
-

## Digitized by the Internet Archive in 2010 with funding from Boston Public Library

## Extra Census Bulletin.

# DISTRIBUTION OF POPULATION ACCORDING TO DENSITY: 1890. 

DEPARTMENT OF THE INTERIOR, Census Office, Washington, D. C., April 10, 1891.

Sir:
In the following tables and accompanying map, prepared by Mr. Henry Gannett, Gcographer, special agent of the Census Office, are presented certain facts relating to the density of the rural as distingnished from the urban population of the country, and in the tables comparison is made with similar facts from other censuses.

The method of preparing the map was as follows: The county was in general taken as the unit. Its population having been ascertained, the number of inhabitants in all cities of 8,000 inhabitants or more existing within it has been deducted therefrom, the location and population of such cities being represented upon the map by circles in heavy body color of area roughly proportional to the number of inhabitants. The rural population has then been divided by the area of the county in square miles, and the quotient accepted as the average density of settlement of the county in question. In cases, however, where the county is of unusual extent, as is the case with most counties in the Cordilleran region, northern Maine, etc., or where there was reason to believe that the different parts of the county differed decidedly in density of population, the county was not treated as a whole, but an approximation to the distribution of the population within it was obtained by the use of the town or township, as the unit of computation, or by other less exact means, in case this was not practicable. The average density of each county or part of a county having thus been ascertained, the figures representing them were platted upon a county map of the United States and were grouped in accordance with the legend upon the map. The subdivisions are those in use in former censuses, viz:
(0) Less than 2 inhabitants to a square mile. (Regarded as unsettled.)
(1) 2 to 6 inhabitants to a square mile.
(2) 6 to 18 inhabitants to a square mile.
(3) 18 to 45 inhabitants to a square mile.
(4) 45 to 90 inhabitants to a square mile.
(5) More than 90 inhabitants to a square mile.

These limits define in a general way the extent and prevalence of various classes of industries. The first group, 2 to 6 to a square mile, indicates a population mainly occupied with the grazing industry or a widely seattcred farming population. The second group, 6 to 18, indicates a farming population, with systematic cultivation of the soil, but this either in an early stage of settlement or upon more or less rugged soil. The third group, 18 to 45 to a square mile, almost universally indicates a highly successful agriculture, while in some localities the beginnings of manufactures have raised into this group a difficult farming region. Speaking generally, agriculture in this country is not carried c. o. P.- 5 m
on with such care and refinement as yet to afford employment and support to a population in excess of 45 to a square mile ; consequently, the last two groups, 45 to 90 and 90 and above to a square mile, appear only as commerce and manufaetures arise and personal and professional serviees are in demand.

In reports of former eensuses that portion of our domain whiel contains less than two inhabitants to a square mile has been regarded as unsettled territory, and throughout this disenssion the same distinetion will be observed.

Upon the map the lines limiting the areas of different densities have not been left to follow strictly the boundary lines of counties, as would be required by a literal interpretation of the figures platted upon the map, but have been drawn in a more natural eourse, avoiding sharp angles and straight lines, but still in such a way as not to depart materially from the indieations of the figures. In one noticeable respect the present map differs from the density maps of former censuses. This is, that eare has been taken to avoid passing direetly from one grade to another removed from it by two or three steps, for example, from grade 5 to grade 3 . This has been done upon the assumption that, whatever the figures indieate, there must be gradation in population as with eontonr lines, and hence the intermediate grades have been represented, even thongh it be in narrow bands, as more nearly approaching the truth.

