



### **Biographical Statement for Hendrik G. van Oss**

Hendrik van Oss, an economic geologist, is a commodity specialist with the U.S. Geological Survey, covering cement, ferrous slags, and coal combustion byproducts. Before joining the USGS, he was a geologist with the International Minerals Division of the U.S. Bureau of Mines, where he covered the mining industries of Turkey and various countries in Africa, including South Africa. Prior to this, he had spent a decade as an exploration geologist for various gold mining companies in the western United States. He holds Bachelors and Masters degrees in geology from Lafayette College and Dartmouth College, respectively.

### **The U.S. Cement Market—It's Not All Imports (Yet)**

*Hendrik G. van Oss*

U.S. Geological Survey

The U.S. Geological Survey (USGS) collects basic data on cement sales and production and is the primary source of these data--as nonproprietary compilations--for cement industry and market analysts. Currently, data are released monthly on cement sales, clinker production, and cement and clinker imports (trade data are compiled from the U.S. Census Bureau), and annually on these and related topics. Both sets of data are now primarily released on the USGS minerals information Web site: <http://minerals.usgs.gov/minerals>. This presentation is a compilation based on the latest data available as of late November 2006, and includes monthly data through September 2006 and annual data for 2005 from the recently completed 2005 annual survey.

Production of portland cement in 2005 was 93.9 million metric tons (Mt) and that of clinker was 87.4 Mt; both the latest in an unbroken 11-year string of consecutive annual production records. Strong market conditions and capacity upgrades at a number of plants were responsible for the production increases. Masonry cement production was up 8% in 2005 to 5.4 Mt, reflecting a continued strong housing market, but a slowdown in the housing market in 2006 was expected to yield only a small production increase for the year. Overall, a nominal (c. 0.5%) increase was expected in total cement production for 2006, and clinker output was expected to increase by about 3%.

Consumption (as measured by sales to final domestic customers) of portland cement reached a record 121.4 Mt in 2005, and masonry cement consumption was a record 5.5 Mt. Sales would have been higher for both but for extensive, if relatively short-lived, disruptions to overall consumption caused by several hurricanes, especially Katrina in August 2005 and Rita in September. A relatively mild 2005-06 winter, continued very low mortgage rates and still fairly robust housing construction, and make-up and/or repair work related to the 2005 hurricanes contributed to exceptionally high levels of consumption through June 2006. However, after the

first quarter, slowly rising interest rates and a related sustained decline in housing construction began to pull monthly consumption levels to below-record levels (although they still remained strong) and levels in the fourth quarter of 2006 are expected to continue this trend. The momentum from the first half of the year is, however, still expected to result in an increase in consumption for 2006, albeit modest (c. 1%), barring unusually severe early winter conditions.

**Refer to tables: “U.S. cement industry summary” and “Portland cement and clinker production and capacity in 2005”; also to graphs “Production and consumption of cement and clinker, 1960-2005” and “Monthly variation in U.S. portland cement consumption”**

Regionally, strong increases in consumption were seen in 2005 in all of the usually strong performing States and in many others. In 2006, however, declines in, especially, housing construction have led to erratic sales levels. Significantly, poor weather conditions in the first half of the year severely aggravated sales in California. In contrast, very robust sales have been seen in 2006 in Louisiana and Mississippi, owing to hurricane-related repair work. The apparent strong increases in sales in 2006 in New England are an artifact of more complete data for the year; sales were likely to have in fact been stagnant.

**Refer to table “U.S. portland plus blended cement consumption”**

Extensive reports of cement shortages in 2004-05 were related to a combination of strong demand, a continuing shortfall in domestic cement production, and an inability to import sufficient cement owing to tightening world availability of cement, and (especially in 2004), shortages of ships. The shortages also allowed cement companies to raise prices, although, for 2004, full-year contracts are believed to have shielded many cement customers from the increases, with the result that the overall mill net value increases for 2004 were surprisingly modest. The full impacts of 2004 price increases, and subsequent increases in 2005, are seen in the large mill net “price” increases realized in 2005; and more increases will likely be evident in the price data for 2006 (not yet available).

**Refer to graph “U.S. mill net values for portland cement” and to table “Mill net value of U.S. sales of portland cement”**

Notwithstanding the widespread reports of shortages of ships in 2004, import tonnages (especially of cement) in that year rose significantly, and with a more ready availability of ships, rose dramatically in 2005. Imports have continued to rise in 2006. Overall, imports in recent years would have had to have been higher still but for the increased popularity of blended cement (included in portland cement in this report) and of supplementary cementitious materials as additives in concrete. Hurricane related disruptions to imports into the Gulf Coast customs districts (e.g., through New Orleans) were short-lived. The diversity of country sources of cement increased in 2005-06, and the relative source contribution has shifted significantly. Most notably, imports from China more than doubled in 2005 relative to 2004, and have almost doubled again in just the first 9 months of 2006. China will be by far the largest single supplier to the United States in 2006.

**Refer to graph: “Cement and clinker imports 1960-2005” and to tables “U.S. imports of hydraulic cement and clinker, by country 2001-2006” and “Major cement and clinker import sources into the United States”**

## U.S. Cement Industry Summary <sup>1 2</sup>

(Data in million metric tons unless otherwise specified)

	2001	2002	2003	2004	2005
<b>Cement production:</b>					
Portland	84,5	85,3	88,1	92,4	93,9
Masonry	4,4	4,4	4,7	5,0	5,4
Grinding capacity	107,0	108,0	112,0	113,0	114,0
Capacity utilization	79%	79%	79%	82%	82%
<b>Clinker production</b>					
Clinker production	78,5	81,5	81,9	86,7	87,4
Clinker capacity	98,4	99,0	100,0	103,0	102,0
Capacity utilization	80%	82%	82%	84%	86%
<b>Consumption:<sup>3</sup></b>					
Portland	108,2	103,9	107,7	115,1	121,4
Masonry	4,5	4,4	4,7	5,2	5,5
"Price" per metric ton <sup>4</sup>	\$76,50	\$76,00	\$75,00	\$79,50	\$91,00
Total sales, billions <sup>4</sup>	\$8,60	\$8,25	\$8,30	\$9,50	\$11,60
<b>Imports:</b>					
Hydraulic cement	23,7	22,2	21,0	25,4	30,4
Clinker	1,8	1,6	1,8	1,6	2,9

<sup>1</sup>Excludes Puerto Rico.

<sup>2</sup>Includes white cement.

<sup>3</sup>Defined as sales to final domestic customers. Includes imported cement.

<sup>4</sup>Mill net value of cement sales, bulk and bag combined.

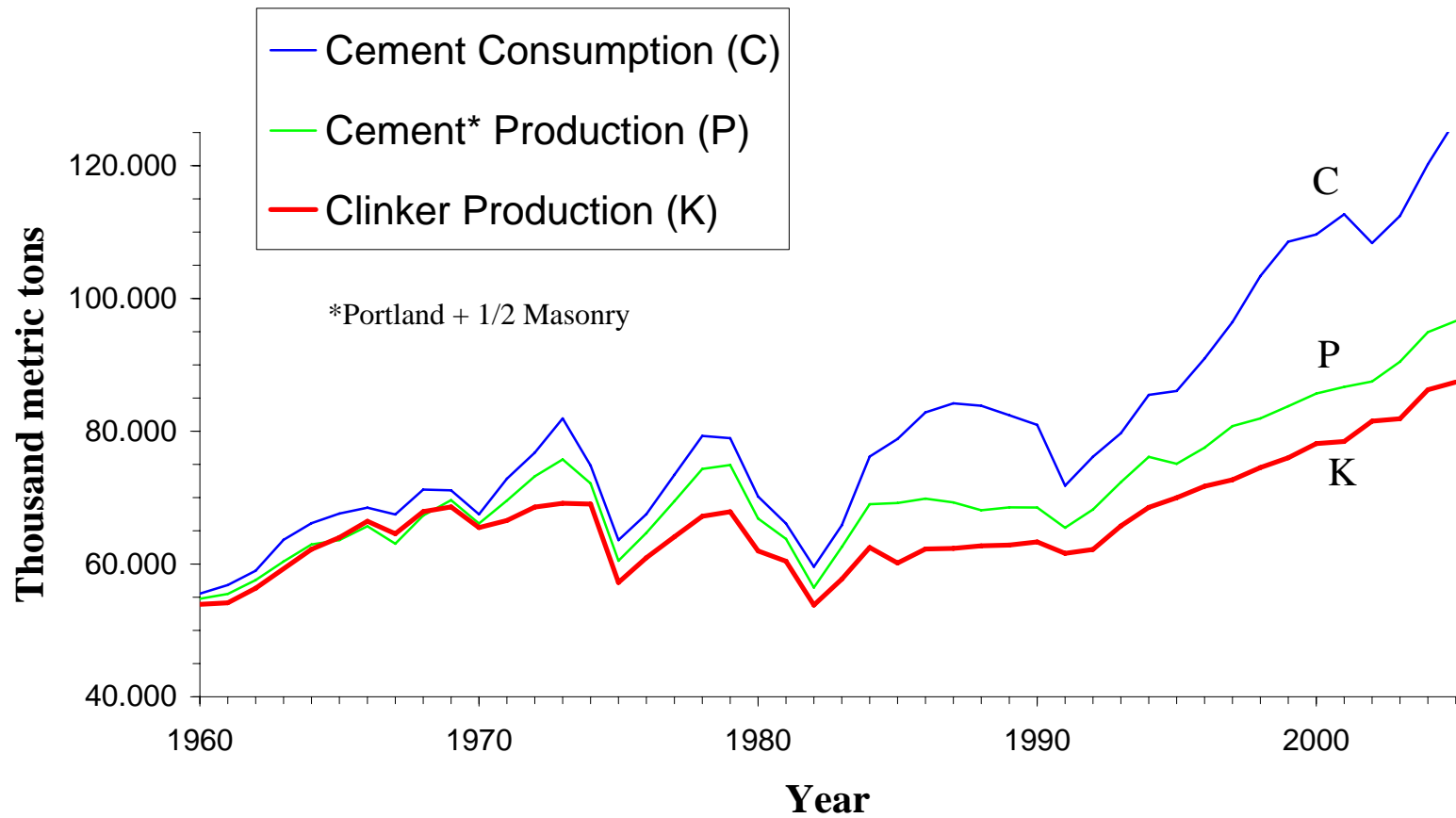
**Portland Cement and Clinker Production and Capacity in 2005 in the USA, by District**

(Production and capacity data are in million metric tons)

