

RESOURCE PROTECTION PLANNING PROJECT

INDUSTRIAL DEVELOPMENT IN THE TEN COUNTIES
OF NORTHWESTERN OKLAHOMA TO 1930

REGION TWO

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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 evaporated 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 criss-

crossed 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.

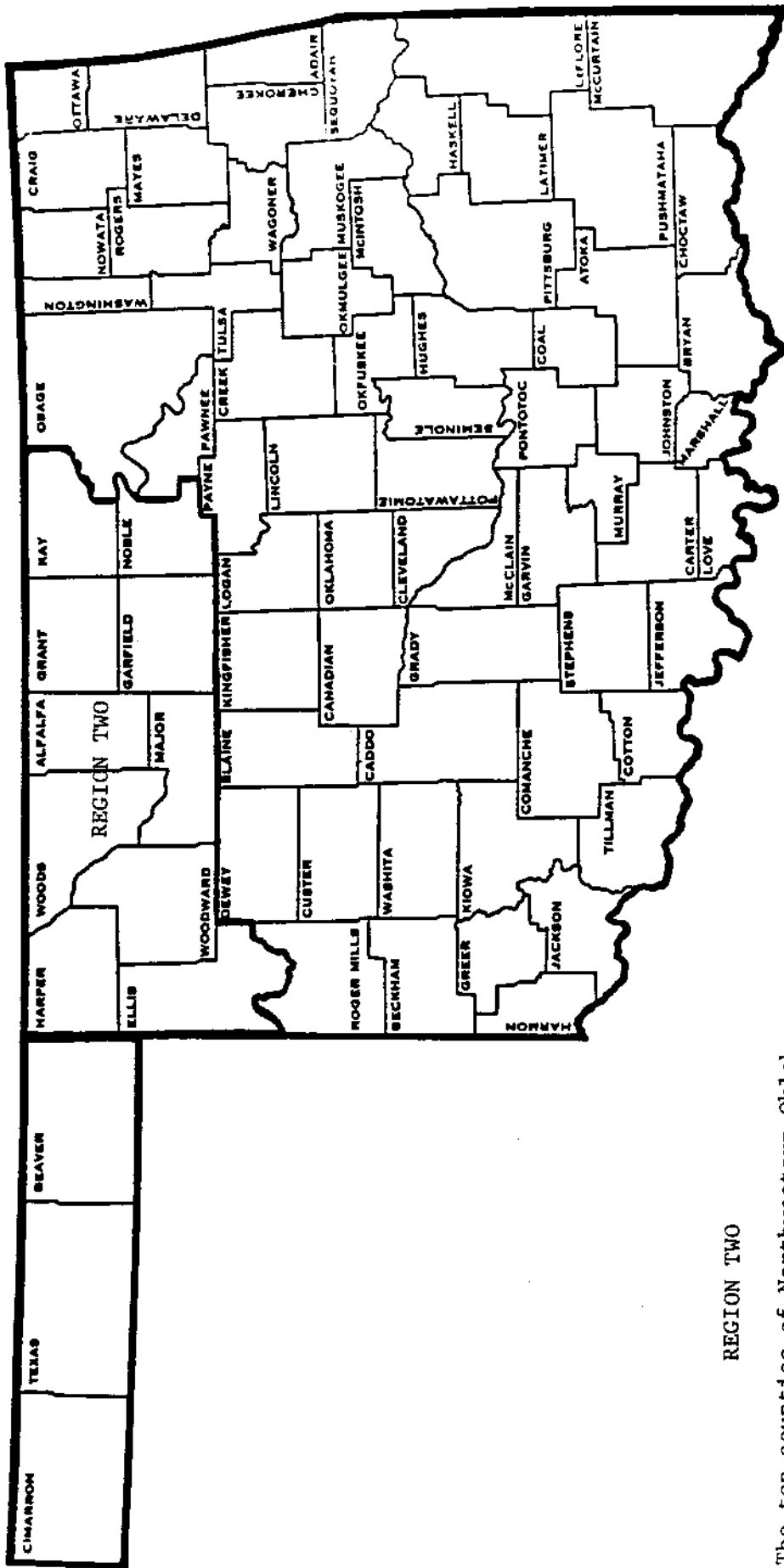
In Oklahoma, the railroad, fossil fuel, and population contributed to significant industrial growth, the patterns of which will interest individuals attempting to place industrial properties in historical context. Beginning in the 1890s, first the number and then the variety of manufacturing establishments 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 Two

