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STATE OF ILLINOIS

DEPARTMENT OF REGISTRATION AND EDUCATION



MINERAL PRODUCTION IN ILLINOIS IN 1968

W. L. Busch



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ILLINOIS STATE GEOLOGICAL SURVEY
URBANA, ILLINOIS 61801

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ABSTRACT

The value of minerals produced in Illinois in 1968 reached a record annual high of 670.6 million dollars. The total value of minerals produced in 1967 was 650 million dollars, and in 1966 the value was 644 million dollars. Each of these figures had established a record annual output. In 1968, the value of coal accounted for 37.2 percent of the value of all minerals produced in the state. Crude oil supplied 25.9 percent. Other products and their percentages of the state's total mineral value include: stone products, 18.9; clay products, 8.0; sand and gravel, 7.9; and fluorspar and metals, 2.1. The quantity and value of minerals produced in 1968 and for other years, are summarized in the tables and maps of this report.

ILLINOIS MINERAL INDUSTRY

Illinois mineral production in 1968 achieved a record annual high of 670.6 million dollars in total value. This amount was 20.6 million dollars, or 3.2 percent, more than the previous all-time high of 650 million dollars set in 1967. The value of minerals produced in 1966, totaling 644 million dollars, was also a record high.

The combined value of coal and crude oil produced in Illinois during 1968 amounted to about 63.1 percent of the value of all minerals for the year.

Stone products, which include crushed stone, cement, and lime, make up the second most valuable group of minerals produced in Illinois. As a group, these commodities contributed 18.9 percent of the 1968 total value. The tonnage and total value of crushed stone production reported during 1968 showed a marked increase over 1967.

The 53.6 million dollars worth of clay products produced in Illinois represents about 8 percent of the state's 1968 total mineral products value. Illinois

clay products include face brick and common brick, structural tile, drain and sewer tile, refractories, pottery and whiteware.

Illinois sand and gravel production in 1968 showed an over-all increase as compared to 1967, and furnished about 7.9 percent of the state's mineral products value. This group of minerals includes common sand and gravel, silica sand, and some special sands.

Fluorspar, lead, and zinc, as a group, showed a decline in total combined value for 1968 as compared with 1967. In 1968, these three minerals accounted for about 2.1 percent of the state's total mineral value.

Record of the Illinois Mineral Industry

Each of the 17 tables and three maps entered in this report is summarized under the following table numbers and titles.

Table 1 - Summary of Illinois Mineral Production, 1967-1968

Table 1, the master table of this report, gives a statistical summary of Illinois mineral production for the years of 1967 and 1968. Items listed are the minerals produced, the amounts reported produced by commercial operators, the total annual value for each product, and the state-wide average value per ton or barrel for each product. Given under footnote "c" are the names of other mineral products produced in Illinois. These items were combined in this way to avoid revealing the output of any one individual producer. The combined values have been added to the state total value in one figure.

Table 2 - Comparison of Illinois Mineral Production in 1967 and 1968

Table 2 lists all of the mineral products entered in table 1 and indicates by the amounts and values whether the 1968 production of each was greater or less than the 1967 production. The balance of increases and declines in value for the mineral products shows a total net gain of 20.6 million dollars, or 3.2 percent for 1968.

Table 3 - Value of Illinois Mineral Production, 1939-1968

The annual total values for Illinois mineral production from 1939 to 1968, recorded in table 3, show a trend toward increased annual total values. General increases in mineral production throughout the state during the 30 years, plus some increases in price, resulted in greater total annual values for the state.

Table 4 - Value of Illinois Mineral Products as Percentage of State Total, 1955-1968

The figures in table 4 show that the value of coal produced in Illinois has accounted for an increasing percentage of the state's total annual mineral product value. During the same period of years, the percentage value of oil has decreased as compared with the total value of all minerals produced in the state.

Table 4 figures also show that the value of building and construction materials (stone, cement, sand, and gravel) has contributed an increasing percentage of the state's total annual value of mineral products. The value contributed annually by clay products to the state total value, 1955-1968, shows a gradual percentage decline. The combined annual values of fluorspar, zinc, and lead, as a percentage of the state total value, has not changed much from year to year.

Table 5 - Average Value of Illinois Mineral Products at Plant Site, 1961-1968

The plant site values for Illinois mineral products recorded in table 5, give some indication of recent prices per barrel, or per ton, for the various products listed.

Table 6 - Illinois Coal Production by Counties, 1968

Twenty-four counties throughout Illinois produced about 62.1 million tons of bituminous coal, valued at about 249.2 million dollars. The value of coal produced represents about 37.2 percent of the entire 1968 Illinois mineral product value. Of the 62.1 million tons of coal mined during 1968, approximately 42 percent came from underground mines and about 58 percent was produced by strip mines.

The 24 counties of Illinois that produced coal in 1968 are shown by the county map in figure 1, with the intensity of mining activity illustrated by the degree of shading. Table 4 indicates the annual percentage that the value of coal contributed to the state total value of all minerals produced each year from 1955 through 1968. Table 5 lists the Illinois average value per ton of coal at the mine for the period 1961-1968, and table 17 shows the position held by each county among all Illinois counties producing coal in 1968.

Table 7 - Illinois Coal Production by Years, 1945-1968

This table is of special interest because it indicates the volume of coal produced by Illinois mines at the close of World War II. It also shows the drop-off of coal production throughout the 1950's, and then the increased production of the 1960's. Figures in table 7 also trace, for a period of 24 years, the growth of strip mining in Illinois, and the gradual leveling of the amount of coal produced from underground mines. Table 7 also records the tons of coal produced during the final years of hand mining in Illinois coal fields.

Table 8 - Coal Production by Illinois Counties, 1882-1968

The cumulative coal production since 1882, by Illinois counties, is shown in table 8. During these 87 years, more than 4 billion tons of coal have been produced from Illinois mines. Of the 71 counties that have produced some coal since 1882, 13 counties have produced over 100 million tons of coal each. As a group, these counties have accounted for a total production of about 3.3 billion tons, or about 80.6 percent of the state's entire coal output since 1882. Table 8 also shows the total number of years that each county has produced coal since 1882 and the most recent year it was productive.

Table 9 - Estimated Oil Production by Illinois Counties, 1888-1968

Production of crude oil in Illinois during 1968 was estimated to be about 56.4 million barrels and was valued at 173.1 million dollars, for an average price of \$3.07 per barrel.

The estimated amount and value of oil produced by county in 1968 is given in table 9 with the percentage of oil that each producing county supplied to the 1968 total Illinois production. The total estimated oil production from 1888 through 1968 is recorded in table 9 for each county. Of the 42 counties producing oil in 1968 (fig. 2), 15 counties produced more than 1 million barrels each for a total of about 50.5 million barrels, or about 89.5 percent of the state's entire oil production for 1968.

