

AGRICULTURAL STATISTICS

BATES COUNTY

FARMS	All Farms		Commercial Farms	
	1978	1974	1978	1974
Number	1,512	1,555	1,315	1,224
Average size (acres)	320	302	358	359
Average land & building value per farm	\$210,531	\$116,084	\$232,554	\$136,873
Hired workers (No. working 150 days or more)	n/a	n/a	-	148
VALUE OF ALL SALES (\$000)	49,428	36,435	49,137	36,031
Crop sales	17,808	18,722	17,693	18,683
Livestock sales	31,212	17,610	31,038	16,838
Average sales per farm	32,691	23,431	37,366	29,437
TOTAL FARM EXPENDITURES (\$000)	33,251	26,315	32,951	25,698
Livestock purchase	8,158	3,492	8,111	3,402
Livestock feed	6,681	4,776	6,632	4,632
Fertilizer	4,696	4,030	4,668	3,975
MARKET VALUE ALL MACHINERY(\$000)	40,775	29,174	39,310	27,821

Source: U.S. Census of Agriculture, 1978.

is devoted to the raising of crops or livestock. Classes of land use shown for the county are general in nature, but show that approximately 6% of the land area is consumed by other than agricultural uses.

Mining

Coal is the only energy resource the state produces in significant quantities. In 1977, this resource represented about 33% of the total energy consumed. Eighty-nine percent of the coal consumed in the state is for power generation. Furthermore, coal is used to produce about 93% of the electricity generated in the state.

Identified bituminous coal resources in Missouri are 4.5% of the total identified U.S. resources. Unlike most of the U.S. bituminous coal, Missouri coal is high in sulfur content which makes it less marketable. In 1977, 6,626,940 short tons of coal were mined in Missouri having a gross value of \$69,507,000. All the coal produced in the state comes from 17 strip mines. Of the total bituminous coal demand in the state, Illinois supplies 61%. Missouri is able to meet only 29% of its total coal needs.

Most of the Missouri coal has been mined from five coal fields, two of which occur in Bates County. The following descriptions were excerpted from Project Reuse, KBRPC, dated September, 1973.

Southwest Field: This field includes coal districts in western and southern Bates County and in Vernon and Barton Counties. The Mulberry district is located along the west border of Bates County in the area surrounding Amoret, Foster, Sprague, and Hume. The important mid-Marmaton Mulberry bed is mined there. The bed ranges in thickness between 6 and 12

inches, but in the Foster area it averages approximately 34 inches. In the Amoret area, it probably averages about 32 inches.

In southern Bates County and in north-central Vernon County, the locally important Mineral coal ranges from less than 14 inches to as much as 72 inches thick. Most of the known readily available Mineral coal has been mined out.

The Tebo Field: The Tebo Field extends diagonally across Henry County from northeast to southwest, parallel with the general strike of the Tebo Coal. The north end of the field lies in southeast Johnson County and the southwest end extends into Bates County and into the formerly important Appleton City area of northwest St. Clair County.

The main coal of this field is the Tebo. It is persistent in the field and ranges in thickness from 20 to 36 inches, but most of it averages 30 inches or less. Other coals present in the Tebo field range in thickness from 12 to 22 inches.

The *Mineral Resources* map shows active mines, past mining districts and the area underlain by potentially mineable coal desposits in western Missouri.

Bates County has contributed significantly to the state's overall production in recent years. In 1976, coal production in Bates County was 1,718,769 tons, which represented 28% of the total coal production for the state. The 1976 gross value of the coal produced in Bates County was approximately \$14 million, based on the county's percentage of the state total. The *Coal Production* table shows tons of coal produced in Bates County and the state for 1976 and preceding years. The table also shows the percentage of Missouri's coal that was produced in Bates County by year. The upstart and rapid increase in coal production in the early 1970's was a direct result of a joint venture by the Kansas City Power and Light Company and the Kansas Gas and Electric Company. The Pittsburg and Midway Mining Company opened a new operation in Bates County in 1972 to supply coal for the newly opened power plant which was located two miles west of the Missouri - Kansas state line, and owned by the two utility companies.

