entertainers (n. e. c.)</p> <p>3. Artists and art teachers</p> <p>4. Authors, editors, and reporters
Authors
Editors and reporters</p> <p>5. Chemists and natural scientists (n. e. c.)
Chemists
Natural scientists (n. e. c.)</p> <p>6. College presidents, professors, and instructors (n. e. c.)</p> <p>7. Designers and draftsmen
Designers
Draftsmen</p> <p>8. Dietitians and nutritionists</p> <p>9. Lawyers and judges</p> <p>10. Librarians</p> <p>11. Musicians and music teachers</p> <p>12. Nurses, professional</p> <p>13. Nurses, student professional</p> <p>14. Physicians and surgeons</p> <p>15. Social scientists</p> <p>16. Social, welfare, and recreation workers
Recreation and group workers
Social and welfare workers, except group</p> <p>17. Teachers (n. e. c.)</p> <p>18. Technicians, medical and dental</p> <p>19. Therapists and healers (n. e. c.)</p> <p>20. Other professional, technical, and kindred workers
Airplane pilots and navigators
Architects
Athletes
Chiropractors
Clerkymen
Dentists
Engineers, aeronautical
Engineers, chemical
Engineers, civil
Engineers, electrical
Engineers, industrial
Engineers, mechanical
Engineers, metallurgical, and metallurgists
Engineers, mining
Engineers, not elsewhere classified
Farm and home management advisors
Foresters and conservationists
Funeral directors and embalmers
Optometrists
Osteopaths
Personnel and labor relations workers
Pharmacists
Photographers
Radio operators
Religious workers
Sports instructors and officials
Surveyors</p> | <p>20. Other professional, technical, and kindred workers—Con.
Technicians, testing
Technicians (n. e. c.)
Veterinarians
Professional, technical, and kindred workers (n. e. c.)</p> <p>21. Farmers and farm managers
Farmers (owners and tenants)
Farm managers</p> <p>22. Specified managers and officials
Buyers and department heads, store
Buyers and shippers, farm products
Conductors, railroad
Credit men
Floormen and floor managers, store
Inspectors, Federal public administration and postal service
Inspectors, State public administration
Inspectors, local public administration
Managers and superintendents, building
Officers, pilots, pursers, and engineers, ship
Officials and administrators (n. e. c.), Federal public administration and postal service
Officials and administrators (n. e. c.), State public administration
Officials and administrators (n. e. c.), local public administration
Officials, lodge, society, union, etc.
Postmasters
Purchasing agents and buyers (n. e. c.)</p> <p>Managers, officials, and proprietors (n. e. c.)—salaried:</p> <p>23. Wholesale and retail trade
Wholesale trade
Food and dairy products stores, and milk retailing
General merchandise and five and ten cent stores
Apparel and accessories stores
Furniture, home furnishings, and equipment stores
Motor vehicles and accessories retailing
Gasoline service stations
Eating and drinking places
Hardware, farm implement, and building material retailing
Other retail trade</p> <p>24. Other industries (incl. not reported)
Construction
Manufacturing
Transportation
Telecommunications, and utilities and sanitary services
Banking and other finance
Insurance and real estate
Business services
Automobile repair services and garages
Miscellaneous repair services
Personal services
All other industries (incl. not reported)</p> <p>Managers, officials, and proprietors (n. e. c.)—self-employed:</p> <p>25. Eating and drinking places</p> <p>26. Wholesale and retail trade, except eating and drinking places
Wholesale trade
Food and dairy products stores, and milk retailing
General merchandise and five and ten cent stores
Apparel and accessories stores
Furniture, home furnishings, and equipment stores
Motor vehicles and accessories retailing</p> | <p>Managers, officials, and proprietors (n. e. c.)—self employed—Con.</p> <p>26. Wholesale and retail trade, except eating and drinking places—Con.
Gasoline service stations
Hardware, farm implement, and building material retailing
Other retail trade</p> <p>27. Other industries (incl. not reported)
Construction
Manufacturing
Transportation
Telecommunications, and utilities and sanitary services
Banking and other finance
Insurance and real estate
Business services
Automobile repair services and garages
Miscellaneous repair services
Personal services
All other industries (incl. not reported)</p> <p>28. Bookkeepers</p> <p>29. Cashiers</p> <p>30. Stenographers, typists, and secretaries</p> <p>31. Telephone operators</p> <p>32. Other clerical and kindred workers
Agents (n. e. c.)
Attendants and assistants, library
Attendants, physician's and dentist's office
Baggage men, transportation
Bank tellers
Collectors, bill and account
Dispatchers and starters, vehicle
Express messengers and railway mail clerks
Mail carriers
Messengers and office boys
Office machine operators
Shipping and receiving clerks
Telegraph messengers
Telegraph operators
Ticket, station, and express agents
Clerical and kindred workers (n. e. c.)</p> <p>33. Insurance and real estate agents and brokers
Insurance agents and brokers
Real estate agents and brokers</p> <p>34. Other specified sales workers
Advertising agents and salesmen
Auctioneers
Demonstrators
Hucksters and peddlers
Newsboys
Stock and bond salesmen</p> <p>35. Salesmen and sales clerks (n. e. c.), retail trade</p> <p>36. Salesmen and sales clerks (n. e. c.), except retail trade
Manufacturing
Wholesale trade
Other industries (incl. not reported)</p> <p>37. Foremen (n. e. c.)
Construction
Metal industries (mfg.)
Machinery, including electrical (mfg.)
Transportation equipment (mfg.)
Other durable goods (mfg.)
Textiles, textile products, and apparel (mfg.)
Other nondurable goods (incl. not specified manufacturing)
Railroads and railway express service
Transportation, except railroad
Telecommunications, and utilities and sanitary services
Other industries (incl. not reported)</p> |
|---|---|--|

List B.—INTERMEDIATE OCCUPATIONAL CLASSIFICATION FOR FEMALES (67 ITEMS) WITH COMPONENT DETAILED ITEMS—Con.

- | | | |
|---|--|---|
| <p>38. Other craftsmen and kindred workers (Includes all occupations in the major group "Craftsmen, foremen, and kindred workers" except "Foremen (n. e. c.)"; see table 124 for detailed listing.)</p> <p>39. Dressmakers and seamstresses, except factory</p> <p>40. Laundry and dry cleaning operatives</p> <p>41. Spinners and weavers, textile
Spinners, textile
Weavers, textile</p> <p>42. Other specified operatives and kindred workers (Includes all occupations in the major group "Operatives and kindred workers" except those included in items 39, 40, and 41, and "Operatives and kindred workers (n. e. c.)"; see table 124 for detailed listing.)</p> <p style="padding-left: 20px;">Operatives and kindred workers (n. e. c.):</p> <p>43. Metal industries
Blast furnaces, steel works, and rolling mills
Other primary iron and steel industries
Primary nonferrous industries
Fabricated steel products
Fabricated nonferrous metal products
Not specified metal industries</p> <p>44. Machinery, including electrical
Agricultural machinery and tractors
Office and store machines and devices
Miscellaneous machinery
Electrical machinery, equipment, and supplies</p> <p>45. Other durable goods
Sawmills, planing mills, and mill work
Miscellaneous wood products
Furniture and fixtures
Glass and glass products
Cement, and concrete, gypsum, and plaster products
Structural clay products
Pottery and related products
Miscellaneous nonmetallic mineral and stone products
Motor vehicles and motor vehicle equipment
Aircraft and parts
Ship and boat building and repairing
Railroad and miscellaneous transportation equipment
Professional equipment and supplies
Photographic equipment and supplies
Watches, clocks, and clockwork-operated devices
Miscellaneous manufacturing industries</p> | <p>Operatives and kindred workers (n. e. c.)—Con.</p> <p>46. Food and kindred products
Meat products
Dairy products
Canning and preserving fruits, vegetables, and sea foods
Grain-mill products
Bakery products
Confectionery and related products
Beverage industries
Miscellaneous food preparations and kindred products
Not specified food industries</p> <p>47. Knitting mills</p> <p>48. Textile mill products, except knitting
Dyeing and finishing textiles, except knit goods
Carpet, rugs, and other floor coverings
Yarn, thread, and fabric mills
Miscellaneous textile mill products</p> <p>49. Apparel and other fabricated textile products
Apparel and accessories
Miscellaneous fabricated textile products</p> <p>50. Leather and leather products
Leather: tanned, curried, and finished
Footwear, except rubber
Leather products, except footwear</p> <p>51. Other nondurable goods
Tobacco manufactures
Pulp, paper, and paperboard mills
Paperboard containers and boxes
Miscellaneous paper and pulp products
Printing, publishing, and allied industries
Synthetic fibers
Drugs and medicines
Paints, varnishes, and related products
Miscellaneous chemicals and allied products
Petroleum refining
Miscellaneous petroleum and coal products
Rubber products</p> <p>52. Not specified manufacturing industries</p> <p>53. Nonmanufacturing industries (Incl. not reported)
Construction
Railroads and railway express service
Transportation, except railroad
Telecommunications, and utilities and sanitary services
Wholesale and retail trade
Business and repair services
Personal services
Public administration
All other industries (Incl. not reported)</p> | <p>54. Private household workers—living in
Housekeepers, private household—living in
Laundresses, private household—living in
Private household workers (n. e. c.)—living in</p> <p>55. Private household workers—living out
Housekeepers, private household—living out
Laundresses, private household—living out
Private household workers (n. e. c.)—living out</p> <p>56. Attendants, hospital and other institution</p> <p>57. Barbers, beauticians, and manicurists</p> <p>58. Charwomen, janitors, and porters
Charwomen and cleaners
Janitors and sextons
Porters</p> <p>59. Cooks, except private household</p> <p>60. Housekeepers and stewards, except private household</p> <p>61. Practical nurses and midwives
Midwives
Practical nurses</p> <p>62. Waitresses, bartenders, and counter workers
Bartenders
Counter and fountain workers
Waiters and waitresses</p> <p>63. Other service workers, except private household
Attendants, professional and personal service (n. e. c.)
Attendants, recreation and amusement
Boarding and lodging house keepers
Bootblacks
Elevator operators
Firemen, fire protection
Guards, watchmen, and doorkeepers
Marshals and constables
Police and detectives, government
Police and detectives, private
Sheriffs and bailiffs
Ushers, recreation and amusement
Watchmen (crossing) and bridge tenders
Service workers, except private household (n. e. c.)</p> <p>64. Farm laborers, unpaid family workers</p> <p>65. Farm laborers, except unpaid, and farm foremen
Farm foremen
Farm laborers, wage workers
Farm service laborers, self-employed</p> <p>66. Laborers, except farm and mine (Includes all occupations in the major group "Laborers, except farm and mine"; see table 124 for detailed listing.)</p> <p>67. Occupation not reported</p> |
|---|--|---|

In the separation of "Managers, officials, and proprietors (n. e. c.)" by class of worker into salaried and self-employed components, the small number of unpaid family workers in this occupation is included in the self-employed component. Mine laborers, noted as an exclusion from the major group "Laborers, except farm and mine," are included in the major group "Operatives and kindred workers." Since the data presented in the occupation tables refer only to civilians, the category "Members of the armed forces" shown in tables 124 and 158 is limited to unemployed veterans who had not worked since their discharge from the armed forces.

Relation to DOT classification.—The occupational classification of the Population Census is generally comparable with the system used in the *Dictionary of Occupational Titles* (DOT).¹⁰ The two systems, however, are designed to meet different needs and to be used under different circumstances. The DOT system is designed primarily for employment service needs, such as placement and counseling, and is ordinarily used to classify very detailed information obtained in an interview with the worker himself. The census system on the other hand is designed for statistical purposes and is ordinarily used in the classification of limited occupational descriptions obtained in an interview with a member of the worker's family. As a result, the DOT system is much more detailed

than the census system; and it also calls for many types of distinctions which cannot be made from census information.

Industry

The industry information presented here was derived from answers to the question, "What kind of business or industry was he working in?"

