

THE MINERAL INDUSTRY OF KANSAS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Bureau of Mines, U.S. Department of the Interior, and the Kansas Geological Survey for collecting information on all nonfuel minerals.

Kansas ranked 23d among the 50 States in total nonfuel mineral value¹ in 1994, one step up from its ranking of 24th in 1993, according to the U.S. Bureau of Mines. The estimated value for 1994 was \$495 million, a 12% increase compared with that of 1993. This followed a 9% increase in 1993 compared with that of 1992. The State accounted for more than 1% of the U.S. total. Based on value, salt, grade-A helium, and crushed stone were virtually tied as Kansas' leading nonfuel mineral commodities, each accounting for approximately 21% of the State's total nonfuel mineral value. Compared with 1993, the value of the following increased: salt, grade-A helium, crushed stone, portland cement, construction sand and gravel, crude helium, gypsum, common clays, industrial sand and gravel, masonry cement, and pumice. Decreases occurred in the value of dimension stone.

Production of nonfuel minerals in Kansas consisted entirely of industrial minerals; no metals were mined in the State. In estimated mineral production for 1994, Kansas continued as the Nation's leading producer of crude and grade-A helium. The State also remained fifth in salt

production, sixth of the six U.S. pumice producing States, and eighth in gypsum. While not ranking among the top 10 States, Kansas mines and manufacturing plants, nonetheless, produced significant quantities of portland cement, common clays, construction sand and gravel, crushed stone, and dimension stone.

According to the Kansas Geological Survey (KGS), the major development in 1994 in the mineral industry was the passage by the State Legislature of a new law regulating the permitting, mining, and reclamation of nonfuel industrial minerals. Prior regulation of industrial minerals mining had been under the jurisdiction of the respective county governments, culminating in the creation of 105 sets of rules. Before 1994, only fuel minerals were regulated by the State. KGS reported that the new rules were similar to those proposed a few years ago by the aggregate industry, spearheaded by the Kansas Aggregate Producers Association and the Kansas Ready Mix Producers Association. Previous attempts to introduce new laws by the legislature had never moved beyond the committee process. Although details were still being worked out, the

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN KANSAS¹

Mineral	1992		1993		1994 ^P		
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	
Cement:							
Masonry	thousand metric tons	31	\$1,914	35	\$2,408	43	\$2,880
Portland	do.	1,551	79,464	1,383	73,914	1,810	97,000
Clays	do.	544	3,921	² 513	² 1,965	561	3,370
Helium:							
Crude	million cubic meters	W	W	23	20,378	28	27,300
Grade-A	do.	W	W	52	103,949	53	105,000
Salt ³	thousand metric tons	1,852	98,620	2,316	103,019	2,590	105,000
Sand and gravel (construction)	do.	10,867	27,289	⁴ 11,900	⁴ 30,700	13,500	37,100
Stone:							
Crushed ⁴	do.	⁵ 15,331	⁵ 69,600	18,847	90,663	⁵ 21,000	⁵ 104,000
Dimension	metric tons	W	W	24,728	2,539	⁵ 19,100	⁵ 2,330
Combined value of clays [fuller's earth (1993)], gemstones, gypsum (crude), pumice, salt (brine), sand and gravel (industrial), stone [crushed quartzite (1992), crushed sandstone (1993-94), dimension (1992), dimension sandstone (1993)], and values indicated by symbol W							
Total		XX	124,274	XX	12,577	XX	11,900
		XX	405,082	XX	442,112	XX	⁵ 495,000

¹Estimated. ^PPreliminary. W Withheld to avoid disclosing company proprietary data; value included with "Combined value" data. XX Not applicable.

²Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

³Excludes certain clays; kind and value included with "Combined value" figure.

⁴Excludes salts in brines; value included with "Combined value" figure.

⁵Excludes certain stones; kind and value included with "Combined value" figure.

⁶Data do not add to total shown because of independent rounding.

new law would be administered by the State Conservation Commission. In other developments, the crushed stone industry experienced a good year in 1994 due to expanded road construction stemming from increased funding support at both the State and Federal levels. Cullor Limestone Co. a longtime crushed stone producer in eastern Kansas, was

acquired by Ash Grove Aggregates, Inc.

¹The term value means the total monetary value as represented by either mine shipments, mineral commodity sales, or marketable production as is applicable to the individual mineral commodities.

TABLE 2
KANSAS: CRUSHED STONE¹ SOLD OR USED BY PRODUCERS IN 1993, BY USE

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Macadam	45	\$193	\$4.29
Riprap and jetty stone	118	755	6.40
Filter stone	364	1,886	5.18
Other coarse aggregate	69	405	5.87
Coarse aggregate, graded:			
Concrete aggregate, coarse	866	5,221	6.03
Bituminous aggregate, coarse	585	3,717	6.35
Bituminous surface-treatment aggregate	81	484	5.98
Railroad ballast	25	145	5.80
Fine aggregate (-3/8 inch):			
Stone sand, concrete	80	367	4.59
Stone sand, bituminous mix or seal	54	161	2.98
Screening, undesignated	250	755	3.02
Coarse and fine aggregate:			
Graded road base or subbase	1,076	4,904	4.56
Unpaved road surfacing	1,315	5,693	4.33
Crusher run or fill or waste	1,011	5,374	5.32
Other coarse and fine aggregate	W	W	3.16
Other construction materials	1,623	5,954	3.67
Roofing granules	W	W	6.84
Agricultural:			
Agricultural limestone	139	443	3.19
Other agricultural uses	(²)	(²)	6.53
Chemical and metallurgical:			
Cement manufacture	1,816	6,710	3.69
Chemical stone	(²)	(²)	7.72
Special:			
Mine dusting or acid water treatment	(²)	(²)	5.64
Unspecified:³			
Actual	5,990	31,154	5.20
Estimated	3,325	16,246	4.89
Total	18,847	90,663	4.81
Total ^{4, 5}	20,775	90,663	4.36

W Withheld to avoid disclosing company proprietary data; included with "Other construction materials."

¹Includes limestone; excludes sandstone from State total to avoid disclosing company proprietary data.

²Withheld to avoid disclosing company proprietary data; included with "Total."

³Includes production reported without a breakdown by use and estimates for nonrespondents.

⁴One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.

⁵Total shown in thousand short tons and thousand dollars.

TABLE 3
KANSAS: CRUSHED STONE SOLD OR USED, BY KIND

Kind	1991				1993 ¹			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	¹ 116	¹ 14,981	¹ \$66,645	¹ \$4.4	127	18,84	\$90,663	\$4.81
Sandstone and quartzite	⁴	² 261	² 603	² 2.31	—	—	—	—
Total	XX	15,242	³ 67,249	4.41	XX	18,847	90,663	4.81
Total ^{4, 5}	XX	¹ 16,801	67,249	4.00	XX	20,775	90,663	4.36

¹Revised. XX Not applicable.

¹Excludes sandstone from State total to avoid disclosing company proprietary data.

²Excludes quartzite value from State total to avoid disclosing company proprietary data.

³Data do not add to total shown because of independent rounding.

⁴One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.

⁵Total shown in thousand short tons and thousand dollars.

TABLE 4
KANSAS: CRUSHED STONE¹ SOLD OR USED BY PRODUCERS IN 1993, BY USE AND DISTRICT

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction aggregates:						
Coarse aggregate (+1 1/2 inch) ²	180	1,086	W	W	—	—
Coarse aggregate, graded ³		W	W	W	—	—
Fine aggregate (-3/8 inch) ⁴	W	W	W	W	—	—
Coarse and fine aggregate ⁵	1,434	8,028	W	W	48	64
Other construction materials ⁶	841	5,241	1,315	6,925	—	—
Agricultural ⁷	(⁸)	(⁸)	(⁹)	(⁹)	—	—
Chemical and metallurgical ¹⁰	—	—	—	—	—	—
Special ¹¹	(⁸)	(⁸)	—	—	—	—
Other miscellaneous uses	73	247	—	—	—	—
Unspecified: ¹²						
Actual	3,537	19,396	(⁹)	(⁹)	—	—
Estimated	2,249	12,061	—	—	—	—
Total ¹³	8,314	46,060	2,630	12,739	48	64
Total ^{14, 15}	9,165	46,060	2,899	12,739	53	64

See footnotes at end of table.

TABLE 4—Continued
KANSAS: CRUSHED STONE¹ SOLD OR USED BY PRODUCERS IN 1993, BY USE AND DISTRICT

(Thousand metric tons and thousand dollars)

Use	District 5		District 6	
	Quantity	Value	Quantity	Value
Construction aggregates:				
Coarse aggregate (+1 1/2 inch) ²	(⁹)	(⁹)	W	W
Coarse aggregate, graded ³	—	—	W	W
Fine aggregate (-3/8 inch) ⁴	(⁹)	(⁹)	W	W
Coarse and fine aggregate ⁵	(⁹)	(⁹)	1,504	5,231
Other construction materials ⁶	—	—	1,186	5,587
Agricultural ⁷	(⁹)	(⁹)	(⁹)	(⁹)
Chemical and metallurgical ¹⁰	—	—	1,865	6,953
Special ¹¹	—	—	—	—
Other miscellaneous uses	—	—	—	—
Unspecified: ¹²				
Actual	(⁹)	(⁹)	1,090	5,602
Estimated	(⁹)	(⁹)	(⁹)	(⁹)
Total ¹³	1,135	4,275	6,720	27,525
Total ^{14 15}	1,251	4,275	7,408	27,525

W Withheld to avoid disclosing company proprietary data; included with "Other construction materials."

¹Excludes sandstone from State total to avoid disclosing company proprietary data.

²Includes filter stone, macadam, and riprap and jetty stone.

³Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, and railroad ballast.

⁴Includes stone sand (concrete), stone sand (bituminous mix or seal), and screening (undesignated).

⁵Includes graded road base or subbase, unpaved road surfacing, crusher run (select material or fill), and other coarse and fine aggregates.

⁶Includes roofing granules.

⁷Includes agricultural limestone and other agricultural uses.

⁸Withheld to avoid disclosing company proprietary data; included with "Other miscellaneous uses."

⁹Withheld to avoid disclosing company proprietary data; included with "Total."

¹⁰Includes cement manufacture and chemical stone for alkali works.

¹¹Includes mine dusting or acid water treatment, asphalt fillers or extenders, other fillers or extenders, and other specified uses not listed.

¹²Includes production reported without a breakdown by use and estimates for nonrespondents.

¹³Data may not add to totals shown because of independent rounding.

¹⁴One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.

¹⁵Total shown in thousand short tons and thousand dollars.