

RESOURCE PROTECTION PLANNING PROJECT
INDUSTRIAL DEVELOPMENT IN THE TEN COUNTIES
OF SOUTHCENTRAL OKLAHOMA TO 1930

REGION FIVE

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Industrialization In Oklahoma

Even though Oklahoma is not an industrial state, industrial production has had a significant and continuing impact on the quality of life and the economic well-being of Oklahomans. For purposes of this historic context, industry is defined as value-added manufacturing, thus encompassing a range of sites from small waterpowered gristmills to huge lead and zinc smelters. Excluded are most energy-related sites, which are the subject of a different historic context. This study covers the period from the early nineteenth century, when white settlement began in Oklahoma, to the late 1920s, when changing markets and the Great Depression significantly altered the state's industrial infrastructure.

Several generalizations have emerged from the research on industrialization in Oklahoma. First, industry has been overwhelmingly extractive and agricultural. Thus, most of the identified sites include gristmills, salt works, cotton gins and cottonseed oil plants, smelters, lumber mills, milk and cheese companies, and flour mills. Second, industrial development has often proceeded in cycles of boom and bust, as seen in coal, lumber, broomcorn, cotton, oil, and lead and zinc. Finally, the number of industrial properties identified during the research for this project is quite small, particularly when compared with the Oklahoma listings on the National Register of Historic Places and the Oklahoma Landmarks Inventory. The majority of these sites are located

in regions three (twenty-four) and seven (twenty-two), while work in 1984/85 identified sixteen industrial sites in region six. These figures reflect not only the relative historical distribution of industrial development in the state but also the lack of attention given to industry in previous surveys.

During most of the nineteenth century, when much of Oklahoma was Indian Territory, limited available energy, poor transportation, restricted markets, and sparse population circumscribed industrial development. As was the case in the rest of premodern America, nearly all manufacturing in Indian Territory was small-scale, existed primarily to serve local needs, and was usually subsistence-oriented. Most manufacturing took place at the family level, where individuals produced a wide variety of home manufacturers by hand, usually for family use or barter, and sometimes for cash sale. Examples include spinning, processing food, churning butter, making soap, and butchering.

Above the family level, artisans and craftsmen, small salt works, and local mills produced what people did not make at home. Artisans and craftsmen, such as carpenters, cabinetmakers, saddlers, and blacksmiths, usually made to order and oftentimes bartered their wares rather than sell them for cash. Only a few sites of this type have been identified, such as the partially excavated ruins of the Mathewson house and blacksmith shed operated from about 1869-74 in Comanche county (region 7). Salt, which was evaporat-

ed from the waters of saline springs, formed a crucial part of the diet of the residents of Indian Territory. The remains of several salt works tentatively identified in the state attest to the significance of salt. Local mills, powered by either water or horses, manufactured products such as flour, cornmeal, and lumber with less labor and of better quality than those made at home. Again, the number of surviving local mills, such as the Hildebrand Mill in Delaware county (region 3), indicate the importance of these establishments in Indian Territory.

The Civil War in Oklahoma contributed to the breakdown of tribal sovereignty and accelerated changes that in the long run stimulated industrial development. During the Civil War, the Choctaws and Chickasaws aligned themselves with the Confederacy, while the Cherokees, Creeks, and Seminoles divided their allegiance between the North and South. At war's end, the Union compelled the tribes to sign Reconstruction treaties. One key provision of these treaties required the tribes to grant railroad rights-of-way for chartered companies to construct north-south and east-west lines.

Beginning shortly after the Civil War and continuing into the early twentieth century, changes in transportation, population, and energy combined to transform industry in Oklahoma. By the early twentieth century, railroads crisscrossed Oklahoma. Railroads spurred economic growth and industrial development by increasing the speed, efficiency,

and reliability of transportation; by making it possible to move a significantly larger volume of goods; and by linking Oklahoma to a national market. With the expansion of the rail network, Oklahoma witnessed an upsurge in ranching, farming, mining, and lumbering. Concomitantly, railroads broke down the sheltered markets that most local industries had formerly enjoyed and placed them at a competitive disadvantage with products mass-produced outside of Oklahoma.

