

GEOLOGY and GEOGRAPHY

Chairman: W. T. BUCKLEY, Indiana University (in armed services)

Acting Chairman: W. D. THORNBURY, Indiana University

Professor A. H. Meyer, Valparaiso University, was elected chairman of the section for 1944.

Indiana County Contrasts in Population Changes

STEPHEN S. VISHER, Indiana University

Of Indiana's 92 counties, only 16 have increased in population decade by decade. The remaining nearly five-sixths of the counties, after attaining their maximum population some time ago, most of them before 1900, have suffered a decline. Thirteen of these counties have continued to decline progressively at each census since their maximum population and five others lost each time except in 1930, when they had a few more people than in 1920. The remaining 58 counties or nearly two-thirds of the state's total, have fluctuated notably during recent decades; most of them had more people in 1940 than in 1930 or 1920.

Population distribution and changes are highly significant aspects of the geography of a region and are worthy of prolonged study to disclose the facts and, if possible, to arrive at their basis. The present study is in continuation of one published in the *Proceedings* in 1942 on "Population Changes in Indiana 1840-1940." (51:179-193)

The first of the accompanying maps shows by vertical shading the 16 counties that have increased steadily in population, and by horizontal shading the 13 which have declined census by census since attaining their maximum population (mostly in 1870-1890) and also the five which declined steadily except for 1930 (Lawrence, Miami, Orange, Rush, Shelby, encircled in Figure 1). The remaining unshaded counties have had a varied population record, that is, have changed status in recent decades.

Map 1 shows that the 16 counties which have continuously gained in population are mostly those with relatively large cities. Examples are Marion (Indianapolis), Allen (Ft. Wayne), Lake (Gary), St. Joseph (South Bend), Vanderburg (Evansville) and Delaware (Muncie). Others are LaPorte (Elkhart), Tippecanoe (Lafayette), Howard (Kokomo) and Wayne (Richmond). Five other counties which have continuously gained although they do not have especially large cities are Henry (New Castle), Fayette (Connersville), Johnson (Franklin), Monroe (Bloomington) and Floyd (New Albany). Four of these 16 relatively prosperous counties are on the northern border of the state, two are on the Ohio River, and the remainder are more centrally located.

The counties which had more people at the 1940 census than at any earlier one are diagonally crossed in Figure 3. The counties that first declined in population are mostly near the southeastern corner of the state, the first part to be well settled. Declines set in there soon after 1870 for Franklin, Jefferson, and Ohio counties and soon after 1880 in several other counties. Owen County also commenced to decline before 1880, and Putnam, Hendricks, Warren and Lagrange before 1890. Five counties, scattered from Crawford on the Ohio River to Whitley just west of Ft. Wayne, had their maximum populations in 1890. Aside from the 16 counties which grew until 1940 (see Fig. 1), most of the remaining counties had their maximum populations no later than the 1900 census. (The census date of maximum population for each county is shown in the 1942 *Proceedings* article cited, Figure 6.)

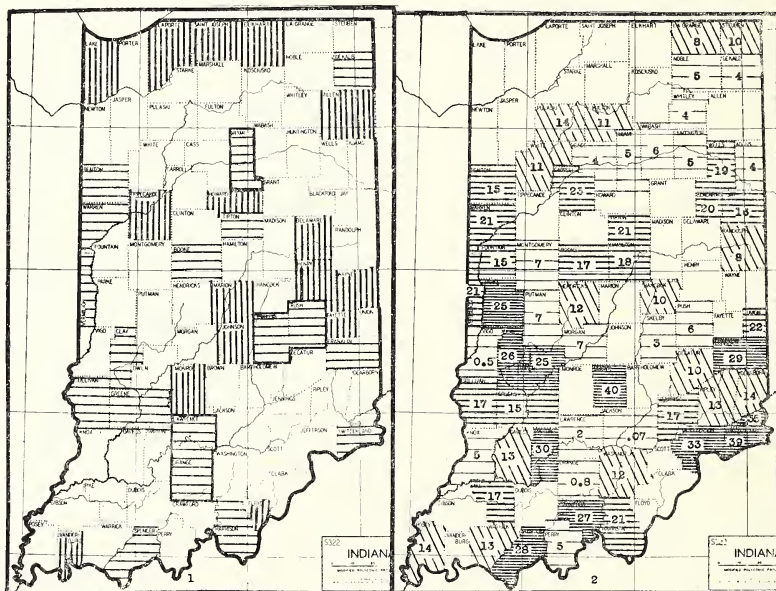


Fig. 1. Counties classified as to population growth: counties shaded vertically had continuous growth; counties shaded horizontally had a steady decline during recent decades; unshaded counties have recommenced increasing after a decline, or were irregular.

Fig. 2. Percentage of decline in population from census of maximum (mostly in 1870-1900) to 1940. Unshaded counties have continued to gain.

The extent of loss of population between the census of maximum population and 1940 is indicated by Figure 2. The shading here represents the percentage magnitude of the loss, the darkest shading, a loss of 25-40 per cent; next one of 15-24, and third (diagonals) one of 10-14 per cent.

The counties which have lost most heavily, relatively, are Brown, Switzerland, Ohio, Jefferson and Martin (40, 39, 35, 33, and 30 per cent

respectively). Other heavy losers, with the percentage decline between the maximum population and 1940 are Franklin 29, Spencer 28, Crawford 27, Clay 26, and Parke and Owen, both 25. Eleven counties lost from 25 to 40 per cent and 17 lost from 15 to 24 per cent.

The counties of especially heavy population loss (25-40 per cent) are in the southern half of the state, but the central third of the state has 12 counties which have lost from 15-40 per cent. No county in the northern quarter of the state has lost more than 14 per cent, the amount that Pulaski lost.

The counties which have lost the largest number of people between their maximum and 1940 with their losses are shaded horizontally in Figure 3. Jefferson County lost 9,829; Clay, 8,920; Spencer, 6,196; Franklin, 5,811. Counties which lost from 4,000 to 5,700 people are Parke, Switzerland, Martin, Brown and Owen. On Figure 3, losses of over 5,000 are shaded darkly, losses of 3,000-4,000 are shaded moderately, losses of 2,000-3,000 are shaded lightly, and losses less than 2,000 are unshaded. The counties which gained (had more people in 1940 than at any earlier census) are cross diagonally.

No losing county stands alone. The largest contiguous belt of declining counties extends from Benton County in the northwest, southward to the Ohio River. In this broad western zone all the counties have lost population except Tippecanoe (Lafayette), Gibson and Vanderburgh (Princeton and Evansville). Crossing the southern third of the state is another zone of counties which have lost rather heavily. Eight southern counties have, however, not lost, and four others have lost only slightly (Jackson, Lawrence, Orange and Vigo).

Several counties which lost heavily border counties which have continued to gain population. Examples are Brown, Boone, Carroll, Harrison, Jefferson, and Tipton, with losses of 17 to 40 per cent, each of which border one or more growing counties.

The counties which have lost heavily in population are of three chief types: (1) rural counties which have suffered serious loss of timber and soil resources, with the result that there are fewer farm families. Examples of this type are Switzerland, Martin, Owen, Brown, and Crawford. (2) Another type consists of excellent farming counties which have lost population as a result of smaller families, resulting from birth control, and encouraged by the increased use of labor-saving machinery and the higher standard of living desired. Examples are Benton, Tipton, Carroll, Blackford, Wells, Hamilton, and Union. (3) Formerly important coal-producing counties have also suffered a decline, with the exhaustion or abandonment of shaft mines. Examples are Clay, Vermillion, Spencer, Pike, and Sullivan.

The counties which have continued to lose population mostly lack sizable cities. Map 1 shows that three of them are on the Ohio River (Switzerland, Harrison, and Spencer). Eight others are south of the National Highway (U. S. 40) (Orange, Lawrence, Greene, Sullivan, Clay, Shelby, Rush, and Franklin). Only one northern county (Dekalb) has continuously lost, after attaining its maximum in 1900.

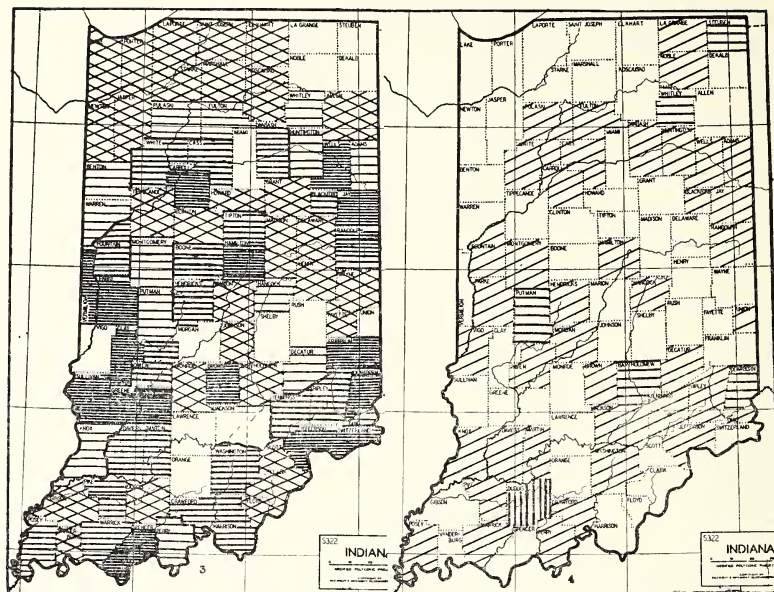


Fig. 3. Counties classified as to loss of population between maximum and 1940. The diagonally crossed counties had most people in 1940. The darkly shaded counties lost 5,000 to 9,820 people per county; the moderately shaded counties lost 3,000 to 5,000, and the lightly shaded counties lost 2,000 to 3,000. The unshaded counties had losses of less than 2,000 people per county.

Fig. 4. Census date of the minimum population following the maximum (generally attained in 1870 to 1900). Vertical shading, minimum in 1910, horizontal shading, minimum in 1920, diagonal shading, minimum in 1930. The unshaded counties had their minimum in 1940 or else have had no minimum as they have grown continuously. (These types are distinguished in Figure 1.)

In addition to the counties which had more people in 1940 than at any earlier census, crossed diagonally in Figure 3, are several counties which had almost as many people at the 1940 census as at any earlier census. They are shaded lightly in Figure 2, and are mostly unshaded in Figure 3. Nine counties had losses of less than five per cent, Vigo, Jackson, and Orange (each less than 1 per cent), Lawrence 2, Shelby 3, Adams, Cass, Dekalb, and Whitley each 4. Ten counties with losses of five to eight per cent are Huntington, Knox, Miami, Noble, and Perry (each 5), Rush and Wabash 6, Montgomery, Morgan and Putnam each 7. These 19 counties of small percentage loss, shaded lightly on Figure 2, are widely distributed over the state. However, except for Vigo and Putnam, each borders some county which has continued to gain.

Figure 4 shows by shading the census dates for the minimum population following the maximum, which had been attained in most cases in 1880 and 1890. Five of these counties recommenced gaining between 1920 and 1930 (Bartholomew, Dearborn, Putnam, Steuben, and Whitley). They are shaded horizontally in Figure 4. About one-third of the state's

counties continued to lose population until after the 1930 census, but then gained appreciably before 1940. These counties are diagonal lines in Figure 4. Eighteen counties attained their minimum population in 1940. They are horizontally lined on Figure 1. DeBois County had its minimum in 1910 and has gained steadily since then. It is shaded vertically in Figure 4.

The 58 counties that have checked their decline and had more people in 1940 than at the previous or some other recent census (unshaded in Figure 1) are most numerous relatively in the northern fourth of Indiana, where, it will be recalled, are several of the counties which have never suffered a decline in population.

The large number of Indiana counties which, after suffering a decline in population, have commenced gaining again, suggests widespread increased opportunities for earning a living. This is partly because of increased industrialization. The sharp decline in population that had taken place earlier occurred when, partly because of the increased use of farm machinery, fewer people are needed on farms. Indiana has ceased to be chiefly an agricultural state. The 1940 census recorded that less than a fourth (23.7 per cent) of Indiana's people were then on farms.

The extensive changes have taken place since 1940 in population distribution in Indiana, associated with war stimulated industrialization and army camps. Undoubtedly when the data for the 1950 census are available, some sharp changes from the trends sketched above will be revealed. Nevertheless, the present discussion helps with the understanding of recent decades, and presumably will throw light upon the changes of 1940-1950.