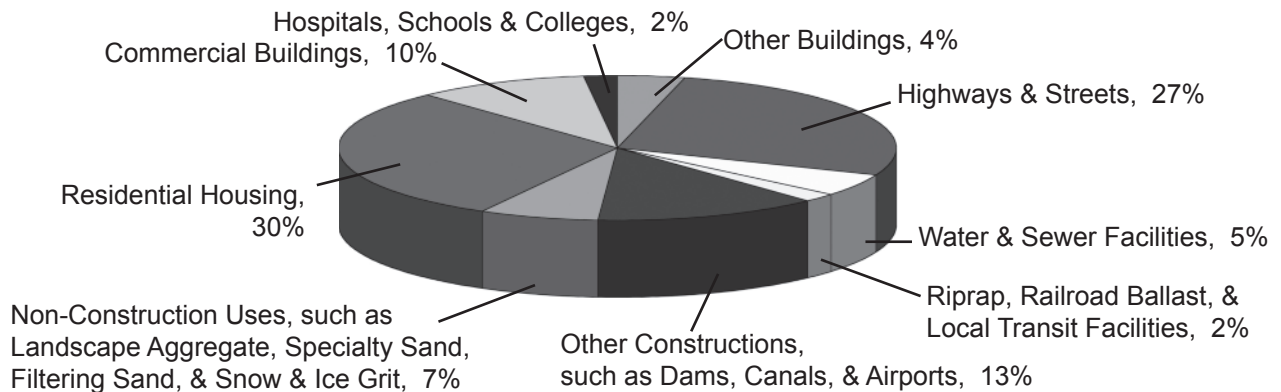


In the U.S., we mine and use about 2 1/4 billion tons of aggregates every year . . . that's 7.5 tons (15,000 pounds) for every person in the USA.

### We All Use Aggregates



Source: California Department of Conservation, Division of Mines and Geology

### We all use rocks . . . each of us need about 10 tons every year.

The average new house contains 120 tons of sand, gravel and stone (called aggregate). About 17 tons is used in concrete.

In the USA, there were 129 million housing units counted in the 2009 Census. Each new house and its proportional share of the associated schools, libraries, shopping centers, recreational centers, and other facilities, requires more than 325 tons of aggregate.

Concrete is commonly used in the construction of all large buildings. Find out how much concrete is used where you live and go to school.

- 15,000 tons of aggregates are required for the construction of an average size school or hospital.
- 85,000 tons of aggregates are necessary to construct one mile of an interstate highway or 1/4 mile of a four-lane road.

Concrete is measured by the cubic yard—measuring three feet by three feet by three feet, or 27 cubic feet. One cubic yard of normal concrete will weigh about 4000 pounds.

One cubic yard covers an area 8 feet by 10 feet if the concrete is 4 inches thick. Four inches is generally enough for sidewalks, residential driveways, or garage floors.

1. How many cubic yards of concrete are in the sidewalk around your school? In the sidewalk around your house?
2. How much concrete is needed to place a floor in a two-car garage (normally 20 ft. by 20 ft.)?
3. How many cubic yards of concrete would be in the floor of your classroom? How much would it weigh if it is made of concrete?
4. If concrete costs \$100 per cubic yard (delivered), how much does each of the above cost?

How big is a ton? Rocks vary tremendously in weight, but a good **Rule of Thumb** is—  
 1 cubic yard of aggregates weighs 1 ton.  
 1 cubic yard of concrete normally weighs 2 tons.