By improving transportation and contributing to economic growth, railroads attracted large numbers of white settlers to Oklahoma. Between 1890 and 1910, Oklahoma's population increased from 258,657 to over 1.6 million, a growth rate of 518 percent. Pressure from the railroads and the growing number of white inhabitants persuaded the federal government to open sections of Indian Territory to white settlement. In April 1889, Congress opened the Unassigned Lands in central Oklahoma, and shortly thereafter about fifty thousand homeseekers participated in a run for two million acres. Overnight, Guthrie, Edmond, Oklahoma City, and Norman appeared along the Santa Fe tracks. The next year, in May 1890, Congress passed the Oklahoma Organic Act, which created Oklahoma Territory from the Unassigned Lands and the Panhandle. Between 1892 and 1901, a series of openings of Indian land increased the size of Oklahoma Territory and attracted tens-of-thousands of settlers.

Cotton provides an illustration of the combined impact of railroads and population growth on manufacturing in Indian Territory. Prior to the Civil War, the Chickasaws, Choctaws, Creeks, and Cherokees engaged in cotton culture. Although some members of the tribes did raise cotton commercially, Indian farms were generally small, and most cotton was used for the domestic manufacture of cloth. The Civil War brought a hiatus to cotton production, but by the 1870s, the arrival of the railroads precipitated a cotton boom that with some reversals continued until the 1930s.

Along with the boom came significant changes in the Indians' cotton culture. Most Indians now bought ready-to-wear clothing shipped in by rail and sold their cotton to be transported out by the railroad. By 1900, 301 gins in Indian Territory processed over 288,000 bales of cotton, and 6 cottonseed processing plants produced oil, cake and meal, hulls, and linters (the short fibers that adhere to the seeds after ginning). But, by 1900, whites who were attracted to Oklahoma largely by the opportunities created by the railroads worked 80 percent of the farms producing cotton on Indian land.

Among the range of potential opportunities that drew white settlers to Oklahoma, the exploitation of coal and petroleum had a significant impact on industrial development. Commercial-scale mining of coal began in 1872, when J.J. McCalester opened a mine in Pittsburg county (region 3) near

a town that later bore his name. Thereafter, coal mining expanded rapidly; by statehood in 1907, fifty companies extracted about three million tons of coal from southeastern Oklahoma. Oilmen drilled Oklahoma's first commercial oil well in 1897 near Bartlesville. After a slow start, the oil industry experienced phenomenal growth. By 1915, Oklahoma's annual yield of 123 million barrels constituted one-third of the world's oil output. In the early years of the oil industry, much natural gas was wasted. During the 1910s, however, production began to climb until by 1925 Oklahoma wells accounted for just over one-fifth of the natural gas marketed in the United States.

Coal, and later petroleum, provided high quality energy for transportation and manufacturing in heretofore unprecedented amounts. One of the most important stimuli for J.J. McCalester's first coal mining venture was the arrival of the MKT railroad, which supplied both a market and transportation. Railroads continued to be major consumers and carriers of coal. Abundant, cheap coal and natural gas furnished the high heat necessary for manufacturing enterprises such as lead and zinc smelters in northeastern Oklahoma and brick kilns scattered all over the state. Like the railroads, energy development attracted people and money to the state, enlarging the pool of risk capital available for industrial expansion, increasing the demand for manufactured goods, and expanding the labor pool.

In Oklahoma, the railroad, fossil fuel, and population contributed to significant industrial growth, the patterns of which will interest individuals attempting to place industrial properties in historical context. Beginning in the 1890s, first the number and then the variety of manufacturing establishments expanded rapidly. Despite these increases in quantity and diversity, small-scale manufacturers gave way to larger producers. Between 1909 and 1919, the number of operations reporting a value of products of less than \$5,000 plummeted from 1,182 to 710, while those reporting a value of products of \$1 million or more increased from 4 to 72. In 1919, these \$1 million firms made up only 3 percent of the state's total; yet, they accounted for 44 percent of the wage earners, 69 percent of the value of products, and 49 percent of the value added. Beginning in the 1910s, industry began to concentrate in cities with a population of 10,000 or more, while during the 1920s, manufacturing became more energy intensive and less labor intensive. Those local industries that survived did so by adapting to new market conditions.

Flour and grist milling offer a good example of Oklahoma's industrial cycle in the late nineteenth and early twentieth centuries. Milling operations increased from 66 in 1899 to 295 in 1909, when most flour mills manufactured their own brand name products and vigorously promoted them in their immediate area. By 1919, however, the number of milling establishments had fallen to 227. Significantly, the

greatest decline was in operations with output valued at less than \$5000 (48), while the most dramatic increase was in facilities producing more than \$1,000,000 worth of product (12). The decrease continued until 1929, when Oklahoma could claim only 71 flour and grist mills. Businesses such as the Okeene Mill in Blaine county (region 7) that remained in operation through this period usually did so by expanding their plant and boosting output. In 1976, the Okeene mill was placed on the National Register of Historic Places, largely because it represented a once important and nearly extinct industry in the state.

