

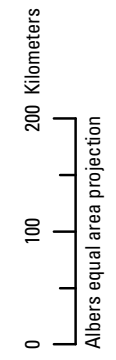
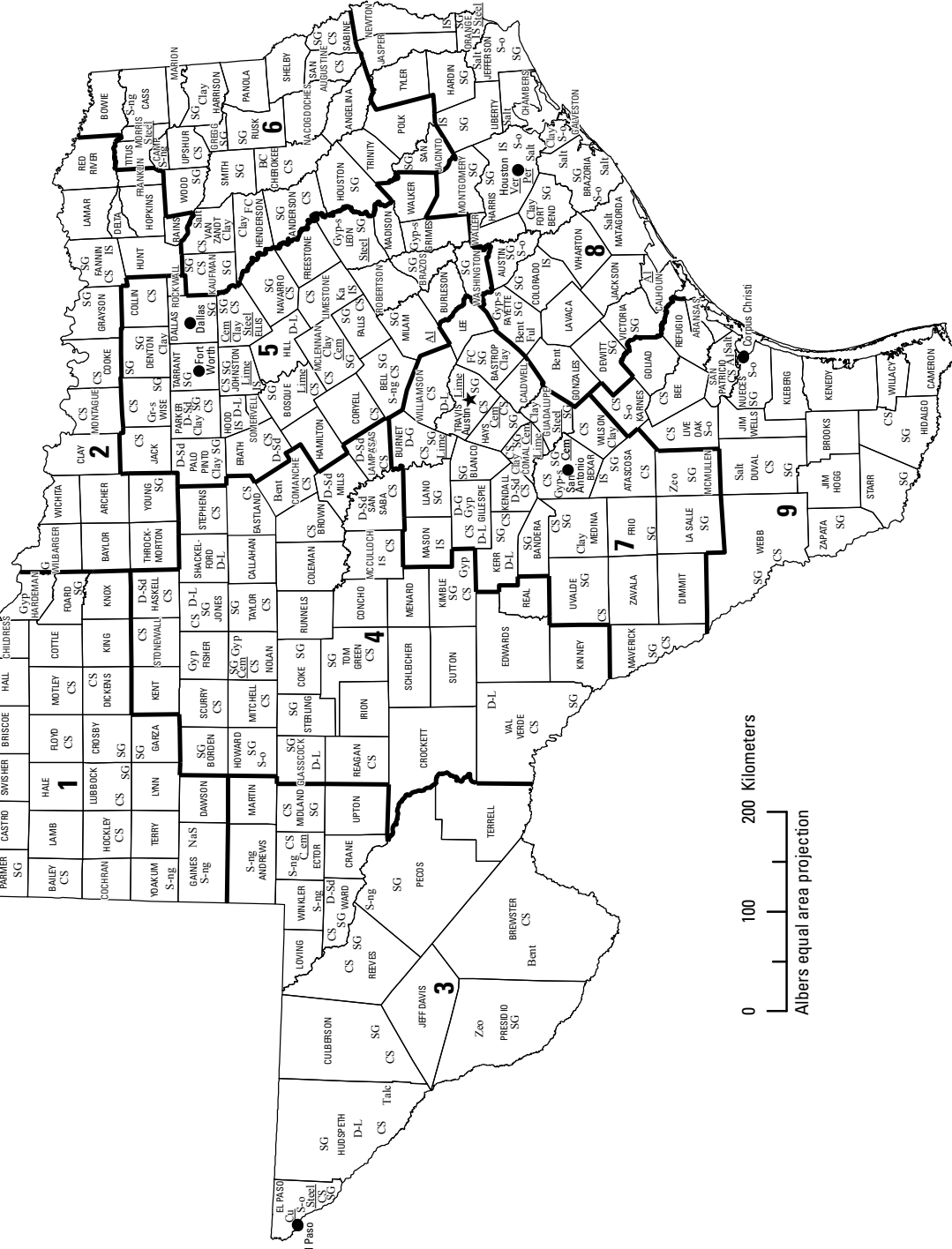