Coal Reserves and Resources: Of the some fifty billion tons of possible coal *resources* available in the state of Missouri, approximately 2.2 billion tons are in Bates County. Coal *resources* includes not only the coal that is known to exist (through mapping and drilling) but also the coal that is thought to exist (through geological prediction). The term *resource* does not connote whether or not the coal can be extracted with the present level of technology, if the quality warrants extraction, or if it is economically feasible to extract..

Coal *reserves* includes only those coal deposits that have been proven to exist and which can be mined under current technology, however, it does not include coal seams of thicknesses less than 12 inches. Coal *reserves* are included as part of the total *resource* base, and represent approximately

COAL PRODUCTION

- IN TONS -

<u>YEAR</u>	<u>BATES COUNTY</u>	<u>MISSOURI</u>	<u>% PRODUCED IN BATES COUNTY</u>
1960	1,042	2,893,912	less than 1%
1972	102,769	4,551,000	2%
1973	969,121	4,658,000	21%
1974	974,314	4,623,000	21%
1975	1,476,054	5,638,000	26%
1976	1,718,769	6,167,524	28%
1977	n/a	6,626,940	n/a

*Note: Data for Bates County for period 1961-1971 indicated no production occurred during these years.

Source: Missouri Energy Profiles, 1978 by Missouri Department of Natural Resources.

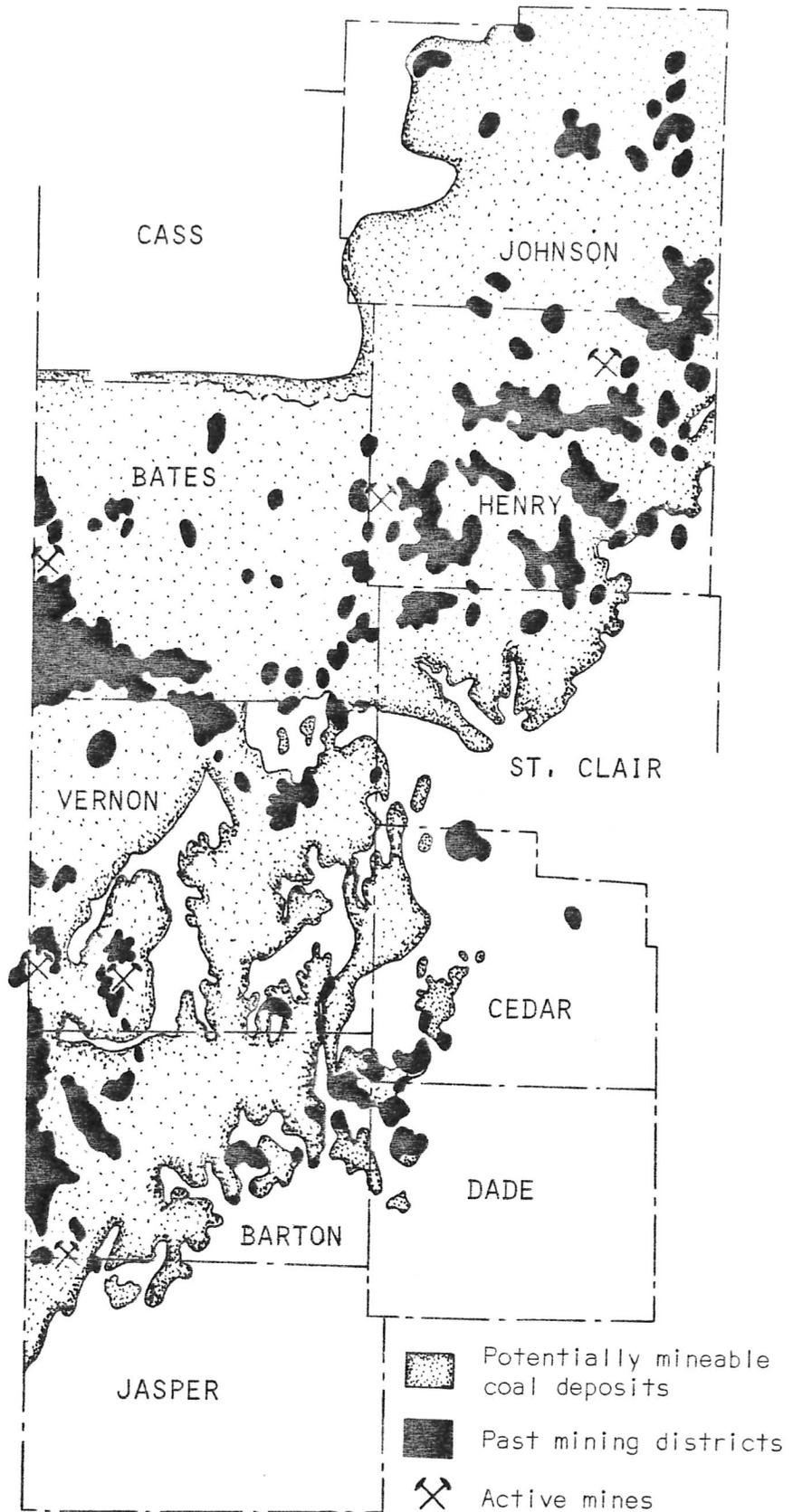
5 billion tons, statewide. Bates County contains almost 6% of the state's total amount of remaining recoverable coal reserves.

