



THE
GEOLOGICAL
SOCIETY
OF AMERICA®

fiscal year **2015**
ANNUAL
REPORT

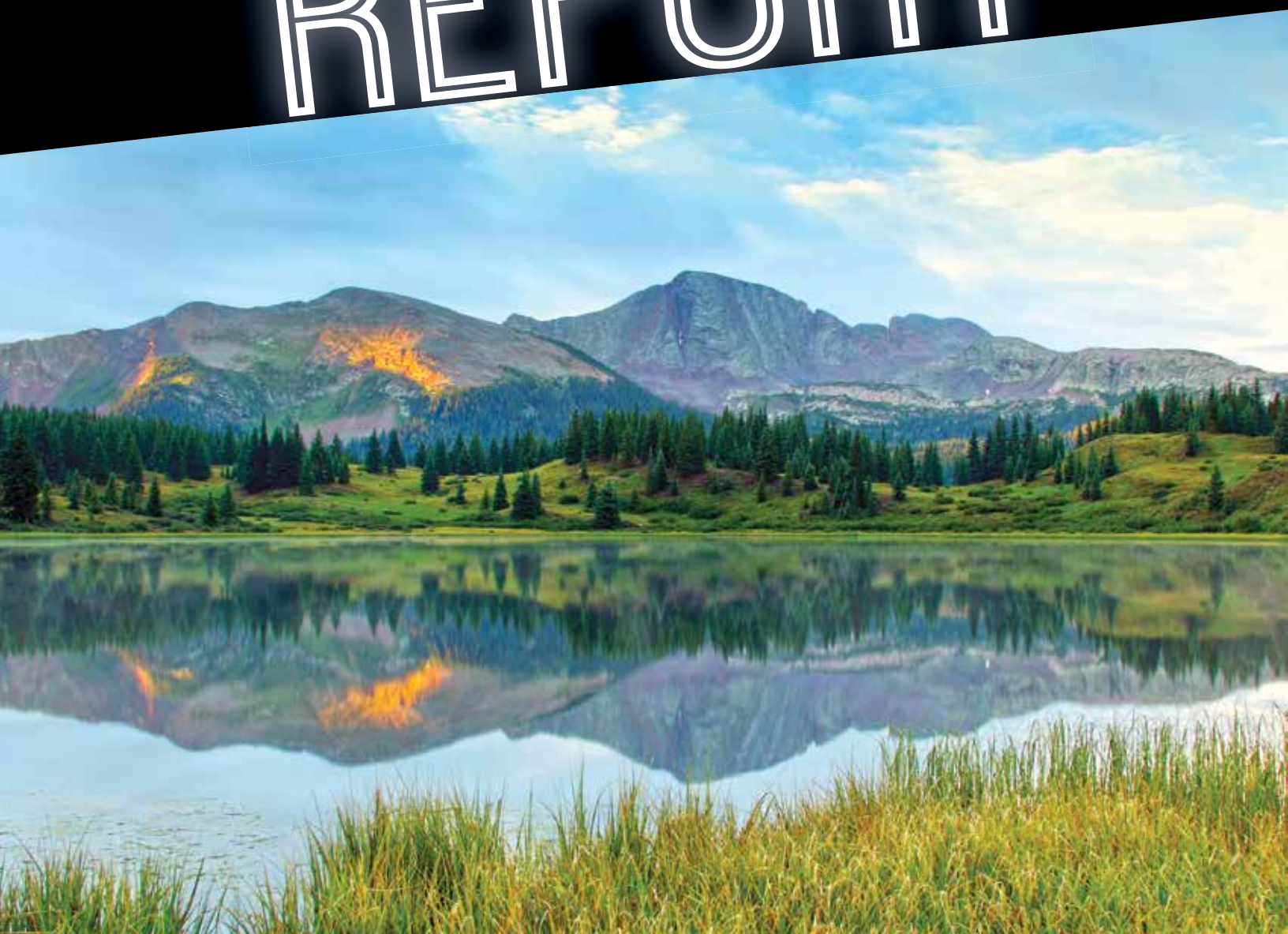


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Cover photo by Brett Kelvie



Letter from the GSA President

Every year brings opportunities and challenges, but fiscal year 2015 has been especially momentous. The year began with Executive Director Jack Hess' announcement that he would retire. Jack's 13-year tenure at the helm of GSA has been very successful by any measure. A search committee conducted a comprehensive search, evaluation, and interview process during the latter months of 2014, and Council enthusiastically approved Dr. Vicki McConnell as GSA's new Executive Director. Former GSA President Judy Totman Parrish agreed to serve as Interim Executive Director until Vicki could begin, and effectively guided the Society from January through March of 2015. Vicki assumed the position of Executive Director in April 2015. Her management and leadership will be crucial in expanding GSA's roles in the global geologic community.



The other momentous decision was Council's approval, in October 2014, of an open access plan for all GSA journals. For the past 125 years, we have fulfilled GSA's important goal of disseminating scientific research through paper publications funded by subscriptions. Beginning in 2017 and phased in over the following three years, our journals (*Geology*, *Geosphere*, *Lithosphere*, and *GSA Bulletin*) will become freely and immediately accessible, by anyone, anytime, anywhere in the world. We are committed to retaining the high quality of our journals, and there will be no change in the current editorial and peer-review policies. The question of whether GSA should participate in open access publication has already been determined by outside forces, and Council chose to be proactive in adopting this profound shift in how science is communicated. The major impact for GSA will be a loss of subscription revenues that currently underwrite many of our programs. To offset these losses, a publication fee for authors will be instituted, along with the designation of some strategic funds to assist authors who lack resources to pay these fees. GSA leadership is also reviewing existing programs to find savings by modification or elimination of some activities that are not cost-effective or critical to our mission. Annual membership dues will modestly increase (but members will no longer have to pay for personal subscriptions to journals). Future Councils will have to restrict new strategic initiatives until the implementation process is completed. The GSA Foundation is also initiating a campaign to provide new financial support for GSA programs. Open access publication is a big challenge for GSA, but a central part of our mission is to assure that our members can be confident that their published scientific findings will reach the entire "universe" of interested scholars and practitioners without traditional barriers that are, frankly, becoming obsolete in the digital age.

Earlier this year, Council established GSA International, an international committee, and reinstated the position of International Secretary. We anticipate that this new structure, which also includes an International Interest Group, will invigorate participation of our international members. Council also approved the proposal for a new Karst Division, recognizing the great interest in this research area, and accepted a proposed renaming of the Coal Geology Division to the Energy Geology Division, reflecting its broader interests. A field safety policy was developed and is now in effect for all GSA-sponsored field trips.

A matter of considerable discussion was Indiana's RFRA legislation, prompting a number of members to ask Council to reconsider the Indianapolis venue for its 2018 annual meeting. Although that problem has been resolved in Indiana by a quickly passed amendment that effectively prohibits discrimination, the issue has raised concerns about the broader context of GSA's non-discrimination policy, which is being revisited by Council.

GSA membership reached an all-time high of 26,940 at the end of 2014. Recognizing the importance of students, who constitute 35% of GSA's membership, Council established a Student Advisory Council (SAC), consisting of student representatives from Sections, Divisions, and standing committees, virtually all of whom now have student members on their management boards or committees. The SAC met for the first time in October 2014 at the GSA Annual Meeting in Vancouver, and elected a chair who conducts online meetings and represents the SAC at Council meetings.

I will mention a few other highlights that may be covered more completely elsewhere in this Annual Report.

- The 2014 annual meeting in Vancouver was a great success, with 6,680 registered participants from 51 countries. The program included 346 technical sessions, 15 field trips, and 32 short courses. Fifty-nine members were elevated to GSA Fellowship.
- Some GSA Section Meetings in the spring of 2015 broke or nearly broke attendance records, demonstrating that these regional conferences continue to be critical venues for professional and student members to share their research. The GSA Mentor Programs were highlights for 1,325 students at the section meetings. Career workshops were also well attended.
- Student research grants awarded this year totaled \$723,570, which funded 391 proposals (50% of the applicants). The GeoCorps America program has planned ~180 projects for student interns working on public lands. The On To the Future program aims to support 125 students from underrepresented groups to attend their first GSA Annual Meeting. The GeoCareers in Industry program links students and private sector industries at the annual meeting, to build a stronger career pipeline.
- GSA journals have been a significant source for media news coverage, indicating the high quality and impact of these publications for general science interest and for informing policy.
- STEPPE, a collaborative project of GSA, SEPM, and the Paleontological Society, is expanding its membership and building innovative programs in soft-rock geology.
- GSA's Government Affairs Office effectively represented our Society's goals and priorities to policymakers in Washington. This role is especially critical now, when some in Congress are questioning the very importance of geoscience. Council approved new policy statements by the Geology and Public Policy Committee, focused on infrastructure and land use management.
- Council established a new award to recognize geologic mapping that has led to paradigm shifts in our science. The GSA Geologic Mapping Award in Honor of Florence Bascom will be presented for the first time at the 2015 Annual Meeting in Baltimore.

The Geological Society of America is flourishing—scientifically, professionally, and financially. I greatly appreciate the honor of serving as its President during this past momentous year and, with the enthusiastic participation of our members and staff, look forward to more opportunities and successes.

Hap McSween, *GSA President*



GSA Fiscal Year 2015 Officers & Councilors



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Term: July 2014–June 2015



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Term: July 2011–June 2015



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Term: July 2012–June 2016



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Term: July 2013–June 2017



Elizabeth J. Catlos
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Term: July 2014–June 2018



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Annual Letter From the GSA Executive Director

Dear GSA Members and Staff,

This letter from the Executive Director encompasses the timespan of three individuals in that position: the end of long-time Executive Director Jack Hess' service, the much appreciated bridging service of Judy Totman Parrish during the early months of 2015, and the beginning of my service to GSA as Executive Director. In our fast-paced world of communications nowadays reporting out on an entire year seems outmoded. I can assure you a wealth of information is summarized in the pages of this report.

This past year saw many successes of GSA activities and operations. As you read through this annual report, you will note the impact of the GSA programs to membership and to society. The year also heralded the beginning of a new era for GSA. Jack Hess, GSA's long-time Executive Director, retired in December 2014, leaving behind a legacy of competent management and innovation for GSA. Dr. Hess had this to impart upon his leaving, "I want to take this opportunity to thank all of the GSA leadership and membership that I have had the privilege of working with over the past 13 years for the wonderful experience of serving as your Executive Director."

Additionally, at the 2014 GSA Annual Meeting, GSA Council made a momentous decision to move GSA's journal publications to gold open access completely by the year 2019. That decision will have bearing on how GSA operates in the future and ultimately what GSA's impact is globally on science and policy. It means we have started planning on how to absorb the changes in revenue and adapting our operations business plan.

The 2014 annual meeting was held in Vancouver, British Columbia, Canada, and was a resounding success. We thank our neighbors to the north for the most gracious welcome and meeting venue. A total of 6,680 registrants participated in the many meeting offerings. The 2015 section meetings held in March and May were excellent with a cumulative attendance of 3,329. Student attendance continues to increase at the section meetings. GSA participated in the European Geosciences Union meeting and the Goldschmidt meeting again this year with the intention to remain a global influence.

I began my term on 1 April 2015 and I am getting settled into the full rhythm of a GSA year. I want to thank GSA Council for their show of support and trust in offering me the Executive Director position. I also want to commend the GSA staff for their utmost professionalism and gracious assistance throughout the transition. The operations were going full blast when I arrived, and everyone continues to contribute 110% to making all GSA endeavors as successful as possible. My job is to make sure that the directions laid out by your Council and leaders can be implemented by the GSA staff effectively and efficiently. We continue to look to the Strategic Plan as the guidepost.

GSA membership stands at 26,940 as of the end of the 2014 calendar year. The organization and members have beneficial partnerships with 72 Associated Societies now. Our publications remain at the top of the geoscience impact and we have revamped the many career development programs into a streamlined GeoCareers program.

In conclusion, we finished fiscal year 2015 in the black financially, and we have constructed a budget for fiscal year 2016 that reflects careful spending on programs and focused strategic initiatives. The GSA staff and I look forward to serving the membership and assisting GSA leadership with fulfilling our mission and goals.

Vicki S. McConnell, *Executive Director*



A handwritten signature in blue ink that reads "Vicki S. McConnell". The signature is fluid and cursive.





GSA Membership

Where Geology and People Come Together

GSA's 26,940 members comprise a diverse community of professional geologists, early career professionals, students, K–12 teachers, and affiliates from the education, industry, and government sectors. GSA members represent more than 27 scientific specialties and interests, and have the option to belong to one or more of GSA's 18 Divisions and six regional Sections.

To continually represent and support members' scientific disciplines, the 18th GSA Division was formed—Karst Division (*currently serving nearly 300 members*), the Coal Geology Division was renamed Energy Geology, and Soils and Soil Processes became the first GSA Interdisciplinary Interest Group (IIG).

Supporting Early Career Professionals and Geoscience Students

It has been GSA's history and long-term goal to support geoscience students and early career professionals in their pursuit of careers in the geosciences by offering programs to aid in their success, and providing benefits designed specifically around their needs.

This year, GSA Council approved extending the membership eligibility for early career professionals (*formerly known as recent graduates*) to those who have earned their highest degree in a geoscience field within the past five years (*previous eligibility was two years*). This member segment continues to enjoy reduced GSA membership and Division dues, reduced GSA meeting registration, free online access to GSA's journals, and access to GSA's GeoCareers programs, along with other membership offerings. GSA student members, who represent 35% of GSA's membership, not only benefit from the aforementioned, they also receive one free Division membership of choice, and may be eligible for travel and research grants.

In support of geoscience students, 538 professional members in 37 countries serve as Campus Representatives by advocating for the Society and encouraging their students to be involved by taking advantage of programs and services offered through membership.

One of the most successful student programs is the GSA Graduate Student Research Grants Program—one of the largest and most prestigious funding programs for graduate students in the geosciences. The program helps fund field and laboratory costs of geoscience projects proposed and conducted by master's and doctoral student members at universities in the United States, Canada, Mexico, and Central America. Throughout its more than 80-year history, the GSA Research Grants Program has awarded nearly 11,000 geoscientists more than US\$14,500,000 to conduct research. For FY2015, 784 students applied for funding and 391 were awarded a grant (50%). The total amount of money granted was US\$723,570. The average grant amount awarded in 2015 was US\$1,851.



GSA International Initiatives

GSA remains active within the international geoscience community in the belief that “science knows no borders.” The GSA worldwide member community spans 118 countries with ~2,200 members residing outside of North America, mostly in the United Kingdom, Australia, Japan, Germany, and China.

This year, the International Section management board members reshaped the International Section with two directions. “GSA International” is now a designated standing GSA committee with a broad charge to assist GSA with coordinating and communicating international opportunities. GSA International is also assisting the international members with the process of becoming the second IIG.

A high impact international initiative is the GSA Thompson International Distinguished Lecture Tour. This year GSA awarded two international lecturers, one lecturer coming to North America and one lecturer traveling outside the United States. Dr. Stefano Lugli and Dr. Lisa L. Ely represent GSA as the 2015 distinguished lecturers. Stefano Lugli is a professor at the University of Modena e Reggio Emilia, Italy. Lisa L. Ely is a professor at Central Washington University, USA.

GSA International’s 2014 awardees were Professor Shigenori Maruyama of Tokyo Institute of Technology, Japan, International Honorary Fellow, and Professor Farouk El-Baz, Boston University, USA, GSA International Career awardee.

International initiatives also included awarding a total of US\$2,200 international travel grants to three students to attend the 2014 annual meeting; partnerships with GSA’s international Associated Societies (*see listing*); joint international meetings; and representation on international committees, commissions, and projects.



AWARDING EXCELLENCE IN THE GEOSCIENCES

In support of our mission to advance the geoscience profession, GSA honors outstanding scientific achievement each year at the GSA awards ceremony held during the Annual Meeting. The three highest awards are the prestigious Penrose Medal, the Arthur L. Day Medal, and the Young Scientist Award (Donath Medal).

New this year is the Geologic Mapping Award in Honor of Florence Bascom. This award acknowledges contributions in high-quality geologic mapping that led the recipient to publish significant new scientific or economic-resource discoveries, and to contribute greater understanding of fundamental geologic processes and concepts.

Other notable awards include:

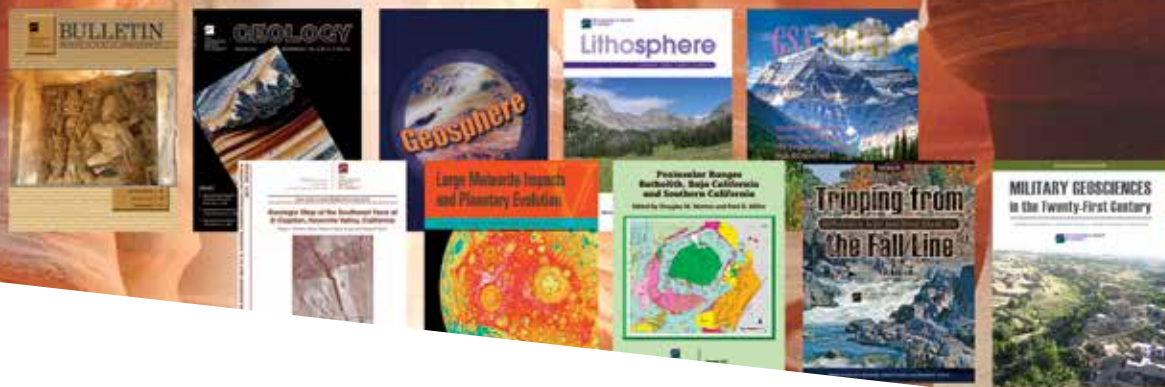
President’s Medal of the Geological Society of America
Randolph W. “Bill” and Cecile T. Bromery Award for Minorities
Outstanding Woman in Science Award
GSA Distinguished Service Award
GSA Public Service Award
John C. Frye Award
AGI Medal in Memory of Ian Campbell
Honorary Fellows
GSA Fellowship
GSA Division Awards

ASSOCIATED SOCIETIES OUTSIDE OF NORTH AMERICA:

Asociación Geológica Argentina (AGA)
European Association of Geoscientists & Engineers (EAGE)
European Geosciences Union (EGU)
Geologica Belgica (GB)
Geological Society of Africa (GSAf)
Geological Society of Australia (GSAus)
Geological Society of China (GSC)
Geological Society of London (GSL)
Geological Society of South Africa (GSSA)
Geologische Vereinigung (GV)
Geoscience Society of New Zealand (GSNZ)
Israel Geological Society (IGS)
Nepal Geological Society (NGS)
Sociedad Geológica Mexicana, A.C. (SGM)
Società Geologica Italiana (SGI)

SPECIAL INTEREST INTERNATIONAL SOCIETIES:

Association of Geoscientists for International Development (AGID)
Blueprint Earth (BE)
International Association for Geoscience Diversity (IAGD)
International Association for Promoting Geoethics (IAPG)
International Association of Emergency Managers (IAEM)
International Association of GeoChemistry (IAGC)
International Association of Hydrogeologists (IAH)
International Medical Geology Association (IMGA)
International Society for Aeolian Research (ISAR)
The Mineralogical Society (MS)
Society for Environmental Geochemistry & Health (SEGh)
Society of Exploration Geophysicists (SEG)



Publications

Discover, Communicate, Connect

JOURNALS

GSA publications will soon enter a new chapter, the result of GSA Council's resolution in October 2014 to make *Geology*, *Geosphere*, *Lithosphere*, and *GSA Bulletin* open access over a three-year period starting in 2017. These peer-reviewed journals are published at www.gsapubs.org, through the aggregate GeoScienceWorld (www.geoscienceworld.org), and on an annual DVD. All four publish accepted articles online as soon as they are ready (ahead-of-issue).

GSA Bulletin, published since 1890, is distributed in print and online bimonthly, with online archives now back to volume 1. 2015 impact factor*: 3.870; five-year: 4.634.

Geology's short papers on new investigations and provocative topics from all earth science disciplines are published monthly online and in print, with online archives back to volume 1 (1973). *Geology* ranks as the #1 geology journal for the ninth year in a row*. 2015 impact factor: 4.884; five-year: 4.962.

Geosphere, which publishes issues bimonthly online, covers all geoscience disciplines and features papers with animations, sound, and movie files, as well as collections of themed issues. 2015 impact factor*: 2.012; five-year: 2.652.

Lithosphere, providing an outlet for the high interest in tectonics and structural geology, is distributed online and in print bimonthly. 2015 impact factor*: 3.013; five-year: 2.743.

Published jointly by the Association of Environmental and Engineering Geologists and GSA is the quarterly *Environmental & Engineering Geoscience*. Online at GeoScienceWorld, it contains new theory, applications, and case histories illustrating the dynamics of environmental and applied disciplines. 2015 impact factor*: 0.977; five-year: 0.824.

GSA Today, GSA's science and news magazine for members and the earth-science community worldwide, features science articles as well as member news and announcements. It is open access online at www.geosociety.org/gsatoday.

BOOKS AND MAPS

GSA published 14 peer-reviewed scholarly books and maps in fiscal year 2015. The Special Paper series (seven volumes in FY15) is for state-of-the-art treatments of rapidly evolving subjects. Memoirs (one

volume in FY15) remain an authoritative reference for a number of years. Field Guides (two in FY15) feature guides from field trips held at GSA and other meetings. The Reviews in Engineering Geology series (one volume in FY15) is produced in cooperation with GSA's Environmental and Engineering Geology Division. One map, one chart, one digital map, plus GSA's annual calendar, featuring images from GSA journal and book covers, were published in FY15. In addition to publishing six new individual *Memorials* (to deceased GSA members), all *Memorials* back to volume 1 were digitized and posted to www.geosociety.org.

GSA's e-book collection (www.gsapubs.org) includes Special Papers, Field Guides, Memoirs, and Reviews in Engineering Geology volumes in PDF back to volume 1 from each series. Individual papers from volumes in progress are now posted "Online First" at the website as they are ready. Also online is the complete suite of Decade of North American Geology volumes and maps, available at GeoScienceWorld and at the GSA Store. Other digitized books available at GeoScienceWorld include the GSA Field Guide and Reviews in Engineering Geology volumes, Engineering Geology Case Histories, GSA Microform Publication Series, Penrose Field Guides, and numerous non-series books.

GEOFACETS

GSA continues its participation with Geofacets, a research tool primarily for exploration geoscientists that lets subscribers search and download thousands of georeferenced geological maps and other content (including about 80,000 maps from GSA publications).

GSA STORE

Along with providing a storefront for GSA books, maps, educational materials, and specialty tools, the GSA Store has made it possible to offer hundreds of previously unavailable or out-of-print publications to researchers and citizen scientists alike.

AUTHORS OF THE FUTURE

For the second year, GSA held an early-career publishing workshop at the GSA Annual Meeting in Vancouver. Led by GSA editors, the popular workshop covers all aspects of the process of preparing research for submission to scholarly journals, including the importance of contributing as a reviewer.

*2015 Thomson Reuters Journal Citation Reports. The JCR uses a systematic, objective means to evaluate a journal's impact based on how many citations its papers receive each year. Thomson Reuters also tracks GSA Special Papers, Memoirs, and Reviews in Engineering Geology volumes in its Book Citation Index.

Meetings

Connecting the Geoscience Community

The Geological Society of America (GSA) offers a variety of meetings to geoscientists; from small research forums, to moderate specialty conferences, to a large annual meeting. These forums, conferences, and meetings are held around the globe throughout the year. GSA provides a platform for scientists to share their latest research and network with peers. GSA strives to keep our meetings cost-effective, yet provide the latest technology platforms for scientists to utilize. In fiscal year 2015, GSA hosted seven meetings and conferences, bringing together thousands of geoscience professionals and students.

The **GSA Annual Meeting and Exposition** travelled to Vancouver, British Columbia, Canada, in October 2014. Nearly 6700 attendees from 51 countries enjoyed this beautiful and geologically active area, while presenting nearly 4500 abstracts over several days. Fifteen field trips ran and short courses were held. Hundreds of volunteers participate yearly in the annual meeting—from local organizing committee members and the Joint Technical Program Committee, to the hundreds of session conveners from every geoscience discipline and the hundreds of student volunteers from campuses across the Americas and abroad. There is something for everyone at the GSA Annual Meeting!

GSA Section Meetings are unique venues for interdisciplinary science and are an important hub for discussing and presenting current research. They provide an excellent opportunity for both professionals and students to attend and participate in technical sessions, field trips, and short courses close to home. The 2015 Section Meetings were held across the country bringing together over 3800 scientists. Meetings were held in Chattanooga, Tennessee (GSA Southeastern Section); Stillwater, Oklahoma (GSA South-Central Section); Bretton Woods, New Hampshire (GSA Northeastern Section); Madison, Wisconsin (GSA North-Central Section); Casper, Wyoming (GSA Rocky Mountain Section); and Anchorage, Alaska (GSA Cordilleran Section).



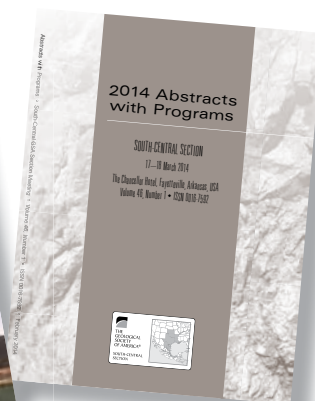
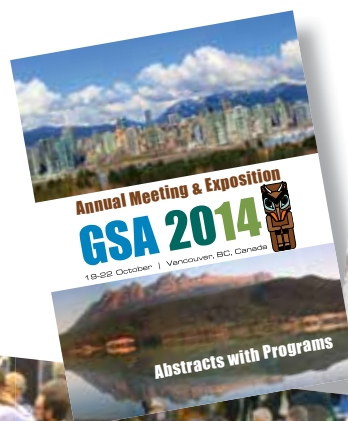
GSA's Penrose Conferences were established in 1969 to bring together multidisciplinary groups of geoscientists and facilitate an open and frank discussion of ideas in an informal atmosphere, as well as to stimulate individual and collaborative research. **Thompson Field Forums** were established in 1998 and provide the opportunity for exchange of current knowledge and exciting ideas expressed by the geology of a specific area. The intent of Thompson Field Forums is to stimulate and enhance individual and collaborative research, and to accelerate the advance of the science by interactions in the field. No Penrose Conferences or Thompson Field Forums were held in FY15. While there are several planned for FY16 and beyond, more are welcome. If you have an idea and would like to look into convening a Penrose Conference or Thompson Field Forum, visit the website (www.geosociety.org/meetings/penrose-thompson.htm). Initial funding may be available.

GSA's Specialty Meetings may take place anywhere in the world. These meetings are typically co-hosted by other countries' geological societies. Stay tuned for more specialty meetings in the near future.

GSA 2014



19-22 October | Vancouver, BC, Canada



Thank You Sponsors

GSA and the Foundation are pleased to collaborate in a wide range of sponsorships supporting the annual meeting, and more: field camps, teacher excellence recognition, geoscience students' field camp attendance, undergraduate diversity scholarships, and a number of in-kind services are all made possible thanks to partners and sponsors. We were pleased to offer the second year of the Geoscience Careers in Industry program, fully supported by a variety of sponsors. We aim to increase unique sponsorship opportunities that shed a spotlight on GSA and partners—even beyond our membership and regular supporters.

