

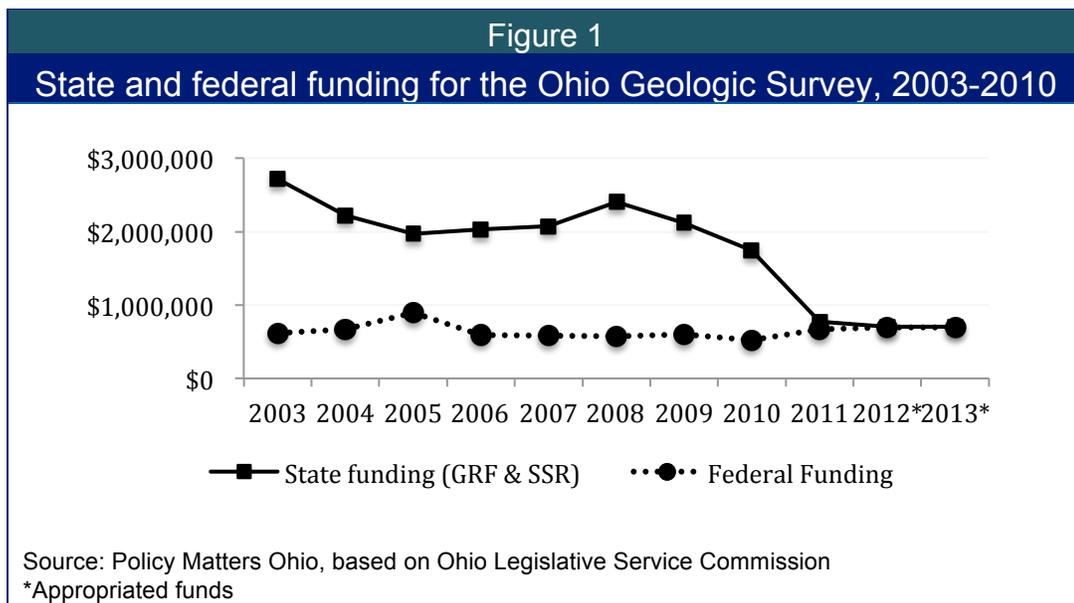
Cutting into Ohio's Bedrock State slashes funding for Geological Survey

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The Ohio Geologic Survey (OGS), a state office related to the United States Geologic Survey, has lost 74 percent of its state funding – a total of \$2 million annually – over the past decade. Half of that loss occurred since 2010, even as an oil and gas boom emerged in eastern Ohio. The current state budget, for fiscal years 2012-13, eliminated all General Revenue Fund support for the agency, leaving it to rely on a smaller state funding stream and federal support.

OGS has served Ohioans for the past 175 years, laying the groundwork for significant economic development and contributing hundreds of millions of dollars in services to the people and businesses throughout its long history. The loss of state support is especially problematic given that the division's geological expertise, core samples, databases and seismic equipment now play a pivotal role in both oversight and development of the fast growing hydraulic fracturing, or fracking, industry. This is a prime example of how, in the wake of the recession and fierce political battles around government services, state policy makers have slashed funding for a public good that protects the health and safety of the population and facilitates economic development. As a result, the public has lost important protections and the private sector will experience increased costs.

Key findings
<ul style="list-style-type: none"> • From 2003 to 2012, state funding for OGS dropped by 74 percent. • OGS monitors seismic activity, of increasing importance with Ohio's oil and gas boom. • OGS data and core samples are critical to development of roads, homes and buildings. • A private report commissioned by OGS estimates its services saved government and industry at least \$575 million in 2010.



Services of the OGS

Organized as a branch of Ohio Department of Natural Resources, OGS conducts research and maintains data that serve both public and private needs. Some of the agency's main public services have historically included:

- Maintaining data and geological records that allow the state to safely develop new roads, buildings, oil and gas wells, mines, and other residential and commercial structures;
- Providing key data for certain ODNR permits, such as permits for injection wells;
- Maintaining and monitoring abandoned mines, sinkholes, areas of potential landslides and other natural threats to the land;
- Convening Ohio's seismic monitoring network to understand trends in and causes of earthquakes;
- Conducting research on Ohio's coastal erosion and disseminating the information to lakefront property owners to help them protect the value and safety of their property.

Beneficiaries of the OGS

A study commissioned by OGS used 2010 data to calculate that the Survey saved users of its resources at least \$575 million a year, based on the costs of replicating OGS services. Major beneficiaries of the agency's services include the oil and gas industry, other mining industries including coal and salt, real estate developers, and various types of engineering and consulting firms. The primary benefit to such industries is that free or cheap access to OGS maps, data, and core samples allows companies to pursue commercial activities without shouldering the financial burden of commissioning individual studies to develop this knowledge. Without the Survey's extensive data, many private-sector initiatives would be more costly, some too risky and costly to be financially justifiable. The general public also benefits as projects are done more safely with more information.

Fracking and the OGS

Given Ohio's pending oil and gas boom, which involves deep drilling and hydraulic fracturing of rock, services provided by OGS are of growing importance. OGS information helps oil and gas companies locate oil and gas deposits as well as the large quantities of water necessary for fracking. OGS data and equipment are necessary to regulate drilling and increase the likelihood that it takes place safely. The Geological Survey provides important information used in the permitting process for injection wells (the final step of the hydraulic fracturing process) and is the only organization with the knowledge and responsibility to monitor earthquakes, which mounting evidence has linked to the injection well process. Since the end of 2011, Ohio has experienced a series of earthquakes that scientists now believe were caused by injection wells. Yet the limited staffing capacity of OGS reduced the speed with which the agency could collect the necessary data on this spate of earthquakes, prolonging the period during which Ohioans remain in the dark about the extent to which certain forms of drilling put Ohio communities at risk.

Summary and recommendation

At its peak, OGS was able to execute a wide array of important activities on a fairly small budget of less than \$3 million in state funding. Ohio should not only restore the dramatic loss of funding OGS has sustained, but put in place the appropriate funding to meet the growing demand for geological research in the context of Ohio's hydraulic fracturing boom.