



**Project Status Report: CEEEn-2018CPST-013**

**Report Date: Mar 4, 2019**

**Team Members: Craig Staples, Alec Escamilla, Paul Andersen**

**Project Title: Springville Performance Evaluation & Pavement Design for Minor Collectors**

**1) Summary of technical/non-technical challenges encountered**

Our group encountered two challenges this past week. First, Craig was responsible for creating a spreadsheet that would perform an empirical analysis based on mechanistic data. After determining where the data was located and how to retrieve it, the data needed to be analyzed in a spreadsheet form for easy reference. The second challenge dealt with taking survey measurements to determine frost heave. Since the weather was cold this weekend when we had planned to go, we were not able to take the required measurements.

**2) Team approaches & resolutions to overcome challenges**

Our approach to these problem was the following:

1. The spreadsheet that Craig designed is functioning and appears to be reporting reliable data. In order to determine that, he will be speaking with Dr. Guthrie this week to see what the next step will be.
2. Since the survey measurements are largely temperature/weather dependent, we will continue to watch the weather to determine the optimal time to complete the surveying.

**3) Status of challenge resolutions & potential project impact**

With our spreadsheets up-to-date, our next approach will be to schedule a time to meet with Dr. Guthrie to move on to the next phase of our project, which will be calculating ESALs and designing adequate road layer thicknesses.

**4) Project status & summary**

While our team hopes that the weather will warm up to abate the frost, we are also preparing for the last few weeks of the semester to be the busiest. We are continuing to do all that we can by learning the design software, and factoring other parameters into our design as guided by Dr. Guthrie. We will continue to work on finding the proper axle load weights to get accurate ESALs.

**Please enter # of hours spent on project this last week for each team member in the order listed above**

**Craig Staples: 14.5      Alec Escamilla: 5.5      Paul Andersen: 6.25**