Classification system.—The industrial classification system developed for the 1950 Census of Population consists of 148 categories organized into 13 major groups. For the detailed industry tables in Chapter C of this volume, a few of the categories were combined, and the detailed industry list used here consists of 146 categories (tables 130, 131, and 160). The composition of each of the detailed categories is shown in the publication, U. S. Bureau of the Census, *1950 Census of Population, Classified Index of Occupations and Industries*, Washington, D. C., 1950.

In Chapter B, most of the industry data are based on a condensed classification of 41 groups. In Chapter C, an intermediate classification of 77 categories has been used in the cross-classifications of industry by age, race, class of worker, major occupation group, weeks worked, and income (tables 132 to 136 and 161). Both the 41-item and 77-item classifications represent selections and combinations of the categories in the detailed system. The relationships among these three levels of classification are shown in list C.

¹⁰ See U. S. Department of Labor, Bureau of Employment Security, *Dictionary of Occupational Titles*, Second Edition, Vols. I and II, Washington, D. C., 1949.

List C.—RELATIONSHIPS AMONG CONDENSED, INTERMEDIATE, AND DETAILED INDUSTRIAL CLASSIFICATION SYSTEMS USED IN THE 1950 CENSUS OF POPULATION

[Figures in parentheses in third column are code designations in the Standard Industrial Classification; see text for explanation]

Condensed classification—41 items	Intermediate classification—77 items	Detailed classification—148 items
Agriculture.....	Agriculture.....	Agriculture (01, 07 exc. 0713).
Forestry and fisheries.....	Forestry and fisheries.....	{Forestry (08). Fisheries (09).
Mining.....	{Coal mining..... Crude petroleum and natural gas extraction..... Mining and quarrying, except fuel.....	{Coal mining (11, 12). Crude petroleum and natural gas extraction (13). Metal mining (10). Nonmetallic mining and quarrying, except fuel (14).
Construction.....	Construction.....	Construction (15-17).
Furniture, and lumber and wood products.....	{Logging..... Sawmills, planing mills, and mill work..... Miscellaneous wood products..... Furniture and fixtures.....	{Logging (241). Sawmills, planing mills, and mill work (242, 243). Miscellaneous wood products (244, 249). Furniture and fixtures (25).
Primary metal industries.....	{Primary iron and steel industries..... Primary nonferrous industries.....	{Blast furnaces, steel works, and rolling mills (331). Other primary iron and steel industries (332, 339 1). Primary nonferrous industries (333-336, 3392 1, 3399 1).
Fabricated metal industries (incl. not specified metal).....	Fabricated metal industries (incl. not specified metal).....	{Fabricated steel products (19 exc. 194, 341-343, 344 exc. 3444, 346 1, 348 1, 3491-3495). Fabricated nonferrous metal products (3444, 3463 1, 347, 3489 1, 3496, 3497, 3499). Not specified metal industries. 3
Machinery, except electrical.....	Machinery, except electrical.....	{Agricultural machinery and tractors (352). Office and store machines and devices (357). Miscellaneous machinery (351, 353-356, 358, 359).
Electrical machinery, equipment, and supplies.....	Electrical machinery, equipment, and supplies.....	Electrical machinery, equipment, and supplies (36).
Motor vehicles and motor vehicle equipment.....	Motor vehicles and motor vehicle equipment.....	Motor vehicles and motor vehicle equipment (371).
Transportation equipment, exc. motor vehicle.....	{Aircraft and parts..... Ship and boat building and repairing..... Railroad and miscellaneous transportation equipment.....	{Aircraft and parts (372). Ship and boat building and repairing (373). Railroad and miscellaneous transportation equipment (374, 375, 379).
Other durable goods.....	{Glass and glass products..... Stone and clay products..... All other durable goods.....	{Glass and glass products (321-323). Cement, and concrete, gypsum, and plaster products (324, 327). Structural clay products (325). Pottery and related products (326). Miscellaneous nonmetallic mineral and stone products (328, 329). Professional equipment and supplies (194, 381-385). Photographic equipment and supplies (386). Watches, clocks, and clockwork-operated devices (387). Miscellaneous manufacturing industries (39).
Food and kindred products.....	{Meat products..... Bakery products..... Other food industries.....	{Meat products (201). Bakery products (205). Dairy products (202). Canning and preserving fruits, vegetables, and sea foods (203). Grain-mill products (0713, 204). Confectionery and related products (207). Beverage industries (208). Miscellaneous food preparations and kindred products (206, 209). Not specified food industries. 3
Textile mill products.....	{Knitting mills..... Yarn, thread, and fabric mills..... Other textile mill products.....	{Knitting mills (225). Yarn, thread, and fabric mills (221-224). Dyeing and finishing textiles, except knit goods (226). Carpets, rugs, and other floor coverings (227). Miscellaneous textile mill products (228, 229).
Apparel and other fabricated textile products.....	Apparel and other fabricated textile products.....	{Apparel and accessories (23 exc. 239). Miscellaneous fabricated textile products (239).
Printing, publishing, and allied industries.....	Printing, publishing, and allied industries.....	Printing, publishing, and allied industries (27).
Chemicals and allied products.....	Chemicals and allied products.....	{Synthetic fibers (2825). Drugs and medicines (283). Paints, varnishes, and related products (285). Miscellaneous chemicals and allied products (281, 282 exc. 2825, 284, 286-289).
Other nondurable goods.....	{Tobacco manufactures..... Paper and allied products..... Petroleum and coal products..... Rubber products..... Footwear, except rubber..... Leather and leather products, except footwear.....	{Tobacco manufactures (21). Pulp, paper, and paperboard mills (261). Paperboard containers and boxes (267). Miscellaneous paper and pulp products (264-266, 269). Petroleum refining (291). Miscellaneous petroleum and coal products (29 exc. 291). Rubber products (30). Footwear, except rubber (313, 314). Leather: tanned, curried, and finished (311). Leather products, except footwear (312, 315-317, 319).
Not specified manufacturing industries.....	Not specified manufacturing industries.....	Not specified manufacturing industries. 3
Railroads and railway express service.....	Railroads and railway express service.....	Railroads and railway express service (40).
Trucking service and warehousing.....	Trucking service and warehousing.....	{Trucking service (421, 428). Warehousing and storage (422-425, 429).
Other transportation.....	{Street railways and bus lines..... Water transportation..... Air transportation..... All other transportation.....	{Street railways and bus lines (41, 43 exc. 433). Water transportation (44). Air transportation (45). Taxicab service (433). Petroleum and gasoline pipe lines (46). Services incidental to transportation (47).
Telecommunications.....	Telecommunications.....	{Telephone (wire and radio) (481). Telegraph (wire and radio) (48 exc. 481).

For footnotes, see end of table.

List C.—RELATIONSHIPS AMONG CONDENSED, INTERMEDIATE, AND DETAILED INDUSTRIAL CLASSIFICATION SYSTEMS USED IN THE 1950 CENSUS OF POPULATION—Con.

Condensed classification—41 items	Intermediate classification—77 items	Detailed classification—148 items
Utilities and sanitary services.....	Electric and gas utilities..... Water supply, sanitary services, and other utilities.....	Electric light and power * (491). Electric-gas utilities * (493). Gas and steam supply systems (492, 496). Water supply (494). Sanitary services (495). Other and not specified utilities * (497).
Wholesale trade.....	Wholesale trade.....	Motor vehicles and equipment (501, 5111). Drugs, chemicals, and allied products (502, 5112). Dry goods and apparel (503, 5113, 5132). Food and related products (504, 505, 5114, 5133, 5134, 514). Electrical goods, hardware, and plumbing equipment (505, 507, 5116). Machinery, equipment, and supplies (508, 5118, 5136). Petroleum products (512). Farm products—raw materials (5096, 5135). Miscellaneous wholesale trade (5091-5095, 5097-5099 †, 5115, 5117, 5119, 5137-5139 ‡). Not specified wholesale trade.†
Food and dairy products stores, and milk retailing.	Food and dairy products stores, and milk retailing.....	Food stores, except dairy products (54 exc. 545). Dairy products stores and milk retailing (545).
Eating and drinking places.....	Eating and drinking places.....	Eating and drinking places (58).
Other retail trade.....	General merchandise and five and ten cent stores..... Apparel and accessories stores..... Furniture, home furnishings, and equipment stores..... Motor vehicles and accessories retailing..... Gasoline service stations..... Drug stores..... Hardware, farm implement, and building material retailing..... All other retail trade.....	General merchandise stores (53 exc. 533). Five and ten cent stores (533). Apparel and accessories stores, except shoe stores (56 exc. 566). Shoe stores (566). Furniture and housefurnishings stores (571). Household appliance and radio stores (572). Motor vehicles and accessories retailing (55 exc. 554). Gasoline service stations (554). Drug stores (591). Hardware and farm implement stores (525). Lumber and building material retailing (52 exc. 525). Liquor stores (592). Retail florists (592). Jewelry stores (597). Fuel and ice retailing (598). Miscellaneous retail stores (593-596, 599 exc. 5992). Not specified retail trade.‡
Finance, insurance, and real estate.....	Banking and other finance..... Insurance and real estate.....	Banking and credit agencies (60, 61). Security and commodity brokerage, and investment companies (62, 67). Insurance (63, 64). Real estate * (65). Real estate-insurance-law offices * (66).
Business services.....	Business services.....	Advertising (731). Accounting, auditing, and bookkeeping services (737). Miscellaneous business services (732-736, 739).
Repair services.....	Automobile repair services and garages..... Miscellaneous repair services.....	Automobile repair services and garages (75). Miscellaneous repair services (76).
Private households.....	Private households.....	Private households (88).
Hotels and lodging places.....	Hotels and lodging places.....	Hotels and lodging places (70).
Other personal services.....	Laundering, cleaning, and dyeing services..... All other personal services.....	Laundering, cleaning, and dyeing services (721, 722, 727 †). Dressmaking shops (7271 †). Shoe repair shops (725). Miscellaneous personal services (723, 724, 726, 729).
Entertainment and recreation services.....	Entertainment and recreation services.....	Radio broadcasting and television (77). Theaters and motion pictures (78, 792). Bowling alleys, and billiard and pool parlors (793). Miscellaneous entertainment and recreation services (701, 704-706, 799).
Medical and other health services.....	Medical and other health services.....	Medical and other health services, except hospitals (80 exc. 800). Hospitals (800).
Educational services, government.....	Educational services, government.....	Educational services government } (82, 84).
Educational services, private.....	Educational services, private.....	Educational services, private }
Other professional and related services.....	Welfare, religious, and membership organizations..... Legal, engineering, and misc. professional services.....	Welfare and religious services (866, 867). Nonprofit membership organizations (861-865, 869). Legal services (81). Engineering and architectural services (891). Miscellaneous professional and related services (89 exc. 891).
Public administration.....	Postal service..... Federal public administration..... State and local public administration.....	Postal service Federal public administration } (90 ‡). State public administration Local public administration
Industry not reported.....	Industry not reported.....	Industry not reported (99).

NOTE: See Executive Office of the President, Bureau of the Budget, *Standard Industrial Classification Manual*, Vol. I, *Manufacturing Industries*, Part 1 (November 1945 edition); and Vol. II, *Nonmanufacturing Industries* (May 1949 edition), Washington, D. C.

- † Components of SIC categories 3392 and 3399 are allocated between "Other primary iron and steel industries" and "Primary nonferrous industries" on a ferrous-nonferrous basis.
 ‡ Components of SIC categories 3463 and 3489 are allocated between "Fabricated steel products" and "Fabricated nonferrous metal products" on a ferrous-nonferrous basis.
 § In the Population Census system, "not specified" categories were set up within certain groups to take care of schedule returns which were not sufficiently precise for allocation to a specific category within the group.
 ¶ "Electric light and power" and "Electric-gas utilities" are combined into a single category in the Volume II tables on detailed industry.
 ** Components of SIC categories 5099 and 5139 are allocated by type of merchandise to the appropriate Population Census wholesale trade category, wherever possible.
 †† "Real estate" and "Real estate-insurance-law offices" are combined into a single category in the Volume II tables on detailed industry.
 ‡‡ Dressmaking shops are shown separately from the rest of SIC category 7271, which is included in "Laundering, cleaning, and dyeing services."
 §§ See text for explanation of basic difference between SIC and Population Census in classification of government workers.

