

## Geoscience in Your State Factsheets

### How does geoscience affect your state?



The AGI Geoscience Policy team created State Geoscience Information factsheets to inform geoscientists and decision makers on how geoscience impacts their state. These factsheets highlight geoscience areas including, employment, water, minerals, energy and hazards in each state. They also demonstrate how federal research agencies, such as the National Science Foundation, U.S. Geological Survey, National Aeronautics and Space Administration, and the National Ocean and Atmospheric Administration contribute beneficial geoscience information to each state.

If you have any questions on our state factsheets, please contact us at [govt@americangeosciences.org](mailto:govt@americangeosciences.org)

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- Florida
- Georgia

Hawaii  
Idaho  
Illinois  
Indiana  
Iowa  
Kansas  
Kentucky  
Louisiana  
Maine  
Maryland

Massachusetts  
Michigan  
Minnesota  
Mississippi  
Missouri  
Montana  
Nebraska  
Nevada  
New Hampshire  
New Jersey

New Mexico  
New York  
North Carolina  
North Dakota  
Ohio  
Oklahoma  
Oregon  
Pennsylvania  
Rhode Island  
South Carolina

South Dakota  
Tennessee  
Texas  
Utah  
Vermont  
Virginia  
Washington  
West Virginia  
Wisconsin  
Wyoming

**Image:**

## WHAT IS GEOSCIENCE?

Geoscience is the study of the Earth and the complex geologic, marine, atmospheric, and hydrologic processes that sustain life and the economy. Understanding the Earth's surface and subsurface, its resources, history, and hazards allows us to develop solutions to critical economic, environmental, health, and safety challenges.



Johns Hopkins University Applied Physics Laboratory via Metatlas

## By the numbers: VIRGINIA

- 8,782 geoscience employees (non-federal/self-employed)<sup>1</sup>
- 298 million gallons/day: total groundwater withdrawal<sup>2</sup>
- \$1.25 billion: value of nonfuel mineral production in 2017<sup>4</sup>
- 64 total disaster declarations, including 17 severe storm, 15 flood, and 13 hurricane disasters (1953-2017)<sup>5</sup>
- \$18.8 million: NSF-GEQ grants awarded in 2017<sup>6</sup>

## ENERGY AND MINERALS IN VIRGINIA

- \$1.25 billion: value of nonfuel mineral production in 2017<sup>4</sup>
- Stone (crushed), cement (portland), sand and gravel (construction): top three nonfuel minerals in order of value produced in 2017<sup>4</sup>
- 12.9 million short tons: coal produced in 2016<sup>7</sup>
- 1.62 million megawatt hours: hydroelectricity produced in 2017<sup>8</sup>
- 3.19 million megawatt hours: wood-derived fuels produced in 2017<sup>8</sup>

## WORKFORCE IN VIRGINIA

- 8,782 geoscience employees (non-federal/self-employed) in 2017<sup>1</sup>
- \$77,129: average median geoscience employee salary<sup>1</sup>
- 20 academic geoscience departments<sup>2</sup>

## WATER USE IN VIRGINIA

- 298 million gallons/day: total groundwater withdrawal<sup>2</sup>
- 6.43 billion gallons/day: total surface water withdrawal<sup>2</sup>
- 697 million gallons/day: public supply water withdrawal<sup>2</sup>
- 52 million gallons/day: water withdrawal for irrigation<sup>2</sup>
- 370 million gallons/day: industrial fresh water withdrawal<sup>2</sup>
- 81% of the population is served by public water supplies<sup>3</sup>

## NATURAL HAZARDS IN VIRGINIA

- 64 total disaster declarations, including 17 severe storm, 15 flood, and 13 hurricane disasters (1953-2017)<sup>5</sup>
- \$19 million: individual assistance grants (2005-2017)<sup>9</sup>
- \$72 million: mitigation grants (2005-2017)<sup>9</sup>
- \$439 million: preparedness grants (2005-2017)<sup>9</sup>
- \$267 million: public assistance grants (2005-2017)<sup>9</sup>
- 64 weather and/or climate events, each with costs exceeding \$1 billion (inflation adjusted) (1980-2017)<sup>9</sup>

1 US Bureau of Labor Statistics, Occupational Employment Statistics, May 2017  
2 American Geosciences Institute, Directory of Geoscience Departments, US Edition (2016)  
3 US Geological Survey, Committee of Advisors on Geoscience Education (2015)

4 US Geological Survey, Mineral Commodity Summaries 2018  
5 US Energy Information Administration  
6 NSF Directorate for Geosciences, Geoscience Education and Career Development Report (2018)  
7 US Geological Survey, Mineral Commodity Summaries, US Edition (2016)  
8 US Bureau of Economic Analysis  
9 US Office of New Markets and Capital Construction (NOCC) News (2018) (accessed April 4, 2018)

AGI is a network of 52 member societies, representing more than 260,000 geoscientists.

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