

BUDGET NEEDS ASSESSMENT APPLICATION
Fall 2016

Name of Person Submitting Request:	Todd Heibel
Program or Service Area:	Geology-Oceanography (Earth Science)
Division:	Science
Date of Last Program Efficacy:	SP 16
What rating was given?	Continuation
Amount Requested:	\$3,000
Object Code:	5611
Strategic Initiatives Addressed: (See http://www.valleycollege.edu/about-sbvc/office-of-president/college_planning_documents/documents/strategic-plan-report-working-doc-8-25-15-2.pdf)	Access, Student Success, and Institutional Effectiveness

Note: To facilitate ranking by the committee, please submit separate requests for each general area of budget augmentation needed. Do not request a lump sum to encompass many different areas.

One-Time Ongoing

Does program or service area have an existing budget (\$1,150)? Yes No

Are there alternative funding sources? (for example, Department, Budget, Perkins, Grants, etc.)

Yes No

If yes, what are they: _____

1. Provide a rationale for your request (Give a detailed explanation of why this budget increase is needed.)

This is a **growth request** and will provide additional funding to supplement existing funding (\$1,150). The Geology-Oceanography Department currently has enough money to fund one half-day (four-hour) **field trip** twice each year (fall semester and spring semester). **We are requesting an ongoing, additional \$3,000 budget augmentation each academic year** to fund an additional full-day (eight-hour) field trip each semester. At present, there are no alternative, existing funding sources (e.g. grants and other departmental/division sources). Field trips are an integral part of geology. Earth scientists analyze landscapes determining the internal and external processes that contribute to landscape development. While images and videos within a classroom setting can help students identify landforms, experiencing the landscape firsthand enriches student experience and sets the context for the analysis. The Geology-Oceanography Department currently provides transportation for our physical geology and oceanography lab classes. Each year, we encourage more sections to participate in these half-day events. Over the past 4 years, we have regularly filled the bus(es) and have had several students take their own transportation. The requested funds would be used to expand the field trip options for additional physical geology and oceanography lab sections, as well as provide field trip options for other Earth Science classes (e.g. California, National Parks, Environmental, Historical, and Physical Geology lecture sections, as well as Oceanography lecture sections). The bus provides a **mobile laboratory** where topics are discussed en route from one site to another, thereby extending and enhancing the learning experience. Because bus companies employ **professional drivers**, this mode of transportation is **much safer than** students driving their own vehicles.

2. Indicate how the content of the department/program's latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (*Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.*)

The current Geology-Oceanography EMP reports state that part of the Action Plan is to “[c]oordinate with the institution to increase the department budget for crucial field trip ... expenses and services.” The requested funds will encourage students to experience the natural landscape in greater detail through guided field trips. While students could drive themselves to keep cost down, the bus provides a mobile laboratory in which instructors can point out features on the landscape and incorporate visual aides. In addition, student driven field trips can pose safety hazards with caravans of students driving from location to location. The San Bernardino-Riverside MSA is one of the most socioeconomically disenfranchised regions in the US. Therefore, many of our students do not have their own transportation, which would exclude students without the finances to attend. Page 7 of the spring 2016 Geology-Oceanography-Environmental Science Program Efficacy document states that “As part of an overall STEM (science, technology, engineering, and mathematics) outreach effort, Geology and Oceanography endeavor to join other STEM programs on campus in the creation of grants, scholarships, tutoring and workshops, internships, career and transfer events and visits, **field trips**, guest speakers, and other events designed to attract women and other traditionally under-represented groups.”

Earth scientists collect data from various field sources, including wilderness areas and city landscapes. While exposing students to field work may spark an interest in the field of geology and related Earth sciences, it enhances observational skills that benefit students within a broad range of disciplines and career paths. In addition, one of the missions of our Geology-Oceanography Department is to, “allow students to make sense of the physical world around them. This increases their level of critical thinking and problem solving for a variety of applications, related to and disparate from geological and environmental processes” (Efficacy Report, p. 37).

3. Indicate any additional information you want the committee to consider (*for example, regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

Anecdotal evidence suggests that geology and oceanography students who participate in field trips improve their analytical and critical thinking skills in all college coursework. Related to this point, instructors find that many SBVC students have not previously explored sites visited during field trips. Exposure to the wider world benefits our students in many ways. In addition, field trips serve as one of the best recruiting mechanisms for geology, oceanography, and related majors (e.g. environmental sciences).

4. Indicate any related costs (including any ongoing maintenance or updates) and department/program plans to support those costs.

There are no on-going maintenance costs for our requested funds. However, field trip (transportation) costs generally increase over time. Currently, a 47-passenger bus costs approximately \$1,200 for an eight-hour rental.

5. What are the consequences of not funding this budget request?

Field trips are an integral part of geology and oceanography. Failure to fund additional field trips will result in more self-guided field trips, which pose safety and pedagogical concerns. Furthermore, these valuable experiential opportunities are foreclosed for students with limited economic resources (e.g. students who do not own a vehicle and/or cannot afford out of pocket fuel and related expenses).