

**Testimony Submitted by
American Geosciences Institute**

P. Patrick Leahy, Executive Director

**To the United States House of Representatives
Committee on Appropriations
Subcommittee on Interior, Environment, and Related Agencies**

March 23, 2016

Thank you for this opportunity to provide the American Geosciences Institute's perspective on fiscal year (FY) 2017 appropriations for geoscience programs within the Subcommittee's jurisdiction. We ask the Subcommittee to support and sustain the critical geoscience work of the United States Geological Survey (USGS), the Bureau of Land Management (BLM), the National Park Service, and the Smithsonian Institution.

Specifically, we ask that you support the President's request for \$1.2 billion for USGS, but we respectfully request that Congress place greater emphasis on the geological sciences within the USGS mission. AGI supports balanced funding for Mission Areas within USGS and notes that funding for important geoscience-based programs has consistently lagged funding for other parts of USGS. AGI also supports \$138 million for Energy and Minerals Management at the Bureau of Land Management; \$234 million for the National Park Service's Natural Resource Stewardship and Everglades Restoration activities; and \$922 million for the Smithsonian Institution.

The Earth provides the energy, mineral, water, and soil resources that are essential for a thriving, innovative economy, national security, and a healthy population and environment. We must understand the Earth system, and particularly the geological characteristics of Earth's surface and subsurface, in order to sustain human health and safety, maintain energy and water supplies, and improve the quality of the environment while reducing risks from natural hazards.

AGI is a nonprofit federation of 51 geoscientific and professional associations that represent approximately 250,000 geologists, geophysicists, and other Earth scientists who work in industry, academia, and government. Founded in 1948, AGI provides information services to geoscientists, serves as a voice of shared interests in our profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources, resilience to natural hazards, and the health of the environment.

U.S. Geological Survey

AGI supports the President’s request for \$1.2 billion for USGS. We respectfully suggest that Congress should allocate more resources to USGS’s geoscience functions because there is no alternative source for this expertise. The key Mission Areas of Water Resources, Core Science Systems, and Energy & Mineral Resources have consistently been underfunded when compared to other USGS Mission Areas. AGI strongly supports the proposed increase for USGS Facilities to maintain essential scientific facilities, including monitoring and observation instrumentation. We urge additional funding for the USGS Library, which is an important and unique resource for researchers and industry.

Importance of Geoscience Functions at USGS: The need for geological information has not diminished since USGS was established in 1879. On the contrary, as we place increasing demands on Earth’s system, many critical decisions rely upon geoscience information. The USGS has a wide-ranging mission to provide objective data, observations, analyses, assessments, and scientific solutions to support decision making; while there is merit to USGS’s broad remit, its unique geological mission should be paramount.

Table 1 highlights the Mission Areas that have been singled out for lower increases than other sections of USGS since FY 2014; we note that these contain the majority of USGS’s geoscience functions. We respectfully ask Congress to recognize the importance of geoscience research, monitoring, information collection and analysis to the nation’s safety, economy, defense, and quality of life, and to support USGS’s mandated role by funding balanced investment in USGS programs.

<i>USGS Mission Area or Account</i>	<i>FY 2014 Enacted</i>	<i>FY 2015 Enacted</i>	<i>FY 2016 Enacted</i>	<i>% change, FY 14-16</i>	<i>FY 2017 request</i>	<i>% change, FY 16 Enacted – FY17 request</i>	<i>% change, FY1 4 Enacted–FY17 request</i>
Climate & Land Use	131,975	135,975	139,975	6.1	171,444	22.4	29.9
Environmental Health	19,614	21,445	21,445	9.3	24,560	15	25.2
Ecosystems	152,811	157,041	160,232	4.9	173,938	10.1	13.8
Natural Hazards	128,486	135,186	139,013	8.2	149,701	7.8	16.5
Water Resources	207,281	211,267	210,687	1.6	227,992	7	10
Core Science Systems	108,807	107,228	111,550	2.5	118,395	6.2	8.8
Energy, Minerals	71,901	70,826	73,066	1.6	74,923	2.5	4.2
Science Support	110,704	105,611	105,611	-4.6	110,592	4.7	0
Facilities	100,421	100,421	100,421	0	117,258	16.8	16.8
Total USGS	1,032,000	1,045,000	1,062,000	2.9	1,168,803	10.1	13.3
		Mission Areas that are consistently funded below USGS-wide increases.					

Table 1: Trends in funding for USGS Mission Areas and Accounts, FY 2014 – FY 2017 request.

Core Science Systems Mission Area:

- **USGS Library:** The USGS Library is a vital resource for geoscientists within and outside USGS, servicing hundreds of thousands of requests online and in person annually, yet staffing has fallen from 66 federal staff (FTE) in 2000 to 18 FTE in 2015. AGI supports increased funding for the USGS Library, which serves industry, academia, and government clients and preserves the intellectual stock of the geosciences.