2012–2013 Minerals Yearbook

TEXAS

TEXAS

DALLAM CS	SHERMAN CS	HANSENBRO He	OSCHULTREE SG	UPSCOMB CS
HARTLEY CS	FUTCHINSON S-o	ROBERTS CS	HICKS He	HEMPHILL SG
ODHAM He	POTTER He	GARSON SG	GRAY SG	WHEELER Gyp
DEAF SMITH CS	RANDALL-ARMSTRONG CS	ARMSTRONG CS	DONLEY SG	COLLINGS- WORTH SG
PARMER CS	CASTRO SG	SWISHER CS	BRISGORE CS	HALL CHUDRASS
BAILEY CS	HALE CS	FLOYD CS	MOTLEY CS	COTTLE CS
COCHRAN CS	LUBBOCK CS	CROSBY CS	DICKENS CS	KING CS
YOAKUM CS	TERRY CS	LINN CS	GARZA CS	KENT CS
GAINES S-he	DAWSON CS	HOWARD SG	BORDEN CS	GYP FISHER
S-HE ANDREWS	MARTIN CS	STUBBS CS	MITCHELL CS	NOAN CS
LOVING CS	WINKLER CS	MIDLAND CS	GLASSCOCK CS	STUBBS CS
CULBERSON CS	WINDYBROOK CS	ECTOR CS	D-L CS	STUBBS CS
HUDSPETH D-L	WARD CS	CRANE CS	REAGAN CS	IRION CS
JEFF DAVIS CS	TERRELL CS	PEDRO CS	CROCKETT CS	SCHLEIBER CS
PRESCOTT SG	BREWSTER CS	EDWARDS CS	VAL VERDE CS	SUTTON CS
EL PASO S-o	TERRELL CS	KINNEY CS	AMMERICK CS	EDWARDS CS
EL PASO S-o	TERRELL CS	KINNEY CS	AMMERICK CS	EDWARDS CS
EL PASO S-o	TERRELL CS	KINNEY CS	AMMERICK CS	EDWARDS CS



Source: University of Texas at Austin, Bureau of Economic Geology/U.S. Geological Survey (2012-13).

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
- Ver Vermiculite plant
- Zeo Zeolites
- Concentration of mineral operations

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 2013, the value of the nonfuel mineral production¹ in the State of Texas increased to \$3.74 billion, 5.0% of the total U.S. nonfuel mineral production, ranking it fourth in the Nation. In 2012, the corresponding value was \$3.49 billion, 4.6% of the U.S. total nonfuel mineral production, ranking it sixth among the 50 States. In 2013, on a per capita basis, nonfuel mineral production in Texas had a value of \$141 compared with the national average of \$238. In 2012, the per capita value was \$133 compared with the national average of \$241.

The value of nonfuel mineral production in Texas for the years 2006 through 2013 was as follows (in billions of dollars): \$3.04 (2006), \$3.32 (2007), \$3.45 (2008), \$2.72 (2009), \$2.85 (2010), \$3.22 (2011), \$3.49 (2012), and \$3.74 (2013).

In 2013, there were 6,275 employees in nonfuel mineral mines in Texas and 4,253 in mills and preparation plants. In 2012, the corresponding numbers were 6,081 in nonfuel mineral mines and 4,049 in mills and preparation plants (U.S. Mine Safety and Health Administration, 2013, p. 15; 2014, p. 15). In 2013, the average annual wage in Texas for all mining was \$62,733 compared with \$52,146 for all industries. In 2012, the corresponding figures were \$62,201 and \$51,590, respectively (National Mining Association, unpub. data, February 4, 2016).

In 2012–13, the leading nonfuel mineral commodities in Texas, in descending order of production value, were crushed stone, portland cement, construction sand and gravel, industrial sand and gravel, and salt. While these five commodities made up 88% of the State's nonfuel mineral value in 2013 and in 2012, the State produced a variety of other nonfuel mineral commodities (table 1). On the basis of quantity, Texas was the leading U.S. producer of common clay out of 35 producing States, crushed stone out of 49 producing States, dimension stone out of 33 producing States, gypsum out of 16 producing States, and portland cement out of 34 producing States. Texas was the second largest producer of ball clay, construction sand and gravel, and zeolites out of 5, 50, and 6 producing States, respectively. The State ranked third in the production of bentonite, industrial sand and gravel, and masonry cement out of 8, 33, and 26 producing States, respectively.

Texas was a significant producer of industrial minerals used in the construction industry. One economic indicator for this

¹The 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 February 2016. 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>.

industry was the number of completed housing units (single family units, whether a single family house or an apartment in a multistory building). In Texas, the number of residential housing units completed increased to 147,460 in 2013 from 135,514 in 2012 and 97,450 in 2011 (U.S. Census Bureau, undated). In 2013, 40% of the U.S. production of dimension stone originated in Texas; dimension stone from Texas increased 43% in tonnage from 2011 to 2012, and another 18% from 2012 to 2013. Most of this was limestone; Texas's share of U.S. dimension limestone production was 74% in 2013, up from 66% in 2012, based on data from Dolley (2015, p. 72.8). Slightly more than 14% of the U.S. output of common clay was mined in Texas. The tonnage of common clay used for brick increased by 33% from 2011 to 2012 and 24% from 2012 to 2013, in contrast to a general decline in usage for bricks in the country overall, based on data from Virta (2015, p. 18.4). Texas had 11 cement plants and an expansion at one plant in 2013 increased the State's total clinker capacity (used to manufacture portland and masonry cement) to 12.4 million metric tons (Mt), about 13% of U.S. capacity. About 14% of the U.S. total of portland cement and 11% of masonry cement in the United States was produced in Texas, and cement was also shipped into Texas for consumption, although the cement plants, on average, were not operating at full capacity (van Oss, 2015, p. 16.12). About 12% of U.S. crushed stone was produced in Texas in 2013; Texas production consisted almost entirely of limestone (table 2). Of reported end uses, cement manufacture and road base were leading categories, on the basis of quantity, in both 2012 and 2013 (table 3). In addition to increased residential construction, the shale gas industry, particularly site development in the Eagle Ford shale field, led to strong markets for crushed stone (Martin Marietta Materials, Inc., 2014).

No metals were mined in Texas in 2012 or 2013, except for a small amount of silver. The Shafter Mine began limited commercial production in December 2012, from underground ore after completion of the mill early in the year and testing on lower grade open pit ore, but was put on care and maintenance in 2013, owing to low metal prices (Aurcana Corp., 2012, 2013). The Round Top Project for the production of rare earths covered approximately 22,000 hectares in Hudspeth County; a method to economically process ore from the area to produce heavy rare earths and yttrium was being developed (Texas Rare Earth Resources Corp., 2014). Metal plants in Texas included two of the four U.S. alumina refineries, two of the three U.S. electrolytic copper refineries, and several steel plants; all of these relied on raw material feeds that were not mined in the State. Approximately 3.2 Mt of scrap was consumed by Texas steel plants in 2013, about 7% less than the previous year and about 6% of the U.S. total based on data from Fenton (2014, p. 38.10; 2015, p. 38.10).