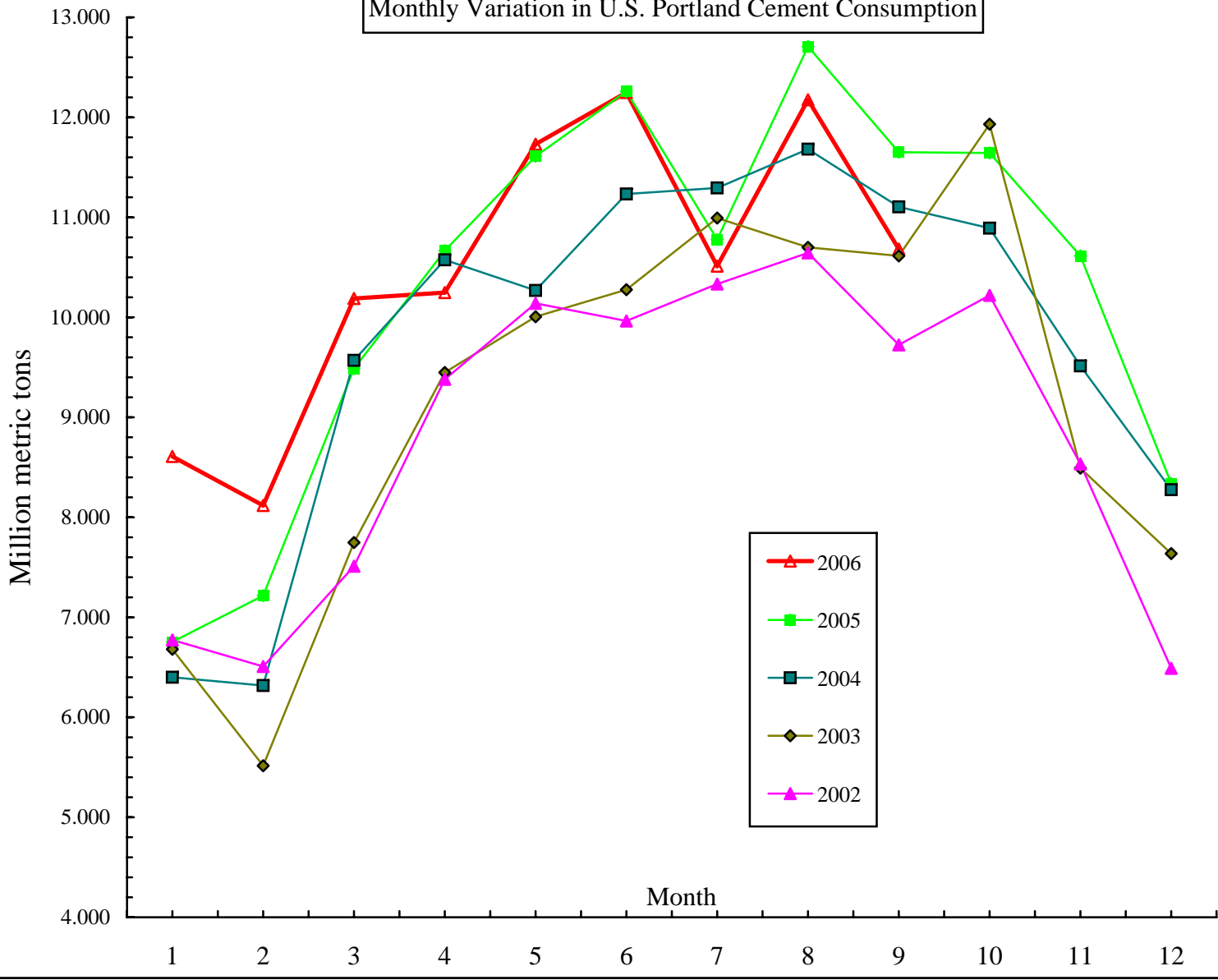
District	Portland cement			Clinker						
	Active plants	Production	Annual capacity	Active plants				Total kilns	Production	Annual capacity
				Wet	Dry	Both	Total			
ME, NY	5	3,2	4,6	2	2	--	4	5	3,1	3,7
E-PA	7	4,7	5,4	2	5	--	7	14	4,5	5,4
W-PA	3	1,6	1,7	2	1	--	3	7	1,6	1,8
IL	4	3,2	3,4	--	4	--	4	8	2,7	3,0
IN	4	3,1	3,7	1	3	--	4	8	3,2	3,6
MI, WI	6	5,6	7,3	1	2	--	3	8	4,1	4,8
OH	2	1,0	1,3	1	1	--	2	3	1,0	1,2
IA, NE, SD	5	4,5	6,1	--	4	1	5	9	4,1	4,8
KS	4	2,9	3,1	1	3	--	4	9	2,8	3,1
MO	5	5,3	7,0	2	3	--	5	6	4,9	5,4
FL	7	5,7	7,3	--	6	--	6	7	5,3	6,2
GA, VA, WV	4	2,4	3,4	1	2	--	3	5	2,2	2,9
MD	3	2,6	2,7	1	2	--	3	4	2,5	2,8
SC	3	3,3	5,0	--	2	1	3	7	3,1	4,9
AL	5	5,1	5,9	--	5	--	5	5	4,9	5,6
KY, MS, TN	4	3,3	3,7	1	3	--	4	4	3,1	3,6
AR, OK	4	2,8	3,3	2	2	--	4	10	2,6	2,9
N-TX	6	6,6	7,6	2	3	1	6	16	6,4	7,3
S-TX	5	4,9	5,6	--	4	1	5	6	4,4	4,8
AZ, NM	3	2,8	3,5	--	3	--	3	7	2,6	3,0
CO, WY	3	2,6	3,0	--	3	--	3	4	2,4	3,0
ID, MT, NV, UT	6	3,1	3,7	3	3	--	6	8	2,8	2,9
N-CA	3	2,7	2,9	--	3	--	3	3	2,6	3,1
S-CA	8	8,9	10,2	--	8	--	8	17	8,9	9,9
OR, WA	4	2,0	2,4	1	2	--	3	3	1,7	2,1
Total or Av.	113	93,9	114,0	23	79	4	106	183	87,4	102,0
PR	2	1,6	2,5	--	2	--	2	2	1,4	2,0

Source: U.S. Geological Survey

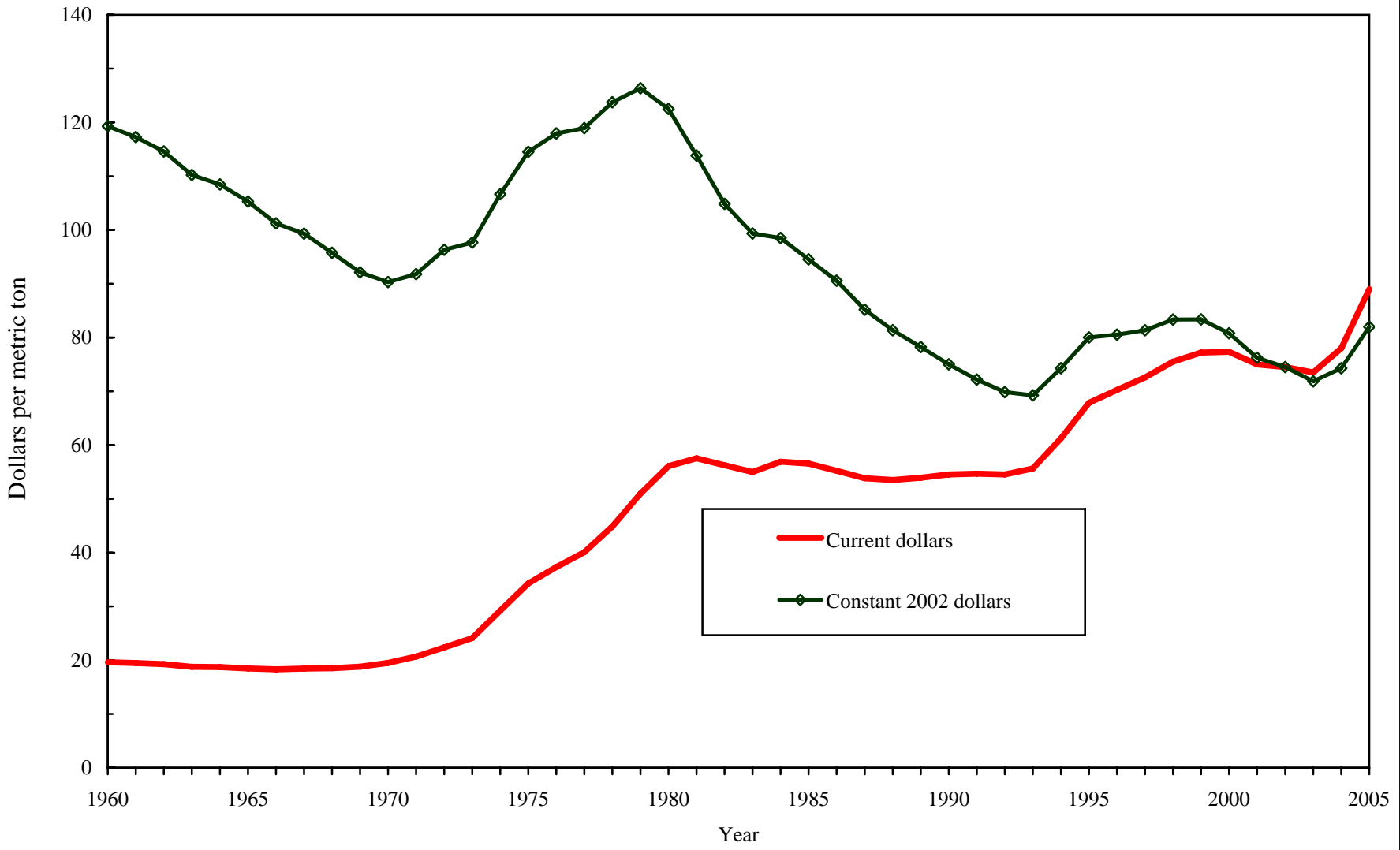
## Production and Consumption of Cement and Clinker, 1960-2005



