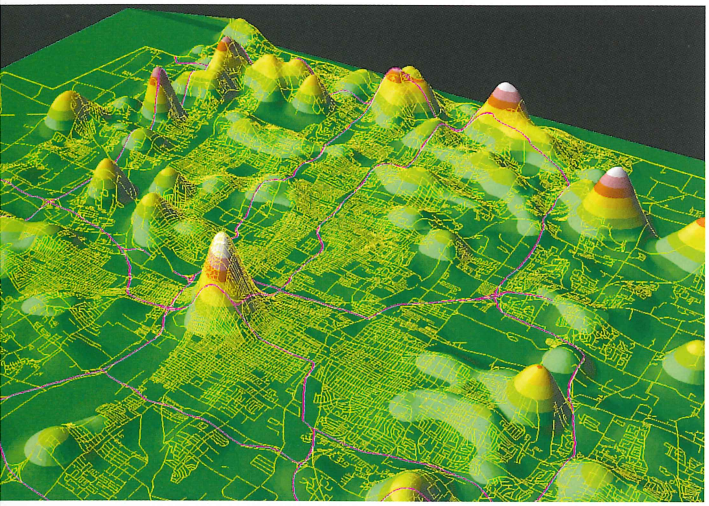
GEOGRAPHY

JOBS *and* CAREERS

in Geography

Whether you are beginning as a geography major or minor, taking classes in GIS, working on an advanced degree, or seeking a different occupation, geography can lead you to new opportunities. Consider a career in geography, and ...

... find your place!



Why Geography?

Geographers apply their unique knowledge, skills, and perspectives in a diverse range of industries. They hold positions as urban planners who assess the costs and benefits of proposed transit systems, as state climatologists assessing the impacts of rising sea levels, as consultants advising firms about moving into new markets, and as human rights advocates working with refugees. These are just a handful of the many types of careers available to geographers.

Geography prepares individuals for work in the social, physical, and environmental sciences, as well as the arts and humanities.

Consider the following trends:

- Geographers are classified by the U.S. Department of Labor as a "Bright Outlook" occupation.
- The U.S. Department of Labor projects "much faster than average" growth, in excess of 20 percent or more, in jobs for geographers, geoscientists, cartographers, urban and regional planners, and other geographic professionals, with projected needs of upwards of 15,000 additional employees in each of these career fields between 2008 and 2018.
- Geospatial technology is considered to be a high growth industry by the U.S. Department of Labor. Because geospatial technology is so pervasive in modern industry, the market is growing at an annual rate of almost 35 percent.

What Employers Look For

Although writing and oral communication are valued in all types of workplaces, as are research, finance and budgeting expertises, geographers possess a multitude of additional skills that are valued by employers across a wide range of careers. Some of these unique skills and perspectives are:

- Spatial thinking
- An interdisciplinary perspective
- Abilities in GIScience, cartography, and visualization
- Experience in field methods
- A sense of the complex interactions between humans and the environment
- Sensitivity to the distinctiveness of places
- A global perspective

Geographers are well prepared to meet the rapidly evolving demands of today's industries given their big picture perspective, eye for detail, and ability to integrate and synthesize information at a variety of scales.

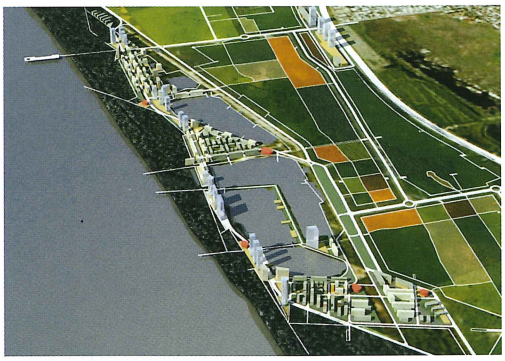
Where are the Jobs?

BUSINESS

The private sector contains many dynamic and exciting employment opportunities for geographers. Although the number of job descriptions that explicitly include the term "geographer" is relatively low, more and more private sector employers are recognizing the value of geographic analysis in their everyday operations.

Thanks to the synthetic and integrative nature of geography, a plethora of opportunities are available for geographers in the private sector, especially for those candidates who are flexible and able to adapt to the needs of the company. Among the most valued geography skills by corporate employers are those related to spatial thinking and geospatial technology, cartography, location analysis, and economic geography.

Geographers in the private sector are suited to fill a number of different roles within an organization. Their jobs range from environmental consulting to software development and database management. Some other examples of private sector geography jobs include working for large mapping organizations, or in the transportation and logistics departments of major corporations.



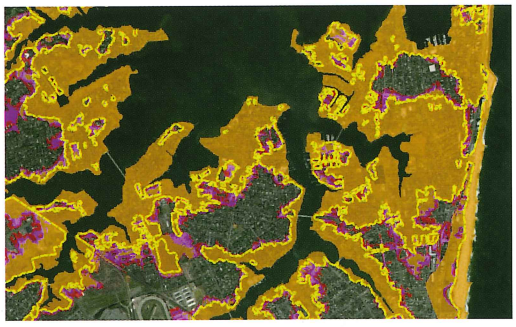
GOVERNMENT

State and Local Government

Geographers play an important role in state and local government, as they are able to understand specific geographic areas by virtue of their extensive education in exploring interactions and linkages within and between places and regions. State and local governments in the United States employ geographers for a variety of jobs focused on topics including transportation, health, environmental planning, metropolitan or rural planning, economic development, and GIS.

Federal Government

Geography is an interdisciplinary field that provides a solid foundation for careers in the federal government. Geographers are employed as scientists, researchers, administrators, resource planners, policy analysts, project managers, and technical specialists across a wide variety of federal agencies. With the call for more evidence-based policy, accountability, and transparency in the public sector, geography is playing an increasingly central role in informing efforts by agencies at all levels of the federal government.



NONPROFIT

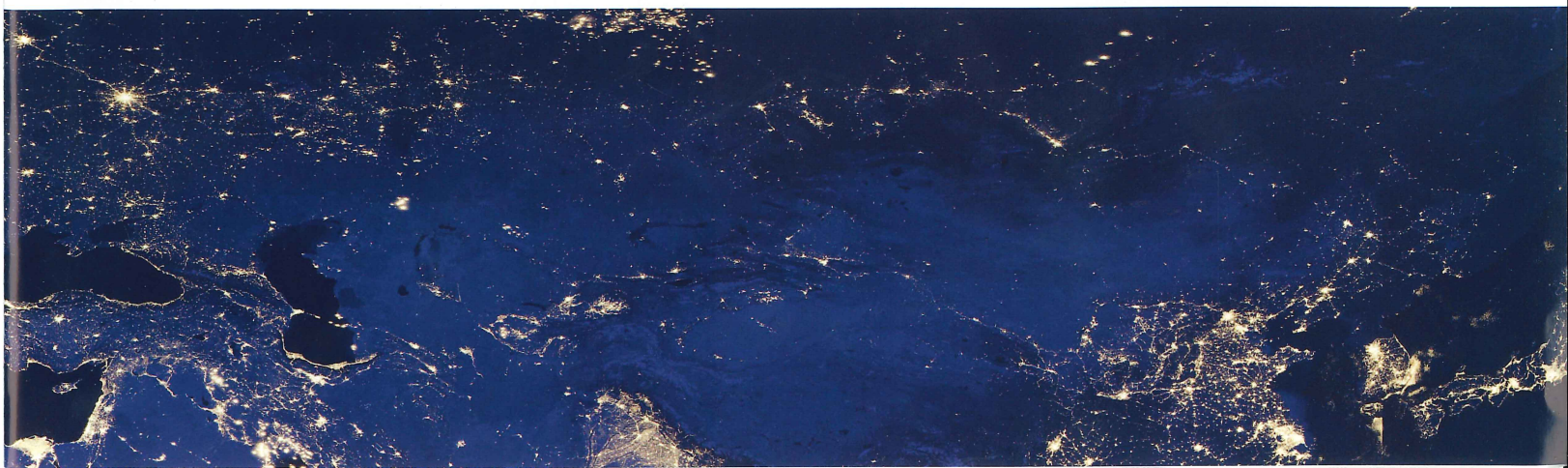
For geographers who seek positions that focus on social, environmental, or development causes, employment in the nonprofit sector may be an excellent fit. Nonprofit organizations pursue a diverse number of causes and visions and offer exciting opportunities for job seekers hoping to make a difference or have a positive impact in a particular field.

Geographers can be found within a broad range of nonprofit organizations whose work coheres around issues as diverse as environmental stewardship, children's advocacy and welfare, domestic and international development, education and health, culture and the arts, historic preservation and heritage conservation, religion, and beyond. With their ability to understand complex relationships between people, place, community, environment, and society, geographers are well positioned to apply their disciplinary perspectives to the nonprofit sector.

