## The Relationship Between Mineral Production And Population in the Oklahoma Portion of The Tri-State Lead and Zinc District<sup>1</sup>

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Mining results in a "boom and bust" type of economy. When minerals are readily available and profitably extracted people are drawn to mining regions. Towns spring up, roads are built, railroads are constructed, and population increases. Once such a mining region has been established it shows an amazing sensitivity to mineral production fluctuations. Variation in production, caused by inaccessibility of ores or falling prices, has a strong influence upon population rise and decline within, and adjacent to, the mining area.

The Tri-State Lead and Zinc District of southeastern Kansas, southwestern Missouri, and northeastern Oklahoma exhibits this populationmineral production relationship well. The purpose of this paper is to demonstrate the correlation between increasing population and increased mineral production, and decreasing mineral production and a declining population, in the Oklahoma portion of the Tri-State district.

## Population-Mineral Production Relationships

Mining within the Tri-State area began in 1871, but for most of Oklahoma production was not begun until some years later. In fact, significant ore production did not begin in Oklahoma until after 1900. This was due primarily to limited settlement opportunity in Indian lands.

Soon after settlement became effective mining became one of the significant occupations of the people within the area. In Ottawa County, the principal zinc-lead producing county in Oklahoma, the population rose from 3,000 in the first census of 1900 to a peak of 41,108 in 1920, only to drop off to a total of 32,218 in 1950. Maximum zinc production was attained in 1925, after which it showed a general decline with minor upturns in response to wars and economic booms.<sup>2</sup> Hence, the peak population and peak zinc production do not appear to be in direct phase relationship. It should be noted, however, that peak zinc production was achieved in a non-census year, and therefore it is quite probable that the actual high water mark of Ottawa County population was reached after 1920 but before 1930.

Total population for the three most significant zinc producing counties in the Tri-State district show a similar trend. Population of the three counties (Ottawa County, Oklahoma, Cherokee County, Kansas, and Jasper County, Missouri) rose from 129,712 in 1900 to a peak of 150,658 in 1920 and then declined to 136,468 in 1950. Maximum zinc production was attained in 1925, hence the pattern of Tri-State as a whole corresponds closely with Ottawa County.

Towns within Ottawa County which depend primarily upon zinc and lead mining for their existence have, for the most part, shown a comparable close relationship to zinc production. For example, Picher had a population of 9,676 in 1920 and declined steadily to 3,951 in 1950.<sup>3</sup> Quapaw's population diminished from 1,394 in 1920 to 938 in 1950. Commerce, on the other hand, has shown a relatively static population. In 1920 Com-

<sup>&</sup>lt;sup>1</sup> Received for publication December 17, 1954. <sup>2</sup> Only zinc production is considered, since zinc is by far the most significant of the two minerals within the area. Further, lead production shows an exact proportional rise and de-

cline with zinc. \* Population figures are given for Picher, Quapaw, and Commerce for the period from 1920 on, since that is the first census year after their founding and for incorporation.

merce had 2,555, in 1930, 2,608, in 1940, 2,422, and in 1950, 2,442. The author has no adequate explanation for this apparently anomalous situation.

Where the previously mentioned zinc-dependent Ottawa County towns have shown a decline or, in the case of Commerce, stability, Miami, a non zinc-oriented town, has shown a steady increase in population. To illustrate, Miami's population was 1,527 in 1900, 1,893 in 1907, 2,907 in 1910, 6,802 in 1920, 8,064 in 1930, 8,345, in 1940, and 11,801, in 1950.

The preceding examples serve to illustrate that population in the Oklahoma portion of the Tri-State Zinc-Lead District is closely tied to the rise and decline of zinc production. Hence it can be seen that this Oklahoma mining area shows the same kind of population-mineral production relationship as other mining sections in the United States.