

think harder. concrete.

ARIZONA CEMENT INDUSTRY



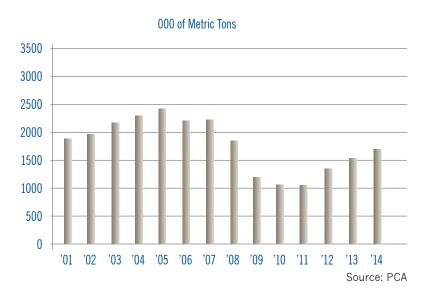
• Offices - 2

Plants - 3

Terminals - 5

Building the Foundation of Arizona's Economy

AZ Cement Production



Economic Data

- · Clinker capacity: 2.8 million metric tons
- Cement production: 1.7 million metric tons
- Cement consumption: 1.8 million metric tons
- Cement employees: 343 in 2014 from 225 in 1997
- Cement & concrete-related employees: 13,453 with a payroll of \$548.1 million
- · Cement contribution to state revenue: \$6.2 million
- Cement & concrete-related contribution to state revenue: \$883.6 million



Portland Cement Association

500 New Jersey Avenue NW, 7th Floor Washington, DC 20001-2066 202.408.9494 Fax 202.408.0877 5420 Old Orchard Road Skokie, Illinois 60077-1083 847.966.6200 Fax 847.966.9781 www.cement.org

ARIZONA CEMENT INDUSTRY

PORTLAND CEMENT MANUFACTURING AND USE

The Portland Cement Association (PCA) represents more than 80 percent of US cement manufacturing capacity with nearly 90 plants in 33 states and distribution facilities in all 50.

Cement or concrete? Concrete is basically a mixture of aggregates and paste. The aggregates are sand and gravel or crushed stone; the paste is water and cement. Portland cement is not a brand name, but the generic term for the type of cement used in virtually all concrete, just as stainless is a type of steel and sterling a type of silver.

Cement is manufactured by heating lime, silica, alumina, iron, and other materials at high temperature. The resulting substance is a marble-like ball called clinker that is ground, mixed with limestone and gypsum, and used to create concrete.

The U.S. cement industry has long been committed to minimizing emissions, waste, energy consumption, and the use of virgin raw materials. For example, the cement industry began to address climate change in the mid-1990s—one of the first industries to do so.

Portland cement is an essential construction material and is uniquely positioned for the rebuilding of American infrastructure.

- U.S. cement companies have annual shipments valued at approximately \$8.6 billion.
- Cement manufacturers in the U.S. employ nearly 13,200 workers with an annual payroll of about \$909 million. When including related industries such as concrete and related industries, the number of employees grows to 490,691 with a payroll of \$22.5 billion.

Concrete is a responsible choice for sustainable, durable development. It offers an economic way to build resilient communities and infrastructure

- Building owners, builders, architects, and designers have come to recognize that durable concrete public buildings, private homes, and businesses resist damage from natural disasters and reduce the impact entire communities have on our planet.
- A National Institute of Building Sciences Multi-Hazard Mitigation Council study reported that every dollar spent on reducing the potential impact of disasters saves society an average of \$4. With durable construction, the damage from major storms can be less severe, reducing the amount of energy and resources that the local community will have to spend on emergency response, reconstruction, repair, and recovery.
- The heating, cooling, and general operations of buildings and homes in the United States accounts for approximately 70 percent of national energy consumption each year and more than 40 percent of CO₂ emissions generated in the U.S.
- Studies by MIT have shown that homes with concrete walls can use 8 to 15 percent less energy than other homes.
- MIT research has also shown that pavements with greater stiffness produce a
 better fuel economy for the vehicles that travel on them. To achieve optimal fuel
 consumption figures, asphalt pavement would need to be about 60 percent thicker
 than concrete pavement. Concrete pavements not only cost less to build, but would in
 this case, use less virgin material

ARIZONA • Senators John McCain (R) and Jeff Flake (R)		
Company CalPortland Drake Cement Salt River Materials Salt River Materials (HQ)	Plant Location Rillito Paulden Clarkdale Scottsdale	House Members Ann Kirkpatrick (D-1st) Paul Gosar (R-4th) Paul Gosar (R-4th) David Schweikert (R-6th)
(HQ) Corporate Headquarters		