2010–2011 Minerals Yearbook

TEXAS [ADVANCE RELEASE]

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

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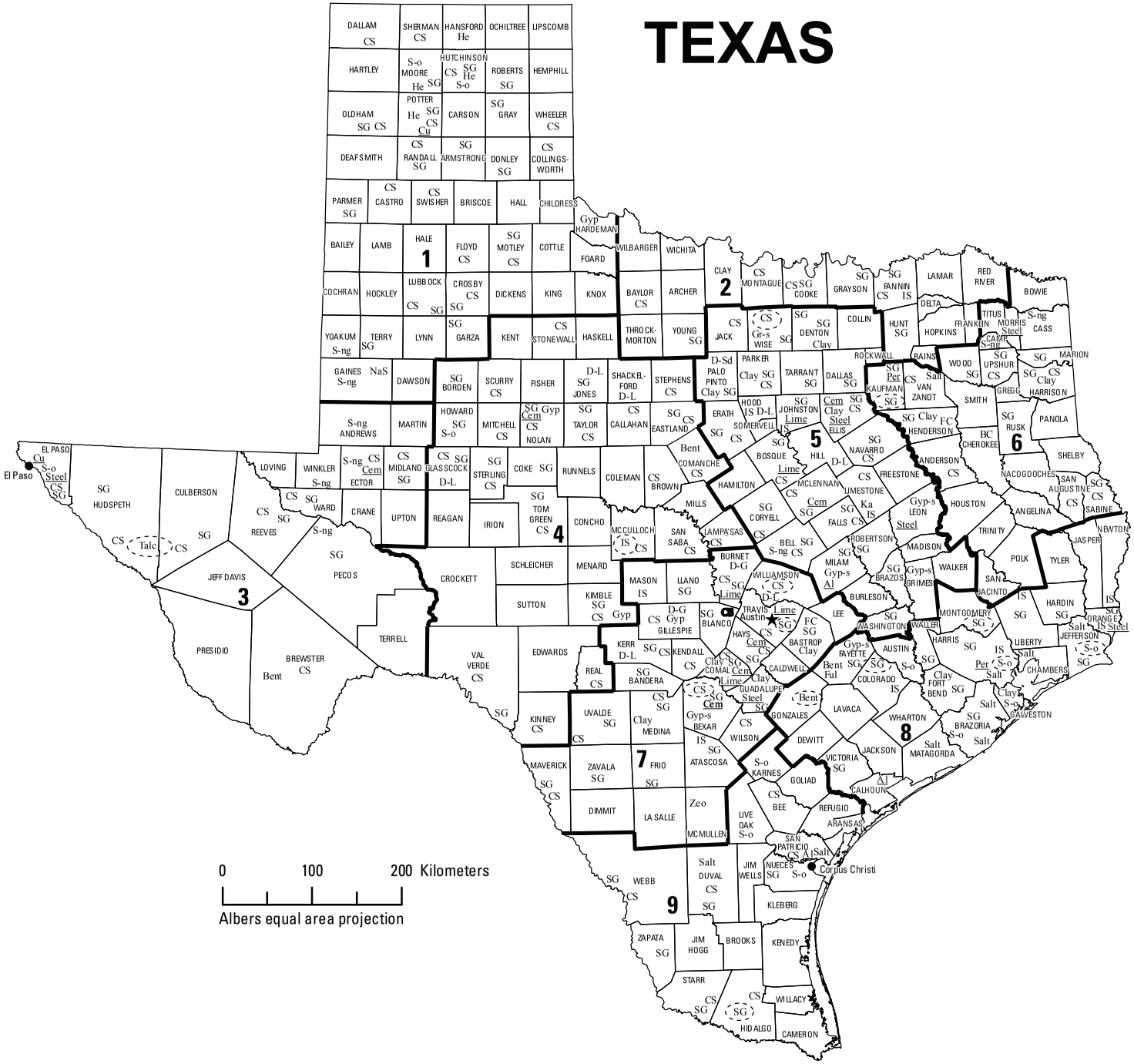
TEXAS



LEGEND

- County boundary
- ★ Capital
- ● City
- 1 Crushed stone/sand and gravel district boundary

MINERAL SYMBOLS
(Principal producing areas)

Al	Aluminum plant
BC	Ball clay
Bent	Bentonite
Cem	Cement plant
Clay	Common clay
CS	Crushed stone
Cu	Copper plant
D-G	Dimension granite
D-L	Dimension limestone
D-Sd	Dimension sandstone
FC	Fire clay
Ful	Fuller's earth
Gr-s	Synthetic Graphite
Gyp	Gypsum
Gyp-s	Synthetic gypsum
He	Helium
IS	Industrial sand
Ka	Kaolin
Lime	Lime plant
Per	Perlite plant
S-ng	Sulfur (natural gas)
S-o	Sulfur (oil)
Salt	Salt
NaS	Sodium sulfate
SG	Sand and gravel
Steel	Steel plant
Talc	Talc
Zeo	Zeolites

Concentration of mineral operations

Source: University of Texas at Austin, Bureau of Economic Geology/U.S. Geological Survey (2010–11).

The Mineral Industry of Texas

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Texas Bureau of Economic Geology at University of Texas at Austin, for collecting information on all nonfuel minerals.

In 2011, Texas nonfuel mineral production[1] was valued at $3.03 billion, based upon annual U.S. Geological Survey (USGS) data. This was a $194 million (6.8%) increase from the State's total nonfuel mineral value of $2.84 billion in 2010, which followed a $113 million (4.1%) increase from the total production value of $2.72 billion in 2009. In 2011, Texas fell to eighth from seventh in rank among the 50 States in total nonfuel mineral production value, down from sixth in 2009. In 2011, Texas accounted for 4% of the U.S. total nonfuel mineral production of $74.7 billion, down from 4.2% in 2010 and 4.5% in 2009. On a per capita basis, Texas remained unchanged from 2010, ranking 30th in 2011 in the Nation in nonfuel mineral production with a value of $118 per capita in 2011, below the national average of $240.

The State's leading nonfuel mineral commodities in 2011 were, in descending order of production value, portland cement, crushed stone, and construction sand and gravel. These three commodities together accounted for 73% of the State's total nonfuel mineral production value in 2011, down from 75% in 2010 and down from nearly 79% in 2009. Crushed stone was the only one of these mineral commodities to decrease in value in 2011, despite an increase in production. In 2010, it had increased in value and production while at the same time portland cement lost 4% of its value, despite a production increase. For that one year, 2010, crushed stone became the States's leading mineral commodity by value—historically, it had been portland cement. Other leading commodities in 2010 and 2011 were industrial sand and gravel, salt, and lime, in descending order of production value. Industrial sand had the biggest increases each year, up 41% by production value in 2010 and 67% in 2011, and 39% and 56% by production quantity. Table 1 shows production quantity and value for the major mineral commodities for these years.

Of the mineral commodities having production values that could not be individually published in order to protect company proprietary data, gypsum, montmorillonite, talc, and zeolites all increased in production value by 10% or more in 2011. All of these had also increased in production quantity by up to 5%, except montmorillonite, which increased by 10%. Grade A helium, crude helium, ball clay, and fire clay decreased in production value in 2011. In 2010, of the concealed commodities, only Grade-A helium and ball clay had increased in production value, by more than 10%. Ball clay increased in quantity by a similar proportion. Decreases in other commodities were modest, generally by 5% or less in production quantity and value, except fire clay and crude helium, with significant decreases. By the end of 2011, however, with the exception of crude and Grade-A helium and fire clay, production quantities and values were higher than those of 2009.

In 2010 and 2011, Texas continued to lead the Nation in the production of common clay, crushed stone, and portland cement. In 2011, the State accounted for 16% of the Nation's total quantity of common clay produced, 10% of the Nation's total quantity of crushed stone produced, and 14% of the Nation's total quantity of portland cement produced. Texas remained the second leading producer of salt, and construction sand and gravel, accounting for 20% and 9% of the U.S. total in 2011, respectively, as well as ball clay and crude talc (data withheld—company proprietary data). Texas remained third in Grade-A helium production among 4 producing States, and fifth in bentonite clay production among 11 producing States. Texas was one of the two States to produce crude helium in 2010 and 2011, ranking second in production behind Kansas. The State rose to second from third in the production of industrial sand and gravel in 2010, and then rose again in 2011 to first, accounting for 16% of the Nation's total industrial sand and gravel production in 2011. In 2010, Texas rose to fifth from sixth among 34 lime-producing States, to second from third among 19 gypsum-producing States, and to fourth from seventh among 8 kaolin clay-producing States and kept these rankings in 2011. In 2011, the State rose to second from third in the production of zeolites among five producing States. Texas rose to second in the production of masonry cement from fourth in 2010, but then fell to third in 2011. The State dropped to second from first in 2010 in the production of dimension stone, and remained second in 2011.

The following narrative information was provided by the Texas Bureau of Economic Geology[2] (TBEG). Production data in the following text are those reported by the TBEG, based upon its surveys and estimates. These data may differ from some USGS annual production figures, which were based upon USGS company surveys and estimates.

Industry Overview

In 2010, the production of industrial minerals in Texas continued to fall, owing to the economic downturn. Mineral production in Texas decreased by 13.4% in 2010 and has declined steadily every year since 2008. Annual mining job

[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 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.

[2]Brent A. Elliot, Economic Geologist, Texas Bureau of Economic Geology of the John A. and Katherine G. Jackson School of Geosciences, University of Texas at Austin, authored the text of the State mineral industry information provided by the TBEG.

growth was down by 5.9% in 2010 compared to job growth in 2009.

Mineral Development and Exploration

Industrial Minerals

Sand and gravel.—In January 2010, the Travis County Commissioners Court approved an approximately 800-hectare (ha) (2,000-acre) sand and gravel project proposed by Texas Industries, Inc. (Dallas, TX; a subsidiary of Martin Marietta, Inc.) near Webberville, Travis County (King, 2010).

Metals

Silver.—In September 2010, Aurcana Corp. (Vancouver, British Columbia, Canada) announced the completion of the feasibility studies for its Silver Shafter project located in the historic Shafter District 375 kilometers (km) southwest of El Paso, Presidio County. In the feasibility study, the company reported positive results for proven and probable reserves of the Silver Shafter project (Aurcana Corp., 2010) and in November 2011 reported that permitting was complete and that production would start in 2012 (Aurcana Corp., 2011).

Rare Earths.—Texas Rare Earth Resources Corp. (Sierra Blanca, TX; formerly Standard Silver Corporation) leased 350 ha (860 acres) around Round Top, a rare earth element (REE) prospect 16 km northwest of Sierra Blanca, Hudspeth County. In 2010, the Company performed REE analysis of core samples taken at Round Top and reported an approximately 71% heavy-to-light REE ratio. Cabot Corp. and Cyprus Minerals Corp. originally took these core samples in 1986–87 while carrying out beryllium exploration at Round Top (PRNewswire, 2010). A preliminary economic assessment was begun in November 2011 (Texas Rare Earth Resources Corp., 2011).

Mineral Fuels and Related Materials

Uranium.—Two uranium mines in south Texas were active. In November 2010, the Palangana in-situ recovery project in Duval County, owned and operated by Uranium Energy Corp. (Corpus Christi, TX), began production of uranium-loaded resin beads (Uranium Energy Corp., 2010a). The company's Hobson plant in Karnes County received the first shipment of uranium-loaded resin beads and began production of yellow cake (Uranium Energy Corp., 2010b). In December 2010, the Texas Commission on Environmental Quality approved the mine permit submitted by Uranium Energy for its proposed in-situ recovery operation near Goliad, Goliad County (Uranium Energy Corp., 2010c). Texas Rare Earth Resources reported evidence of economic-grade uranium mineralization at its Round Top prospect (PRNewswire, 2010).

Legislation and Governmental Programs

Texas continued to be an active participant in the STATEMAP program. STATEMAP is a component of the congressionally mandated National Cooperative Geologic Mapping Program (NCGMP) through which the USGS distributes Federal funds to support geologic mapping efforts through a competitive funding process. The NCGMP has three primary components: (1) FEDMAP, which funds Federal geologic mapping projects; (2) STATEMAP, which is a matching-funds grants program with State geological surveys; and (3) EDMAP, a matching-funds grant program with universities that has a goal to train the next generation of geologic mappers. In 2010, the TBEG, as part of the STATEMAP program, completed geologic maps of the Cleburne quadrangle (scale 1:100,000) and the Maragorda–Matagorda SW quadrangle (scale 1:24,000).

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

(Thousand metric tons and thousand dollars)

Mineral	2009		2010		2011	
	Quantity	Value	Quantity	Value	Quantity	Value
Cement:						
Masonry	202	28,300 e	199 e	26,800 e	187	25,100 e
Portland	8,350	815,000 e	8,870 e	785,000 e	9,200	836,000 e
Clays:						
Bentonite	54	8,610	64	9,900	67	10,300
Common	1,800	13,000	1,730	14,000	1,840	13,300
Kaolin	W	W	47	13,900	22	6,920
Gemstones, natural	NA	202	NA	203	NA	203
Gypsum, crude	W	W	W	W	W	W
Lime	1,040	105,000	1,280	136,000	1,350	148,000
Salt	8,910	164,000	9,130	173,000	9,330	180,000
Sand and gravel:						
Construction	71,900 r	540,000 r	71,500	540,000	76,400	573,000
Industrial	3,220 r	143,000 r	4,480	202,000	7,000	337,000
Stone:						
Crushed	110,000	784,000 r	114,000	805,000	117,000	787,000
Dimension	236	42,000	195	57,000	202	47,100
Combined values of brucite (2008), clays [ball, fire, fuller's earth], helium, talc (crude), zeolites, and values indicated by symbol W	XX	79,000 r	XX	73,500	XX	64,300
Total	XX	2,720,000 r	XX	2,840,000	XX	3,030,000

[e]Estimated. [r]Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. Withheld values included in "Combined values" data.
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

TEXAS: CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE[1]

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	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone[2]	189 r	99,600 r	$713,000 r	$7.16	179	104,000	$727,000	$7.01	175	105,000	$717,000	$6.81
Marble	15	86	4,180	48.32	24	100	2,990	29.80	23	49	2,550	52.04
Calcareous marl	--	--	--	--	--	--	--	--	1	406	3,170	7.82
Granite	--	--	--	--	10	383	5,230	13.67	--	--	--	--
Traprock	--	--	--	--	3	772	7,210	9.33	--	--	--	--
Sandstone and quartzite[3]	8	2,440 r	9,550 r	3.91	8	3,070	17,900	5.82	9	4,480	20,400	4.56
Miscellaneous stone	47 r	8,160 r	60,900 r	7.46	34	6,380	44,600	6.99	39	6,290	43,800	6.96
Total or average	XX	110,000	784,000 r	7.15	XX	114,000	805,000	7.04	XX	117,000	787,000	6.76

[r]Revised. XX Not applicable. -- Zero.

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

[2]Includes limestone-dolomite reported with no distinction between the two kinds of stone.

[3]Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

TABLE 3
TEXAS: CRUSHED STONE SOLD OR USED BY PRODUCERS
IN 2010, BY USE[1]

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Riprap and jetty stone	347	3,420
Filter stone	133	817
Other coarse aggregate	495	4,560
Coarse aggregate, graded:		
Concrete aggregate, coarse	1,340	9,730
Bituminous aggregate, coarse	215	1,780
Bituminous surface-treatment aggregate	77	743
Railroad ballast	W	W
Other graded coarse aggregate	7,290	85,900
Fine aggregate (-⅜ inch):		
Stone sand, concrete	297	2,900
Stone sand, bituminous mix or seal	W	W
Screening, undesignated	632	1,930
Other fine aggregate	1,890	14,100
Coarse and fine aggregates:		
Graded road base or subbase	4,770	21,900
Unpaved road surface	608	3,200
Terrazzo and exposed aggregate	42	6,880
Crusher run or fill or waste	1,370	4,020
Other coarse and fine aggregates	12,600	109,000
Agricultural:		
Agricultural, limestone	301	2,370
Poultry grit and mineral food	W	W
Other agricultural uses	W	W
Chemical and metallurgical:		
Cement manufacture	11,100	40,100
Lime manufacture	W	W
Special:		
Asphalt fillers or extenders	W	W
Other fillers or extenders	W	W
Other miscellaneous uses and specified uses not listed	W	W
Unspecified:[2]		
Reported	37,100	259,000
Estimated	28,700	200,000
Total	114,000	807,000

W Withheld to avoid disclosing company proprietary data; included in "Total."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Reported and estimated production without a breakdown by end use.

TABLE 4
TEXAS: CRUSHED STONE SOLD OR USED BY PRODUCERS
IN 2011, BY USE[1]

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Riprap and jetty stone	614	6,680
Filter stone	335	2,190
Unspecified coarse aggregate	433	4,330
Coarse aggregate, graded:		
Concrete aggregate, coarse	5,250	34,500
Bituminous aggregate, coarse	363	3,310
Bituminous surface-treatment aggregate	189	1,980
Railroad ballast	589	6,060
Unspecified graded coarse aggregate	8,660	106,000
Fine aggregate (-⅜ inch):		
Stone sand, concrete	350	2,800
Stone sand, bituminous mix or seal	86	925
Screening, undesignated	176	766
Unspecified fine aggregate	2,250	17,600
Coarse and fine aggregates:		
Graded road base or subbase	8,660	41,400
Unpaved road surface	806	5,070
Terrazzo and exposed aggregate	20	2,390
Crusher run or fill or waste	1,590	5,220
Unspecified coarse and fine aggregates	8,440	81,000
Unspecified and other construction materials	84	601
Agricultural:		
Agricultural, limestone	432	3,760
Poultry grit and mineral food	W	W
Chemical and metallurgical:		
Cement manufacture	9,850	34,200
Lime manufacture	1,380	4,780
Flux stone	1	13
Sulfur oxide removal	W	W
Special:		
Asphalt fillers or extenders	W	W
Other fillers or extenders	W	W
Other miscellaneous uses and specified uses not listed	32	649
Unspecified:[2]		
Reported	40,900	253,000
Estimated	24,400	157,000
Total	117,000	787,000

W Withheld to avoid disclosing company proprietary data; included in "Total."
[1]Data are rounded to no more than three significant digits.
[2]Reported and estimated production without a breakdown by end use.

TABLE 5

TEXAS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2010, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch)[2]	--	--	--	--	W	W
Coarse aggregate, graded[3]	W	W	--	--	W	W
Fine aggregate (-⅜ inch)[4]	W	W	--	--	W	W
Coarse and fine aggregates[5]	109	560	49	233	479	2,190
Agricultural[6]	10	78	--	--	--	--
Chemical and metallurgical[7]	--	--	--	--	W	W
Special[8]	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed[9]	--	--	--	--	--	--
Unspecified:[10]						
Reported	--	--	--	--	356	2,520
Estimated	1,570	12,100	379	2,660	4,850	33,500
Total[11]	1,880	14,200	428	2,890	7,130	51,000

	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch)[2]	52	549	205	1,840	W	W
Coarse aggregate, graded[3]	W	W	1,770	12,900	--	--
Fine aggregate (-⅜ inch)[4]	W	W	797	2,970	--	--
Coarse and fine aggregates[5]	1,650	9,370	1,880	15,800	W	W
Agricultural[6]	--	--	W	W	--	--
Chemical and metallurgical[7]	W	W	4,180	16,700	--	--
Special[8]	--	--	W	W	--	--
Other miscellaneous uses and specified uses not listed[9]	W	W	--	--	--	--
Unspecified:[10]						
Reported	--	--	11,800	85,100	--	--
Estimated	1,870	12,700	10,300	71,800	850	6,660
Total[11]	7,570	48,600	31,700	218,000	926	7,250

	District 7		District 8		District 9	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch)[2]	593	5,440	W	W	--	--
Coarse aggregate, graded[3]	4,220	39,600	W	W	W	W
Fine aggregate (-⅜ inch)[4]	1,550	11,000	W	W	W	W
Coarse and fine aggregates[5]	13,200	85,500	W	W	W	W
Agricultural[6]	W	W	W	W	--	--
Chemical and metallurgical[7]	7,110	22,000	--	--	--	--
Special[8]	W	W	--	--	--	--
Other miscellaneous uses and specified uses not listed[9]	W	W	--	--	--	--
Unspecified:[10]						
Reported	23,400	160,000	975	7,470	624	4,240
Estimated	5,430	37,400	--	--	3,370	23,400
Total[11]	55,800	363,000	3,970	61,100	4,990	40,800

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 macadam, riprap and jetty stone, filter stone, and other coarse aggregates.

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

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

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

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

[7]Includes cement manufacture, lime manufacture, dead-burned dolomite manufacture, flux stone, chemical stone, glass manufacture, and sulfur oxide removal.

[8]Includes mine dusting or acid water treatment, whiting or whitening substance, and other fillers or extenders.

[9]Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.

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

[11]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

TEXAS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2011, 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]	W	W	--	--	W	W	W	W
Coarse aggregate, graded[3]	76	942	--	--	W	W	W	W
Fine aggregate (-⅜ inch)[4]	29	230	--	--	24	103	W	W
Coarse and fine aggregates[5]	W	W	13	57	203	878	1,430	9,270
Other construction materials	--	--	--	--	29	323	--	--
Agricultural[6]	W	W	--	--	--	--	--	--
Chemical and metallurgical[7]	--	--	--	--	W	W	--	--
Special[8]	--	--	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed[9]	--	--	--	--	--	--	--	--
Unspecified:[10]								
Reported	W	W	--	--	580	3,490	W	W
Estimated	1,810	11,700	154	1,000	3,760	24,400	1,550	10,200
Total	2,020	13,900	167	1,060	5,910	39,200	7,380	44,200

Use	District 5		District 6		District 7		District 8	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch)[2]	659	6,440	--	--	560	5,150	W	W
Coarse aggregate, graded[3]	5,660	39,900	--	--	6,770	70,600	W	W
Fine aggregate (-⅜ inch)[4]	773	4,390	--	--	1,790	14,900	W	W
Coarse and fine aggregates[5]	2,690	15,100	897	3,650	11,600	69,700	W	W
Other construction materials	84	601	--	--	--	--	--	--
Agricultural[6]	W	W	--	--	W	W	--	--
Chemical and metallurgical[7]	4,730	18,000	W	W	5,830	17,500	--	--
Special[8]	W	W	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed[9]	--	--	--	--	W	W	--	--
Unspecified:[10]								
Reported	10,100	69,900	--	--	25,600	157,000	793	6,070
Estimated	7,940	51,700	270	1,750	5,920	37,800	--	--
Total	33,400	219,000	1,280	5,800	58,200	374,000	2,890	46,400

Use	District 9		Unspecified	
	Quantity	Value	Quantity	Value
Construction:				
Coarse aggregate (+1½ inch)[2]	19	309	--	--
Coarse aggregate, graded[3]	29	424	--	--
Fine aggregate (-⅜ inch)[4]	W	W	--	--
Coarse and fine aggregates[5]	W	W	79	1,720
Other construction materials	--	--	--	--
Agricultural[6]	--	--	--	--
Chemical and metallurgical[7]	--	--	--	--
Special[8]	--	--	--	--
Other miscellaneous uses and specified uses not listed[9]	--	--	--	--
Unspecified:[10]				
Reported	495	3,800	--	--
Estimated	2,970	18,700	--	--
Total	5,190	42,400	79	1,720

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 macadam, riprap and jetty stone, filter stone, and other coarse aggregates.

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

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

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

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

[7]Includes cement manufacture, lime manufacture, dead-burned dolomite manufacture, flux stone, chemical stone, glass manufacture, and sulfur oxide removal.

[8]Includes mine dusting or acid water treatment, whiting or whitening substance, and other fillers or extenders.

[9]Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.

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

TABLE 7
TEXAS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2010,
BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	19,500	$159,000	$8.15
Plaster and gunite sands	214	2,560	11.96
Concrete products (blocks, bricks, pipe, decorative, etc.)	103	1,350	13.11
Asphaltic concrete aggregates and other bituminous mixtures	686	7,040	10.26
Road base and coverings[2]	4,590	17,400	3.79
Fill	1,920	7,530	3.92
Other miscellaneous uses[3]	330	2,540	7.70
Unspecified:[4]			
Reported	5,720	43,900	7.67
Estimated	36,500	284,000	7.78
Total or average	69,500	525,000	7.55

[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 (cement and lime).
[3]Includes filtration, golf course, railroad ballast, and snow and ice control.
[4]Reported and estimated production without a breakdown by end use.

TABLE 8
TEXAS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2011,
BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	21,200	$166,000	$7.83
Plaster and gunite sands	193	1,740	9.02
Concrete products (blocks, bricks, pipe, decorative, etc.)	125	1,610	12.88
Asphaltic concrete aggregates and other bituminous mixtures	521	4,900	9.40
Road base and coverings[2]	1,550	12,200	7.87
Fill	2,500	12,100	4.84
Other miscellaneous uses[3]	125	941	7.53
Unspecified:[4]			
Reported	11,200	84,200	7.52
Estimated	39,000	290,000	7.44
Total or average	76,400	573,000	7.50

[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 (cement and lime).
[3]Includes filtration, golf course, and snow and ice control.
[4]Reported and estimated production without a breakdown by end use.

TABLE 9

TEXAS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2010, 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]	W	W	W	W	304	733
Asphaltic concrete aggregates and road base materials[3]	272	3,320	W	W	W	W
Fill	W	W	32	88	W	W
Other miscellaneous uses[4]	406	4,230	601	3,740	13	42
Unspecified:[5]						
Reported	49	370	--	--	11	192
Estimated	5,940	46,900	3,460	27,400	3,670	28,800
Total[6]	6,670	44,700	4,090	31,300	3,990	29,800
	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	2,620	21,400	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	167	1,160	W	W
Fill	4	8	782	2,770	24	94
Other miscellaneous uses[4]	--	--	81	389	3,010	6,990
Unspecified:[5]						
Reported	--	--	--	--	4	18
Estimated	4,110	31,200	5,470	42,400	2,490	19,600
Total[6]	4,120	31,200	9,120	68,100	5,520	26,700
	District 7		District 8		District 9	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	1,930	13,000	8,580	67,600	2,140	22,700
Asphaltic concrete aggregates and road base materials[3]	288	2,070	W	W	225	2,030
Fill	99	482	816	3,080	32	105
Other miscellaneous uses[4]	6	52	911	6,580	--	--
Unspecified:[5]						
Reported	715	6,520	587	4,350	270	2,210
Estimated	5,720	43,200	8,870	69,700	4,510	35,600
Total[6]	8,760	65,300	19,800	139,000	5,730	62,600
	Unspecified districts					
	Quantity	Value				
Concrete aggregate and concrete products[2]	270	3,170				
Asphaltic concrete aggregates and road base materials[3]	43	650				
Fill	--	--				
Other miscellaneous uses[4]	--	--				
Unspecified:[5]	--	--				
Reported	--	--				
Estimated	--	--				
Total[6]	313	3,820				

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]Includes plaster and gunite sands.

[3]Includes road and other stabilization (cement and lime).

[4]Includes filtration, golf course, railroad ballast, and snow and ice control.

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

[6]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 10

TEXAS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2011, 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]	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	W	W	W	W
Fill	194	1,710	29	89	2	5
Other miscellaneous uses[4]	1	12	--	--	15	57
Unspecified:[5]						
Reported	50	337	331	2,560	8	51
Estimated	5,360	44,500	624	4,740	1,650	11,900
Total	6,040	51,100	2,380	17,800	1,860	13,000

Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials[3]	W	W	W	W	W	W
Fill	2	5	821	3,200	14	70
Other miscellaneous uses[4]	--	--	81	414	22	397
Unspecified:[5]						
Reported	--	--	6,420	47,800	426	3,290
Estimated	2,650	20,300	12,000	91,700	2,960	11,100
Total	2,780	21,500	22,900	170,000	5,170	26,700

Use	District 7		District 8		District 9	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products[2]	2,170	15,800	10,200	76,300	2,460	26,700
Asphaltic concrete aggregates and road base materials[3]	283	2,110	772	7,270	269	2,420
Fill	322	2,560	1,080	4,340	39	131
Other miscellaneous uses[4]	6	61	--	--	--	--
Unspecified:[5]						
Reported	2,790	21,800	860	5,840	297	2,510
Estimated	3,110	23,800	6,970	52,700	3,430	26,200
Total	8,690	66,200	19,900	146,000	6,500	58,000

Use	Unspecified districts	
	Quantity	Value
Concrete aggregate and concrete products[2]	--	--
Asphaltic concrete aggregates and road base materials[3]	--	--
Fill	--	--
Other miscellaneous uses[4]	--	--
Unspecified:[5]	--	--
Reported	--	--
Estimated	221	2,560
Total	221	2,559

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 plaster and gunite sands.

[3]Includes road and other stabilization (cement and lime).

[4]Includes filtration, golf course, and snow and ice control.

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