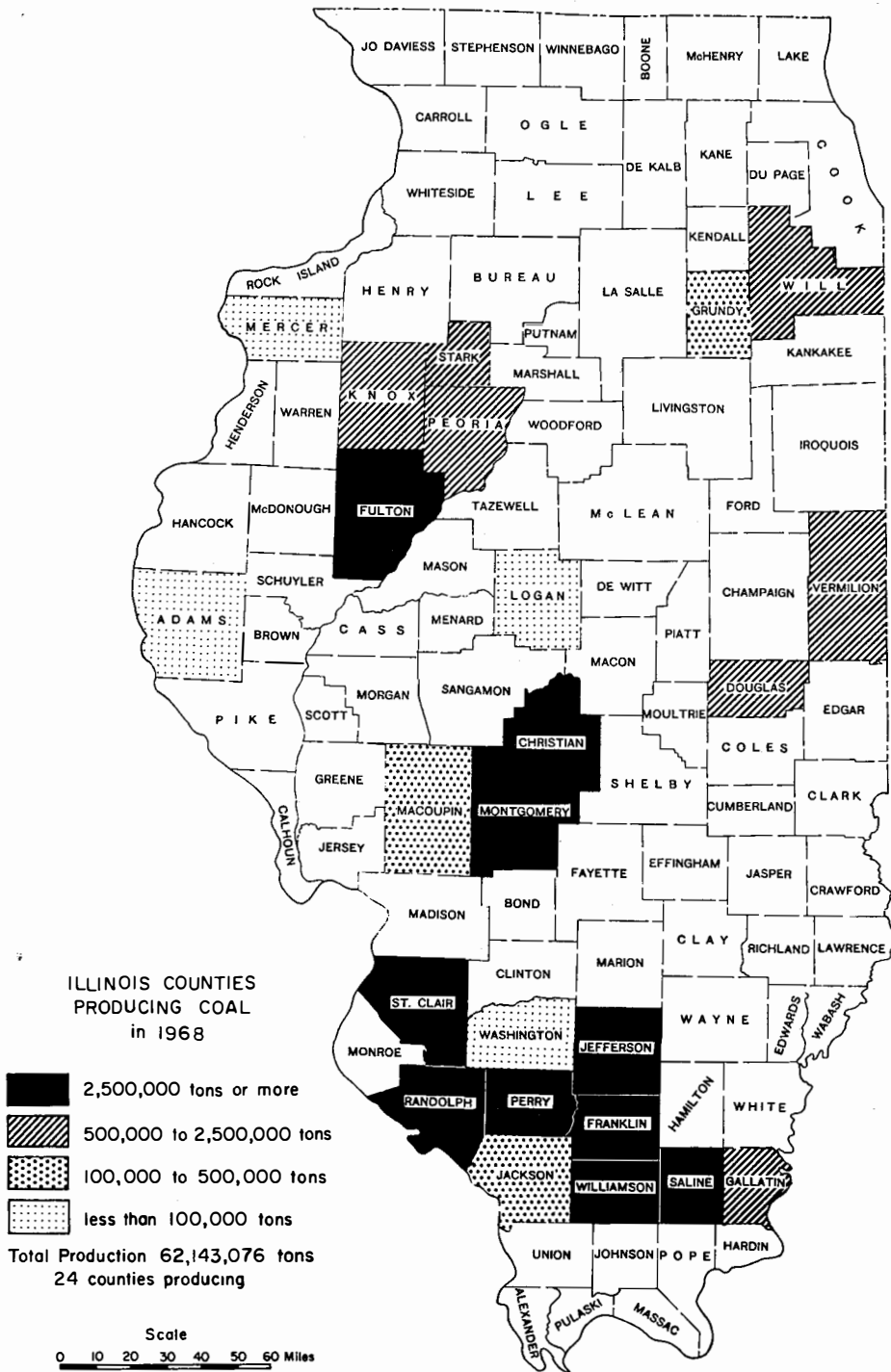


Figure 1 - Illinois coal production by counties in 1968.

Table 4 indicates the annual percentage that the value of oil contributed to the state total value of all minerals produced each year from 1955 through 1968. Table 5 lists the Illinois average price per barrel of oil from 1961 through 1968. The relative position held by each county producing oil in 1968 is shown in table 17.

Table 10 - Illinois Stone Production by Regions, 1968

A production of about 52.7 million tons of crushed and broken stone was reported by commercial quarry operators for 1968. This prepared stone was valued at 77.2 million dollars for an average of \$1.47 per ton. The tonnage produced in 1968 was supplied by 237 operations located in 61 counties throughout the state.

The account of stone production in Illinois by regions (fig. 3) and according to three categories of use - road and building, agriculture, and all other uses, is given in table 10. This table also lists every county reporting stone production and the average value at the quarry for all uses of stone in all regions for 1968. The value of crushed stone, plus the values of the stone products, cement and lime, contributed about 18.9 percent (table 4) of the total Illinois mineral value for 1968. Table 5 gives the yearly average value per ton of stone at the quarry from 1961 through 1968. The position held by each county producing stone in 1968 is reported in table 17.

Table 11 - Illinois Common Sand Production by Regions, 1968

Table 12 - Illinois Gravel Production by Regions, 1968

In 1968, a total of 40.2 million tons of common sand and gravel was reported produced by commercial operators. The combined value of these materials amounted to about 38.7 million dollars.

Counties in the Northeast Region of the state (fig. 3) produced the largest amounts of sand and gravel in 1968. (Figure 3, a county outline map of Illinois, shows the regional division of the state used in constructing tables 11 and 12.) The second most important area in the state for the production of common sand and gravel was the Northwest Region, and the Central Region was in third place in 1968.

The southern part of Illinois has comparatively few sand and gravel producing areas, with the exception of some counties that border on the Mississippi, Ohio, or Wabash Rivers. Table 11 (common sand) and table 12 (gravel) indicate the amount and value of sand or gravel produced by regions throughout the state. These tables also list every county reporting sand or gravel production, and the average value at the pit for all uses of sand or gravel in all regions in 1968. Table 5 gives the annual average value for sand and gravel for the years 1961 through 1968. Table 17 lists in numerical order the relative position held by Illinois counties in the production of common sand and gravel for 1968.

Table 13 - Illinois Silica Sand Production, 1967-1968

Illinois silica sand is produced primarily in La Salle County and in smaller amounts in Ogle County. Table 13 indicates that in 1967 and 1968 the most important use for Illinois silica sand was for the manufacture of glass. The second most important use for this material was for molding sand purposes. Other uses for underground silica sand include grinding, blast, engine, filtration, and oil sand. Ground silica sand uses include abrasive, chemical, enamel, filler, foundry, glass, pottery, and others.

