



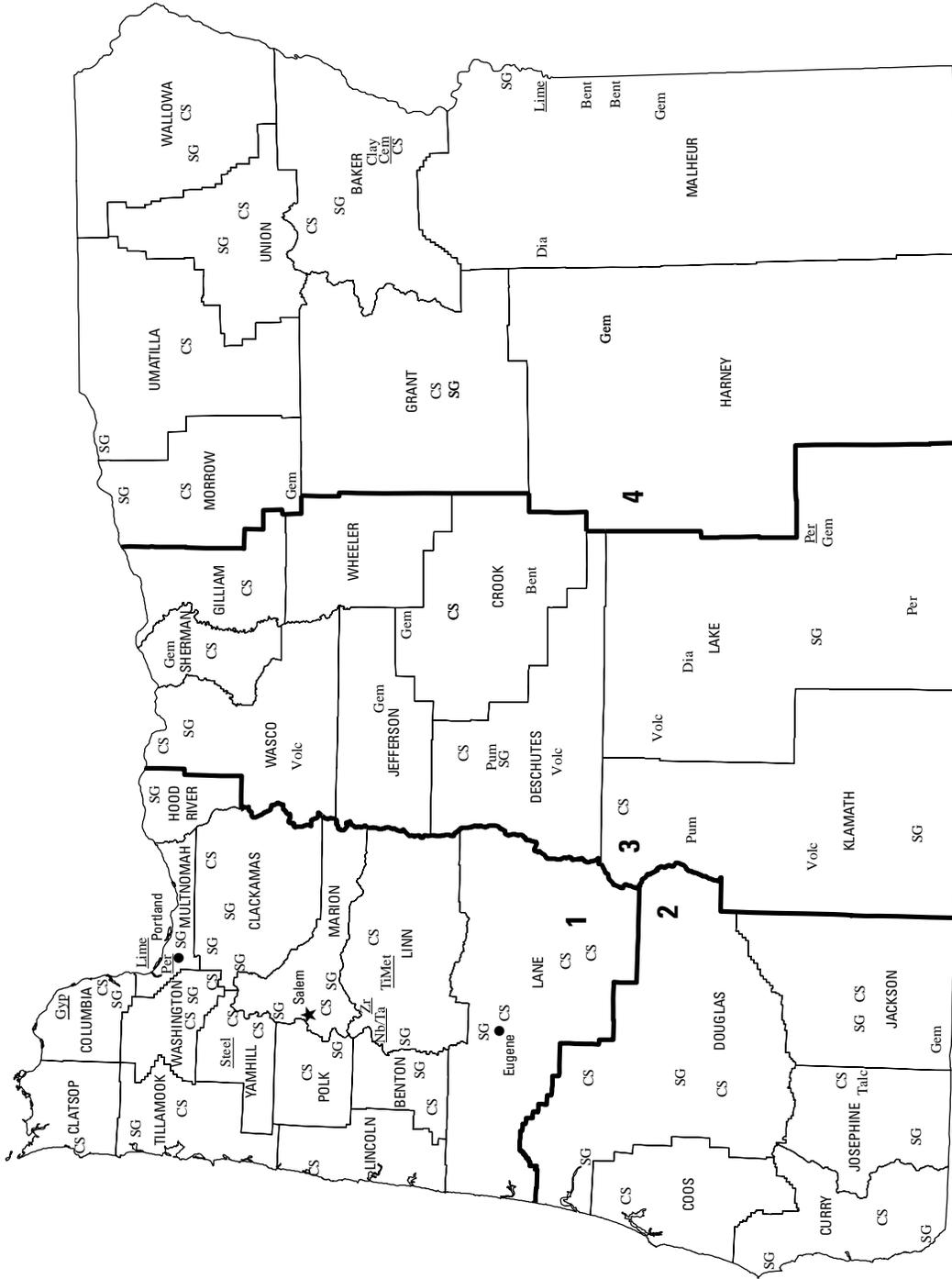
# 2007 Minerals Yearbook

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OREGON [ADVANCE RELEASE]

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# OREGON

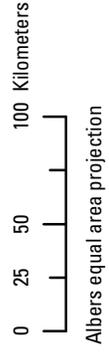


## LEGEND

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

## MINERAL SYMBOLS (Major producing areas)

- Bent Bentonite
- Cem Cement plant and quarry
- Clay Common clay
- CS Crushed stone
- Dia Diatomite
- Gyp Gypsum plant
- Gem Gemstones
- Lime Lime plant and quarry
- 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



# THE MINERAL INDUSTRY OF OREGON

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Oregon Department of Geology and Mineral Industries for collecting information on all nonfuel minerals.

In 2007, Oregon's nonfuel raw mineral production<sup>1</sup> was valued at \$493 million, based upon annual U.S. Geological Survey (USGS) data. This was a decrease of \$43 million, or 8%, from the State's total nonfuel mineral value of \$536 million in 2006, which followed a \$97 million, or 22%, increase from 2005 to 2006. The State ranked 36th among the 50 States in total nonfuel mineral production value.

Industrial minerals accounted for all of Oregon's nonfuel raw mineral and raw mineral material production. Crushed stone, construction sand and gravel, and portland cement, in descending order of production 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 74% of Oregon's total nonfuel mineral production value, while the combined total of these seven mineral commodities accounted for more than 98% of the State's total nonfuel raw mineral economy.

In 2007, despite increases that took place in the unit values of most of the State's nonfuel mineral commodities, decreases in

the quantities produced of a majority of the commodities led to the State's overall decrease in nonfuel mineral production value. The largest decreases in value, in descending order, took place in crushed stone, construction sand and gravel, portland cement, and diatomite. Although crushed stone production marginally increased, its value of production decreased by \$16 million, or down by nearly 8%. Decreases in the production of construction sand and gravel and portland cement resulted in decreases of about \$12 million each in the mineral commodities' production values. Also a smaller yet significant decrease took place in the production value of diatomite. Increases in value took place only in lime, crude perlite, and gemstones. While not significantly affecting the State's overall change in value in 2007, gemstones continued its recent increasing trend. In 2007, the value of gemstone production rose nearly 16% to \$2.15 million from \$1.86 million in 2006, following a nearly 58% increase from \$1.18 million in 2005 (table 1).

In 2007, Oregon continued to be second in the quantity of crude perlite produced as compared with other producing States, second in the production of gemstones (gemstones based upon value), and third in the production of diatomite. With a slightly more than 50% decrease in pumice and pumicite production, the State decreased in rank to fifth from second in that mineral commodity. Additionally, Oregon remained a producer of significant quantities of crushed stone, construction sand and gravel, and common clays. Besides the small increase in crushed stone production, only crude perlite had an increase in production in 2007, up by about 10%.

<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 2007 USGS mineral production data published in this chapter are those available as of June 2009. 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<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones, natural	NA	1,180	NA	1,860	NA	2,150
Sand and gravel, construction	22,000	146,000	23,800	175,000	21,200	163,000
Stone, crushed	26,800	164,000	28,900 <sup>†</sup>	216,000 <sup>†</sup>	29,000	200,000
Combine values of cement (portland), clays (bentonite, common), diatomite, lime, perlite (crude), pumice and pumicite, talc [crude (2005–06)]	XX	128,000	XX	143,000	XX	128,000
Total	XX	439,000	XX	536,000 <sup>†</sup>	XX	493,000

<sup>†</sup>Revised. NA Not available. XX Not applicable.

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

<sup>2</sup>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 TYPE<sup>1</sup>

Type	2006			2007		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Traprock	113	17,700 <sup>r</sup>	\$137,000 <sup>r</sup>	130	17,300	\$118,000
Volcanic cinder and scoria	6	28	222	6	445	3,350
Miscellaneous stone	64 <sup>r</sup>	11,200 <sup>r</sup>	79,500 <sup>r</sup>	74	11,300	78,700
Total	XX	28,900 <sup>r</sup>	216,000 <sup>r</sup>	XX	29,000	200,000

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

<sup>1</sup>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 2007, BY USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Macadam	W	W
Riprap and jetty stone	150	1,490
Filter stone	W	W
Other coarse aggregate	1,420	8,870
Coarse aggregate, graded:		
Concrete aggregate, coarse	28	162
Bituminous aggregate, coarse	313	2,880
Bituminous surface-treatment aggregate	29	270
Railroad ballast	225	1,890
Other graded coarse aggregate	312	1,870
Fine aggregate (-¾ inch):		
Stone sand, concrete	170	1,310
Stone sand, bituminous mix or seal	112	1,290
Screening, undesignated	139	856
Other fine aggregate	176	1,530
Coarse and fine aggregates:		
Graded road base or subbase	5,870	40,700
Unpaved road surfacing	727	5,070
Terrazzo and exposed aggregate	W	W
Crusher run or fill or waste	519	3,200
Roofing granules	W	W
Other coarse and fine aggregates	2,690	15,200
Other construction materials	43	524
Chemical and metallurgical, cement manufacture	(2)	(2)
Other miscellaneous uses and specified uses not listed	435	3,570
Unspecified: <sup>3</sup>		
Reported	6,950	47,800
Estimated	8,600	60,000
Total	29,000	200,000

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>Withheld to avoid disclosing company proprietary data; included with "Unspecified: Reported."

