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2006 Minerals Yearbook

OREGON

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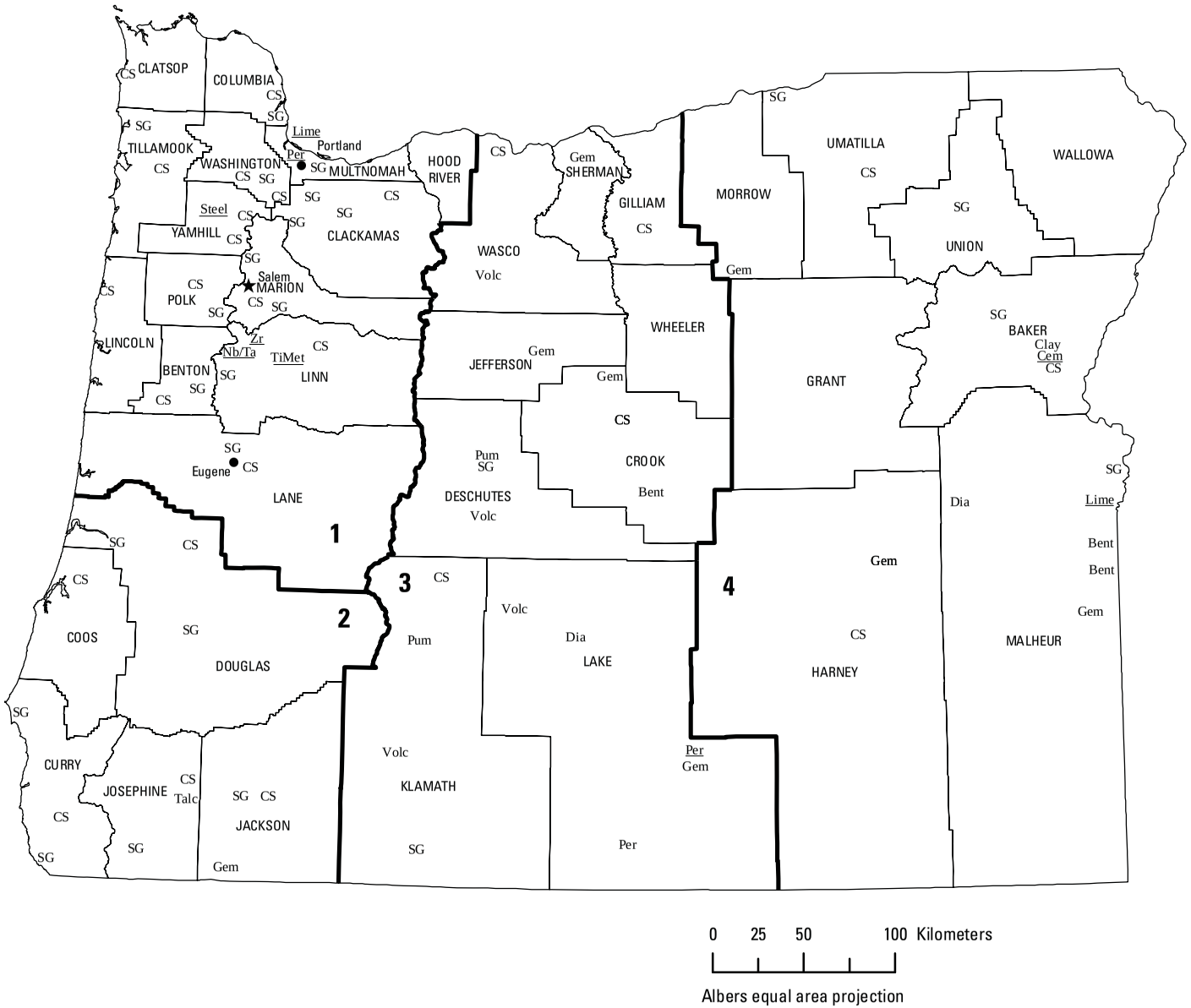
OREGON



LEGEND

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

MINERAL SYMBOLS (Major producing areas)

Bent	Bentonite
Cem	Cement plant
Clay	Common clay
CS	Crushed stone
Dia	Diatomite
Dia	Diatomite plant
Gem	Gemstones
Lime	Lime plant
Nb/Ta	Niobium (columbium) and tantalum plant
Per	Perlite
Per	Perlite plant
Pum	Pumice and pumicite
SG	Construction sand and gravel
Steel	Steel plant
Talc	Talc
TiMet	Titanium metal plant
Volc	Volcanic cinder
Zr	Zirconium plant

Source: Oregon Department of Geology and Mineral Industries/U.S. Geological Survey (2006).

THE MINERAL INDUSTRY OF OREGON

In 2006, Oregon's nonfuel raw mineral production[1] was valued at $509 million, based upon annual U.S. Geological Survey (USGS) data. This was an increase of $70 million, or nearly 16%, from the State's total nonfuel mineral value of $439 million in 2005, which followed a $72 million, or 19.6%, increase from 2004 to 2005. The State ranked 36th among the 50 States in total nonfuel mineral production value and accounted for nearly 1% of the U.S. total.

Industrial minerals accounted for all of Oregon's nonfuel raw mineral and material production. Crushed stone, construction sand and gravel, and portland cement, in descending order of value, remained the State's leading nonfuel mineral commodities, followed by diatomite, crude perlite, pumice and pumicite, and gemstones. Construction sand and gravel and crushed stone accounted for nearly 72% of Oregon's total nonfuel mineral production value, while the combined total of these seven mineral commodities accounted for about 99% of the State's total nonfuel raw mineral economy.

In 2006, Oregon's rise in nonfuel mineral value was led by increases in the values of construction sand and gravel, crushed stone, and portland cement. Significant increases took place in the unit values of each of the three. An 8% increase in the production of construction sand and gravel led to a $29 million, or a nearly 20%, increase in the commodity's value, while a nearly 7% decrease in crushed stone production resulted in a $25 million, or 15% increase, in its value. With a relatively small increase in portland cement production, its value rose by more than $15 million. Although being a comparatively smaller increase, the value of gemstones rose a substantial 58% to $1.86 million in 2006 from the State's $1.18 million of 2005 (table 1). The largest decrease in value took place in that of lime, down by about $4 million.

In 2006, Oregon continued to be second in the quantity of crude perlite produced as compared with other producing States, and third in the production of diatomite. The State rose in rank to second from third in the production of gemstones (gemstones based upon value), and it decreased to second from first in that of pumice and pumicite. Additionally, Oregon remained a significant producer of crushed stone and construction sand and gravel; the production and value of common clays was up substantially.

[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 2006 USGS mineral production data published in this chapter are those available as of March 2008. 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.

TABLE 1

NONFUEL RAW MINERAL PRODUCTION IN OREGON[1, 2]

(Thousand metric tons and thousand dollars)

Mineral	2004		2005		2006	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays, bentonite	10	W	W	W	W	W
Gemstones, natural	NA	1,210	NA	1,180	NA	1,860
Sand and gravel, construction	21,000	125,000	22,000	146,000	23,800	175,000
Stone, crushed	22,700	126,000	26,800 r	164,000 r	25,000	189,000
Combine values of cement (portland), clays (common), diatomite, lime, perlite (crude), pumice and pumicite, talc (crude), and values indicated by the symbol W	XX	114,000	XX	128,000	XX	143,000
Total	XX	367,000	XX	439,000 r	XX	509,000

rRevised. 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

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

Kind	2005 Number of quarries	2005 Quantity (thousand metric tons)	2005 Value (thousands)	2006 Number of quarries	2006 Quantity (thousand metric tons)	2006 Value (thousands)
Limestone	1	1,290	$7,120	1	1,240	$6,750
Granite	1	2	14	--	--	--
Traprock	116 r	21,800 r	135,000 r	113	18,200	140,000
Volcanic cinder and scoria	3	47	261	6	28	222
Miscellaneous stone	20 r	3,620 r	21,600 r	29	5,510	42,400
Total	XX	26,800 r	164,000 r	XX	25,000	189,000

rRevised. XX Not applicable. -- Zero.