References Cited

- Aurcana Corp., 2012, Aurcana announces commercial production at Shafer Mine in Texas: Vancouver, British Columbia, Canada, Aurcana Corp. press release, December 14. (Accessed June 22, 2016, at http://www.aurcana.com/news/2013/index.php?&content_id=334.)
- Aurcana Corp., 2013, Shafer Project to be put on care and maintenance: Vancouver, British Columbia, Canada, Aurcana Corp. press release, December 19. (Accessed June 22, 2016, at http://www.aurcana.com/news/2013/index.php?&content_id=334.)
- Dolley, T.P., 2015, Stone, dimension , *in* Metals and minerals: U.S. Geological Survey Minerals Yearbook 2013, v. I, p. 72.1–72.14. (Accessed March 18, 2016, at http://minerals.usgs.gov/minerals/pubs/commodity/stone_dimension/myb1-2013-stond.pdf.)
- Fenton, M.D., 2014, Iron and steel scrap , *in* Metals and minerals: U.S. Geological Survey Minerals Yearbook 2012, v. I, p. 38.1–38.22. (Accessed March 18, 2016, at http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/myb1-2012-fescr.pdf.)
- Fenton, M.D., 2015, Iron and steel scrap , *in* Metals and minerals: U.S. Geological Survey Minerals Yearbook 2013, v. I, p. 38.1–38.23. (Accessed March 18, 2016, at http://minerals.usgs.gov/minerals/pubs/commodity/iron_&_steel_scrap/myb1-2013-fescr.pdf.)
- Martin Marietta Materials, Inc., 2014, Annual report 2013: Raleigh, NC, Martin Marietta Materials, Inc., 101 p. (Accessed June 22, 2016, via <http://ir.martinmarietta.com/annuals-proxies.cfm>).
- Texas Rare Earth Resources Corp., 2014, 2014 annual report to shareholders: Sierra Blanca, TX, Texas Rare Earth Resources Corp., 60 p. (Accessed June 22, 2016, at http://tmrcorp.com/_resources/Annual_Report_to_Stockholders_2014.pdf).
- U.S. Census Bureau, [undated], Number of new residential housing units by State (total): U.S. Census Bureau, 51 p. (Accessed July 16, 2016, at <http://www.census.gov/construction/bps/xls/annualhistorybystatebystructure.xls>.)
- U.S. Mine Safety and Health Administration, [2013], Mine injury and worktime, quarterly, January–December 2012: U.S. Mine Safety and Health Administration, Final, closeout edition, 33 p. (Accessed February 8, 2016, at http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20125.pdf.)
- U.S. Mine Safety and Health Administration, [2014], Mine injury and worktime, quarterly, January–December 2013: U.S. Mine Safety and Health Administration, Final, closeout edition, 34 p. (Accessed February 8, 2016, at http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20135.pdf.)
- van Oss, H.G., 2015, Cement , *in* Metals and minerals: U.S. Geological Survey Minerals Yearbook 2013, v. I, p. 16.1–16.32. (Accessed May 18, 2016, at <http://minerals.usgs.gov/minerals/pubs/commodity/cement/myb1-2013-cemen.pdf>.)
- Virta, R.L., 2015, Clay and shale , *in* Metals and minerals: U.S. Geological Survey Minerals Yearbook 2013, v. I, p. 18.1–18.22. (Accessed May 3, 2016, at <http://minerals.usgs.gov/minerals/pubs/commodity/clays/myb1-2013-clays.pdf>.)

TABLE 1
NONFUEL MINERAL PRODUCTION IN TEXAS^{1,2}

(Thousand metric tons and thousand dollars)

Mineral	2011		2012		2013	
	Quantity	Value	Quantity	Value	Quantity	Value
Cement:						
Masonry	187	25,100 ^e	215	31,900 ^e	238	37,300 ^e
Portland	9,200	926,000 ^{r,c}	10,000	937,000 ^e	10,100	995,000 ^e
Clays:						
Bentonite	67	10,300	57	9,730	56	9,990
Common	1,840	13,300	1,940	13,400	1,520	12,100
Gemstones, natural	NA	203	NA	203	NA	172
Lime	1,350	148,000	1,360	154,000	1,360	154,000
Salt	9,330	180,000	7,790	161,000	7,770	166,000
Sand and gravel:						
Construction	79,200 ^r	593,000 ^r	80,800	584,000	78,300	606,000
Industrial	7,000	337,000	7,010	357,000	7,080	434,000
Stone:						
Crushed	117,000	791,000 ^r	134,000	1,020,000	136,000	1,100,000
Dimension	535 ^r	117,000 ^r	766	151,000	905	151,000
Combined values of clays (ball, fire, fuller's earth, kaolin), gypsum (crude), helium [crude, Grade-A (2011–12)], silver (2013), talc (crude), and zeolites	XX	75,000 ^r	XX	73,700	XX	70,100
Total	XX	3,220,000 ^r	XX	3,490,000	XX	3,740,000