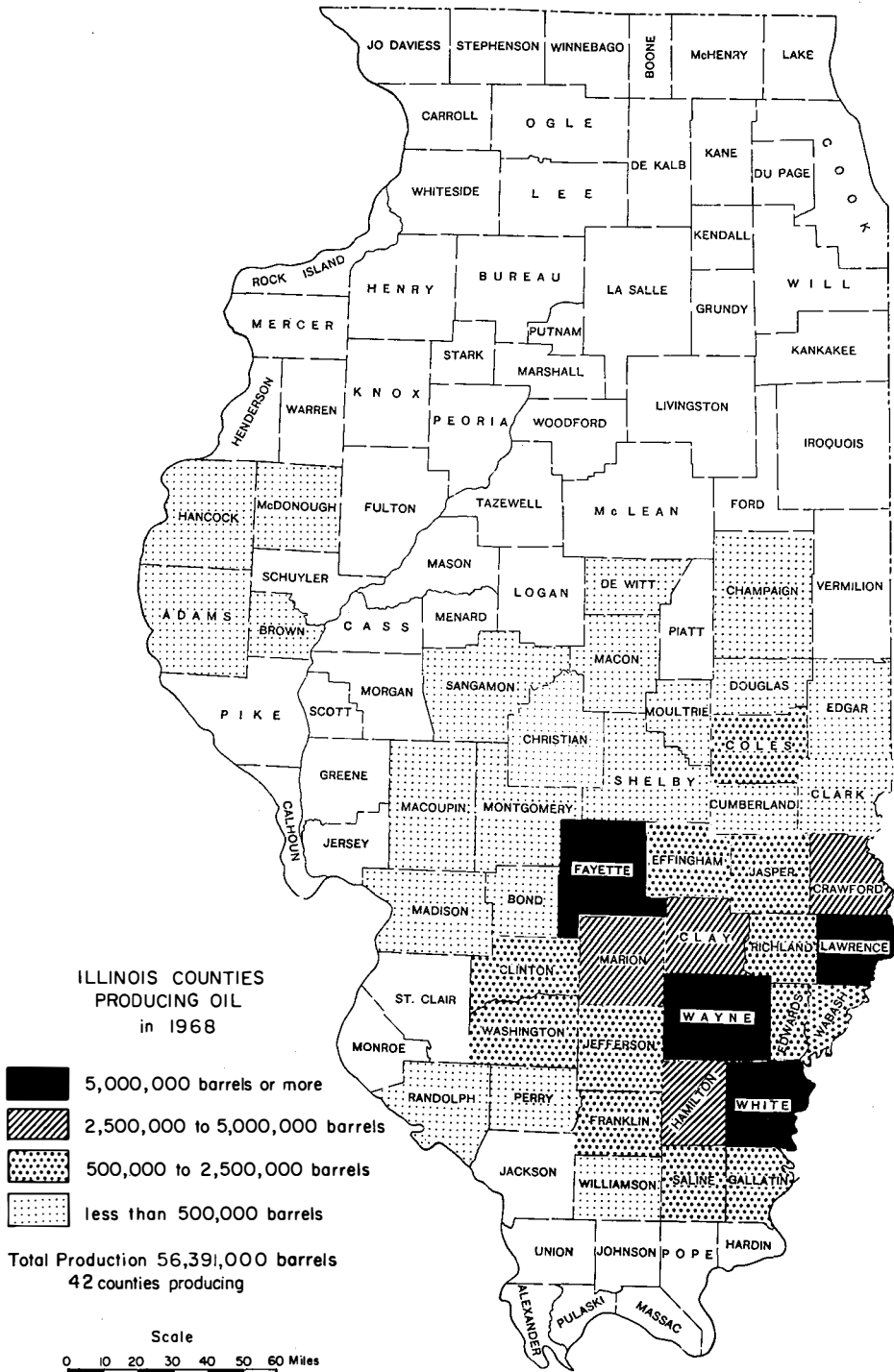


Figure 2 - Illinois oil production by counties in 1968.

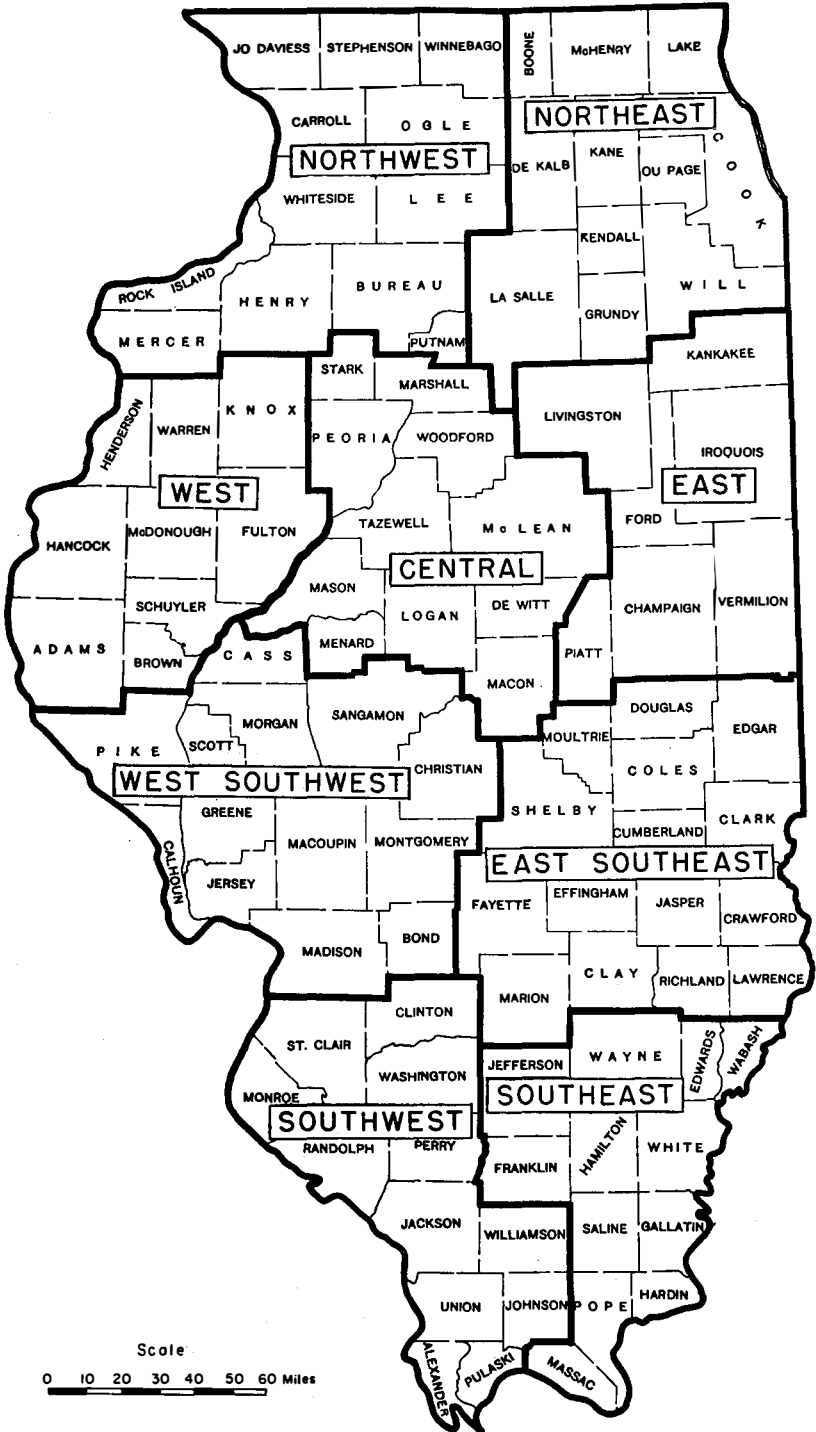


Figure 3 - County outline map of Illinois showing area division.

During 1968, a total of 3.9 million tons of Illinois silica sand was produced which was valued at 13.4 million dollars. In 1967, silica sand production was 3.8 million tons, valued at 12.9 million dollars. The total value of all sands and gravel produced in Illinois during 1968 amounted to 7.9 percent of the value of all minerals produced in the state (table 4). Table 5 indicates the average annual value of common sand and gravel, and silica sand, from 1961 through 1968. Table 17 shows that La Salle and Ogle Counties are the only counties producing silica sand in Illinois.

Table 14 - Production of Illinois Clay Products, 1967-1968

The value of clay products reported produced in Illinois during 1968 was 53.6 million dollars, and for 1967 the value was 46.1 million dollars. In both 1968 and 1967, 41 clay products plants located in 24 counties throughout Illinois reported production. The total value of clay products produced in 1968 was about 8.0 percent of the value of all minerals produced in the state (table 4). The rank of all counties in the state reporting the production of clay products for 1968 is given in table 17 of this report.

Table 15 - Fluorspar Shipped and Consumed, 1960-1968

Fluorspar figures indicate that Illinois producers shipped a total of 188,325 tons in 1968, which was valued at 9.1 million dollars (table 1), for an average price of \$48.50 per ton (table 5). Illinois fluorspar shipments during 1968 amounted to 74.6 percent of all fluorspar produced and shipped in the United States (table 15). Of the 1.2 million tons of domestic and foreign fluorspar consumed in the United States in 1968, Illinois fluorspar shipments supplied about 15.1 percent of this total.