<sup>3</sup>Reported and estimated production without a breakdown by end use.

TABLE 4  
OREGON: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2007, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Districts 1 and 2 <sup>2</sup>		Districts 3 and 4 <sup>2</sup>		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>3</sup>	1,540	10,200	151	843	--	--
Coarse aggregate, graded <sup>4</sup>	606	4,540	300	2,530	--	--
Fine aggregate (-¾ inch) <sup>5</sup>	427	3,590	170	1,400	--	--
Coarse and fine aggregates <sup>6</sup>	8,290	55,300	1,270	7,890	262	1,150
Other construction materials	40	497	2	28	--	--
Chemical and metallurgical <sup>7</sup>	--	--	W	W	--	--
Other miscellaneous uses	236	2,470	199	1,100	--	--
Unspecified: <sup>8</sup>						
Reported	3,490	22,300	1,750	11,300	1,720	14,100
Estimated	7,700	54,000	923	6,400	--	--
Total	22,300	153,000	4,770	31,500	1,980	15,300

W Withheld to avoid disclosing company proprietary data; included with "Unspecified: Reported." -- Zero.

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

<sup>2</sup>Districts 1 and 2 and 3 and 4 are combined to avoid disclosing company proprietary data.

<sup>3</sup>Includes filter stone, macadam, riprap and jetty stone, and other coarse aggregates.

<sup>4</sup>Includes bituminous aggregate (coarse), bituminous surface-treatment aggregate, concrete aggregate (coarse), railroad ballast, and other graded coarse aggregates.

<sup>5</sup>Includes screening (undesignated), stone sand (bituminous mix or seal), stone sand (concrete), and other fine aggregates.

<sup>6</sup>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.

<sup>7</sup>Includes cement manufacture.

<sup>8</sup>Reported and estimated production without a breakdown by end use.

TABLE 5  
OREGON: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2007,  
BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate and concrete products	2,510	\$22,800	\$9.08
Plaster and gunit sands	10	190	19.00
Concrete products (blocks, bricks, pipe, decorative, etc.)	4	37	9.25
Asphaltic concrete aggregates and other bituminous mixtures	1,640	13,500	8.24
Road base and coverings	4,010	28,400	7.10
Fill	433	2,510	5.79
Snow and ice control	9	77	8.56
Golf course	19	104	5.47
Other miscellaneous uses <sup>2</sup>	312	1,620	5.20
Unspecified: <sup>3</sup>			
Reported	7,980	60,500	7.58
Estimated	4,300	34,000	7.81
Total or average	21,200	163,000	7.70

<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 railroad ballast.

<sup>3</sup>Reported and estimated production without a breakdown by end use.

TABLE 6  
 OREGON: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2007,  
 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
Concrete aggregate (including concrete sand) <sup>2</sup>	827	7,450	689	6,670	870	6,870
Concrete products (blocks, bricks, pipe, decorative, etc.)	--	--	--	--	--	--
Asphaltic concrete aggregates and road base materials	567	4,470	562	5,580	W	W
Road base and coverings	2,110	16,200	716	5,110	W	W
Fill	62	241	131	1,230	221	988
Snow and ice control	(3)	3	3	28	--	--
Golf course	--	--	--	--	19	104
Other miscellaneous uses <sup>4</sup>	122	356	50	484	1,490	9,490
Unspecified: <sup>5</sup>						
Reported	7,510	57,700	231	1,810	21	85
Estimated	2,700	21,000	110	840	880	6,800
Total	13,900	108,000	2,490	21,700	3,490	24,200
			Unspecified districts			
	District 4		Quantity	Value		
Concrete aggregate (including concrete sand) <sup>2</sup>	133	1,980	--	--		
Concrete products (blocks, bricks, pipe, decorative, etc.)	4	37	--	--		
Asphaltic concrete aggregates and road base materials	W	W	--	--		
Road base and coverings	W	W	--	--		
Fill	19	49	--	--		
Snow and ice control	6	46	--	--		
Golf course	--	--	--	--		
Other miscellaneous uses <sup>4</sup>	340	2,020	--	--		
Unspecified: <sup>5</sup>						
Reported	85	653	128	254		
Estimated	610	4,700	--	--		
Total	1,190	9,510	128	254		

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>Less than ½ unit.

<sup>4</sup>Includes railroad ballast.

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