While, generally speaking, Bates County is underlain by considerable quantities of coal, it is important to note that it may not be economically feasible to extract the coal. The quality, extent, depth of seam and location - particularly if coal occurs beneath urban areas, reservoirs, or federal or state lands - are some of the factors which may inhibit the extraction of all of the existing coal.

Implications for the Future*: The high sulfur content of Missouri's coal is a definite limiting factor to its expanded use. Present environmental restrictions limit coal burned to 2% or less sulfur content (most Bates County coal contains between 2-4%) or, if the sulfur content exceeds 2%, to emission control equipment to reduce sulfur emissions to acceptable standards. The latter is extremely costly and at the present time, the former offers the better approach from an economic standpoint.

At the present time, most of Bates County coal is consumed by mine-mouth electric generating plants. The use of coal for this purpose will continue to grow but at a slow rate. There are other uses that are available to increase consumption of local coal resources. Two such uses are coal gasification and coal liquefaction. Gasification plants could be constructed to serve industrial plants in the region or in nearby areas such as Kansas City. The gas should be nearly cost competitive with natural gas and offers the added advantage of the given industrial site having control of its own power source rather than dependence on a public utility. Its primary restriction is it must be located adjacent to or near an industrial site and coal must be shipped from the mined area to the point of usage.

* Excerpted from Natural Resource Evaluation of the Kaysinger Basin, KBRPC, July 1979.



MAJOR COAL FIELDS

Source: *Missouri Department of Natural Resources, Chemical Analysis of Selected Missouri Coals and Some Statistical Implications, 1976.*

The conversion of coal to a liquid hydrocarbon is likewise a viable alternative use for local coal reserves. To date, four processes are available to convert coal to a liquid hydrocarbon. In the early 1940's the German army and air force derived the majority of their fuel from liquefied synthetic fuel. One such plant produced 64,000 barrels of fuel per day.

Since a large proportion of Missouri and Bates County coal reserves are not amenable to conventional shaft or strip mining due to thinness of the coal seam and depth of seam, in-situ coal gasification may prove the only available means of developing these reserves.

Oil

During the past few months interest in oil exploration has picked up in Bates County. Test wells are being drilled near the city of Rockville in the southeastern portion of the county.

Manufacturing

Manufacturing is a process of adding value to a raw or semi-finished product. The *Butler Manufacturing Base* table shows the number of firms and employment by type of manufacturing for 1979. A total of 18 firms employed 420 persons in 1982, mostly in the manufacture and/or distribution of durable goods. The *Major Industrial Employment Place* table lists these 18 firms by name and number of employees.

BUTLER MANUFACTURING BASE

<u>INDUSTRY</u>	<u>EMPLOYMENT</u>	<u>NUMBER OF FIRMS</u>
Durable Goods	227	6
Lumber and wood products	9	1
Stone, clay and glass products	100	3
Fabricated metal products	118	2
Nondurable Goods	147	8
Food products	45	4
Printing	5	1
Chemical products	4	1
Leather products	38	1
Miscellaneous	55	1

Source: Missouri Directory of Manufacturing and Mining, 1979.