The combined efforts of business and science can make a greater difference than any organization alone. As GSA strives to convey and expand its relevance to the private sector, we look forward to building new corporate relationships in a variety of industries. Together, we can foster the growth of current and future leaders in the geoscience community, engaging business and industry as a positive force to advance science, stewardship, and service.

We thank the companies that join us in the meaningful impacts of partnership.

DOUBLE DIAMOND



PLATINUM



GOLD



SILVER

AAPG—American Association of Petroleum Geologists
American Elements
CH2M Hill
Image Audiovisuals*
LifeStraw Water Filters*
Newmont Mining Corporation
Simon Fraser University*

CONTRIBUTOR

Paleontological Society



GSA FOUNDATION

The GSA Foundation is proud to continue its work in support of GSA and its programs.

Education & Outreach

Nurturing Current & Future Generations

Earth science education and outreach activities are available to members at all levels of their careers.

EXPLORE CAREERS

The GeoCareers Program

GSA's GeoCareers initiative provides events, activities, and workshops at GSA Section and Annual Meetings, aimed at increasing knowledge of career pathways for students studying in the geosciences. These activities are available to both students and early career professionals, and help them better understand the preparation needed for a successful career.

Annual Meeting

The GeoCareers in Industry events connect students with professionals in industry through a student poster session, a company information-sharing session, and an evening reception. A career workshop highlights ways for students to better market themselves to potential employers and features a panel of company representatives to discuss their company hiring processes. More than 400 people participated in these events at the 2014 annual meeting.

Career Pathways panels (Geology in Industry, Geology in Government, and Women in Geology) highlight a variety of careers available to students and early career professionals and are driven by student questions. During the 2014 annual meeting, 650 students and early career professionals attended these events along with 19 mentors. Over the past 15 years, these programs have served more than 8,000 students and nearly 300 mentors.

GSA's On To the Future (OTF) program supports a diverse group of students traditionally underrepresented in the geosciences to attend their first GSA Annual Meeting. OTF supported 119 students to attend the 2014 annual meeting, and to date, have provided travel awards, membership, and meeting registration to more than 200 students nationwide.

Section Meetings

The Roy J. Shlemon Mentor Program in Applied Geoscience and the John Mann Mentors in Applied Hydrogeology luncheons are short-term mentoring events that connect students and early career professionals

with practicing geologists and hydrogeologists. These luncheons are held at each of GSA's section meetings. Combined over the past year, these events reached 572 students and early career professionals and 60 mentors. Increased contributions by sections helped these luncheons thrive at the Northeastern and Southeastern Section Meetings.

In addition to these mentor events, three workshops focused on career development ran at each section meeting. Topics included career planning, career exploration, and cover letter and résumé writing. A total of more than 200 students participated in these workshops.

FIELD AND RESEARCH EXPERIENCES

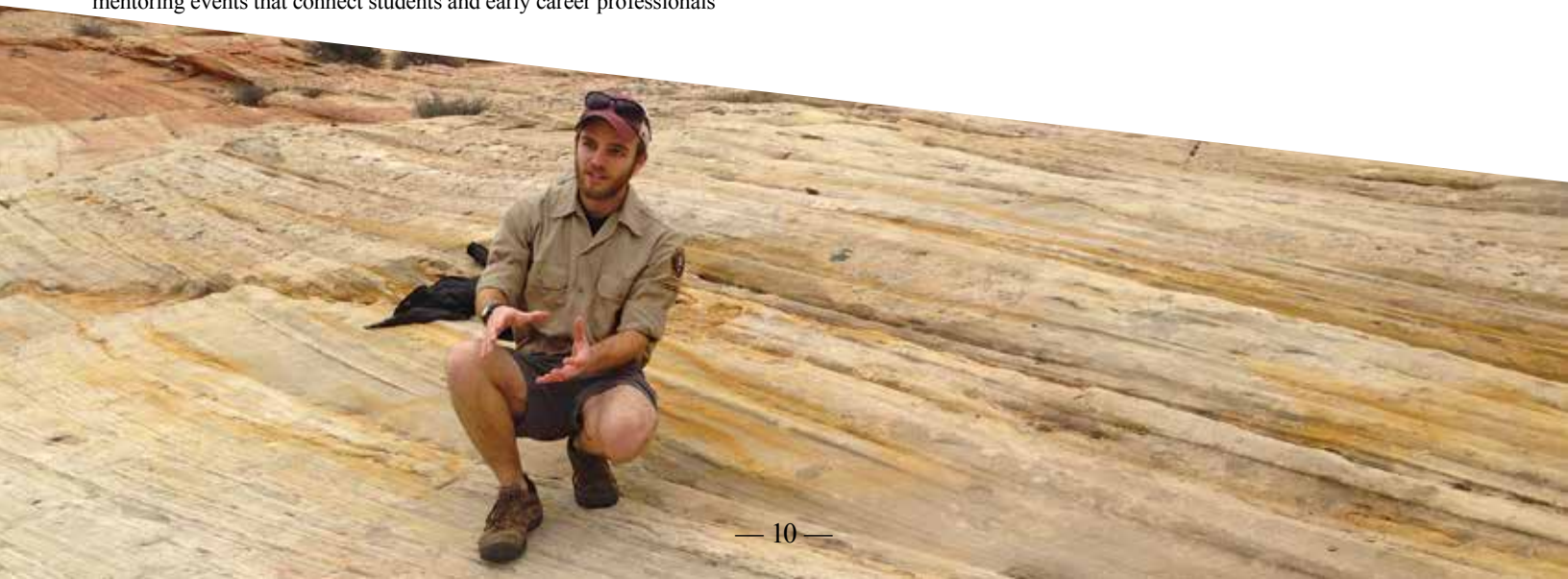
GeoCorps™ America

GeoCorps™ America had a milestone year. The Bureau of Land Management (BLM), the U.S. Forest Service, and the National Park Service's Geoscientists-In-the-Parks program hosted nearly 200 projects on public lands all across the country. Interest in GeoCorps, from partners and participants, continues to grow. This growth is a positive sign for the program's relevance and resilience.

The Mosaics in Science program, a partnership between the National Park Service and GSA designed to promote further diversity among those working in Science, Technology, Engineering and Math (STEM) with the National Park Service, continued into its third year. The program hosted 24 participants, largely from groups underrepresented in the sciences, to complete STEM projects at National Park sites. In all, more than 20 GeoCorps America and Mosaics in Science participants attended the 2014 GSA Annual Meeting to present their work.

At the 2014 annual meeting, GSA received the National Park Service Director's Partnership Award for its ongoing and successful partnership between the Geoscientists-In-the-Parks program and GeoCorps America, and for its work on the Mosaics in Science program.

Another milestone for GeoCorps America was partnering for the first time with the Bureau of Land Management's (BLM) "Direct Hire Authority" program, which provides participants a fast-track into direct employment with the BLM.





GSA/ExxonMobil Field Camp Programs

With continued support from ExxonMobil, GSA is able to offer a variety of field awards to students and faculty. The GSA/ExxonMobil Bighorn Basin Field Award offers a group of students and faculty an introduction to integrated basin and petroleum systems analysis and is taught by ExxonMobil staff. In summer 2014, there were five faculty, five graduate students, and 16 undergraduate awardees.

The GSA/ExxonMobil Field Camp Scholar Award is a \$2,000 award to students to attend a field camp of their choice. A total of 20 students were awarded based on their economic and financial need, merit, and diversity.

The GSA/ExxonMobil Field Camp Excellence Award is provided to a field camp to assist with the costs associated with running a summer camp. This year the \$10,000 award went to the Georgia State University Basic and Advanced Field Geology Field Camp.

The EarthCache™ Program

The EarthCache™ program, an educational geocaching project that takes the general public to more than 20,000 interesting Earth science sites, continued its growth trajectory. More than six million people have logged visits to EarthCache sites since its inception. The Third International EarthCache Mega Event took place in October 2014 in Duncan, Vancouver Island, British Columbia, Canada. More than 470 people from around the world attended, and plans for the fourth event, which will be held in Goslar, Germany, are well underway.

PROFESSIONAL DEVELOPMENT

The GeoTeachers Program

The Teacher Advocate Program (TAP) is undergoing a transformation and is now called the GeoTeachers Program. The goal for the GeoTeachers Program is to provide professional development to teachers via workshops and field experiences. This past year was another successful year with workshops taught at the National Science Teachers' Association national and regional conferences, and the Northwest Ohio STEM Conference. More than 373,600 students and 2900 teachers benefited from these workshops. All of the CD teaching resources have been redeveloped and are available for teachers to purchase online. Field camps for teachers ran in the Rocky Mountains and Mammoth Cave. Both were highly successful with teachers gaining a deeper understanding of geological processes and how to teach complex topics to their students. These trips will continue to

run with an additional trip to Acadia National Park being offered for the summer of 2016.

Teachers, college students, geologists, and EarthCache participants attended GeoVentures in Hawaii and Iceland. These trips continue to extend the field-based offerings for GSA members and their friends. Trips provide a unique opportunity for many people to experience geoscience first hand and provide teachers and students with skills and enthusiasm to continue to be involved in Earth science.

Short Courses

The Short Course program is thriving. The 2014 Annual Meeting saw 687 people attending 31 courses. This is our largest short course participation to date. Student attendance represented 54% of the total.

GeoCareers Interview Service

(Formerly the Employment Service Center)

The Employment Service Center, which has been in existence at GSA for over 17 years, is undergoing a transformation to reflect current employment practices and employee needs. It has been enhanced to offer additional benefits for employers seeking to interview qualified candidates at the GSA Annual Meeting and has been renamed the GeoCareers Interview Service.



The Geological Society of America®
GEOCAREERS



STEPPE

A Voice For Deep-Time Sedimentary Crust Research

STEPPE is an NSF-funded consortium that champions the study of Earth's deep-time sedimentary crust and the record of life and climate it archives. STEPPE was created to facilitate communication among the geosciences community because *collaboration* was identified as key to sustained funding and effectiveness in today's challenging environment.



STEPPE STRIVES TO:

- Increase funding for research on the sedimentary crust through infrastructure development and improving access to data, information, and models;
- Communicate the importance of ancient, diverse sedimentary data in order to maintain a global economy, a healthy environment, and critical ecosystems;
- Facilitate communication among diverse components of the community of sedimentary crust researchers;
- Promote interdisciplinary education and workforce development and diversity; and
- Translate scientific advancements into effective tools for energy and climate policy and ecosystem management.

ONLINE

The STEPPE website serves as a central portal for news, information, and collaboration. A variety of materials have been synthesized and made easily accessible, including:

- A searchable funding and fellowship opportunity database
- Consortium members' recent research and publications
- STEPPE-discipline White Papers & Workshop Reports
- Events calendar
- Blog, news digest, e-newsletter, and social media presence.

STEPPE Connect is an online collaborative platform that allows members to form online groups, share content, schedule meetings, and discuss research with their community.



Participants in the "Leaves of Change" professional development workshop for middle school teachers, Florissant Fossil Quarry, Colorado.

WORKSHOPS

STEPPE fosters research collaboration through funding workshops that bring together multidisciplinary groups to develop proposals for external funding agencies. Our workshops build bonds between domains that commonly remain independent and help increase chances of answering bigger picture problems our society currently faces. STEPPE has funded:

- "ONE-Delta—Synthesizing Observational, Numerical, and Experimental data to unravel the complex dynamics of deltas and margin sequences" (PI: Ryan Sincavage, Vanderbilt University);
- "Increased precipitation extremes in greenhouse conditions; An integrated paleoclimate and anthropogenic perspective" (PI: Piret Plink-Bjorkund, Colorado School of Mines);
- "Lake Tanganyika: A Miocene-Recent Source-to-Sink Laboratory in the African Tropics" (PI: Michael McGlue, University of Kentucky);
- "Tracking Biotic Change across the Cretaceous-Paleogene of India" (PI: Jeffrey Wilson, University of Michigan); and
- "Biological and Environmental Transitions during the Neoproterozoic and Paleozoic" (PI: Sarah Pruss, Smith College).

STUDENT TRAVEL AWARDS

STEPPE is committed to enriching young geoscientists' careers by assisting with funding, to allow travel to conferences and meetings around the globe. Fifteen awardees attended the Fourth International Paleontological Congress in Argentina and 11 awardees went to STRATI 2015 in Austria. Early career scientists and students were given the chance to meet others in the STEPPE disciplines, talk about research, and make lifelong connections. STEPPE and GSA funded travel support for underrepresented minority students to attend both the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) and the GSA Annual Meeting. You can read about their experiences at steppe.org/category/strati-2015/ and steppe.org/category/ipc4/.

FELLOWSHIP PROGRAM

With support from its consortium members, STEPPE initiated a 3–6-month Fellowship program that gives student geoscientists the opportunity to work on science policy in Washington, D.C., or at GSA Headquarters in Boulder, Colorado, to develop science communication skills, create education and outreach materials, and build upon professional networks and databases. Fellows also have the opportunity to interact with a diverse group of mentors and colleagues, as well as travel to the GSA



Annual Meeting and Geo-CVD in Washington, D.C. Previous Fellows include:

- Science Communications Fellow: *Zoe Gentes*, University of Rhode Island;
- Science Policy Fellow: *Lindsey Bowman*, West Virginia University; and
- Graduate Student Fellows: *Wassim Benhallam*, University of Utah–Salt Lake City; *Erin Leckey*, University of Colorado–Boulder; and *Kathryn Nold*, University of Indiana–Bloomington.

At its core, STEPPE builds connections between researchers, professionals, students, teachers, institutions, and policy-makers. STEPPE accomplishes this through several key programs supported by its consortium members:

EDUCATION

STEPPE partners with science educators like FOSSIL (Fostering Opportunities for Synergistic STEM with Informal Learners), the National Park Service, museums, and universities to provide earth science teachers with hands-on, field-based, professional development.

The multiday program “Collaboration for Change: Fossil Plants and Ancient Climates” was created by STEPPE to provide middle school teachers with fossil-collecting experience, adaptable classroom modules consistent with the Next Generation Science Standards, and the training to confidently teach earth science concepts to students from diverse backgrounds. This successful program is now part of a larger, national project that is focused on urban middle school teachers and students from underrepresented minority populations.

CYBERINFRASTRUCTURE

STEPPE works to build capacity through project partnerships related to cyberinfrastructure. The STEPPE executive director serves on the Fossil Calibration Advisory Board, the Continental Scientific Drilling Coordinating Office—Policy Committee, the Paleobiological Data Consortium—Advisory Council, and the EarthCube Cyberinfrastructure for Paleogeosciences—Steering Committee, and is an active member of several iDigBio working groups.

STEPPE and partners have received funding from NSF EarthCube for the ePANDDA (Enhancing Paleontological and Neontological Data Discovery API) project. ePANDDA will develop software tools to connect three established and critically important data sources that will fundamentally change the nature of the research questions that may be addressed by the scientific community.



The STEPPE Coordinating Office is funded by the National Science Foundation, NSF-EAR 1206274.



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Government Affairs & Public Policy

Bridging the Geosciences & Public Policy

GSA ADVOCATES FOR GEOSCIENCE RESEARCH FUNDING

GSA provided congressional testimony in support of geoscience research at the U.S Geological Survey (USGS), National Science Foundation (NSF), and National Aeronautics and Space Administration (NASA). In the constrained budget environment with geoscience funding targeted for cuts, GSA has been working strategically with members of Congress and the scientific and research community to highlight the value of geoscience research to our public health and safety, economic growth, and innovation.

MEET WITH POLICYMAKERS

GSA provides opportunities for its members to meet with members of Congress to discuss geosciences policy issues by running Congressional Visits Days and associated training sessions. These are great opportunities to have a direct impact on the process of government and to expand your science communication skill set. Events this year included Climate Science Day (10–11 February 2015) and Geoscience Congressional Visits Day (16–17 September 2014). Participants begin with an afternoon orientation program run by GSA and other scientific societies that includes updates on current geoscience-relevant legislation, background on the organization and structure of Congress, and strategies to build relationships between scientists and policymakers. The next day scientists head out in teams, accompanied by a scientific society staff member, to meet with congressional offices on Capitol Hill.

Can't come to D.C.? Join other geoscientists in Geoscience Congressional District Visits Day and meet with your elected representatives when they return to their home districts!

GEOSCIENCE RESEARCH ON THE HILL

GSA joined with the American Geophysical Union (AGU) and the American Geosciences Institute (AGI) to highlight federally funded geoscience research at events on Capitol Hill. The

Science-Engineering-Technology Exhibition and Reception (17 March 2015) featured the NASA Magnetospheric Multiscale (MMS) mission, and the Coalition for National Science Funding reception (29 April 2015) showcased NSF-funded coastal research. Both of these events attracted more than two hundred attendees, including members of Congress and executive branch leaders. As co-chair of the USGS Coalition Exhibition and Reception (16 September 2014), GSA played a lead role in planning and executing this event, which honors congressional champions of the USGS and highlights USGS research and applications.

GSA joined with many geoscience societies and government agencies to launch a new briefing series, which highlights the geoscience underpinning essential for effective energy and environmental policy making. The Energy from the Earth briefing series featured leading experts discussing topics ranging from carbon capture and storage, to natural gas, to geothermal, to global energy trends during six well-attended congressional briefings.