From the map and the records of past eensuses the following table has been prepared, presenting the areas in square miles of different classes of settlement and the total settled area at the date of each census:

AREAS IN SQUARE MILES OF THE DIFFERENT CLASSES OF SETTLEMENT.

|  |  | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| YEARS. | 2 or more to the square mile. | 2 to 6 to the square mile. | 6 to 18 to the square mile. | 181045 to the square mile. | 45 to 90 to the square mile. | 90 and over to the square mile. |
| 1790......... | 239,935 | 83,436 | 83,346 | 59,282 | 13,051 | 820 |
| 1800........ | 365,708 | 81,010 | 123, 265 | 82,504 | 17,734 | 1,193 |
| 1810........ | 407,945 | 116,629 | 154,419 | 108,155 | 27,499 | 1,243 |
| 1820........ | 5¢8,717 | 110,827 | 177,153 | 150,390 | 39,004 | 1,343 |
| 1830....... | 632,717 | 151,460 | 205,894 | 186,503 | 65,446 | 3,414 |
| 1840 ....... | 807, 292 | 183,607 | 291, 819 | 241,587 | 81,451 | 5,828 |
| 1850........ ${ }^{\text {. }}$ | 979,249 | 233,697 | 294,698 | 338,796 | 100,794 | 11,261 |
| 1860........ | 1,194,754 | 260,866 | 353,341 | 431,601 | 134,722 | 14,221 |
| 1870........ | 1,272,239 | -245,897 | 363,475 | 470,529 | 174,036 | 18.302 |
| - 1880 ........ | 1,569,570 | 381,520 | 373,890 | 554,300 | 231,410 | 25,150 |
| 1890......... | $1,917,285$ | 592,037 | 393,913 | 701,845 | 235,148 | 24,312 |

It will be noted that the settled area has eonstantly and rapidly increased, but by no means at a uniform rate or at rates proportional to the increase of population. The following table shows the rates of inerease of the settled area and of the population placed in juxtaposition :

PER CENT OF INCREASE OF SETTLED AREA AND OF POPULATION.

| years. | Areas, | Population. | PER CENT OF INCREASE. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Area. | Population. |
| 1790... | 239,935 | 3,929,214 |  |  |
| 1800. | 305,708 | 5,308,443 | 27.41 | 35.10 |
| 1810. | 407,945 | 7,239,881 | 33.44 | 36.38 |
| 1.820. | 503,717 | 9,633,822 | 24.70 | 33.07 |
| 1830. | 632,717 | 12,866,020 | 21.38 | 33.5. |
| 1810..... | 807,292 | 17,069,4.33 | 27.59 | 32.67 |
| 1850. | 979,219 | 23,191,876 | 21.30 | 33.87 |
| 1860... | 1,194,754 | 31,4-43,321 | 22.01 | 33.58 |
| 1870.. | 4,272,239 | 38,558,371 | 6.19 | 22.63 |
| 1880.. | 1,569,5\% | 50, 155,783 | 23.37 | 30.08 |
| 1890.... | 1,947,285 | 62,623, 250 | 21.06 | 21.86 |

In 1890 the population was nearly sixteen times as great as in 1790 , while during the century the settled area was increased only about eightfold. In general, the increase of population has gone on at a much more rapid rate than that of settled area.

Notwithstanding the constant passage of territory from lower groups into higher by reason of increase in the number of inhabitants, the lower groups have been so rapidly inereased by settlement of new territory that they have increased in every case, excepting that in 1870 a slight diminntion is noted in group 1 . In 1890 a trifling reduction is seen in the highest group. This is doubtless an indirect result of the rapid development of cities in the territory falling into this group, as each city, upon reaching a population of 8,000 , is subtracted from the population of its county, thereby materially reducing the apparent density of the population of the county. To a certain extent the case is similar in the next gronp, that of 45 to 90 inhabitants to a square mile, which during the past decade inereased in area but 3,738 square iniles.

During this period the inroads upon the unsettled region have been unprecedented in amount, not less than 377,715 square miles having been redeemed, exceeding by $80,384 \mathrm{square}$ miles the area settled between 1870 and 1880.