Region Five

Region five is made up of ten counties in southcentral Oklahoma. Settlement in this part of the state followed a pattern that was not typical of frontier territories in the rest of the United States. In the mid-1820s, under provisions of the Treaty of Doak's Stand and the Boundary Treaty of 1825, the federal government evicted illegal white settlers and granted the Choctaw Indians title to what is now the southern half of Oklahoma. In 1837, the Chickasaw tribe purchased a large tract of land from the Choctaws that roughly corresponded with region five, minus the section that is north of the South Canadian river. Subsequently, the eastern portion of this land above the South Canadian became

the home of relocated Seminoles and the western part the domain of resettled Pottawatomies and Shawnees. Even though the legal and illegal white population rose steadily after the Civil War, the area remained a part of Indian Territory until statehood in 1907.

Before the Civil War, the family was the basic unit of production in region five. As was the case in the rest of antebellum Indian territory, women spun and wove locally grown cotton into cloth and sewed most of the clothing worn by the family. Men manufactured spinning wheels and looms, and the families divided other household manufacturing tasks according to the age and sex of the members. Food processing formed an important part of the work accomplished at the family level. For those with a marketable surplus, the Red river provided access to the Mississippi.

Despite the importance of family manufacturing, artisans and craftsmen and small local mills made products that people did not produce at home. But, unlike the situation in eastern Oklahoma, there is no evidence of salt works in the region. Even in the antebellum period, salt must have been an imported item. Region five is a well-watered area, with numerous rivers and streams that should have been ideal for powering small mills. Yet, research for this project has identified only one possible waterpowered mill, which apparently was constructed at the head of Clear Boggy (about twelve miles south of Ada in Pontotoc county) in the 1870s.

Beginning in the 1890s, the construction of railroads, new markets, energy development, and population growth contributed to a proliferation in the number of manufactures. In 1890, when Indian Territory included all of Oklahoma except the Panhandle and the Unassigned Lands, the U.S. census reported only 20 establishments that manufactured products worth more than \$500. By 1900, after a series of land openings had greatly reduced the size of Indian Territory, the census reported 789 such manufacturers organized into more than thirty industrial categories. In 1900, the Chickasaw Nation supported 343 establishments with a product valued at over \$500, which was more than 80 percent of the total for the Creek, Cherokee, and Choctaw Nations combined. (The census for 1900 did not report on either the Seminoles or the Shawnees and Pottawatomies.) Paradoxically, south-central Oklahoma now contains fewer identified industrial properties from the same period than any of the other regions formerly occupied by the five "civilized" tribes.

By opening up new markets, the railroad played an important part in economic booms in cotton and wheat. (Unlike regions three and four, southcentral Oklahoma did not have the timber resources to support a large-scale lumber industry.) The arrival of the railroad initiated a cotton boom in the region five. In common with the Creeks, Cherokees, and Choctaws, the Chickasaws and Seminoles shifted their emphasis from domestic to commercial production.

Strictly Indian harvest peaked in the mid-1870s, thereafter an influx of whites accounted for a rapid increase in cotton culture. By 1900, the Chickasaw Nation produced 140,108 bales of cotton, compared with about 148,000 for the rest of Indian Territory and nearly 117,000 for Oklahoma Territory. Yet, behind this impressive yield lay the fact that in 1900 white farmers actually grew most of the cotton harvested in the Chickasaw Nation.

The cotton boom in region five generated three related types of industrial activity. Nearly every community in the cotton-growing area had at least one gin. In 1931, region five had about 120 cotton gins. Most farmers sold their cotton at the gin, which removed the seeds and baled the fibers. Buyers then purchased the bales and shipped them to compressing plants like the ones located in Paul's Valley, Purcell, and Ada. Finally, gins sold the seeds to cottonseed processing mills, about thirty-three of which were located in region five in 1931. Four large mills in Ardmore, Purcell, Shawnee, and Tecumseh each provided work for from twenty to fifty men. The cotton boom collapsed in the 1930s, when drought, depression, federal programs such as the Agricultural Adjustment Act, and soil exhaustion combined to reduce both acreage and output. Previous research has identified only two sites from this important period in the region's industrial history.