SCIENCE FELLOWS

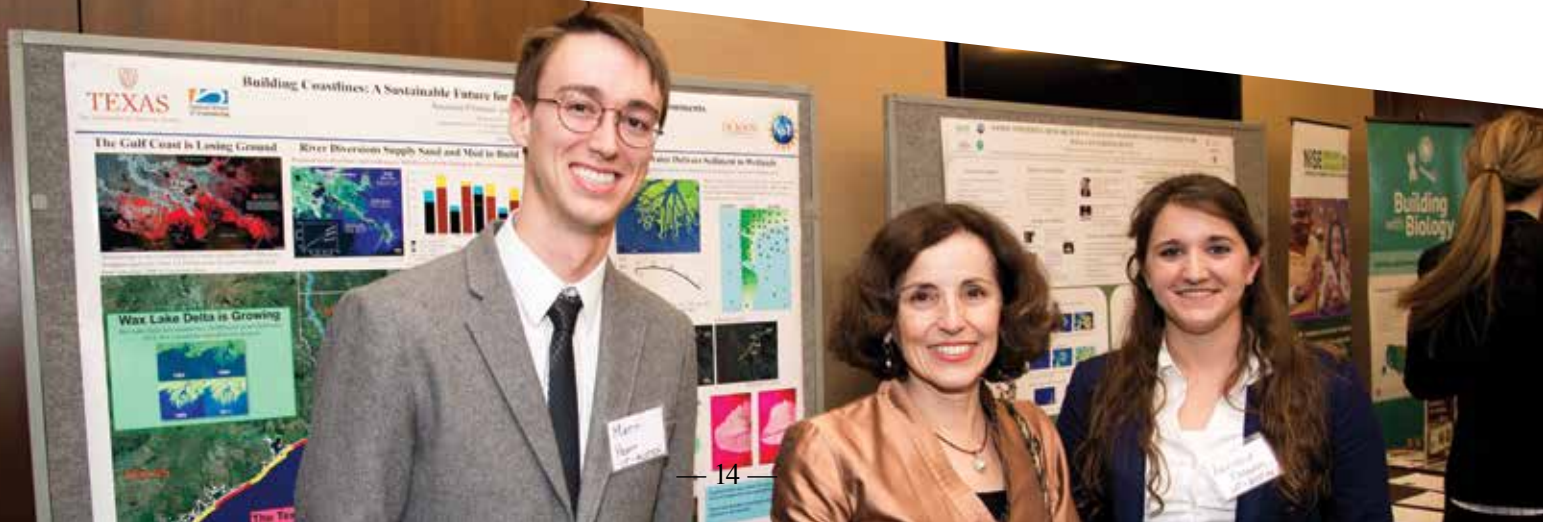


Susanna Blair served as the 2014–2015 GSA-USGS Congressional Science Fellow. She spent a year working in the office of Senator Kirsten Gillibrand (D-NY) on water, energy, and other science policy issues.

Karen Paczkowski was this year's GSA Science Policy Fellow. She spent the year working in GSA's Government Affairs office in D.C., acting as a science policy liaison between GSA scientists and policymakers.

NEW GSA POSITION STATEMENTS ADOPTED

GSA Council approved a new Position Statement: "The Role of the Geoscientist in Building and Maintaining Infrastructure," a major revision of the "Integrating Geoscience with Sustainable Land Use Management" Position Statement, and a minor revision of the "Climate Change" Position Statement.





GSA Science Policy Fellow Karen Paczkowski assists GSA Annual Meeting attendees develop engaging messages at the communication workshop.



GSA Geology and Public Policy Committee members visit Capitol Hill.

*Keep up with current policy developments
on GSA's website*

www.geosociety.org/geopolicy

and blog

<https://geosociety.wordpress.com>

← Photo to the left: Matthew Hiatt and Anastasia Piliouras, students at the University of Texas, talk to NSF Director France Córdova at a geoscience exhibition on Capitol Hill sponsored by GSA, AGI, and AGU.

GSA Foundation

THE FOUNDATION

The Geological Society of America Foundation's mission is to support the programs of the Geological Society of America. The Foundation welcomes contributions from individuals, corporations, foundations, and institutions.

2014–2015 HIGHLIGHTS

In fiscal year 2015, the GSA Foundation received contributions of about \$1.85M from individual GSA members and corporations. This makes FY15 one of our most successful years ever. Our success was assured by 4711 separate gifts at all levels—the second largest number in the Foundation's 35-year history.

The responsibilities of the Foundation are to (1) support GSA programs and (2) preserve the Foundation's assets for the future. With respect to the first (see chart below), we were able to provide GSA with \$1,068,440 to support its programs—a record amount. This is a 36% increase in just the past five years. With respect to the second responsibility, the Foundation's assets ended the year at a historic high—more than \$18M as compared with \$16M at the end of FY14.

Projects initiated through member support in 2015 include:

- A lead gift established the GSA Geologic Mapping Award in Honor of Florence Bascom, recognizing the fundamental role of high-quality mapping in our profession.
- The E-an Zen Fund was established to support science in the public interest.
- Family and friends of Tim Wawrzyniec funded a research grant in his memory, supporting field research in the Rocky Mountains.
- All GSA Memorials have been digitized and are available online.

I wish to recognize the continuing support of Paula and Jeffrey Gural and dozens of other individuals, associated societies, GSA sections, and corporate sponsors for helping advance On To the Future, GSA's flagship diversity enhancing program.

We are pleased that corporate partnerships supported the second year of the GeoCareers in Industry Program, which is now expanding into year-round resources for students and early-career professionals as well as establishing a presence at GSA Section Meetings.

The Foundation also launched a redesigned website (www.gsafweb.org) to provide improved access to information and ideas regarding ways philanthropy will make a difference for GSA and the geosciences.

The Foundation is pleased to help donors support GSA programs and priorities that matter to them. Looking forward, the Foundation and GSA are collaborating to carry out even more effective resource-building strategies. With your help, we will shape a strong future for GSA.

The Future

The GSA Foundation booth will have a new look at the GSA Annual Meeting in Baltimore. The booth will feature interactive presentations showcasing several GSA programs that the Foundation supports through your generous gifts. As we have in the past, the Foundation will host its Senior Fellows Reception and Pardee Coterie breakfast for those who include the Foundation in their estate plans, and Penrose donor lounge for Penrose Circle level (\$500/a) contributors. We hope you can join us there.

I am honored to have taken on the position president of the Foundation effective January 2015. I have very big shoes to fill following the very successful five-year term of Geoff Feiss. Thank you, Geoff, for all that you have done for GSA and the Foundation.

The work of the Foundation on behalf of the Society and its members is ongoing and grows in importance each year. I encourage every member to avail themselves of the opportunity to serve GSA and to support the Foundation in their combined efforts to ensure the dynamism and strength of the geosciences.

John W. Hess, GSA Foundation President



GSA FOUNDATION

John W. (Jack) Hess, GSA Foundation President

GSA Operations Report

(in millions)

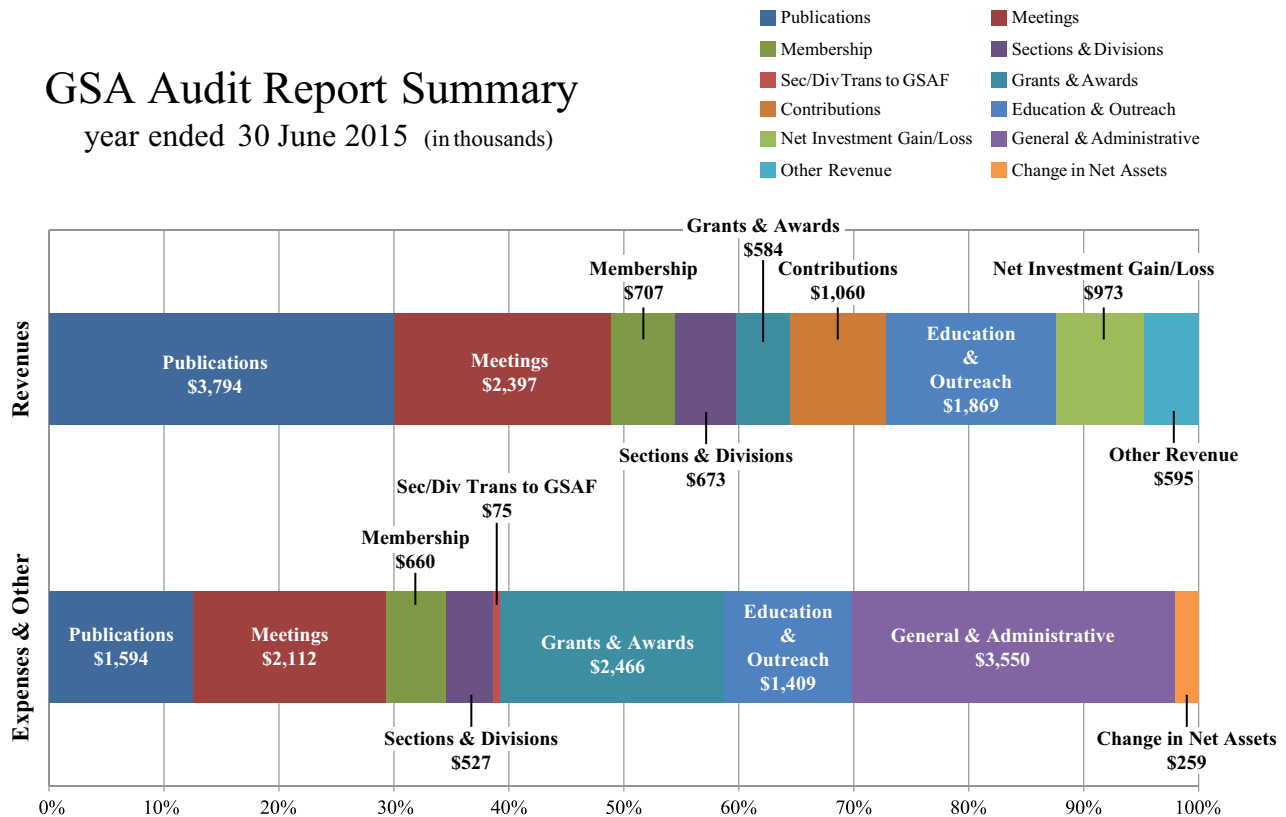
Fiscal Year 2015 (FY15) ended with the change in net assets before investment earnings \$4M better than budget. This result reflects the continuing dedicated commitment of all staff, volunteers, and leadership. Brock and Company, CPAs completed their combined audit report of GSA for FY15 and issued an unqualified opinion.