EDUCATION

Studying geography is excellent preparation for a wide range of teaching positions at all levels of education. Employment opportunities for teachers who are trained as geographers are found almost everywhere. Geographers can teach K-12 and college/university level teaching positions, to informal educational settings such as museums and nature study centers, to more technical settings such as corporate professional development centers teaching GIS or remote sensing skills.

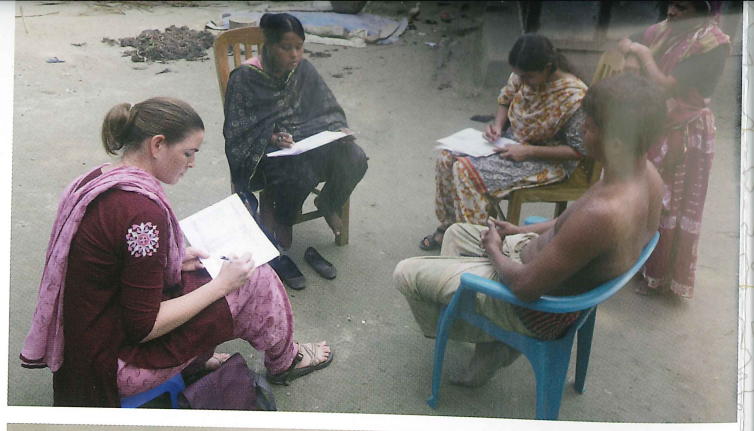
For those with a love of learning, teaching geography offers not only an opportunity to help others gain knowledge and understanding, but also to continue learning themselves. Teachers guide student learning and help model and teach critical thinking skills in students. Teachers and students have an invaluable opportunity to share and learn from their different generations' aspirations for the world and its future.

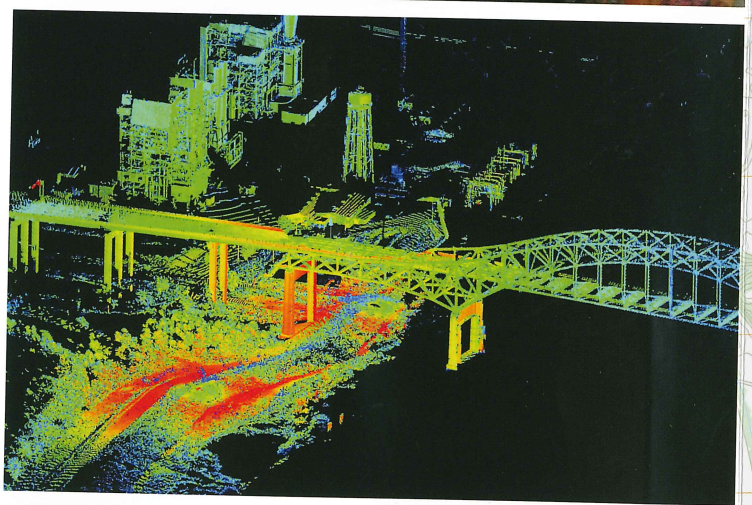


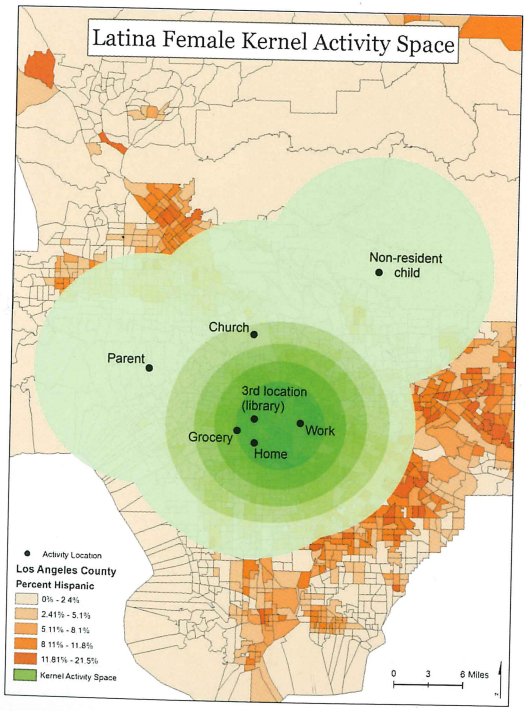
Professionals with a Conscience

Some of the ways that geographers are making valuable contributions to the work and performance of businesses, nonprofits, and government agencies include:

- **Understanding Social Systems:** Geographers analyze the ways in which people interact in economic, political, social, and spatial contexts. Geographers offer a powerful perspective that can help employers take the specific needs and interests of a population into consideration when making decisions.
- **Improving the Environment:** Geographers study natural phenomena and work in areas as diverse as conservation, climate change, geology, meteorology, hazards, and natural resource management. Geographers understand human-environment relationships and how to use that information to manage natural resources and to protect the planet as a whole.
- **Enhancing Financial Performance:** Geographers, using geospatial tools such as GIS and GPS, are able to map and analyze economic data in search of important spatial patterns and relationships that can significantly enhance business efficiency and profitability. Spatial and temporal analysis is an important component of a geographic education and a skill valued by a large number of business employers.







Meet Some Professional Geographers

Mark Barnes *realized that pursuing a career in academia was the right career path for him after he accepted a semester-long public-sector internship. It became clear over the course of that semester that his passion was for academic work. As an Assistant Professor of Geography at Morgan State University, Mark relishes the teaching opportunities, the flexibility of the academic lifestyle, and his interactions with students.*

Sonia Arbona *chose to work in the public sector out of her desire to be able to spend more time on research and family than her previous employment in the academic sector had allowed. As a Medical Geographer at the Texas Department of State Health Services she relies upon her strong writing and technical skills in areas such as cartography and GIS to conduct epidemiological studies of HIV/AIDS and other sexually transmitted diseases in Texas.*

Jane Daniels' *work as Executive Director of Colorado Preservation, Inc., requires her to use her training as a geographer to analyze a wide array of data. As the leader of a nonprofit organization, she helps build partnerships with public and private agencies to enhance historic preservation across Colorado. In addition to supervising staff and working with the board of directors, Jane also directs the strategic planning, visioning, development, administration, and programmatic initiatives of the organization.*

Dave Selkowitz*'s graduate school training did not include how to avoid confrontations with bears, but fortunately the USGS provides bear safety training for scientists working in Alaska. Working as a research geographer at the USGS Alaska Science Center, he often uses skills he developed through recreational activities, such as skiing, hiking, and rafting, while conducting fieldwork. But, it is the skills he learned in graduate school, including remote sensing and his geographic imagination, which allow him to make sense of the data.*

TAKE ACTION! The AAG provides many resources to help manage your career. **Visit** **www.aag.org/careers** to find jobs or to learn about geography occupations, skills, and salary trends. **Download** career preparation tip sheets and educational materials. **View** the *AAG Guide to Geography Programs in the Americas,* the complete and invaluable reference for faculty, prospective students, government agencies, and private firms throughout the world. **Read** *Practicing Geography: Careers for Enhancing Society and the Environment,* a book designed to help prepare students for careers in business, government, and non-profit organizations. **Join** today at **www.aag.org/membership** and discover the benefits of being part of the AAG! **Attend** AAG Annual Meetings to meet employers and thousands of other geographers: **www.aag.org/annual meeting**.

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PHOTO CREDITS: *FRONT COVER:* MAP BACKGROUND, USGS; STUDENTS, ISTOCK. *INSIDE LEFT:* PROFESSOR WORKS WITH COMMUNITY MAPPING TEAM IN HONDURAS, JOE BRYAN, U. OF COLORADO, BOULDER; DENSITY GRAPHIC, M.-P. KWAN; SEWER TUNNEL EXPLORATION, BRADLEY L. GARRETT; GIS CLASS, COMMUNITY COLLEGE OF PHILADELPHIA. *INSIDE RIGHT:* PROFESSOR AND COLLEAGUES INTERVIEW HEAD OF HOUSEHOLD IN BANGLADESH, ELISABETH ROOT, U. OF COLORADO, BOULDER; STUDENTS IN GHANA LEARN MAPPING SOFTWARE, AAG; LIDAR SCAN, TOBY MINEAR, USGS; MARKET DAY IN OZUMBA, MEXICO, EMMA GAALAAS MULLANEY; GRAPHIC, R. PETERSON, L. KRIVO, M.-P. KWAN, C. BROWNING, K. CALDER, T. HAWTHORNE. *INSIDE SPREAD:* URBAN PLANNING MAP, WIKIMEDIA COMMONS; SEA LEVEL RISE MAP, ESRI; FLOOD IN CZECH REPUBLIC, PETR BROŽ; STUDENTS GAIN MAPPING SKILLS, AAG; EARTH LIGHTS, NASA. *BACK COVER:* MAP BACKGROUND, USGS.

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