Even though members of the five "civilized" tribes had grown wheat on a limited basis, white settlers introduced wheat into Oklahoma as a cash crop. Many of the whites who crowded into Oklahoma for the run of April 1889 or the opening of the Cherokee Outlet in September 1893, already had experience as wheat-growers. But, in the early 1890s, one of the droughts that has periodically afflicted the southern plains retarded the spread of wheat culture. After 1896, the rain returned, the land yielded bountiful harvests, and northcentral and northwestern Oklahoma became a rich new breadbasket. In 1914, the outbreak of WWI in Europe drove up the price of U.S. wheat. In response to this economic incentive, farmers in central and southern Oklahoma began to put their land into wheat. The amount of land devoted to wheat in region five rose sharply, with one observer reporting that farmers in Pontotoc county had sown wheat between their rows of cotton. By 1917, the price paid for wheat at Oklahoma elevators set a record high that would not be surpassed until 1947.

Flour mills were the most important industrial enterprise associated with the wheat boom. In 1909, before the war-induced rise in wheat prices, region five had ten flour and feed mills, including three in Pottawatomie county and two each in Garvin and Pontotoc counties. Although county data is thin at best, it appears that region five followed the statewide trend, so that by 1931 a few large mills

handled most of the flour business in southcentral Oklahoma. Nonetheless, in the early 1930s, the region still supported a number of small flour mills in association with elevators and feed mills. Beginning in the 1920s, changing market conditions, overproduction, and drought brought the wheat boom tumbling down.

Alongside the boom and bust in cotton and wheat, other industries developed in region five. Early in the twentieth century the rural areas of Johnston and Pontotoc counties had several relatively small-scale quarries. Two granite quarries operated in Johnston county, including the Capitol Quarry in the vicinity of Troy that produced the stone for the basement of the state capitol building. Quarries near Wapanucka in Johnston county yielded quite a bit of limestone that was used for local building and in the manufacture of lime. During the 1910s, a kiln in Johnston county made lime, which served as the main ingredient for mortar, plaster, and cement. In the 1920s, Ada (Pontotoc county) was home to a portland cement plant, as well as a brick factory, which—obtained its raw material from clay pits and shale quarries. Region five also possessed significant deposits of asphalt. Depending on its chemical properties, asphalt from quarries in Carter, Garvin, Love, Marshall, Murray, and Pontotoc counties was employed for paving or in the manufacture of varnish, paint, waterproofing, and insulation.

In the early twentieth century, numerous small industries developed that were centered largely in the towns and cities of region five. According to the Third Annual Report of the Oklahoma Department of Labor for 1909-10, printing establishments far outnumbered other types of industries, followed by bakeries, flour and feed mills, bottling works, cotton oil plants, tinning operations, carriage and blacksmith shops, and saddlery and harness shops. Other industries in the region produced manufactured ice, boots and shoes, stone and cement, dimension lumber, bricks, and ice cream. Carter and Pottawatomie counties possessed the greatest industrial diversity, which undoubtedly was centered in Ardmore and Shawnee.

Despite gains in the early years of the century, the region's industrial base began to erode during the 1920s. The best source of raw data on industry in region five is the U.S. census. But, in order to avoid divulging proprietary information, the manufacturing census for 1929 did not report on Johnston and McClain counties. Even so, some clear patterns emerge from a comparison of the remaining eight counties for 1919 and 1929. Following a regional high of 235 in 1919, the number of industrial establishments fell in six counties, for a net loss of 79 firms. Marshall and Pottawatomie counties also experienced across-the-board declines in number of wage earners, value of products, and value added. Carter and Murray counties posted slight increases in single

categories, but joined Marshall and Pottawatomie in a general downward slide.

While some counties suffered reversals, Seminole and Pontotoc counties enjoyed gains in wage earners, value of products, and value added. Seminole even showed an increase of twelve industrial establishments. Yet, even these positive indicators do not reflect broad-based industrial development. Rather, in Seminole the growth appears to have been related to petroleum development. The reasons for the improvement in the industrial economy of Pontotoc county are not so obvious, but the expansion seems to have been centered in Ada, which was one of the cities in region five with a population greater than 10,000. Overall, during the 1920s, region five experienced an industrial decline, and Oklahoma's manufacturing became increasingly concentrated in regions three and six.

PROPERTY-TYPE ANALYSIS FOR INDUSTRIAL SITES IN REGION FIVE

There is a paucity of identified industrial sites in region five. The fact that previous surveys have not paid much attention to industrial properties offers a partial explanation for this situation. But, the focus of earlier surveys does not completely account for the lack of sites. Many industrial properties from the antebellum period, such as small water mills, have been idle for more than one hundred

years. Most have disappeared. Any that have survived and escaped discovery would probably have only archeological value. When the booms in cotton and wheat collapsed, entrepreneurs abandoned many structures associated with boom production. Again, little but archeological remains are likely to exist. The problems confronted by surveyors are compounded by the general decline of industry in region five during the 1920s and 30s. Archival research and interviews will be required to identify surviving properties that have industrial significance.

Despite the slump in the industrial economy of south-central Oklahoma, hundreds of manufacturing facilities operated during the late nineteenth and early twentieth centuries. Many must still be extant, especially in cities that had a population greater than ten thousand like Ardmore, Ada, Seminole, Shawnee, and Wewoka, as well as the many smaller towns scattered throughout the region. Additional research and survey work might locate the following types of industrial properties in region five: 1) factory buildings 2) — company housing 3) warehouses 4) mill complexes and 5) quarries. Surveyors will need to rigorously apply the National Register criteria as a basis for evaluating all identified properties. The National Register criteria are as follows:

- A: Properties that are associated with events that have made a significant contribution to the broad patterns of our history.

- B: Properties that are associated with the lives of persons significant in our past.
- C: Properties that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- D: Properties that have yielded, or that may be expected to yield, information important in prehistory or history.

1. Factory buildings: Hundreds of factories operated in region five during the late nineteenth and early twentieth centuries. Most of these facilities produced on a relatively small scale and sold a range of products in local or regional markets. Included in this category would be bakeries, boot and shoe manufacturers, ice plants, printing offices, bottling works, blacksmith and carriage shops, mattress factories, and tinning and tailor shops. A smaller percentage of manufacturers produced on a larger scale and sold in a wider market, especially processors of cotton, wheat, and broom corn. The diversity of factories in terms of both product and size makes it very difficult to provide a generic description. Surveyors should look for rectangular, one- or two-story buildings constructed of brick, cement blocks, or interior wood frame covered with sheet metal. Beyond that, however, careful research, including the use of fire insurance maps, will be required to identify surviving factories.

2. Company housing: No industry-related company houses have been identified in region five. Not enough information exists to provide a single, useful description. Surveyors should look for simple, wood-frame, detached dwellings that are located together and that are similarly constructed. Research will be necessary to locate any extant company housing.

3. Warehouses: Even though there are no identified, industrial warehouses in region five, the available evidence points to the conclusion that there must be surviving warehouses in towns and cities in the region. In general, existing warehouses would be either one- or two-story buildings with a flat roof. The most likely materials of construction would include brick, cement blocks, or an interior wooden frame covered with sheet metal. Most of these buildings have probably been adapted for other uses so that research will be required to establish their industrial significance.

4. Mill complexes: In southcentral Oklahoma, mills processed grain, cotton seeds, and timber. The only identified mill in the region is an archeological sawmill site in Johnston county. Flour and grist mills, which should be the easiest to identify are usually tall, rectangular buildings of interior wooden frame construction covered with sheet metal. They may still contain their milling machinery and be found in conjunction with cement elevators and loading

facilities for either rail cars or trucks. Cotton seed mills are less readily identified but may consist of a two-story brick building that once housed a cake mill, oil presses, and linters, surrounded by metal-covered storage buildings. Sawmills and planing mills varied in size and configuration. Surveyors should look for wood-frame or sheet metal-covered structures that may still house some of the original machinery.

5. Quarries: In region five, quarries produced granite, limestone, clay, and shale. Most of these quarries have been abandoned for decades and it is likely that little remains but the often water-filled pits.

