

THE MINERAL INDUSTRY OF NEVADA

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Nevada Bureau of Mines and Geology for collecting information on all nonfuel minerals.

In 1998, the preliminary estimated value¹ of nonfuel mineral production for Nevada was \$3.1 billion, according to the U.S. Geological Survey (USGS). This was a 5% decrease from that of 1997,² and followed a 0.6% increase in 1997 from 1996. The State rose in rank to first in the Nation (second in 1997) in nonfuel mineral production value, of which Nevada accounted for nearly 8% of the U.S. total.

Nevada, the Nation's leading State in gold and silver production, provided 74% and 40% of the Nation's gold and silver, respectively, and in so doing, the "Silver State" has been first in gold production since 1981 and in silver since 1987. In 1998, gold accounted for 79% of Nevada's nonfuel mineral value, but the precious metal also accounted for the largest portion of the State's decrease in value. Gold production increased, but owing to a lower average price for gold, the metal's total value decreased by about \$140 million (table 1). Other nonfuel minerals that had significant decreases included copper, down about \$38 million, and lithium compounds and diatomite, down \$19 million and \$7 million, respectively. Fuller's earth (down \$3 million) showed a small, yet significant decrease. Small increases occurred for crushed stone, bentonite, crude gypsum, silver, and portland cement (descending order of magnitude of change). Copper production increased slightly, but its value decreased owing to decreased copper prices. All other nonfuel minerals showed changes of value of less than \$1 million, except magnesite, which remained the same. In 1997, substantial increases in the values of copper, silver, crushed stone, and lime, supported by smaller yet significant increases in lithium compounds and diatomite were more than enough to balance out the significant decreases in gold, and combined significant drops in the values of magnesite, construction sand and gravel, and crude gypsum (descending order of change).

¹The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on the minerals or 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 1998 USGS mineral production data published in this chapter are preliminary estimates as of February 1999 and are expected to change. For some mineral commodities (for example, construction sand and gravel, crushed stone, and portland cement), estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. A telephone listing for the specialists may be retrieved over the Internet at <http://minerals.usgs.gov/minerals/contacts/comdir.html>; by using MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset (request Document #1000 for a telephone listing of all mineral commodity specialists); or by calling USGS information at (703) 648-4000 for the specialist's name and number. All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at <http://minerals.usgs.gov/minerals>; facsimile copies may be obtained from MINES FaxBack.

²Values, percentage calculations, and rankings for 1997 may vary from the *Minerals Yearbook, Area Reports: Domestic 1997, Volume II*, owing to the revision of preliminary 1997 to final 1997 data. Data for 1998 are preliminary and expected to change, while related rankings may also be subject to change.

Based on USGS estimates of quantities produced in the 50 States during 1998, Nevada remained first² in gold, silver, and barite production; first of three mercury-producing States; and first of two States that produced lithium minerals; and the only State to produce magnesite. The State also retained its 1997 ranking in a number of other mineral commodities—it was second in diatomite, fourth in copper, and seventh in lime. Nevada moved up in rank to 3d from 11th in the production of gemstones (by value), and to 5th from 6th in the production of crude gypsum and crude perlite, while it dropped to 2d in brucite. In addition, significant quantities of construction sand and gravel, industrial sand and gravel, and lime were produced in the State.

According to the Fraser Institute, an economic think-tank based in Vancouver, Canada, Nevada ranked the highest in North America for overall investment attractiveness (Jones and Prager, 1998). This top ranking was a result of the State's high mineral potential rating and its number one rating in public policy in the Fraser Institute study.

The following narrative information was provided by the Nevada Bureau of Mines and Geology (NBMG).³ Production data in the following text are those reported by the NBMG, based on its own surveys, estimates, and information gathered from company annual reports. The NBMG data are reported by that agency to be nonproprietary data and may differ from some USGS preliminary estimates and production figures as reported to the USGS.

Nevada produced 271,000 kilograms (kg) of gold in 1998 as well as 669,000 kg of silver. Nevada broke its own gold production record set in 1997, and for the first time exceeded the 249,000 kg mark. Silver production, however, was down from the record set in 1997. Nevada remained the leading gold- and silver-producing State in the United States with 36 mines reporting gold production and 30 mines producing silver production during 1998.

