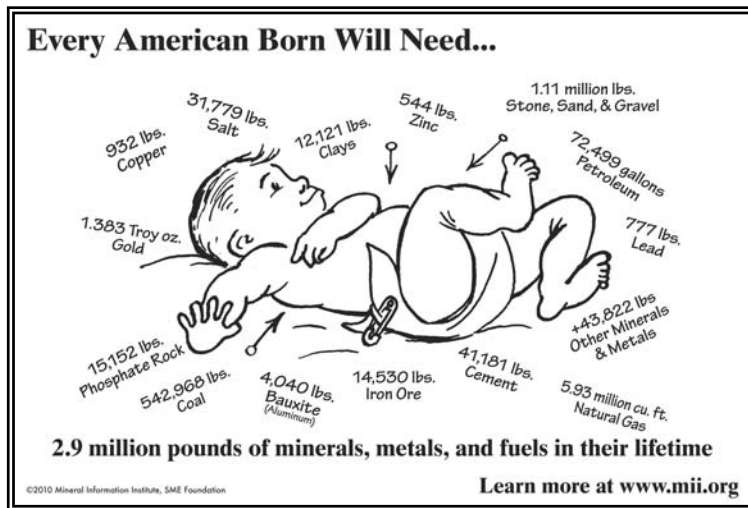


37,687 Pounds of Minerals and Energy Are Needed Each Year for Every American

Last year, every person in the United States needed more than 18 tons of minerals and energy fuels to maintain their standard of living, according to statistics compiled by the Mineral Information Institute, an Affiliate of the Society for Mining, Metallurgy and Exploration Foundation.



With the life expectancy in the U.S. averaging 77.7 years, the average American will need to have 2.9 million pounds of resources to provide the products and materials they will depend upon in their lifetime. The population of the U.S. is over 307 million people, so this means that last year nearly 6 billion tons of rocks and minerals had to be mined somewhere to make the things we use in our everyday lives.

According to the U.S. Geological Survey, continued declines in the U.S. housing market during 2009 were reflected in further reductions in the production and consumption of cement, clays, construction sand and gravel, crushed stone, gypsum, and those associated with the manufacture of goods such as ceramic tile, paint, roofing, and wallboard. Declines in automobile manufacturing resulted in reduction production and consumption of metals such as copper, iron and steel, lead, and platinum-group metals.

Despite these conditions, more than 37,600 pounds of mined materials were needed per person in 2009 to maintain the American lifestyle. More than half (21,285 pounds) of the country's mineral needs are for the energy fuels needed for transportation and to heat, cool and light our homes and businesses. Energy fuels include coal, petroleum, natural gas, and uranium.

Each year the Institute uses information provided by the U.S. Geological Survey, the Energy Information Administration, and the National Mining Association to calculate the amounts of different rocks and minerals which are mined to make the things we all use.

Process for Calculating the *Mii Minerals Baby*

Per Capita Annual Consumption

To annually update the *Mii Minerals Baby*, statistics from the U.S. Geological Survey Mineral Commodity Summaries (annual reports are available on-line at minerals.usgs.gov/minerals/pubs/commodity/) and the Energy Information Administration (<http://www.eia.doe.gov/>) provide the amounts of various minerals and energy fuels that are consumed in the United States. Both sources provide annual “apparent consumption” data that is used, rather than production statistics.

The Statistic Services group of the National Mining Association provides the analysis to generate the per capita mineral usage by converting these statistics from (in most cases) metric tonnes to pounds and dividing by the most current U.S. population estimate. (This report is available on-line at <http://www.nma.org/>.) This provides the *U.S. Annual Mineral Use Per Person* statistic. To provide a weight statistic, the petroleum and natural gas numbers are converted from volume to weight measurements.

To Create the Lifetime Statistic

This annual per capita consumption is multiplied by the average life expectancy for newborns in the U.S., provided by the Center for Disease Control. (This estimate is usually two to three years out of date.) The life expectancy statistic between men and women was averaged by CDC, and the figure of 77.7 years was used in calculating this year’s *Mii Baby*.

The most current *Mii Baby* can be downloaded from www.mii.org

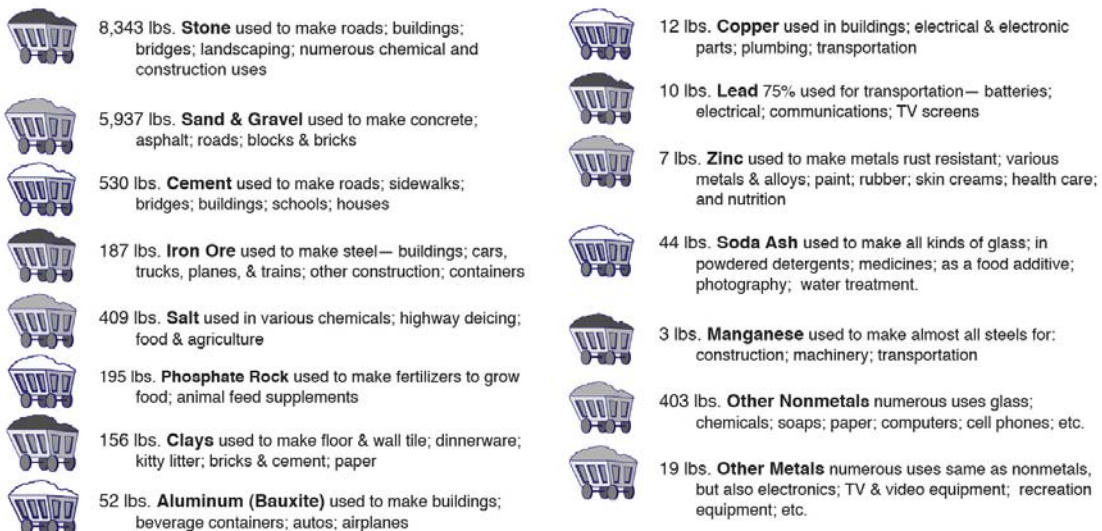
Historical Calculations

Year	Annual Lbs Per Capita	Lifetime Lbs Per Capita	Life Expectancy Rate Used	Annual Tons Consumed	USA Population
1995	47,769	3,620,898	75.5	6,276,023,781	262,765,000
1996	45,931	3,495,368	75.7	6,092,389,897	265,283,000
1997	46,216	3,535,524	75.8	6,190,656,308	267,901,000
1998	47,338	3,630,825	76.1	6,390,630,000	270,000,000
1999	48,427	3,714,351	76.5	6,605,927,070	272,820,000
2000	48,148	3,707,396	76.7	6,774,423,600	281,400,000
2001	47,122	3,637,818	76.7	6,710,102,117	284,797,000
2002	46,010	3,551,972	77	6,625,440,000	288,000,000
2003	45,524	3,519,005	77.2	6,623,742,000	291,000,000
2004	46,414	3,587,802	77.3	6,815,895,900	293,700,000
2005	47,502	3,686,155	77.5	7,010,345,160	295,160,000
2006	47,769	3,716,428	77.8	7,150,971,531	299,398,000
2007	46,279	3,605,134	77.9	6,979,057,509	301,621,000
2008	42,719	3,323,541	77.8	6,494,569,570	304,060,000
2009	37,687	2,928,299	77.7	5,785,105,248	307,008,000

A few examples of how those minerals and metals are used

- The average American house contains slightly more than a quarter of a million pounds of minerals and metals; there were 129 million housing units existing in the country in 2009. Each of them requires insulation (silica, feldspar and trona), roofing (silica sands, limestone and petroleum), and hardware (iron, zinc, copper, steel, brass). Glass windows are made of trona, silica sand, limestone and feldspar. Foundations consist of concrete made from sand, gravel and cement. Cement is made of limestone, bauxite, clay, shale and gypsum. The concrete is reinforced with steel rods.
- There were an estimated 254,403,082 registered passenger vehicles in the United States, weighing an average of nearly 3,000 pounds each. They are driven more than 12,000 miles a year and consume an average of 550 gallons of fuel, each.
- There are 4 million miles of roads and bridges in the country that require maintenance and repair. 85,000 tons of aggregates are required for each mile of Interstate highway.
- More than 100 billion aluminum beverage cans are produced each year; about 63% are recycled.
- More than 1.4 billion cinema tickets are sold each year, requiring energy fuels to heat and cool the audience, operate the projectors, and to provide the snacks at the 39,233 theater screens in the U.S.
- 280 million personal computers were in use in 2009.
- Eighty-eight percent of the electricity used in the U.S. is generated by fuels obtained by mining: 45% from coal; 23% from natural gas; 20% from nuclear power. Only 7% is generated by hydro, with another 5% from petroleum, wood, wind, other gasses, geothermal, solar, and other resources.
- There were 1.28 billion cell phones sold worldwide in 2008, each containing about \$1 worth of gold plus 42 other minerals and metals.

Every year— 37,687 pounds of new minerals must be provided for every person in the United States to make the things we use, every day



Plus These Energy Fuels

• 933 gallons of **Petroleum** • 6,988 lbs. of **Coal** • 76,319 cu. ft. of **Natural Gas** • 1/4 lb. of **Uranium**

To generate the energy each person uses in one year—
equivalent to 300 people working around the clock for each of us.

