FACILITIES NEEDS ASSESSMENT APPLICATION
Fall 2015

Facilities: Programs should list no more than three facility or renovation items. Identify the area in need of physical renovation, maintenance and/or repair. Requests for additional space should also be listed here. *Requests listed in this category will be forwarded to the Facilities Committee to evaluate through their own processes.* Provide a thorough rationale, **using data to support your request**, in order to help the Facilities Committee with their evaluation. List the approximate cost of your request.

Name of Person Submitting Request:	**Achala D. Chatterjee**
Program or Service Area:	**Water Supply Technology**
Division:	**Applied Technology, Transportation & Culinary Arts**
Date of Last Program Efficacy:	**Spring 2014, mini review, fall 2011 full efficacy**
What rating was given?	**Continuation, Continuation**
Strategic Initiatives Addressed: (See Appendix A: http://tinyurl.com/l5oqoxm)	2.6, 2.6.6

Replacement ☐ Growth x

1. Renovation Request

The Backflow and Cross-connection Control courses are taught in a lab built in 2006 in Room T101. The lab currently houses 6 stations with common valves and controls. These courses have enrollment limits of 25 students each. Thus 4 students share one backflow station. Ideally 2-3 students should share a station so that each student has enough hands on time to manipulate the valves and learn how to troubleshoot malfunctioning valves. 2 additional stations will allow 3 students to share a station. This will increase the hands on time that each student needs to improve competency. These two new stations will house newer valves which will also offer students more variety of valves to practice on. Depending on the jurisdiction where a student wishes to work as a backflow professional, he/she would needs either a county (LA, Riverside, San Bernardino, or Orange) or American Water Works Association (AWWA) certification. All the certification tests include both written test and hands on test. Thus time spent working with the valves is really important for student success. Student who obtain industry (County and/or AWWA) certification in Backflow and Cross Connection Control can start their own business or work for a plumber or for city, county or municipal agencies. If the backflow lab had 8 stations then the San Bernardino County and the AWWA are willing to send a proctor to the campus to conduct hands-on portion of the test. Our students would be less intimidated by the certification process if it is held on their home turf in familiar laboratory setting. This would results in more students being certified at the end of the course. Having Backflow Certification Test on campus would also bring in foot traffic from the industry. These professionals need continuing education every three years to renew the licenses. Thus it would provide familiarity and free recruitment for the program on a regular basis. The department goal is to have every student who enrolls in the Backflow and Cross-Connection Control course to pass at least one industry certificate upon successful completion of the courses.
The program was moved in spring semester of 2014. Since then the student enrollment has dropped; however number of sections offered has increased. This enrollment management practice has reduced the WSCH/FTEF by more than 30% in two years. In order for the program to have more sustainable WSCH/FTEF, the number of students enrolled in each section needs to

be increased. Bringing more foot traffic to the campus for certification would increase the awareness of our program to the water professionals in this region.

Approximate Cost: $10,000

2. Renovation Request

The program was located in the Science Division for many years and it was moved to the Technical Division in 2003. Then it was moved from the Technical Division to Science Division in 2007. Then it was moved from the Science Division to the Technical Division in 2014. As a result program is like an orphan shuttling from one foster home to another. The backflow lab is located in the Technical Division where it was built in 2006. The water/wastewater analysis lab is conducted in the Chemistry laboratory located in the Physical Science Building. All the classes are taught in several buildings all over the campus – Technical Building, HLS, Physical Science and Business. One fulltime faculty was provided a private office in the Liberal Arts Building, the other shares office with multiple Aeronautical adjunct faculty in Technical Building. The Water Technology tutor provides tutoring support to students at a table located in the faculty office area in Science Division where water faculty previously had an office.
Equipment such as valves, pump parts, etc. which are needed to teach the class, are stored in a portable storage unit outside of the Technical building or in faculty offices. It is difficult to carry all the equipment, which is usually quite heavy, all over the campus in different classrooms. If all the classes were taught in a few select rooms in one building, students and faculty would have better access to important learning tools. Charts depicting contaminant levels, periodic tables, common laws governing water treatment and other teaching aids cannot be permanently displayed in any classroom since the classes are taught in any available room on the campus during a particular semester. Students scattered all over the campus and thus they are unable to form informal communities and networking groups where information about jobs, licensing, and certifications can be shared. Three adjacent classrooms housed in a building or in portable units designated primarily for use by the water program would really help the program. Displays could be set up in the classrooms. The tutor could be located in a room near where the students congregate before and after class and during breaks.

Approximate Cost: Cost of a classroom would vary considerably. If an existing space is reallocated, it would be minimal. If a portable unit is used it would be low, if a new building is constructed it would be a lot more.

3. Renovation Request

Approximate Cost: