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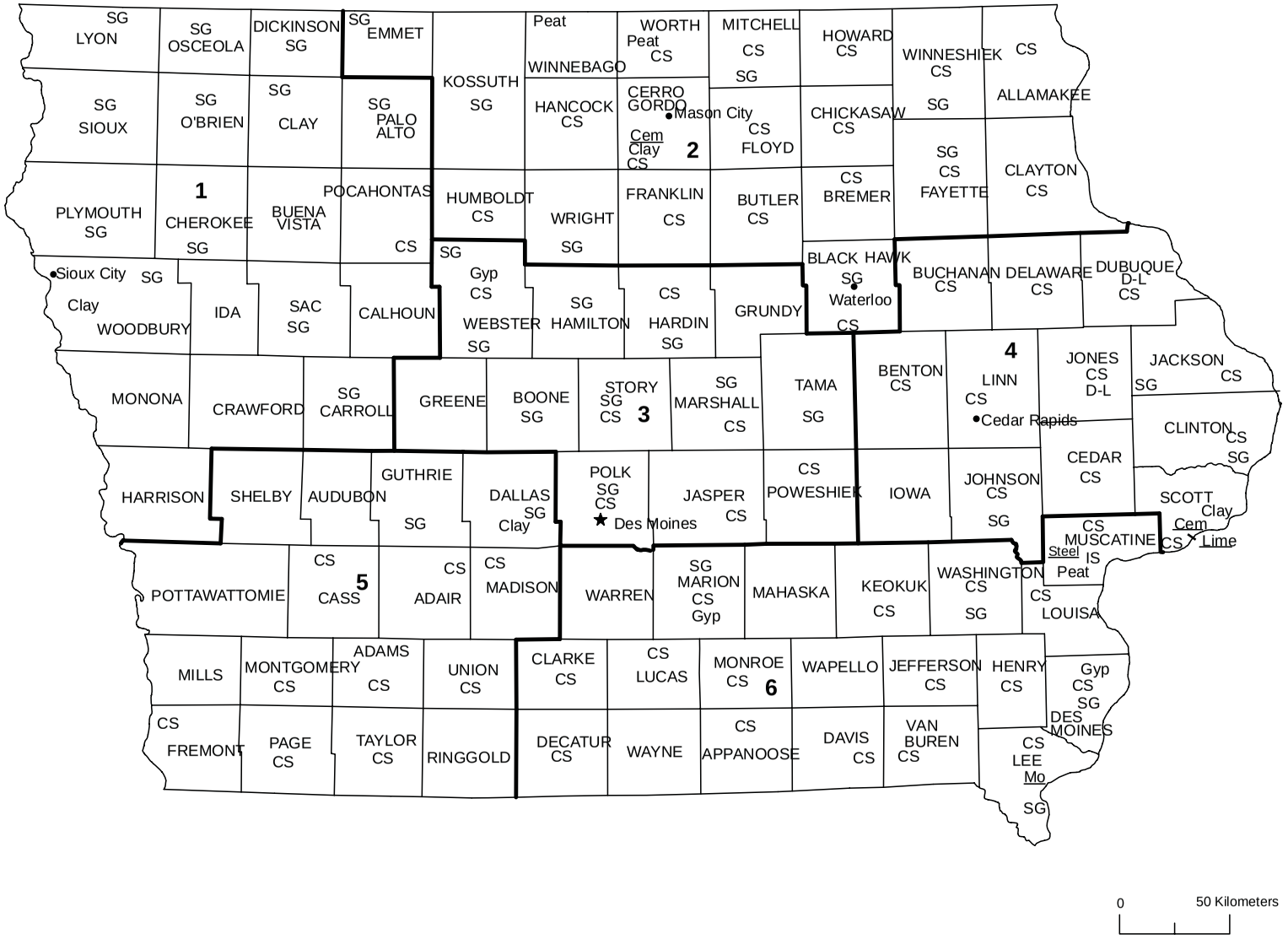
2005 Minerals Yearbook

IOWA

U.S. Department of the Interior
U.S. Geological Survey

August 2007

IOWA



LEGEND

- County boundary
- Capital
- City
- 1 — Crushed stone/sand and gravel districts

MINERAL SYMBOLS (Major producing areas)

Cem	Cement plant
Clay	Common clay
CS	Crushed stone
D-L	Dimension limestone
Gyp	Gypsum
IS	Industrial sand
Lime	Lime plant
Mo	Molybdenum plant
Peat	Peat
SG	Construction sand and gravel
Steel	Steel plant

Source: Iowa Geological Survey and Land Quality Bureau/U.S. Geological Survey (2005)

THE MINERAL INDUSTRY OF IOWA

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Iowa Geological Survey and Land Quality Bureau for collecting information on all nonfuel minerals.

In 2005, Iowa's nonfuel raw mineral production was valued[1] at $641 million, a 20%, or a $107 million, increase from that of 2004, based upon annual U.S. Geological Survey data. This followed a 6% increase in the State's total nonfuel mineral production value for 2004 from that of 2003, which was up more than 3% from that of 2002. The State was 29th in rank (28th in 2004) among the 50 States in total nonfuel mineral production value and accounted for more than 1% of the U.S. total. Yet, per capita, the State ranked 15th in the Nation in its minerals industry's value of nonfuel mineral production; with a population of close to 3 million, the value of production was nearly $220 per capita.

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the 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 2005 USGS mineral production data published in this chapter are those available as of December 2006. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at URL http://minerals.usgs.gov/minerals.

Cement (portland and masonry), crushed stone, construction sand and gravel, and gypsum (in descending order of value) were Iowa's leading nonfuel mineral commodities in 2005, accounting for nearly 97% of the State's total nonfuel mineral value. In 2005, most of the State's mineral commodities showed increases in production with the related increased values of cement, crushed stone (up $32 million), construction sand and gravel (up about $19 million), and gypsum, in descending order of change, leading the way. With a near doubling of production, the value of common clays more than quadrupled that of 2004 (table 1). Lime production and value also increased. Peat and industrial sand and gravel values decreased slightly and gemstones remained the same.

In 2005, Iowa rose to 2d from 4th in the quantities of gypsum produced and was 12th in portland cement production. Additionally, the State continued to be a significant producer of crushed stone, construction sand and gravel, and common clays (descending order of value). No metals were mined in Iowa; the State's metal production, including molybdenum and raw steel, resulted from the processing of materials acquired from other domestic and foreign sources.

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

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2003		2004		2005	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common	256	763	325	1,150	630	4,740
Gemstones	NA	2	NA	2	NA	2
Sand and gravel, construction	13,400	61,000	17,100	74,300	19,900	93,100
Stone, crushed	35,600	207,000	35,800 r	219,000 r	34,500	251,000
Combined values of cement, gypsum (crude), lime, peat, sand and gravel (industrial)	XX	235,000	XX	239,000	XX	292,000
Total	XX	504,000	XX	534,000 r	XX	641,000

rRevised. NA Not available. XX Not applicable.
[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
[2]Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 2
IOWA: CRUSHED STONE SOLD OR USED, BY KIND[1]

Kind	2004			2005		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Limestone[2]	159	33,800	$206,000	164	32,600	$237,000
Dolomite	37	1,990	13,000	34	1,940	14,200
Total	XX	35,800 r	219,000 r	XX	34,500	251,000

rRevised. XX Not applicable.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes limestone-dolomite reported with no distinction between the two.

TABLE 3
IOWA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2005, BY USE[1]

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Macadam	146	927
Riprap and jetty stone	91	1,070
Filter stone	245	2,290
Other coarse aggregates	197	953
Total	679	5,240
Coarse aggregate, graded:		
Concrete aggregate, coarse	1,040	9,910
Bituminous aggregate, coarse	390	3,050
Bituminous surface-treatment aggregate	164	1,250
Railroad ballast	W	W
Other graded coarse aggregates	126	818
Total	1,720	15,000
Fine aggregate (-⅜ inch):		
Stone sand, concrete	(2)	(2)
Stone sand, bituminous mix or seal	172	1,220
Screening, undesignated	182	734
Other fine aggregates	71	581
Total	425	2,540
Coarse and fine aggregates:		
Graded road base or subbase	1,440	10,700
Unpaved road surfacing	2,950	19,300
Terrazzo and exposed aggregate	(3)	(3)
Crusher run or fill or waste	174	628
Roofing granules	(3)	(3)
Other coarse and fine aggregates	746	5,450
Total	5,420	37,400
Other construction materials	144	1,180
Agricultural:		
Limestone	500	2,450
Poultry grit and mineral food	(3)	(3)
Other agricultural uses	(3)	(3)
Total	931	8,270
Chemical and metallurgical:		
Lime manufacture	(3)	(3)
Flux stone	(3)	(3)
Glass manufacture	(3)	(3)
Total	1,140	6,980
Special, asphalt fillers or extenders	(4)	(4)
Other miscellaneous uses and specified uses not listed	67	216
Unspecified:[5]		
Reported	15,300	111,000
Estimated	8,600	63,000
Total	24,000	174,000
Grand total	34,500	251,000

W Withheld to avoid disclosing company proprietary data; included with "Other graded coarse aggregate."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Withheld to avoid disclosing company proprietary data; included with "Other fine aggregate."
[3]Withheld to avoid disclosing company proprietary data; included in "Total."
[4]Withheld to avoid disclosing company proprietary data; included in "Unspecified: Reported."
[5]Reported and estimated production without a breakdown by end use.