MAJOR INDUSTRIAL EMPLOYMENT PLACES
BUTLER, MISSOURI

FIRM	NUMBER OF EMPLOYEES		
	Male	Female	Total
Cox Hide Company	35	5	40
Bates County Rock, Division of Ash Grove Cement	31	2	33
Bates County Headliner-Shopper	7	23	30
Tri-County Sheltered Workshop (Bates Co.)	15	11	26
Osage Pecan Company	5		5
		(office)	
		(production)	20
M.F.A. Exchange	6	1	
		(Butler)	
	12	2	23
		(Passaic)	
	2		
		(plant)	
Kammerer Ice and Coal Co. (peak season)	10	2	12
Brooks Machine and Tooling Company	9	2	11
Vit-A-Zine	7	3	10
Southside Lumber Co. (Westover Mills)	8	1	9
Cross County Exchanger	1	3	4
Kling Monument	5	1	6
Farmacol	7	2	9
Coca Cola Bot. Co.	4	1	5
Buerge Farm Supplies	NA	NA	12
Gebhart Concrete	3	0	3
Tiona Truck Line Inc.	110	7	117
Osage Valley Electric Coop. Ass'n.	<u>33</u>	<u>12</u>	<u>45</u>
Total (Active Firms - 18)	310	78	420

Source: Butler Chamber of Commerce, January 1982

Auxiliary Industries

The retail, wholesale and service segments of the local economy are not classified as *base industries* such as agriculture and some manufacturing. Most returns to firms of these types are from local residents rather than persons outside the region. For this reason, the trade and service industries do not bring in money from outside the region, and, therefore, support little or no growth. These trade segments grow in response to increased demand resulting from (1) population increase, (2) increases in disposable income and (3) increase in the area serviced.

Data from the 1977 Census of Retail Trade show that Butler's 95 retail stores had sales totaling \$29.5 million.

The nine grocery stores sales in 1977 accounted for \$6.2 million. Other leading retail kinds of business in 1977 were nine clothing stores with \$1.6 million, nine gasoline service stations with \$2.2 million, and 15 eating places with \$1.0 million.

Annual sales for all retailers in the City averaged \$310,032 per establishment.

The per capita retail sales for grocery stores in the City were \$1,635; clothing stores, \$422; eating places, \$276; furniture stores, \$341; and drug stores, \$179.

The per capita retail sales for grocery stores in the State were \$659; clothing stores, \$138; eating places, \$250; furniture stores, \$53; and drug stores, \$89.

The 1977 payroll of retailers in the City amounted to \$27.9 million.

There were 412 paid employees (full- and part-time) engaged in retail trade in the City as of mid-March 1977.

Retail Trade

Retail sales are a useful indicator in determining growth and expansion in a community. The *Retail Trade* table shows a breakdown of establishments by retail category. The total number of establishments increased by 11% from 1963 to 1972, but from 1972 to 1977, the number of firms declined to a total of 95. The net increase in the number of retail establishments from 1963 to 1977 was two firms, or 3%.

According to the amount of sales in 1972, more than two-thirds of the total county sales were made in Butler, when the city contained half of the county's retail establishments. By 1977, these figures had changed somewhat, with the percentage of total county firms located in Butler declining to 42%. The percentage of total county sales made in Butler also declined somewhat, to 59%. Within the city of Butler, the total amount of retail sales increased by more than half from 1972 to 1977.

RETAIL TRADE
BUTLER, MISSOURI

	NUMBER OF ESTABLISHMENTS			SALES (\$000)	
	1977	1972	1963	1977	1972
Total, all retail stores	95	102	92	29,453	19,068
Building materials	6	8	13	1,568	1,177
General merchandise	5	3	6	n/a	669
Food stores	9	9	10	6,178	3,865
Automotive dealers	10	10	6	n/a	n/a
Gasoline service stations	9	15	9	2,185	1,519
Apparel, accessory stores	9	10	5	1,593	2,400
Furniture, home furnishings, equipment stores	8	5	8	1,289	n/a
Eating, drinking places	15	16	16	1,043	803
Drug, proprietary stores	3	3	2	667	508
Other retail stores	21	23	12	3,320	1,501
Non-store retailers	--	--	5	--	--

Source: *Census of Retail Trade for Missouri, 1963, 1972, 1977.*

Wholesale Trade

Prior to 1977, statistics on wholesale trade for small cities was not available. However, since data was available for Bates County, and because Butler is the largest city in the county, it is assumed that most of the county's wholesale activity occurred in Butler. The *Wholesale Trade* table shows wholesale trade statistics for Bates County for 1963, 1972 and 1977. Data was published for the city of Butler in 1977, which is also shown on the table.