Monthly Variation in U.S. Portland Cement Consumption

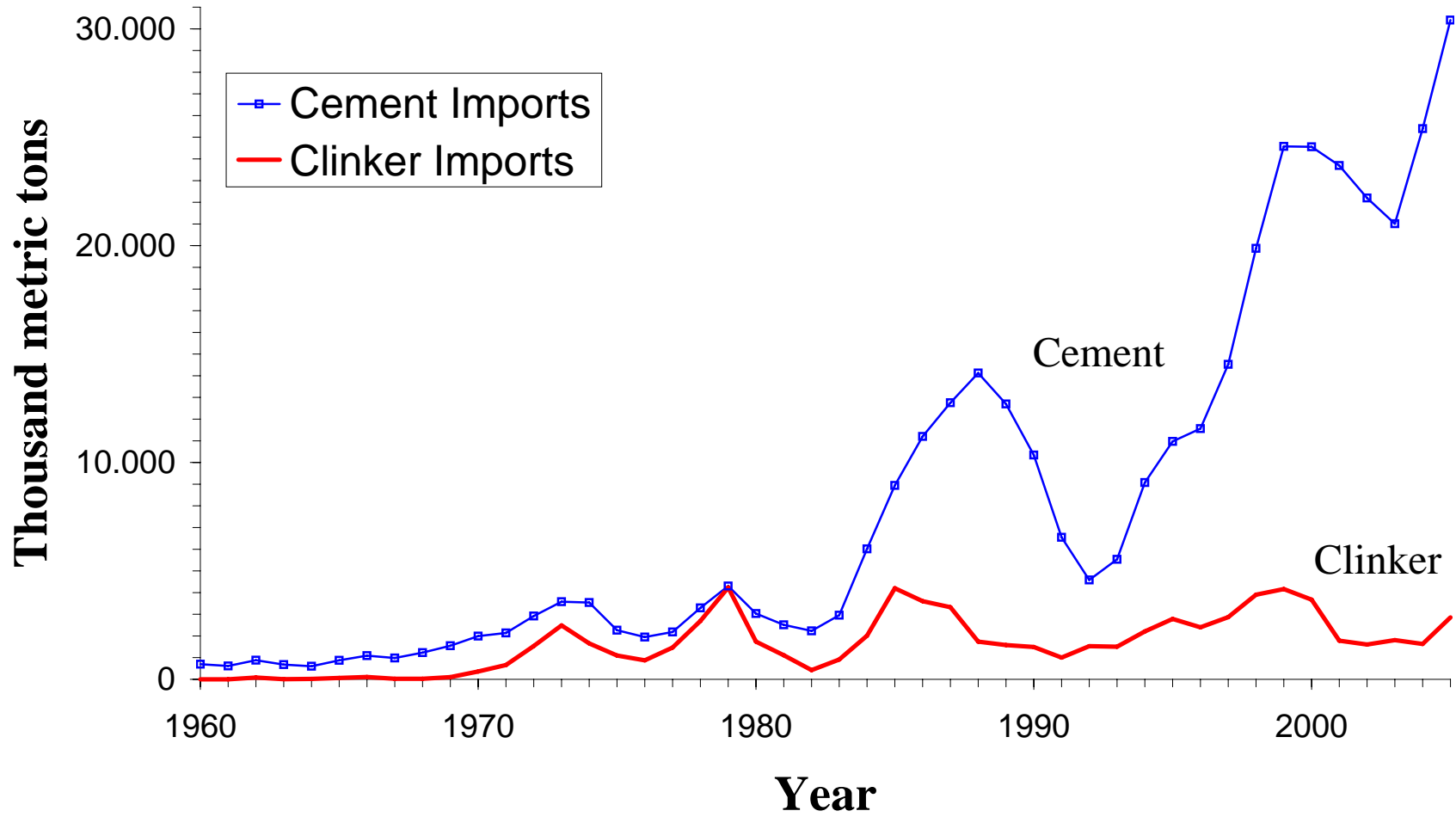


U.S. Mill Net Values for Portland Cement





# Cement & Clinker Imports 1960-2005



## U.S. Portland plus Blended Cement Consumption <sup>1</sup>

(Thousand metric tons)

Census District and State	Year					Full year 2005 vs.				January - September			2005
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2006	Change	kg/ person
<b>New England District</b>													
Connecticut	812	746	757	828	799	-1,6%	7,1%	5,5%	-3,5%	595	596	0,2%	228
Maine	225	208	219	234	234	4,0%	12,5%	6,8%	0,0%	177	251 <sup>2</sup>	41,8% <sup>2</sup>	177
Massachusetts	1.644	1.395	1.265	1.322	1.242	-24,5%	-11,0%	-1,8%	-6,1%	917	880	-4,0%	194
New Hampshire	260	244	233	221	229	-11,9%	-6,1%	-1,7%	3,6%	171	246 <sup>2</sup>	43,9% <sup>2</sup>	175
Rhode Island	182	167	197	178	188	3,3%	12,6%	-4,6%	5,6%	137	159 <sup>2</sup>	16,1% <sup>2</sup>	175
Vermont	122	116	136	144	129	5,7%	11,2%	-5,1%	-10,4%	96	119 <sup>2</sup>	24,0% <sup>2</sup>	207
District Total:	3.245	2.876	2.807	2.927	2.821	-13,1%	-1,9%	0,5%	-3,6%	2.093	2,251 <sup>2</sup>	7,5% <sup>2</sup>	198
<b>Middle Atlantic District</b>													
New Jersey	2.069	1.975	1.886	2.036	1.964	-5,1%	-0,6%	4,1%	-3,5%	1.481	1.474	-0,5%	225
New York	3.339	3.157	3.149	3.236	3.151	-5,6%	-0,2%	0,1%	-2,6%	2.349	2.486	5,8%	164
Pennsylvania	3.595	3.320	3.113	3.396	3.310	-7,9%	-0,3%	6,3%	-2,5%	2.529	2.465	-2,5%	266
District Total:	9.003	8.452	8.148	8.668	8.425	-6,4%	-0,3%	3,4%	-2,8%	6.359	6.425	1,0%	209
<b>South Atlantic District</b>													
Delaware	162	193	173	181	208	28,4%	7,8%	20,2%	14,9%	160	185	15,6%	247
Washington DC	184	186	195	191	205	11,4%	10,2%	5,1%	7,3%	158	162	2,5%	372
Florida	7.527	7.828	8.589	9.698	11.233	49,2%	43,5%	30,8%	15,8%	8.403	8.744	4,1%	631
Georgia	3.412	3.087	3.446	4.109	4.395	28,8%	42,4%	27,5%	7,0%	3.300	3.442	4,3%	484
Maryland	1.381	1.309	1.344	1.542	1.568	13,5%	19,8%	16,7%	1,7%	1.182	1.234	4,4%	280
North Carolina	2.734	2.510	2.469	2.743	2.900	6,1%	15,5%	17,5%	5,7%	2.182	2.397	9,9%	334
South Carolina	1.386	1.368	1.499	1.742	1.778	28,3%	30,0%	18,6%	2,1%	1.346	1.424	5,8%	418
Virginia	2.326	2.119	2.100	2.478	2.666	14,6%	25,8%	27,0%	7,6%	2.046	2.047	0,0%	352
West Virginia	461	424	432	488	512	11,1%	20,8%	18,5%	4,9%	388	412	6,2%	282
District Total:	19.573	19.024	20.247	23.172	25.465	30,1%	33,9%	25,8%	9,9%	19.165	20.047	4,6%	453
<b>East South Central District</b>													
Alabama	1.564	1.479	1.599	1.643	1.738	11,1%	17,5%	8,7%	5,8%	1.301	1.371	5,4%	381
Kentucky	1.354	1.228	1.337	1.395	1.486	9,7%	21,0%	11,1%	6,5%	1.105	1.003	-9,2%	356
Mississippi	950	910	984	974	1.067	12,3%	17,3%	8,4%	9,5%	787	892	13,3%	365
Tennessee	1.963	1.809	1.884	1.875	2.111	7,5%	16,7%	12,0%	12,6%	1.592	1.615	1,4%	354
District Total:	5.831	5.426	5.804	5.887	6.402	9,8%	18,0%	10,3%	8,7%	4.785	4.881	2,0%	363

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## U.S. Portland plus Blended Cement Consumption 1/--Continued

(Thousand metric tons)

Census District and State	Year					Full year 2005 vs.				January - September			2005
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2006	Change	kg/ person
<b>West South Central District</b>													
Arkansas	976	946	1.094	1.173	1.205	23,5%	27,4%	10,1%	2,7%	883	945	7,0%	434
Louisiana	1.770	1.679	1.832	1.882	1.935	9,3%	15,2%	5,6%	2,8%	1.439	1.769	22,9%	428
Oklahoma	1.543	1.363	1.480	1.442	1.603	3,9%	17,6%	8,3%	11,2%	1.201	1.194	-0,6%	452
Texas	12.752	12.272	13.039	13.096	14.473	13,5%	17,9%	11,0%	10,5%	10.974	11.085	1,0%	633
<b>District Total:</b>	<b>17.041</b>	<b>16.260</b>	<b>17.445</b>	<b>17.593</b>	<b>19.216</b>	<b>12,8%</b>	<b>18,2%</b>	<b>10,2%</b>	<b>9,2%</b>	<b>14.497</b>	<b>14.993</b>	<b>3,4%</b>	<b>570</b>
<b>East North Central District</b>													
Illinois	4.162	4.112	3.990	3.987	4.106	-1,3%	-0,1%	2,9%	3,0%	3.081	3.137	1,8%	322
Indiana	2.252	2.081	2.176	2.238	2.182	-3,1%	4,9%	0,3%	-2,5%	1.635	1.619	-1,0%	348
Michigan	3.557	3.146	3.052	3.175	2.924	-17,8%	-7,1%	-4,2%	-7,9%	2.181	1.905	-12,7%	289
Ohio	4.029	3.763	3.830	3.999	3.893	-3,4%	3,5%	1,6%	-2,7%	2.930	2.803	-4,3%	340
Wisconsin	2.298	2.054	2.229	2.329	2.348	2,2%	14,3%	5,3%	0,8%	1.766	1.663	-5,8%	424
<b>District Total:</b>	<b>16.298</b>	<b>15.156</b>	<b>15.277</b>	<b>15.728</b>	<b>15.453</b>	<b>-5,2%</b>	<b>2,0%</b>	<b>1,2%</b>	<b>-1,7%</b>	<b>11.593</b>	<b>11.127</b>	<b>-4,0%</b>	<b>335</b>
<b>West North Central District</b>													
Iowa	1.698	1.734	1.717	1.842	1.933	13,8%	11,5%	12,6%	4,9%	1.447	1.434	-0,9%	652
Kansas	1.624	1.498	1.540	1.535	1.537	-5,4%	2,6%	-0,2%	0,1%	1.131	1.187	5,0%	560
Minnesota	1.973	1.998	2.068	2.077	2.016	2,2%	0,9%	-2,5%	-2,9%	1.520	1.440	-5,3%	393
Missouri	2.672	2.500	2.664	2.623	2.816	5,4%	12,6%	5,7%	7,4%	2.165	2.058	-4,9%	485
Nebraska	1.201	1.184	1.208	1.308	1.356	12,9%	14,5%	12,3%	3,7%	1.055	979	-7,2%	771
North Dakota	303	311	330	402	359	18,5%	15,4%	8,8%	-10,7%	266	289	8,6%	564
South Dakota	460	423	452	512	483	5,0%	14,2%	6,9%	-5,7%	370	459	24,1%	622
<b>District Total:</b>	<b>9.931</b>	<b>9.648</b>	<b>9.979</b>	<b>10.299</b>	<b>10.500</b>	<b>5,7%</b>	<b>8,8%</b>	<b>5,2%</b>	<b>2,0%</b>	<b>7.954</b>	<b>7.846</b>	<b>-1,4%</b>	<b>530</b>
<b>Mountain District</b>													
Arizona	3.265	3.293	3.608	4.117	4.671	43,1%	41,8%	29,5%	13,5%	3.490	3.606	3,3%	786
Colorado	2.660	2.612	2.290	2.440	2.521	-5,2%	-3,5%	10,1%	3,3%	1.930	2.075	7,5%	540
Idaho	568	567	590	685	704	23,9%	24,2%	19,3%	2,8%	549	565	2,9%	493
Montana	353	323	375	407	380	7,6%	17,6%	1,3%	-6,6%	294	300	2,0%	406
Nevada	1.943	1.843	2.026	2.382	2.602	33,9%	41,2%	28,4%	9,2%	1.954	2.085	6,7%	1.078
New Mexico	888	824	813	940	901	1,5%	9,3%	10,8%	-4,1%	685	695	1,5%	467
Utah	1.297	1.166	1.200	1.373	1.526	17,7%	30,9%	27,2%	11,1%	1.142	1.290	13,0%	618
Wyoming	365	413	424	463	466	27,7%	12,8%	9,9%	0,6%	364	355	-2,5%	915
<b>District Total:</b>	<b>11.339</b>	<b>11.041</b>	<b>11.326</b>	<b>12.807</b>	<b>13.771</b>	<b>21,4%</b>	<b>24,7%</b>	<b>21,6%</b>	<b>7,5%</b>	<b>10.408</b>	<b>10.971</b>	<b>5,4%</b>	<b>679</b>

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## U.S. Portland plus Blended Cement Consumption 1/--Continued

(Thousand metric tons)

Census District and State	Year					Full year 2005 vs.				January - September			2005 kg/ person
	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2006	Change	
<b>Pacific District</b>													
Alaska	133	137	165	175	173	30,1%	26,3%	4,8%	-1,1%	142	139	-2,1%	261
California	12.592	12.633	13.255	14.221	15.322	21,7%	21,3%	15,6%	7,7%	11.454	10.900	-4,8%	424
Hawaii	280	312	340	380	431	53,9%	38,1%	26,8%	13,4%	328	349	6,4%	338
Oregon	981	1.040	1.005	1.119	1.237	26,1%	18,9%	23,1%	10,5%	937	1.029	9,8%	340
Washington	1.961	1.899	1.903	2.090	2.238	14,1%	17,9%	17,6%	7,1%	1.684	1.814	7,7%	356
<b>District Total:</b>	<b>15.947</b>	<b>16.021</b>	<b>16.668</b>	<b>17.985</b>	<b>19.401</b>	<b>21,7%</b>	<b>21,1%</b>	<b>16,4%</b>	<b>7,9%</b>	<b>14.545</b>	<b>14.231</b>	<b>-2,2%</b>	<b>404</b>
<b>USA Total:</b>	<b>108.215</b>	<b>103.906</b>	<b>107.701</b>	<b>115.066</b>	<b>121.448</b>	<b>12,2%</b>	<b>16,9%</b>	<b>12,8%</b>	<b>5,5%</b>	<b>91.401</b>	<b>92.772</b>	<b>1,5%</b>	<b>410</b>
Puerto Rico	1.865	1.882	1.858	1.879	1.857	-0,4%	-1,3%	-0,1%	-1,2%	1.423	1.425	0,1%	475
Exports <sup>3</sup>	442	438	483	463	466	5,4%	6,4%	-3,5%	0,6%	310	327	5,5%	
<b>Grand Total:</b>	<b>110.519</b>	<b>106.226</b>	<b>110.042</b>	<b>117.435</b>	<b>123.730</b>	<b>12,0%</b>	<b>16,5%</b>	<b>12,4%</b>	<b>5,4%</b>	<b>93.134</b>	<b>94.524</b>	<b>1,5%</b>	<b>412</b>

<sup>1</sup>Consumption defined as sales of finished cement to final customers. Includes sales of blended cement, imported cement, and cement made from imported clinker.

<sup>2</sup>The apparent large increases in New England are an artifact of more complete reporting in 2006; actual levels likely were significantly unchanged from those of 2005.

<sup>3</sup>Sales to overseas final customers; includes U.S. possessions and territories.

Source: U.S. Geological Survey

## Mill Net Value of U.S. Sales of Portland Cement <sup>1 2 3</sup>

(Dollars per metric ton)

District	2001	2002	2003	2004	2005	2004 vs. 2003	2005 vs. 2004
Maine and New York	\$74,50	\$76,50	\$74,00	\$75,91	\$89,00	2,6%	17,2%
Pennsylvania, eastern	69,24	73,13	73,00	75,00	87,50	2,7%	16,7%
Pennsylvania, western	77,50	78,50	75,50	78,00	89,06	3,3%	14,2%
Illinois	74,50	73,77	72,00	77,31	88,50	7,4%	14,5%
Indiana	67,29	67,23	69,39	70,85	79,40	2,1%	12,1%
Michigan and Wisconsin	77,00	75,00	74,00	81,00	93,00	9,5%	14,8%
Ohio	77,49	76,52	79,64	80,50	90,48	1,1%	12,4%
Iowa, Nebraska, South Dakota	76,84	77,57	77,65	82,12	92,16	5,8%	12,2%
Kansas	76,50	76,85	76,00	79,00	84,41	3,9%	6,8%
Missouri	73,30	69,24	68,87	73,63	86,99	6,9%	18,1%
Florida	72,50	75,32	77,00	82,50	90,65	7,1%	9,9%
Georgia, Virginia, West Virginia	76,92	76,00	70,50	74,55	85,50	5,7%	14,7%
Maryland	77,12	74,30	66,82	69,38	82,41	3,8%	18,8%
South Carolina	64,40	70,13	61,50	63,06	75,59	2,5%	19,9%
Alabama	78,50	65,50	63,00	66,69	82,24	5,9%	23,3%
Kentucky, Mississippi, Tennessee	75,50	69,50	68,50	73,79	86,77	7,7%	17,6%
Arkansas and Oklahoma	75,50	72,00	70,24	74,68	83,51	6,3%	11,8%
Texas, northern	75,75	72,00	67,50	73,00	84,00	8,1%	15,1%
Texas, southern	67,00	67,72	67,78	69,50	80,15	2,5%	15,3%
Arizona and New Mexico	92,50	90,66	93,08	92,80	101,00	-0,3%	8,8%
Colorado and Wyoming	78,00	75,96	72,82	74,19	87,50	1,9%	17,9%
Idaho, Montana, Nevada, Utah	79,57	81,00	79,00	82,82	93,13	4,8%	12,4%
Alaska and Hawaii	134,61	130,11	129,80	129,53	139,72	-0,2%	7,9%
California, northern	81,62	79,53	80,69	86,88	98,11	7,7%	12,9%
California, southern	75,48	75,46	74,97	81,87	97,22	9,2%	18,7%
Oregon and Washington	78,00	78,50	76,61	77,00	88,00	0,5%	14,3%
Average:	75,00	74,50	73,50	78,00	89,00	6,1%	14,1%

<sup>1</sup> Includes imported cement and cement made from imported clinker. Includes gray and white portland cement. Includes blended cements.

