

Association of Environmental & Engineering Geology
AEG Foundation Diversity Field-Trip Grants

*For Junior-High School and High School Earth Science or STEM Teachers
Who Teach Black, Hispanic or Latino/a, Pacific Islander,
and/or American Indian/Alaskan Native Students*

BACKGROUND

In 2020, the Association of Environmental & Engineering Geology's (AEG) Executive Council made the following statement on diversity: *"AEG supports diversity, equity, and inclusion in the geosciences professions and in our organization. AEG leadership plans to further our efforts in promoting these values by challenging ourselves on what we can do better to encourage underrepresented populations to consider and obtain careers in the geosciences and to foster a welcoming and inclusive environment within our Association and the geosciences professions."*

In mid-2020, AEG established the Diversity, Inclusion, and Equity Committee (DEIC). Leaders and members of the DEIC have established the AEG Foundation Diversity Scholarship Fund to support geoscience enrichment field trips for junior-high-school (or middle-school) and high-school students and academic scholarship for college/university students.

The purpose of the AEG Foundation Diversity Field Trip Grants is to show junior-high-school (or middle-school) and high-school students who have a Black, Hispanic or Latino/a, Pacific Islander, and/or American Indian/Alaskan Native personal heritage an introduction to professional practice in the geosciences. Hopefully, a positive experience may encourage them to consider continuing their college or university studies in the geosciences.

Each year, the AEG Foundation shall disburse about \$5,000 in support of about five AEG Foundation Diversity Field Trip Grants. It is planned that those five grants will be for about \$1,000 each. The grants will be made after evaluation of proposals submitted by junior-high-school (or middle-school) and high-school teachers and their school administrators.

Successful proposals may request funding for transportation (such as a chartered coach, or fuel and professional drivers for the schools' vehicles); lunches and snacks; admission fees to state or national parks, mineral- or fossil-collecting sites, mine tours, or other geoscience-related sites; liability insurance for the teacher(s), the school and district, volunteer chaperones, and AEG Foundation; and other necessary expenses.

Each student field-trip participant must provide a written and signed parental/guardian permission or authorization that meets or exceeds the state, district, and school requirements.

Successful proposals should request not more than about \$1,000 each. If more funding is needed for the planned field trip, other sources should be tapped, such as the school's parents-teachers group, a local school sponsor, and/or a nearby AEG Chapter (see [Regions & Chapters \(aegweb.org\)](https://aegweb.org); scroll down). **If funding less than \$1,000 is needed, the budget request should reflect that – the AEG Foundation may be able to give more than five grants if economies are possible and presented.**

These grants are available to public, private, and charter school students. They are not available to home-school students or home-school groups.

It is preferred that this AEG Foundation Diversity Field-Trip be scheduled for out-of-school hours, such as a Saturday, a school holiday, or a vacation day. A full-day is preferred (~9:00 am until ~6:00 pm, or ~8:00 am until ~4:00 pm, 6:00 am until 5:00 pm, or similar).

A summary of each field trip that is funded through this AEG program shall be prepared for the AEG Foundation and AEG. Photos and a short summary of the event (about 200-300 words) will be published in following issues of the *AEG News* and the *AEG Insider*.

SUGGESTIONS TO PROPOSERS

Field-trip itineraries should include at least three stops that show three different aspects of the geosciences. A good mix for your field-trip itinerary might include three or more stops at:

- A public beach or creek, allowing students to see erosion, sediment transport, and deposition geologic processes (might be good for a lunch stop, too);
- A problematic landslide that has damaged buildings, homes, utilities, or highways;
- A tourist cave, usually run by a state park system or a commercial operator (some commercial operators may narrate the tour better than others – so pick a good one);
- A pay-to-collect mineral or fossil site, where students get to dig in the soil or rock and keep their finds (*Google* “mineral collecting sites” or “fossil collecting sites” to find them in your area);
- A stream-gage monitoring site, with a visit by a hydrologist to explain what is being monitored ([Water Resources - Connect \(usgs.gov\)](http://WaterResources-Connect.usgs.gov));
- An active underground or open-pit mine or sand-and-gravel operation (kids younger than 18 probably won't be allowed on the site, so contact the mine operator to see if the mine management would meet with your group at a nearby overview site to explain the mining operations);
- An environmental site that has clean-up work completed or in progress (contact your local AEG chapter [www.aegweb.org/regions-chapters] for possible access through local AEG members);
- A visit to a distinct landform or geologic feature in your region, such as a volcanic flow, karst or sinkholes, a fault-controlled valley, a meandering stream, a floodplain, a glacial deposit or feature, a barrier island, or a significant road cut;
- Contact your local AEG Chapter [www.aegweb.org/regions-chapters], for more ideas and to enlist their help in making arrangements or to meet your group along the way;
- Contact a local geoscience hobbyist group – rock and mineral collectors, speleologists (cavers), and amateur paleontologists – as they may know of local sites that are otherwise not open to the public and they may even agree to meet your group there;
- Contact your state's Geological Survey for ideas, as they also may be able to arrange to meet your group at a site and provide some explanation of what your students are seeing, and they can probably provide some geologic maps;
- Contact the Geoscience departments at a nearby university (they usually have a “Geology Club” for their geoscience students); it may be possible to enlist their support and participation for your field trip (maybe the university students could explain the geologic processes, products, or professions and help the students appreciate what they are seeing?);
- These are just some ideas, and certainly do not limit the possibilities for your field-trip itinerary. What else can you add?

While museums provide wonderful learning opportunities, they are not preferred major destinations for these AEG Foundation Diversity Field-Trips. **Our intent is to get the kids outside and into the field to see in situ geologic processes, products, and professions firsthand.**

DIVERSITY FIELD TRIP GRANT EVALUATION

The submitted proposals will be evaluated for how well the proposed field trips introduce geosciences as a career option to the student participants. Weighted factors that will be assessed include:

1. At least 66% (two-thirds) of the students who will participate on this field trip should be of **Black, Hispanic or Latino/a, Pacific Islander, and/or American Indian/Alaskan Native personal heritage; (20 points)**
2. An interesting and appropriate **itinerary of at least three different types of outdoor stops**, (Examples: A mine, a beach, and a landslide; or, an environmental clean-up site, a sand-and-gravel operation, and a fossil-collecting site; or, a volcanic flow, a glacial erratic, and a floodplain); **the stops should focus on the geosciences** (mineral resources, geologic hazards, environmental quality, landforms, geologic processes, water quality, stratigraphy, geologic structure, etc.); **(20 points)**
3. The **introduction of geoscience as a possible career**, and how to best prepare for it while still in junior-high school and high school, shall be included in the field-trip itinerary; **(20 points)**
4. The **enlistment of geoscience students and professionals** from your area, from the US Geological Survey (USGS), your state geological survey, hobbyist groups, local colleges or universities, and your local AEG Chapter, who may agree to help with the itinerary or additional expenses, and provide real-time, on-site participation with your field-trip group. (It may be possible to arrange additional interactions with the class with the help of these geoscience students and professionals – so it is definitely worthwhile to make these inquiries and proactively maintain these connections.) **(20 points)**
5. An **optimum number of student participants** should be between 16 and 24. For example, a field-trip roster of 20 students will be more favorably evaluated than one of 40 participants); **(10 points)**
6. There shall be a **prudent number of adult chaperones** – at least one adult chaperone for every five students; and **(5 points)**
7. The **use of maps** (topographic, geologic, bathymetric, highway, land-use, hydrologic, etc.) before, during, and after the field trip. **(5 points)**

A final suggestion: whether or not your field-trip proposal is selected for funding, you may want to make contact with your local USGS office or branch, your state geological survey, the Geology Department of one or more local universities, hobbyist groups, and your local AEG Chapter – and *maintain* that contact.

There is a significant, recent, new effort within the geoscience community at large to offer outreach and enrichment opportunities for all junior-high and high-school students.

These contacts may provide additional local opportunities for shadow-day visits, guest speakers, classroom supplies, career-day presenters, volunteer or intern experiences, lab equipment, science-fair projects, and other networking and learning opportunities for both students and their teachers.

Good luck!