The following table shows the proportion of the area of each gronp of population to the total area of settlement at eaeh censns :

| xears. | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1790. | 348 | 348 | 247 | 54 | 3 |
| 1800 | 265 | 403 | 270 | 58 | 4 |
| 1810 | 286 | 379 | 265 | 67 | 3 |
| 1820. | 277 | 348 | 296 | 76 | 3 |
| 1830. | 239 | 357 | 295 | 103 | 6 |
| 1840. | 228 | 361 | 299 | 105 | 7 |
| 18 ¢0. | 239 | 301 | 316 | 103 | 11 |
| 1860. | 218 | 296 | 361 | 113 | 12 |
| 1870. | 193 | 286 | 370 | 137 | 14 |
| 1880. | 245 | 238 | 353 | 148 | 16 |
| 1890. | 304 | 202 | 361 | 121 | 12 |

The most striking fact which appears upon a study of the map is the numerous additions which have been made to the settled area within the Cordilleran region. Settlements have spread westward up the slope of the plains until they have joined the bodies formerly isolated in Colorado, forming a continuons body of settlement from the east to the Rocky monntains. Praetically the whole of Kansas has become a settled region, and the unsettled area of Nebraska has been reduced in dimensions to a third of what it was ten years ago. What was a sparsely-settled region in Texas in 1880 is now the most populons part of the state, while settlements have spread westward to the escarpment of the Staked Plains. The unsettled regions of the Dakotas have been reduced to half their former dimensions. Settlements in Montana have spread until they now occupy one-third of the state. In New Mexico, Idaho, and Wyoming considerable extensions of area are to be noted. In Colorado, in spite of the decline of the mining fever and the depopulation of its mining regions, settlement has spread, and two-thirds of the state is now under the dominion of man. Oregon and Washington show equally rapid progress, and California, althongh its mining regions have suffered, has made great inroads upon its msettled regions, especially in the south. Of all the western states and territories Nevada alone is at a standstill in this respect, its settled area remaining practically the same as in 1880 . When it is remembered that the state has lost one-third of its population during the past ten years, the fact that it has held its own in settled area is surprising until it is understood that the state has undergone a material change in occupations during the decade, and that the inhabitants, instead of being closely grouped together and engaged in mining pursuits, have become scattered along its streams and have engaged in agriculture.

Turning now to the east, it is seen that settlement is spreading with some rapidity in Maine, its unsettled area having dwindled from 12,000 down to about 4,000 square miles. The mettled portion of the Adirondack region in New York has also diminished, there leing now but 1,000 square miles remaining unsettled. The frontier has been pushed still farther sonthward in Florida, and the unsettled area has been reduced from 20,500 to 13,000 square miles.

The lumbering and mining interests of Michigan have practically obliterated its wilderuess and have reduced that of Wisconsin to one-half of its former area. In Minnesota the area of its wild northern forests have heen rednced from 34,000 to $23,000 \mathrm{square}$ miles.

The following table presents in detailed form, by states, the extent of settled area and the area in each of the density groups:

AREAS IN SQUARE MILES OF THE DIFFERENT CLASSES OF SETTLEMENT IN 1890, BY STATES.