Compared to Fiscal Year 2014 (FY14), the change in net assets before investment earnings decreased \$.75M. The principal components of this unfavorable difference are reduction in net meeting revenue (\$.23M), net increase in grant and E&O expense (\$.21M), net increase in STEPPE program expense (\$.15M), and increase in administrative costs for capital campaign and contract labor costs (\$.18M).

During FY15, GSA drew from investments \$.51M for strategic spending and Council authorized \$.33M from the Pardee fund for research grants and meetings.

For FY15, the Society had a net investment gain of \$.97M compared to an investment gain in FY14 of \$3.8M. This change principally reflects the result of general worldwide economic and market conditions.

GSA Audit Report Summary year ended 30 June 2015 (in thousands)



A full copy of the combined audit report can be accessed at http://www.geosociety.org/aboutus/fiscal/ann_Audit.pdf.

The Treasurer's report can be accessed at <http://geosociety.org/aboutus/fiscal/treasurerRpt.pdf>.

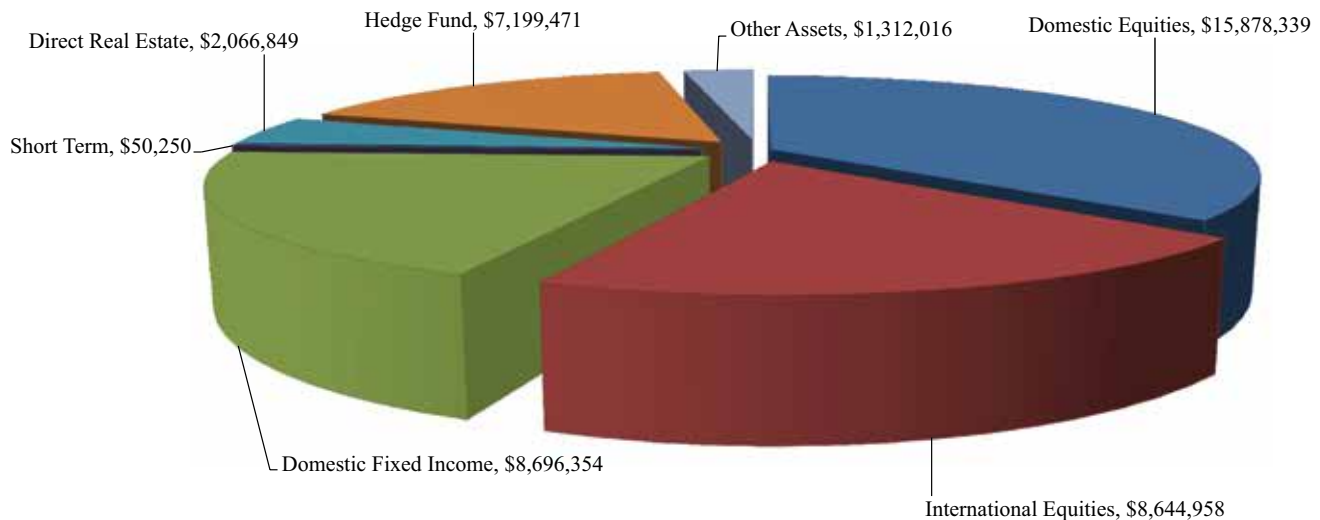
GSA/GSAF Combined Investment Portfolio Report

During FY15, the combined portfolio in total increased \$.76M (2%), net of withdrawals. The graph presented is for the combined investment portfolio and excludes the separately managed Pooled Income Fund.

GSA and the GSA Foundation have a well-diversified investment portfolio and a dedicated team of volunteer members to manage these assets. Through FY15, the joint Investment Committee was composed of eight dedicated and knowledgeable voting members. The Committee relies on expertise provided by an outside consulting firm, Watershed Investment Consultants, Inc. The organization continues to follow an investment strategy of diversification among investment classes within strategic allocation targets.

The Committee continues to search for members with the interest and aptitude to serve on the Investment Committee in the future. This service is a key component to the long-term health of the portfolio, and consequently, the mission of GSA.

GSA and GSA Foundation Jointly Managed Combined Investment Portfolio 30 June 2015



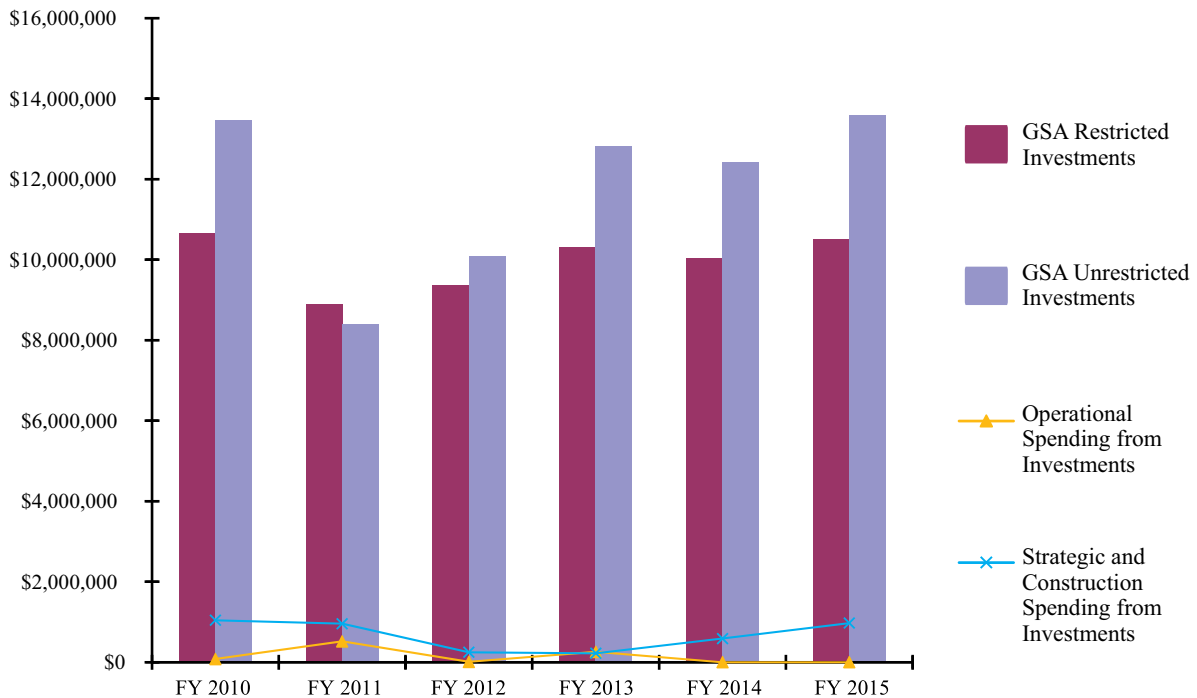
GSA/GSAF Combined Investment Portfolio Report

GSA's restricted investment balance is primarily comprised of funds from R.A.F. Penrose (donated in the 1930's) and from Joseph T. Pardee (donated in the 1990's).

Unrestricted funds are vital to the future of GSA because they can be used where Council deems there is greatest need. In recent years, these funds have supported strategic projects such as digital publications, Government Affairs, E&O programs and staffing, Social Media staffing, and Capital Campaign initiatives.

As indicated in the chart below, GSA investments have primarily increased or decreased due to overall market conditions. The investment balances also fluctuate from investment earnings, less amounts paid from the Pardee fund for Research Grants and amounts designated for strategic spending by Council.

Council approved using Pardee funds for the student research grant program beginning in Fiscal Year 2004 and then approved spending unrestricted funds for strategic programs beginning in Fiscal Year 2006. This spending is governed by policy to ensure viability of the portfolio over the long term to ensure the continuing mission of GSA.



The yellow line indicates amounts paid to cover the gap between revenues and operating expenses, which has generally decreased over time. The blue line shows the increase in strategic spending.