<sup>2</sup> Values are ex-plant (FOB plant), except for independently-reporting terminals (FOB terminal). Values include any bagging and palletizing charges, but exclude any onward delivery charges to final customer or distribution terminals.

<sup>3</sup> Data are presented unrounded except where districts contain estimated data, in which cases the values have been rounded to the nearest \$0.50 per ton. Even reported data are probably good to no better than the nearest \$0.50 or even \$1.00 per ton.

Source: U.S. Geological Survey

Source: U.S. Geological Survey

**Major Cement & Clinker Import Sources into the United States<sup>1</sup>**  
(Thousand metric tons)

Customs District	Country of Origin	2003	2004	2005	Jan.-Sept. 2006
Anchorage, AK:	Canada	10	11	8	9
	Rep. of Korea	132	111	134	102
Baltimore, MD:	Canada	--	--	--	76
	Norway	--	--	89	--
	Romania	--	--	--	501
	Taiwan	--	--	25	35
	Venezuela	--	--	7	18
Boston, MA:	Venezuela	176	127	132	37
Buffalo, NY:	Canada	704	796	817	538
Charlestown, SC:	China	8	38	--	--
	Colombia	506	261	299	224
	Egypt	39	--	--	--
	Greece	272	451	686	661
	Spain	7	46	23	--
	Venezuela	--	7	55	--
Chicago, IL:	Canada	35	34	--	--
Cleveland, OH:	Canada	697	699	791	616
Columbia-Snake, OR, WA:	Canada	56	128	111	9
	China	481	506	672	826
	Rep. of Korea	--	21	84	--
Detroit, MI:	Belgium	--	149	--	--
	Brazil	50	127	53	--
	Canada	1,553	1,171	1,263	890
Duluth & Minneapolis, MN:	Canada	189	172	<b>196</b>	<b>125</b>
El Paso, TX:	Mexico	189	368	724	558
Great Falls, MT	Canada	14	51	62	25
Honolulu, HI:	China	32	55	39	298
	Philippines	206	301	312	--
	Taiwan	--	--	77	75
	Thailand	77	40	--	--
Houston-Galveston, TX:	China	--	--	248	1,315
	Colombia	140	119	116	139
	Egypt	19	29	263	42
	Greece	--	206	292	81
	Korea	1,393	1,138	1,259	778
	Peru	312	31	47	--
	Philippines	--	--	27	--
	Thailand	79	--	309	215
	Turkey	--	69	44	--
	United Arab Emirates	6	--	1	--
Venezuela	73	375	44	--	
Laredo, TX:	Mexico	124	158	142	181

**Major Cement & Clinker Import Sources into the United States--Continued<sup>1</sup>**  
**(Thousand metric tons)**

<b>Customs District</b>	<b>Country of Origin</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>Jan.-Sept. 2006</b>
Los Angeles, CA:	China	709 <sup>2</sup>	1.196	1.874	1.588
	Indonesia	--	78	211	72
	Japan	223 <sup>2</sup>	--	2	2
	Taiwan	395	260	214	41
	Thailand	646	974	745	1.161
Miami, FL:	China	--	--	85	461
	Colombia	32	30	16	33
	Denmark	17	4	51	36
	Egypt	--	14	33	48
	Greece	318	485	439	144
	Mexico	--	--	86	63
	Spain	326	346	96	64
	Sweden	913	1.055	1.006	656
	Taiwan	--	--	13	47
	Thailand	--	--	80	40
	Turkey	388	248	238	147
	Venezuela	71	109	120	36
Milwaukee, WI:	Canada	270	248	198	--
Mobile, AL:	China	--	--	15	162
	Colombia	53	231	137	--
	Greece	--	--	14	120
	Rep. of Korea	--	--	15	--
	Peru	--	61	--	--
	Taiwan	--	--	8	--
	Thailand	287	97	61	167
	Turkey	--	12	--	--
	Venezuela	27	128	248	29
New Orleans, LA:	China	16	5	552	1.266
	Colombia	22	213	180	215
	Croatia	35	25	33	21
	Egypt	--	268	153	--
	Greece	104	370	245	--
	Rep. of Korea	220	437	897	806
	Norway	--	29	--	--
	Peru	116	550	1.000	659
	Spain	--	--	78	--
	Taiwan	--	--	528	334
	Thailand	768	464	238	454
	Turkey	242	125	102	99
	Venezuela	--	52	90	--

**Major Cement & Clinker Import Sources into the United States--Continued<sup>1</sup>**  
**(Thousand metric tons)**

<b>Customs District</b>	<b>Country of Origin</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>Jan.-Sept. 2006</b>
New York, NY:	China	--	--	8	142
	Denmark	--	--	--	35
	Greece	274	255	403	337
	Norway	448	336	431	152
	Taiwan	--	--	37	86
	Thailand	--	10	--	42
	Turkey	190	31	159	122
	Venezuela	20	190	190	74
Nogales, AZ:	Mexico	571	846	1,068	847
Norfolk, VA:	Bulgaria	151	231	303	239
	Canada	78	10	--	13
	China	--	--	36	159
	Colombia	131	163	156	--
	France	90	79	74	71
	Greece	--	--	33	--
	Romania	--	--	--	80
	Venezuela	69	26	84	7
Ogdensburg, NY:	Canada	365	384	336	306
Pembina, ND:	Canada	239	181	178	94
Philadelphia, PA:	Rep. of Korea	93	--	--	143
	Thailand	142	404	417	366
Portland, ME:	Canada	92	98	156	62
Providence, RI:	China	--	--	103	55
	Turkey	106	--	82	164
	Venezuela	486	648	555	310
St. Albans, VT:	Canada	115	123	134	95
San Diego, CA:	Mexico	--	58	153	67
	Taiwan	--	545	547	443
	Thailand	465	76	15	--
San Francisco, CA:	China	478	351	671	1,220
	Indonesia	--	553	654	39
	Taiwan	--	263	200	324
	Thailand	554	561	837	650
San Juan, PR:	China	99	25	--	48
	Colombia	20	3	5	9
	Denmark	277	217	212	27
	Rep. of Korea	--	--	146	176
	Mexico	7	10	12	9
	Spain	--	4	--	--
	Turkey	--	16	--	--
	Venezuela	12	--	--	--
Savannah, GA:	Colombia	1	3	79	138



