

Idaho Incubation Fund Program

Quarterly Progress Report Form

December 20, 2011

Proposal No. TOIF12017
Name: Richard Wall
Name of Institution: University of Idaho
Project Title: An Accessible Pedestrian System Fault Monitor

Information to be reported in your progress report is as follows:

- 1) Provide a summary of project goals/milestones for the period just completed, accomplishments for the period just completed, and plans and goals for the coming quarter:
 - a) This award was made on July 1, 2011 and the PI was notified of the award on July 12, 2011. Funds were made available to begin working starting on August 24, 2011. One graduate student and one undergraduate student started the project at the start of the Fall 2011 semester on August 22, 2011.
 - b) The progress of this project is indicated on Table 1.
 - i) The Multimedia Ethernet Communication (MEC) board has been designed and tested to provide the Ethernet over power line communications.
 - ii) The computer program that generates simulated Advanced Accessible Pedestrian System (AAPS) Ethernet messages to test fault detection is complete. Three simulator programs were completed that generate the normal network packets. The simulation environment also allows the following types of packets to be sent over the network:
 - (1) bad Set Request message
 - (2) no Set Request message
 - (3) bad Set Response message
 - (4) no Set Response message
 - (5) incorrect pedestrian button state in Set Response message
 - iii) Pedestrian Fault Monitor (PFM) hardware development environment has been mastered.
 - c) Plans for the next quarter
 - i) Establish weekly meeting times
 - ii) Complete 2nd generation MEC

iii) Complete PFM laboratory testing

(1) Generate and test fault messages listed in paragraph 1.b ii).

iv) Complete field testing in Moscow, ID

v) Plan for field testing at Campbell Company in Boise, ID

Table 1. Project Tasks, Milestones, and Schedule:

Research Timeline 2011–2012	July '11	August	September	October	November	December	January '12	February	March	April	May	June
Analyze network communications protocols	100%											
Program PFM computer		70%										
Generate test plan			30%									
Laboratory testing							50%					
Field testing in Moscow								0%				
Performance documentation								0%				
Field tests: Campbell Company									0%			
Report of findings												0

2) Provide a summary of budget expenditures for the period just completed:

To date, \$2,732.18 has been spent on student salaries and fringe benefits plus \$366 on the self-contained computer hardware enclosure.

3) List patents, copyrights, plant variety protection certificates received or pending:

The technology being developed for this project is an extension of technology already licensed to Campbell Co. The original patent application is serial number 13/059,635 titled “Advanced Accessible Pedestrian System for Signalized Traffic Intersections” filed 02/17/2011.

4) List invention disclosures, patent, copyright and PVP applications filed, technology licenses/options signed, start-up businesses created, and industry involvement:

See item 3.

5) Include funding burn rate:

This equates to 92% of funds available and 53% of the project time remaining.

6) Any other pertinent information: