THE MINERAL INDUSTRY OF IOWA

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 Geological Survey Bureau, Division of Energy and Geological Resources, Iowa Department of Natural Resources, for collecting information on all nonfuel minerals.

In 1995, for the 3d consecutive year, Iowa ranked 26th among the 50 States in total nonfuel mineral production value,[1] according to the U.S. Geological Survey (USGS). The estimated value for 1995 was $484 million, a 7% increase from that of 1994. This followed a 13.5% increase in 1994 (based on final data). The State accounted for more than 1% of the total U.S. nonfuel mineral production value. Crushed stone remained the leading commodity, accounting for more than 45% of the State's total nonfuel mineral value, followed by portland cement with nearly 37% and construction sand and gravel with about 11%. Compared with 1994, the following mineral commodity values increased in 1995: crushed stone, portland cement, crude gypsum, industrial sand and gravel, peat, and gemstones. Decreases occurred in construction sand and gravel, lime, masonry cement, and common clays.

Compared with USGS estimates of quantities produced in the other 49 States, Iowa remained 2d in crude gypsum and rose from 10th to 7th in portland cement. Additionally, significant quantities of crushed stone, construction sand and gravel, masonry cement, dimension stone, common clays, and industrial sand and gravel were produced in the State. No metals were mined in Iowa; all of the State's metal production resulted from the processing of materials acquired from other domestic and foreign sources.

According to the Geological Survey Bureau of the Iowa Department of Natural Resources, Wendling Quarries Inc. of DeWitt, in Clinton County, acquired all of Vulcan Materials Co.'s Iowa properties, most of which were crushed stone operations.

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on the minerals or mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 1995 USGS mineral production data published in this chapter are estimated as of Dec. 1995. Estimates for some commodities, e.g., construction sand and gravel, crushed stone, and portland cement, are periodically updated. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Call MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset and request Document No. 1000 for a telephone listing of all mineral commodity specialists or call USGS information at (703) 648-4000 for the specialist's name and number.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN IOWA[1 2]

Mineral		1993		1994		1995[p]	
		Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Cement (portland)	metric tons	2,300,000	$136,000	2,390,000	$153,000	2,830,000	$181,000
Clays	thousand metric tons	358	1,670	384	1,520	317	1,280
Gemstones		NA	46	NA	50	NA	57
Gypsum (crude)	thousand metric tons	1,990	12,300	2,210	12,700	2,240	12,900
Peat	metric tons	W	W	5,000	W	W	W
Sand and gravel (construction)	thousand metric tons	[e]16,600	[e]64,700	15,300	58,200	14,000	53,900
Stone (crushed)	do.	30,500	169,000	[3]36,600	[3]211,000	[3]37,500	[3]219,000
Combined value of cement (masonry), lime, sand and gravel (industrial), stone [crushed dolomite and miscellaneous (1994-95), dimension], and values indicated by symbol W		XX	13,900	XX	15,400	XX	15,800
Total		XX	398,000	XX	451,000	XX	484,000

[e]Estimated. [p]Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data; values included with "Combined value" data. X X Not applicable.
[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
[2]Data are rounded to three significant digits; may not add to totals shown.
[3]Excludes certain stones; value included with "Combined value" data.

TABLE 2

IOWA: CRUSHED STONE[1] SOLD OR USED BY PRODUCERS IN 1994, BY USE[2]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Macadam	137	$850	$6.20
Riprap and jetty stone	164	1,090	6.66
Filter stone	115	556	4.83
Other coarse aggregate	329	1,900	5.78
Coarse aggregate, graded:			
Concrete aggregate, coarse	1,120	8,060	7.23
Bituminous aggregate, coarse	488	2,950	6.04
Bituminous surface-treatment aggregate	339	1,290	3.81
Railroad ballast	178	1,030	5.81
Other graded coarse aggregate	W	W	5.44
Fine aggregate (-3/8 inch):			
Stone sand, concrete	49	244	4.98
Stone sand, bituminous mix or seal	W	W	7.71
Screening, undesignated	166	588	3.54
Other fine aggregate	39	203	5.21
Coarse and fine aggregates:			
Graded road base or subbase	2,180	12,100	5.55
Unpaved road surfacing	3,000	16,000	5.34
Terrazzo and exposed aggregate	8	51	6.38
Crusher run or fill or waste	221	631	2.86
Other coarse and fine aggregates[3]	1,220	7,180	5.91
Agricultural: Agricultural limestone[4]	1,190	10,600	8.93
Chemical and metallurgical:			
Cement manufacture	2,810	20,100	7.13
Lime manufacture	(5)	(5)	3.95
Flux stone	(5)	(5)	5.94
Glass manufacture	(5)	(5)	10.90
Special:			
Asphalt fillers or extenders	(5)	(5)	13.70
Other fillers or extenders	1	5	5.00
Unspecified:[6]			
Actual	9,360	52,200	5.58
Estimated	12,900	69,300	5.39
Total	36,600	211,000	5.75

W Withheld to avoid disclosing company proprietary data; included with "Other coarse and fine aggregates."
[1]Includes dolomite, limestone, and limestone-dolomite; excludes dolomite value and miscellaneous stone from State total to avoid disclosing company proprietary data.
[2]Data are rounded to three significant digits; may not add to totals shown.
[3]Includes pipe bedding and roofing granules.
[4]Includes poultry grit and mineral food.
[5]Withheld to avoid disclosing company proprietary data; included in "Total."
[6]Includes production reported without a breakdown by end use and estimates for nonrespondents.

TABLE 3

IOWA: CRUSHED STONE SOLD OR USED, BY KIND[1]

Kind	1993				1994			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone[2]	215	30,300	$168,000	$5.54	228	36,600	$211,000	$5.76
Dolomite	1	W	W	4.65	2	33	([3])	([3])
Miscellaneous stone	5	W	W	3.09	([4])	([4])	([4])	([4])
Total	XX	30,500	169,000	5.53	XX	36,600	211,000	5.75

W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.
[1]Data are rounded to three significant digits; may not add to totals shown.
[2]Includes limestone-dolomite, reported with no distinction between the two.
[3]Excludes dolomite value from State total to avoid disclosing company proprietary data.
[4]Excludes miscellaneous stone from State total to avoid disclosing company proprietary data.

TABLE 4

IOWA: CRUSHED STONE[1] SOLD OR USED BY PRODUCERS IN 1994, BY USE AND DISTRICT[2]

(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)[3]	39	([4])	131	687	W	W
Coarse aggregate, graded[5]	27	([4])	563	3,410	W	W
Fine aggregate (-3/8 inch)[6]	6	([4])	69	306	16	W
Coarse and fine aggregate[7]	([4])	([4])	1,680	8,320	543	3,190
Agricultural[8]	([4])	([4])	([4])	([4])	342	([4])
Chemical and metallurgical[9]	—	—	([4])	([4])	—	—
Special[10]	—	—	—	—	—	—
Unspecified:[11]						
Actual	([4])	([4])	1,320	7,820	3,980	([4])
Estimated	—	—	1,820	9,490	—	—
Total	943	6,180	7,480	49,800	4,880	34,200

	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction aggregates:						
Coarse aggregate (+1 1/2 inch)[3]	173	1,040	23	([4])	W	1,330
Coarse aggregate, graded[5]	1,290	7,940	9	([4])	881	W
Fine aggregate (-3/8 inch)[6]	140	532	([4])	([4])	28	W
Coarse and fine aggregate[7]	1,710	8,630	([4])	([4])	2,170	17,100
Agricultural[8]	264	1,850	18	([4])	381	1,960
Chemical and metallurgical[9]	([4])	([4])	—	—	—	—
Special[10]	([4])	([4])	—	—	([4])	([4])
Unspecified:[11]						
Actual	1,650	5,730	583	([4])	([4])	([4])
Estimated	2,410	10,900	7,360	45,900	1,270	3,050
Total	9,400	41,600	8,130	51,000	5,800	28,000

W Withheld to avoid disclosing company proprietary data; included with "Coarse and fine aggregate."
[1]Excludes dolomite value and miscellaneous stone from State total to avoid disclosing company proprietary data.
[2]Data are rounded to three significant digits; may not add to totals shown.
[3]Includes filter stone, macadam, riprap and jetty stone, and other coarse aggregate.
[4]Withheld to avoid disclosing company proprietary data; included in "Total."
[5]Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and other graded coarse aggregate.
[6]Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregate.
[7]Includes graded road base or subbase, terrazzo and exposed aggregate, unpaved road surfacing, crusher run (select material or fill), other coarse and fine aggregates, pipe bedding, and roofing granules.
[8]Includes agricultural limestone, and poultry grit and mineral food.
[9]Includes cement manufacture, flux stone, glass manufacture, and lime manufacture.
[10]Includes asphalt fillers or extenders, and other fillers or extenders.
[11]Includes production reported without a breakdown by end use and estimates for nonrespondents.

TABLE 5

IOWA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1994, BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Value per ton
Concrete aggregate (including concrete sand)	4,240	$17,600	$4.16
Plaster and gunite sands	104	484	4.65
Concrete products (blocks, brick, pipe, decorative, etc.)	138	464	3.36
Asphaltic concrete aggregates and other bituminous mixtures	744	3,010	4.04
Road base and coverings[2]	3,080	8,060	2.62
Fill	1,850	6,220	3.36
Snow and ice control	197	697	3.54
Other[3]	48	376	7.83
Unspecified:[4]			
Actual	2,810	13,900	4.93
Estimated	2,130	7,420	3.49
Total or average	15,300	58,200	3.80

[1]Data are rounded to three significant digits; may not add to totals shown.
[2]Includes road and other stabilization (cement and lime).
[3]Includes filtration, railroad ballast, and roofing granules.
[4]Includes production reported without a breakdown by end use and estimates for nonrespondents.

TABLE 6

IOWA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1994, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	676	2,240	691	2,820	1,520	6,430
Asphaltic concrete aggregates and road base materials[3]	1,470	4,130	1,050	2,520	2,200	7,560
Snow and ice control	57	126	42	150	66	271
Railroad ballast	1	3	—	—	—	—
Other miscellaneous uses[4]	4	34	17	205	4	24
Unspecified:[5]						
Actual	758	4,470	167	814	1,170	5,240
Estimated	1,360	4,450	49	195	606	2,310
Total	4,330	15,400	2,010	6,700	5,560	21,800
	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	745	3,090	W	W	W	W
Asphaltic concrete aggregates and road base materials[3]	242	672	281	935	431	1,470
Snow and ice control	14	55	W	W	W	W
Railroad ballast	—	—	—	—	—	—
Other miscellaneous uses[4]	11	54	—	—	12	59
Unspecified:[5]						
Actual	378	1,580	50	202	295	1,560
Estimated	110	464	1	6	—	—
Total	1,500	5,920	459	1,650	1,480	6,680

W Withheld to avoid disclosing company proprietary data; included in "Total."
[1]Data are rounded to three significant digits; may not add to totals shown.
[2]Includes plaster and gunite sands.
[3]Includes fill, and road and other stabilization (cement and lime).
[4]Includes filtration.
[5]Includes production reported without a breakdown by end use and estimates for nonrespondents.

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