| States and territories. | $\begin{aligned} & \text { Total area } \\ & \text { settlement. } \end{aligned}$ | 2 to 6 to the square mile. | 6 to 18 to the square mile. | $\begin{gathered} 18 \text { to } 45 \\ \text { to the square } \\ \text { mile. } \end{gathered}$ | $\begin{aligned} & 45 \text { to } 90 \\ & \text { to the square } \\ & \text { mile. } \end{aligned}$ | A hove 90 to the square mile. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total. | 1,947,285 | 592,037 | 393,943 | 701,845 | 235,148 | 24,312 |
| Alabama ... | 51,540 |  | 9,472 | 37,717 | 4,351 |  |
| Arizona............ .............................. | 24,645 | 24,64 | 23,212 | 29,833 |  |  |
| California ............................. | 96,60: | 57,657 | 2s, 116 | 10,181 |  | 50 |
| Colorado ................... ..... | 68,492 | 57,810 | 9,439 | 1,243 |  |  |
| Connecticut.. .................. | 4,845 |  |  |  | 4,072 | 773 |
| Delaware.................... | 1,960 |  |  | 810 | 1,150 | 65. |
| Florida............................. | 41,070 | 18,888 | 20,451 | 1,931 |  |  |
| Georgia........... | 58,980 | 1,166 | 16,153 | 35,040 | 6,621 |  |
| Idaho .. ................ .......... | 39,143 | 37,233 | 1,910 |  |  |  |
| Illinois .......................... | 56,000 |  |  | 41,890 | 14,110 |  |
| Indiana.......................... | $\begin{array}{r}35,910 \\ 55 \\ \hline\end{array}$ |  |  | 12,484 50,167 | 23,426 1 1,062 |  |
| Iowa............................................. | 55,475 80,971 | 24,920 | 4,246 22,493 | 50,167 32,44 | 1,1062 |  |
| Kentueky... | 40,000 |  | 1,643 | 25,149 | 12,491 | 717 |
| Louisiana........ ................ | 45,420 | 7,608 | 18,490 | 18,319 | 816 | 187 |
| Mrine... | 25,729 | 9,624 | 6,596 | 6,703 | 2, 806 |  |
| Maryland... | 9,860 |  |  | 2,900 | 6,123 | +837 |
| Massaehusetts.............. | 8,040 | - |  | 959 | 4,149 | 2,932 |
| Michigan.. | 57,430 | 12,349 | 13,651 | 16,844 | 13,806 | 780 |
| Minnesota. | 56, 359 | 9,871 | 25,766 | 20,622 |  |  |
| Mississippi. | 46,340 |  | 10,007 | 35,502 | ${ }_{1} 831$ |  |
| Missouri.... | 68,735 46,796 | 45,941 | 14,892 | 52,765 |  | 48 |
| Nebraska........................ | 63,061 |  | 17,040 | 1929 |  |  |
| Nevada..... | 11,948 | 10,022 | 1,208 | 718 |  |  |
| New Hampshire................. | ${ }^{8} 8.828$ | 708 | 886 | 5,245 | 1,989 |  |
| New Jersey..................... | 7,455 |  |  | 1,550 | 3,055 | 2,850 |
| New Mexico ................... | 45,589 | 35,625 | 9,964 |  |  |  |
| New York. | 46,580 | 1,427 | 1,887 | 13,172 | 28,266 | 1,828 |
| North Carolina................ | 48,580 |  | 6,313 | 38,060 | 4,207 |  |
| North Dakota.................................................. | 26,973 40,760 | 17,835 | 9,138 |  | 37,74 | 1,400 |
| Oklahoma............................. | -2,890 |  |  | 2,890 |  |  |
| Oregon | 46,189 | 39,124 | 5,018 | 2,047 |  |  |
| Pennsylvania.................... | 44,985 |  |  | 10,617 | 23,692 | 10,676 |
| Rhode Island.................... | 1,085 |  |  |  | 320 6,241 | 765 |
| South Dakota..................... | 43,848 | 19,343 | 23,150 | 1,355 | 6,24 |  |
| Tennessee........................ | 41,750 |  | 4,114 | 24,985 | 12,651 |  |
| Texas............................ | 150,810 | 59,755 | 40,313 | 50, 742 |  |  |
| Utah............................. | 27,580 | 20,421 | 5,701 | 1,458 |  |  |
| Virginia................................. | -9,185 |  | 3,109 | - 29,895 | 7,121 |  |
| Washington. | 36,945 | 22,202 | 13,461 | 1,282 |  |  |
| West Virginia................. | 24,645 |  | 9,190 | 11,766 | 3,689 |  |
| Wiscousin............................................. Wyoming...... | 51,148 29 | $\begin{array}{r} 8,410 \\ 22,85 \% \end{array}$ | 14,360 | 20,672 | 7,302 | 404 |

Up to and including 1880 the country had a frontier of settlement, but at present the unsettled area has been so broken into by isolated bodies of settlement that there can hardly be said to be a frontier line. In the discussion of its cxtent, its westward movement, etc., it can not, therefore, any longer have a place in the census reports.

Very respectfully,
ROBERT P. PORTER,
Superintendent of Census.
The Secretary of the Interior.