**Major Cement & Clinker Import Sources into the United States--Continued<sup>1</sup>**  
**(Thousand metric tons)**

<b>Customs District</b>	<b>Country of Origin</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>Jan.-Sept. 2006</b>
Seattle, WA:	Canada	1,213	1,469	1,153	729
	China	--	--	119	311
	Rep. of Korea	--	--	136	220
	Taiwan	--	--	51	--
	Thailand	147	184	28	--
Tampa, FL:	Brazil	182	315	377	310
	China	--	--	374	997
	Colombia	803	931	586	416
	Denmark	139	152	177	118
	Egypt	--	27	103	63
	Greece	220	244	675	263
	Mexico	--	--	--	26
	Spain	19	16	39	--
	Sweden	9	--	50	5
	Taiwan	--	--	57	201
	Thailand	86	18	163	226
	Turkey	142	240	50	--
	Venezuela	651	652	852	227
Wilmington, NC:	Colombia	56	126	256	217
	Dominican Rep.	--	--	77	24
	Indonesia	--	--	14	18
	Mexico	--	--	--	42
	Venezuela	7	78	42	--
Total of imports listed:		22,843	26,918	33,076	28,183
Total, incl. imports not listed:		23,241	27,305	33,652	29,061

-- Zero.

<sup>1</sup> Typically excludes countries for which imports were less than 20,000 tons for the range of years shown.

<sup>2</sup> Virtually all of the import tonnage reported as being from Japan was likely material from China and, possibly, Thailand.

Source: U.S. Census Bureau.

## U.S. Imports of Hydraulic Cement and Clinker, by Country 2001-2006<sup>1</sup>

(Thousand metric tons)

Country of origin	2001	2002	2003	2004	2005	2006 <sup>2</sup>	% U.S. Total Imports		
							'01-'06	'05-'06	'06 <sup>2</sup>
<b>EUROPE</b>									
Bulgaria	360	356	151	231	303	239	1,0%	0,9%	0,8%
Croatia	24	25	36	25	34	21	0,1%	0,1%	0,1%
Denmark	527	333	433	373	439	215	1,4%	1,0%	0,7%
France	71	85	90	79	74	71	0,3%	0,2%	0,2%
Greece	1.552	1.785	1.188	2.011	2.786	1.607	6,7%	7,0%	5,6%
Italy	135	*	*	--	*	--	0,1%	0,0%	0,0%
Norway	412	508	471	365	522	182	1,5%	1,1%	0,6%
Spain	651	327	355	412	236	64	1,3%	0,5%	0,2%
Sweden	989	1.047	924	1.058	1.050	662	3,5%	2,7%	2,3%
Turkey	766	684	1.077	771	675	532	2,8%	1,9%	1,8%
Other	20	194	53	45	132	223	0,4%	0,6%	0,8%
Europe total <sup>3</sup>	5.507	5.344	4.778	5.370	6.251	3.816			
Percent. of U.S. import total	21,3%	22,1%	20,6%	19,7%	18,6%	13,2%	19,0%	16,1%	13,2%
Canada	5.110	5.181	5.601	5.753	5.404	3.662			
Percent. of U.S. import total	19,8%	21,4%	24,1%	21,1%	16,1%	12,7%	18,8%	14,5%	12,7%
<b>LATIN AMERICA</b>									
Colombia	1.704	1.579	1.766	2.123	1.849	1.430	6,4%	5,2%	5,0%
Mexico	1.645	1.228	891	1.439	2.185	1.799	5,6%	6,4%	6,2%
Peru	247	372	459	644	1.047	659	2,1%	2,7%	2,3%
Venezuela	1.565	1.530	1.664	2.505	2.484	791	6,5%	5,2%	2,7%
Other	33	101	268	443	561	333	1,1%	1,4%	1,2%
Latin America total <sup>3</sup>	5.445	4.810	5.048	7.154	8.126	5.012			
Percent. of U.S. import total	21,1%	19,9%	21,7%	26,2%	24,1%	17,4%	21,8%	21,0%	17,4%
<b>ASIA and the PACIFIC</b>									
Australia	146	*	--	--	*	--	0,1%	0,0%	0,0%
China	3.266	2.165	1.823	2.145	4.726	8.866	14,1%	21,7%	30,7%
Indonesia	318	272	--	630	865	130	1,4%	1,6%	0,5%
Japan <sup>4</sup>	374	*	223	2	4	2	0,4%	0,0%	0,0%
Korea, Rep.	1.326	1.625	1.745	1.729	2.672	2.225	6,9%	7,8%	7,7%
Philippines	318	294	206	301	312	--	0,9%	0,5%	0,0%
Taiwan	551	115	395	1.068	1.759	1.630	3,4%	5,4%	5,6%
Thailand	4.070	4.259	3.344	2.808	2.893	3.363	12,7%	10,0%	11,7%
Other	55	*	9	2	77	1	0,1%	0,1%	0,0%
Asia and the Pacific total <sup>3</sup>	10.424	8.731	7.745	8.685	13.308	16.217			
Percent. of U.S. import total	40,3%	36,1%	33,3%	31,8%	39,5%	56,2%	39,9%	47,2%	56,2%

## U.S. Imports of Hydraulic Cement and Clinker, by Country 2001-2006<sup>1</sup>--Continued.

(Thousand metric tons)

Country of origin	2001	2002	2003	2004	2005	2006 <sup>2</sup>	% U.S. Total Imports		
							'01-'06	'05-'06	'06 <sup>2</sup>
AFRICA and MIDDLE EAST	--	103	64	341	574	155			
Percent. of U.S. import total	0,0%	0,4%	0,3%	1,2%	1,7%	0,5%	0,8%	1,2%	0,5%
Grand total <sup>3</sup>	25.861	24.169	23.241	27.305	33.652	28.861	100,0%	100,0%	100,0%

-- Zero. \* Less than 500 metric tons.

<sup>1</sup> Data include Puerto Rico.

<sup>2</sup> Data for 2006 are for January through September only.

<sup>3</sup> Data may not add to totals shown due to independent rounding.

<sup>4</sup> Data for Japan for 2001 and 2003 are likely to be mostly misreported material, likely from China.

Source: U.S. Census Bureau.