Newmont Mining Corp. continued as the largest gold-producing company in Nevada with 84,107 kg of gold produced in 1998 from its operations, which include Twin Creeks and the Lone Tree Complex as well as all of the company's Carlin Trend mines. Newmont's gold production was down slightly from the 1997 figure of 86,359 kg.

Barrick Gold Corp. was second in Nevada gold production, with 72,969 kg, and for the fourth consecutive year, Barrick's Betze-Post Mine was the largest individual Nevada gold producer with 46,614 kg. This figure was lower than the 1997 Betze-Post production of 49,947 kg, but Barrick Gold's Meikle Mine reported 1998 production of 26,354 kg, up from the 1997 figure of 17,863 kg. Other major gold producers in 1998 included Smoky Valley Common Operation's Round Mountain Mine with 15,878 kg. Placer Dome's Cortez Gold

³Joseph V. Tingley and Daphne D. La Pointe, Research Geologists, co-authored the text of mineral industry information provided by the Nevada Bureau of Mines and Geology.

Mines (including Pipeline) produced 35,500 kg; Independence Mining Co.'s Jerritt Canyon Mine produced 10,800 kg. Echo Bay Minerals Co. produced 5,210 kg from its McCoy/Cove operation, and Getchell Gold's Getchell Mine produced 5,453 kg.

Echo Bay Minerals' McCoy/Cove operation was Nevada's largest silver producer in 1998, yielding 292,000 kg. Coeur d'Alene Mines' Rochester Mine produced 224,000 kg of silver, and Kinross' Candelaria Mine produced 34,000 kg of silver. Other large silver-producing operations included Kennecott Rawhide Mining Co.'s Denton Rawhide Mine with 26,400 kg, Round Mountain Mine with 15,904 kg, and Hecla Mining's Rosebud Mine, which produced 14,866 kg.

BHP Copper Co. continued to operate its Robinson Copper Mine during 1998, producing 67,313 metric tons (t) of copper in concentrate, along with 2,700 kg of gold and 9,316 kg of silver. The MacArthur copper mine in Lyon County did not produce in 1998, while the Yerington Mine produced from stockpiled ore.

At an estimated \$373 million, the total value of industrial minerals produced in Nevada in 1998 was slightly above that for 1997. The most important Nevada industrial minerals produced in 1998, in order of estimated dollar value, were aggregates, lime, diatomite, gypsum, cement, barite, lithium, silica, clay, and magnesia. Data used for these estimates, and data reported for individual commodities below, were obtained from the NBMG or directly from companies that produced industrial minerals.

In 1998, construction aggregates (sand, gravel, and crushed stone) production in Nevada had an approximate total value of \$119 million and was ranked second among the State's mined commodities behind gold. For 1998, statewide aggregates production was estimated at 24.0 million metric tons (Mt), 5% below production in 1997. Aggregates produced from sand and gravel deposits accounted for about 75% of aggregates production statewide, with crushed stone and lightweight aggregates making up the balance.

Companies in the Las Vegas area that produced more than 1 million ton of aggregates in 1997, ranked in order of tonnage produced, were Nevada Ready Mix Corp., Hanson Aggregates West (formerly Bonanza Materials Inc.), CSR (formerly WMK Transit Mix Inc.), Frehner Construction Inc; Wells Cargo Inc., and Blue Diamond Materials Co. The largest producer, Nevada Ready Mix Co., produced most of its aggregates from a single open pit in an alluvial fan in the Lone Mountain area. Community pits and other aggregates mining facilities administered by the U.S. Bureau of Land Management and operated at least seven different companies, provided about 2.1 Mt to the Las Vegas area total in 1998.

In 1998, sand and gravel operations accounted for about 85% of aggregates used in the Las Vegas metropolitan area, with crushed stone and lightweight aggregate making up the balance. Major crushed stone producers in the Las Vegas area were Frehner Construction Co., Lopke Granite Products, and Southern Nevada Lightweight.

