

MINERALS: AMERICA'S STRENGTH

The basics of our well-being—our homes, workplaces, schools, hospitals and transportation systems—are all possible because of America's vast mineral wealth. We also rely on metals and minerals to meet our electronic, telecommunications and national security needs.

The contributions to America's well-being that have been made by minerals and minerals mining are unprecedented. Not only is the United States among the world's largest minerals users, we also rank as one of the world's largest producers.

Mineral Facts

- **Supply** – The domestic mining industry provides nearly 50 percent of the metals American manufacturers need to operate, including iron ore, copper, gold, phosphate, zinc, silver and molybdenum.
- **Jobs** – More than 400,000 people work directly in U.S. metals and non-metals mining throughout the United States, and an additional 700,000 jobs are created elsewhere in the economy to support metals and non-metals mining. Industries, such as machinery and computers and electronics, that are dependent upon metals and minerals to produce their products, employ nearly 17 million people, with more than \$900 billion in earnings, and contribute \$2.1 trillion in annual gross domestic product according to the Bureau of Economic Analysis and the Bureau of Labor Statistics. For additional information see www.nma.org/pdf/pubs/mining_economic_report.pdf.
- **Wages** – The average annual wage for mining jobs is the highest of any industrial category—40 percent higher than the combined average for all industrial jobs.
- **Value** – The \$64 billion worth of metals and non-metals produced at U.S. mines in 2010 generated around \$200 billion in direct and indirect economic output.
- **Government Revenue** – Metals and non-metals mining generated an estimated \$13 billion in payroll and income taxes in 2008.

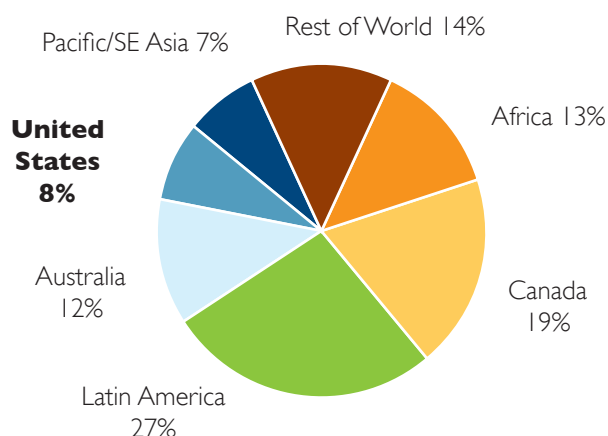
Despite the benefits provided by domestic minerals mining, the United States has witnessed a prolonged period of underinvestment in exploration. In turn, this has caused America to become increasingly dependent on foreign sources for minerals vital to our economic and national security—including minerals for which we have proven reserves.

Consider:

- The U.S. accounts for a meager 8 percent of worldwide exploration budgets.
- American now depends on imports for 100 percent of 18 mineral commodities, including yttrium, which is essential to the manufacture of microwave communications equipment, and vanadium, essential to the manufacture of superconductors.

America is 50 percent import reliant on 43 commodities to meet domestic demand. Among those commodities is silver, for which the U.S. has one of the world's largest reserves, an inte-

Declining U.S. Share of Worldwide Exploration Spending, 2010



Source: SME Mining Engineering Magazine, May 2011

Metal Used in a Fighter Jet Engine

Metal	Amount (tons)	Import Dependence
Titanium (Sponge)	2.7	64%
Nickel	2.7	43%
Chromium	0.9	56%
Cobalt	0.6	81%
Aluminum*	0.5	38%
Niobium	0.1	100%
Tantalum	1.2 kg	100%

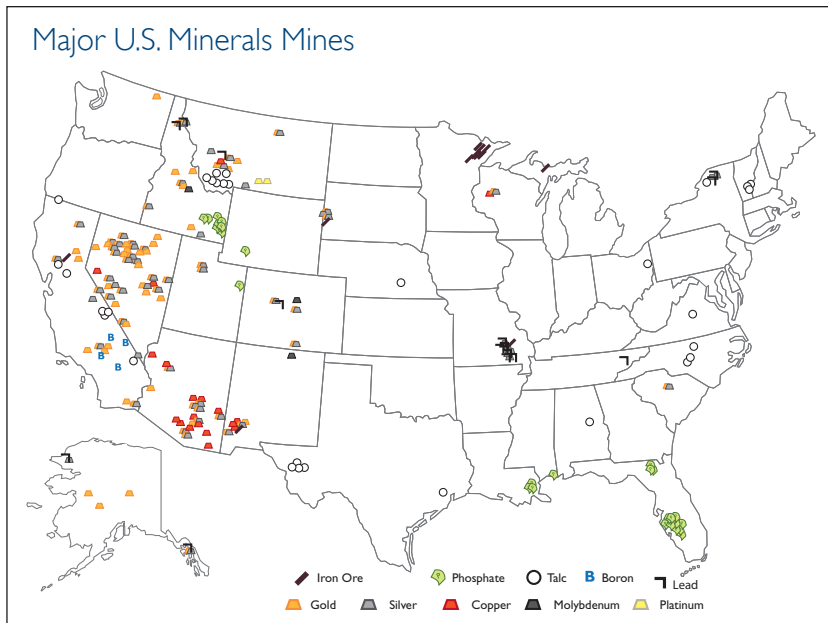


Sources: USGS Mineral Commodity Summaries 2011; British Geological Survey. * Estimate based on 2007 data.

gral component of catalytic converters, cell phones and medical diagnostics.