UNITED STATES SUMMARY

Figure 30.—PERCENTAGE OF EMPLOYED PERSONS IN MANUFACTURING, BY STATES: 1950

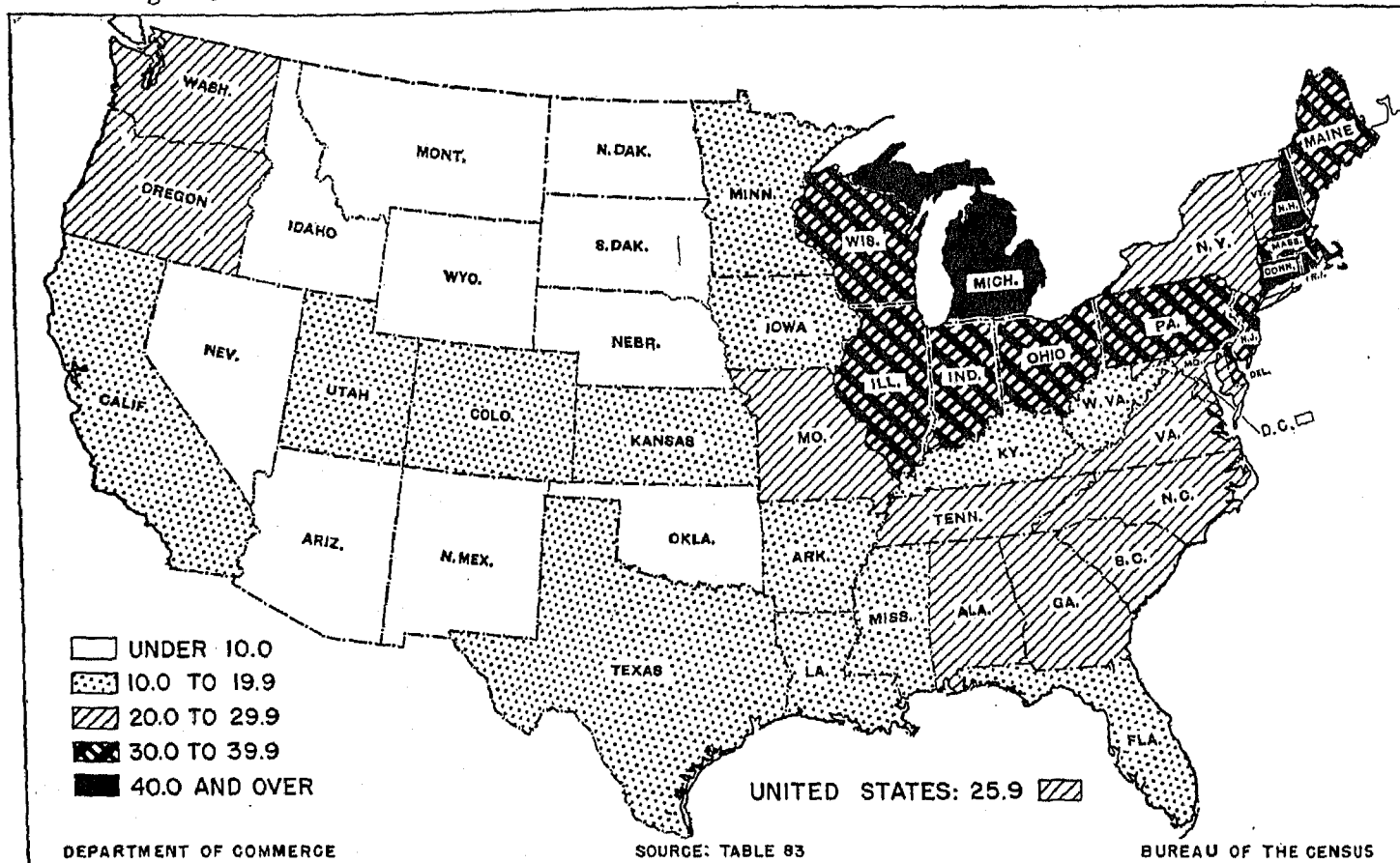
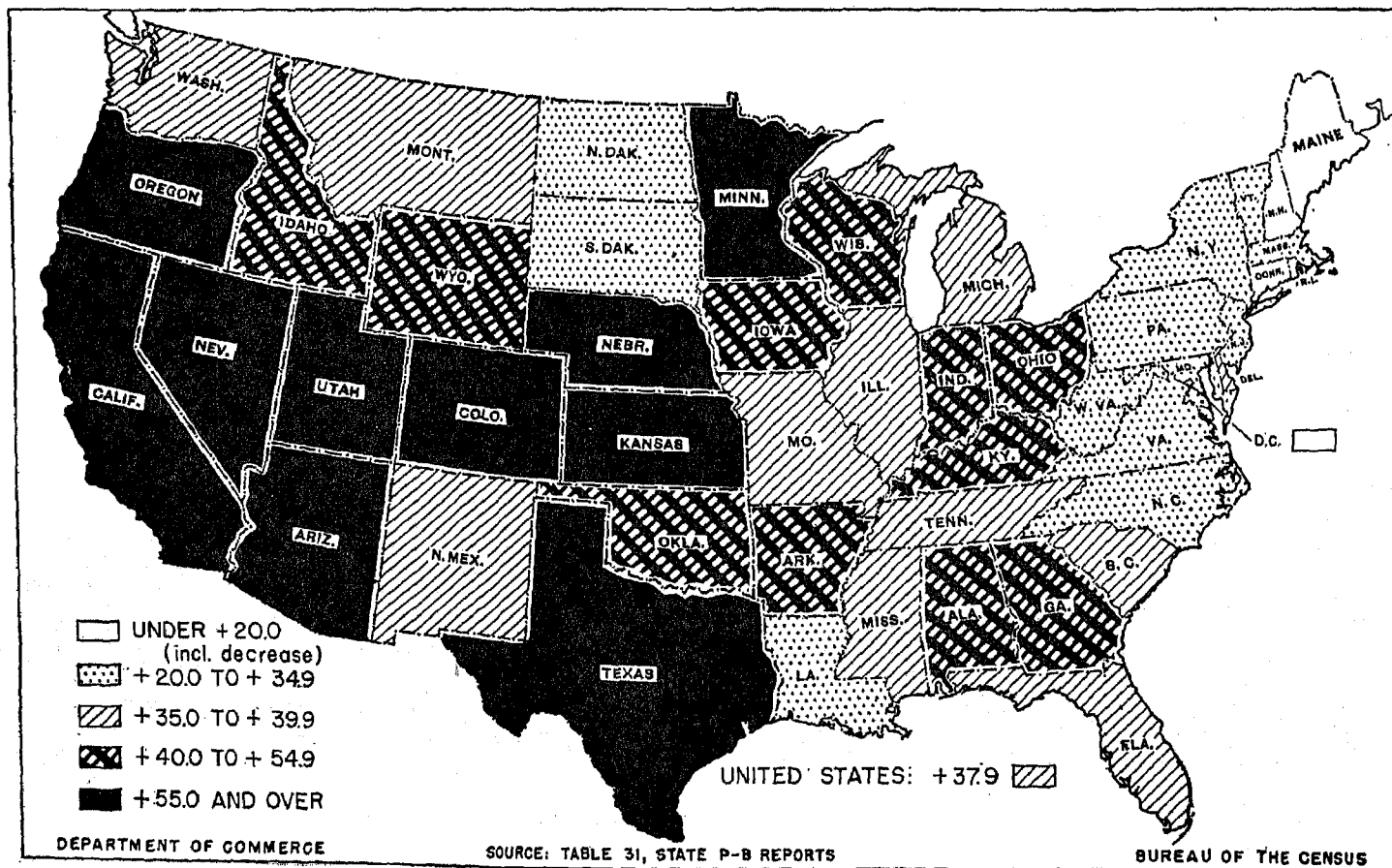


Figure 31.—PERCENT CHANGE, 1940 TO 1950, IN THE NUMBER OF PERSONS EMPLOYED IN MANUFACTURING, BY STATES



Relation to Standard Industrial Classification.—List C shows for each Population Census category the code designation of the similar category or categories in the Standard Industrial Classification (SIC). This relationship is presented here for general information purposes only and does not imply complete comparability. The SIC, which was developed under the sponsorship of the United States Bureau of the Budget, is designed primarily for the classification of reports on industry obtained from establishments. These reports are, by their nature and degree of detail, considerably different from reports on industry obtained from household enumerations such as the Population Census. As a result, many distinctions called for in the SIC cannot be observed in the Population Census. Furthermore, the needs which the Population Census data are designed to meet frequently differ from the needs which the establishment data meet. Perhaps the most basic difference between the two systems is in the allocation of government workers. The SIC classifies all government agencies in a single major group whereas the Population Census industrial classification system allocates them among the various groups according to type of activity, as explained in the next paragraph.

Definition of "Public administration."—The major group "Public administration" includes only those activities which are uniquely governmental functions, such as legislative and judicial activities and most of the activities in the executive agencies. Government agencies engaged in educational and medical services and in activities commonly carried on also by private enterprises, such as transportation and manufacturing, are classified in the appropriate industrial category. For example, persons employed by a hospital are classified in the "Hospitals" category regardless of whether they are paid from private or public funds. The total number of government workers appears here in the data on class of worker; of particular significance in this connection is the cross-classification of industry by class of worker (tables 133 and 161).

Relation to certain occupation groups.—In the Population Census classification systems, the industry category "Agriculture" is somewhat more inclusive than the total of the two major occupation groups, "Farmers and farm managers" and "Farm laborers and foremen." The industry category includes, in addition to all persons in these two major occupation groups, (a) other persons employed on farms, such as truck drivers, mechanics, and bookkeepers, and (b) persons engaged in agricultural activities other than strictly farm operation, such as crop dusting or spraying, cotton ginning, and landscape gardening. Similarly, the industry category "Private households" is somewhat more inclusive than the major occupation group "Private household workers." In addition to the housekeepers, laundresses, and miscellaneous types of domestic workers covered by the major occupation group, the industry category includes persons in occupations such as chauffeur and secretary, if they work for private households.

Class of Worker

The class-of-worker information, as noted above, refers to the same job as does the occupation and industry information. The allocation of a person to a particular class-of-worker category is basically independent, however, of the occupation or industry in which he worked. The classification by class of worker consists of four categories which are defined as follows:

1. *Private wage and salary workers.*—Persons who worked for a private employer for wages, salary, commission, tips, pay-in-kind, or at piece rates.

2. *Government workers.*—Persons who worked for any governmental unit (Federal, State, or local), regardless of the activity which the particular agency carried on.

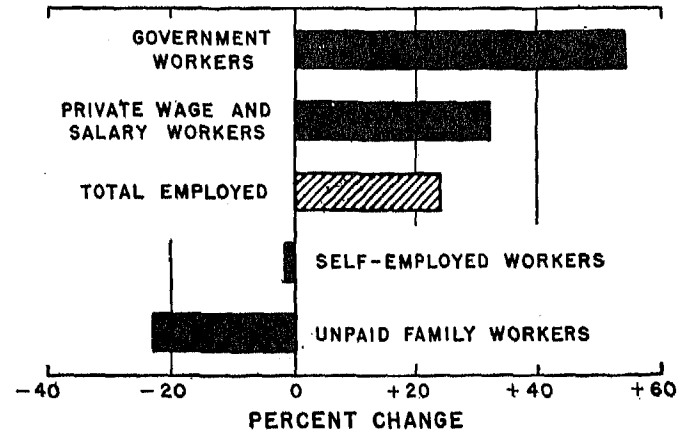
3. *Self-employed workers.*—Persons who worked for profit or fees in their own business, profession, or trade, or who operated a farm either as an owner or tenant. Included here are the owner-operators of large stores and manufacturing establishments as well as small merchants, independent craftsmen and professional men, farmers, peddlers, and other persons who conducted enterprises of their own. Persons paid to manage businesses or farms owned by other persons or by corporations, on the other hand,

are classified as private wage and salary workers (or, in some few cases, as government workers).