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

TABLE 3

OREGON: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2006, BY USE[1]

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Macadam	W	W
Riprap and jetty stone	56	584
Filter stone	80	795
Other coarse aggregate	622	4,060
Total	758	5,440
Coarse aggregate, graded:		
Concrete aggregate, coarse	(2)	(2)
Bituminous aggregate, coarse	282	2,660
Bituminous surface-treatment aggregate	(2)	(2)
Railroad ballast	143	1,100
Other graded coarse aggregate	308	2,230
Total	758	6,350
Fine aggregate (-⅜ inch):		
Stone sand, concrete	(2)	(2)
Stone sand, bituminous mix or seal	(2)	(2)
Screening, undesignated	19	47
Other fine aggregate	210	2,110
Total	409	3,730
Coarse and fine aggregates:		
Graded road base or subbase	3,280	26,200
Unpaved road surfacing	943	7,160
Terrazzo and exposed aggregate	(2)	(2)
Crusher run or fill or waste	481	3,440
Roofing granules	(2)	(2)
Other coarse and fine aggregates	2,520	18,700
Total	7,450	56,700
Other construction materials	56	339
Chemical and metallurgical, cement manufacture	(3)	(3)
Special, asphalt fillers or extenders	(3)	(3)
Other miscellaneous uses:		
Lightweight aggregate (slate)	(4)	(4)
Other specified uses not listed	(4)	(4)
Unspecified:[5]		
Reported	7,840	59,900
Estimated	6,600	51,000
Total	14,500	111,000
Grand total	25,000	189,000

W Withheld to avoid disclosing company proprietary data; included with "Other coarse aggregates."

[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 in "Total."

[3]Withheld to avoid disclosing company proprietary data; included in "Grand total."

[4]Withheld to avoid disclosing company proprietary data; included with "Unspecified: Reported."

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

TABLE 4

OREGON: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2006, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	Districts 1 and 2[2]		Districts 3 and 4[2]		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch)[3]	644	4,720	112	708	2	14
Coarse aggregate, graded[4]	457	3,670	301	2,690	--	--
Fine aggregate (-⅜ inch)[5]	150	1,390	259	2,340	--	--
Coarse and fine aggregates[6]	6,290	48,800	1,160	7,860	--	--
Other construction materials	--	--	56	339	--	--
Chemical and metallurgical[7]	--	--	W	W	--	--
Special[8]	--	--	W	W	--	--
Other miscellaneous uses[9]	(10)	(10)	(10)	(10)	--	--
Unspecified:[11]						
Reported	4,650	35,700	345	2,500	2,850	21,700
Estimated	6,000	46,000	630	4,800	--	--
Total	18,200	140,000	3,910	27,100	2,850	21,700

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]Districts 1 and 2 and 3 and 4 are combined to avoid disclosing company proprietary data.

[3]Includes filter stone, macadam, riprap and jetty stone, and other coarse aggregates.

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

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

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

[7]Includes cement manufacture.

[8]Includes asphalt fillers or extenders.

[9]Includes lightweight aggregate (slate) and other specified uses not listed.

[10]Withheld to avoid disclosing company proprietary data; included with "Unspecified: Reported."

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

TABLE 5

OREGON: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2006, BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate and concrete products	2,510	$22,800	$9.10
Plaster and gunite sands	11	210	19.09
Asphaltic concrete aggregates and other bituminous mixtures	1,430	11,900	8.37
Road base and coverings	3,510	22,700	6.48
Fill	340	1,730	5.07
Snow and ice control	6	48	8.00
Filtration	15	163	10.87
Other miscellaneous uses	550	3,550	6.46
Unspecified:[2]			
Reported	10,000	72,200	7.21
Estimated	5,370	39,400	7.34
Total or average	23,800	175,000	7.36

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

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

TABLE 6
OREGON: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2006,
BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

Use	District 1		Districts 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products[2]	839	6,720	707	6,910	737	6,620
Asphaltic concrete aggregates and other bituminous mixtures	548	4,200	452	4,330	W	W
Road base and coverings	2,040	14,100	534	3,730	790	4,170
Fill	45	144	W	W	219	1,040
Other miscellaneous uses[3]	497	3,330	74	671	423	3,270
Unspecified:[4]						
Reported	8,270	58,900	860	7,470	21	104
Estimated	3,580	26,500	380	2,810	850	6,280
Total	15,800	114,000	3,010	25,900	3,040	21,500

	District 4		Unspecified districts	
	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products[2]	235	2,760	--	--
Asphaltic concrete aggregates and other bituminous mixtures	W	W	--	--
Road base and coverings	143	690		
Fill	W	W	--	--
Other miscellaneous uses[3]	80	432	--	--
Unspecified:[4]				
Reported	30	218	839	5,540
Estimated	559	3,860	--	--
Total	1,050	7,960	839	5,540

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 filtration and snow and ice control.

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