BUDGET NEEDS ASSESSMENT APPLICATION
Fall 2017

Name of Person Submitting Request:	**Todd Heibel**
Program or Service Area:	**Geographic Information Systems (GIS)**
Division:	**Science**
Date of Last Program Efficacy:	**SP 15 for GEOG-GIS and SP 17 for GIS (2-year)**
What rating was given?	**Continuation**
Amount Requested:	**$4,000**
Object Code: Object Codes Object Code Guidelines	**2389**
State specifically how this budget will be used:	**GIS Tutorial Services**
Strategic Initiatives Addressed: Strategic Directions + Goals	Student Access and Student Success

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?   Yes ☐   No ▣

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

                                                Yes ☐   No ▣

If yes, what are they: There is a miniscule $100 institutional budget for all expenses. There is potential for future Perkins, Strong Workforce, and other grant funding, but such funding has not yet been procured.

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

At present, **there is only a limited institutionally-supported budget of $100.** The Geographic Information Systems (GIS) Department heavily relied upon the Perkins and CTE Enhancement Grants to fund tutorial services during past academic years, but these grants have since expired. While the Student Success Center and its various grants support a significant number of tutors and SI leaders, these funds *do not* include support for a GIS tutor (in fact, the total number of SIs and tutors is greatly diminished from previous academic years). This means that approximately 12 lecture and laboratory sections comprising dozens of GIS students are without tutorial services. Therefore, the department requests **$4,000** to support a GIS **tutor**. The amount of $4,000 has been calculated by estimating tutor compensation of $12/hour working an average of 10 hours/week for 16 weeks (total of $1,920 per semester plus benefits). This is **growth funding** that the institution would support on an annual basis. In other words, this is not a one-time, stopgap request, as this growth funding is needed on an ongoing, annual basis. Because there are four to five adjunct GIS faculty per semester (more than two FTEF and more than 80 students (duplicated enrollment)), the department will remain strong and student demand will continue.

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 addition of a dedicated GIS tutor has the potential to increase student success, retention, and

overall enrollment. By extension, efficiency – a campus-wide goal – may also increase. There is a certificate option for GIS students, and all courses are being offered on a regular basis, including full online delivery, following a multi-semester hiatus. Within the EMP document, the need for a tutor is clearly identified within Challenges and Opportunities section. In addition, the SP 2015 Geography-GIS document identifies the need for tutors on pages 14, 15, 35, and 36.

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

A dedicated GIS tutor has the potential to increase the FTES, census, FTEF, efficiency, success, and retention for these programs and students. As the total enrollment for the GIS Department increases, demand for a tutor will also increase. In addition, the job market for fields related to GIS is forecast to improve. A tutor can better ensure that SBVC GIS students are prepared to enter this expanding career field (State of California EDD, 2014-24 statewide occupation profile):

Occupation:	Median Annual Wage:	Annual Average Openings:
Geographers	$85,180	10
Cartographers and Photogrammetrists	$71,690	80
Geospatial Information Scientists and Technologists	$91,630	131

Source: O Net Online and State of California Employment Development Department (2016).

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

Although $4,000 per academic year appears to be a large sum, consider that the average tutor is paid $12 per hour. This means that there are 320 hours of tutoring available for the entire 36-week academic year (fall and spring semesters). Therefore, the per-week tutoring schedule would average a bit less than 9 hours (8.9 hours per week). This funding is needed on an ongoing basis, as demand for GIS courses is anticipated to increase with the addition of online courses, modification of the certificate, and improved job market prospects. The Student Success Center uses various STEM-related grant funding to support SI and tutorial services. However, the GIS Department is not currently included within these various grants even though it clearly fits within the STEM rubric. Although a GIS tutor has been included within past GIS and college-wide grants, there is no guarantee that funding will be available during the next academic year. In addition, there is no guarantee that a future grant would be funded, especially in the current hyper-competitive grant climate.

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

If funding for a GIS tutor is not approved, then students will not be appropriately prepared for transfer to four-year programs, and students will not qualify for well-paid positions within the geographic, cartographic, and geospatial sectors. In addition, student enrollment may stagnate. This is unfortunate, as dedicated faculty members and modified certificate provide an excellent opportunity for immediate employment, as well as transfer into a variety of GIS and related programs within the Cal State and UC systems.