4. *Unpaid family workers.*—Persons who worked without pay on a farm or in a business operated by a member of the household to whom they are related by blood or marriage. The great majority of unpaid family workers are farm laborers.

The relatively small number of employed persons for whom class of worker was not reported has been included among private wage and salary workers unless there was evidence on the census schedule that they should have been classified in one of the other class-of-worker categories.

FIGURE 32.—PERCENT CHANGE, 1940 TO 1950, IN THE NUMBER OF EMPLOYED PERSONS IN THE UNITED STATES, BY CLASS OF WORKER



SOURCE: TABLE 54

Comparability

1940 Census.—The changes in schedule design and interviewing techniques for the labor force questions, as explained in the section on "Employment status," do not affect comparability between 1940 and 1950 for most of the occupation, industry, and class-of-worker categories. There is evidence, however, that for the categories which include relatively large proportions of female unpaid family workers ("Farm laborers, unpaid family workers," "Agriculture," and "Unpaid family workers"), the 1940 data are sometimes understated by an appreciable amount relative to 1950.

For experienced unemployed persons the 1950 occupation data are not comparable with the data shown in the 1940 Third Series bulletin for the United States. The occupation data for public emergency workers (one of the two component groups of the unemployed in 1940) refer to "current job," whereas the "last job" of the unemployed was reported in 1950.

The occupational and industrial classification systems used in 1940 are basically the same as those of 1950. There are a number of differences, however, in the title and content for certain items, and in the degree of detail shown for the various major groups. The 1940 classification by class of worker is comparable with the 1950 classification system.

The process of adjusting the 1940 detailed occupation and industry data for comparability with the 1950 figures cannot be explained in this volume because of the great deal of material involved in this process. It appears useful, however, to give here some indication of the comparisons and adjustments to be made in deriving roughly comparable data on the major group level.

The listings which follow show only those major groups where significant adjustments are necessary, or where the comparative groups are not immediately identifiable. Furthermore, the adjustments shown are those which can be estimated fairly readily from the census data. This rough procedure yields figures for employed males and females in each major group which, for the United States as a whole, differ from the figures obtained by the more detailed adjustment procedure by a maximum of about 6 percent and for most cases, by less than 3 percent.

For major occupation groups, the comparisons are as follows:

Professional, technical, and kindred workers.—Comparable with *Professional and semiprofessional workers*. Add accountants and auditors from 1940 figure.

Managers, officials, and proprietors, except farm.—Comparable with *Proprietors, managers, and officials, except farm*.

Clerical and kindred workers and Sales workers.—Comparable with *Clerical, sales, and kindred workers*. Subtract accountants and auditors from 1940 figure.

Craftsmen, foremen, and kindred workers.—Comparable with *Craftsmen, foremen, and kindred workers*. Add linemen and servicemen, telegraph, telephone, and power; and motion picture projectionists from 1940 figure.

Operatives and kindred workers.—Comparable with *Operatives and kindred workers*. Subtract linemen and servicemen, telegraph, telephone, and power; and motion picture projectionists from 1940 figure.

Private household workers.—Comparable with *Domestic service workers* for both sexes combined and for females; not comparable for males.

Service workers, except private household.—Comparable with *Protective service workers and Service workers, except domestic and protective*. Note that the 1950 occupation data are limited to civilians, thereby necessitating the removal from the 1940 group of soldiers, sailors, marines, and coast guards.

For major industry groups, the comparisons are as follows:

Transportation, communication, and other public utilities.—Comparable with *Transportation, communication, and other public utilities*. Subtract radio broadcasting and television from 1940 figure.

Business and repair services.—Comparable with *Business and repair services*. Add accounting, auditing, and bookkeeping services to the 1940 figure.

Entertainment and recreation services.—Comparable with *Amusement, recreation, and related services*. Add radio broadcasting and television to the 1940 figure.

Professional and related services.—Comparable with *Professional and related services*. Subtract accounting, auditing, and bookkeeping services from the 1940 figure.

Public administration.—Comparable with *Government* for both sexes combined and males; not comparable for females. Note that the 1950 industry data are limited to civilians thereby necessitating the removal from the 1940 group of national defense.

The 1940 occupation and industry data shown in this volume include adjustments which take account of the differences between the 1940 and 1950 classification systems. In order to maximize the amount of comparable data, it was sometimes necessary to estimate the adjustments from information which was incomplete or not entirely satisfactory for the purpose. Furthermore, there were certain differences between the 1940 and 1950 coding and editing procedures which could not be measured statistically. Caution should, therefore, be exercised in interpreting small numerical changes. Caution should also be exercised with regard to large relative increases in the numbers of women engaged in occupations which are unusual for women. Although it is certainly true that women have expanded the range of their occupational activities during the last decade, the figures shown here may, in some cases, tend to overstate this expansion because more intensive checking of questionable returns of this type was performed in 1940 than in 1950; this overstatement is particularly true of the railroad occupations.

The 1940 data on occupation, industry, and class of worker shown in this volume have been revised to eliminate members of the armed forces in order to achieve comparability with the 1950 figures for the employed, which are limited to civilians. In the occupation tables of the 1940 reports, the armed forces were mainly included in the major group "Protective service workers." In the industry tables, the armed forces were all included in the major group "Government." In the class-of-worker tables, the armed forces were all included in the category "Government workers" (or in the total "Wage or salary workers").

The 1940 major occupation group figures presented in Chapter C of this volume may differ in some cases from the corresponding figures presented in Chapter B. The revised figures shown in

Chapter C were developed by a more detailed analysis of the 1940–1950 classification differences than were the figures in Chapter B.

1930 and earlier censuses.—Prior to 1940, the census data on the economically active population referred to "gainful workers" rather than to "labor force." The differences between these two concepts are described in the section on "Employment status." The effects of this variation in approach on the various occupation and industry categories are virtually impossible to measure. For most categories, the number of gainful workers is probably equivalent to the number of persons in the experienced civilian labor force. For certain categories, however, particularly those with relatively large numbers of seasonal workers, the gainful worker concept probably yields somewhat larger figures than does the labor force concept.

The occupational and industrial classification systems used in the 1930 Census and earlier censuses were markedly different from the 1950 systems. The relationships between the present and earlier systems are being analyzed, and the results of the study will be made available by the Bureau of the Census. For information on occupation and industry data from 1930 and earlier censuses, see the publication, U. S. Bureau of the Census, *Sixteenth Census Reports, Population, Comparative Occupation Statistics for the United States, 1870 to 1940*, Washington, D. C., 1943.

Other data.—Comparability between the statistics presented in this volume and statistics from other sources is frequently affected by the use of different classification systems, as well as by many of the factors described in the paragraphs on comparability with Current Population Survey data and other data in the section on "Employment status." In regard to comparisons between occupation figures from the Population Census and those based on data from government licensing agencies, professional associations, trade unions, etc., comparability may not be as direct as would first appear. Among the sources of difference may be the inclusion in the organizational listing of retired persons or persons devoting all or most of their time to another occupation, the inclusion of the same person in two or more different listings, and the fact that relatively few organizations attain complete coverage or membership in an occupation field. Differences in definition and concept, as well as errors in census data, may also be contributing factors to lack of comparability.

Quality of Data

The omission from the labor force of some marginal workers (mainly part-time and occasional workers), as explained in the section on "Employment status," has probably resulted in some understatement in many of the occupation, industry, and class-of-worker figures. Another factor to be considered in the interpretation of these data is that enumerators sometimes returned occupation and industry designations which were not sufficiently specific for precise allocation. One cause may have been the enumerator's lack of knowledge of how to describe a particular job on the census schedule. Another possible cause was inadequate information about the worker's job on the part of the housewife or other person from whom the enumerator obtained the report. Indefinite occupation and industry returns can frequently be assigned, however, to the appropriate category through the use of supplementary information. For example, in the case of occupation, the industry return on the census schedule is often of great assistance. In the case of indefinite industry returns, helpful information can frequently be obtained from outside sources regarding the types of industrial activity in the given area. The basic document used in the allocation of the schedule returns of occupation and industry to the appropriate categories of the classification systems is the publication, U. S. Bureau of the Census, *1950 Census of Population, Alphabetical Index of Occupations and Industries*, Washington, D. C., 1950.

The application of detailed occupational and industrial classifications to approximately 60 million workers is obviously subject to some error. Although the number of misclassifications prob-

ably does not have any serious effect on the usefulness of most of the data, there are a few cases where relatively small numbers of erroneous returns may produce what might be regarded as a serious misstatement of the facts. These cases relate mainly to the numbers of men, women, and children shown in occupations which are unusual for such persons, and to the government workers shown in industries that are ordinarily not carried on by government agencies. Some of the more obvious misclassifications have been adjusted, but it was not possible to perform a complete review of the data for all discrepancies.

Information on certain aspects of the quality of the occupation, industry, and class-of-worker data is available from the Post-Enumeration Survey. The Post-Enumeration Survey material refers only to employed persons and, in the case of occupation and industry, is as yet tabulated only for major groups. One important factor which affects the quality of the data on occupation, industry, and class of worker—the reporting of employment status—was not investigated, mainly because the time interval between the census and Post-Enumeration Survey enumerations appeared too great to yield adequate information on an item so subject to change as employment status.

In general, the percent distributions by major occupation group, major industry group, and class of worker were only slightly affected by errors of coverage, errors in reporting a job description, and errors in reporting age. With few exceptions, the percentage of employed persons in each such category was affected by less than one percentage point. The stability in the percentage was found both when corrections were made for all three types of errors combined and when corrections were made for each type separately. This stability also existed with regard to the distributions for both sexes combined and for males and females separately.

The accuracy of the count of persons in each major group was also measured by the Post-Enumeration Survey. The absolute number of employed persons in most of the major occupation, major industry, and class-of-worker groups was in error by less than 4 percent as a result of the three types of error measured.

INCOME

Definitions

Components of income.—Income, as defined in the 1950 Census, is the sum of money received from wages or salaries, net income (or loss) from self-employment, and income other than earnings. The figures in this report represent the amount of income received before deductions for personal income taxes, social security, bond purchases, union dues, etc.

Receipts from the following sources were not included as income: money received from the sale of property, unless the recipient was engaged in the business of selling such property; the value of income "in kind," such as food produced and consumed in the home or free living quarters; withdrawals of bank deposits; money borrowed; tax refunds; gifts and lump-sum inheritances or insurance payments.

Information was requested of a 20-percent sample of persons 14 years of age and over on the following income categories: (a) The amount of money wages or salary received in 1949; (b) the amount of net money income received from self-employment in 1949; and (c) the amount of other money income received in 1949. If the sample person was the head of a family, these three questions were repeated for the other family members as a group in order to obtain the income of the whole family. The composition of families is that of the time of interview, although the time period covered by the income statistics is the calendar year 1949. Specific definitions of these three categories of income are as follows:

Wages or salary.—This is defined as the total money earnings received for work performed as an employee. It includes wages, salary, armed forces pay, commissions, tips, piece-rate payments, and cash bonuses earned.

Self-employment income.—This is defined as net money income (gross receipts minus operating expenses) from a business, farm, or professional enterprise in which the person was engaged on his own account or as an unincorporated employer. Gross receipts include the value of all goods sold and services rendered. Expenses include the costs of goods purchased, rent, heat, light, power, depreciation charges, wages and salaries paid, business taxes, etc.

Income other than earnings.—This includes money income received from sources other than wages or salary and self-employment, such as net income (or loss) from rents or receipts from roomers or boarders; royalties; interest, dividends, and periodic income from estates and trust funds; pensions; veterans' payments, armed forces allotments for dependents, and other governmental payments or assistance; and other income such as contributions for support from persons who are not members of the household, alimony, and periodic receipts from insurance policies or annuities.