As in the past 7 years, the most important source of Las Vegas area aggregates was the Lone Mountain area northwest of Las Vegas. Once located a considerable distance from heavily urbanized areas, the impact of Lone Mountain aggregates operations, particularly on residential traffic, is now coming under scrutiny due to encroaching urbanization.

Significant production still comes from sites located in more heavily urbanized parts of the Las Vegas metropolitan area, but it is likely that future production will come increasingly from more distant sources. Since 1997, common aggregates have been hauled into Las Vegas from sites as far as 80 kilometers (km) away in Lincoln County.

In the Reno-Sparks-Carson City area, Granite Construction Co. and All-Lite Aggregate Co. produced about 1 million ton of aggregates in 1998. Companies that produced 450,000 t or more in 1998 included Rocky Ridge Inc. and Rilite Aggregate Co. Paiute Pit Aggregates, 48 km east of the Reno-Sparks metropolitan area, was also a major producer. Crushed rock continued to be an important source of aggregates in this area; crushed rock operations of Granite Construction and Rocky Ridge and lightweight rhyolite aggregates from All-Lite Aggregate Co., Rilite Aggregate Co., and Basqlite Lightweight Aggregate Corp. accounted for about 70% of the aggregate used in 1998 in the Reno-Sparks-Carson City area.

In 1998, barite shipments from Nevada totaled 445,000 t, 16% less than in 1997. M.I. Drilling Fluids Co. was once again the largest Nevada barite producer, with combined production of nearly 272,000 t of screened and crushed high-grade ore from the Greystone Mine and ground and bagged barite from its Battle Mountain plant, both in Lander County. In 1998 likely acquisition of Dresser Industries, Inc., the parent company of M.I. Drilling Fluids, by Halliburton Inc. was announced. If this takes place, the two largest barite producers in Nevada would be part of a single company.

Baroid Drilling Fluids, a subsidiary of Halliburton, shipped barite from the Dunphy Mill in Eureka County and the Rossi Mine in Elko County in 1998. Milpark Inc. also produced significant amounts of barite for drilling materials at its Argenta property near Battle Mountain, Lander County. Standard Industrial Minerals Inc. shipped a small amount of barite in 1998 from the P and S Mine in Nye County to a processing plant in Bishop, CA. The company markets high value white paint-grade barite for use in paint and as a filler.

American Borate Co. mined borate minerals from an underground operation in Death Valley, CA, in 1998. The ore is processed at the Lathrop Wells Mill in Nye County, but because the ore is from out of State, this production is not included in the estimate of total value of Nevada minerals.

Although the company mainly produces crushed landscape rock, Las Vegas Rock produced some sandstone building stone at Goodsprings, Clark County. Nevada Neanderthal Stone, which quarries and cuts Tertiary tuff near Beatty in Nye County for floor tile and other stone products, has seen its sales decline to 20% of former levels due to competition from foreign competitors.

The Nevada Cement Co., a subsidiary of Centex Construction Products, Inc., produces portland cement at a plant at Fernley in Lyon County. Annual production exceeds 450,000 t of cement. The Royal Cement Co. owns an idle plant near Logandale in Clark County. Annual production from this plant between 1995 and 1997 was as much as 45,000 t of cement. The plant is now shut down and there is no indication that the plant will resume production.

Clay production in Nevada in 1998 declined somewhat from 1997. IMV Nevada, which is owned by Mud Camp Mining Co. of California, is the largest producer. The operation consists of sepiolite, montmorillonite, and saponite mines and

a processing plant in Amargosa Valley, Nye County. The company is the only producer of sepiolite and saponite in the United States, and exports clay mineral products with a variety of uses worldwide.

Eagle-Picher Minerals, Inc., a division of Eagle-Picher Industries, Inc., produces most of Nevada's diatomite at three different operations. The largest operation is the Colado plant near Lovelock in Pershing County, which produces diatomaceous earth filtration products from diatomite mined northwest of Lovelock. The company also produced diatomite that is mainly used in fillers and absorbents at its Clark plant and mine in Storey County, and diatomite used in insulation from a pit near Hazen in Lyon County.

