
IDAHO

GEOLOGICAL SURVEY

University of Idaho

**STRATEGIC PLAN
FY2023 - FY2027**

The Idaho Geological Survey (IGS) is a non-regulatory state agency that leads in the collection, interpretation, and dissemination of geologic and mineral data for Idaho. The agency has served the state since 1919 and prior to 1984 was named the Idaho Bureau of Mines and Geology.

MISSION STATEMENT

The Survey’s mission is to provide the state with timely and relevant geologic information. Members of the IGS fulfill this mission through applied geologic research and strong collaborations with federal and state agencies, academia, and the private sector. IGS research focuses on geologic mapping, geologic hazards (earthquakes and landslides), hydrogeology (surface and groundwater evaluation), geothermal energy, oil and gas, and metallic and industrial minerals. The Survey's Digital Mapping Laboratory is central to compiling, producing, and delivering new digital geologic maps and publications for the agency. The IGS is also engaged in dissemination of historic mining records, community service, and earth science education. As Idaho grows, demand is increasing for geologic and geospatial information related to energy, mineral, and water resource development, and landslide and earthquake hazards.

VISION STATEMENT

IGS is committed to the advancement of diverse disciplines within the geosciences and emphasizes the practical application of geology to benefit society. The Survey seeks to accomplish its responsibilities through service and outreach, research, and education.

AUTHORITY

[Idaho Statutes, Title 47, Chapter 2](#) provides for the creation, purpose, duties, reporting, offices, and Advisory Board of the IGS. The Statutes specify the authority to conduct investigations, establish cooperative projects, and seek research funding. The IGS publishes an Annual Report as required by its enabling act.

GOAL 1: Service and Outreach

Achieve excellence in collecting and disseminating geologic information and mineral data to the public, governmental agencies, elected officials, educational institutions, civic and professional organizations, and the mining, energy, agriculture, utility, construction, insurance, and banking industries. Continue to strive for increased efficiency and access to survey information primarily through publications, website products, in-house collections, and customer inquiries. Emphasize website delivery of digital products and compliance with new revision of state documents requirements (Idaho Statute 33-2505).

Objective A: Develop and publish survey documents

Initiate and develop research initiatives and publish geological maps, technical reports, and data sets.

Performance Measures:

I. Number of Published Reports on Geology/Hydrogeology/Geohazards/Mineral & Energy Resources.

| FY19 (2018-2019) | FY20 (2019-2020) | FY21 (2020-2021) | FY22 (2021-2022) | Benchmark |
|------------------|------------------|------------------|------------------|-----------|
| 11 | 11 | 18 | | 11 |

Benchmark: The number of published reports will be scaled to the number of permanent research staff by a factor of 1.5, given comparable scope of each publication (currently 7 permanent research staff).

Objective B: Deliver statewide geologic information and products via website

Create and deliver IGS products and publications to the general public, state and federal agencies, and cooperators in an efficient and timely manner. Products include GIS data sets, reports, map publications, and web map applications.

Performance Measures:

I. Number of website viewers.

| FY19 (2018-2019) | FY20 (2019-2020) | FY21 (2020-2021) | FY22 (2021-2022) | Benchmark |
|------------------|------------------|---------------------|------------------|-----------|
| 137,863 | 278,919 | 21,388 ¹ | | 120,000 |

Benchmark: The number of website viewers (excluding robot searches) will be equal to or greater than the last full fiscal year reported.²

II. Number of website products used or downloaded.

| FY19 (2018-2019) | FY20 (2019-2020) | FY21 (2020-2021) | FY22 (2021-2022) | Benchmark |
|--------------------|--------------------|--------------------|------------------|-----------|
| ----- ³ | ----- ³ | 5,621 ¹ | | 32,000 |

Benchmark: The number of website products used or downloaded will be equal to or greater than the last full fiscal year reported.²

Objective C: Sustain Idaho State Documents Depository Program and GeoRef Catalog (International)

Deliver all IGS products and publications to the Idaho Commission for Libraries for cataloging and distribution to special document collections in state university libraries and deliver digital copies of all products and publications to GeoRef for entry in their international catalog of geologic literature.