Illinois is the nation's leading fluorspar producing state. This material is mined principally in Hardin County, with small amounts produced in Pope County. Both counties are located in the southern part of Illinois.

Table 16 - Illinois Zinc and Lead Production, 1960-1968

Zinc and lead are recovered from primary metal mines in Jo Daviess County, located in the northwestern part of the state, and as by-products of fluorspar mining in Hardin and Pope Counties in southern Illinois.

In 1968, Illinois mines produced 18,182 tons of zinc, valued at 4.9 million dollars, and 1,467 tons of lead, valued at \$387,641 (table 16). The combined values of fluorspar shipments and the values of zinc and lead produced in Illinois contributed about 2.1 percent (table 4) of the state's 1968 total mineral products value of 670.6 million dollars.

Table 17 - Summary of Minerals Produced by Illinois Counties, 1968

Table 17 is a convenient reference to the 102 counties of Illinois producing any of 14 mineral products. The table indicates the different mineral products produced by any county in the state. The numbers show the relative position held by each county among all counties producing a selected mineral product.

TABLE 1 - SUMMARY OF ILLINOIS MINERAL PRODUCTION, 1967-1968^a

Material	Unit	1967 ^b			1968 ^b		
		Quantity	Value at plants		Quantity	Value at plants	
			Total	Average		Total	Average
Coal - bituminous	tons	64,814,771	\$251,481,312	\$ 3.88	62,143,076	\$249,193,735	\$ 4.01
Crude oil	bbis.	60,115,000	181,547,300	3.02	56,391,000	173,120,370	3.07
Limestone and dolomite	tons	44,836,956	63,116,345	1.41	52,665,155	77,194,915	1.47
Cement - Portland 376 lb.	bbis.	9,068,892	30,185,632	3.33	9,371,801	32,475,145	3.47
Cement - Masonry 280 lb.	bbis.	591,153	1,850,650	3.13	602,365	2,097,203	3.48
Clay products	—	—	46,114,642	—	—	53,613,873	—
Sand	tons	15,562,000	13,183,000	0.85	18,580,000	16,288,000	0.88
Gravel	tons	17,946,000	17,191,000	0.96	21,626,000	22,380,000	1.03
Silica sand	tons	3,825,000	12,895,000	3.37	3,912,000	13,405,000	3.43
Fluorspar	tons	210,207	9,858,743	46.90	188,325	9,134,132	48.50
Zinc	tons	20,416	5,652,374	277.00	18,182	4,909,140	270.00
Lead	tons	2,384	667,520	280.00	1,467	387,641	264.00
Other materials ^c	—	—	16,256,482	—	—	16,400,846	—
Total value			\$650,000,000			\$670,600,000	

^aTable based on figures from the U.S. Bureau of Mines, the Illinois State Department of Mines and Minerals, and the Illinois State Geological Survey.

^bSubject to revision.

^cIncludes natural gas, lime, tripoli, natural bonded molding sand, and sandstone.

TABLE 2 - COMPARISON OF ILLINOIS MINERAL PRODUCTION IN 1967 and 1968^a

Material	Unit	Production change 1967-1968			Value change 1967-1968		
		Increase	Decrease	Percent	Increase	Decrease	Percent
Coal - bituminous	tons	—	2,671,695	- 4.1	\$ —	\$2,287,577	- 0.9
Crude oil	bbls.	—	3,724,000	- 6.2	—	8,426,930	- 4.6
Limestone and dolomite	tons	7,828,199	—	+ 17.5	14,078,570	—	+ 22.3
Cement - Portland 376 lb.	bbls.	302,909	—	+ 3.3	2,289,513	—	+ 7.6
Cement - Masonry 280 lb.	bbls.	11,212	—	+ 1.9	246,553	—	+ 13.3
Clay products	—	—	—	—	7,499,231	—	+ 16.3
Sand	tons	3,018,000	—	+ 19.4	3,105,000	—	+ 23.6
Gravel	tons	3,680,000	—	+ 20.5	5,189,000	—	+ 30.2
Silica sand	tons	87,000	—	+ 2.3	510,000	—	+ 4.0
Fluorspar	tons	—	21,882	- 10.4	—	724,611	- 7.4
Zinc	tons	—	2,234	- 10.9	—	743,234	- 13.1
Lead	tons	—	917	- 38.5	—	279,879	- 41.9
Other materials	—	—	—	—	144,364	—	+ 0.9
Total values					\$33,062,231	\$12,462,231	—
1968 net increase over 1967 value					\$20,600,000	—	+ 3.2

^aTable 2 based on figures tabulated in table 1.

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 TABLE 3 - VALUE OF ILLINOIS MINERAL PRODUCTION, 1939-1968
 (thousands of dollars)

Year	Mineral production	Year	Mineral production	Year	Mineral production
1939	\$215,157	1949	\$487,808	1959	\$606,300
1940	287,327	1950	539,236	1960	615,800
1941	335,504	1951	542,031	1961	604,000
1942	341,998	1952	500,820	1962	631,000
1943	337,912	1953	501,926	1963	615,000
1944	342,832	1954	519,242	1964	618,000
1945	344,431	1955	570,653	1965	618,500
1946	379,673	1956	613,364	1966	644,000
1947	458,737	1957	612,755	1967	650,000
1948	567,624	1958	611,625	1968	670,600

TABLE 4 - VALUE OF ILLINOIS MINERAL PRODUCTS AS PERCENTAGE OF STATE TOTAL, 1955-1968

Year	Coal	Crude oil	Stone products	Clay products	Sand and gravel	Fluorspar and metals	Total percent
1955	29.3	42.7	11.3	9.6	4.5	2.6	100
1956	30.0	40.6	12.2	9.6	5.0	2.6	100
1957	30.5	40.1	12.3	9.9	4.8	2.4	100
1958	28.7	40.5	13.7	9.0	5.8	2.3	100
1959	30.4	38.7	13.7	9.6	5.5	2.1	100
1960	29.8	38.0	15.0	9.2	5.5	2.5	100
1961	29.2	39.1	14.5	9.3	5.8	2.1	100
1962	29.6	38.0	15.2	8.9	6.2	2.1	100
1963	31.9	36.3	15.2	8.8	5.9	1.9	100
1964	33.6	33.5	16.4	8.3	6.5	1.7	100
1965	35.2	30.3	17.1	8.5	6.6	2.3	100
1966	37.8	29.0	16.0	8.5	6.7	2.0	100
1967	38.7	28.0	16.9	7.1	6.8	2.5	100
1968	37.2	25.9	18.9	8.0	7.9	2.1	100

TABLE 5 - AVERAGE VALUE OF ILLINOIS MINERAL PRODUCTS AT PLANT SITE, 1961-1968

Year	Coal (ton)	Crude oil (bbl.)	Crushed stone (ton)	Cement (bbl.)	Lime (ton)	Silica sand (ton)
1961	\$3.91	\$3.00	\$1.37	\$3.28	\$16.31	\$3.69
1962	3.86	3.00	1.36	3.29	16.29	3.96
1963	3.80	2.96	1.33	3.28	16.51	3.61
1964	3.79	2.93	1.35	3.30	16.61	3.27
1965	3.74	2.93	1.34	3.26	15.73	3.30
1966	3.85	3.00	1.35	3.11	15.53	3.41
1967	3.88	3.02	1.41	3.32	15.38	3.37
1968	4.01	3.07	1.47	3.47	15.05	3.43

Year	Sand (ton)	Gravel (ton)	Fluorspar (ton)	Zinc (ton)	Lead (ton)	Tripoli (ton)
1961	\$0.88	\$0.89	\$50.95	\$230.00	\$206.00	\$25.02
1962	0.86	0.93	48.12	230.00	184.00	26.13
1963	0.85	0.97	49.58	230.00	216.00	26.90
1964	0.87	1.01	50.62	272.00	262.00	26.88
1965	0.85	0.91	49.40	292.00	312.00	26.59
1966	0.84	0.91	45.42	290.00	302.00	26.56
1967	0.85	0.96	46.90	277.00	280.00	31.03
1968	0.88	1.03	48.50	270.00	264.00	26.37

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TABLE 6 - ILLINOIS COAL PRODUCTION BY COUNTIES, 1968^a

County	Number of mines	Tons mined		Total tons	Total value ^b
		Underground	Strip		
Adams	1	—	12,569	12,569	\$ 50,402
Christian	1	5,329,521	—	5,329,521	21,371,379
Douglas	1	653,830	—	653,830	2,621,858
Franklin	5	7,075,440	—	7,075,440	28,372,514
Fulton	7	—	7,281,188	7,281,188	29,197,564
Gallatin	2	640,834	395,702	1,036,536	4,156,509
Jackson	4	—	259,003	259,003	1,038,602
Jefferson	3	3,184,034	—	3,184,034	12,767,976
Kankakee	1	—	962,484	962,484 ^c	3,859,561
Knox	1	—	1,792,649	1,792,649	7,188,523
Logan	1	22,929	—	22,929	91,945
Macoupin	1	291,461	—	291,461	1,168,759
Mercer	1	13,910	—	13,910	55,779
Montgomery	2	3,099,046	—	3,099,046	12,427,175
Peoria	5	330	1,742,922	1,743,252	6,990,441
Perry	3	—	9,108,725	9,108,725	36,525,987
Randolph	3	912,787	3,043,010	3,955,797	15,862,746
St. Clair	4	638,653	6,458,462	7,097,115	28,459,431
Saline	5	1,498,008	1,077,020	2,575,028	10,325,862
Stark	1	—	557,128	557,128	2,234,083
Vermilion	4	59,394	785,682	845,076	3,388,755
Washington	1	28,092	—	28,092	112,649
Williamson	12	2,636,161	2,582,102	5,218,263	20,925,235
Total	69	26,084,430	36,058,646	62,143,076	\$249,193,735

^a Production figures, Illinois State Department of Mines and Minerals.

^b Average mine value for Illinois coal estimated at \$4.01 per ton, 1968.

^c Mine tipple located in Kankakee County - 368,941 tons mined in Grundy County and 593,543 tons mined in Will County.

TABLE 7 - ILLINOIS COAL PRODUCTION BY YEARS, 1945-1968^a

Year	Tons of coal produced by				
	All mines Total	Strip mines Total	Underground mines		
			Total	Mined by machine	Mined by hand
1968	62,143,076	36,058,646	26,084,430	26,084,430	—
1967	64,814,771	37,164,771	27,650,000	27,650,000	—
1966	63,212,697	36,080,526	27,132,171	27,132,171	—
1965	58,232,480	32,661,038	25,571,442	25,571,442	—
1964	54,834,488	29,956,137	24,878,351	24,878,351	—
1963	51,642,431	27,216,422	24,426,009	24,426,009	—
1962	48,353,913	24,603,873	23,750,040	23,750,040	—
1961	45,132,526	22,926,945	22,205,581	22,203,257	2,324
1960	45,820,632	22,707,527	23,113,105	23,099,304	13,801
1959	45,374,626	22,006,206	23,368,420	23,355,034	13,386
1958	43,777,130	20,608,567	23,168,563	23,147,089	21,474
1957	46,682,889	19,883,979	26,798,910	26,767,434	31,476
1956	47,804,040	19,658,854	28,145,186	28,100,001	45,185
1955	45,711,555	18,715,621	26,995,934	26,935,614	60,320
1954	41,775,752	16,425,532	25,350,220	25,219,084	131,136
1953	45,966,114	16,680,336	29,285,778	29,132,106	153,672
1952	45,752,588	16,715,635	29,036,953	28,788,980	247,973
1951	54,869,679	18,309,970	36,559,709	36,081,258	478,451
1950	57,282,303	17,640,466	39,641,837	37,766,772	1,875,065
1949	47,630,380	13,952,202	33,678,178	32,993,484	684,694
1948	66,166,805	17,875,540	48,291,265	46,655,924	1,635,341
1947	68,325,241	17,821,339	50,503,902	48,877,626	1,626,276
1946	63,767,082	15,207,804	48,559,278	46,714,916	1,844,362
1945	73,446,930	17,011,196	56,435,734	53,999,655	2,436,079

^a Source: Illinois State Department of Mines and Minerals.

TABLE 8 - COAL PRODUCTION BY ILLINOIS COUNTIES, 1882-1968^a

County	Total production (tons)	Total years active	Last year active	County	Total production (tons)	Total years active	Last year active
Adams	338,531	25	1968	Marshall	12,516,141	70	1951
Bond	7,355,569	57	1942	Menard	13,462,005	84	1965
Brown	65,347	40	1963	Mercer	15,349,205	81	1968
Bureau	53,823,055	80	1964	Monroe	8,284	13	1941
Calhoun	96,247	27	1912	Montgomery	113,562,116	87	1968
Cass	212,477	53	1941	Morgan	190,787	64	1951
Christian	281,898,916	84	1968	Moultrie	2,032,236	16	1924
Clark	4,482	2	1955	Peoria	78,258,811	87	1968
Clay	801	1	1963	Perry	227,100,754	87	1968
Clinton	38,656,325	79	1960	Pike	5,081	8	1942
Coles	198,932	6	1888	Pope	1,562	11	1938
Crawford	45,400	16	1961	Putnam	10,071,893	29	1938
Douglas	8,670,282	23	1968	Randolph	101,523,766	87	1968
Edgar	915,698	41	1952	Richland	154	1	1890
Effingham	796	1	1890	Rock Island	3,846,169	67	1948
Franklin	542,923,634	70	1968	St. Clair	296,146,463	87	1968
Fulton	262,145,277	87	1968	Saline	228,350,475	87	1968
Gallatin	7,625,894	84	1968	Sangamon	233,449,607	83	1964
Greene	693,191	84	1967	Schuyler	7,747,691	84	1966
Grundy	43,264,192	85	1968	Scott	612,476	61	1942
Hamilton	22,097	16	1905	Shelby	4,119,763	67	1950
Hancock	771,281	72	1958	Stark	5,496,069	78	1968
Hardin	40	1	1890	Tazewell	17,633,802	75	1956
Henry	22,910,053	84	1965	Vermilion	163,965,165	87	1968
Jackson	97,047,087	87	1968	Wabash	198,226	36	1964
Jasper	23,739	11	1939	Warren	685,466	73	1954
Jefferson	50,481,753	65	1968	Washington	18,151,329	87	1968
Jersey	120,350	59	1951	White	1,676,741	36	1940
Johnson	245,942	53	1965	Will	41,818,058	87	1968
Kankakee	8,752,960	43	1962	Williamson	387,043,892	87	1968
Knox	51,616,206	87	1968	Woodford	7,810,160	70	1951
La Salle	65,547,638	79	1960	Total (1882-1968)		4,052,661,046	
Livingston	10,111,437	80	1961	Estimated production (1833-1881)		73,386,123	
Logan	14,533,376	84	1968	Total production (1833-1968)		4,126,047,169	
Macon	11,000,468	65	1947				
Macoupin	265,984,690	87	1968				
Mc Donough	2,634,903	69	1951				
Mc Lean	5,544,139	47	1928				
Madison	164,295,772	83	1964				
Marion	39,247,722	82	1963				

^aProduction figures, Illinois State Department of Mines and Minerals.

TABLE 9 - ESTIMATED OIL PRODUCTION BY ILLINOIS COUNTIES, 1888-1968^a

County	Total production ^b 1888-1968	1968 Production		1968 value ^c
		Thousands of barrels	Percent of state total	
Adams	165	4	0.01	\$ 12,280
Bond	6,888	82	0.15	251,740
Brown	215	4	0.01	12,280
Champaign	6	1	—	3,070
Christian	22,643	446	0.79	1,369,220
Clark-Cumberland	86,884	611	1.08	1,875,770
Clay	118,721	2,866	5.08	8,798,620
Clinton	78,868	932	1.65	2,861,240
Coles	20,959	583	1.03	1,789,810
Crawford	216,015	2,599	4.61	7,978,930
De Witt	1,549	236	0.42	724,520
Douglas	3,373	65	0.12	199,550
Edgar	2,857	102	0.18	313,140
Edwards	41,615	771	1.37	2,366,970
Effingham	13,267	676	1.20	2,075,320
Fayette	359,511	6,732	11.94	20,667,240
Franklin	65,203	1,560	2.77	4,789,200
Gallatin	44,778	1,178	2.09	3,616,460
Hamilton	122,587	3,794	6.73	11,647,580
Hancock-Mc Donough	5,188	38	0.07	116,660
Jasper	44,500	1,319	2.34	4,049,330
Jefferson	74,584	1,442	2.56	4,426,940
Lawrence	355,839	5,952	10.55	18,272,640
Macon	854	13	0.02	39,910
Macoupin	224	6	0.01	18,420
Madison	16,371	180	0.32	552,600
Marion	380,041	4,231	7.50	12,989,170
Monroe	2	—	—	—
Montgomery	112	1	—	3,070
Moultrie	77	3	0.01	9,210
Perry	648	19	0.03	58,330
Randolph	3,681	121	0.21	371,470
Richland	90,396	2,071	3.67	6,357,970
St. Clair	2,883	—	—	—
Saline	18,105	1,083	1.92	3,324,810
Sangamon	1,607	225	0.40	690,750
Schuyler	1	—	—	—
Shelby	1,345	48	0.09	147,360
Wabash	96,268	2,381	4.22	7,309,670
Washington	24,874	615	1.09	1,888,050
Wayne	209,395	6,137	10.88	18,840,590
White	243,317	7,138	12.66	21,913,660
Williamson	702	126	0.22	386,820
Total	2,777,118	56,391	100.00	\$173,120,370

^aSubject to revision.^bIn thousands of barrels.^cAverage price estimated at \$3.07 per barrel.

MINERAL PRODUCTION IN ILLINOIS IN 1968

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 TABLE 10 - ILLINOIS STONE PRODUCTION BY REGIONS, 1968^{a, b}

Producing counties and operations ^c		Stone use	Tons	Value	Average per ton
NORTHWEST					
Carroll	Ogle	Road and building	4,989,574	\$6,340,380	\$1.27
Henry	Rock Island	Agstone	573,317	874,621	1.53
Jo Daviess	Stephenson	All other	11,674	13,406	1.15
Lee	Whiteside				
Mercer	Winnebago				
Operations - 105		Total	5,574,565	\$7,228,407	\$1.30
WEST					
Adams	Knox	Road and building	1,915,985	\$2,791,718	\$1.46
Brown	Mc Donough	Agstone	470,160	736,639	1.57
Hancock	Schuyler	All other	307,432	939,689	3.06
Henderson	Warren				
Operations - 22		Total	2,693,577	\$4,468,046	\$1.66
WEST SOUTHWEST					
Calhoun	Madison	Road and building	2,189,558	\$3,645,559	\$1.66
Christian	Montgomery	Agstone	613,703	924,390	1.51
Greene	Pike	All other	133,492	252,482	1.89
Jersey	Scott				
Macoupin					
Operations - 26		Total	2,936,753	\$4,822,431	\$1.64
SOUTHWEST					
Clinton	Randolph	Road and building	5,094,733	\$7,929,480	\$1.56
Jackson	St. Clair	Agstone	674,511	1,119,624	1.66
Johnson	Union	All other	1,490,504	2,366,415	1.59
Monroe	Washington				
Pulaski					
Operations - 23		Total	7,259,748	\$11,415,519	\$1.57
NORTHEAST					
Boone	Kendall	Road and building	22,651,897	\$31,291,370	\$1.38
Cook	La Salle	Agstone	481,022	837,643	1.74
De Kalb	McHenry	All other	1,458,968	2,373,207	1.63
Du Page	Will				
Kane					
Operations - 27		Total	24,591,887	\$34,502,220	\$1.40
EAST					
Kankakee		Road and building	3,469,342	\$4,959,303	\$1.43
Livingston		Agstone	1,046,093	1,540,148	1.47
Vermilion		All other	122,634	332,534	2.71
Operations - 11		Total	4,638,069	\$6,831,985	\$1.47
CENTRAL					
Logan		Road and building	1,278,042	\$2,037,385	\$1.59
Menard		Agstone	178,313	310,216	1.74
Peoria		All other	—	—	—
Operations - 5		Total	1,456,355	\$2,347,601	\$1.61
EAST SOUTHEAST					
Clark	Fayette	Road and building	1,339,606	\$2,502,873	\$1.87
Clay	Marion	Agstone	486,218	917,914	1.89
Coles	Shelby	All other	—	—	—
Cumberland					
Operations - 10		Total	1,825,824	\$3,420,787	\$1.87
SOUTHEAST					
Hardin		Road and building	1,183,626	\$1,458,087	\$1.23
Jefferson		Agstone	275,293	361,836	1.31
Massac		All other	229,458	337,996	1.47
Operations - 8		Total	1,688,377	\$2,157,919	\$1.28
STATE TOTALS					
Counties - 61		Road and building	44,112,363	\$62,956,155	\$1.43
Operations - 237		Agstone	4,798,630	7,623,031	1.59
		All other	3,754,162	6,615,729	1.76
		Total	52,665,155	\$77,194,915	\$1.47

^a Based on U.S. Bureau of Mines figures. All values at the quarry.

^b Dimension stone and stone used for cement and lime not included.

^c Summary of commercial stone production. Figure 3 shows regions and counties.