Moltan Co. of Memphis, TN, is the second largest diatomite miner in Nevada, producing cat litter, oil absorbent, and soil conditioner from diatomite mined in Churchill County northeast of Fernley. Other companies that produced diatomite in Nevada in 1998 were Grefco Inc. at its Basalt operation in Esmeralda and Mineral Counties, and CR Minerals Corp. at Hazen in Lyon County.

Gypsum production in Nevada increased from 1.5 Mt in 1997 to 1.6 Mt in 1998. The Blue Diamond operation of James Hardie Gypsum Co., just southwest of Las Vegas in Clark County, was the largest producer at more than 680,000 t. This gypsum was used to make wallboard and plaster. USG Corp., which mines gypsum at the other end of the State (northern Pershing County) was the second largest producer at nearly 476,000 t. USG processes the gypsum into wallboard and plaster at its Empire plant in northern Washoe County. Although PABCO Gypsum in Clark County east of Las Vegas mined nearly 530,000 t of ore in 1996, actual gypsum production was lower because the ore must be beneficiated to produce a gypsum concentrate. PABCO processes most of this gypsum into wallboard. The Art Wilson Co., Carson City, shipped about 104,000 t of gypsum from the Adams Mine in Lyon County for use in cement and agricultural markets.

In 1998, lime production in Nevada continued at record levels, increasing 7% over 1997. The Continental Lime, Inc. Pilot Peak high-calcium lime operation near Wendover in Elko County shipped the most lime in 1998, mainly to Nevada gold mining operations for use in pH control. Chemical Lime Co. produced high-calcium and dolomitic lime at Apex near Las Vegas. Hydrated lime is made from Apex quicklime at a plant in Henderson. The high-calcium lime is mainly used for gold mine processing, paper manufacturing, and environmental markets; the dolomitic lime is mostly used in construction. In late 1997, Chemical Lime shut down its dolomite mining operation at Sloan, south of Las Vegas, where limestone and dolomite had been mined since 1910.

In addition to lime, Chemical Lime shipped crushed limestone for glass flux and flue gas desulfurization. Other carbonate rock producers in Nevada were Min-Ad, Inc. and Nutritional Additives Corp., which are both located near Winnemucca, produce ground dolomite for agricultural use. Min-Ad, the largest of the two agricultural dolomite producers, shipped more than 54,000 t in 1998, a slight increase over 1997.

In October 1998, the Silver Peak, Esmeralda County, lithium operation was sold to Chemetall GmbH, a subsidiary of the giant Metallgesellschaft AG, for \$305 million by Cyprus Amax Minerals Co. The operation, which produces

lithium carbonate and lithium hydroxide compounds from brine that is pumped from beneath Clayton Valley playa and evaporated in nearby ponds, has been active since 1965. A similar lithium brine facility in Chile was included in the sale. In recent years, Cyprus Amax earnings from lithium sales have been strong and prices high; however, the new SQM Chemicals S.A. (formerly Minsal) lithium brine operation in South America caused price reductions in 1998.

Annual production of magnesite from magnesite at Gabbs, Nye County, by Premier Services Corp. was approximately the same in 1998 as in 1997. Brucite (magnesium hydroxide) production was up sharply, though still relatively small in comparison to past brucite production from the deposit.

In 1998, Eagle-Picher Minerals produced expanded perlite at the Colado diatomaceous earth facility in Pershing County from perlite that is mined in Churchill County. In addition, the Wilkin Mining and Trucking Co. mined perlite from the Mackie Mine in Lincoln County.

The Huck Salt Co. of Fallon produced about 16,000 t of salt in 1998. The salt, mined from Fourmile Flat near the Sand Springs mining district in Churchill County, is now mainly used for deicing roads. Salt has been harvested from this playa deposit more-or-less continuously since salt was hauled to Virginia City for ore processing in the 1860's.

The Simplot Silica Products plant at Overton in Clark County shipped 580,000 t of silica sand in 1998, the same as in 1997. The sand is mined from a large deposit of friable sandstone, washed in the pit, and transported via a slurry pipeline to the plant where it is screened and bagged.

The American Resource Corp. processing plant near Amargosa Valley, Nye County, shipped clinoptilolite for water processing, odor control, and horticultural uses in 1998. The company was placed in receivership along with its parent company, Rea Gold Corp., in March 1998. An offer to buy the zeolite operation by Badger Mining Corp., a Wisconsin-based industrial mineral company, was accepted in 1998. It is anticipated that the acquisition will be finalized in 1999. The clinoptilolite deposit extends from California, where it is presently mined, into Nevada. The operation has plans for plant expansion and development of a mine in Nevada.

American Colloid Inc. sold the Eastgate plant in Churchill County to an unnamed buyer. The plant, which was acquired from American Resource Corp. in 1995, was originally constructed by East West Minerals Inc. in 1987 to process mordenite into cat litter and absorbent products.

Metals exploration continued in Nevada in 1998 although at a lower level than in 1997. As in the recent past, 1998 exploration activity was concentrated along the major trends in the northern part of the State, the Battle Mountain-Eureka, Carlin, Getchell, and Midas trends. Several projects were pursued in Mineral, Esmeralda, and western Nye Counties along the Walker Lane, but no new activity was reported in Lincoln or Clark Counties, or along the eastern borderlands of the State.

Reference Cited

Jones, Laura, and Prager, Sharon, 1998, The Fraser Institute survey of mining companies operating in North America-1998/99: Vancouver, Canada, Fraser Institute, 50 p.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN NEVADA 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	1996		1997		1998 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays:						
Bentonite	6	580	W	W	W	W
Kaolin	25	W	W	W	W	W
Gemstones	NA	234	NA	474	NA	1,520
Gold 3/ kilograms	215,000	2,700,000	243,000	2,600,000	259,000	2,460,000
Sand and gravel: Construction	22,400	113,000	23,600	110,000	25,200	121,000
Silver 3/ metric tons	594	99,100	866	136,000	845	139,000
Stone: Crushed	3,080	25,200	5,150	41,800	5,600	46,200
Zeolites metric tons	(4/)	NA	(4/)	NA	NA	NA
Combined values of barite, brucite, cement (portland), clays (fuller's earth), copper, diatomite, gypsum (crude), lime, lithium minerals, magnesite, mercury, perlite (crude), salt, sand and gravel (industrial), and values indicated by symbol W	XX	315,000	XX	383,000	XX	324,000
Total	XX	3,250,000	XX	3,270,000	XX	3,100,000

P/ Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with "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 three significant digits; may not add to totals shown.

3/ Recoverable content from ores, etc.

4/ Withheld to avoid disclosing company proprietary data.

TABLE 2
NEVADA: CRUSHED STONE SOLD OR USED, BY KIND 1/

Kind	1996				1997			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	8	2,170	\$15,600	\$7.17	8	3,890	\$28,700	\$7.38
Dolomite	3	W	W	14.70	3	W	W	14.70
Granite	1	W	W	12.51	1	W	W	15.93
Traprock	6	W	W	3.30	6	W	W	3.48
Volcanic cinder and scoria	1	W	W	2.20	1	W	W	4.04
Miscellaneous stone	1	W	W	4.41	1	W	W	8.27
Total	XX	3,080	25,200	8.18	XX	5,150	41,800	8.12

W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.

1/ Data are rounded to three significant digits, except unit value; may not add to totals shown.

TABLE 3
NEVADA: CRUSHED STONE SOLD OR USED BY PRODUCERS
IN 1997, BY USE 1/ 2/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch): Other coarse aggregate 3/	75	\$808	\$10.77
Coarse aggregate, graded:			
Concrete aggregate, coarse	605	6,910	11.42
Bituminous aggregate, coarse	73	440	6.03
Other graded coarse aggregate	4	59	14.75
Fine aggregate (-1/8 inch):			
Stone sand, bituminous mix or seal	64	385	6.02
Other fine aggregate 4/	140	1,270	9.05
Coarse and fine aggregates:			
Graded road base or subbase	408	1,740	4.26
Crusher run or fill or waste	54	150	2.78
Other construction materials 5/	477	3,650	7.65
Agricultural:			
Poultry grit and mineral food	54	1,780	32.91
Other agricultural uses	W	W	11.02
Chemical and metallurgical:			
Cement manufacture	W	W	4.37
Lime manufacture	W	W	9.38
Flux stone	W	W	16.36
Sulfur oxide removal	W	W	3.49
Other miscellaneous uses: Waste material	W	W	1.10
Unspecified: 6/			
Actual	489	4,150	8.49
Estimated	15	65	4.33
Total	5,150	41,800	8.12

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

1/ Data are rounded to three significant digits, except unit value; may not add to totals shown.

2/ Includes dolomite, granite, limestone, miscellaneous stone, traprock, and volcanic cinder and scoria.

3/ Includes riprap and jetty stone.

4/ Includes stone sand (concrete) and screening (undesignated).

5/ Includes unpaved road surfacing.

6/ Reported and estimated production without a breakdown by end use.

TABLE 4
NEVADA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1997,
BY USE AND DISTRICT 1/

(Thousand metric tons and thousand dollars)

Use	District 1		District 2	
	Quantity	Value	Quantity	Value
Construction aggregates:				
Coarse aggregate (+1 1/2 inch) 2/	W	W	W	W
Coarse aggregate, graded 3/	W	W	W	W
Fine aggregate (-3/8 inch) 4/	W	W	W	W
Coarse and fine aggregate 5/	402	1,720	W	W
Other construction materials 6/	W	W	W	W
Agricultural 7/	W	W	--	--
Chemical and metallurgical 8/	W	W	W	W
Unspecified 9/				
Actual	W	W	W	W
Estimated	--	--	15	65
Total	2,270	14,900	2,880	26,900

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

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes riprap and jetty stone.

3/ Includes concrete aggregate (coarse), bituminous aggregate (coarse), and other coarse aggregate.

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

5/ Includes graded road base or subbase, unpaved road surfacing, crusher run (select material or fill), and other coarse and fine aggregates.

6/ Includes waste material.

7/ Includes poultry grit and mineral food and other agricultural uses.

8/ Includes cement manufacture, flux stone, lime manufacture, and sulfur oxide removal.

9/ Includes reported and estimated production without a breakdown by end use.

TABLE 5
NEVADA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1997,
BY MAJOR USE CATEGORY 1/

Use	Quantity (thousand metric tons)	Value (thousands)	Value per ton
Concrete aggregate (including concrete sand)	3,600	\$21,600	\$6.02
Plaster and gunitite sands	530	2,220	4.20
Concrete products (blocks, bricks, pipe, decorative, etc.)	278	1,200	4.32
Asphaltic concrete aggregates and other bituminous mixtures	2,080	11,100	5.36
Road base and coverings 2/	3,670	14,300	3.90
Fill	1,260	4,340	3.43
Snow and ice control	67	294	4.39
Other miscellaneous uses 3/	1,450	6,660	4.59
Unspecified: 4/			
Actual	5,830	30,800	5.29
Estimated	4,810	17,700	3.68
Total or average	23,600	110,000	4.66

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes road and other stabilization (cement).

3/ Includes filtration and railroad ballast.

4/ Includes reported and estimated production without a breakdown by end use.

TABLE 6
NEVADA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1997,
BY USE AND DISTRICT 1/

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products 2/	915	4.490	3,490	20.600	--	--
Asphaltic concrete aggregates	1,040	6.530	876	4.230	161	365
Road base and coverings 3/	863	3.570	2,730	10.600	76	172
Fill	590	2.580	674	1.760	--	--
Other miscellaneous uses 4/	32	325	1,490	6.630	--	--
Unspecified: 5/						
Actual	5	9	5,700	30.600	125	207
Estimated	1,470	5,520	3,330	12,200	--	--
Total	4,920	23,000	18,300	86,500	362	744

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes plaster and gunite sands.

3/ Includes road and other stabilization (cement).

4/ Includes filtration, railroad ballast, and snow and ice control.

5/ Includes reported and estimated production without a breakdown by end use.