TABLE 4
IOWA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2005, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3		District 4	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch)[2]	--	--	157	1,010	W	W	W	W
Coarse aggregate, graded[3]	--	--	W	W	W	W	943	9,050
Fine aggregate (-⅜ inch)[4]	--	--	W	W	--	--	W	W
Coarse and fine aggregate[5]	--	--	W	W	W	W	W	W
Other construction materials	--	--	144	1,180	--	--	--	--
Agricultural[6]	--	--	W	W	W	W	W	W
Chemical and metallurgical[7]	--	--	--	--	--	--	W	W
Special[8]	--	--	--	--	--	--	W	W
Other miscellaneous uses	--	--	--	--	--	--	67	216
Unspecified:[9]								
Reported	1,440	10,300	3,240	23,200	2,690	19,300	4,570	33,300
Estimated	--	--	4,000	30,000	--	--	1,400	10,000
Total	1,440	10,300	9,910	69,200	3,370	26,300	10,600	78,200

	District 5		District 6		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch)[2]	--	--	W	W	41	215
Coarse aggregate, graded[3]	--	--	W	W	24	191
Fine aggregate (-⅜ inch)[4]	--	--	W	W	84	584
Coarse and fine aggregates[5]	--	--	1,490	10,900	499	3,650
Other construction materials	--	--	--	--	--	--
Agricultural[6]	--	--	W	W	28	137
Chemical and metallurgical[7]	--	--	--	--	--	--
Special[8]	--	--	--	--	--	--
Other miscellaneous uses	--	--	--	--	--	--
Unspecified:[9]						
Reported	1,080	7,740	2,310	16,700	--	--
Estimated	2,500	18,000	712	5,200	--	--
Total	3,580	26,000	4,950	36,000	677	4,780

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes filter stone, macadam, riprap and jetty stone, and other coarse aggregate.

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

[4]Includes screening (undesignated), stone sand (bituminous mix or seal), stone sand (concrete), and other fine aggregate.

[5]Includes crusher run or fill or waste, graded road base or subbase, roofing granules, terrazzo exposed aggregate, unpaved road surfacing, and other coarse and fine aggregates.

[6]Includes agricultural limestone, poultry grit and mineral food, and other agricultural uses.

[7]Includes lime and glass manufacture and flux stone.

[8]Includes asphalt fillers or extenders.

[9]Reported and estimated production without a breakdown by end use.

TABLE 5
IOWA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2005,
BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	2,090	$11,500	$5.51
Plaster and gunite sands	84	575	6.84
Concrete products (blocks, bricks, pipe, decorative, etc.)	25	166	6.73
Asphaltic concrete aggregates and other bituminous mixtures	170	659	3.88
Road base and coverings[2]	1,770	4,920	2.78
Fill	613	2,150	3.50
Snow and ice control	39	141	3.57
Other miscellaneous uses[3]	40	473	11.71
Unspecified:[4]			
Reported	9,720	47,900	4.93
Estimated	5,310	24,600	4.63
Total or average	19,900	93,100	4.69

[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Includes road and other stabilization (lime).
[3]Includes roofing granules.
[4]Reported and estimated production without a breakdown by end use.

TABLE 6

IOWA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2005, BY USE AND DISTRICT[1, 2]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		Districts 3 and 5	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate (including concrete sand)	466	2,560	537	2,460	165	1,060
Concrete products (blocks, bricks, pipe, decorative, etc.) [3]	W	W	W	W	11	38
Asphaltic concrete aggregates and other bituminous mixtures	--	--	126	556	44	102
Road base and coverings [4]	839	2,410	766	1,850	100	381
Fill	62	198	96	432	183	718
Snow and ice control	19	60	13	52	W	W
Other miscellaneous uses [5]	17	145	76	590	10	96
Unspecified: [6]						
Reported	2,190	11,000	7	58	6,740	33,300
Estimated	3,280	15,200	522	2,420	753	3,480
Total	6,870	31,500	2,140	8,410	8,000	39,100

Use	District 4		District 6		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate (including concrete sand)	560	3,730	366	1,730	--	--
Concrete products (blocks, bricks, pipe, decorative, etc.) [3]	39	354	--	--	--	--
Asphaltic concrete aggregates and other bituminous mixtures	--	--	--	--	--	--
Road base and coverings [4]	W	W	W	W	59	243
Fill	184	562	88	237	--	--
Snow and ice control	W	W	--	--	--	--
Other miscellaneous uses [5]	6	37	1	15	--	--
Unspecified: [6]						
Reported	456	1,960	326	1,620	--	--
Estimated	161	746	596	2,760	--	--
Total	1,410	7,390	1,380	6,360	59	243

W Withheld to avoid disclosing company proprietary data; included in "Other miscellaneous uses." -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Districts 3 and 5 are combined to avoid disclosing company proprietary data.

[3]Includes plaster and gunite sands.

[4]Includes road and other stabilization (lime).

[5]Includes roofing granules.

[6]Reported and estimated production without a breakdown by end use.