INDUSTRIAL SITES IN OKLAHOMA

REGION TWO:

Ellis County:

1. Ingles Brothers Broomcorn Warehouse: 100 NW First Street, Shattuck, OK (OLI)

Kay County:

2. Brushyhead Quarry: NE 1/4, SW 1/4, SW 1/4, Sec. 19, T 29 N, R 4 E; Newkirk, OK

Woods County:

3. Alva (flour) Mills: NE 1/4, Sec. 23, T 27 N, R 14 W; North of Alva, OK (OLI)

Woodward County:

4. Phill's Ice Company: Santa Fe and Ninth Street, Woodward, OK (OLI)
5. Boyle Building: 1114-1122 Ninth Street, Woodward, OK

REGION THREE:

Adair County:

6. Golda's Mill: SW 1/4, Sec. 16, T 16 N, R 24 E; twelve miles NW of Stillwell, OK (N.R.)

Delaware County:

7. Grove Cheese Factory (American Legion Chapter 178): O'Daniel Parkway and Broadway, Grove, OK
8. Hildebrand's Mill (Becks Mill): SW 1/4, Sec. 24, T 20 N, R 24 E; ten miles west of Siloam Springs, Ark. (N.R.)

Mayes County:

9. Markam "Old Salt Lick" Site: Between Locus Grove and Pryor, OK

10. Col. A.P. Chouteau Residence: Near Salina, OK

McIntosh County:

11. Johnson Gin and Store: NW 1/4, Sec. 15, T 11 N, R 15 E; Pierce, OK (OLI)

12. Watson Gin: SW 1/4, SE 1/4, Sec. 36, T 9 N, R 13 E; Hanna, OK

13. Cochrane's Gin: Corner of Huts and Main, Hanna, OK (OLI)

14. Windston Gin: Sec. 36, T 9 N, R 13 E (OLI)

Muskogee County:

15. Southern Electric-Stout Roller Mill: 302 Commercial, Muskogee, OK (OLI)

16. Old Salt Springs: Dirty Creek, north and west of Ramsey

17. David Vann Salt Works: SW 1/4, Sec. 17, T 12 N, R 20 E

18. The Francis Vitriified Brick Company: Boynton, OK

Okmulgee County:

19. Russel Mill and Elevator: 201 South Third Street, Morris, OK

Pawnee County:

20. Corliss Steam Engine: Pawnee Fair Grounds, Pawnee, OK (N.R.)

21. Balmer Kiln: Archeological site in Pawnee county

Sequoyah County:

22. Mackey's Salt Works: Inundated in Sections 11 and 14, T 13 N, R 21 E; nine miles east of Gore, OK

23. Salt Springs (granted Sequoyah by treaty of 1828): About 1-1/2 miles west of the former town of Nicut, Sec. 19, T 13 N, R 26 E (about one hundred yards south of Salt Branch)

24. Bean's Salt Works: About five miles north of Gore on highway to Tenkiller lake (about one mile above where Salt Creek empties into the Illinois River); SE 1/4, Sec. 21, T 13 N, R 21 E

Tulsa County:

25. Tulsa Acme Brick Plant: 4103 Dawson Road, Tulsa, OK
26. Kerr Glass Company: South Main, Sand Springs, OK (OLI)
27. Brown's Mill/Plummer's Grain Elevator: Bixby, OK (OLI)
28. United States Zinc: 200 South Wilson, Sand Springs, OK (OLI)
29. Commander Mills: 726 Adams, Sand Springs, OK (OLI)

Washington County:

30. Carr-Bartles Mill Site: Bartlesville, OK (OLI)

REGION FOUR:

Bryan County:

31. Durant Milling Company: North of tracks and East of depot, Durant, OK
32. Commanche Chief Brands Peanut Co., Inc.: East of tracks, 1 block North of depot, Durant, OK

Choctaw County:

33. Folsom Salt Works: NW 1/4, Sec. 35, T 5 S, R 14 E; four miles northeast of Boswell, OK (OLI)
34. Water Mill: North of Kiamichi River Bridge, U.S. highway 70 (OLI)

LeFlore County:

35. Pine Valley Company Town and Lumber Mill: NE 1/4, NE 1/4, Sec. 10, T 2 N, R 24 E; approximately one mile south of Muse, OK

36. Howe Coke Ovens: SE 1/4, SW 1/4, SW 1/4, Sec. 35, T 6 N, R 25 E

37. Milton Socialist Colony: SE 1/4, Sec. 15, T 18 N, R 23 E; Block 32, lots 13-23, original town, Milton; southwest of Bokoshe, OK

McCurtain County:

38. America: NE 1/4, SE 1/4, Sec. 35, T 10 S, R 26 E; intersection Forest Service Road 211 and 9175, southeast of Bokhoma, OK

39. Clear Creek Water Mill: SE 1/4, SE 1/4, Sec. 31, T 7 S, R 21 E; southwest of Valliant, OK

Pittsburg County:

40. McAlester Oil Mill Company: South of Washington and East of Fourteenth Streets, McAlester, OK

41. Southern Ice and Cold Storage Company: Corner of Fifth and Choctaw, McAlester, OK (N.R.)

REGION FIVE:

Johnston County:

42. Oolithic Stone Quarry: Vicinity of Bromide, OK (OLI)

43. Nida Gin: Nida, OK

44. Sawmill site: Archeological site

Marshall County:

45. Kingston Cotton Gin: Northeast corner of the intersection of Willis and U.S. highway 70 (5th Street), Kingston, OK

Murray County:

46. Big Canyon (Rock) Crusher: Sec. 30, T 2 S, R 3 E; Route 110, Dougherty, OK (OLI)

Pontotoc County:

47. Byrd's Mill: Twelve miles southeast of Ada, OK
(OLI)

REGION SEVEN:

Beckham County:

48. Whited Grist Mill: 306 East Seventh Street, Elk
City, OK (N.R.)

Blaine County:

49. Ruins of Old Ferguson: SE 1/4, NW 1/4, Sec. 28, T 18
N, R 11 W (OLI)
50. Okeene Flour Mill: Off State highway 51, Okeene,
OK (N.R.)
51. Old Plant Office Building: United States Gypsum
Company, Southard, OK (N.R.)
52. Old Salt Works: SW 1/4, NE 1/4, SW 1/4, Sec. 23, T
18 N, R 12 W; two and three-quarter miles south and
one and one-quarter miles east of Southard, OK
(N.R.)

Caddo County:

53. Apache Milling Company: 161 Evans, Apache, OK
54. Ice Plant: Red brick, now a frame shop, Anadarko, OK
55. Peanut Mill: South side of state highway 9 coming in
from Chickasha, just east of downtown, red roof,
Anadarko, OK

Comanche County:

56. Hazel Rock Quarry: Near Meers, OK
57. Pearson Smelter: On Blue Creek, Ketch Ranch, Fort
Sill, OK (OLI)
58. Albert Laux Blacksmith Shop: Main and B Street,
Sterling, OK (OLI)
59. LaSill Milk Company: 201 Dearborn, Lawton, OK (OLI)

60. Bonanza Smelter: Fawn Creek Wildlife (OLI)
61. Mathewson House and Shed (blacksmith): Archeological site

Custer County:

62. Owl Blacksmith Shop: 208 West Rainey, Weatherford, OK (N.R.)

Dewey County:

63. Seiling Milling Company: Fourth and Orange, Seiling, OK (N.R.)

Harmon County:

64. Kiser Salt Works: SE 1/4, SE 1/4, Sec. 4, T 6 N, R 26 W; eighteen miles north of Hollis, OK (OLI)
65. Cottonseed Oil Plant: Hollis, OK

Jackson County:

66. Leger-Bunge Flour Mill: Block 5, lots 1-5, 10-12, Wrights Addition, Altus, OK (OLI)

Jefferson County:

67. Addington Brick Company: Addington, OK

Kiowa County:

68. Chickasaw Cotton Oil Company Building: 46th and Eastern, Hobart, OK (OLI)

Stephens County:

69. Halliburton Oil Cementing Company: 1015 Bois D'Arc, Duncan, OK
70. Washita Valley Gin: Highway 29, on Main Street, two miles from Brooks Road, Bray, OK
71. Peoples' Ice Company: 602 West Main Street, Duncan, OK

SELECTED BIBLIOGRAPHY

Primary Sources

1. Klein, John J. et al. The Oklahoma Economy. Stillwater: Publishing and Printing Department, Oklahoma State University, 1963.
2. Nuttall, Thomas. A Journal of Travels into the Arkansas Territory during the Year 1819. edited by Savoie Lottinville. Norman: University of Oklahoma Press, 1980.
3. Oklahoma Department of Labor. Second Annual Report of the Department of Labor for the State of Oklahoma, 1908-09.
4. _____. Third Annual Report of the Department of Labor for the State of Oklahoma, 1909-10.
5. _____. Industrial Directory, Bulletin Number 1-A: Containing a Partial List of the Industries in 408 Cities and Towns within the State of Oklahoma (1932).
6. Oklahoma Historic Sites Committee. "Oklahoma Historic Sites Survey." Oklahoma City: Oklahoma Historical Society, 1958. Also published in the Chronicles of Oklahoma.
7. Redfield, John S. "Mineral Resources in Oklahoma." Oklahoma Geological Survey. Bulletin Number 42 (May 1927).
8. U.S. Department of Commerce and Labor. Bureau of the Census. Thirteenth Census of the U.S., 1909, vol.9, Manufacturers.
9. U.S. Department of Commerce. Bureau of the Census. Fourteenth Census of the U.S., 1919, vol.9, Manufacturers.
10. _____. Fifteenth Census of the U.S., 1929, vol.3, Manufacturers.
11. U.S. Department of the Interior. Eleventh Census of the U.S., 1890, vol.6, Manufacturing Industries.
12. _____. Twelfth Census of the U.S., 1900, vol.9, Manufacturers.
13. _____. Twelfth Census of the U.S., 1900, vol.8, Statistics of Manufacturers.

Secondary Sources

Books:

14. Bernard, Richard M. The Poles of Oklahoma. Norman: University of Oklahoma Press, 1980. See chapters on coal mining and the lead and zinc industry.
15. Goble, Danney. Progressive Oklahoma: The Making of a New Kind of State. Norman: University of Oklahoma Press, 1980.
16. Ellifritt, Duane S. An Inventory of Historic Engineering Sites in Oklahoma. Stillwater: School of Engineering, Oklahoma State University, January 1974.
17. Foreman, Grant. A History of Oklahoma. Norman: University of Oklahoma Press, 1942.
18. _____. Pioneer Days in the Early Southwest. Cleveland: The Arthur Clark Co., 1926. See chapters 2 and 3 on salt works.
19. Gibson, Arrell M. Oklahoma: A History of Five Centuries. Norman: Harlow Publishing Corporation, 1965.
20. Miner, Craig. The Corporation and the Indian: Tribal Sovereignty and Industrial Civilization in Indian Territory, 1865-1907. Columbia, MO: University of Missouri Press, 1976.
21. Robison, Luke. Made Out-A-Mud. Privately Published, 1980.
22. Shirk, George H. Oklahoma Place Names. Second Edition. Norman: University of Oklahoma Press, 1965.

Articles:

23. Curran, Claude W. "Forests and Forest Industries in Oklahoma." in John W. Morris. editor. Geography of Oklahoma. Oklahoma City: Oklahoma Historical Society, 1977.
24. Dikeman, Neil J. Jr., "Development of Manufacturing in Oklahoma." in Morris. Geography of Oklahoma.
25. Doerr, Arthur H. "Industry and Labor." in Kent Ruth. editor. Oklahoma: A Guide to the Sooner State. Norman: University of Oklahoma Press, 1957.

26. Fite, Gilbert. "Development of the Cotton Industry by the Five Civilized Tribes in Indian Territory." Journal of Southern History. 15(August 1949).

27. Gibson, Arrell M. editor. "From the Brazos to the North Fork, the Autobiography of Otto Koelzow." The Chronicles of Oklahoma. 40(Autumn 1962). Cotton culture in Greer county in 1901.

28. Green, Donald E. "Beginnings of Wheat Culture in Oklahoma." in Green. editor. Rural Oklahoma. Oklahoma City: Oklahoma Historical Society, 1977.

29. Littlefield, Daniel F. Jr. and Underhill, Lonnie E. "Hildebrand's Mill Near Flint, Cherokee Nation." Chronicles of Oklahoma. 48(1970).

30. Meredith, Howard and Meredith, Mary Ellen. "Oklahoma Territorial Building Stone." in Meredith and Meredith. editors. Of the Earth: Oklahoma Architectural History. Oklahoma City: Oklahoma Historical Society, 1980.

31. Nall, Garry L. "King Cotton in Oklahoma, 1825-1939." in Green, Donald E. editor. Rural Oklahoma. Oklahoma City: Oklahoma Historical Society, 1977.

32. Olson, Ralph E. "Agriculture in Oklahoma." in Morris, John W. editor. Geography of Oklahoma. Oklahoma City: Oklahoma Historical Society, 1977.

33. Peavler, Bill. "Early-Day Industrial and Commercial Properties." Westview. 4(Summer 1985).

Theses and Dissertations:

34. Aldrich, Gene. "A History of the Coal Industry in Oklahoma before 1907." PhD dissertation. University of Oklahoma, 1952.

35. McCollum, Jarrell I. "The Foundry Industry in Oklahoma." MA Thesis. Oklahoma State University, 1952.

36. Miller, Robert A. "The Broomcorn Industry of Oklahoma." MA Thesis. Oklahoma State University, 1948.