^eEstimated. ^rRevised. NA Not available. XX Not applicable.

¹Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

²Data 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 TYPE¹

Type	2012				2013			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone ²	169	122,000	\$926,000	\$7.60	161	123,000	\$998,000	\$8.11
Dolomite	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Marble	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Calcareous marl	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Granite	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Traprock	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Sandstone and quartzite ⁵	13	5,580	35,500	6.36	12	6,180	39,900	6.46
Miscellaneous stone	64	6,390	56,000	8.77	56	6,670	65,500	9.82
Total or average	XX	134,000	1,020,000	7.61	XX	136,000	1,100,000	8.12

XX Not applicable.

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

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

³Withheld to avoid disclosing company proprietary data; included with "Limestone."

⁴Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone."

⁵Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

TABLE 3
TEXAS: CRUSHED STONE SOLD OR USED BY PRODUCERS, BY USE¹

Use	2012			2013		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	--	--	--	39	\$550	\$14.12
Riprap and jetty stone	473	\$7,090	\$14.99	403	4,710	11.69
Filter stone	305	2,110	6.92	381	2,590	6.80
Unspecified coarse aggregate	745	9,120	12.24	1,170	18,300	15.67
Coarse aggregate, graded:						
Concrete aggregate, coarse	4,960	36,200	7.30	3,190	27,700	8.69
Bituminous aggregate, coarse	1,950	16,500	8.46	W	W	W
Bituminous surface-treatment aggregate	--	--	--	W	W	W
Railroad ballast	653	7,370	11.28	728	8,880	12.21
Unspecified graded coarse aggregate	5,390	76,900	14.26	8,210	118,000	14.37
Fine aggregate (-¾ inch):						
Stone sand, concrete	1,310	12,200	9.31	574	5,130	8.94
Stone sand, bituminous mix or seal	W	W	W	176	1,670	9.49
Screening, undesignated	69	435	6.30	422	1,630	3.85
Unspecified fine aggregate	1,490	14,100	9.49	3,150	26,200	8.33
Coarse and fine aggregates:						
Graded road base or subbase	10,800	57,100	5.30	8,670	54,700	6.31
Unpaved road surface	492	4,150	8.44	107	1,170	10.94
Terrazzo and exposed aggregate	W	W	W	15	9,120	609.66
Crusher run or fill or waste	1,750	6,430	3.66	2,710	11,900	4.40
Roofing granules	--	--	--	W	W	W
Unspecified coarse and fine aggregates	10,400	95,700	9.19	17,700	181,000	10.23
Unspecified and other construction materials	7	73	10.36	426	3,590	8.42
Agricultural:						
Agricultural Limestone	264	3,090	11.71	376	2,110	5.60
Poultry grit and mineral food	W	W	W	W	W	W
Chemical and metallurgical:						
Cement manufacture	12,400	44,500	3.59	12,400	60,100	4.84
Lime manufacture	--	--	--	W	W	W
Sulfur oxide removal	W	W	W	--	--	--
Special:						
Asphalt fillers or extenders	W	W	W	--	--	--
Other fillers or extenders	W	W	W	W	W	W
Other miscellaneous uses and specified uses not listed	297	4,490	15.13	757	6,100	8.07
Unspecified:²						
Reported	43,100	330,000	7.66	45,800	350,000	7.65
Estimated	36,200	278,000	7.68	26,500	194,000	7.33
Total or average	134,000	1,020,000	7.61	136,000	1,100,000	8.12

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

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

²Reported and estimated production without a breakdown by end use.