Region two is made up of ten counties in northcentral Oklahoma that roughly correspond with the western two-thirds of the old Cherokee Outlet. In 1828, the Western Cherokees agreed to exchange their land in Arkansas for a new home in Indian Territory. Under the terms of this agreement, the Cherokees received about seven million acres in northeastern Oklahoma and a fifty-seven-mile-wide outlet that extended west to the 100th meridian. The Cherokees never actually occupied the outlet, and under provisions of the Reconstruction Treaty of 1866, the U.S. government reserved the right to resettle other tribes in those western lands. The government exercised this option by relocating several tribes



REGION TWO

The ten counties of Northwestern Oklahoma

to the west of the Cherokee Nation, including the Kaw, Tonkawa, Ponca, and Otto and Missouri Indians on land that is currently in region two.

When compared with eastern Oklahoma, white settlement in region two came quite late in the nineteenth century. The Cherokee Nation began leasing grazing rights in the outlet in 1879. After 1883, the Cherokees granted exclusive grazing privileges to the Cherokee Strip Live Stock Association, headquartered at Caldwell, Kansas. Between 1892 and 1906, the government opened the Indian land in northcentral Oklahoma to white settlement by allotments and runs. The largest opening and the biggest addition to Oklahoma Territory came in September 1893, when over 100,000 land-seekers participated in a run for 40,000 claims in the Cherokee Outlet. Initial political organization established Grant, Garfield, Kay, Noble, Pawnee, Woods, and Woodward counties.

Almost no manufacturing took place in northcentral Oklahoma until after the construction of railroads and the opening of Indian land to white settlement. Before the Civil War, few people lived in the Cherokee Outlet. Thereafter, grazers had little need for manufacturing, while domestic production met most of the requirements of the outlet's relocated Indians. Railroads began to penetrate the region in 1887 when the Santa Fe constructed two lines across the outlet: One ran from Kiowa, Kansas, southwest to Amarillo, Texas, and the other cut through the future sites of Ponca

City and Perry in Kay and Noble counties. Two years later, in 1889, the Rock Island ran track south from Caldwell, Kansas, across the outlet to Fort Reno (later El Reno, region six).

In sharp contrast with regions one and seven, the census for 1900 shows that manufacturing became well established in parts of region two during the 1890s. By 1900, nearly 131,000 thousand settlers had taken up new homes in north-central Oklahoma Territory. Surprisingly, Woods county had the largest population in Oklahoma, with almost 35,000 inhabitants. According to the manufacturing census for 1900, the seven counties that made up region two had 233 of Oklahoma Territory's 870 manufacturers. Kay county led all others with 77 establishments, followed by Garfield, Grant, and Woods. Numbers of manufacturers, however, do not tell the entire industrial story. Statistics on wage earners and value of products reveal that the greatest levels of industrial activity and productivity existed in the four eastern counties: Grant, Garfield, Kay, and Noble. A complete explanation of Grant's standing awaits more detailed research. The position of Garfield, Kay, and Noble, however, can be attributed to the combined presence of the region's largest communities and access to rail transportation.

By opening up new markets, the railroad contributed to a region-wide boom in wheat and a more limited boom in cotton. Many of the whites who crowded into Oklahoma after 1889

already had experience growing wheat. In the early 1890s, however, one of the droughts that periodically afflicts the southern plains retarded the spread of wheat culture. After 1896, the drought broke and wheat became an important cash crop in northcentral and northwestern Oklahoma. In 1914, the eruption of WWI in Europe drove up the price of U.S. wheat, and by 1917, the price paid for wheat at Oklahoma elevators had set a record that stood until 1947.

In response to this economic incentive, farmers in northcentral Oklahoma planted more wheat. The wheat harvest in region two increased dramatically from 8.5 million bushels in 1909 to 24.7 million in 1919, which made wheat the most important cereal crop in the region. During the 1920s, farmers in the eastern counties responded to a glutted market and falling prices by planting less wheat. Growers in the five western counties, however, increased production, and by 1929, the region-wide yield of 21.2 million bushels still represented forty-one percent of all of the wheat harvested in the state. During the 1930s, drought, changing market conditions, overproduction, and the Agricultural Adjustment Act brought the wheat boom tumbling down.

Flour mills were the most important industrial enterprise associated with the wheat boom. In 1909, before the war-induced rise in wheat prices, region two had twenty flour and feed mills, with at least one in every county except Harper and Woodward. County data is thin at best, but it

appears that region two followed the statewide trend, so that by 1931 a few high-capacity mills handled most of the flour business in Oklahoma. Pillsbury had a mill at Enid and other large facilities operated at Blackwell and Ponca City in Kay county and Alva in Woods county. Nonetheless, in the early 1930s, the region still supported quite a few small flour mills in association with elevators and feed mills.

After 1890, cotton rapidly emerged as one of Oklahoma Territory's most important commodities. The primary reason for cotton's ascendancy was its higher rate of return when compared with other possible cash crops. In 1898, cotton farmers could expect to earn from \$25 to \$50 per acre, compared to about \$14 for wheat and \$11 for corn. During the 1920s, Oklahoma experienced a tremendous expansion of its cotton production, and cotton culture spread out of its southern stronghold into wheat-growing counties in region two. In northcentral Oklahoma, industrial activity associated with the processing of cotton was limited to ten gins in the in the five southernmost counties, Ellis, Woodward, Major, Garfield, and Noble. Morrison in Ellis county led all other communities in the region with five gins. The cotton boom collapsed in the 1930s, when drought, depression, soil exhaustion, and federal programs such as the Agricultural Adjustment Act combined to reduce both acreage and output.

Alongside boom production, quarrying industries flourished in parts of region two. During the territorial period,

a number of limestone quarries opened in eastern Kay county, particularly in the bluffs along the Arkansas River. The largest quarries operated near Newkirk and Uncas (a post office six miles west of Kaw from 1895 to 1956), and provided stone for buildings, sidewalks, curbing, railroad beds, bridge construction, and even fence posts. Before statehood in 1907, a sandstone quarry opened near Perry in order to meet a growing demand for building stone. At various times in the first decades of the twentieth century, clay pits and shale quarries served the region's principle brick plants at Perry, Enid, Alva, Woodward, and Blackwell. In 1931, the facility at Blackwell provided employment for twenty-three men.

In the early twentieth century, numerous small industries developed in the cities and towns of region two. According to the Third Annual Report of the Oklahoma Department of Labor for 1909-10, printing establishments greatly outnumbered other types of industries followed by bakeries, flour and feed mills, quarries and stone works, saddlery and harness makers, carriage and blacksmith shops, ice plants, bottling works, boot and shoe makers, planing mills, tailor shops, and creameries. Other industries in the region produced tinware, brooms, cigars, ice cream, gloves, and bricks. Kay and Garfield counties far and away possessed the largest numbers of manufacturing establishments and the greatest industrial diversity. Their standing can be

attributed to good rail connections and the presence of some of the region's largest communities, Ponca City and Blackwell in Kay county and Enid in Garfield county.

During the 1920s, northcentral Oklahoma experienced general industrial decline that was offset in aggregate, region-wide statistics by significant but localized growth. The U.S. census is the best source of information on industry in region two. Unfortunately for modern historians, the manufacturing census for 1929 sought to protect proprietary information by not reporting on Ellis, Grant, and Harper counties. Ellis and Harper had almost no industry in 1919, and there is little reason to expect any change in the 1920s. Despite the limitations of the census, some clear patterns emerge from a comparison of the seven remaining counties for 1919 and 1929. After a regional high of 293 in 1919, the number of manufacturing establishments fell in all 7 counties for a net loss of 83 firms. Alfalfa county also suffered across-the-board declines in the number of wage earners, value of products, and value added. Noble and Woods counties posted increases in value added but joined Alfalfa in a general downward slide.

While some counties underwent reversals in the 1920s, Kay and Garfield counties enjoyed significant gains. Kay county experienced the greatest industrial growth in the region. A large percentage of this increase took place in Blackwell and Ponca City, where petroleum producers and

refineries hired more workers than any other operations in the county. In 1931, Continental Oil and Empire Oil and Refining Company in Ponca City each provided work for about 600 men, while Globe Oil and Refining Company in Blackwell had about 100 employees on the payroll. Over and above oil-related facilities, the largest employers in these cities included a cheese company, two creameries, an ice cream factory, a brick plant, and a packing company. In Garfield county, the relative contribution made by Enid declined between 1919 and 1929, but nonetheless, that community continued to dominate manufacturing in the county. Enid's leading producers in 1931 included a bakery, six creameries, two ice cream makers, and a publishing company. Overall, during the 1920s, region two joined the rest of Oklahoma in reporting a net loss in the number of manufacturers. At the same time, industry became increasingly concentrated in the biggest communities.

PROPERTY-TYPE ANALYSIS FOR INDUSTRIAL SITES IN REGION TWO

There are very few identified industrial sites in region two. A large part of the explanation for this situation rests with the fact that previous surveys have not devoted much attention to industrial sites. The emphasis of earlier surveys, however, does not offer a complete explanation of

the dearth of identified manufacturing properties. Many nineteenth century operations have long since fallen into ruin, and entrepreneurs often abandoned structures associated with boom production once the boom had run its course. In addition, changing market conditions contributed to the closing of dozens of establishments in the 1920s and 30s. Surveyors will need to conduct archival research, supplemented with interviews, in order to identify properties that possess industrial significance.

Despite these problems, hundreds of manufacturing facilities operated in region two during the late nineteenth and early twentieth centuries. Many must still exist. While not neglecting the rest of the region, surveyors should give special attention to Kay and Garfield counties, particularly in and around Newkirk, Blackwell, Ponca City, and Enid. Further research and survey work might locate the following types of industrial properties in northcentral Oklahoma: 1) factory buildings 2) company housing 3) warehouses 4) mill complexes 5) quarries and 6) salt works. Surveyors will need to carefully 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 two during the period covered by this study. The majority of these establishments produced on a relatively modest 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 wheat and broom corn. The range of factories in terms of both product and size makes it very difficult to write 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, 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 northcentral Oklahoma. Not enough

information exists to provide a single, useful description of a company house. 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 two, the available evidence indicates 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 northcentral Oklahoma, mills processed corn, wheat, timber, and probably alfalfa and sorghum. Although many mills operated in the region during the period covered by this study, few have been identified by previous surveys. Flour and grist mills, which should be the easiest to recognize, 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. 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. There is not enough data to offer a reliable description of an alfalfa or a sorghum mill.

5. Quarries: Quarries in region two produced limestone, sandstone, clay, and shale. Most of these quarries have been abandoned for decades and it is not likely that much remains but the often water-filled pits. Northcentral Oklahoma also had extensive deposits of gypsum in all five counties in the western end of the region. The absence of rail connections appears to have frustrated the development of these deposits.

6. Salt works: There is no evidence that salt works operated in the region during the late nineteenth and early twentieth centuries. Nonetheless, northcentral Oklahoma has significant salt plains on the Woods county and Harper county sides of the Cimarron river and along the Salt Fork of the Arkansas river in Alfalfa county. Lack of adequate transportation seems to have prevented the exploitation of this resource during the period covered by this study.

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 Vitrified 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.