Information on the income distribution of families and unrelated individuals is presented in Chapter B. Statistics on the income of all persons 14 years of age and over are presented in Chapter C.

When comparisons among States or other areas are made, account should be taken of the fact that this report covers money income only and not the value of goods produced and consumed on the farm. The money income distributions of families or persons in areas containing a relatively large proportion of farm residents may not be an adequate indicator of income levels in those areas. It should also be remembered that changes in money income between 1939 and 1949 were accompanied by changes in prices; therefore, an increase in wage or salary income does not represent a similar change in economic well-being.

Comparability

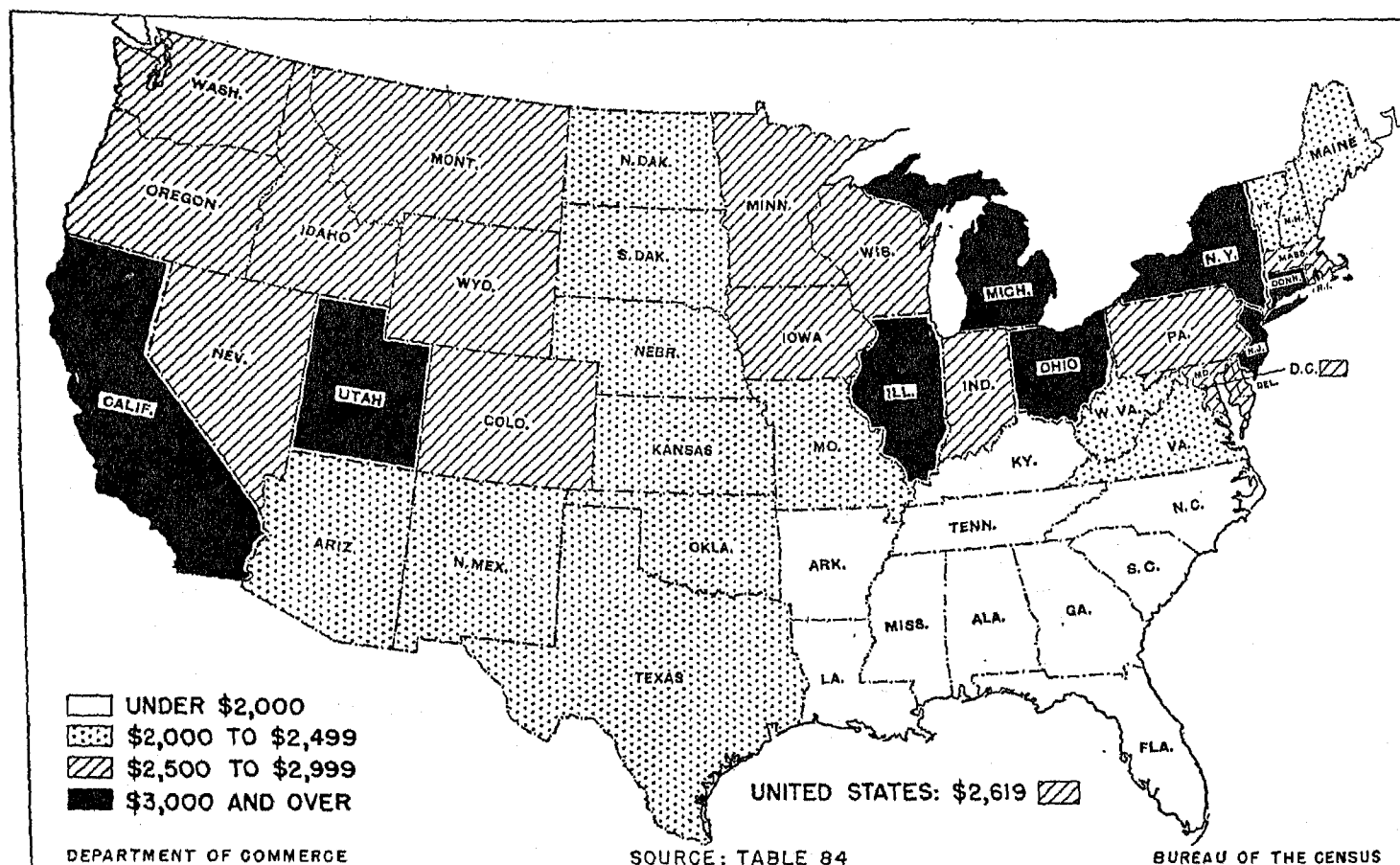
1940 Census.—In 1940 all persons 14 years of age and over were asked to report (a) the amount of money wages or salary received in 1939 and (b) whether income amounting to \$50 or more was received in 1939 from sources other than money wages or salaries. Comparable wage or salary income distributions for 1940 and 1950 are presented in tables 144 and 166 of this report. All of the other 1950 Census income data shown in this report relate to total money income and are not comparable with statistics from the 1940 Census.

Office of Business Economics income payments series.—The Office of Business Economics of the Department of Commerce publishes data on the aggregate income received by the population in each State. If the aggregate income were estimated from the census income distributions, it would be smaller than that shown in the State income payments series for several reasons. The Bureau of the Census data are obtained by household interview, whereas the State income payments series is estimated largely on the basis of data derived from business and governmental sources. Moreover, the definitions of income are different. The State income payments series includes some items not included in the income data shown in this report, such as income in kind, the value of the services of banks and other financial intermediaries rendered to persons without the assessment of specific charges, and the income of persons who died or emigrated prior to April 1, 1950. On the other hand, the Bureau of the Census income data include contributions for support received from persons not residing in the same living quarters.

Federal Reserve Board Survey of Consumer Finances.—The Federal Reserve Board Survey of Consumer Finances obtained, among other data, information on the size distribution of income for 1949. The survey was based on a nationwide sample of approximately 3,500 units in 66 areas, covering all persons in private households. Interviews were taken and most of the results were presented on a "spending unit" basis, those household members who had incomes which they used primarily for their own purposes constituting separate spending units. Tabulations of certain financial data, however, were presented on a "family unit" basis as well. The "family unit" is identical with the concept of family or individual used by the Bureau of the Census. Differences between the results of the Federal Reserve Board survey

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Figure 33.—MEDIAN INCOME IN 1949 OF FAMILIES AND UNRELATED INDIVIDUALS, BY STATES: 1950



and the statistics in this volume are subject to sampling variability and arise from differences in estimating procedure as well as from differences in the number and wording of the questions asked.

Income tax data.—For several reasons, the income data shown in this report are not directly comparable with those which may be obtained from statistical summaries of income tax returns. Income as defined for tax purposes differs somewhat from the Bureau of the Census concept. Moreover, the coverage of income tax statistics is less inclusive because of the exemptions of persons having small amounts of income. Furthermore, some of the income tax returns are filed as separate returns and others as joint returns; and, consequently, the income reporting unit is not consistently either a family or a person.

Bureau of Old Age and Survivors Insurance wage record data.—The wage or salary data shown in this report are not directly comparable with those which may be obtained from the wage records of the Bureau of Old Age and Survivors Insurance for several reasons. The coverage of the wage record data for 1949 is less inclusive than the 1950 Census data because of the exclusion of the wages or salaries of such groups as domestic servants, farm laborers, governmental employees, and employees of nonprofit institutions. Furthermore, no wages or salaries received from any one employer in excess of \$3,000 in 1949 are covered by the wage record data. Finally, as the Bureau of the Census data are obtained by household interviews, they will differ from the Old Age and Survivors Insurance wage record data which are based upon employers' reports.

Quality of Data

The figures in this census, as in all field surveys of income, are only approximately accurate because of errors of response and nonreporting. In most cases the schedule entries for income are based not on records but on memory, usually that of the housewife.

Other errors of reporting are due to misunderstanding of the income questions or to misrepresentation. In addition, the number of persons shown at each income level is subject to error because of the omission of persons who were not enumerated in the census. Despite these sources of error, however, the various checks which have been made on the quality of the 1950 Census income data suggest that they may be sufficiently reliable for the analysis of the characteristics of the population at different income levels.

A preliminary analysis of the results obtained in the Post-Enumeration Survey indicates that, despite considerable variability of response, there is no important difference between the census and the survey in the percent distribution of income recipients by income levels. For persons, the median income from the census was \$1,917 and from the check, \$1,840. Moreover, the Post-Enumeration Survey results suggest that the 1950 Census income distributions would have been substantially the same had information been available for persons who were not enumerated in the census or who were enumerated but for whom the income questions were left blank. The Post-Enumeration Survey also found a relatively larger number of income recipients than did the census; about 64 percent of the population 14 years old and over enumerated in the census are shown as income recipients in the census as compared with 68 percent in the Post-Enumeration Survey. Most of the additional income recipients reported in the Post-Enumeration Survey were in the lowest income levels and their inclusion affects only moderately the distribution by income level.

A comparison of the income distributions based on the 1950 Census and on the March 1950 Current Population Survey shows no significant difference for families and for persons. Moreover, a comparison of the incomes reported by a matched sample of about 5,000 persons interviewed in both the 1950 Census and the March 1950 Current Population Survey provides evidence which

supports strongly the conclusions based on the Post-Enumeration Survey. This matched sample, like the Post-Enumeration Survey, reveals considerable variability of response but little net difference between the income distributions.

Although the primary purpose of the income questions in the 1950 Census was to provide distributions of families and of persons 14 years of age and over by income levels, rough estimates of aggregate income can be derived from these data. A comparison of aggregate income estimated from preliminary samples of 1950 Census returns with those prepared by the National Income Division of the Department of Commerce indicates that aggregate total money income derived from the 1950 Census income data for persons was 92 percent of the National Income Division estimates after the latter have been adjusted to make them as nearly comparable as possible with the income concept used by the Bureau of the Census. The comparable ratio for wage or salary income was over 95 percent.

The estimated census aggregate derived from the data for families and unrelated individuals was slightly over 80 percent of the comparable National Income Division estimate. The relatively greater understatement of income for families and unrelated

individuals is attributable in part to the fact that the method used to obtain family income data in the census was inferior to the method used to obtain income data for persons. The coding procedures may have also created a downward bias in the family income data. In coding it was assumed that there was no other income in the family when only the head's income was reported and income information was not reported for other family members. It is estimated that this editing assumption was made for about 5 percent of the families. This procedure was adopted in order to make maximum use of the information obtained. In a large majority of the fully reported cases, the head's income constituted all or most of the total family income.

The income tables for the United States include in the lowest income group (under \$500) about 1.6 million families and about 1.8 million unrelated individuals who were classified as having no 1949 income, as defined in the census. Many of these were living on income "in kind," savings, or gifts, or were newly created families or families in which the sole breadwinner had recently died or left the household. A relatively large proportion, however, probably had some money income which was not recorded in the census.

RELIABILITY OF SAMPLE DATA

SAMPLE DESIGN

Some of the data in the tables which follow are indicated by asterisks or by headnotes as being based on a representative 20-percent sample of the population. A separate line was provided on the population schedules for each person enumerated, with every fifth line designated as a sample line. Within each enumeration district, the schedules were divided approximately equally among five versions. On each version the sample constituted a different set of lines so that each line on the schedule was in the sample on one of the five versions. The persons enumerated on these sample lines were asked all of the pertinent sample questions.¹¹ In addition, this sample served as the basis for some of the tabulations of data obtained for the entire population.

Although the sampling plan did not automatically insure an exact 20-percent sample of persons in each locality, it was unbiased and for large areas the deviation from 20-percent was expected to be quite small. Small biases, however, arose when the enumerator failed to follow his sampling instructions exactly. For the United States as a whole, tabulations for Chapter B show that the proportion of the total population enumerated in the sample was 19.95 percent. The proportion of the total population in the sample, by regions, was 19.94 percent in the Northeast, 19.93 in the North Central States, 19.97 in the South and 19.96 in the West. Among States, the proportions in the sample ranged from 19.86 percent to 20.00 percent.