TABLE 4
TEXAS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2012, BY USE AND DISTRICT¹

(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
Coarse aggregate, graded ³	W	W	--	--	W	W	W	W
Fine aggregate (-¾ inch) ⁴	W	W	--	--	W	W	W	W
Coarse and fine aggregates ⁵	W	W	273	1,410	294	1,590	W	W
Other construction materials	--	--	--	--	--	--	--	--
Agricultural ⁶	W	W	--	--	--	--	--	--
Chemical and metallurgical ⁷	--	--	--	--	W	W	--	--
Special ⁸	--	--	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed ⁹	2	25	--	--	--	--	6	321
Unspecified: ¹⁰								
Reported	--	--	--	--	354	2,670	W	W
Estimated	1,720	13,300	182	1,320	4,500	36,900	6,010	35,300
Total	1,950	15,400	455	2,730	6,690	54,200	8,090	54,100
Use	District 5		District 6		District 7		District 8	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch) ²	354	5,900	--	--	488	4,310	W	W
Coarse aggregate, graded ³	W	W	--	--	5,030	46,500	W	W
Fine aggregate (-¾ inch) ⁴	W	W	--	--	1,450	13,500	W	W
Coarse and fine aggregates ⁵	2,890	18,100	--	--	16,000	97,400	W	W
Other construction materials	--	--	--	--	--	--	--	--
Agricultural ⁶	W	W	--	--	W	W	--	--
Chemical and metallurgical ⁷	5,770	21,900	--	--	6,070	19,100	--	--
Special ⁸	W	W	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed ⁹	--	--	--	--	W	W	--	--
Unspecified: ¹⁰								
Reported	12,400	95,900	--	--	30,300	231,000	27	217
Estimated	9,640	67,700	988	6,990	9,780	93,300	--	--
Total	38,200	276,000	988	6,990	69,500	510,000	W	W
Use	District 9		Unspecified districts					
	Quantity	Value	Quantity	Value				
Construction:								
Coarse aggregate (+1½ inch) ²	414	5,040	--	--				
Coarse aggregate, graded ³	W	W	--	--				
Fine aggregate (-¾ inch) ⁴	13	77	--	--				
Coarse and fine aggregates ⁵	W	W	205	4,680				
Other construction materials	7	73	--	--				
Agricultural ⁶	--	--	--	--				
Chemical and metallurgical ⁷	--	--	--	--				
Special ⁸	--	--	--	--				
Other miscellaneous uses and specified uses not listed ⁹	--	--	--	--				
Unspecified: ¹⁰								
Reported	36	290	--	--				
Estimated	3,320	22,900	--	--				
Total	5,470	46,400	205	4,680				

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

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

²Includes riprap and jetty stone, filter stone, and unspecified coarse aggregate.

³Includes concrete aggregate (coarse), bituminous aggregate (coarse), railroad ballast, and unspecified graded coarse aggregate.

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

⁵Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, and unspecified coarse and fine aggregates.

⁶Includes agricultural limestone, and poultry grit and mineral food.

⁷Includes cement manufacture and sulfur oxide removal.

⁸Includes asphalt fillers or extenders and other fillers or extenders.

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

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

TABLE 5
TEXAS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2013, BY USE AND DISTRICT¹

