**Project Status Report: CEEn-2018CPST-013** **Report Date: Jan 28, 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

We were able to meet with Dr. Guthrie and discuss our tasks for this semester. The main task for this last week was to gather data on the minor collectors and to count the traffic that passes on each site. Originally the plan was to have each team member count at a different street at various times throughout the day. However, this was going to be labor intensive and would not have the data that we wanted.

## 2) Team approaches & resolutions to overcome challenges

To solve this problem we spoke with another capstone group that indicated that they had used traffic cameras from Dr. Schultz. We emailed Dr. Schultz to ask for permission to use the equipment, then spoke with our mentor, who emailed Springville City for permission to place the equipment. Our request was granted, and we placed the equipment on Tuesday, January 22, 2019, at five different locations. With the data in hand, we were able to count the traffic at various times for each location.

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

Now that we understand our plan and how it relates to the our Statement of Work, the biggest challenge will be to get the traffic data for the 5 sites in Springville as quickly as possible. All of the tests we will be performing depend on this data. The ability to make traffic counts and characterization will allow us to estimate the loads and weathering that these minor collectors are experiencing. With this information we will be able to make informed decisions about Springville City's pavement design.

## 4) Project status & summary

The project is now progressing. We have determined, through the data collected by Dr. Guthrie and his research students, that the city of Springville may have used base materials that were not adequate for the traffic, weather, etc. and are now failing. With this conclusion, and with the traffic data, we will be able to appropriately deliver a new construction specification by the end of the semester. With the traffic data, we plan on meeting with Dr. Guthrie to discuss the next phase(s) of our work.

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

**Craig Staples:** 9 **Alec Escamilla:** 5 **Paul Andersen:** 12.25