

The USGS: An Unparalleled Scientific Asset

The U.S. Geological Survey (USGS) delivers information critical to powering our economy, managing our natural resources, and keeping Americans safe and healthy.¹

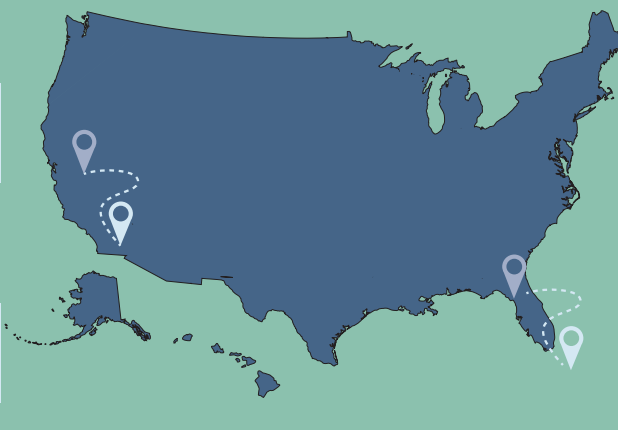
Mapping the Nation

\$21B

Geologic maps save users an estimated 15% in annual costs: a value of between \$14B and \$21B.

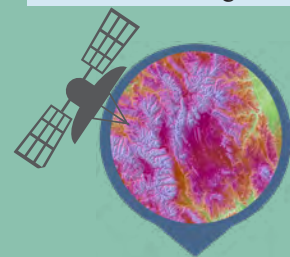
\$25.6B

is the annual value to users of key Earth observation platforms like Landsat, which is managed by the USGS.



\$13.5B

in annual benefits is generated by the USGS's 3D Elevation Program.



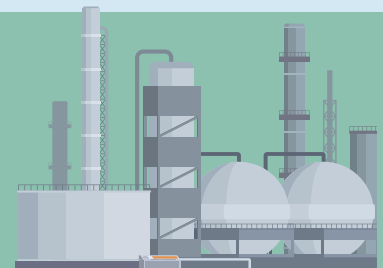
Securing America's Energy Independence

44%

USGS-identified undiscovered geothermal energy is equal to 44% of current U.S. electricity generation.

29.4B

barrels of oil and 391.6 trillion cubic feet of gas in recoverable resources are available on U.S. public lands based on USGS assessments.



Protecting Americans' Health and Safety

\$424B

in recent wildland fire damages highlight the need for USGS fire science, which supports efforts to protect communities and reduce risk.



USGS earthquake, volcano, landslide, and coastal hazard monitoring and information save lives and minimize costs; for example, \$2.8M can be saved because of USGS enhanced information about a Mauna Loa eruption.

\$4.5B

is the estimated cost of annual flooding. Through a network of over 11,885 streamgages, the USGS supports public safety and enables forecasts, early warning systems, and management actions that protect lives and property.

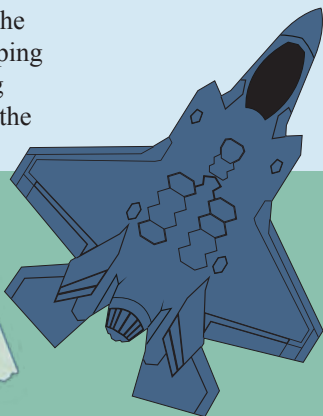


¹Values are given in billions (B), millions (M), and trillions (T) of U.S. dollars. GDP is "Gross Domestic Product." Percentages are shown as %.

Supporting National Security

\$3.1B

The USGS identified a \$3.1B risk to the American economy if China restricts gallium imports. This is one example underscoring the importance of the USGS mapping critical minerals, investigating supply chains, and producing the Nation's critical minerals list.

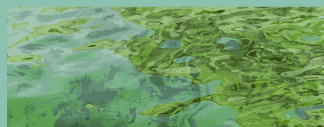
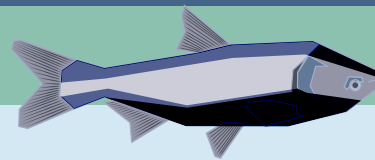


Enhancing Our Lands and Water

\$21B

in estimated annual costs results from invasive species.

The USGS's invasive species research informs approaches used to reduce their effects on agriculture, water infrastructure, disease transmission, fisheries, and outdoor recreation.



USGS innovations support early warnings for harmful algal blooms—over \$2M in yearly benefits are provided to Kansas alone.

\$45B

USGS science informs the management of big game (such as deer and elk). The big-game hunting industry contributes \$45B to the U.S. economy.



Fostering American Prosperity

\$4.1T

Mineral commodities are necessary for the \$4.1T in value added to the GDP by major industries that consume processed mineral materials and employ 1 million workers. Because of this, USGS data on mineral supply, demand, and trade are highly valued.

45,000 metric tons

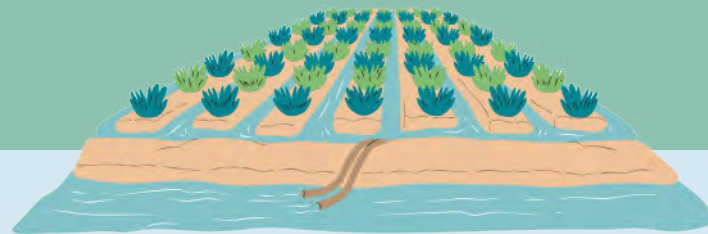
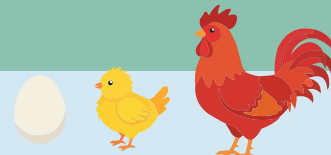
Rare earths power the growing technology economy, including cell phones, electric vehicles, and medical devices. For over 70 years, USGS work has supported the discovery of rare earth resources in California's Mountain Pass area, which produced 45,000 metric tons of rare earth concentrates in 2024—over 11% of the global supply.



Guarding American Food Security

\$70.2B

USGS science informs early warning systems and management strategies to mitigate disease outbreaks in agriculture—critical research on highly pathogenic avian influenza, for example, helps safeguard the \$70B value in poultry and egg production.



\$11.8B

USGS groundwater tools are vital for agriculture; for example, in the Mississippi Alluvial Plain, 65% of farming relies on groundwater to support its \$11.8B annual industry.



For more information, visit: <https://www.usgs.gov>

U.S. Geological Survey
12201 Sunrise Valley Drive
Reston, VA 20192

ISSN 2332-354X (online)
<https://doi.org/10.3133/gip263>