(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	88	812	W	W	W	W
Coarse aggregate, graded ³	57	615	--	--	W	W	W	W
Fine aggregate (-¾ inch) ⁴	15	133	1	5	W	W	W	W
Coarse and fine aggregates ⁵	127	1,200	W	W	W	W	W	W
Other construction materials	20	121	--	--	3	79	27	180
Agricultural ⁶	--	--	--	--	--	--	W	W
Chemical and metallurgical ⁷	W	W	--	--	W	W	--	--
Special ⁸	--	--	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed ⁹	1	15	--	--	--	--	--	--
Unspecified: ¹⁰								
Reported	--	--	--	--	483	3,600	--	--
Estimated	1,640	13,100	42	313	2,860	21,500	7,280	42,400
Total	1,880	15,400	W	W	8,300	66,200	9,480	63,400
Use	District 5		District 6		District 7		District 8	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Construction:								
Coarse aggregate (+1½ inch) ²	237	2,650	W	W	604	7,860	W	W
Coarse aggregate, graded ³	2,180	17,900	--	--	6,670	70,200	W	W
Fine aggregate (-¾ inch) ⁴	988	4,950	--	--	2,730	23,700	W	W
Coarse and fine aggregates ⁵	2,510	18,300	W	W	19,400	166,000	W	W
Other construction materials	--	--	--	--	W	W	--	--
Agricultural ⁶	W	W	--	--	W	W	--	--
Chemical and metallurgical ⁷	6,270	32,400	--	--	6,770	27,900	--	--
Special ⁸	W	W	--	--	18	372	W	W
Other miscellaneous uses and specified uses not listed ⁹	388	2,940	--	--	--	--	--	--
Unspecified: ¹⁰								
Reported	14,600	110,000	--	--	30,700	237,000	27	224
Estimated	7,470	64,300	503	3,760	3,870	27,900	--	--
Total	34,800	254,000	683	5,580	71,800	568,000	W	W
Use	District 9		Unspecified districts					
	Quantity	Value	Quantity	Value				
Construction:								
Coarse aggregate (+1½ inch) ²	386	6,000	--	--				
Coarse aggregate, graded ³	W	W	--	--				
Fine aggregate (-¾ inch) ⁴	W	W	--	--				
Coarse and fine aggregates ⁵	1,350	15,200	128	2,840				
Other construction materials	--	--	--	--				
Agricultural ⁶	--	--	--	--				
Chemical and metallurgical ⁷	--	--	--	--				
Special ⁸	--	--	--	--				
Other miscellaneous uses and specified uses not listed ⁹	--	--	--	--				
Unspecified: ¹⁰								
Reported	36	299	--	--				
Estimated	2,780	20,800	--	--				
Total	4,790	45,600	128	2,840				

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

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

²Includes riprap and jetty stone, filter stone, and unspecified coarse aggregate.

³Includes concrete aggregate (coarse), bituminous aggregate (coarse), railroad ballast, and unspecified graded coarse aggregate.

⁴Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesigned), and unspecified fine aggregate.

⁵Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, and unspecified coarse and fine aggregates.

⁶Includes agricultural limestone, and poultry grit and mineral food.

⁷Includes cement manufacture and sulfur oxide removal.

⁸Includes asphalt fillers or extenders and other fillers or extenders.

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

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

TABLE 6
TEXAS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2012,
BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	20,400	\$142,000	\$6.99
Plaster and gunite sands	345	2,980	8.64
Concrete products (blocks, bricks, pipe, decorative, and so forth)	9	122	13.56
Asphaltic concrete aggregates and other bituminous mixtures	572	4,750	8.30
Road base and coverings ²	2,600	25,800	9.93
Fill	1,810	8,070	4.46
Other miscellaneous uses ³	62	466	7.52
Unspecified: ⁴			
Reported	8,040	59,700	7.42
Estimated	46,900	340,000	7.24
Total or average	80,800	584,000	7.23

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

²Includes road and other stabilization (cement and lime).

³Includes filtration, and snow and ice control.

⁴Reported and estimated production without a breakdown by end use.

TABLE 7
TEXAS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2013,
BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	16,800	\$151,000	\$9.02
Plaster and gunite sands and concrete products	200	2,750	13.73
Asphaltic concrete aggregates and other bituminous mixtures	362	4,400	12.14
Road base and coverings	976	4,440	4.55
Road and other stabilization (cement)	4	28	7.00
Fill	1,410	7,430	5.27
Other miscellaneous uses ²	501	13,000	25.87
Unspecified: ³			
Reported	11,600	83,900	7.21
Estimated	46,400	339,000	7.31
Total or average	78,300	606,000	7.75

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

²Includes filtration.

³Reported and estimated production without a breakdown by end use.

TABLE 8
TEXAS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2012, BY USE AND DISTRICT¹

(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	1,840	12,600	W	W
Asphaltic concrete aggregates and road base materials ³	W	W	361	3,250	W	W
Fill	84	554	36	110	6	13
Other miscellaneous uses ⁴	2	21	--	--	15	57
Unspecified: ⁵						
Reported	2	27	200	1,320	573	4,420
Estimated	5,660	41,400	162	1,190	2,510	18,300
Total	6,680	52,300	2,590	18,500	3,570	24,600
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products ²	W	W	3,890	25,400	W	W
Asphaltic concrete aggregates and road base materials ³	W	W	--	--	--	--
Fill	--	--	564	2,110	W	W
Other miscellaneous uses ⁴	--	--	20	112	--	--
Unspecified: ⁵						
Reported	--	--	1,800	12,300	--	--
Estimated	2,500	18,300	12,500	91,300	4,690	34,300
Total	2,760	19,900	18,800	131,000	7,170	50,900
Use	District 7		District 8		District 9	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products ²	2,840	22,500	6,230	36,500	W	W
Asphaltic concrete aggregates and road base materials ³	1,490	15,700	602	5,160	W	W
Fill	552	3,110	546	1,980	--	--
Other miscellaneous uses ⁴	26	276	--	--	--	--
Unspecified: ⁵						
Reported	2,370	18,700	2,890	21,000	200	1,770
Estimated	3,400	24,900	11,200	78,700	4,330	31,600
Total	10,700	85,100	21,500	143,000	6,400	53,400
Use	Unspecified districts					
	Quantity	Value				
Concrete aggregate and concrete products ²	674	4,830				
Asphaltic concrete aggregates and road base materials ³	--	--				
Fill	--	--				
Other miscellaneous uses ⁴	--	--				
Unspecified: ⁵						
Reported	--	--				
Estimated	--	--				
Total	674	4,830				

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

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

²Includes plaster and gunite sands.

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

⁴Includes filtration, and snow and ice control.

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

TABLE 9
TEXAS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2013, BY USE AND DISTRICT¹

(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	974	8,550	1,040	12,700
Asphaltic concrete aggregates and road base materials ³	W	W	66	591	W	W
Fill	90	602	42	213	W	W
Other miscellaneous uses ⁴	--	--	--	--	15	332
Unspecified: ⁵						
Reported	2	31	--	--	447	3,450
Estimated	5,920	46,400	660	4,510	1,510	9,480
Total	6,330	50,400	1,740	13,900	3,020	26,000
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products ²	24	173	W	W	W	W
Asphaltic concrete aggregates and road base materials ³	--	--	--	--	W	W
Fill	--	--	W	W	5	20
Other miscellaneous uses ⁴	--	--	160	1,550	227	9,990
Unspecified: ⁵						
Reported	--	--	2,530	18,400	--	--
Estimated	1,650	12,000	14,700	109,000	3,100	22,000
Total	1,670	12,100	19,800	144,000	4,040	38,900
Use	District 7		District 8		District 9	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products ²	2,900	25,300	6,820	56,700	W	W
Asphaltic concrete aggregates and road base materials ³	576	1,770	204	1,310	W	W
Fill	425	2,790	326	1,820	10	39
Other miscellaneous uses ⁴	100	1,090	--	--	--	--
Unspecified: ⁵						
Reported	2,810	22,400	5,560	37,100	295	2,600
Estimated	6,590	53,200	9,630	62,700	2,700	20,200
Total	13,400	107,000	22,500	160,000	5,780	55,200

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

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

²Includes plaster and gunite sands.

³Includes road and other stabilization (cement).

⁴Includes filtration.

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