To further jobs creation and to meet our domestic need for infrastructure development, military equipment and consumer

products, we should further develop America's domestic resource base to capitalize on the advantages of America's stable government, economic strength, educated workforce and technologically advanced and environmentally aware mining industry.



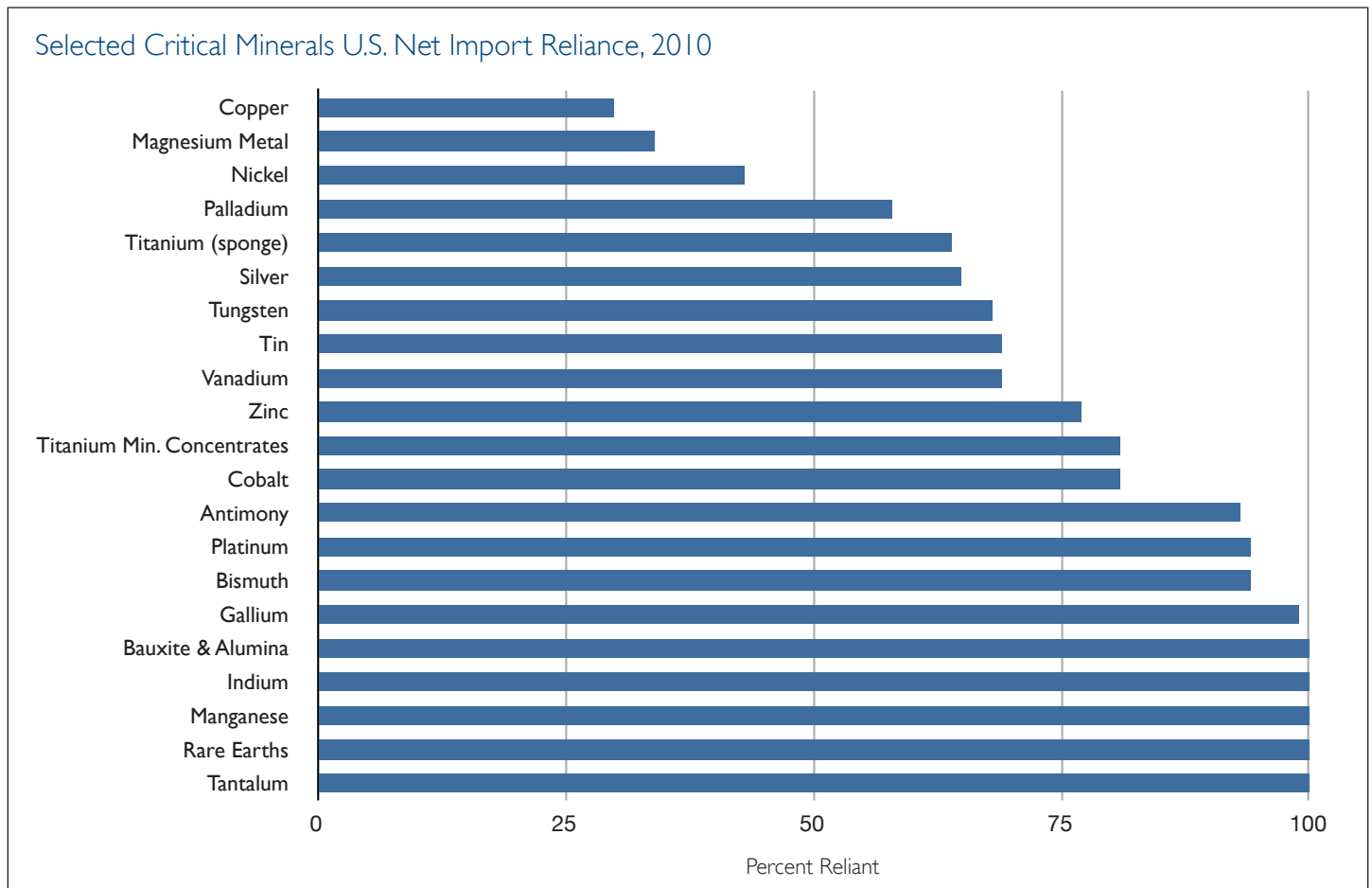
Source: U.S. Geological Survey (USGS)

Environmental Stewardship

U.S. minerals mining complies with numerous state and federal laws including the:

- National Environmental Policy Act
- Clean Air Act
- Clean Water Act
- Solid Waste Disposal Act
- Resource Conservation and Recovery Act
- Superfund
- Safe Drinking Water Act
- Toxic Substances Control Act

A congressionally mandated National Academy of Sciences study has found that the existing laws and regulations governing hardrock mining are effective in protecting the environment.



Source: USGS Mineral Commodity Summaries 2011 and National Research Council, Minerals, Critical Minerals, and the U.S. Economy