Performance Measures:

I. Percentage of Survey documents available through these programs.

| FY19 (2018-2019) | FY20 (2019-2020) | FY21 (2020-2021) | FY22 (2021-2022) | Benchmark |
|------------------|------------------|------------------|------------------|-----------|
| ~99% | ~99% | ~99% | | ~99% |

Benchmark: All newly published IGS documents will be made available through these programs.⁴

Objective D: Sustain voluntary compliance

Sustain voluntary compliance with uploads of new geologic mapping products published at the Idaho Geologic Survey to the National Geologic Map Database Website managed by the U.S. Geological Survey.

Performance Measures:

I. Percentage of published Geologic Maps that are uploaded to the national website depicting detailed geologic mapping in Idaho.

| FY19 (2018-2019) | FY20 (2019-2020) | FY21 (2020-2021) | FY22 (2021-2022) | Benchmark |
|------------------|------------------|------------------|------------------|-----------|
| 100% | 100% | 100% | | 100% |

Benchmark: All geologic maps that are published at the IGS each year will be uploaded to this website.⁴

GOAL 2: Research

Promote, foster, and sustain a climate for research excellence. Develop existing competitive strengths in geological expertise. Maintain national level recognition and research competitiveness in digital geological mapping and applied research activities. Sustain and build a strong research program through interdisciplinary collaboration with academic institutions, state and federal land management agencies, and industry partners.

Objective A: Sustain and enhance geological mapping

Sustain and enhance geological mapping and study areas of particular interest including those with economic potential and geohazard concerns.

Performance Measures:

- I. **Increase the geologic map coverage of Idaho by mapping priority areas of socioeconomic importance. Identify and study areas with geologic resources of economic importance and identify and study areas that are predisposed to geologic hazards.**

| FY19 (2018-2019) | FY20 (2019-2020) | FY21 (2020-2021) | FY22 (2021-2022) | Benchmark |
|------------------|------------------|------------------|------------------|-----------|
| 38.2% | 38.2% | 38.7% | | 39.2% |

Benchmark: Increase the cumulative percentage of Idaho's area covered by modern geologic mapping.⁵

Objective B: Sustain and build external research funding

Sustain and build existing state and federal funding sources to maintain research objectives for the IGS and develop new sources of funding from private entities that are exploring and developing geologic resources in Idaho.

Performance Measures:

- I. **Maintain externally funded grant and contract dollars to support IGS mission.**

| FY19 (2018-2019) | FY20 (2019-2020) | FY21 (2020-2021) | FY22 (2021-2022) | Benchmark |
|------------------|------------------|------------------|------------------|-----------|
| \$396,556 | \$639,902 | \$662,366 | | \$500,000 |

Benchmark: Maintain external grants and contracts funding level in line with a 15% variation of the previous five-year average.⁶

GOAL 3: Education

Support knowledge and understanding of Idaho's geologic setting and resources through earth science education. Achieve excellence in scholarly and creative activities through collaboration and building partnerships that enhance teaching, discovery, and lifelong learning.

Objective A: Provide earth science education

Develop and deliver earth science education programs, materials, and presentations to public and private schools.

Performance Measures:

- I. **Number of educational programs provided to public and private schools and the public at large.**

| FY19 (2018-2019) | FY20 (2019-2020) | FY21 (2020-2021) | FY22 (2021-2022) | Benchmark |
|------------------|------------------|------------------|------------------|-----------|
| 18 | 48 | 30 | | 18 |

Benchmark: The number of educational and public presentations will be scaled to the number of permanent research staff by a factor of 2.5 (currently 7 permanent research staff).⁷

Key External Factors

Funding:

Achievement of strategic goals and objectives is dependent on appropriate state funding.

External research support is partially subject to competitive federal funding, and some federal programs require a state match.

Consistent state funding is critical given the Survey's commitments to provide deliverables that include digital geologic maps, reports on mineral exploration, oil and gas exploration, water resource assessment, and geologic hazards (seismic and slope stability), along with archiving older, unpublished mining records.

With the assistance of the Survey's Advisory Board, we are receiving valuable advice, as we seek partnerships with state and private entities to produce non-proprietary products accessible through the Survey's website.

Demand for services and products:

Changes in demand for geologic information due to energy and mineral economics play an important role in the achievement of strategic goals and objectives. State population growth and requirements for geologic and geospatial information by public decision makers and land managers are also key external factors that are projected to increase over time.

Aspirational Goals for the IGS:

- Increase public outreach and promote the state's resource-based economy.
- Implement an interdisciplinary geologic study of the Treasure Valley region that will connect surface geologic mapping, oil and gas subsurface work, hydrogeology, and geologic hazards.
- Build a functional hazards program that will coordinate with the Idaho Office of Emergency Management and other agencies to focus on geologic hazard assessments and protection of human lives, homes, and the state's infrastructure such as pipelines, roads, railroads, and dams.
- Coordinate with various surface water and groundwater data collection and administrative agencies to assess watersheds in focus areas of the state and increase outreach and understanding of water resource issues.
- Improve understanding of mineral systems and ore deposits that are currently being mined and explored including cobalt, phosphate, silver, gold, critical minerals, and rare earth elements.
- Continue to work with the Idaho Geologic Mapping Advisory Committee to develop a 5- to 10-year geologic mapping plan, while executing the statewide effort of new modern geologic mapping at detailed scale.
- Improve the scientific understanding of the southwest Idaho oil and gas play's source and reservoirs, as well as conduct baseline evaluations of the favorable structures in southern and southeast Idaho.

- Improve the Survey’s website and web map applications to accommodate visualization and interaction through mobile devices for ease of public use.

Evaluation Process

An annual review of existing benchmarks and goals is necessary to ensure that IGS is successfully executing its strategic plan and providing relevant and timely geologic and geospatial information to the public on the Survey’s website. New technologies will be continually evaluated on an annual basis to ensure IGS is providing its data and publications in a user-friendly format that is easily accessible to the public.

Red Tape Reduction Act

Please See the State Board of Education strategic plan for Red Tape Reduction Act information.

Cyber Security Plan

As a functional part of the University of Idaho the Idaho Geological Survey is subject to the University of Idaho Cyber Security Plan.

¹ We launched our new website and started collecting web stats on April 29, 2021, so these measures are only for the period between April 29, 2021 and June 30, 2021. Caution should be used when comparing FY21 web stats to previous years as we started using a new web statistic tool on April 29, 2021. The number of website viewers extrapolated over the entire fiscal year would be 123,622, and the number of website products used or downloaded would be 32,489.

² Due to the ongoing implementation of a different web statistic tool on our website, the actual measures may be different than what was reported in past Performance Reports or Strategic Plans, and the benchmark set for FY23 may not be that meaningful.

³ We did not have the data to calculate this measure due to the ongoing implementation of a different web statistic tool on our website. An estimate for this measure for FY19 was reported in the FY21 Strategic Plan in error.

⁴ This benchmark is based on current levels of performance and maintaining the current high level.

⁵ This benchmark is dependent in part on the ability to receive external grants to broaden areas not already covered. Due to the increasingly competitive nature of external grant funding, it is determined that a simple increase of areas covered was a more meaningful measure than a set number of projects.

⁶ This benchmark is dependent on availability and continuation of state and federal dedicated programs.

⁷ This benchmark is based on existing resources (including staff time) to provide presentations and develop educational partnerships for additional presentations at new venues above and beyond the current partnerships with public schools and postsecondary institutions.