The small biases which arose as a result of enumerator error were usually in the direction of a slight underrepresentation of adult males, particularly heads of households. The proportion of household heads in the sample was 19.73 percent and the proportion of all other persons was 20.04 percent.¹² Among males 25 years of age and over, 19.71 percent were enumerated in the sample; among females of comparable age, the proportion in the sample was 20.03 percent. As a consequence of this bias, sample statistics on such items as the size and composition of the male labor force are somewhat affected.

Estimates of the number of persons with specified characteristics based on sample data have in all cases been obtained by

¹¹ In 19 counties of Michigan and Ohio, the sample consisted basically of every fifth household and the pertinent sample questions were directed to all persons in the household. Such a household sample was used as an experiment to determine the feasibility of this type of sample in future censuses of population.

¹² In the experimental areas of Michigan and Ohio, biases due to the underenumeration of household heads did not exist, although other problems arose because some enumerators made errors in the selection of the sample in institutions.

multiplying the number of persons in the sample with these characteristics by five. Estimates of percentages have been obtained in each case by using the sample values for both the numerator and denominator.

SAMPLING VARIABILITY

The figures based on the 20-percent sample are subject to sampling variability which can be estimated from the standard errors shown in tables R and S. These tables do not reflect the effects of the biases mentioned above. The standard error is a measure of sampling variability. The chances are about 2 out of 3 that the difference due to sampling variability between an estimate and the figure that would have been obtained from a complete count of the population is less than the standard error. The amount by which the standard error must be multiplied to obtain other odds deemed more appropriate can be found in most statistical textbooks. For example, the chances are about 19 out of 20 that the difference is less than twice the standard error, and 99 out of 100 that it is less than 2½ times the standard error.

Illustration: Table 42 shows that there were an estimated 181,850 rural-farm persons 18 and 19 years of age enrolled in school in the United States in April 1950 (25.1 percent of the estimated 725,295 rural-farm persons in this age group). Table 34 indicates that the total rural population of the United States was 54,229,675. By linear interpolation, from table R, the standard error for an estimate of 182,000 in an area with 54,000,000 inhabitants may be estimated at about 860. Consequently, the chances are about 2 out of 3 that the figure which would have been obtained from a complete count of the number of rural-farm persons 18 and 19 years who were enrolled in school would have differed by less than 860 from the sample estimate. It also follows that there is only about 1 chance in 100 that a complete census result would have differed by as much as 2,150, that is, by about 2½ times the number obtained from the table. Table S shows that the standard error of the 25.1 percent on a base of 725,000 is about 0.1 percent. For most estimates, linear interpolation will provide reasonably accurate results.¹³

¹³ A closer approximation of a standard error from table R may be obtained by using

$$2.1(x) \sqrt{\frac{T-x}{xT}}$$

where x is the size of the estimate and T is the total population of the area;

in table S, the approximation is $2.1 \sqrt{\frac{P(1-P)}{y}}$ where P is the percentage being estimated and y the size of the base. For example the approximation provided by the above formula of the standard error of an estimate of 100,000 (x) in an area with a total population of 150,000 (T) is 420; linear interpolation would yield about 230.

The standard errors shown in tables R and S are not directly applicable to differences between two estimates. These tables are to be applied differently in the three following types of differences:

1. The difference may be one between a sample figure and one based on a complete count, e. g., arising from comparisons between 1950 data and those for 1940 or earlier years. The standard error of a difference of this type is identical with the variability of the 1950 estimate.

2. The difference may be one between two sample estimates, one of which represents a subclass of the other. This case will usually occur when a residual of a distribution is needed. For example, an estimate of the number of persons in the United States who are 14 years of age and are not enrolled in school can be obtained by subtracting the estimate of the number enrolled as shown in table 110 from the sample estimate of the total number 14 years of age. Tables R and S can be used directly for a difference of this type, with the difference considered as a sample estimate.

3. The standard error of any other type of difference will be approximately the square root of the sum of the squares of the standard error of each estimate considered separately. This formula will represent the actual standard error quite accurately for the difference between estimates of the same characteristic in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. If, however, there is a high positive correlation between the two characteristics, the formula will overestimate the true standard error.

Some of the tables present estimates of medians (e. g., median years of school completed, median income) as well as the corresponding distributions. The sampling variability of estimates of medians depend on the distributions upon which the medians are based.¹⁴

RATIO ESTIMATES

It is possible to make an improved estimate of an absolute number (improved in the sense that the standard error is smaller) whenever the class in question forms a part of a larger group for which both a sample estimate and a complete count are available. This alternative estimate is particularly useful when the characteristic being estimated is a substantial part of the larger group; when the proportion is small, the improvement will be relatively minor. The improved estimate (usually referred to as a "ratio estimate") may be obtained by multiplying a percentage based on sample data by the figure which represents the complete count of the base of the percentage.

The effect of using ratio estimates of this type is, in general, to reduce the relative sampling variability from that shown for an estimate of a given size in table R to that shown for the corresponding percentage in table S. Estimates of these types are not being published by the Bureau of the Census because of the much higher cost necessary for their preparation than for the estimates derived by multiplying the sample results by five.

¹⁴ The standard error of a median based on sample data may be estimated as follows: If the estimated total number reporting the characteristic is N , compute the number $N/2 - \sqrt{N}$. Cumulate the frequencies in the table until the class interval which contains this number is located. By linear interpolation, obtain the value below which $N/2 - \sqrt{N}$ cases lie. In a similar manner, obtain the value below which $N/2 + \sqrt{N}$ cases lie. If information on the characteristic had been obtained from the total population, the chances are about 2 out of 3 that the median would lie between these two values. The chances will be about 19 out of 20 that the median will be in the interval computed similarly but using $N/2 \pm 2.5\sqrt{N}$ and about 99 in 100 that it will be in the interval obtained by using $N/2 \pm 2.5\sqrt{N}$.

Table R.—STANDARD ERROR OF ESTIMATED NUMBER FROM 20-PERCENT SAMPLE

(Range of 2 chances out of 3)

Estimated number	Population of area ¹						
	100,000	500,000	1,000,000	5,000,000	10,000,000	25,000,000	150,000,000
100.....	20	20	20	20	20	20	20
500.....	50	50	50	50	50	50	50
1,000.....	70	70	70	70	70	70	70
2,500.....	100	100	100	100	100	100	100
5,000.....	140	150	150	150	150	150	150
10,000.....	200	200	210	210	210	210	210
25,000.....	290	320	320	330	330	330	330
50,000.....	340	440	450	460	460	460	460
75,000.....	310	530	550	560	560	560	560
100,000.....	180	590	620	650	650	650	650
250,000.....		760	910	1,010	1,020	1,030	1,030
500,000.....		410	1,070	1,300	1,430	1,450	1,460
1,000,000.....			570	1,870	1,970	2,030	2,060
2,500,000.....				2,400	2,870	3,110	3,240
5,000,000.....				1,280	3,390	4,170	4,550
10,000,000.....					1,810	5,100	6,330
15,000,000.....						5,370	7,630
25,000,000.....						2,830	9,510
50,000,000.....							12,170
150,000,000.....							7,070

¹ An area is the smallest complete geographic area to which the estimate under consideration pertains. Thus the area may be the United States, a region, division, State, city, standard metropolitan area, urbanized area, or the urban or rural portion of the United States. The rural-farm or rural-nonfarm population, the nonwhite population, etc., do not represent a complete area.

Table S.—STANDARD ERROR OF ESTIMATED PERCENTAGE FROM 20-PERCENT SAMPLE

(Range of 2 chances out of 3)

Estimated percentage	Base of percentage							
	500	1,000	2,500	10,000	25,000	100,000	500,000	5,000,000
2 or 98.....	1.3	0.9	0.6	0.3	0.2	0.1	0.0	0.0
5 or 95.....	2.0	1.4	0.9	0.5	0.3	0.1	0.1	0.0
10 or 90.....	2.8	2.0	1.2	0.6	0.4	0.2	0.1	0.0
25 or 75.....	4.0	2.8	1.8	0.9	0.6	0.3	0.1	0.0
50.....	4.6	3.3	2.1	1.0	0.7	0.3	0.1	0.0

LIST OF CORRECTIONS

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This volume has been prepared primarily by assembling and binding the statistical portions of previously issued bulletins which constituted preprinted chapters. This publication plan was adopted to conserve public funds. The corrections appearing

below represent changes which would ordinarily have been made if the volume had been prepared by reprinting the contents of the bulletins.

Table	Page (prefix 1)	Item	Change	
			From	To
24	48	CHANDLER, ARIZ.: 1940 population.....	1,240	1,239
24	49	SEAL BEACH, CALIF.: Percent increase, 1940 to 1950.....	28.8	128.8
24	49	WHITTIER, CALIF.: 1950 population.....	23,820	23,433
		Percent increase, 1940 to 1950.....	47.8	45.4
24	50	GULFPORT, FLA.: Percent increase, 1940 to 1950.....	34.2	134.2
24	50	PERRINE, FLA.: Add "(uninc.)"		
24	51	MOUNT PROSPECT, ILL.: Percent increase, 1940 to 1950.....	33.1	133.1
24	52	ZEIGLER, ILL.: Percent increase, 1940 to 1950.....	16.3	-16.3
24	52	CLAY CENTER, KANS.: Percent increase, 1940 to 1950.....	-0.2	0.2
24	55	PARK RAPIDS, MINN.: Percent increase, 1940 to 1950.....	4.5	14.5
24	56	MOUNT EPHRAIM, N. J., shown as Mount Ephriam.		
24	58	FAIRPORT, OHIO: Percent increase, 1940 to 1950.....	0.2	-0.2
24	58	LOGAN, OHIO: Percent increase, 1940 to 1950.....	3.3	-3.3
24	59	BRISTOW, OKLA.: Percent increase, 1940 to 1950.....	10.7	-10.7
24	59	PAWHUSKA, OKLA.: Percent increase, 1940 to 1950.....	2.1	-2.1
24	59	WEWOKA, OKLA.: Percent increase, 1940 to 1950.....	34.6	-34.6
24	60	EAST CONEMAUGH, PA.: Percent increase, 1940 to 1950.....	-4.7	-14.7
24	60	EBENSBURG, PA., shown as Edensburg.		
24	60	OIL CITY, PA.: Percent increase, 1940 to 1950.....	3.9	-3.9
24	61	SELINGSGROVE, PA., shown as Selingsgrove.		
24	61	SPANGLER, PA.: Percent increase, 1940 to 1950.....	5.9	-5.9
24	61	TRAFFORD, PA.: Percent increase, 1940 to 1950.....	1.3	-1.3
24	61	WEST HOMESTEAD, PA.: Percent increase, 1940 to 1950.....	7.6	-7.6
24	63	HIGHLAND SPRINGS, VA., shown as Highland Spring.		
24	64	ALASKA: Add "(uninc.)" following Eastchester and Mountain View.		
24	64-65	PUERTO RICO: Add "(uninc.)" following name of each place in Territory.		
26	66	CONTINENTAL UNITED STATES (168 areas): 1940 population.....	69,279,675	69,276,481
26	68	RICHMOND, VA., STANDARD METROPOLITAN AREA:		
		1940 population of area.....	266,185	262,991
		Percent increase, 1940 to 1950.....	23.2	24.7
		Chesterfield County: 1940 population.....	31,133	27,989
		Percent increase, 1940 to 1950.....	29.6	44.3
		Add footnote reference 1 to 1940 population of Chesterfield County.		
		Add footnote 1 to read as follows:		
		"Excludes 1940 population (3,194) of Colonial Heights town, which became an independent city in 1948."		
27	69	CONTINENTAL UNITED STATES (168 areas):		
		1940 population.....	69,279,675	69,276,481
		Increase, 1940 to 1950.....	15,221,005	15,224,199
		Outside central cities:		
		1940 population.....	25,887,957	25,884,763
		Increase, 1940 to 1950:		
		Number.....	9,199,931	9,203,125
		Percent.....	35.5	35.6
27	71	RICHMOND, VA., STANDARD METROPOLITAN AREA:		
		1940 population.....	266,185	262,991
		Increase, 1940 to 1950:		
		Number.....	61,805	65,059
		Percent.....	23.2	24.7
		Outside central city: 1940 population.....	73,143	69,949
		Increase, 1940 to 1950:		
		Number.....	24,597	27,791
		Percent.....	33.6	39.7
29	75	CONTINENTAL UNITED STATES (168 areas): Land area in square miles.....	207,583	207,590
29	75	JACKSONVILLE, FLA., STANDARD METROPOLITAN AREA:		
		Land area in square miles.....	770	777
		Population per square mile:		
		Standard metropolitan area.....	395	391
		Outside central city or cities.....	135	133
86	138	GALVESTON, TEXAS, STANDARD METROPOLITAN AREA: Nonwhite population.....	23,882	23,822
115	237	UNITED STATES, TOTAL: Median school years completed, nonwhite:		
		Male, 25 to 29 years.....	7.4	8.4
		Female, 30 to 34 years.....	8.1	8.4