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TABLE 11 - ILLINOIS COMMON SAND PRODUCTION BY REGIONS, 1968^a

Producing counties and operations ^b		Sand use	Tons	Value	Average per ton
NORTHWEST					
Bureau	Putnam				
Carroll	Rock Island	Paving	1,633,000	\$1,124,000	\$0.69
Henry	Stephenson	Building	1,204,000	1,091,000	0.91
Jo Daviess	Whiteside	All other	2,120,000	1,171,000	0.55
Lee	Winnebago				
Ogle		Total	4,957,000	\$3,386,000	\$0.68
Operations - 28					
WEST					
Adams		Paving	151,000	\$ 104,000	\$0.69
Brown		Building	62,000	66,000	1.06
Fulton		All other	74,000	50,000	0.74
Knox		Total	287,000	\$ 220,000	\$0.77
Operations - 8					
WEST SOUTHWEST					
Bond		Paving	327,000	\$ 326,000	\$1.00
Madison		Building	555,000	549,000	0.99
Pike		All other	72,000	54,000	0.75
Sangamon		Total	954,000	\$ 929,000	\$0.97
Operations - 10					
SOUTHWEST					
Alexander		Paving	193,000	\$ 189,000	\$0.98
Jackson		Building	323,000	315,000	0.98
Randolph		All other	44,000	40,000	0.91
St. Clair		Total	560,000	\$ 544,000	\$0.97
Union					
Operations - 5					
CENTRAL					
De Witt	Mason	Paving	939,000	\$ 786,000	\$0.84
Logan	Peoria	Building	607,000	569,000	0.94
Mc Lean	Tazewell	All other	266,000	214,000	0.80
Macon	Woodford	Total	1,812,000	\$1,569,000	\$0.87
Marshall					
Operations - 30					
NORTHEAST					
Boone	Kendall	Paving	3,211,000	\$3,139,000	\$0.98
Cook	Lake	Building	4,633,000	4,649,000	1.00
De Kalb	La Salle	All other	445,000	345,000	0.78
Du Page	Mc Henry	Total	8,289,000	\$8,133,000	\$0.98
Grundy	Will				
Kane					
Operations - 52					
EAST					
Champaign		Paving	227,000	\$ 223,000	\$0.98
Ford		Building	334,000	307,000	0.92
Kankakee		All other	82,000	39,000	0.48
Livingston		Total	643,000	\$ 569,000	\$0.88
Vermillion					
Operations - 10					
EAST SOUTHEAST					
Clark	Effingham	Paving	348,000	\$ 284,000	\$0.82
Coles	Fayette	Building	147,000	106,000	0.72
Crawford	Lawrence	All other	83,000	47,000	0.57
Cumberland	Shelby	Total	578,000	\$ 437,000	\$0.76
Operations - 17					
SOUTHEAST					
Gallatin		Paving	101,000	\$ 113,000	\$1.12
Massac		Building	326,000	341,000	1.05
Wabash		All other	73,000	47,000	0.64
White		Total	500,000	\$ 501,000	\$1.00
Operations - 10					
STATE TOTALS					
Counties - 61					
Operations - 170		Paving	7,130,000	\$6,288,000	\$0.88
		Building	8,191,000	7,993,000	0.98
		All other	3,259,000	2,007,000	0.62
		Total	18,580,000	\$16,288,000	\$0.88

^a Based on U. S. Bureau of Mines figures. All values at the pit.

^b Summary of commercial sand production. Figure 3 shows regions and counties.

MINERAL PRODUCTION IN ILLINOIS IN 1968

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TABLE 12 - ILLINOIS GRAVEL PRODUCTION BY REGIONS, 1968^a

Producing counties and operations ^b		Gravel use	Tons	Value	Average per ton
NORTHWEST					
Bureau	Putnam				
Carroll	Rock Island	Paving	973,000	\$1,049,000	\$1.08
Henry	Stephenson	Building	918,000	1,004,000	1.09
Jo Daviess	Whiteside	All other	44,000	33,000	0.75
Lee	Winnebago				
Ogle		Total	1,935,000	\$2,086,000	\$1.08
Operations - 35					
WEST					
Adams		Paving	351,000	\$ 556,000	\$1.58
Fulton		Building	—	—	—
Schuyler		All other	—	—	—
Operations - 6		Total	351,000	\$ 556,000	\$1.58
WEST SOUTHWEST					
Bond		Paving	374,000	\$ 624,000	\$1.67
Pike		Building	145,000	178,000	1.23
Sangamon		All other	—	—	—
Operations - 8		Total	519,000	\$ 802,000	\$1.55
SOUTHWEST					
Union ^c		Paving	—	\$ —	\$ —
Operations - 2		Building	—	—	—
		All other	—	—	—
		Total	—	\$ —	\$ —
CENTRAL					
De Witt	Peoria				
Logan	Stark	Paving	2,114,000	\$2,695,000	\$1.27
Mc Lean	Tazewell	Building	617,000	869,000	1.41
Macon	Woodford	All other	175,000	188,000	1.07
Marshall		Total	2,906,000	\$3,752,000	\$1.29
Operations - 45					
NORTHEAST					
Boone	Kendall				
Cook	Lake	Paving	6,002,000	\$6,132,000	\$1.02
De Kalb	La Salle	Building	7,255,000	6,685,000	0.92
Du Page	Mc Henry	All other	1,009,000	728,000	0.72
Grundy	Will				
Kane		Total	14,266,000	\$13,545,000	\$0.95
Operations - 74					
EAST					
Champaign					
Ford		Paving	337,000	\$ 389,000	\$1.15
Iroquois		Building	81,000	114,000	1.41
Livingston		All other	160,000	65,000	0.41
Vermilion		Total	578,000	\$ 568,000	\$0.98
Operations - 21					
EAST SOUTHEAST					
Clark	Fayette	Paving	715,000	\$ 681,000	\$0.95
Coles	Lawrence	Building	98,000	113,000	1.15
Crawford	Moultrie	All other	64,000	41,000	0.64
Cumberland	Shelby	Total	877,000	\$ 835,000	\$0.95
Operations - 17					
SOUTHEAST					
Gallatin		Paving	164,000	\$ 193,000	\$1.18
Massac		Building	30,000	43,000	1.43
Wabash		All other	—	—	—
White		Total	194,000	\$ 236,000	\$1.22
Operations - 8					
STATE TOTALS					
Counties - 55		Paving	11,030,000	\$12,319,000	\$1.12
Operations - 216		Building	9,144,000	9,006,000	0.98
		All other	1,452,000	1,055,000	0.73
		Total	21,626,000	\$22,380,000	\$1.03

^aBased on U. S. Bureau of Mines figures. All values at the pit.

^bSummary of commercial gravel production. Figure 3 shows regions and counties.

^cUnion County combined with Southeast Region.

TABLE 13 - ILLINOIS SILICA SAND PRODUCTION, 1967-1968^a

Silica sand use	1967		1968	
	Tons	Value	Tons	Value
Glass sand	1,999,000	\$ 4,313,000	2,059,000	\$ 4,618,000
Molding sand ^b	1,022,000	3,537,000	1,024,000	3,716,000
Other uses ^b				
Ground silica sand ^{c,d}	804,000	5,045,000	829,000	5,071,000
Total silica sand	3,825,000	\$12,895,000	3,912,000	\$13,405,000

^aBased on U. S. Bureau of Mines figures.

^bBlast, engine, filtration, grinding, oil, other.

^cFor abrasives, ceramics, foundry, filler, chemical.

^dGround silica sand figures not available for publication.

TABLE 14 - PRODUCTION OF ILLINOIS CLAY PRODUCTS, 1967-1968

Clay products reported	1967		1968	
	Amount	Value	Amount	Value
Face brick (number)	166,412,967	\$ 7,859,959	140,838,467	\$ 6,514,301
Common brick (number)	118,463,890	3,567,384	136,249,312	4,608,331
Drain and sewer tile (tons)	194,540	6,912,873	173,296	6,718,642
Lightweight aggregate (tons)	550,000	3,452,943	727,533	3,158,580
Other clay products	---	1,063,769	---	597,080
Clay and silica refractories	---	7,216,777	---	8,874,080
Pottery and whiteware	---	16,040,937	---	23,142,930
Total		\$46,114,642		\$53,613,873

TABLE 15 - FLUORSPAR SHIPPED AND CONSUMED, 1960-1968^a

Year	Fluorspar Shipments			Fluorspar ^b consumed in United States	Illinois shipments as percent of U.S. consumption
	United States	Illinois	Illinois as percent of U.S.		
1960	229,782	134,529	58.5	643,759	20.9
1961	197,354	116,908	59.2	687,940	17.0
1962	206,026	132,830	64.5	652,888	20.3
1963	199,948	132,060	66.1	736,350	17.9
1964	217,137	127,454	58.7	831,561	15.3
1965	240,932	159,140	66.1	930,127	17.1
1966	253,068	176,175	69.6	1,065,124	16.5
1967	295,643	210,207	71.1	1,091,158	19.3
1968	252,411	188,325	74.6	1,243,414	15.1

^aFluorspar figures, in tons, U. S. Bureau of Mines.

