Community/Public Service Worksheet

Service Category: Economic Development Programs

Title: Continuous Improvement Student Internship Program

Primary UA Contact(s):
- Alan Hill (name)
- Alabama Productivity Center (Office)
- (name)
  (Office)

Community Partner(s) (if any):
- Chester Voucher (name)
- Alabama Technology Network (Organization)
- Howard Smith (name)
- Alabama Power Company (Organization)

Program Description: Our program employees student interns and places them at business and industries around the state to work on productivity and sustainability improvement projects. Through the program students are engaged in real life continuous improvement projects that provide experiential learning opportunities. They are supported by APC staff and UA faculty. In some cases we receive financial support from community partners to fund these projects that promote economic growth for Alabama business and industries. One example of this is our 2013 Summer E3 Student Internship Program, in which 6 students received training and were placed at 6 manufacturing clients for a 12 week internship. The success of the program allowed us to expand it this year. The 2014 Alabama Operations and Sustainability Summer Student Internship program will allow 9 students the opportunity to work with 9 manufacturing clients.

Objectives/Outcomes: During the 2013 program, students worked on implementing measureable energy efficiency and environmental waste reduction programs at their respective clients. Examples of these projects included upgrading to energy efficient lighting, evaluating process air lines for leaks and repairing those leaks, implementing recycling programs, and other related activities. Each client paid $5,000 and received $5,000 from funding provided by our community partners. The manufacturing clients participating in the program reported $760,765 in actual savings over the 12 week program and an additional $262,583 in potential savings. The minimum reported return on investment was an 8 to 1 return reported by the client, the average return on investment was 12 to 1.

Assessment Measures: The UA student interns spent 40 hours per week over a 12 week period at their assigned manufacturing client. The client identified an inhouse mentor that worked with the student and monitored their work. In addition there were weekly follow ups made by APC staff and/or UA Engineering faculty. The students were assigned projects at the beginning of the program that dealt with energy efficiency and environmental waste reduction.
Results: The manufacturing clients participating in the program reported $760,765 in actual savings over the 12 week program and an additional $262,583 in potential savings. The minimum reported return on investment was an 8 to 1 return reported by the client, the average return on investment was 12 to 1. In addition to the reported impacts, the students participating in the program received valuable industry experience that will aid them as they enter the workforce.

Conclusions: Based on the results above along with the expansion of the program this year, the program was a success, both for the students and the manufacturing clients. As part of the program, these clients will be surveyed by a third party this year to evaluate the effectiveness of the program.

Improvement Actions: For this year’s program, we have expanded the type of projects the students will be working on. For example, there will be more operations based projects. These include those that lead to shop floor efficiencies that reduce the amount of production time and increase output. This in turn leads to less overtime, which leads to both energy and environmental savings.