Tables 42 and 43.—REVISED FIGURES

Population	TABLE 42				TABLE 43				
	United States		Rural farm		Population	United States			
	From	To	From	To		From	To		
Total, 5 to 29 years old.....	58,708,800	58,721,470	9,926,110	9,938,720	1950	Total, 5 to 24 years old.....	46,519,445		
5 and 6 years.....	5,490,200	5,502,810	1,032,085	1,044,695				5 to 19 years.....	35,079,350
Percent enrolled:									
Total, 5 to 29 years old.....	(1)	(1)	55.5	55.4	5 and 6 years.....	5,502,810			
5 and 6 years.....	(1)	(1)	37.1	36.6					

1 No change.

Table 44 Revised.—YEARS OF SCHOOL COMPLETED BY PERSONS 25 YEARS OLD AND OVER, BY COLOR AND BY SEX, FOR THE UNITED STATES, URBAN AND RURAL, 1950, AND FOR THE UNITED STATES, 1940

(Asterisk (*) denotes statistics based on 20-percent sample. For totals of persons 25 years old and over from complete count for 1950, see table 38. Percent not shown where less than 0.1 or where base is less than 500)

Area, color, and sex	Total, 25 years old and over	Years of school completed										Median school years completed
		None	Elementary school				High school		College		Not re- ported	
			1 to 4 years	5 and 6 years	7 years	8 years	1 to 3 years	4 years	1 to 3 years	4 years or more		
*1950												
United States.....	87,570,575	2,184,355	7,270,465	7,975,945	5,985,955	17,741,510	14,857,660	17,678,930	6,261,635	5,284,445	2,329,675	9.3
Male.....	42,634,720	1,110,370	3,948,085	4,030,235	2,992,105	8,835,165	7,005,480	7,521,480	2,903,135	3,027,120	1,311,545	9.0
Female.....	44,885,855	1,073,985	3,322,380	3,945,710	2,993,850	8,906,345	7,852,180	10,157,450	3,358,500	2,257,325	1,018,130	9.6
White.....	79,396,835	1,649,080	5,237,845	6,508,500	5,227,740	16,804,325	13,792,530	17,018,620	6,023,675	5,108,200	2,028,820	9.7
Nonwhite.....	8,173,740	535,275	2,033,120	1,469,445	768,215	937,185	1,005,130	600,310	237,960	170,245	300,855	6.9
Urban.....	58,851,820	1,359,185	4,010,225	4,727,770	3,505,530	11,019,060	10,382,795	13,286,045	4,697,635	4,258,285	1,605,290	10.2
Male.....	28,084,275	637,015	2,053,255	2,306,020	1,690,625	5,311,295	4,865,510	5,602,170	2,257,205	2,477,370	883,940	10.0
Female.....	30,767,545	722,170	1,969,970	2,421,750	1,815,905	5,707,795	5,517,285	7,683,875	2,440,430	1,780,915	721,350	10.3
White.....	53,328,225	1,107,230	2,936,850	3,792,135	2,985,335	10,293,005	9,596,135	12,701,090	4,493,810	4,107,705	1,404,860	10.5
Nonwhite.....	5,523,595	251,955	1,073,375	935,615	520,195	725,995	876,660	584,955	203,825	150,580	200,440	7.8
Rural nonfarm.....	16,896,415	457,700	1,641,050	1,714,220	1,321,570	3,646,370	2,823,175	2,905,090	1,057,705	787,595	541,940	8.8
Male.....	8,426,460	252,115	920,925	891,070	677,600	1,863,500	1,350,085	1,260,235	454,230	437,890	318,810	8.7
Female.....	8,469,955	205,585	720,125	823,150	643,970	1,782,870	1,473,090	1,644,855	603,475	349,705	223,130	9.0
White.....	15,591,155	318,730	1,224,870	1,469,435	1,204,210	3,531,650	2,711,825	2,856,945	1,036,010	769,875	467,605	8.9
Nonwhite.....	1,305,260	138,970	416,180	244,785	117,360	114,720	111,360	48,145	21,695	17,720	74,335	5.5
Rural farm.....	11,822,340	367,470	1,619,190	1,533,955	1,158,855	3,076,080	1,651,690	1,487,795	506,295	238,565	182,445	8.4
Male.....	6,173,985	221,240	973,905	833,145	623,980	1,660,400	789,885	650,075	191,700	111,800	108,795	8.2
Female.....	5,648,355	140,230	645,285	700,810	534,875	1,415,680	861,805	828,720	314,595	126,705	73,650	8.6
White.....	10,477,455	223,120	1,075,625	1,244,910	1,035,195	2,979,810	1,574,670	1,460,585	493,855	230,620	156,365	8.5
Nonwhite.....	1,344,885	144,350	543,565	289,045	120,860	96,470	77,120	27,210	12,440	7,945	26,080	4.8
1940												
United States.....	74,775,836	2,799,923	7,504,689	8,515,111	5,141,035	20,756,918	11,181,995	10,551,680	4,075,184	3,407,331	1,041,970	8.6
Male.....	37,463,087	1,471,290	4,079,100	4,899,910	2,607,902	10,631,478	5,332,803	4,507,244	1,823,981	2,021,228	588,151	8.6
Female.....	37,312,749	1,328,633	3,425,589	4,115,201	2,533,133	10,125,440	5,849,192	6,044,436	2,251,203	1,386,103	453,819	8.7
White.....	67,999,523	2,009,095	5,222,119	7,082,235	4,580,131	19,966,762	10,603,592	10,255,333	3,948,681	3,310,785	920,890	8.7
Nonwhite.....	6,776,313	790,828	2,082,570	1,432,876	560,904	790,156	578,403	296,347	126,503	87,546	121,080	6.8
Percent Distribution												
*1950												
United States.....	100.0	2.5	8.3	9.1	6.8	20.3	17.0	20.2	7.2	6.0	2.7	-----
Male.....	100.0	2.6	9.2	9.4	7.0	20.7	16.4	17.6	6.8	7.1	3.1	-----
Female.....	100.0	2.4	7.4	8.8	6.7	10.8	17.5	22.6	7.5	5.0	2.3	-----
White.....	100.0	2.1	6.6	8.2	6.6	21.2	17.4	21.4	7.6	6.4	2.6	-----
Nonwhite.....	100.0	6.5	24.0	18.0	9.3	11.5	13.0	8.1	2.9	2.2	3.7	-----
Urban.....	100.0	2.3	6.8	8.0	6.0	18.7	17.6	22.6	8.0	7.2	2.7	-----
Male.....	100.0	2.3	7.3	8.2	6.0	18.9	17.3	19.9	8.0	8.8	3.1	-----
Female.....	100.0	2.3	6.4	7.9	5.9	18.6	17.9	25.0	7.9	5.8	2.3	-----
White.....	100.0	2.1	5.5	7.1	5.6	19.3	17.8	23.8	8.4	7.7	2.6	-----
Nonwhite.....	100.0	4.6	19.4	16.9	9.4	13.1	15.9	10.6	3.7	2.7	3.6	-----
Rural nonfarm.....	100.0	2.7	9.7	10.1	7.8	21.6	16.7	17.2	6.3	4.7	3.2	-----
Male.....	100.0	3.0	10.9	10.6	8.0	22.1	16.0	15.0	5.4	5.2	3.8	-----
Female.....	100.0	2.4	8.5	9.7	7.6	21.0	17.4	19.4	7.1	4.1	2.6	-----
White.....	100.0	2.0	7.9	9.4	7.7	22.7	17.4	18.3	6.6	4.9	3.0	-----
Nonwhite.....	100.0	10.6	31.9	18.8	9.0	8.8	8.5	3.7	1.7	1.4	5.7	-----
Rural farm.....	100.0	3.1	13.7	13.0	9.8	23.0	14.0	12.6	4.3	2.9	1.5	-----
Male.....	100.0	3.6	15.8	13.5	10.1	23.9	12.8	10.7	3.1	1.8	1.8	-----
Female.....	100.0	2.6	11.4	12.4	9.5	25.1	15.3	14.7	5.6	2.2	1.3	-----
White.....	100.0	2.1	10.3	11.9	9.9	23.4	15.0	13.9	4.7	2.2	1.5	-----
Nonwhite.....	100.0	10.7	40.4	21.5	9.0	7.2	5.7	2.0	0.9	0.6	1.9	-----
1940												
United States.....	100.0	3.7	9.8	11.4	6.9	27.8	15.0	14.1	5.4	4.5	1.4	-----
Male.....	100.0	3.9	10.9	11.7	7.0	28.4	14.2	12.0	4.9	5.4	1.6	-----
Female.....	100.0	3.6	8.6	11.0	6.8	27.1	15.7	16.2	6.0	3.7	1.2	-----
White.....	100.0	3.1	7.7	10.4	6.7	29.4	15.6	15.1	5.8	4.9	1.4	-----
Nonwhite.....	100.0	10.3	30.7	21.1	8.3	11.7	8.5	4.4	1.9	1.3	1.8	-----

LIST OF CORRECTIONS

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Tables 55 and 56.—REVISED FIGURES

TABLES 55 AND 56, UNITED STATES, 1950

Industry group	Total		Male		Female	
	From	To	From	To	From	To
Agriculture, forestry, and fisheries.....	7,005,403	7,005,406	(1)	(1)	593,231	593,234
Agriculture.....	6,884,970	6,884,973	(1)	(1)	587,740	587,752
Manufacturing.....	14,575,692	14,575,703	10,933,379	10,933,390	(1)	(1)
Durable goods.....	7,756,922	7,756,928	6,518,208	6,518,210	1,238,714	1,238,718
Primary metal industries.....	1,166,782	1,166,787	1,090,678	1,090,683	(1)	(1)
Fabricated metal industries (incl. not specified metal).....	836,651	836,636	680,303	680,378	(1)	(1)
Machinery, except electrical.....	1,204,922	1,205,470	1,121,815	1,122,847	173,107	173,123
Other durable goods.....	1,133,017	1,132,485	814,804	814,284	318,213	318,201
Nondurable goods.....	6,006,510	6,006,700	4,330,133	4,330,324	2,366,377	2,366,385
Food and kindred products.....	1,309,070	1,309,250	1,081,153	1,081,334	317,917	317,925
Printing, publishing, and allied industries.....	853,239	853,249	640,259	640,269	(1)	(1)
Not specified manufacturing industries.....	122,200	122,066	85,038	84,856	37,222	37,210
Transportation, commun., and other public utilities.....	(1)	(1)	(1)	(1)	(1)	(1)
Railroads and railway express service.....	1,385,684	1,385,707	1,313,022	1,313,045	(1)	(1)
Trucking service and warehousing.....	700,682	700,707	653,250	653,275	(1)	(1)
Other transportation.....	854,297	854,240	779,856	779,808	(1)	(1)
Wholesale and retail trade.....	10,547,569	10,547,563	6,998,784	6,998,778	(1)	(1)
Wholesale trade.....	1,075,817	1,075,844	1,590,506	1,590,533	(1)	(1)
Retail trade.....	8,571,752	8,571,719	5,402,278	5,402,245	(1)	(1)
Food and dairy products stores, and milk retailing.....	1,717,405	1,717,506	1,238,033	1,238,044	(1)	(1)
Other retail trade.....	5,168,758	5,168,714	3,341,554	3,341,510	(1)	(1)
Business and repair services.....	1,411,357	1,411,397	1,228,490	1,228,530	(1)	(1)
Repair services.....	953,080	953,120	910,593	910,633	(1)	(1)
Personal services.....	3,488,551	3,488,573	1,159,439	1,159,461	(1)	(1)
Other personal services.....	1,330,665	1,330,687	684,070	684,101	(1)	(1)
Entertainment and recreation services.....	554,029	554,032	413,019	413,022	(1)	(1)
Professional and related services.....	4,674,548	4,674,478	1,956,967	1,956,897	(1)	(1)
Other professional and related services.....	977,530	977,460	620,320	620,250	(1)	(1)
Industry not reported.....	830,924	839,921	(1)	(1)	330,555	330,552

TABLE 55

Industry group	Urban				Rural nonfarm					
	Total		Male		Total		Male		Female	
	From	To	From	To	From	To	From	To	From	To
Manufacturing.....	11,304,088	11,304,078	8,351,134	8,351,174	2,524,644	2,524,615	1,998,566	1,998,537	(1)	(1)
Durable goods.....	5,945,902	5,945,044	4,893,608	4,893,620	1,382,263	1,382,207	1,236,142	1,235,092	147,111	147,115
Primary metal industries.....	952,471	952,476	880,010	880,015	(1)	(1)	(1)	(1)	(1)	(1)
Fabricated metal industries (incl. not specified metal).....	700,864	709,849	680,619	680,604	(1)	(1)	(1)	(1)	(1)	(1)
Machinery, except electrical.....	1,059,641	1,060,073	909,829	910,261	187,991	188,107	169,603	169,793	18,298	18,314
Other durable goods.....	887,391	887,021	618,636	618,466	198,960	198,798	159,142	158,992	30,818	30,806
Nondurable goods.....	5,203,860	5,203,966	3,393,280	3,393,386	1,122,234	1,122,327	748,280	748,374	373,945	373,953
Food and kindred products.....	1,105,664	1,105,770	845,251	845,357	226,966	227,049	183,067	183,142	43,899	43,907
Printing, publishing, and allied industries.....	(1)	(1)	(1)	(1)	80,601	80,701	61,271	61,281	(1)	(1)
Chemicals and allied products.....	(1)	(1)	(1)	(1)	(1)	(1)	91,400	99,400	(1)	(1)
Not specified manufacturing industries.....	94,186	94,008	64,286	64,168	20,157	20,081	15,135	15,071	5,022	5,010
Transportation, commun., and other public utilities.....	3,469,503	3,469,484	2,888,336	2,888,317	734,079	734,098	652,028	652,047	(1)	(1)
Transportation.....	2,314,367	2,314,348	2,144,122	2,144,103	506,933	506,952	487,882	487,901	(1)	(1)
Railroads and railway express service.....	1,073,880	1,073,884	1,008,096	1,008,100	260,204	260,213	254,304	254,413	(1)	(1)
Trucking service and warehousing.....	500,173	500,188	470,112	470,117	160,770	160,780	144,251	144,261	(1)	(1)
Other transportation.....	731,314	731,276	665,920	665,891	95,809	95,860	80,237	80,227	(1)	(1)
Wholesale and retail trade.....	8,425,318	8,425,322	5,552,251	5,552,255	1,775,613	1,775,603	1,217,795	1,217,785	(1)	(1)
Wholesale trade.....	1,050,618	1,050,646	1,317,226	1,317,253	(1)	(1)	(1)	(1)	(1)	(1)
Retail trade.....	6,774,700	6,774,677	4,235,025	4,235,002	1,511,851	1,511,841	980,781	980,771	(1)	(1)
Food and dairy products stores, and milk retailing.....	1,299,658	1,299,670	962,620	962,641	347,628	347,628	238,747	238,737	(1)	(1)
Other retail trade.....	4,134,558	4,134,514	2,594,092	2,594,048	(1)	(1)	(1)	(1)	(1)	(1)
Business and repair services.....	1,047,404	1,047,429	886,350	886,375	301,981	301,996	284,405	284,420	(1)	(1)
Repair services.....	631,055	631,080	599,776	599,801	260,544	260,559	257,773	257,783	(1)	(1)
Personal services.....	2,773,727	2,773,734	941,319	941,326	577,943	577,955	190,888	190,903	(1)	(1)
Other personal services.....	1,118,643	1,118,650	677,407	677,414	180,764	180,779	94,293	94,308	(1)	(1)
Entertainment and recreation services.....	464,681	464,684	343,200	343,203	(1)	(1)	(1)	(1)	(1)	(1)
Professional and related services.....	3,631,076	3,631,016	1,508,415	1,508,355	830,934	830,924	380,436	380,426	(1)	(1)
Other professional and related services.....	810,131	810,071	501,731	501,671	144,077	144,067	104,038	104,028	(1)	(1)

TABLE 55, RURAL FARM

TABLE 56, PERCENT INCREASE, 1940 TO 1950

Industry group	Total		Female		Industry group	Total		Male	
	From	To	From	To		From	To	From	To
Agriculture, forestry, and fisheries.....	5,662,812	5,662,815	467,388	467,391	Manufacturing.....	(1)	(1)	(1)	(1)
Agriculture.....	5,648,929	5,648,932	466,744	466,747	Durable goods.....	78.8	78.9	70.1	70.2
Industry not reported.....	145,788	145,785	61,117	61,114	Machinery, except electrical.....	51.6	51.5	41.7	41.6
					Other durable goods.....	-33.4	-33.5	-37.4	-37.5
					Not specified manufacturing industries.....	(1)	(1)	51.2	51.3
					Business and repair services.....	47.7	47.8	(1)	(1)
					Repair services.....				

1 No change.

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UNITED STATES SUMMARY

Tables 57, 61, 67, 80, 81, 82, and 85.—REVISED FIGURES

TABLE 57

Income	Families				Unrelated individuals				Color and age	Total		Female	
	United States		Urban		United States		Urban			Form	To	From	To
	From	To	From	To	From	To	From	To					
Less than \$500.....	3,018,030	3,018,085	1,437,440	1,437,495	3,192,245	3,192,190	2,238,485	2,238,430	All classes:				
\$500 to \$999.....	2,325,930	2,326,710	962,680	962,760	1,842,850	1,842,770	1,310,170	1,310,090	10 to 14 years..	163,210	163,410	77,755	77,955
\$1,000 to \$1,499.....	2,587,155	2,587,100	1,233,490	1,233,435	1,248,205	1,248,260	915,035	915,090	30 to 34 years..	112,550	112,350	55,588	55,388
\$1,500 to \$1,999.....	2,721,735	2,721,655	1,407,175	1,467,095	928,505	928,585	745,705	746,785	White:				
									10 to 14 years..	161,674	161,874	77,066	77,266
									30 to 34 years..	111,518	111,318	55,101	54,901

TABLE 61, NORTHEAST, RURAL FARM

TABLE 67

Area	Years of school completed						Median school years completed				
	Elementary school				High school		All classes			White	Nonwhite
	1 to 4 years	5 and 6 years	7 years	8 years	1 to 3 years	4 years	Total	Male	Female		
United States.....	7,270,465	7,975,945	5,985,955	17,741,510	14,857,660	17,678,930	9.3	9.0	9.6	9.7	6.9
The West.....	582,800	660,185	552,050	2,076,580	2,056,420	2,984,635	11.3	10.8	11.8	11.4	8.7
Mountain.....	167,085	170,035	141,470	523,815	464,020	627,330	10.7	10.0	11.3	10.8	7.3
Montana.....	16,040	20,685	10,295	84,170	51,085	74,490	10.1	9.0	11.2	10.2	8.0
Idaho.....	12,185	15,470	10,820	76,200	50,110	72,770	10.6	9.8	11.3	10.6	8.4

TABLE 80

Major industry group	United States		North Central		East North Central		Illinois		Wisconsin	
	From	To	From	To	From	To	From	To	From	To
Agriculture, forestry, and fisheries.....	7,005,403	7,005,406	2,384,308	2,384,311	1,058,270	1,058,279	(1)	(1)	254,183	254,186
Manufacturing, total.....	14,575,092	14,575,703	5,002,552	5,002,663	4,177,741	4,177,752	1,135,944	1,135,955	(1)	(1)
Durable goods.....	7,756,922	7,756,928	3,282,527	3,282,533	2,913,554	2,913,560	699,992	699,998	(1)	(1)
Nondurable goods.....	6,806,510	6,806,700	1,670,438	1,670,637	1,227,378	1,227,672	424,855	425,054	(1)	(1)
Wholesale and retail trade.....	10,547,599	10,547,563	3,206,700	3,206,694	2,170,840	2,170,834	691,225	691,219	(1)	(1)
Business and repair services.....	1,411,357	1,411,397	430,431	430,471	287,990	288,030	95,052	95,062	(1)	(1)
Personal services.....	3,488,561	3,488,573	829,015	829,037	674,860	674,882	182,522	182,544	(1)	(1)
Entertainment and recreation services.....	554,020	554,032	151,112	151,115	105,571	105,574	33,360	33,363	(1)	(1)
Professional and related services.....	4,674,548	4,674,478	1,387,120	1,387,050	926,064	926,894	281,657	281,587	(1)	(1)
Industry not reported.....	830,924	830,921	265,828	265,825	165,155	165,152	(1)	(1)	18,139	18,136

TABLE 81

Major industry group	United States		North Central		East North Central		Illinois	
	From	To	From	To	From	To	From	To
Manufacturing, total.....	10,933,379	10,933,390	3,929,513	3,929,524	3,303,913	3,303,924	839,706	839,717
Durable goods.....	6,518,208	6,518,210	2,781,777	2,781,779	2,419,202	2,419,204	547,649	547,651
Nondurable goods.....	4,330,133	4,330,324	1,101,344	1,101,335	857,356	857,547	284,040	284,231
Wholesale and retail trade.....	6,908,784	6,908,778	2,058,854	2,058,848	1,384,823	1,384,817	444,663	444,657
Business and repair services.....	1,228,490	1,228,530	373,401	373,441	246,168	246,208	78,492	78,532
Personal services.....	1,159,439	1,159,461	285,829	285,851	199,978	200,000	69,748	69,770
Entertainment and recreation services.....	413,019	413,022	112,725	112,728	79,136	79,139	25,138	25,141
Professional and related services.....	1,956,967	1,956,897	572,716	572,645	387,919	387,849	121,616	121,546

TABLE 82

Major industry group	United States		North Central		East North Central		Illinois		Wisconsin	
	From	To	From	To	From	To	From	To	From	To
Agriculture, forestry, and fisheries.....	593,231	593,234	183,250	183,253	83,592	83,595	(1)	(1)	33,911	33,914
Manufacturing:										
Durable goods.....	1,238,714	1,238,718	550,750	550,754	494,352	494,356	152,343	152,347	(1)	(1)
Nondurable goods.....	2,366,377	2,366,385	509,094	509,102	370,017	370,025	140,815	140,823	(1)	(1)
Industry not reported.....	330,555	330,552	107,640	107,637	66,867	66,864	(1)	(1)	7,747	7,744

TABLE 85

Income	United States		West		Pacific		California	
	From	To	From	To	From	To	From	To
Less than \$1,000.....	5,344,660	5,344,795	514,770	514,905	360,835	360,970	260,515	260,650
\$1,000 to \$1,999.....	5,308,890	5,308,755	601,215	601,080	422,030	421,895	302,190	302,055

1 No change.

Table 185.—REVISED MEDIAN INCOME FIGURES FOR NASHVILLE CITY

Race	Both sexes		Race	Female	
	From	To		From	To
Total, 14 years old and over.....	\$1,545	\$1,463	Total, 14 years old and over.....	\$1,109	\$952
White.....	1,872	1,788	White.....	1,456	1,231
Negro.....	1,019	967	Negro.....	731	655