^bFluorspar consumed includes domestic and foreign material.

TABLE 16 - ILLINOIS ZINC AND LEAD PRODUCTION, 1960-1968^a

Year ^b	Zinc			Lead		
	Tons	Value	Average per ton	Tons	Value	Average per ton
1960	29,550	\$7,623,900	\$258.00	3,000	\$702,000	\$234.00
1961	26,795	6,162,850	230.00	3,430	706,580	206.00
1962	27,413	6,304,990	230.00	3,610	664,240	184.00
1963	20,337	4,677,510	230.00	2,901	626,616	216.00
1964	13,800	3,753,600	272.00	2,180	571,160	262.00
1965	18,314	5,347,688	292.00	3,005	937,560	312.00
1966	15,192	4,405,680	290.00	2,285	690,756	302.00
1967	20,416	5,652,374	277.00	2,384	667,520	280.00
1968	18,182	4,909,140	270.00	1,467	387,641	264.00

^aBased on U. S. Bureau of Mines figures.

^bMine production of recoverable metal.

TABLE 17 - SUMMARY OF MINERALS PRODUCED BY ILLINOIS COUNTIES, 1968

This table is a convenient reference to the 102 counties of Illinois producing any of 14 mineral products. The numbers show the position held by each county as compared with all counties producing a selected mineral product.

Counties	Cement	Clay products	Coal	Crude oil	Fluorspar	Lead	Lime	Natural bonded molding sand	Common sand	Common gravel	Silica sand	Stone	Tripoli	Zinc
Adams	-	-	24	37	-	-	2	-	45	49	-	15	-	-
Alexander	-	-	-	-	-	-	-	-	34	-	-	-	1	-
Bond	-	-	-	30	-	-	-	-	18	23	-	-	-	-
Boone	-	-	-	-	-	-	-	-	15	11	-	43	-	-
Brown	-	24	-	38	-	-	-	-	60	-	-	59	-	-
Bureau	-	-	-	-	-	-	-	-	1	7	-	-	-	-
Calhoun	-	-	-	-	-	-	-	-	-	-	-	58	-	-
Carroll	-	-	-	-	-	-	-	-	55	54	-	34	-	-
Cass	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Champaign	-	-	-	40	-	-	-	-	12	20	-	-	-	-
Christian	-	-	5	21	-	-	-	-	-	-	-	61	-	-
Clark	-	-	-	22	-	-	-	-	35	28	-	22	-	-
Clay	-	-	-	7	-	-	-	-	-	-	-	46	-	-
Clinton	-	-	-	16	-	-	-	-	-	-	-	50	-	-
Coles	-	-	-	20	-	-	-	-	26	43	-	21	-	-
Cook	-	2	-	-	-	-	1	-	8	14	-	1	-	-
Crawford	-	5	-	8	-	-	-	-	42	19	-	-	-	-
Cumberland	-	-	-	25	-	-	-	-	30	32	-	51	-	-
De Kalb	-	-	-	-	-	-	-	-	27	22	-	38	-	-
De Witt	-	-	-	23	-	-	-	-	53	29	-	-	-	-
Douglas	-	-	15	31	-	-	-	-	-	-	-	-	-	-
Du Page	-	7	-	-	-	-	-	-	19	12	-	7	-	-
Edgar	-	-	-	29	-	-	-	-	-	-	-	-	-	-
Edwards	-	-	-	17	-	-	-	-	-	-	-	-	-	-
Effingham	-	-	-	18	-	-	-	-	52	-	-	-	-	-
Fayette	-	23	-	2	-	-	-	3	50	50	-	40	-	-
Ford	-	-	-	-	-	-	-	-	25	27	-	-	-	-
Franklin	-	-	4	11	-	-	-	-	-	-	-	-	-	-
Fulton	-	-	2	-	-	-	-	-	20	15	-	-	-	-
Gallatin	-	-	13	14	-	-	-	-	17	47	-	-	-	-
Greene	-	12	-	-	-	-	-	-	-	-	-	36	-	-
Grundy	-	9	18	-	-	-	-	-	5	4	-	-	-	-
Hamilton	-	-	-	6	-	-	-	-	-	-	-	-	-	-
Hancock	-	-	-	41	-	-	-	-	-	-	-	28	-	-
Hardin	-	-	-	-	1	1	-	-	-	-	-	8	-	1

(Continued on page 20)

TABLE 17 - Continued

Counties	Cement	Clay products	Coal	Crude oil	Fluorspar	Lead	Lime	Natural bonded molding sand	Common sand	Common gravel	Silica sand	Stone	Tripoli	Zinc
Pulaski	-	19	-	-	-	-	-	-	-	-	-	29	-	-
Putnam	-	-	-	-	-	-	-	-	59	37	-	-	-	-
Randolph	-	-	7	28	-	-	-	-	28	-	-	9	-	-
Richland	-	-	-	10	-	-	-	-	-	-	-	-	-	-
Rock Island	-	-	-	-	-	-	-	2	7	26	-	6	-	-
St. Clair	-	21	3	-	-	-	-	-	16	-	-	2	-	-
Saline	-	-	10	15	-	-	-	-	-	-	-	-	-	-
Sangamon	-	15	-	24	-	-	-	-	11	21	-	-	-	-
Schuyler	-	-	-	-	-	-	-	-	-	42	-	57	-	-
Scott	-	17	-	-	-	-	-	-	-	-	-	47	-	-
Shelby	-	-	-	32	-	-	-	-	44	35	-	55	-	-
Stark	-	-	17	-	-	-	-	-	-	52	-	-	-	-
Stephenson	-	-	-	-	-	-	-	-	39	41	-	25	-	-
Tazewell	-	13	-	-	-	-	-	-	13	13	-	-	-	-
Union	-	-	-	-	-	-	-	-	58	48	-	14	-	-
Vermilion	-	14	14	-	-	-	-	-	49	25	-	10	-	-
Wabash	-	-	-	9	-	-	-	-	32	38	-	-	-	-
Warren	-	8	-	-	-	-	-	-	-	-	-	26	-	-
Washington	-	-	21	19	-	-	-	-	-	-	-	31	-	-
Wayne	-	-	-	3	-	-	-	-	-	-	-	-	-	-
White	-	-	-	1	-	-	-	-	33	36	-	-	-	-
Whiteside	-	-	-	-	-	-	-	-	38	45	-	30	-	-
Will	-	10	16	-	-	-	-	-	4	3	-	3	-	-
Williamson	-	-	6	27	-	-	-	-	-	-	-	-	-	-
Winnebago	-	-	-	-	-	-	-	-	6	9	-	16	-	-
Woodford	-	-	-	-	-	-	-	-	56	24	-	-	-	-

ILLINOIS STATE GEOLOGICAL SURVEY

Urbana, Illinois 61801

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December 16, 1969

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(Chemical Group continued on next page)

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Topographic mapping in cooperation with the
United States Geological Survey.

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