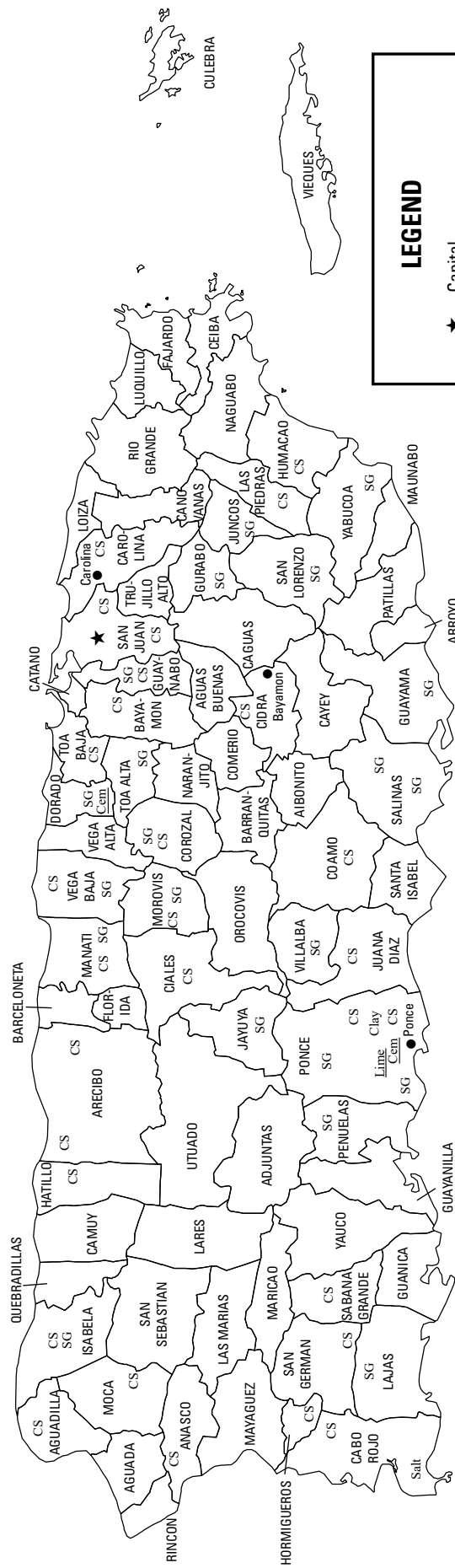




2010–2011 Minerals Yearbook

PUERTO RICO

PUERTO RICO



LEGEND

- ★ Capital
- City
- Municipality boundary

MINERAL SYMBOLS
(Principal producing areas)

- Cem Cement plant
- Clay Common clay
- CS Crushed stone
- Lime Lime plant
- Salt Salt
- SG Construction sand and gravel



THE MINERAL INDUSTRY OF PUERTO RICO AND THE ADMINISTERED ISLANDS

In 2011, Puerto Rico's publishable nonfuel mineral production¹ was valued at \$83 million, based upon annual U.S. Geological Survey (USGS) data. This was a \$13.6 million (20%) increase from the nonfuel mineral production value of \$69.4 million in 2010, which followed a \$15.3 million (18%) decrease from \$84.7 million in 2009 (published totals exclude proprietary company data for cement; actual totals are greater). If compared to the 50 States, Puerto Rico would rank 49th in both 2010 and 2011, down from 48th in 2009 and 42d in 2008. Puerto Rico's nonfuel mineral production value would account for one-tenth of one percent of the total U.S. nonfuel mineral production value in each year. On a per capita basis, Puerto Rico had a value of \$22; the average among the 50 States was \$240.

Among the commodities reported to the USGS, portland cement remained the leading nonfuel mineral commodity by value in Puerto Rico, followed by crushed stone, lime, salt, and common clay. Crushed stone accounted for more than 90% of Puerto Rico's publishable nonfuel mineral production quantity in both 2010 and 2011, with lime close to 5%, and salt accounting for 2% in each year. Production of portland cement accounted for the entirety of the nonpublishable total. Of the U.S. Administered Islands, American Samoa, Guam, and the Virgin Islands reported production of crushed stone. The production value of crushed stone generated in Guam increased significantly during 2010 and 2011 while the production value of crushed stone from the Virgin Islands declined by 17% from 2009 levels. There was no appreciable change in American Samoa.

In Puerto Rico, the production quantity of crushed stone produced in 2011 declined by 1.9 million metric tons (Mt) (20%) from that of 2009, with most of the decrease, 1.8 Mt, taking place in 2010. The production value of crushed stone

also decreased significantly between 2009 and 2010, by \$17.1 million (21%). However, despite the slight decline of production quantity, the production value in 2011 increased from 2010 to \$77.5 million, just 4.5% below that of 2009. The production value of portland cement was withheld to protect company proprietary data, but the production quantity followed the trend of crushed stone, with a large decrease of 20% of production quantity in 2010 from 2009 and a slight drop of 1% in 2011 from 2010.

Sand and gravel is produced mainly for use as aggregate in concrete and concrete products, as road base materials, and as fill. The USGS does not survey sand and gravel producers in Puerto Rico; construction sand and gravel operations on the map are based on data collected by the Mine Safety and Health Administration (MSHA). For the sand and gravel industry, MSHA reported about 275,000 employee hours during 2010 (U.S. Department of Labor, 2011, p. 14) and 239,000 employee hours during 2011 (U.S. Department of Labor, 2012, p. 14). Based on these employee hours, it is estimated that 4.7 Mt of sand and gravel was produced in Puerto Rico during 2010 and that 4.1 Mt was produced in 2011.

Puerto Rico's nonfuel mineral production value, when compared to that of the 50 States, would rank 15th out of 17 producing States for salt production, 25th out of 36 States in the production of portland cement, 33d out of all States in crushed stone, 38th out of 39 States in common clay, and last out of 34 States in lime production, based on the 2011 production quantities. Based on the 2011 estimate, the island would rank 47th out of all States in the production of construction sand and gravel.

References Cited

- U.S. Department of Labor, 2011, Mine injury and worktime, quarterly: Department of Labor—Mine Safety Health and Administration, January–December 2010, Final, 33 p. (Accessed August 15, 2014, at http://www.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20105.pdf.)
- U.S. Department of Labor, 2012, Mine injury and worktime, quarterly: Department of Labor—Mine Safety Health and Administration, January–December 2011, Final, 33 p. (Accessed August 15, 2014, at http://www.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20115.pdf.)

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 May 2013. 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>.

TABLE 1
 NONFUEL RAW MINERAL PRODUCTION IN THE COMMONWEALTH OF PUERTO RICO AND ISLANDS ADMINISTERED
 BY THE UNITED STATES^{1,2,3,4}

(Thousand metric tons and thousand dollars)

Mineral	2009		2010		2011	
	Quantity	Value	Quantity	Value	Quantity	Value
Puerto Rico:						
Cement, portland	936	W	755	W	744	W
Clays, common	54	328	54	328	54	328
Lime ^e	11	1,750	12	3,660	12	3,760
Salt	45	1,500	45	1,500	45	1,500
Stone, crushed	9,450 ^r	81,100 ^r	7,610	64,000	7,530	77,500
Total	XX	84,700 ^r	XX	69,400	XX	83,000

^eEstimated. ^rRevised. W Withheld to avoid disclosing company proprietary data; excluded from "Total." 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.

³Data for the Administered Islands are withheld—company proprietary data.

⁴Although the U.S. Geological Survey does not survey, it is estimated that 4.7 million metric tons (Mt) of sand and gravel was produced in Puerto Rico during 2010 and that 4.1 Mt was produced in 2011.