- **National Geospatial Program:** Topographic mapping has been a core activity at USGS since its inception. AGI strongly supports the 3D Nation interagency partnership to build a modern elevation map of the nation's territories and urges Congress to support USGS's contribution, the 3DEP (3D Elevation) program. **AGI strongly supports investment in lidar and ifsar mapping, and the President's request for \$69 million for the National Geospatial Program.**
- **National Cooperative Geologic Mapping Program (NCGMP):** This important, decades-long partnership between the USGS, state geological surveys, and universities has a proven track record of delivering cost-effective geological maps. Over the past few years the number of grant proposals has increased while funding has remained stagnant. **AGI asks that Congress increase funding for the National Cooperative Geologic Mapping Program to \$30 million in FY 2017 to meet growing demand.**
- **Data Preservation:** The National Geological and Geophysical Data Preservation Program (NGGDPP) produces more value in terms of economic, environmental, hazard mitigation, and regulatory efficiency than it costs to run. **AGI urges Congress to reauthorize NGGDPP and to fund it at the previously authorized level of \$3 million.**

Energy and Mineral Resources Mission Area:

- **Mineral Resources Program:** AGI is a founding member of the Minerals Science and Information Coalition (MSIC), which supports minerals expertise in the federal government. We are concerned at the dearth of investment in this foundational component of the manufacturing supply chain, which is critical to our national economy and defense. **AGI supports the President's request for \$49 million for the Mineral Resources Program and asks that Congress add \$5 million in new funding to create minerals forecasting capabilities.**
There is no point developing new materials if we cannot supply the raw materials to manufacture them. **AGI suggests the creation of a Critical Minerals Hub, with funding of \$25 million per year for 5 years, to match the Critical Materials Hub in the Department of Energy.**
- **Energy Resources Program:** AGI supports increased funding for the Energy Resources Program. We note the importance of research on gas hydrates, which may play a significant role in future energy and climate scenarios. **AGI supports funding of \$286 million for the Energy Resources Program.**
- We urge USGS to develop opportunities to collaborate effectively with other agencies, including integrating more geological information with DOE's Subsurface Technology and Engineering (SubTER) crosscut, to ensure prudent use of federal funds.

Climate and Land Use Mission Area:

- **Land Remote Sensing Program:** One of the most fundamental concepts in the geosciences is that the Earth changes through time. It is impossible to overstate the importance of long-term, consistent monitoring of the Earth to provide a sound basis for decision making. **AGI supports the President's request for \$96.5 million for the Land Remote Sensing Program, which includes Landsat and other Earth observing systems.**

Water Resources Mission Area:

- Challenges in water supplies and water quality highlight the importance of understanding the quality, quantity, and distribution of our groundwater and surface water resources. **AGI urges Congress to ensure the continuity and expansion of nationwide, long-term data collection and research programs that support water planning and decision making across all states, and to fund Water Resources at \$228 million for FY 2017.**

Natural Hazards Mission Area:

- Landslide hazards are assessed using detailed topographic data from the National Geospatial Program. **AGI supports the proposed increase to \$8 million for the Landslides Hazards Program** in order to reap societal benefits from investments in geospatial information.
- Earthquakes are increasing in states like Oklahoma and Kansas, and early warning systems are needed to avoid potential devastation from large earthquakes. **AGI supports funding for the Earthquake Hazards Program of \$60.5 million.**
- **AGI supports robust funding of the Natural Hazards Program and urges Congress to appropriate \$139 million to this Mission Area.**

Bureau of Land Management

AGI notes efforts by the Energy and Minerals Management program to improve the return to taxpayers from the extraction of natural resources on our nation's public lands. **AGI supports funding the Energy and Minerals Management activity at \$138 million.**

Smithsonian Institution

The Smithsonian's National Museum of Natural History plays a dual role in communicating the excitement of the geosciences and enhancing knowledge through research and preservation of geoscience collections. **AGI supports the President's request of \$922 million for the Smithsonian Institution in FY 2017.**

National Park Service

National parks are very important to the geoscience community and the public as unique national treasures that showcase the geologic splendor of our country and offer unparalleled opportunities for research, education, and outdoor activities. **AGI supports the President's request for \$224 million for Natural Resource Stewardship activities and \$10 million for Everglades Restoration during the centennial year of the National Parks.**

Thank you for the opportunity to present this testimony to the Subcommittee. If you would like any additional information for the record, please contact Maeve Boland at 703-379-2480, ext. 228 voice, 703-379-7563 fax, mboland@agiweb.org, or 4220 King Street, Alexandria VA 22302-1502.