



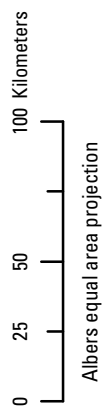
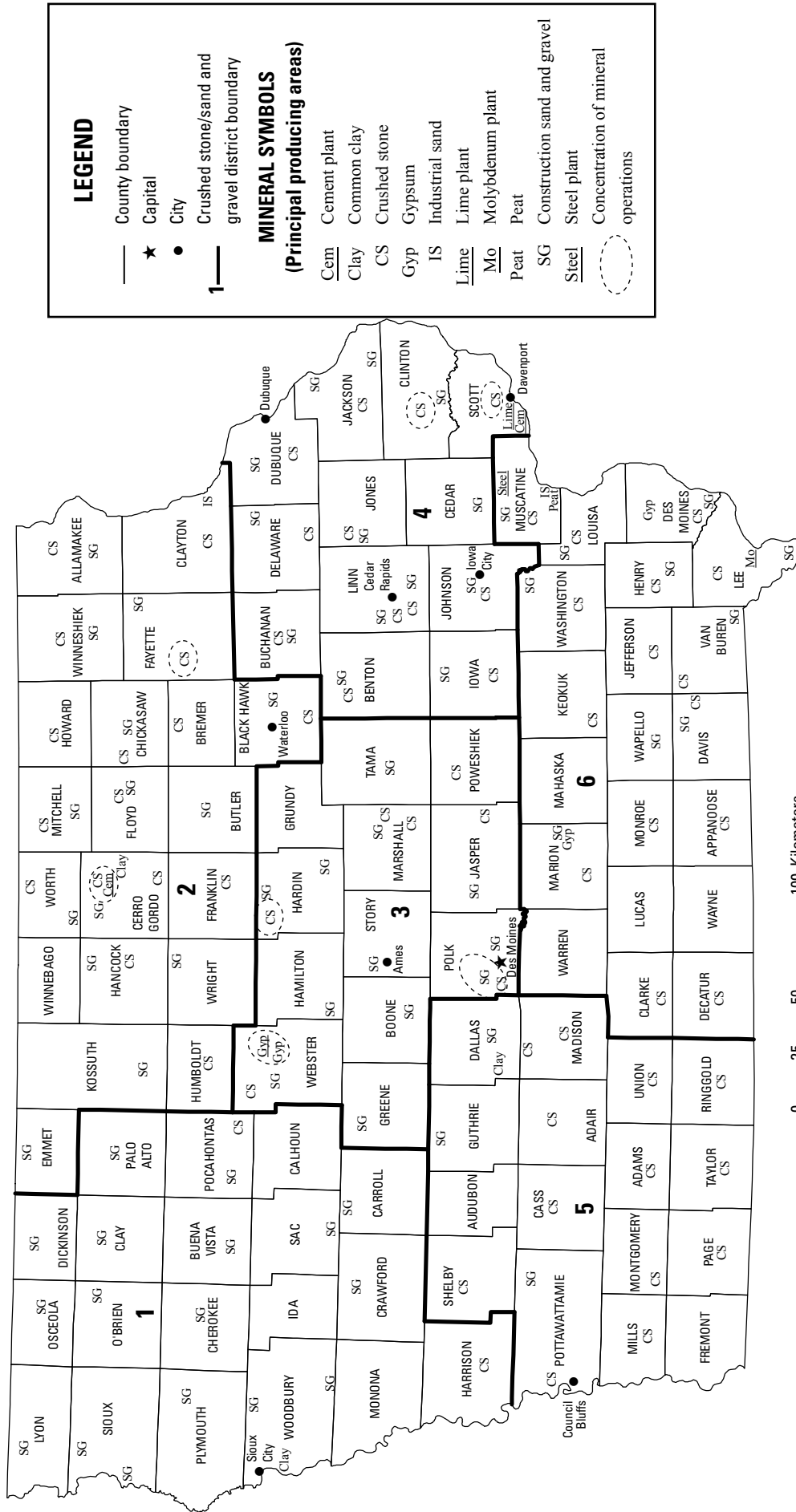
# 2010–2011 Minerals Yearbook

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IOWA

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# IOWA



Source: Iowa Geological Survey and Land Quality Bureau/U.S. Geological Survey (2010–11).

# 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 2011, Iowa's nonfuel mineral production<sup>1</sup> was valued at \$653 million, based upon annual U.S. Geological Survey data. This was a \$68 million (almost 12%) increase in the State's total nonfuel mineral production value from a total of \$585 million in 2010, which followed a \$50 million decrease (8%) from a total of \$635 million in 2009. The State remained 31st in rank in both 2010 and 2011 among the 50 States in total nonfuel mineral production value and accounted for almost 0.9% of the U.S. total. On a per capita basis, Iowa ranked 16th in the Nation with a value of \$213, somewhat below the national average of \$240.

Crushed stone, portland cement, construction sand and gravel, lime, and crude gypsum (in descending order of value) remained Iowa's leading nonfuel mineral commodities in 2011, accounting for more than 99% of the State's total nonfuel mineral production. The production values of crushed stone, portland cement, and construction sand and gravel increased in 2011 after decreasing in 2010. In 2011, the production value of construction sand and gravel increased by \$17 million (almost 20%). In 2011, industrial sand and gravel had the largest increase in production value, by 45%, and production quantity, by 40%, following increases in 2010 of almost 10% and 20%, respectively. Lime increased by more than 25% in both production value and quantity produced in 2010, with smaller increases of 15% and 5% in 2011, respectively (actual values withheld for industrial sand and gravel and lime—company proprietary data). In 2010, common clay production

value remained virtually unchanged at \$827,000, despite a 9% increase in the quantity produced. In 2011, common clay saw a \$35 million (4%) increase in production value, with a decrease in production of more than 9%.

In 2011, production value of portland cement increased by 5% and the quantity produced increased by 10%, whereas in 2010, portland cement had the largest decrease of more than 20% in production value and more than 15% in the quantity produced (actual values withheld—company proprietary data). Gypsum decreased in production value by 5% in 2011 following a 50% decrease in 2010 (actual values withheld—company proprietary data).

From 2009 to 2011, the State rose in rank from 31st to 13th to 11th in industrial sand and gravel production among 33 producing States, because of the increased demand for hydraulic fracturing sand (frac sand). From 2009 to 2010, the State rose from 10th to 9th in peat production, then dropped to 12th in 2011 out of 13 producing States. Iowa declined to 3d from 2d in crude gypsum production among 19 producing States in 2010, and from 3d to 4th among 17 producing States in 2011. This is the first time since 2005 that Iowa ranked lower than second for gypsum production. In 2011, Iowa ranked in the top 20 producing States for gypsum, construction sand and gravel, lime, and crushed stone.

No metal ores were mined in Iowa; the State's metal production, including molybdenum and steel, came from the processing of materials acquired from other domestic and foreign sources. Secondary molybdenum products were produced at a plant in Fort Madison, Lee County, by Climax Molybdenum Co. (a subsidiary of Freeport-McMoRan Copper & Gold Inc.). Steel and steel products were produced at a steel mill outside of Wilton, Muscatine County, by Gerdau Ameristeel Corp. (part of the Gerdau Corp.), and at a mill, also in Muscatine County, by Ipsco Steel Inc. The State had many foundries and recyclers of iron and steel scrap, particularly in Lee and Scott Counties.

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<sup>1</sup>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 USGS mineral production data published in this chapter are those available as of May 2013. Data in this report are rounded to three significant digits and percentages are calculated from unrounded data. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at <http://minerals.usgs.gov/minerals>.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN IOWA<sup>1,2</sup>  
(Thousand metric tons and thousand dollars)

Mineral	2009			2010			2011		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Clays, common	184	828	201	827	182	862			
Gemstones, natural	NA	3	NA	3	NA	3			
Gypsum, crude	W <sup>r</sup>	W <sup>r</sup>	W	W	W	W			
Peat	W	W	W	W	W	5			
Sand and gravel, construction	13,600	87,800 <sup>r</sup>	13,700	84,400	15,000	101,000			
Stone, crushed	32,700 <sup>r</sup>	298,000 <sup>r</sup>	32,000	289,000	32,100	311,000			
Combined values of cement, lime, sand and gravel (industrial), and values indicated by symbol W	XX	248,000 <sup>r</sup>	XX	211,000	XX	240,000			
Total	XX	635,000 <sup>r</sup>	XX	585,000	XX	653,000			

<sup>r</sup>Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. Withheld values included in "Combined values" data.

XX Not applicable.

<sup>1</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers). Includes cement and molybdenum concentrate processing.

TABLE 2  
IOWA: CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE<sup>1</sup>

Type	2009			2010			2011		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	
Limestone <sup>2</sup>	215 <sup>r</sup>	32,700 <sup>r</sup>	\$298,000 <sup>r</sup>	\$9.13	209	31,700	\$286,000	\$9.02	
Dolomite	--	--	--	--	1	279	2,660	9.51	
Miscellaneous stone	2	37	270	7.23	--	--	--	--	
Total or average	XX	32,700 <sup>r</sup>	298,000 <sup>r</sup>	9.13	XX	32,000	289,000	9.02	
					XX	32,100	311,000	9.69	

<sup>r</sup>Revised. XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Includes limestone-dolomite reported with no distinction between the two kinds of stone.

TABLE 3  
IOWA: CRUSHED STONE SOLD OR USED BY PRODUCERS  
IN 2010, BY USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
<b>Construction:</b>		
Coarse aggregate (+1½ inch):		
Macadam	171	1,660
Riprap and jetty stone	304	5,530
Filter stone	228	2,690
Other coarse aggregate	334	3,480
Coarse aggregate, graded:		
Concrete aggregate, coarse	964	10,900
Bituminous aggregate, coarse	339	3,890
Bituminous surface-treatment aggregate	119	1,270
Railroad ballast	W	W
Other graded coarse aggregate	171	1,630
Fine aggregate (-¾ inch):		
Stone sand, concrete	W	W
Stone sand, bituminous mix or seal	262	4,920
Screening, undesignated	225	1,040
Other fine aggregate	W	W
Coarse and fine aggregates:		
Graded road base or subbase	3,050	31,700
Unpaved road surface	3,260	27,000
Crusher run or fill or waste	113	475
Roofing granules	W	W
Other coarse and fine aggregates	711	3,220
Other construction materials	W	W
<b>Agricultural:</b>		
Agricultural, limestone	822	5,080
Other agricultural uses	W	W
<b>Chemical and metallurgical:</b>		
Cement manufacture	490	1,080
Lime manufacture	W	W
Flux stone	W	W
Glass manufacture	W	W
Special, asphalt filler or extenders	W	W
Other miscellaneous uses and specified uses not listed	W	W
<b>Unspecified:<sup>2</sup></b>		
Reported	9,440	89,800
Estimated	9,440	82,200
<b>Total</b>	<b>32,000</b>	<b>289,000</b>

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

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Reported and estimated production without a breakdown by end use.

TABLE 4  
IOWA: CRUSHED STONE SOLD OR USED BY PRODUCERS  
IN 2011, BY USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
<b>Construction:</b>		
Coarse aggregate (+1½ inch):		
Macadam	168	1,730
Riprap and jetty stone	153	2,540
Filter stone	140	1,770
Unspecified coarse aggregate	83	821
Coarse aggregate, graded:		
Concrete aggregate, coarse	1,440	15,900
Bituminous aggregate, coarse	151	1,840
Bituminous surface-treatment aggregate	155	1,610
Railroad ballast	W	W
Fine aggregate (-¾ inch):		
Stone sand, concrete	127	1,440
Stone sand, bituminous mix or seal	151	849
Screening, undesignated	284	1,390
Unspecified fine aggregate	W	W
Coarse and fine aggregates:		
Graded road base or subbase	1,410	11,800
Unpaved road surface	2,640	22,900
Crusher run or fill or waste	205	1,370
Roofing granules	W	W
Unspecified coarse and fine aggregates	705	7,670
Unspecified and other construction materials	W	W
<b>Agricultural:</b>		
Agricultural, limestone	718	4,970
Poultry grit and mineral food	W	W
Unspecified and other agricultural uses	W	W
<b>Chemical and metallurgical:</b>		
Cement manufacture	674	1,490
Lime manufacture	W	W
Flux stone	W	W
Glass manufacture	W	W
Special asphalt fillers or extenders	W	W
Other miscellaneous uses and specified uses not listed	106	1,970
<b>Unspecified:<sup>2</sup></b>		
Reported	10,100	98,600
Estimated	11,200	113,000
<b>Total</b>	<b>32,100</b>	<b>311,000</b>

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

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Reported and estimated production without a breakdown by end use.

TABLE 5  
IOWA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2010, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	2	58	W	W	W	W
Coarse aggregate, graded <sup>3</sup>	--	--	W	W	W	W
Fine aggregate (-¾ inch) <sup>4</sup>	--	--	W	W	--	--
Coarse and fine aggregates <sup>5</sup>	1	4	1,490	11,100	--	--
Other construction materials	--	--	W	W	--	--
Agricultural <sup>6</sup>	9	29	152	823	W	W
Chemical and metallurgical <sup>7</sup>	--	--	490	1,080	--	--
Special <sup>8</sup>	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--	--	--	--	--
Unspecified: <sup>10</sup>						
Reported	417	3,940	1,860	17,600	4,890	46,800
Estimated	--	--	2,920	27,800	379	4,880
Total <sup>11</sup>	429	4,030	7,870	66,800	5,390	52,600
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	W	W	321	5,460	215	2,710
Coarse aggregate, graded <sup>3</sup>	617	6,970	199	2,810	237	2,340
Fine aggregate (-¾ inch) <sup>4</sup>	W	W	126	1,620	78	3,090
Coarse and fine aggregates <sup>5</sup>	1,470	11,600	1,510	16,500	2,470	22,900
Other construction materials	W	W	--	--	--	--
Agricultural <sup>6</sup>	191	2,240	277	2,210	205	1,110
Chemical and metallurgical <sup>7</sup>	W	W	--	--	--	--
Special <sup>8</sup>	W	W	--	--	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	W	W	--	--	--	--
Unspecified: <sup>10</sup>						
Reported	358	3,380	619	5,850	1,240	11,800
Estimated	4,900	37,800	315	2,990	924	8,790
Total <sup>11</sup>	9,020	75,500	3,370	37,500	5,370	52,700
Use	Unspecified districts					
	Quantity	Value				
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	9	170				
Coarse aggregate, graded <sup>3</sup>	43	495				
Fine aggregate (-¾ inch) <sup>4</sup>	22	100				
Coarse and fine aggregates <sup>5</sup>	256	1,160				
Other construction materials	--	--				
Agricultural <sup>6</sup>	13	82				
Chemical and metallurgical <sup>7</sup>	--	--				
Special <sup>8</sup>	--	--				
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--				
Unspecified: <sup>10</sup>						
Reported	55	519				
Estimated	--	--				
Total <sup>11</sup>	398	2,520				

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

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes macadam, riprap and jetty stone, filter stone, and other coarse aggregates.

<sup>3</sup>Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and other graded coarse aggregates.

<sup>4</sup>Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregate.

<sup>5</sup>Includes graded road base or subbase, unpaved road surface, crusher run, roofing granules, and other coarse and fine aggregates.

<sup>6</sup>Includes agricultural limestone and other agricultural uses.

<sup>7</sup>Includes cement manufacture, lime manufacture, flux stone, and glass manufacture.

<sup>8</sup>Includes mine dusting or acid water treatment, whitening or whitening substance, and other fillers or extenders.

<sup>9</sup>Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.

<sup>10</sup>Reported and estimated production without a breakdown by end use.

<sup>11</sup>District totals may not add up to the published State total, owing to revisions made after the production of the table and (or) proprietary data being withheld.

TABLE 6  
IOWA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2011, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	--	--	118	1,242	W	W
Coarse aggregate, graded <sup>3</sup>	--	--	876	9,029	--	--
Fine aggregate (-¾ inch) <sup>4</sup>	--	--	258	1,729	--	--
Coarse and fine aggregates <sup>5</sup>	--	--	2,109	15,925	W	W
Other construction materials	--	--	W	W	--	--
Agricultural <sup>6</sup>	--	--	390	2,196	W	W
Chemical and metallurgical <sup>7</sup>	--	--	W	W	--	--
Special <sup>8</sup>	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--	W	W	--	--
Unspecified: <sup>10</sup>						
Reported	373	3,639	2,235	21,831	4,645	45,367
Estimated	11	91	1,443	14,090	--	--
Total	384	3,729	8,311	69,486	5,216	52,497
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	W	W	--	--	197	2,707
Coarse aggregate, graded <sup>3</sup>	680	7,820	--	--	W	W
Fine aggregate (-¾ inch) <sup>4</sup>	157	1,044	--	--	W	W
Coarse and fine aggregates <sup>5</sup>	879	8,412	--	--	1,626	16,047
Other construction materials	W	W	--	--	--	--
Agricultural <sup>6</sup>	W	W	--	--	158	884
Chemical and metallurgical <sup>7</sup>	W	W	--	--	--	--
Special <sup>8</sup>	W	W	--	--	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	W	W	--	--	--	--
Unspecified: <sup>10</sup>						
Reported	812	7,803	745	7,277	1,188	11,600
Estimated	5,428	49,938	2,762	31,960	1,591	16,594
Total	9,099	89,660	3,507	39,237	4,964	50,229
Use	Unspecified districts					
	Quantity	Value				
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	2	42				
Coarse aggregate, graded <sup>3</sup>	47	575				
Fine aggregate (-¾ inch) <sup>4</sup>	90	436				
Coarse and fine aggregates <sup>5</sup>	373	4,054				
Other construction materials	--	--				
Agricultural <sup>6</sup>	32	235				
Chemical and metallurgical <sup>7</sup>	--	--				
Special <sup>8</sup>	--	--				
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--				
Unspecified: <sup>10</sup>						
Reported	111	1,110				
Estimated	--	--				
Total	656	6,452				

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

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes macadam, riprap and jetty stone, filter stone, and other coarse aggregates.

<sup>3</sup>Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and other graded coarse aggregates.

<sup>4</sup>Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregate.

<sup>5</sup>Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, roofing granules, and other coarse and fine aggregates.

<sup>6</sup>Includes agricultural limestone, poultry grit and mineral food, and other agricultural uses.

<sup>7</sup>Includes cement manufacture, lime manufacture, dead-burned dolomite manufacture, flux stone, chemical stone, glass manufacture, and sulfur oxide removal.

<sup>8</sup>Includes mine dusting or acid water treatment, whitening or whitening substance, and other fillers or extenders.

<sup>9</sup>Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.

<sup>10</sup>Reported and estimated production without a breakdown by end use.



TABLE 7  
IOWA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2010,  
BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	2,340	\$16,700	\$7.14
Plaster and gunitite sands	42	284	6.76
Concrete products (blocks, bricks, pipe, decorative, etc.)	76	1,020	13.43
Asphaltic concrete aggregates and other bituminous mixtures	188	1,050	5.61
Road base and coverings <sup>2</sup>	1,840	7,030	3.81
Fill	472	1,980	4.20
Snow and ice control	33	341	10.33
Other miscellaneous uses <sup>3</sup>	75	853	11.37
Unspecified: <sup>4</sup>			
Reported	5,440	35,500	6.52
Estimated	3,250	20,100	6.19
Total or average	13,700	84,400	6.17

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Includes road and other stabilization (lime and cement).

<sup>3</sup>Includes railroad ballast.

<sup>4</sup>Reported and estimated production without a breakdown by end use.

TABLE 8  
IOWA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2011,  
BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	3,350	\$23,200	\$6.93
Plaster and gunitite sands	87	315	3.62
Concrete products (blocks, bricks, pipe, decorative, etc.)	10	198	19.80
Asphaltic concrete aggregates and other bituminous mixtures	151	933	6.18
Road base and coverings <sup>2</sup>	2,170	10,400	4.79
Fill	510	2,590	5.08
Snow and ice control	34	282	8.29
Other miscellaneous uses <sup>3</sup>	77	1,300	16.88
Unspecified: <sup>4</sup>			
Reported	5,490	39,900	7.27
Estimated	3,090	21,700	7.02
Total or average	15,000	101,000	6.73

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Includes road and other stabilization (lime).

<sup>3</sup>Includes railroad ballast.

<sup>4</sup>Reported and estimated production without a breakdown by end use.

TABLE 9  
IOWA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2010, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		Districts 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate (including concrete sand)	522	3,520	663	4,580	218	1,550
Concrete products (blocks, bricks, pipe, decorative, etc.) <sup>2</sup>	W	W	W	W	1	13
Asphaltic concrete aggregates and road base materials <sup>3</sup>	897	3,480	649	1,920	W	W
Fill	172	644	42	191	98	451
Other miscellaneous uses <sup>4</sup>	47	582	41	325	11	94
Unspecified: <sup>5</sup>						
Reported	906	5,660	297	1,760	3,590	23,700
Estimated	1,470	9,070	382	2,360	148	978
Total <sup>6</sup>	4,020	23,000	2,180	11,700	4,300	28,000
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate (including concrete sand)	367	2,780	(7)	(7)	558	4,170
Concrete products (blocks, bricks, pipe, decorative, etc.) <sup>2</sup>	W	W	--	--	W	W
Asphaltic concrete aggregates and and road base materials <sup>3</sup>	--	--	(7)	(7)	19	154
Fill	80	367	--	--	81	330
Other miscellaneous uses <sup>4</sup>	88	1,180	--	--	4	25
Unspecified: <sup>5</sup>						
Reported	170	1,270	225	1,360	256	1,740
Estimated	277	1,710	115	712	859	5,300
Total <sup>6</sup>	981	7,320	408	2,420	1,780	11,800
Use	Unspecified districts					
	Quantity	Value				
Concrete aggregate (including concrete sand)	--	--				
Concrete products (blocks, bricks, pipe, decorative, etc.) <sup>2</sup>	--	--				
Asphaltic concrete aggregates and and road base materials <sup>3</sup>	94	569				
Fill	--	--				
Other miscellaneous uses <sup>4</sup>	--	--				
Unspecified: <sup>5</sup>						
Reported	--	--				
Estimated	--	--				
Total <sup>6</sup>	94	569				

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

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes plaster and gunite sands.

<sup>3</sup>Includes road and other stabilization (cement and lime).

<sup>4</sup>Includes railroad ballast, and snow and ice control.

<sup>5</sup>Reported and estimated production without a breakdown by end use.

<sup>6</sup>District totals may not add up to the published State total, owing to revisions made after the production of the table and (or) proprietary data being withheld.

<sup>7</sup>Less than ½ unit.

TABLE 10  
IOWA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2011, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		Districts 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate (including concrete sand)	1,110	7,290	1,020	6,950	W	W
Concrete products (blocks, bricks, pipe, decorative, etc.) <sup>2</sup>	1	16	W	W	W	W
Asphaltic concrete aggregates and road base materials <sup>3</sup>	1,070	5,960	W	W	W	W
Fill	158	756	83	392	73	366
Other miscellaneous uses <sup>4</sup>	5	37	34	409	12	86
Unspecified: <sup>5</sup>						
Reported	953	6,750	17	208	3,090	22,200
Estimated	838	5,820	663	4,600	157	1,090
Total	4,140	26,600	1,980	13,700	4,440	28,100
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate (including concrete sand)	439	3,400	W	99	W	W
Concrete products (blocks, bricks, pipe, decorative, etc.) <sup>2</sup>	W	W	--	--	W	W
Asphaltic concrete aggregates road base materials <sup>3</sup>	W	W	W	420	W	W
Fill	119	617	--	--	77	461
Other miscellaneous uses <sup>4</sup>	17	198	--	--	42	852
Unspecified: <sup>5</sup>						
Reported	129	1,000	157	1,070	1,140	8,730
Estimated	753	5,520	122	849	554	3,850
Total	1,520	10,900	359	2,440	2,430	18,500
Use	Unspecified districts					
	Quantity	Value				
Concrete aggregate (including concrete sand)	--	--				
Concrete products (blocks, bricks, pipe, decorative, etc.) <sup>2</sup>	--	--				
Asphaltic concrete aggregates and road base materials <sup>3</sup>	103	683				
Fill	--	--				
Other miscellaneous uses <sup>4</sup>	--	--				
Unspecified: <sup>5</sup>						
Reported	--	--				
Estimated	--	--				
Total	103	683				

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

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes plaster and gunite sands.

<sup>3</sup>Includes road and other stabilization (lime).

<sup>4</sup>Includes railroad ballast, and snow and ice control.

<sup>5</sup>Reported and estimated production without a breakdown by end use.