Bruce R. Clark
Treasurer



Carl P. Fricke
GSA Investment Committee Chair

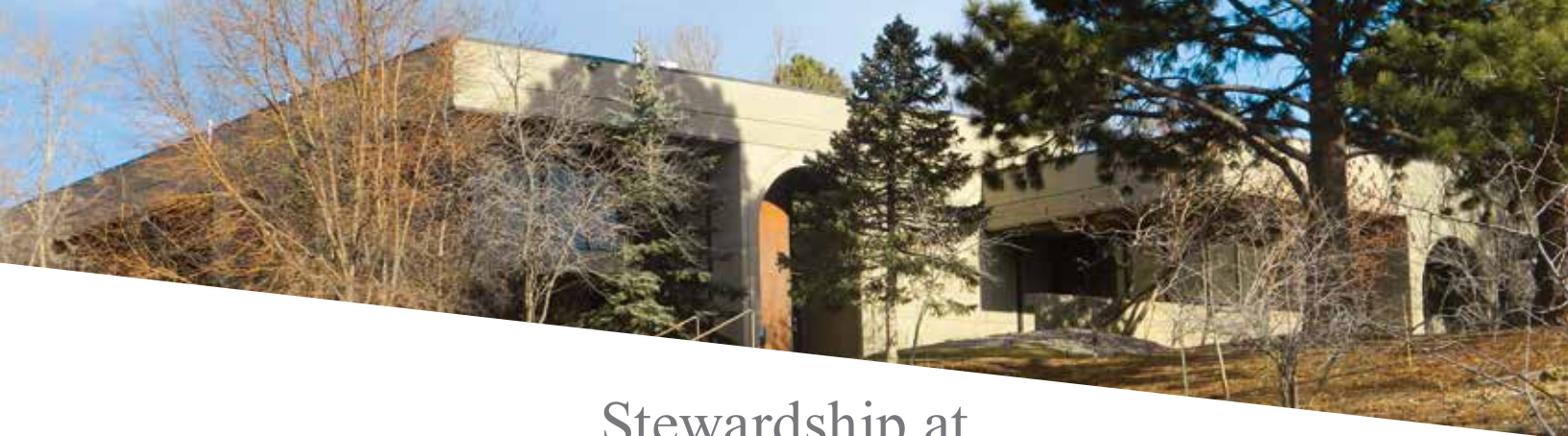
GSA gratefully acknowledges the invaluable contributions of Bruce R. Clark, Treasurer; and Carl P. Fricke, GSA Investment Committee Chair, for service to the Society and preparation of the financial data included in this report.

GSA's Associated Societies

Allied in Service to Members and the Larger Geoscience Community

(as of 30 June 2015)

AASP—The Palynological Society
American Association of Petroleum Geologists (AAPG)
American Geophysical Union (AGU)
American Institute of Professional Geologists (AIPG)
American Quaternary Association (AMQUA)
American Rock Mechanics Association (ARMA)
American Water Resources Association (AWRA)
Asociación Geológica Argentina (AGA)
Association for the Sciences of Limnology and Oceanography (ASLO)
Association for Women Geoscientists (AWG)
Association of American State Geologists (AASG)
Association of Earth Science Editors (AESE)
Association of Environmental and Engineering Geologists (AEG)
Association of Geoscientists for International Development (AGID)
Blueprint Earth (BE)
Clay Minerals Society, The (CMS)
Colorado Scientific Society (CSS)
Council on Undergraduate Research Geosciences Division (CUR)
Cushman Foundation (CF)
Environmental & Engineering Geophysical Society (EEGS)
European Association of Geoscientists & Engineers (EAGE)
European Geosciences Union (EGU)
Geochemical Society (GS)
Geologica Belgica (GB)
Geological Association of Canada (GAC®)
Geological Society of Africa (GSAf)
Geological Society of Australia (GSAus)
Geological Society of China (GSC)
Geological Society of London (GSL)
Geological Society of South Africa (GSSA)
Geologische Vereinigung (GV)
Geoscience Information Society (GISIS)
Geoscience Society of New Zealand (GSNZ)
Groundwater Resources Association of California (GRA)
History of Earth Sciences Society (HESS)
International Association for Geoscience Diversity (IAGD)
International Association for Promoting Geoethics (IAPG)
International Association of Emergency Managers (IAEM)
International Association of GeoChemistry (IAGC)
International Association of Hydrogeologists (IAH)
International Medical Geology Association (IMGA)
International Society for Aeolian Research (ISAR)
Israel Geological Society (IGS)
Karst Waters Institute (KWI)
Microanalysis Society (MAS)
Mineralogical Association of Canada (MAC)
Mineralogical Society, The (MS)
Mineralogical Society of America (MSA)
Minnesota Ground Water Association (MGWA)
National Association of Black Geoscientists (NABG)
National Association of Geoscience Teachers (NAGT)
National Association of State Boards of Geology (ASBOG)
National Cave and Karst Research Institute (NCKRI)
National Earth Science Teachers Association (NESTA)
National Ground Water Association (NGWA)
Nepal Geological Society (NGS)
Paleontological Research Institution (PRI)
Paleontological Society (PS)
Seismological Society of America (SSA)
Sigma Gamma Epsilon (SGE)
Sociedad Geológica Mexicana, A.C. (SGM)
Società Geologica Italiana (SGI)
Society for American Archaeology (SAA)
Society for Environmental Geochemistry & Health (SEGH)
Society for Mining, Metallurgy & Exploration, Inc. (SME)
Society for Sedimentary Geology (SEPM)
Society for the Preservation of Natural History Collections (SPNHC)
Society of Economic Geologists (SEG)
Society of Exploration Geophysicists (SEG)
Society of Vertebrate Paleontology (SVP)
Soil Science Society of America (SSSA)
Western Interior Paleontological Association (WIPS)



Stewardship at GSA Headquarters

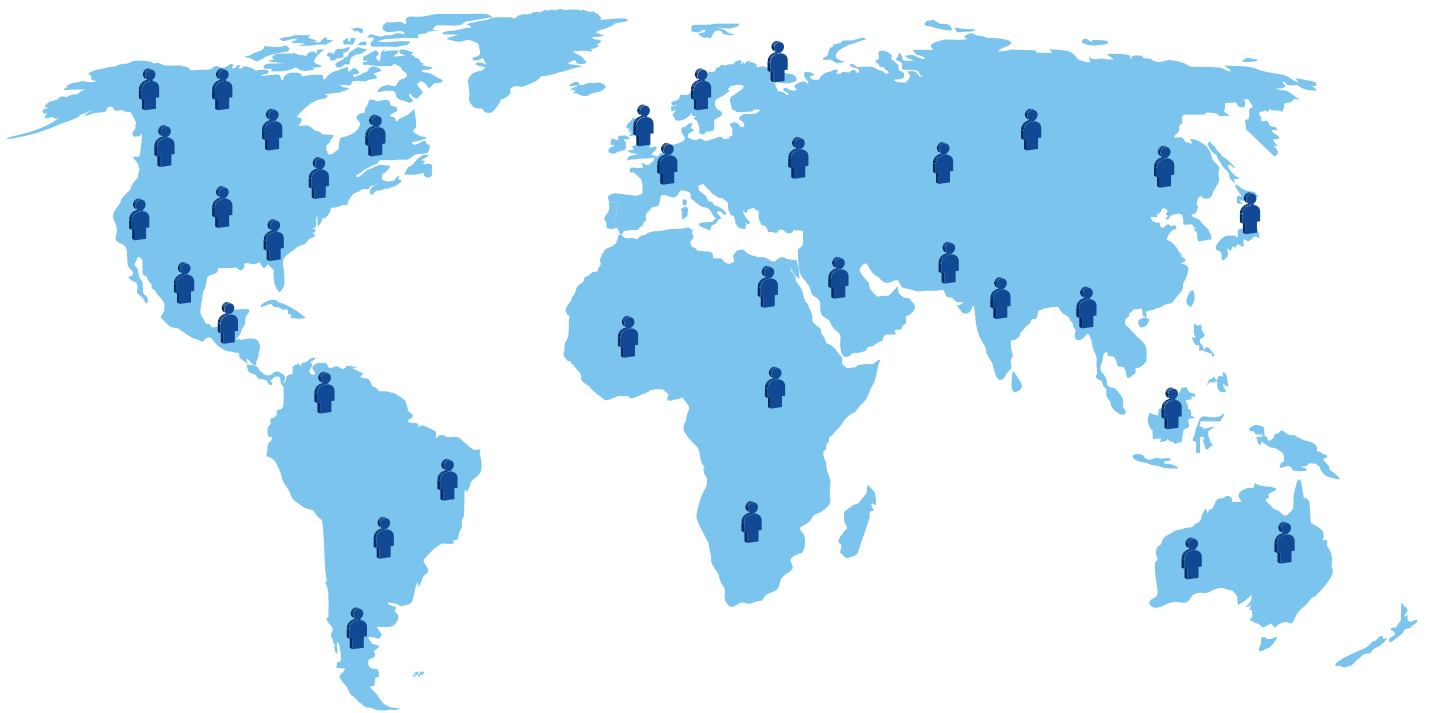
At GSA Headquarters, we have been addressing long-term planning for facility maintenance, building redundancy into critical systems such as IT, and completing some outstanding landscaping projects. The facility is stable and our focus is to maintain what we have and extend the life at minimal expense; deferring when reasonable, but not to the detriment of the building or grounds.

Improvements to the heating and cooling systems, as well as other costly projects, have been carefully evaluated to determine true need and prioritized for appropriate scheduling within future year budgets.

The solar panel array continues to be a success story, generating power to contribute to the grid at a greater rate than anticipated and reducing our solar panel payback schedule.

We have wrapped up some needed grounds projects and are monitoring the health of our threatened ash trees—giving treatment where appropriate. Some removal may be necessary, but we hope to save many of the trees that define our beautiful Boulder campus.





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