The table indicates that, as with the number of retail establishments, the number of wholesale establishments increased from 1963 to 1972, but the number decreased from 1972 to 1977. The total gain in the number of individual wholesale businesses from 1963 to 1977 was three, or 9%. Even though the number of firms decreased from 1972 to 1977, the number of employees rose from 240 in 1972 to 320 in 1977, an increase of 33%. Total sales by Bates County wholesalers increased during this same period by more than 60%.

Just as in the retail sector, Butler dominates the county's wholesale activity. Nearly 60% of the county's firms are located in Butler. These 22 firms garnered 72% of the total sales, and employed 80% of the wholesale employees in Bates County in 1977.

Selected Services

Selected services include such businesses as motels, auto repair, barber shops among others. Such services as these generally increase in number as the community increases in population or as the level of affluence increases.

WHOLESALE TRADE

	BATES COUNTY			BUTLER
	<u>1963</u>	<u>1972</u>	<u>1977</u>	<u>1977</u>
Total				
Establishments	34	45	37	22
Sales (\$000)	12,123	30,004	48,297	34,607
Payroll (\$000)	506	1,294	2,610	2,064
Paid employees	137	240	320	258
Merchant wholesalers				
Number		27	30	19
Sales (\$000)		18,399	43,581	n/a
Other operating types*				
Number		18	7	3
Sales		n/a	n/a	n/a

*Includes manufacturer's sales branches and sales offices and merchandise agents and brokers.

Source: Census of Wholesale Trade for Missouri, 1963, 1972, 1977.

The total number of service businesses present in Butler in 1972, 72 individual establishments, represents an increase of 47% since 1963. During this same 9 year period, however, receipts from these services increased to more than 1½ times the 1963 level. The *Selected Service Industries* table shows the number and amount of receipts of several types of service businesses in Butler for 1972.

One very important facet of Butler's service industries not revealed in the Census data, is the medical industry. Within this industry, there are several large employers in Butler, presently providing 365 jobs. Bates County Memorial Hospital, a 90 bed facility, is the single largest employer. Nursing homes, which provide a total of 257 beds, also contribute significantly to the employment of the community's labor force. The following is a tabulation of major employers in this industry, and number of employees.

Bates County Memorial Hospital	216
Medicalodge Inc. .	91
Willow Lane Nursing Home	31
Colony Retirement Home	7
Bates Medical Clinic	9
C.W. Long & Assoc.	8

Educational and Governmental Employers

The Butler School System, provides employment for 100 persons: 64 teachers, 32 support personnel, and four persons in administrative capacities. The University of Missouri Extension Services has four employees.

The Governmental Offices are represented below:

City of Butler	75
County	30
USDA	5
State Hwy.	26

In conclusion, every economy is based upon industries which may be classified as growth producing or non-growth producing. Agriculture may be considered as growth producing if the level of production continues to increase so that the exported products will continue to bring increased outside monies to the local economy. While the present level of manufacturing in Butler may not qualify this industry as a base industry in the sense that agriculture is a base industry, manufacturing appears to be making strides in the economy. Recent expansions of local manufacturing firms signal the industry's confidence in the city's industrial future, as well as in their own.

Secondary sectors have been adjusting to changes in the economy brought on by such factors as energy, inflation, and by subtle changes in the area's base economy. While there has been a recent shift in retail activity, in spite of more purchases being made outside of Butler, retail and wholesale activity appears to be increasing, as does activity in service-related industries. Even though industries in the secondary sector are not considered growth producing, they are vital to Butler's stable economy because they help support the growth which has occurred. These shifts are evidence that the economy is showing more diversification, and indicate continued economic stability. While diversification will give a firmer footing, it appears that true economic growth potential lies in the city's ability to expand its manufacturing base.